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Attachment A DSM2 Output – Delta Water Quality

Water Quality Technical Report

Shasta Lake Water Resources Investigation

Prepared by:

**United States Department of the Interior
Bureau of Reclamation
Mid-Pacific Region**



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Attachment A

DSM2 Output – Delta Water Quality

Existing Condition v Alternative CP1
Existing Condition v Alternative CP2
Existing Condition v Alternative CP3

No-Action Alternative v Alternative CP1
No-Action Alternative v Alternative CP2
No-Action Alternative v Alternative CP3

Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville (umhos/cm)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	7,582	7,489	4,335	2,731	407	209	211	185	187	952	3,965	6,440	2,891
1923	Below Normal	7,724	6,580	727	220	455	988	485	441	1,602	3,093	5,375	7,097	2,899
1924	Critical	8,222	8,680	7,936	6,357	2,480	1,628	3,596	6,142	6,403	6,864	7,614	8,722	6,220
1925	Dry	10,230	10,044	7,668	6,582	434	207	269	676	1,659	3,749	6,604	8,061	4,682
1926	Dry	9,343	9,237	8,832	4,975	458	829	409	833	3,440	5,362	6,948	8,325	4,916
1927	Wet	8,768	3,428	1,358	397	184	186	181	232	939	1,903	4,395	6,734	2,392
1928	Above Normal	7,600	3,727	3,071	1,189	414	183	199	374	1,940	2,575	4,442	7,135	2,737
1929	Critical	8,648	8,405	6,873	6,463	3,272	2,299	3,542	4,058	4,952	6,325	7,721	9,284	5,987
1930	Dry	9,879	10,362	5,650	1,622	821	259	711	1,672	3,675	5,316	6,761	8,278	4,584
1931	Critical	9,009	8,763	8,252	5,948	3,982	4,135	4,833	6,566	6,427	6,797	7,865	8,993	6,798
1932	Dry	9,925	10,436	3,688	1,309	701	905	1,589	1,306	1,584	3,493	6,481	8,306	4,144
1933	Critical	9,054	8,889	8,539	5,142	3,710	2,689	2,163	3,604	5,160	6,364	7,398	8,517	5,936
1934	Critical	10,139	9,960	7,357	2,800	1,232	1,178	1,638	3,748	4,422	5,855	7,765	9,312	5,451
1935	Below Normal	9,711	9,429	7,856	1,240	761	428	190	216	714	2,553	5,220	6,875	3,766
1936	Below Normal	8,319	8,527	8,457	848	214	208	235	403	1,217	2,777	5,248	7,131	3,632
1937	Below Normal	8,466	8,490	7,818	6,154	689	233	231	414	1,041	2,719	5,083	6,943	4,023
1938	Wet	7,954	1,882	198	198	202	191	194	190	197	926	3,894	2,195	1,518
1939	Dry	1,897	4,149	5,000	4,742	2,917	1,881	2,139	2,143	4,528	5,013	6,150	8,465	4,085
1940	Above Normal	8,291	8,035	7,937	1,157	212	184	181	340	1,435	1,795	4,049	6,815	3,369
1941	Wet	7,565	7,540	786	191	191	189	185	186	328	1,529	4,120	3,530	2,195
1942	Wet	3,434	5,619	487	195	182	203	191	192	230	1,294	4,101	2,940	1,589
1943	Wet	3,063	2,119	346	193	193	193	203	287	1,129	2,200	4,488	7,216	1,802
1944	Dry	8,531	7,351	7,499	5,825	1,006	410	1,192	1,877	3,082	4,378	6,247	8,177	4,631
1945	Below Normal	8,689	6,697	3,933	4,435	555	218	621	1,163	1,974	2,918	5,260	7,414	3,656
1946	Below Normal	8,543	4,940	270	183	210	382	723	881	1,906	3,162	5,259	7,596	2,838
1947	Dry	8,617	7,995	4,978	4,787	2,610	877	1,163	2,279	3,218	4,305	5,535	7,416	4,482
1948	Below Normal	8,802	8,324	7,939	5,293	1,838	1,504	535	292	587	2,152	4,908	5,975	4,012
1949	Dry	7,380	8,051	7,164	6,329	2,448	266	652	1,211	2,265	4,005	5,235	7,364	4,364
1950	Below Normal	8,538	8,607	8,248	3,028	309	406	616	702	1,685	3,144	5,179	6,804	3,939
1951	Above Normal	8,226	541	187	197	190	194	398	623	2,171	2,008	3,872	6,482	2,091
1952	Wet	6,897	7,008	784	199	184	192	187	181	188	679	2,838	1,623	1,747
1953	Wet	2,235	4,733	685	183	216	411	680	290	390	1,566	4,186	3,939	1,626
1954	Above Normal	3,835	3,859	4,813	897	189	182	183	222	1,647	2,161	3,976	6,641	2,384
1955	Dry	7,915	7,421	2,301	895	1,113	2,390	2,677	2,262	3,389	4,636	6,417	8,116	4,128
1956	Wet	8,544	8,765	459	189	192	190	303	190	334	1,511	4,253	2,706	2,303
1957	Above Normal	1,830	3,908	5,421	5,323	676	190	271	538	1,517	2,140	4,323	7,451	2,799
1958	Wet	4,224	3,524	1,546	229	184	194	190	184	188	1,132	3,491	1,892	1,415
1959	Below Normal	2,654	5,627	6,924	1,047	197	230	1,301	2,346	3,377	2,915	4,763	7,102	3,207
1960	Dry	8,457	8,485	7,905	7,380	1,225	448	1,031	1,748	3,687	5,036	5,995	7,899	4,941
1961	Dry	8,615	8,540	5,823	5,561	1,077	691	1,462	2,476	4,170	4,502	5,379	7,626	4,660
1962	Below Normal	8,619	8,538	5,632	5,729	587	256	925	1,044	2,663	2,571	4,449	7,534	4,045
1963	Wet	979	1,546	824	1,128	239	207	184	225	746	1,764	4,234	6,471	1,545
1964	Dry	7,226	1,829	2,527	1,181	1,027	2,111	2,372	2,384	3,556	4,539	5,453	7,397	3,467
1965	Wet	8,087	6,993	391	183	194	272	191	230	1,134	2,177	4,787	6,781	2,618
1966	Below Normal	8,261	1,701	1,419	390	265	294	853	1,294	3,324	3,086	4,532	7,031	2,704
1967	Wet	7,826	6,920	836	213	188	187	202	188	360	2,287	1,506	1,742	1,742
1968	Below Normal	1,831	4,204	4,533	860	189	190	500	1,554	3,108	2,847	4,733	7,368	2,660
1969	Wet	8,069	6,933	2,497	207	204	221	211	198	210	1,025	4,001	1,828	2,134
1970	Wet	1,776	3,555	315	182	188	187	340	928	2,383	2,308	4,191	7,055	1,951
1971	Wet	7,453	3,958	290	184	193	183	226	221	720	1,876	4,439	2,922	1,889
1972	Below Normal	4,134	6,659	3,200	2,059	1,052	243	903	1,855	3,634	3,465	5,275	7,489	3,331
1973	Above Normal	8,335	3,059	628	200	193	187	308	570	1,219	2,256	4,812	6,787	2,380
1974	Wet	7,558	437	183	180	185	182	182	261	537	1,728	4,207	2,062	1,475
1975	Wet	1,999	4,339	3,813	2,717	311	186	213	216	316	1,525	3,878	2,432	1,829
1976	Critical	1,438	2,556	4,119	5,406	4,757	2,613	3,421	5,443	7,364	7,736	8,251	9,306	5,201
1977	Critical	8,668	9,318	7,170	7,123	2,529	2,891	4,488	6,421	7,846	7,811	8,252	9,303	6,818
1978	Above Normal	9,661	9,777	6,698	368	203	204	216	275	624	1,892	4,539	5,309	3,314
1979	Below Normal	6,809	8,072	6,778	2,300	263	214	407	671	1,098	2,788	5,331	7,689	3,535
1980	Above Normal	8,499	5,653	1,910	203	198	212	300	534	800	1,913	4,464	6,700	2,615
1981	Dry	8,172	8,508	6,332	1,101	313	230	778	2,177	4,205	5,203	6,127	7,816	4,247
1982	Wet	8,745	1,004	183	196	187	201	184	189	273	1,431	3,755	1,074	1,452
1983	Wet	353	201	198	222	196	185	199	196	195	208	333	247	228
1984	Wet	567	194	184	202	201	188	325	875	2,115	2,393	4,546	7,530	1,610
1985	Dry	7,527	963	562	2,186	1,751	855	1,535	1,657	3,792	4,334	5,804	8,088	3,255
1986	Wet	8,010	7,929	4,939	1,697	189	191	247	560	1,192	2,231	4,506	5,835	3,127
1987	Dry	7,382	8,129	8,366	6,009	1,885	372	987	2,438	4,367	5,307	6,250	7,987	4,957
1988	Critical	8,977	9,017	6,053	1,018	1,005	2,260	3,165	3,989	4,564	6,031	7,890	9,266	5,270
1989	Dry	10,323	9,701	8,071	6,629	6,040	455	336	1,087	3,387	4,817	5,639	7,306	5,316
1990	Critical	8,452	8,597	5,418	2,901	1,940	2,629	2,770	4,742	7,276	7,862	7,973	9,110	5,806
1991	Critical	10,309	10,137	9,865	9,302	7,555	1,185	915	3,830	7,163	7,790	7,640	8,933	7,052
1992	Critical	10,648	10,107	10,077	7,917	1,180	652	1,364	3,527	4,595	6,288	8,314	9,305	6,164
1993	Above Normal	9,913	9,692	7,375	423	206	195	187	203	252	1,346	4,358	5,697	3,321
1994	Critical	7,122	7,992	7,103	5,714	1,415	1,081	2,147	3,102	5,081	5,172	5,278	7,538	4,895
Average		7,138	6,361	4,364	2,589	1,035	692	950	1,462	2,451	3,368	5,251	6,551	3,518
Wet		5,434	4,220	1,014	442	200	207	239	296	663	1,513	3,854	3,739	1,818
Above Normal		7,377	5,574	4,237	1,269	289	194	246	386	1,179	1,904	4,280	6,546	2,790
Below Normal		7,222	6,885	5,267	2,413	542	414	609	948	1,995	2,871	5,044	7,146	3,446
Dry		8,214	7,575	5,773	4,195	1,614	824	1,206	1,764	3,375	4,625	6,064	7,914	4,429
Critical		8,390	8,535	7,397	5,508	2,921	2,103	2,837	4,598	5,938	6,741	7,663	8,966	5,966

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville (umhos/cm)

Alternative CP1 (2005)

SVI														Average
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	7,582	7,489	4,335	2,731	407	209	211	185	187	952	3,965	6,440	2,891
1923	Below Normal	7,724	6,580	727	220	455	988	485	441	1,602	3,093	5,376	7,096	2,899
1924	Critical	8,221	8,680	7,938	6,356	2,478	1,628	3,595	6,155	6,050	6,545	7,645	8,854	6,179
1925	Dry	10,084	10,175	7,564	6,343	428	206	265	674	1,659	3,748	6,589	7,975	4,643
1926	Dry	9,294	9,222	8,827	4,972	458	828	453	846	3,416	5,349	6,952	8,328	4,912
1927	Wet	8,585	3,372	1,354	397	185	186	181	231	937	1,921	4,416	6,772	2,378
1928	Above Normal	7,585	3,973	3,223	1,177	408	183	199	373	1,942	2,568	4,399	7,121	2,763
1929	Critical	8,652	8,433	6,442	6,193	3,229	2,285	3,539	4,002	5,009	6,315	7,798	9,403	5,942
1930	Dry	9,730	10,158	5,667	1,643	823	262	717	1,634	3,758	5,219	6,882	8,505	4,583
1931	Critical	9,188	8,795	8,459	6,410	4,838	4,662	4,965	6,601	7,692	7,500	7,959	9,168	7,186
1932	Dry	9,981	10,433	3,692	1,293	709	914	1,591	1,306	1,584	3,494	6,482	8,302	4,149
1933	Critical	9,051	8,888	8,533	5,154	3,728	2,771	2,217	3,615	5,164	6,367	7,392	8,516	5,950
1934	Critical	10,133	9,967	7,348	2,931	1,289	1,186	1,641	3,748	4,421	5,854	7,763	9,308	5,466
1935	Below Normal	9,709	9,428	7,854	1,240	749	425	190	216	719	2,532	5,205	6,933	3,767
1936	Below Normal	8,361	8,547	8,463	847	213	211	238	404	1,222	2,758	5,238	7,084	3,632
1937	Below Normal	8,428	8,418	7,011	5,672	685	232	231	413	1,037	2,718	5,084	7,020	3,912
1938	Wet	7,940	1,982	203	199	201	191	194	190	197	926	3,882	2,204	1,526
1939	Dry	1,827	4,064	4,970	4,733	2,938	1,882	2,137	2,145	4,602	4,423	5,629	8,353	3,975
1940	Above Normal	8,235	7,996	7,925	1,151	215	184	181	319	1,401	1,798	4,055	6,825	3,357
1941	Wet	7,584	7,576	787	191	191	189	185	186	328	1,529	4,120	3,533	2,200
1942	Wet	3,440	5,626	487	195	182	203	191	192	230	1,293	4,107	2,943	1,591
1943	Wet	3,068	2,121	346	193	193	193	203	286	1,129	2,198	4,484	7,224	1,803
1944	Dry	8,402	7,391	6,937	6,065	1,301	436	1,187	1,880	3,015	4,323	5,938	7,873	4,562
1945	Below Normal	8,803	6,822	3,949	4,438	554	216	619	1,169	1,979	2,918	5,258	7,406	3,678
1946	Below Normal	8,448	6,580	359	184	209	371	713	881	1,908	3,059	5,151	7,482	2,945
1947	Dry	8,567	8,157	5,044	4,798	2,565	852	1,137	2,288	3,098	4,143	5,228	7,189	4,422
1948	Below Normal	8,727	8,359	8,095	5,424	1,590	1,375	530	294	829	2,397	4,996	6,773	4,116
1949	Dry	7,920	8,274	7,110	6,476	5,761	515	652	1,217	2,261	3,027	5,192	7,309	4,726
1950	Below Normal	8,475	8,523	8,057	2,782	294	405	606	701	1,685	4,125	5,179	6,816	3,887
1951	Above Normal	8,134	587	187	197	190	194	398	623	2,127	1,936	3,820	6,415	2,067
1952	Wet	6,878	6,590	763	199	184	192	187	181	188	679	2,843	1,623	1,709
1953	Wet	2,229	4,716	682	183	216	412	680	299	395	1,568	4,160	3,953	1,625
1954	Above Normal	3,871	3,209	4,326	844	188	182	183	228	1,668	2,120	3,927	6,619	2,280
1955	Dry	7,937	7,410	2,773	1,042	1,132	2,399	2,668	2,112	3,272	4,540	5,941	7,695	4,077
1956	Wet	8,388	8,683	474	189	192	190	304	191	334	1,512	4,236	2,716	2,284
1957	Above Normal	1,837	3,906	5,567	5,205	648	190	271	529	1,509	2,092	4,247	7,383	2,782
1958	Wet	4,492	3,719	1,574	232	184	193	190	184	188	1,132	3,499	1,899	1,457
1959	Below Normal	2,661	5,633	6,926	1,048	197	230	1,305	2,339	3,321	2,824	4,687	7,322	3,208
1960	Dry	8,593	8,275	6,693	6,616	1,210	449	1,032	1,746	3,716	5,176	5,806	7,676	4,749
1961	Dry	8,657	8,326	5,857	5,679	1,304	934	1,624	2,454	4,104	4,550	5,367	7,592	4,704
1962	Below Normal	8,641	8,507	5,648	5,747	602	257	925	1,044	2,684	2,446	4,328	7,500	4,027
1963	Wet	1,049	1,434	763	1,286	254	205	184	225	745	1,771	4,241	6,486	1,554
1964	Dry	7,248	1,753	2,462	1,167	1,023	2,118	2,359	2,387	3,419	4,412	5,229	7,223	3,400
1965	Wet	8,072	6,992	402	183	194	270	191	230	1,081	2,159	4,812	6,794	2,615
1966	Below Normal	8,249	1,885	1,501	395	274	300	861	1,295	3,274	3,036	4,512	7,003	2,715
1967	Wet	7,800	6,904	840	213	188	187	202	189	188	360	2,293	1,511	1,740
1968	Below Normal	1,831	4,194	4,524	859	189	189	500	1,555	3,088	2,790	4,691	7,353	2,647
1969	Wet	8,059	6,923	2,478	208	204	221	211	197	210	1,025	4,000	1,838	2,131
1970	Wet	1,759	3,521	314	182	188	187	338	932	2,385	2,306	4,176	7,045	1,944
1971	Wet	7,439	3,727	281	184	193	182	226	221	720	1,839	4,406	2,975	1,866
1972	Below Normal	4,184	6,681	3,206	2,060	1,052	245	911	1,852	3,642	3,334	5,119	7,349	3,303
1973	Above Normal	8,152	3,489	712	202	193	186	308	581	1,223	2,166	4,706	6,782	2,392
1974	Wet	7,552	442	183	180	185	182	182	261	537	1,729	4,213	2,068	1,476
1975	Wet	2,003	4,344	3,814	2,719	311	186	213	216	316	1,525	3,883	2,439	1,831
1976	Critical	1,441	2,558	4,120	5,408	4,759	2,617	3,434	5,441	7,173	7,616	8,161	9,285	5,168
1977	Critical	8,624	8,801	6,333	6,579	2,764	3,144	4,547	6,428	7,806	7,892	8,034	8,884	6,653
1978	Above Normal	10,004	9,680	6,960	408	205	205	219	269	618	1,892	4,538	5,350	3,362
1979	Below Normal	6,850	8,087	6,766	2,332	266	214	407	645	1,090	2,790	5,327	7,673	3,537
1980	Above Normal	8,467	6,347	1,820	199	197	212	300	533	804	1,912	4,462	6,698	2,663
1981	Dry	8,171	8,506	6,330	1,102	319	269	851	2,188	4,216	5,170	6,047	7,769	4,245
1982	Wet	8,735	1,021	183	196	187	201	184	189	273	1,431	3,771	1,080	1,454
1983	Wet	354	201	198	222	196	185	199	196	195	208	334	247	228
1984	Wet	568	194	184	202	201	188	325	874	2,111	2,391	4,543	7,324	1,592
1985	Dry	7,820	1,039	566	2,193	1,755	857	1,538	1,651	3,690	4,271	5,683	8,012	3,256
1986	Wet	8,008	7,668	4,793	1,763	189	191	248	553	1,183	2,129	4,568	5,829	3,099
1987	Dry	7,356	8,178	8,266	5,892	2,014	437	997	2,406	4,335	5,099	5,761	7,690	4,863
1988	Critical	8,874	8,971	6,022	1,013	995	2,265	3,249	4,066	4,524	6,026	7,866	9,217	5,257
1989	Dry	10,351	9,682	8,128	6,677	6,016	469	342	1,080	3,242	4,797	5,497	7,136	5,285
1990	Critical	8,400	8,546	5,343	2,866	1,935	2,624	2,766	4,741	7,277	7,893	7,997	9,116	5,792
1991	Critical	10,309	10,131	9,865	9,275	7,529	1,183	915	3,834	7,163	7,794	7,698	9,041	7,061
1992	Critical	10,699	10,093	10,083	7,896	1,169	651	1,364	3,527	4,597	6,288	8,316	9,328	6,168
1993	Above Normal	9,909	9,700	7,366	421	206	197	188	220	262	1,342	4,350	5,724	3,324
1994	Critical	7,152	8,006	7,090	5,923	1,481	1,091	2,152	3,106	4,871	5,249	5,163	7,262	4,879
Average		7,144	6,374	4,316	2,575	1,101	711	958	1,460	2,450	3,347	5,200	6,530	3,514
Wet		5,429	4,179	1,005	453	201	206	239	296	661	1,509	3,856	3,738	1,814
Above Normal		7,378	5,638	4,242	1,253	286	194	246	386	1,174	1,878	4,247	6,536	2,788
Below Normal		7,221	7,017	5,220	2,375	523	404	609	946	2,006	2,844	5,011	7,201	3,448
Dry		8,246	7,565	5,680	4,168	1,860	864	1,222	1,751	3,337	4,542	5,889	7,789	4,409
Critical		8,395	8,489	7,298	5,500	3,016	2,176	2,865	4,605	5,979	6,778	7,649	8,949	5,975

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	-1	0
1924	Critical	-1	0	2	-1	-1	0	0	14	-353	-318	31	132	-41
1925	Dry	-146	131	-103	-239	-6	0	-5	-2	0	0	-15	-86	-39
1926	Dry	-49	-15	-5	-3	0	-1	44	14	-24	-12	4	2	-4
1927	Wet	-183	-56	-4	-1	1	0	0	-2	18	21	38	-14	-14
1928	Above Norma	-15	246	152	-12	-6	0	0	0	3	-7	-44	-14	25
1929	Critical	3	28	-430	-270	-44	-14	-3	-56	57	-10	76	119	-45
1930	Dry	-148	-205	17	21	1	3	6	-38	83	-98	121	227	-1
1931	Critical	179	32	207	462	857	527	132	35	1,265	703	94	175	389
1932	Dry	56	-3	4	-16	7	9	3	0	0	1	1	-4	5
1933	Critical	-4	-1	-6	12	18	83	54	11	4	3	-6	-1	14
1934	Critical	-5	7	-9	130	57	8	2	0	-1	0	-2	-3	15
1935	Below Normal	-2	-1	-2	0	-12	-3	0	0	5	-21	-15	58	1
1936	Below Normal	42	20	6	0	0	3	4	1	5	-19	-10	-47	0
1937	Below Normal	-38	-73	-807	-482	-4	-1	0	-1	-4	-1	1	77	-111
1938	Wet	-13	101	5	1	0	0	0	0	0	0	-13	8	7
1939	Dry	-71	-84	-30	-9	21	1	-2	3	74	-590	-522	-112	-110
1940	Above Norma	-56	-39	-11	-6	3	0	0	-20	-34	3	5	11	-12
1941	Wet	20	36	2	0	0	0	0	0	0	0	1	4	5
1942	Wet	6	7	0	0	0	0	0	0	0	-1	6	4	2
1943	Wet	4	2	0	0	0	0	0	0	0	-2	-4	8	1
1944	Dry	-129	40	-563	240	295	25	-5	3	-67	-56	-309	-303	-69
1945	Below Normal	115	125	16	3	-1	-2	-1	6	5	0	-2	-8	21
1946	Below Normal	-95	1,640	89	0	-1	-11	-10	0	1	-102	-108	-114	107
1947	Dry	-50	162	66	10	-45	-25	-26	8	-121	-163	-307	-227	-60
1948	Below Normal	-76	35	156	132	-248	-129	-4	2	242	245	88	797	103
1949	Dry	540	223	-55	147	3,313	249	0	6	-3	22	-42	-55	362
1950	Below Normal	-64	-83	-191	-247	-15	-1	-10	-1	0	-19	1	12	-52
1951	Above Norma	-91	45	0	0	-1	0	-1	0	-44	-72	-53	-67	-24
1952	Wet	-18	-417	-20	0	0	0	0	0	0	0	5	1	-38
1953	Wet	-6	-17	-2	0	0	0	0	9	5	2	-26	13	-2
1954	Above Norma	36	-650	-487	-53	-1	0	0	5	21	-41	-49	-22	-103
1955	Dry	21	-11	473	147	18	9	-9	-150	-117	-96	-477	-421	-51
1956	Wet	-157	-83	16	0	0	0	0	0	1	1	-17	10	-19
1957	Above Norma	7	-2	147	-118	-28	0	0	-10	-8	-48	-75	-68	-17
1958	Wet	268	195	28	2	0	0	0	0	0	0	7	7	42
1959	Below Normal	7	6	2	1	0	0	4	-7	-56	-91	-77	220	1
1960	Dry	136	-210	-1,211	-763	-15	1	1	-2	29	140	-189	-223	-192
1961	Dry	43	-213	34	118	227	243	162	-23	-65	49	-12	-34	44
1962	Below Normal	22	-31	15	18	14	1	0	1	21	-125	-120	-34	-18
1963	Wet	71	-112	-61	159	15	-1	0	0	0	7	7	15	8
1964	Dry	21	-76	-65	-14	-4	6	-13	3	-137	-127	-224	-174	-67
1965	Wet	-15	-1	11	0	0	-2	0	0	-54	-18	25	13	-3
1966	Below Normal	-12	185	81	5	8	6	7	1	-50	-49	-21	-27	11
1967	Wet	-26	-16	3	0	0	0	0	0	0	0	6	5	-2
1968	Below Normal	0	-10	-10	-1	0	0	0	1	-20	-58	-42	-15	-13
1969	Wet	-11	-10	-18	1	0	0	0	0	0	0	-1	10	-2
1970	Wet	-17	-34	-1	0	0	0	-2	4	3	-2	-16	-11	-6
1971	Wet	-14	-231	-9	0	0	0	0	0	0	-37	-33	53	-23
1972	Below Normal	49	22	5	1	0	2	8	-3	9	-132	-156	-139	-28
1973	Above Norma	-184	430	84	1	0	0	0	11	4	-90	-106	-6	12
1974	Wet	-6	5	0	0	0	0	0	0	0	0	6	6	1
1975	Wet	5	4	1	2	0	0	0	0	0	0	5	7	2
1976	Critical	3	2	0	3	2	5	12	-2	-191	-120	-90	-22	-33
1977	Critical	-44	-518	-837	-545	235	253	59	7	-40	82	-218	-419	-165
1978	Above Norma	343	-98	262	39	2	1	3	-5	-6	0	-1	42	48
1979	Below Normal	41	15	-11	33	4	0	0	-27	-8	2	-4	-15	2
1980	Above Norma	-31	694	-90	-4	0	0	0	-1	4	-1	-2	-2	47
1981	Dry	-1	-3	-2	1	7	38	72	11	11	-34	-80	-47	-2
1982	Wet	-10	17	0	0	0	0	0	0	0	0	16	6	2
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	1	0	0	0	0	0	-1	-4	-4	-1	-3	-206	-18
1985	Dry	293	75	5	7	4	2	3	-6	-103	-64	-121	-76	2
1986	Wet	-2	-261	-146	66	1	0	2	-7	-9	-40	61	-6	-28
1987	Dry	-27	49	-99	-117	128	65	11	-31	-31	-278	-489	-297	-93
1988	Critical	-103	-46	-32	-5	-10	5	84	77	-40	-5	-24	-49	-12
1989	Dry	28	-20	57	48	-24	15	5	-6	-145	-20	-141	-170	-31
1990	Critical	-52	-50	-75	-34	-5	-5	-4	-1	31	24	6	-14	-14
1991	Critical	0	-6	1	-27	-26	-2	0	3	-1	4	57	108	9
1992	Critical	51	-13	6	-21	-11	-1	0	-1	1	0	2	23	3
1993	Above Norma	-4	8	-9	-3	0	2	0	17	10	-4	-8	27	3
1994	Critical	30	14	-14	209	67	10	5	4	-210	77	-115	-276	-17
Average		6	12	-47	-13	66	19	8	-2	-1	-22	-51	-21	-4
Wet		-5	-41	-9	11	1	0	0	-3	-3	-3	3	-1	-4
Above Norma		1	63	5	-16	-3	0	0	0	-5	-26	-33	-10	-2
Below Normal		-1	132	-46	-38	-18	-10	0	-2	11	-26	-33	55	2
Dry		32	-10	-92	-26	245	40	16	-13	-39	-83	-175	-125	-19
Critical		5	-46	-99	-7	95	73	28	8	41	37	-14	-17	9

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average	
Year	Year Type														
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-6%	-5%	0%	2%	-1%	
1925	Dry	-1%	1%	-1%	-4%	-1%	0%	-2%	0%	0%	0%	0%	-1%	-1%	
1926	Dry	-1%	0%	0%	0%	0%	0%	11%	2%	-1%	0%	0%	0%	1%	
1927	Wet	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	
1928	Above Norma	0%	7%	5%	-1%	-2%	0%	0%	0%	0%	0%	-1%	0%	1%	
1929	Critical	0%	0%	-6%	-4%	-1%	-1%	0%	-1%	1%	0%	1%	1%	-1%	
1930	Dry	-2%	-2%	0%	1%	0%	1%	0%	-2%	2%	-2%	2%	3%	0%	
1931	Critical	2%	0%	3%	8%	22%	13%	3%	1%	20%	10%	1%	2%	7%	
1932	Dry	1%	0%	0%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	
1933	Critical	0%	0%	0%	0%	0%	3%	3%	0%	0%	0%	0%	0%	1%	
1934	Critical	0%	0%	0%	5%	5%	1%	0%	0%	0%	0%	0%	0%	1%	
1935	Below Normal	0%	0%	0%	0%	-2%	-1%	0%	0%	1%	-1%	0%	1%	0%	
1936	Below Normal	1%	0%	0%	0%	0%	1%	2%	0%	0%	-1%	0%	-1%	0%	
1937	Below Normal	0%	-1%	-10%	-8%	-1%	0%	0%	0%	0%	0%	0%	1%	-2%	
1938	Wet	0%	5%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	
1939	Dry	-4%	-2%	-1%	0%	1%	0%	0%	0%	2%	-12%	-8%	-1%	-2%	
1940	Above Norma	-1%	0%	0%	-1%	1%	0%	0%	-6%	-2%	0%	0%	0%	-1%	
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1944	Dry	-2%	1%	-8%	4%	29%	6%	0%	0%	-2%	-1%	-5%	-4%	2%	
1945	Below Normal	1%	2%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	
1946	Below Normal	-1%	33%	33%	0%	-1%	-3%	-1%	0%	0%	-3%	-2%	-2%	4%	
1947	Dry	-1%	2%	1%	0%	-2%	-3%	-2%	0%	-4%	-4%	-6%	-3%	-2%	
1948	Below Normal	-1%	0%	2%	2%	-13%	-9%	-1%	1%	41%	11%	2%	13%	4%	
1949	Dry	7%	3%	-1%	2%	135%	94%	0%	0%	0%	1%	-1%	-1%	20%	
1950	Below Normal	-1%	-1%	-2%	-8%	-5%	0%	-2%	0%	0%	-1%	0%	0%	-2%	
1951	Above Norma	-1%	8%	0%	0%	0%	0%	0%	0%	-2%	-4%	-1%	-1%	0%	
1952	Wet	0%	-6%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	
1953	Wet	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	-1%	0%	0%	
1954	Above Norma	1%	-17%	-10%	0%	-1%	0%	0%	2%	1%	-2%	-1%	0%	-3%	
1955	Dry	0%	0%	21%	16%	2%	0%	0%	-7%	-3%	-2%	-7%	-5%	1%	
1956	Wet	-2%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1957	Above Norma	0%	0%	3%	-2%	-4%	0%	0%	-2%	-2%	-2%	-2%	-1%	-1%	
1958	Wet	6%	6%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	-2%	3%	0%	
1960	Dry	2%	0%	-15%	-10%	-1%	0%	0%	1%	3%	3%	-3%	-3%	-3%	
1961	Dry	0%	-2%	1%	2%	21%	35%	11%	-1%	-2%	1%	0%	0%	5%	
1962	Below Normal	0%	0%	0%	2%	0%	0%	0%	0%	1%	-5%	-3%	0%	0%	
1963	Wet	7%	-7%	-7%	14%	6%	-1%	0%	0%	0%	0%	0%	0%	1%	
1964	Dry	0%	-4%	-3%	-1%	0%	0%	-1%	0%	-4%	-3%	-4%	-2%	-2%	
1965	Wet	0%	0%	3%	0%	0%	-1%	0%	0%	-5%	-1%	1%	0%	0%	
1966	Below Normal	0%	11%	6%	1%	3%	2%	1%	0%	-1%	-2%	0%	0%	2%	
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	0%	0%	
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	
1970	Wet	-1%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	
1971	Wet	0%	-6%	-3%	0%	0%	0%	0%	0%	0%	-2%	-1%	2%	-1%	
1972	Below Normal	1%	0%	0%	0%	0%	1%	1%	0%	0%	-4%	-3%	-2%	0%	
1973	Above Norma	-2%	14%	13%	1%	0%	0%	0%	2%	0%	-4%	-2%	0%	2%	
1974	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-3%	-2%	-1%	0%	0%	
1977	Critical	-1%	-6%	-12%	-8%	9%	9%	0%	-1%	1%	-3%	-5%	-1%	-1%	
1978	Above Norma	4%	-1%	4%	11%	1%	0%	1%	-2%	-1%	0%	0%	1%	1%	
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	-4%	-1%	0%	0%	0%	0%	
1980	Above Norma	0%	12%	-5%	-2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	
1981	Dry	0%	0%	0%	0%	2%	17%	9%	1%	0%	-1%	-1%	-1%	2%	
1982	Wet	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-3%	0%	
1985	Dry	4%	8%	1%	0%	0%	0%	0%	0%	-3%	-1%	-2%	-1%	1%	
1986	Wet	0%	-3%	-3%	4%	0%	0%	1%	-1%	-1%	-2%	1%	0%	0%	
1987	Dry	0%	1%	-1%	-2%	7%	17%	1%	-1%	-1%	-5%	-8%	-4%	0%	
1988	Critical	-1%	-1%	-1%	0%	-1%	0%	3%	2%	-1%	0%	0%	-1%	0%	
1989	Dry	0%	0%	1%	1%	0%	3%	2%	-1%	-4%	0%	-3%	-2%	0%	
1990	Critical	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-1%	0%	0%	
1993	Above Norma	0%	0%	0%	-1%	0%	1%	0%	8%	4%	0%	0%	0%	1%	
1994	Critical	0%	0%	0%	4%	5%	1%	0%	0%	-4%	1%	-2%	-4%	0%	
Average		0%	1%	0%	0%	3%	3%	1%	0%	0%	-1%	-1%	0%	0%	
Wet		0%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Above Norma		0%	2%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	
Below Normal		0%	3%	2%	-1%	-1%	0%	0%	3%	-1%	-1%	1%	0%	0%	
Dry		0%	0%	0%	1%	12%	11%	2%	-1%	-2%	-3%	-2%	1%	0%	
Critical		0%	0%	-1%	0%	3%	2%	1%	0%	1%	0%	0%	0%	0%	

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	-1	0	0	0	0	0	0	0	0	0	-1	0
1924	Critical	0	0	2	-2	-2	0	0	13	-361	-335	20	122	-45
1925	Dry	-135	111	-127	-279	-9	0	-13	-6	-1	-1	-22	-87	-47
1926	Dry	-50	-18	-8	-4	0	-2	126	51	-20	-12	7	9	6
1927	Wet	-157	-75	-8	-2	1	0	0	-1	-3	27	26	37	-13
1928	Above Norma	-8	340	230	-31	-17	0	3	1	5	-11	-39	-14	38
1929	Critical	0	27	-431	-326	-72	-24	-6	-57	59	-4	92	122	-52
1930	Dry	-135	-198	24	33	3	13	16	-60	61	-75	142	225	4
1931	Critical	162	46	144	572	1,118	688	183	54	1,291	833	153	191	453
1932	Dry	68	6	8	-30	23	23	5	0	0	1	1	-3	9
1933	Critical	-3	-1	-5	20	25	125	86	18	6	4	-5	-1	22
1934	Critical	-5	7	-10	222	108	15	4	0	-1	0	-2	-4	28
1935	Below Normal	-2	-1	-2	-1	-24	-5	0	0	4	-18	-14	54	-1
1936	Below Normal	44	20	7	0	-1	25	24	2	8	-13	-7	-46	5
1937	Below Normal	-39	-47	-773	-591	6	-1	1	-2	-7	-3	-2	74	-115
1938	Wet	-23	225	14	10	0	0	0	0	0	0	-10	12	19
1939	Dry	-109	-114	-40	-12	29	3	-3	3	89	-647	-569	-137	-126
1940	Above Norma	-64	-43	-16	-13	5	0	0	-35	-52	5	8	11	-16
1941	Wet	19	32	3	0	0	0	0	0	0	0	0	5	5
1942	Wet	8	8	1	0	0	0	0	2	2	0	7	5	3
1943	Wet	5	3	0	0	0	0	0	0	0	-1	-2	7	1
1944	Dry	-114	42	-558	313	588	72	-10	17	-73	-41	-315	-309	-32
1945	Below Normal	91	135	23	6	-1	-3	-1	10	11	2	-1	-7	22
1946	Below Normal	-89	1,902	165	0	-7	-34	-21	-2	3	-128	-126	-115	129
1947	Dry	-67	150	84	13	-70	-54	-47	10	-158	-175	-329	-254	-75
1948	Below Normal	-95	-1	160	161	-477	-261	-10	7	501	441	139	828	116
1949	Dry	640	261	-48	187	4,294	470	-20	9	-8	15	-41	-47	476
1950	Below Normal	-44	-57	-203	-374	-40	-1	-20	-4	0	-14	0	11	-62
1951	Above Norma	-77	99	0	0	-1	0	-1	0	-60	-111	-70	-71	-24
1952	Wet	-25	-440	6	0	0	0	0	0	0	0	6	1	-38
1953	Wet	-8	-20	-3	0	0	1	-1	35	17	4	-18	18	2
1954	Above Norma	44	-869	-670	-115	-2	0	0	13	28	-62	-61	-26	-143
1955	Dry	16	-8	799	308	40	15	-12	-220	-163	-84	-490	-452	-21
1956	Wet	-178	-95	24	0	0	1	3	2	2	2	-12	15	-20
1957	Above Norma	10	-1	149	-126	-51	0	0	-23	-15	-71	-84	-71	-24
1958	Wet	345	276	52	12	0	0	0	0	0	0	9	11	59
1959	Below Normal	10	7	2	2	0	0	5	-10	-69	-122	-89	200	-5
1960	Dry	171	-95	-1,263	-889	-21	5	3	-3	20	155	-183	-237	-195
1961	Dry	34	-199	61	151	543	530	290	-22	-74	53	-9	-37	110
1962	Below Normal	19	-29	22	26	35	4	0	1	19	-173	-148	-43	-22
1963	Wet	153	-148	-119	274	29	-7	0	0	0	10	10	15	18
1964	Dry	22	-157	-113	-31	-10	9	-17	1	-171	-146	-243	-193	-88
1965	Wet	-31	-5	19	0	6	-3	1	-1	-91	-29	31	14	-7
1966	Below Normal	-10	363	160	13	34	25	16	2	-61	-65	-25	-28	35
1967	Wet	-26	-17	11	1	0	0	0	0	0	1	9	9	-1
1968	Below Normal	0	-12	-12	-1	0	0	1	-4	-30	-81	-50	-18	-17
1969	Wet	-11	-11	-30	0	-1	0	0	0	0	0	-1	18	-3
1970	Wet	-25	-44	-3	0	0	0	-2	9	5	-5	-15	-8	-7
1971	Wet	-14	-320	-14	1	-2	-2	2	0	1	-55	-48	79	-31
1972	Below Normal	69	28	9	2	1	12	18	-4	11	-169	-175	-145	-29
1973	Above Norma	-186	647	179	2	0	0	-1	25	10	-129	-129	-16	33
1974	Wet	-6	10	0	0	3	0	0	0	0	0	7	9	2
1975	Wet	7	6	1	3	1	0	0	0	0	0	6	11	3
1976	Critical	6	3	0	4	3	7	16	-2	-168	-129	-73	-18	-29
1977	Critical	-47	-405	-900	-622	457	411	95	16	-43	92	-238	-428	-134
1978	Above Norma	271	-101	333	66	3	1	1	-13	-14	0	-1	48	49
1979	Below Normal	46	18	-11	60	11	1	1	-56	-19	5	-2	-14	3
1980	Above Norma	-30	798	-230	-12	0	0	1	-2	7	-1	-2	-2	44
1981	Dry	-1	-2	-3	3	27	162	167	21	13	-38	-82	-53	18
1982	Wet	-11	41	0	0	0	0	0	0	0	0	19	10	5
1983	Wet	1	0	0	0	0	0	0	0	0	0	1	1	0
1984	Wet	2	0	0	0	0	0	0	-3	-5	-3	-3	-191	-17
1985	Dry	268	123	9	12	7	6	6	-10	-123	-74	-122	-87	1
1986	Wet	-7	-242	-182	120	2	0	11	-9	-18	-43	41	-3	-27
1987	Dry	-24	31	-64	-166	276	214	48	-48	-24	-280	-512	-322	-73
1988	Critical	-124	-59	-42	-10	-9	5	109	94	-36	-4	-29	-46	-13
1989	Dry	23	-19	59	55	-22	45	16	-11	-177	-33	-149	-186	-33
1990	Critical	-66	-47	-92	-54	-11	-8	-6	-2	0	35	29	7	-18
1991	Critical	0	-5	1	-26	-27	-3	-1	4	-1	4	67	109	10
1992	Critical	52	-9	5	-23	-17	-1	0	-1	1	0	1	20	2
1993	Above Norma	-3	8	-11	-4	0	17	4	83	37	-8	-6	28	12
1994	Critical	31	15	-14	214	113	23	7	5	-228	79	-123	-268	-12
Average		8	26	-44	-12	94	34	15	-1	-1	-22	-53	-23	2
Wet		1	-39	-11	20	2	-1	0	2	-4	-4	3	4	-2
Above Norma		-4	88	-4	-23	-6	2	1	5	-5	-39	-38	-11	-3
Below Normal		0	166	-32	-50	-33	-17	1	-4	26	-24	-36	53	4
Dry		38	-5	-74	-21	356	94	35	-17	-51	-86	-182	-136	-4
Critical		0	-36	-112	-3	140	103	41	12	43	48	-9	-16	18

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-4%	-3%	0%	1%	0%
1925	Dry	-1%	1%	-1%	-3%	-1%	0%	-2%	0%	0%	0%	0%	-1%	-1%
1926	Dry	0%	0%	0%	0%	0%	0%	13%	3%	0%	0%	0%	0%	1%
1927	Wet	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1928	Above Norma	0%	5%	4%	-1%	-1%	0%	1%	0%	0%	0%	-1%	0%	1%
1929	Critical	0%	0%	-4%	-3%	-1%	-1%	0%	-1%	1%	0%	1%	1%	-1%
1930	Dry	-1%	-1%	0%	1%	0%	2%	1%	-2%	1%	-1%	1%	2%	0%
1931	Critical	1%	0%	1%	6%	16%	9%	2%	1%	13%	8%	1%	2%	5%
1932	Dry	0%	0%	0%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	4%	4%	1%	0%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1936	Below Normal	0%	0%	0%	0%	0%	10%	5%	0%	0%	0%	0%	0%	1%
1937	Below Normal	0%	0%	-7%	-6%	1%	0%	0%	0%	0%	0%	0%	1%	-1%
1938	Wet	0%	6%	6%	4%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1939	Dry	-3%	-2%	0%	0%	1%	0%	0%	0%	1%	-8%	-6%	-1%	-1%
1940	Above Norma	-1%	0%	0%	-1%	2%	0%	0%	-5%	-2%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	-1%	0%	-5%	3%	26%	7%	0%	0%	-1%	-1%	-3%	-3%	2%
1945	Below Normal	1%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	-1%	22%	43%	0%	-2%	-3%	-1%	0%	0%	-2%	-1%	-1%	5%
1947	Dry	-1%	1%	1%	0%	-1%	-2%	-2%	0%	-3%	-2%	-4%	-2%	-1%
1948	Below Normal	-1%	0%	1%	2%	-12%	-8%	-1%	1%	32%	10%	2%	9%	3%
1949	Dry	6%	2%	0%	2%	85%	105%	-1%	0%	0%	0%	0%	0%	16%
1950	Below Normal	0%	0%	-2%	-6%	0%	0%	-1%	0%	0%	0%	0%	0%	-1%
1951	Above Norma	-1%	11%	0%	0%	0%	0%	0%	0%	-1%	-3%	-1%	-1%	0%
1952	Wet	0%	-4%	0%	0%	0%	0%	0%	-4%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	4%	1%	0%	0%	0%	0%
1954	Above Norma	1%	-12%	-8%	-6%	-1%	0%	0%	3%	1%	-1%	-1%	0%	-2%
1955	Dry	0%	0%	17%	13%	1%	0%	0%	-5%	-3%	-1%	-5%	-4%	1%
1956	Wet	-1%	-1%	3%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1957	Above Norma	0%	0%	2%	-1%	-4%	0%	0%	-2%	0%	-2%	-1%	-1%	-1%
1958	Wet	5%	4%	1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	2%	0%
1960	Dry	1%	-1%	-11%	-8%	-1%	0%	0%	0%	2%	-2%	-2%	-2%	-2%
1961	Dry	0%	-2%	1%	2%	22%	29%	9%	0%	-1%	1%	0%	0%	5%
1962	Below Normal	0%	0%	0%	0%	3%	1%	0%	0%	0%	-3%	-2%	0%	0%
1963	Wet	8%	-5%	-6%	10%	9%	-2%	0%	0%	0%	0%	0%	0%	1%
1964	Dry	0%	-4%	-2%	-1%	0%	0%	0%	0%	-3%	-2%	-3%	-2%	-1%
1965	Wet	0%	0%	3%	0%	2%	0%	0%	0%	-4%	-1%	0%	0%	0%
1966	Below Normal	0%	10%	5%	1%	5%	3%	1%	0%	-1%	-1%	0%	0%	2%
1967	Wet	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-4%	-3%	1%	-1%	-1%	0%	0%	0%	-1%	-1%	1%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	2%	1%	0%	0%	-3%	-2%	-1%	0%
1973	Above Norma	-2%	11%	11%	1%	0%	0%	0%	2%	0%	-3%	-2%	0%	2%
1974	Wet	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	-1%	0%	0%
1977	Critical	0%	-3%	-8%	-6%	9%	8%	1%	0%	0%	1%	-2%	-3%	0%
1978	Above Norma	2%	-1%	3%	12%	2%	0%	0%	-2%	-1%	0%	0%	1%	1%
1979	Below Normal	0%	0%	0%	1%	3%	0%	0%	-3%	-1%	0%	0%	0%	0%
1980	Above Norma	0%	9%	-6%	-5%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	3%	33%	9%	0%	0%	-1%	0%	0%	4%
1982	Wet	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%
1985	Dry	2%	6%	1%	0%	0%	0%	0%	0%	-2%	-1%	-1%	-1%	0%
1986	Wet	0%	-2%	-2%	3%	1%	0%	3%	-1%	-1%	-1%	1%	0%	0%
1987	Dry	0%	0%	-1%	-2%	7%	24%	2%	-1%	0%	-3%	-5%	-3%	1%
1988	Critical	-1%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	1%	0%	5%	2%	0%	-3%	0%	-2%	-2%	0%
1990	Critical	-1%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-1%	0%	0%
1993	Above Norma	0%	0%	0%	-1%	0%	7%	2%	25%	6%	0%	0%	0%	3%
1994	Critical	0%	0%	0%	2%	4%	1%	0%	0%	-3%	1%	-1%	-2%	0%
Average		0%	1%	1%	0%	2%	3%	1%	0%	0%	0%	-1%	0%	1%
Wet		0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	2%	1%	0%	0%	1%	0%	2%	0%	-1%	-1%	0%	0%
Below Normal		0%	2%	3%	-1%	-1%	0%	0%	0%	2%	0%	0%	1%	1%
Dry		0%	0%	0%	0%	9%	13%	2%	0%	-1%	-1%	-2%	-1%	2%
Critical		0%	0%	-1%	0%	2%	2%	1%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	1	-1	0
1924	Critical	0	0	1	0	0	0	0	7	-192	-173	-10	78	-24
1925	Dry	-81	65	-25	-91	-1	0	-1	0	1	2	31	-44	-12
1926	Dry	-26	-6	-1	-1	0	0	3	-1	-14	-9	-15	-21	-8
1927	Wet	-143	-11	0	0	1	0	0	0	0	4	10	20	-10
1928	Above Normal	-16	62	36	0	-1	0	0	0	-1	0	-28	-5	4
1929	Critical	5	13	-193	-80	-10	-3	-1	-33	-6	-54	-28	45	-29
1930	Dry	-84	-123	2	5	0	0	0	-4	79	-90	8	132	-6
1931	Critical	157	8	211	110	236	166	40	11	726	228	-21	86	163
1932	Dry	29	-7	0	-2	0	0	0	-7	0	1	0	-2	2
1933	Critical	-2	-1	-2	2	5	14	10	2	1	1	-3	-2	2
1934	Critical	-5	1	-3	20	10	2	1	0	0	0	0	-2	2
1935	Below Normal	-1	-1	-1	0	-1	0	0	-1	2	-12	-8	34	1
1936	Below Normal	18	14	1	0	0	0	0	0	1	-12	-9	-27	-1
1937	Below Normal	-21	-86	-418	-136	-1	0	0	0	1	5	9	46	-50
1938	Wet	8	10	1	0	0	0	0	0	0	0	-13	2	1
1939	Dry	-11	-22	-9	-3	5	0	0	0	14	-227	-218	-34	-42
1940	Above Normal	-29	-23	-3	-1	3	0	0	-3	-6	1	2	6	-4
1941	Wet	11	21	0	0	0	0	0	0	0	0	1	1	3
1942	Wet	2	3	0	0	0	0	0	0	0	-3	3	1	0
1943	Wet	1	0	0	0	0	0	0	0	0	-2	-9	6	0
1944	Dry	-90	22	-270	64	58	5	0	-2	-21	-37	-159	-158	-49
1945	Below Normal	83	50	5	1	0	-1	-1	1	0	-1	-6	-5	10
1946	Below Normal	-53	539	9	0	0	0	-1	0	-2	-28	-45	-65	30
1947	Dry	5	85	19	3	-6	-2	-3	1	-33	-64	-118	-90	-17
1948	Below Normal	-23	46	51	41	-31	-13	-1	0	22	29	20	371	43
1949	Dry	161	100	-23	41	868	22	3	1	1	9	-23	-44	93
1950	Below Normal	-73	-95	-61	-54	-3	0	-1	-1	-16	-3	7	-25	-11
1951	Above Normal	-66	6	0	0	0	0	0	0	-12	-13	-17	-30	-11
1952	Wet	-4	-186	-5	0	0	0	0	0	0	0	1	0	-16
1953	Wet	-1	-6	-1	0	0	0	0	0	0	0	-17	7	-1
1954	Above Normal	11	-162	-144	-14	0	0	0	1	4	-8	-18	-6	-28
1955	Dry	15	-7	82	19	3	2	-2	-30	-29	-71	-242	-195	-38
1956	Wet	-74	-39	3	0	0	0	0	0	0	0	-14	4	-10
1957	Above Normal	1	-1	61	-48	-4	0	0	-1	-2	-10	-35	-36	-6
1958	Wet	76	48	6	1	0	0	0	0	0	0	2	1	11
1959	Below Normal	1	2	1	0	0	0	1	-1	-18	-21	-31	167	8
1960	Dry	9	-267	-496	-289	-4	0	0	0	25	56	-104	-102	-98
1961	Dry	24	-115	7	43	29	24	22	-6	-24	17	-9	-14	0
1962	Below Normal	14	-18	4	7	2	0	0	0	17	-25	-40	-9	-4
1963	Wet	8	-26	-11	22	1	0	0	0	0	1	3	7	1
1964	Dry	9	-13	-11	-2	0	2	-3	1	-44	-43	-85	-72	-22
1965	Wet	8	-1	2	0	0	0	0	0	-10	-4	4	6	0
1966	Below Normal	-9	24	12	1	0	0	1	0	-17	-12	-8	-14	-2
1967	Wet	-13	-6	1	0	0	0	0	0	0	0	2	1	-1
1968	Below Normal	0	-3	-3	0	0	0	0	1	-5	-12	-17	-4	-4
1969	Wet	-6	-4	-3	0	0	0	0	0	0	0	0	1	-1
1970	Wet	-3	-10	0	0	0	0	0	0	-2	0	-10	-9	-3
1971	Wet	-8	-56	-1	0	0	0	0	0	0	-8	-5	10	-6
1972	Below Normal	13	8	1	0	0	0	1	0	-1	-37	-77	-74	-14
1973	Above Normal	-99	91	15	1	0	0	0	1	-1	-20	-42	7	-4
1974	Wet	-3	1	0	0	0	0	0	0	0	0	2	1	0
1975	Wet	1	1	0	0	0	0	0	0	0	0	2	1	1
1976	Critical	0	0	0	1	1	1	1	0	-183	-61	-128	-28	-33
1977	Critical	-22	-470	-297	-234	2	50	8	-2	1	-1	-5	-162	-94
1978	Above Normal	476	13	88	7	1	0	1	0	0	0	0	16	50
1979	Below Normal	16	6	-5	5	1	0	0	-3	-1	-2	-12	-12	-1
1980	Above Normal	-17	250	2	0	0	0	0	0	0	0	-1	-1	19
1981	Dry	1	-1	-1	0	0	2	6	2	2	-13	-43	-18	-5
1982	Wet	-5	3	0	0	0	0	0	0	0	0	6	1	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-2	0	-6	-146	-13
1985	Dry	183	12	1	1	1	0	0	-1	-37	-20	-59	-24	5
1986	Wet	2	-163	-40	9	0	0	0	-1	-1	-37	65	-16	-15
1987	Dry	-15	58	-94	-13	10	7	-1	-6	-42	-140	-220	-132	-49
1988	Critical	-38	-15	-9	-1	-5	1	23	32	-7	-1	11	-39	-4
1989	Dry	16	-8	22	20	-13	2	0	-1	-48	-1	-62	-75	-12
1990	Critical	-16	-33	-20	-7	-1	-1	-1	0	1	-1	-5	3	-7
1991	Critical	0	-4	0	-14	-12	0	0	1	-1	3	-20	55	1
1992	Critical	30	-7	1	-5	-3	0	0	1	0	1	1	21	3
1993	Above Normal	-2	5	-2	0	0	1	0	1	0	-3	-15	12	0
1994	Critical	14	7	-6	81	9	1	1	1	-96	32	-41	-182	-15
Average		5	-6	-21	-7	16	4	1	0	1	-12	-26	-10	-5
Wet		-7	-20	-2	2	0	0	0	-1	-2	1	-5	-3	
Above Normal		26	24	5	-6	0	0	0	0	-2	-5	-15	-4	2
Below Normal		-2	35	-29	-10	-2	-1	0	0	0	-10	-16	30	-1
Dry		9	-14	-50	-13	59	4	2	-3	-11	-39	-82	-56	-16
Critical		10	-42	-26	-11	19	19	7	2	21	-2	-21	-11	-3

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-11%	-8%	0%	2%	-1%
1925	Dry	-2%	2%	-1%	-6%	0%	0%	0%	0%	0%	0%	1%	-2%	-1%
1926	Dry	-1%	0%	0%	0%	0%	0%	2%	0%	-2%	-1%	-1%	-1%	0%
1927	Wet	-5%	-2%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%
1928	Above Norma	-1%	8%	6%	0%	0%	0%	0%	0%	0%	0%	-3%	0%	1%
1929	Critical	0%	1%	-11%	-5%	-2%	-1%	0%	-4%	0%	-3%	-1%	1%	-2%
1930	Dry	-2%	-3%	0%	1%	0%	0%	0%	-1%	10%	-7%	0%	5%	0%
1931	Critical	6%	0%	9%	8%	26%	18%	4%	1%	39%	12%	-1%	3%	10%
1932	Dry	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	1%	3%	2%	0%	0%	0%	0%	0%	1%
1934	Critical	0%	0%	0%	4%	4%	1%	0%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	1%	-2%	-1%	2%	0%
1936	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	-1%	0%
1937	Below Normal	-1%	-3%	-19%	-10%	0%	0%	0%	0%	0%	1%	1%	2%	-2%
1938	Wet	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1939	Dry	-3%	-3%	-1%	0%	1%	0%	0%	0%	1%	-20%	-13%	-1%	-3%
1940	Above Norma	-1%	-1%	0%	0%	1%	0%	0%	-1%	-2%	0%	0%	0%	0%
1941	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1944	Dry	-4%	1%	-13%	5%	19%	2%	0%	-1%	-3%	-4%	-9%	-6%	-1%
1945	Below Normal	3%	3%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	-2%	56%	5%	0%	0%	0%	0%	0%	0%	-5%	-3%	-3%	4%
1947	Dry	0%	4%	2%	0%	-1%	-1%	-1%	0%	-5%	-7%	-9%	-4%	-2%
1948	Below Normal	-1%	2%	2%	4%	-8%	-4%	0%	0%	11%	7%	2%	25%	3%
1949	Dry	8%	4%	-1%	3%	185%	12%	1%	0%	0%	1%	-2%	-2%	17%
1950	Below Normal	-3%	-4%	-3%	-9%	-1%	0%	0%	0%	-2%	0%	0%	0%	-2%
1951	Above Norma	-2%	3%	0%	0%	0%	0%	0%	0%	-3%	-4%	-2%	-2%	-1%
1952	Wet	0%	-10%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	1%	0%
1954	Above Norma	1%	-21%	-13%	-4%	0%	0%	0%	0%	1%	-2%	-2%	0%	-3%
1955	Dry	1%	0%	17%	8%	1%	0%	0%	-7%	-4%	-7%	-14%	-7%	-1%
1956	Wet	-3%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1957	Above Norma	0%	0%	5%	-4%	-1%	0%	0%	0%	-1%	-2%	-3%	-2%	-1%
1958	Wet	9%	7%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-4%	-3%	-3%	8%	0%
1960	Dry	0%	-10%	-23%	-15%	-1%	0%	0%	0%	3%	5%	-7%	-4%	-4%
1961	Dry	1%	-5%	1%	3%	9%	11%	7%	-1%	-2%	2%	-1%	-1%	2%
1962	Below Normal	1%	-1%	0%	0%	1%	0%	0%	0%	3%	-5%	-4%	0%	0%
1963	Wet	3%	-7%	-4%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	-3%	-2%	-1%	0%	0%	-1%	0%	-6%	-4%	-6%	-3%	-2%
1965	Wet	0%	0%	1%	0%	0%	0%	0%	0%	-4%	-1%	0%	0%	0%
1966	Below Normal	0%	6%	4%	0%	0%	0%	0%	0%	-2%	-2%	-1%	-1%	0%
1967	Wet	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	0%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1971	Wet	0%	-7%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	2%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	-5%	-6%	-3%	-1%
1973	Above Norma	-4%	15%	6%	0%	0%	0%	0%	0%	0%	-5%	-3%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-8%	-3%	-5%	-1%	-1%
1977	Critical	-1%	-15%	-17%	-11%	0%	7%	0%	0%	0%	0%	0%	-5%	-3%
1978	Above Norma	13%	0%	5%	3%	1%	0%	1%	0%	0%	0%	0%	1%	2%
1979	Below Normal	1%	0%	0%	1%	0%	0%	0%	-1%	0%	0%	-1%	-1%	0%
1980	Above Norma	-1%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	1%	3%	0%	0%	-1%	-3%	-1%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	-6%	-1%
1985	Dry	9%	4%	0%	0%	0%	0%	0%	0%	-4%	-2%	-4%	-1%	0%
1986	Wet	0%	-7%	-4%	2%	0%	0%	0%	0%	0%	-7%	6%	-1%	-1%
1987	Dry	-1%	2%	-4%	-1%	3%	4%	-1%	-1%	-4%	-11%	-13%	-5%	-3%
1988	Critical	-1%	-1%	-1%	0%	-2%	0%	4%	4%	-1%	0%	0%	-1%	0%
1989	Dry	0%	0%	1%	1%	-1%	1%	0%	0%	-7%	0%	-4%	-3%	-1%
1990	Critical	-1%	-1%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-1%	2%	0%
1992	Critical	1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	-1%	1%	0%
1994	Critical	1%	0%	0%	6%	2%	0%	0%	0%	-8%	3%	-3%	-7%	0%
Average		0%	0%	-1%	0%	3%	1%	0%	0%	0%	-1%	-2%	0%	0%
Wet		0%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		1%	2%	1%	-1%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
Below Normal		0%	4%	-1%	-1%	-1%	0%	0%	0%	1%	-2%	-1%	2%	0%
Dry		1%	0%	-2%	0%	13%	2%	1%	-1%	-1%	-3%	-5%	-2%	0%
Critical		0%	-1%	-2%	0%	2%	2%	1%	0%	1%	0%	-1%	0%	0%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)

Existing Condition		SVI												Average
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	
1922	Above Normal	2,074	2,015	1,603	961	402	221	201	201	204	234	688	1,926	894
1923	Below Normal	2,360	2,229	718	235	224	244	227	225	256	505	1,023	1,963	851
1924	Critical	2,400	2,471	2,404	2,044	775	311	488	1,145	1,567	1,617	1,591	2,088	1,575
1925	Dry	2,602	2,494	2,402	2,415	583	218	204	225	250	501	1,192	2,360	1,287
1926	Dry	2,419	2,290	2,490	2,051	630	267	266	253	569	1,011	1,337	2,249	1,319
1927	Wet	2,796	1,215	523	317	220	203	191	214	227	315	781	1,941	745
1928	Above Normal	2,423	1,148	886	541	278	200	198	218	321	422	902	2,133	806
1929	Critical	2,781	2,808	2,255	2,220	1,638	518	477	561	766	1,118	1,638	2,384	1,597
1930	Dry	2,380	2,706	2,142	759	350	232	213	281	629	1,044	1,345	2,394	1,206
1931	Critical	2,490	2,281	2,566	2,099	994	660	755	1,203	1,289	1,544	1,727	2,209	1,651
1932	Dry	2,392	2,758	1,239	456	308	258	271	280	258	452	1,207	2,303	1,015
1933	Critical	2,229	2,053	2,179	1,408	878	568	335	526	822	1,116	1,402	1,953	1,289
1934	Critical	2,572	2,427	2,431	1,064	417	270	277	528	664	959	1,649	2,394	1,304
1935	Below Normal	2,313	2,826	2,097	886	283	250	205	232	228	421	1,145	2,209	1,091
1936	Below Normal	2,343	2,224	2,663	911	272	234	202	221	229	472	1,097	2,145	1,084
1937	Below Normal	2,320	2,341	2,275	1,955	540	295	246	222	221	355	964	2,046	1,148
1938	Wet	2,420	1,415	239	205	309	283	229	216	224	236	700	505	582
1939	Dry	281	847	1,622	1,535	904	404	330	380	806	1,158	1,575	2,405	1,021
1940	Above Normal	2,639	2,290	2,093	920	268	211	196	222	259	323	817	2,041	1,023
1941	Wet	2,394	2,662	871	232	249	230	209	201	210	258	862	1,020	783
1942	Wet	749	1,759	591	235	220	209	212	209	195	238	854	695	514
1943	Wet	591	420	240	230	222	234	224	219	240	348	786	2,104	488
1944	Dry	2,661	2,419	2,596	2,005	845	260	247	351	593	992	1,481	2,529	1,415
1945	Below Normal	2,613	2,146	1,336	1,307	475	239	231	250	303	489	970	2,177	1,045
1946	Below Normal	2,414	1,447	307	197	211	220	219	245	310	673	1,175	2,369	815
1947	Dry	2,641	2,483	1,790	1,261	1,119	422	253	415	725	1,121	1,583	2,179	1,333
1948	Below Normal	2,726	2,772	2,127	2,035	893	362	311	218	203	371	1,102	2,062	1,265
1949	Dry	1,999	2,191	2,535	2,026	1,019	275	214	245	401	1,115	1,584	2,155	1,313
1950	Below Normal	2,319	2,255	2,282	1,170	320	215	241	234	277	462	1,021	2,076	1,073
1951	Above Normal	2,727	440	219	237	221	203	207	234	356	382	890	2,092	684
1952	Wet	2,398	2,593	794	237	202	227	209	189	208	220	506	369	679
1953	Wet	385	1,181	628	205	204	214	222	213	216	263	945	1,277	496
1954	Above Normal	995	1,202	1,781	946	222	194	191	204	306	389	859	2,107	783
1955	Dry	2,687	2,758	1,113	338	289	365	410	366	531	892	1,540	2,186	1,123
1956	Wet	2,177	2,777	499	265	237	214	204	211	194	245	892	694	717
1957	Above Normal	354	732	1,864	2,020	756	216	202	233	271	364	890	2,298	850
1958	Wet	1,380	998	739	272	223	244	223	192	200	248	672	437	486
1959	Below Normal	471	1,388	2,369	987	235	205	243	403	681	685	1,143	2,015	902
1960	Dry	2,458	2,273	2,442	2,525	1,253	286	227	294	742	1,200	1,551	2,309	1,463
1961	Dry	2,774	3,032	2,352	1,834	1,042	297	273	381	729	1,211	1,616	2,346	1,491
1962	Below Normal	2,824	2,979	2,387	1,661	544	232	238	242	399	657	1,262	2,535	1,330
1963	Wet	1,244	480	591	386	248	200	204	217	204	292	783	1,983	569
1964	Dry	2,327	1,221	710	761	290	367	441	414	715	1,354	1,707	2,115	1,035
1965	Wet	2,674	2,790	490	203	204	199	201	223	229	345	847	1,886	858
1966	Below Normal	2,279	1,173	368	290	211	206	229	261	610	688	1,030	2,253	800
1967	Wet	2,755	2,769	956	263	216	204	236	203	208	228	425	335	733
1968	Below Normal	291	889	1,254	642	214	194	208	330	636	655	1,013	2,310	720
1969	Wet	2,676	2,374	1,124	279	311	297	256	224	225	243	805	529	779
1970	Wet	295	773	333	235	217	203	207	240	361	403	818	2,130	518
1971	Wet	2,579	1,283	305	197	195	190	193	211	216	332	1,041	960	642
1972	Below Normal	907	1,911	1,173	649	565	245	218	315	648	673	1,104	2,265	889
1973	Above Normal	2,862	1,092	397	238	225	205	201	222	236	385	967	1,990	752
1974	Wet	2,565	432	195	195	197	200	195	209	201	283	1,041	679	533
1975	Wet	358	1,059	1,245	802	297	211	206	216	194	246	883	718	536
1976	Critical	271	491	1,273	1,797	1,574	831	593	987	1,666	2,048	2,030	2,862	1,369
1977	Critical	2,671	2,689	2,318	1,857	733	461	682	1,081	1,833	1,730	1,887	2,494	1,703
1978	Above Normal	2,588	2,711	2,294	491	248	267	271	241	224	285	789	1,398	984
1979	Below Normal	1,750	2,565	2,400	925	279	223	214	232	225	405	933	2,230	1,032
1980	Above Normal	2,648	1,870	728	243	274	280	245	227	231	285	911	1,960	825
1981	Dry	2,091	2,168	2,463	971	257	202	216	368	885	1,297	1,536	2,386	1,237
1982	Wet	3,049	1,088	208	224	219	241	216	199	201	254	707	302	576
1983	Wet	186	200	248	314	295	259	242	229	225	218	199	186	233
1984	Wet	191	193	233	252	228	200	210	253	316	415	823	2,104	452
1985	Dry	2,178	800	252	646	767	343	290	315	772	1,269	1,641	2,593	989
1986	Wet	2,733	2,645	1,912	735	270	265	244	218	235	312	902	1,609	1,007
1987	Dry	1,686	2,124	2,712	1,989	1,024	307	230	442	799	1,211	1,672	2,309	1,375
1988	Critical	2,927	2,610	2,337	907	288	319	519	579	712	1,216	1,759	2,402	1,381
1989	Dry	2,620	2,638	2,156	2,338	1,621	394	206	256	674	1,306	1,704	2,158	1,506
1990	Critical	2,728	2,940	2,143	1,188	621	499	428	742	1,543	1,783	1,786	2,299	1,558
1991	Critical	2,692	2,558	2,508	2,268	1,783	858	260	632	1,559	1,750	1,559	2,173	1,717
1992	Critical	2,916	2,560	2,758	2,209	973	296	283	533	811	1,157	2,213	2,669	1,616
1993	Above Normal	2,759	2,698	2,341	488	250	215	194	203	192	238	762	1,625	997
1994	Critical	2,106	2,297	2,584	2,113	936	315	370	475	1,124	2,103	2,111	2,346	1,573
Average		2,076	1,916	1,503	990	511	289	269	337	507	713	1,169	1,890	1,014
Wet		1,743	1,481	617	299	237	225	215	215	225	283	775	1,070	615
Above Normal		2,207	1,620	1,421	709	314	221	211	220	260	331	848	1,957	860
Below Normal		1,995	2,082	1,697	989	376	240	231	259	373	536	1,070	2,190	1,003
Dry		2,262	2,200	1,939	1,494	769	306	268	329	630	1,071	1,517	2,311	1,258
Critical		2,399	2,349	2,313	1,765	967	492	456	751	1,196	1,512	1,779	2,356	1,528

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)
Alternative CP1 (2005)

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	2,074	2,015	1,603	961	402	221	201	201	204	234	688	1,926	894
1923	Below Normal	2,360	2,228	718	235	224	244	227	225	256	504	1,020	1,961	850
1924	Critical	2,400	2,471	2,405	2,043	774	311	488	1,150	1,557	1,611	1,671	2,168	1,587
1925	Dry	2,505	2,590	2,277	2,244	581	216	203	225	250	500	1,171	2,317	1,257
1926	Dry	2,396	2,283	2,487	2,050	630	266	273	252	567	1,016	1,354	2,293	1,322
1927	Wet	2,829	1,209	522	316	221	203	191	214	227	315	781	1,943	748
1928	Above Normal	2,426	1,219	948	546	274	200	197	217	323	422	938	2,165	823
1929	Critical	2,784	2,827	2,245	2,118	1,603	513	475	573	814	1,160	1,761	2,500	1,614
1930	Dry	2,296	2,594	2,165	775	351	233	213	281	570	1,088	1,517	2,524	1,217
1931	Critical	2,460	2,261	2,320	2,324	1,366	818	796	1,214	1,712	1,963	1,853	2,302	1,782
1932	Dry	2,413	2,750	1,239	452	307	257	270	280	258	453	1,208	2,301	1,016
1933	Critical	2,226	2,053	2,176	1,414	887	597	346	527	823	1,117	1,399	1,952	1,293
1934	Critical	2,569	2,430	2,425	1,137	450	274	278	528	664	959	1,647	2,392	1,313
1935	Below Normal	2,312	2,826	2,097	886	283	250	205	232	226	432	1,164	2,227	1,095
1936	Below Normal	2,361	2,223	2,663	911	271	233	201	221	229	504	1,138	2,158	1,093
1937	Below Normal	2,320	2,474	2,236	1,792	526	293	245	221	221	351	943	2,038	1,138
1938	Wet	2,314	1,403	245	204	307	283	229	216	224	236	714	513	574
1939	Dry	269	822	1,607	1,531	900	404	330	386	866	1,188	1,635	2,469	1,034
1940	Above Normal	2,671	2,312	2,102	919	272	212	196	216	256	323	817	2,042	1,028
1941	Wet	2,397	2,654	868	232	249	230	209	201	210	258	861	1,021	783
1942	Wet	751	1,762	592	235	220	209	212	209	195	237	853	695	514
1943	Wet	592	420	240	230	222	234	224	218	240	352	800	2,118	491
1944	Dry	2,680	2,486	2,408	2,290	1,116	286	249	339	561	1,059	1,472	2,446	1,448
1945	Below Normal	2,679	2,229	1,348	1,308	475	234	228	250	306	496	982	2,185	1,060
1946	Below Normal	2,369	2,057	424	197	212	220	218	246	316	675	1,176	2,357	872
1947	Dry	2,561	2,526	1,830	1,268	1,125	418	248	414	708	1,176	1,610	2,103	1,332
1948	Below Normal	2,657	2,656	2,185	2,124	877	339	304	218	213	473	1,222	2,294	1,297
1949	Dry	2,452	2,346	2,456	2,151	1,735	496	220	245	391	1,076	1,581	2,185	1,445
1950	Below Normal	2,429	2,410	2,224	1,056	302	213	237	234	278	490	1,048	2,092	1,085
1951	Above Normal	2,710	460	219	237	220	203	207	234	351	379	897	2,087	684
1952	Wet	2,384	2,388	743	237	202	227	209	189	208	207	507	369	657
1953	Wet	384	1,172	624	204	204	214	222	213	218	264	980	1,299	500
1954	Above Normal	1,010	996	1,490	878	218	194	191	209	310	389	866	2,109	738
1955	Dry	2,686	2,749	1,247	387	295	366	410	349	508	1,005	1,544	2,030	1,131
1956	Wet	2,107	2,743	499	265	236	212	203	211	194	245	917	707	712
1957	Above Normal	356	731	1,877	2,006	731	215	202	232	273	363	911	2,300	850
1958	Wet	1,458	1,078	760	274	222	243	223	192	200	248	674	439	501
1959	Below Normal	473	1,390	2,371	988	235	205	244	403	680	687	1,154	2,049	907
1960	Dry	2,693	2,752	2,094	2,220	1,223	284	227	293	694	1,196	1,540	2,211	1,447
1961	Dry	2,845	2,978	2,428	1,911	1,128	332	297	372	705	1,212	1,613	2,324	1,512
1962	Below Normal	2,835	2,966	2,405	1,673	551	233	238	242	390	663	1,267	2,547	1,334
1963	Wet	1,233	448	539	420	262	201	204	217	204	292	783	1,984	565
1964	Dry	2,337	1,195	689	751	288	367	441	416	695	1,372	1,718	2,053	1,027
1965	Wet	2,638	2,785	492	203	203	198	200	223	225	351	867	1,897	857
1966	Below Normal	2,273	1,228	386	295	211	207	230	262	603	686	1,039	2,254	806
1967	Wet	2,753	2,762	956	264	216	204	235	203	208	228	426	336	733
1968	Below Normal	291	884	1,249	641	214	194	208	335	650	658	1,021	2,312	721
1969	Wet	2,678	2,372	1,117	279	310	297	256	224	225	243	805	530	778
1970	Wet	291	760	330	235	217	203	207	239	365	403	828	2,148	519
1971	Wet	2,586	1,212	293	197	195	190	193	211	216	331	1,019	967	634
1972	Below Normal	923	1,921	1,176	649	565	246	219	317	665	673	1,130	2,269	896
1973	Above Normal	2,801	1,208	468	241	224	204	201	222	238	382	964	1,990	762
1974	Wet	2,562	436	195	195	196	200	195	209	201	283	1,043	681	533
1975	Wet	359	1,061	1,246	803	297	211	206	216	194	246	885	720	537
1976	Critical	272	492	1,273	1,799	1,576	832	605	988	1,668	2,040	2,116	2,927	1,382
1977	Critical	2,672	2,884	2,276	1,746	895	476	685	1,078	1,788	1,788	1,685	2,200	1,681
1978	Above Normal	2,673	2,628	2,564	583	250	268	276	242	226	285	789	1,414	1,016
1979	Below Normal	1,769	2,573	2,395	932	280	223	214	231	225	410	944	2,235	1,036
1980	Above Normal	2,634	2,152	793	239	273	280	245	227	231	285	911	1,959	852
1981	Dry	2,088	2,166	2,462	971	258	206	220	373	904	1,297	1,536	2,369	1,238
1982	Wet	3,052	1,103	208	224	218	241	216	199	201	254	712	304	578
1983	Wet	186	200	248	314	295	259	242	229	225	218	199	186	233
1984	Wet	191	193	233	252	228	200	210	253	317	414	832	2,078	450
1985	Dry	2,233	861	255	649	769	344	290	315	751	1,272	1,646	2,555	995
1986	Wet	2,730	2,612	1,855	748	272	266	243	217	235	309	812	1,554	988
1987	Dry	1,671	2,060	2,799	1,859	1,051	355	233	445	863	1,314	1,700	2,249	1,383
1988	Critical	2,882	2,585	2,320	902	293	320	527	576	689	1,204	1,719	2,381	1,366
1989	Dry	2,642	2,616	2,194	2,368	1,613	401	207	256	647	1,301	1,701	2,088	1,503
1990	Critical	2,679	2,950	2,126	1,171	619	499	428	742	1,544	1,813	1,813	2,305	1,557
1991	Critical	2,691	2,554	2,509	2,254	1,770	856	260	632	1,558	1,752	1,597	2,225	1,722
1992	Critical	2,944	2,551	2,767	2,196	958	295	283	553	810	1,156	2,213	2,672	1,617
1993	Above Normal	2,752	2,706	2,332	484	250	215	195	204	194	239	783	1,651	1,000
1994	Critical	2,121	2,303	2,572	2,118	959	318	371	476	1,072	2,129	2,102	2,314	1,571
Average		2,083	1,937	1,495	988	532	296	270	337	510	728	1,181	1,890	1,021
Wet		1,737	1,465	610	302	238	225	216	214	225	283	776	1,071	614
Above Normal		2,211	1,643	1,440	710	311	221	211	220	261	330	856	1,964	865
Below Normal		2,004	2,148	1,705	978	373	238	230	260	376	550	1,089	2,213	1,014
Dry		2,297	2,236	1,915	1,489	836	327	271	328	621	1,095	1,534	2,282	1,269
Critical		2,392	2,363	2,284	1,769	1,012	509	462	753	1,225	1,558	1,798	2,361	1,541

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	-1	-3	-2	-1
1924	Critical	0	0	1	-1	-1	0	0	5	-10	-6	80	80	12
1925	Dry	-97	96	-126	-171	-2	-1	-1	0	0	-1	-21	-43	-31
1926	Dry	-23	-6	-2	-1	0	0	8	-1	-1	6	17	44	3
1927	Wet	33	-6	-1	-1	1	0	0	0	0	1	-1	2	2
1928	Above Norma	3	70	63	5	-3	0	0	-1	3	1	36	33	17
1929	Critical	3	19	-10	-102	-34	-6	-1	12	47	42	122	117	17
1930	Dry	-84	-112	23	17	2	2	0	0	-59	45	172	130	11
1931	Critical	-31	-19	-246	226	372	158	42	12	422	419	125	93	131
1932	Dry	20	-8	0	-3	-1	-1	0	0	0	0	1	-3	0
1933	Critical	-3	-1	-3	6	9	29	12	2	1	1	-3	-1	4
1934	Critical	-4	3	-6	73	33	4	1	0	0	0	-2	-2	8
1935	Below Normal	-1	1	0	0	-1	0	0	0	-2	12	20	18	4
1936	Below Normal	19	-1	-1	0	-2	-1	-1	0	0	33	41	13	8
1937	Below Normal	0	133	-39	-163	-14	-2	-1	0	0	-3	-20	-8	-10
1938	Wet	-106	-11	6	-1	-2	0	0	0	0	0	14	8	-8
1939	Dry	-12	-25	-16	-4	-4	0	-1	6	60	30	60	63	13
1940	Above Norma	33	22	9	-1	4	1	0	-6	-3	-1	0	1	5
1941	Wet	3	-8	-3	0	0	1	0	0	0	0	-1	1	-1
1942	Wet	2	3	1	0	0	0	0	0	0	-1	-1	0	0
1943	Wet	1	0	0	0	0	0	0	0	0	4	14	14	3
1944	Dry	-2	67	-188	286	271	26	2	-12	-32	67	-9	-83	33
1945	Below Normal	66	83	12	1	0	-4	-3	0	3	7	12	7	15
1946	Below Normal	-44	610	117	1	1	0	-1	0	6	2	1	-12	57
1947	Dry	-81	43	40	7	6	-4	-5	0	-17	55	27	-76	0
1948	Below Normal	-69	-116	58	89	-16	-23	-6	0	10	102	120	232	32
1949	Dry	453	155	-79	125	716	221	7	1	-10	-39	-3	30	131
1950	Below Normal	109	155	-57	-114	-18	-1	-4	0	1	29	26	16	12
1951	Above Norma	-17	20	0	0	-2	-1	0	0	-5	-3	7	-4	0
1952	Wet	-14	-205	-52	0	0	-1	0	0	0	0	1	0	-23
1953	Wet	-2	-9	-4	0	0	0	0	0	1	0	35	23	4
1954	Above Norma	15	-206	-291	-67	-4	0	0	4	4	0	7	3	-45
1955	Dry	-1	-9	133	50	6	2	0	-16	-23	114	3	-155	9
1956	Wet	-70	-34	0	0	-1	-1	-1	0	0	0	25	13	-6
1957	Above Norma	2	-1	13	-14	-25	-1	0	-1	2	-1	21	2	0
1958	Wet	78	80	21	2	0	-1	0	0	0	0	2	2	15
1959	Below Normal	1	3	2	1	0	0	1	0	-1	1	11	35	5
1960	Dry	234	479	-348	-365	-30	-2	0	0	-48	-4	-11	-97	-16
1961	Dry	72	-54	76	77	86	36	23	-9	-24	1	-3	-22	22
1962	Below Normal	11	-12	17	12	7	1	0	0	-10	6	5	12	4
1963	Wet	-11	-32	-52	34	14	0	0	-1	0	0	0	1	-4
1964	Dry	10	-27	-21	-10	-2	0	0	2	-20	18	11	-62	-8
1965	Wet	-35	-5	2	0	-1	-1	0	0	-4	6	20	11	-1
1966	Below Normal	-5	55	18	4	0	1	1	1	-7	-2	8	1	6
1967	Wet	-2	-7	1	1	0	0	0	0	0	0	1	1	-1
1968	Below Normal	0	-5	-5	-1	0	0	0	5	14	3	8	1	2
1969	Wet	2	-2	-6	0	-1	0	0	0	0	0	0	2	0
1970	Wet	-4	-13	-3	0	0	0	0	-1	4	0	10	18	1
1971	Wet	7	-71	-12	0	0	0	0	0	0	-2	-22	7	-8
1972	Below Normal	16	10	3	0	0	1	0	2	17	0	26	4	7
1973	Above Norma	-61	116	71	3	-1	-1	0	0	2	-3	-3	0	10
1974	Wet	-3	4	0	0	0	0	0	0	0	0	2	2	0
1975	Wet	1	1	0	1	0	0	0	0	0	0	2	2	1
1976	Critical	0	0	0	2	2	1	12	1	2	-9	85	65	14
1977	Critical	1	194	-43	-112	162	15	4	-3	-44	58	-202	-294	-22
1978	Above Norma	85	-83	270	92	2	1	6	0	2	0	0	15	32
1979	Below Normal	18	8	-5	6	2	0	0	-1	0	5	10	5	4
1980	Above Norma	-14	282	65	-4	-1	0	0	0	0	0	-1	-1	27
1981	Dry	-3	-2	-2	0	1	3	5	5	19	0	1	-17	1
1982	Wet	3	15	1	0	-1	0	0	0	0	0	5	1	2
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	1	0	10	-26	-1
1985	Dry	55	61	3	3	2	0	0	-1	-20	3	5	-39	6
1986	Wet	-2	-33	-57	13	2	0	-1	0	0	-3	-90	-54	-19
1987	Dry	-15	-64	87	-130	28	48	4	3	64	103	28	-60	8
1988	Critical	-45	-25	-17	-5	5	1	8	-3	-23	-12	-40	-21	-15
1989	Dry	22	-22	38	30	-8	7	1	0	-27	-5	-3	-71	-3
1990	Critical	-48	10	-16	-17	-2	0	0	0	1	30	27	6	-1
1991	Critical	-1	-4	0	-14	-13	-2	0	1	0	2	38	52	5
1992	Critical	28	-9	10	-13	-15	-1	0	0	-1	0	0	3	0
1993	Above Norma	-7	8	-8	-4	0	1	0	1	1	1	20	25	3
1994	Critical	15	6	-12	4	22	3	1	1	-53	26	-9	-32	-2
Average		7	21	-8	-2	21	7	1	0	3	16	12	0	7
Wet		-6	-16	-7	2	1	0	0	0	0	0	1	1	-2
Above Norma		4	23	19	1	-3	0	1	0	0	-1	9	7	5
Below Normal		9	66	9	-12	-3	-1	0	2	14	19	23	10	
Dry		34	36	-24	-6	67	21	3	-1	-9	25	17	-29	11
Critical		-7	15	-29	4	45	17	6	2	28	46	18	6	13

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	5%	4%	1%
1925	Dry	-4%	4%	-5%	-7%	0%	-1%	-1%	0%	0%	0%	-2%	-2%	-1%
1926	Dry	-1%	0%	0%	0%	0%	0%	3%	0%	0%	1%	1%	2%	0%
1927	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	6%	7%	1%	-1%	0%	0%	0%	1%	0%	4%	2%	2%
1929	Critical	0%	1%	0%	-5%	-2%	-1%	0%	2%	6%	4%	7%	5%	1%
1930	Dry	-4%	-4%	1%	2%	0%	1%	0%	0%	-9%	4%	13%	5%	1%
1931	Critical	-1%	-1%	-10%	11%	37%	24%	6%	1%	33%	27%	7%	4%	12%
1932	Dry	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	1%	5%	3%	0%	0%	0%	0%	0%	1%
1934	Critical	0%	0%	0%	7%	8%	1%	0%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	3%	2%	1%	0%
1936	Below Normal	1%	0%	0%	0%	-1%	-1%	0%	0%	0%	7%	4%	1%	1%
1937	Below Normal	0%	6%	-2%	-8%	-3%	-1%	0%	0%	-1%	0%	-2%	0%	-1%
1938	Wet	-4%	-1%	3%	0%	-1%	0%	0%	0%	0%	0%	2%	2%	0%
1939	Dry	-4%	-3%	-1%	0%	0%	0%	0%	2%	7%	3%	4%	3%	1%
1940	Above Norma	1%	1%	0%	0%	1%	0%	0%	-3%	-1%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	1%	0%
1944	Dry	0%	3%	-7%	14%	32%	10%	1%	-4%	-5%	7%	-1%	-3%	4%
1945	Below Normal	3%	4%	1%	0%	0%	-2%	-1%	0%	1%	1%	1%	0%	1%
1946	Below Normal	-2%	42%	38%	0%	0%	0%	0%	0%	2%	0%	0%	-1%	7%
1947	Dry	-3%	2%	2%	1%	1%	-1%	-2%	0%	-2%	5%	2%	-3%	0%
1948	Below Normal	-3%	-4%	3%	4%	-2%	-6%	-2%	0%	5%	27%	11%	11%	4%
1949	Dry	23%	7%	-3%	6%	70%	80%	3%	0%	-3%	-4%	0%	1%	15%
1950	Below Normal	5%	7%	-3%	-10%	-6%	-1%	-2%	0%	1%	6%	3%	1%	0%
1951	Above Norma	-1%	4%	0%	0%	-1%	0%	0%	0%	-1%	-1%	1%	0%	0%
1952	Wet	-1%	-8%	-6%	0%	0%	0%	0%	-8%	0%	0%	0%	0%	-1%
1953	Wet	0%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%	4%	2%	0%
1954	Above Norma	1%	-17%	-16%	-7%	-2%	0%	0%	2%	1%	0%	1%	0%	-3%
1955	Dry	0%	0%	12%	15%	2%	0%	0%	-4%	13%	0%	0%	-7%	2%
1956	Wet	-3%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	3%	2%	0%
1957	Above Norma	1%	0%	1%	-1%	-3%	0%	0%	0%	1%	0%	2%	0%	0%
1958	Wet	6%	8%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1960	Dry	10%	21%	-14%	-14%	-2%	-1%	0%	0%	0%	0%	-1%	-4%	-1%
1961	Dry	3%	-2%	3%	4%	8%	12%	8%	-2%	-3%	0%	0%	-1%	3%
1962	Below Normal	0%	0%	1%	1%	1%	0%	0%	0%	-2%	1%	0%	0%	0%
1963	Wet	-1%	-7%	-9%	9%	6%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	-2%	-3%	-1%	-1%	0%	0%	0%	-3%	1%	1%	-3%	-1%
1965	Wet	-1%	0%	0%	0%	0%	0%	0%	0%	-2%	2%	2%	1%	0%
1966	Below Normal	0%	5%	5%	1%	0%	0%	0%	0%	-1%	0%	1%	0%	1%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	-1%	0%	0%	0%	0%	0%	1%	2%	0%	1%	0%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	-1%	-2%	-1%	0%	0%	0%	0%	0%	1%	0%	1%	1%	0%
1971	Wet	0%	-6%	-4%	0%	0%	0%	0%	0%	0%	-1%	-2%	1%	-1%
1972	Below Normal	2%	1%	0%	0%	0%	1%	0%	1%	3%	0%	2%	0%	1%
1973	Above Norma	-2%	11%	18%	1%	0%	0%	0%	0%	1%	-1%	0%	0%	2%
1974	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	4%	2%	1%
1977	Critical	0%	7%	-2%	-6%	22%	3%	1%	0%	-2%	3%	-11%	-12%	0%
1978	Above Norma	3%	-3%	12%	19%	1%	0%	2%	0%	1%	0%	0%	1%	3%
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	0%	0%	1%	1%	0%	0%
1980	Above Norma	-1%	15%	9%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	2%	2%	1%	2%	0%	0%	-1%	1%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%
1985	Dry	3%	8%	1%	0%	0%	0%	0%	0%	-3%	0%	0%	-1%	1%
1986	Wet	0%	-1%	-3%	2%	1%	0%	0%	0%	0%	-1%	-10%	-3%	-1%
1987	Dry	-1%	-3%	3%	-7%	3%	16%	2%	1%	8%	8%	2%	-3%	2%
1988	Critical	-2%	-1%	-1%	-1%	2%	0%	1%	0%	-3%	-1%	-2%	-1%	-1%
1989	Dry	1%	-1%	2%	1%	-1%	2%	1%	0%	-4%	0%	0%	-3%	0%
1990	Critical	-2%	0%	-1%	1%	0%	0%	0%	0%	0%	2%	2%	0%	0%
1991	Critical	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	2%	2%	0%
1992	Critical	1%	0%	0%	-1%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	-1%	0%	0%	0%	1%	1%	0%	3%	2%	0%
1994	Critical	1%	0%	0%	0%	2%	1%	0%	0%	-5%	1%	0%	-1%	0%
Average		0%	1%	0%	0%	2%	2%	0%	0%	0%	2%	1%	0%	1%
Wet		0%	-1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	2%	3%	1%	-1%	0%	0%	0%	0%	0%	1%	0%	1%
Below Normal		0%	4%	3%	-1%	-1%	-1%	0%	0%	1%	3%	2%	1%	1%
Dry		1%	2%	-1%	1%	7%	8%	1%	0%	-2%	2%	1%	-1%	2%
Critical		0%	1%	-1%	0%	6%	3%	1%	0%	2%	3%	1%	0%	1%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)

Existing Condition		SVI												
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	677	653	763	806	659	555	361	355	340	530	521	524	562
1923	Below Normal	554	573	651	566	545	734	381	380	561	634	539	499	551
1924	Critical	521	577	776	823	989	1,014	702	665	707	678	651	629	728
1925	Dry	668	656	809	897	908	951	448	418	653	674	623	588	691
1926	Dry	616	632	810	863	991	1,005	561	544	704	686	635	594	720
1927	Wet	640	608	801	855	776	796	424	394	644	667	596	558	646
1928	Above Normal	540	542	764	783	905	511	426	457	677	677	621	583	624
1929	Critical	592	618	802	826	989	1,005	623	584	704	686	645	605	723
1930	Dry	658	660	846	906	995	1,002	622	582	706	685	643	600	742
1931	Critical	655	655	842	907	995	1,011	747	697	709	684	652	628	765
1932	Dry	683	693	750	843	748	896	574	505	669	661	609	579	684
1933	Critical	601	619	820	877	994	1,003	627	580	699	680	636	607	729
1934	Critical	644	674	819	881	997	1,006	727	662	706	678	652	630	756
1935	Below Normal	681	686	843	819	1,010	893	420	411	640	633	606	572	684
1936	Below Normal	586	618	825	846	562	335	360	414	596	646	540	529	571
1937	Below Normal	541	589	783	771	433	382	281	278	591	636	539	528	529
1938	Wet	553	553	522	564	374	329	259	255	254	384	355	350	396
1939	Dry	416	509	728	762	836	818	510	503	702	682	629	577	639
1940	Above Normal	595	635	824	736	736	343	332	381	537	636	592	531	573
1941	Wet	549	579	645	628	419	309	263	267	422	487	484	507	463
1942	Wet	502	523	643	447	298	417	317	281	413	465	371	361	420
1943	Wet	487	498	653	365	267	304	298	378	457	621	520	521	448
1944	Dry	527	531	716	751	815	796	432	464	646	661	618	591	629
1945	Below Normal	585	593	776	780	501	351	388	373	510	601	506	514	540
1946	Below Normal	494	552	495	564	460	497	398	378	539	650	589	553	514
1947	Dry	534	558	705	745	841	992	610	570	688	692	647	607	682
1948	Below Normal	616	628	796	850	991	1,002	582	545	635	643	621	597	709
1949	Dry	615	635	809	868	993	957	625	600	659	681	638	609	724
1950	Below Normal	636	631	798	853	991	993	537	448	595	669	633	592	698
1951	Above Normal	618	629	387	324	253	443	395	262	525	659	623	594	476
1952	Wet	588	616	755	570	623	424	229	204	292	385	352	363	450
1953	Wet	531	548	723	610	635	904	384	348	526	614	607	579	584
1954	Above Normal	581	621	782	807	941	982	530	489	664	679	635	607	693
1955	Dry	617	639	775	770	987	1,002	613	592	703	702	658	617	723
1956	Wet	657	663	705	370	358	365	385	376	411	490	476	431	474
1957	Above Normal	507	569	751	777	895	943	391	359	564	651	612	575	633
1958	Wet	566	619	774	790	746	475	209	190	331	433	362	363	488
1959	Below Normal	518	560	718	750	720	838	479	481	691	689	642	579	639
1960	Dry	615	661	814	840	946	1,001	616	578	707	699	672	642	733
1961	Dry	697	689	830	914	1,019	1,005	705	665	707	675	695	664	775
1962	Below Normal	715	700	826	942	741	734	511	482	696	671	624	594	686
1963	Wet	632	679	829	859	855	939	458	421	596	641	599	564	673
1964	Dry	587	610	817	827	991	1,004	622	582	703	693	655	617	726
1965	Wet	647	669	750	462	393	513	354	352	481	636	464	480	517
1966	Below Normal	541	464	612	645	604	870	513	504	702	700	661	629	620
1967	Wet	630	688	757	778	914	559	267	225	294	307	340	347	509
1968	Below Normal	493	576	736	763	743	917	462	453	683	693	636	604	646
1969	Wet	614	646	793	653	375	398	286	242	244	388	364	369	448
1970	Wet	408	505	626	282	341	366	365	401	490	640	609	560	466
1971	Wet	547	615	788	764	925	850	386	372	561	627	611	578	635
1972	Below Normal	552	636	797	823	936	1,003	573	535	704	697	649	624	711
1973	Above Normal	634	634	798	850	703	613	433	441	523	651	533	516	611
1974	Wet	502	517	619	524	612	318	368	394	446	587	501	472	488
1975	Wet	431	486	710	729	344	318	379	376	436	576	492	507	482
1976	Critical	428	512	762	776	921	1,003	612	573	706	703	644	630	689
1977	Critical	658	676	818	887	993	1,010	698	631	710	696	715	727	768
1978	Above Normal	761	756	865	772	743	677	384	319	413	555	495	451	599
1979	Below Normal	584	523	753	669	362	323	390	306	448	653	538	539	507
1980	Above Normal	518	561	770	422	343	395	361	362	383	464	464	494	461
1981	Dry	480	502	730	750	903	868	490	454	694	673	646	609	650
1982	Wet	588	637	792	727	290	303	223	212	367	421	346	250	430
1983	Wet	203	267	379	346	323	258	292	266	242	228	189	234	269
1984	Wet	351	206	302	334	223	364	370	364	530	633	537	463	390
1985	Dry	447	499	779	775	831	886	540	506	691	701	620	569	654
1986	Wet	580	588	766	825	459	310	242	228	392	607	495	445	495
1987	Dry	436	439	716	775	982	922	599	555	706	703	666	630	677
1988	Critical	648	665	813	876	992	1,010	682	643	707	705	711	668	760
1989	Dry	741	706	833	931	1,166	1,019	719	615	708	677	667	601	782
1990	Critical	689	694	835	946	1,151	1,023	713	651	709	694	687	666	788
1991	Critical	698	688	854	985	1,255	1,007	699	653	708	699	695	699	803
1992	Critical	734	731	888	1,012	988	1,002	758	783	780	697	707	722	817
1993	Above Normal	794	798	912	700	767	846	553	535	485	570	548	516	669
1994	Critical	572	618	858	959	1,000	1,011	693	637	749	737	708	688	769
Average		580	600	749	741	744	729	476	452	578	622	576	551	617
Wet		534	558	682	594	502	468	322	312	420	516	461	443	484
Above Normal		622	640	762	698	694	631	417	396	511	607	564	539	590
Below Normal		578	595	743	760	686	705	448	428	614	658	595	568	615
Dry		584	601	779	826	935	945	580	546	690	686	645	606	702
Critical		620	644	824	896	1,022	1,009	690	647	716	695	675	658	758

Shasta Lake Water Resources Investigation
 Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)

Alternative CP1 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	677	653	763	806	659	555	361	355	340	530	521	524	562
1923	Below Normal	554	573	651	566	545	734	381	380	561	634	539	499	551
1924	Critical	521	577	776	823	989	1,014	702	665	707	678	651	629	728
1925	Dry	668	656	809	897	908	951	448	418	653	674	623	588	691
1926	Dry	616	632	810	863	991	1,005	561	544	704	686	635	594	720
1927	Wet	640	608	801	855	776	796	424	394	644	667	596	558	646
1928	Above Normal	540	542	764	783	905	511	426	457	677	677	621	583	624
1929	Critical	592	618	802	826	989	1,005	623	585	704	687	646	605	723
1930	Dry	658	660	846	906	995	1,002	622	582	706	685	643	600	742
1931	Critical	655	655	843	907	994	1,011	747	697	709	684	652	628	765
1932	Dry	683	693	750	843	748	896	574	505	669	661	609	579	684
1933	Critical	601	619	820	877	994	1,003	627	580	699	680	636	607	729
1934	Critical	644	674	819	881	997	1,006	727	662	706	678	652	630	756
1935	Below Normal	681	686	843	819	1,010	893	420	411	640	633	606	572	684
1936	Below Normal	586	618	825	846	562	335	360	414	596	646	540	529	572
1937	Below Normal	541	589	783	771	433	382	281	278	591	636	539	528	529
1938	Wet	553	553	522	564	374	329	259	255	254	384	355	350	396
1939	Dry	416	509	728	762	836	818	510	503	702	683	630	577	640
1940	Above Normal	595	635	824	736	736	343	332	381	537	636	592	531	573
1941	Wet	549	579	645	628	419	309	263	267	422	487	484	507	463
1942	Wet	502	523	643	447	298	417	317	281	413	465	371	361	420
1943	Wet	487	498	653	365	267	304	298	378	457	621	520	521	448
1944	Dry	527	531	716	751	815	796	432	464	646	661	618	591	629
1945	Below Normal	585	593	776	780	501	351	388	373	510	601	506	514	540
1946	Below Normal	494	552	495	564	460	497	398	378	539	650	589	553	514
1947	Dry	534	558	705	745	841	992	610	570	688	692	648	607	682
1948	Below Normal	616	628	796	850	991	1,002	582	545	635	643	621	597	709
1949	Dry	615	635	809	868	993	957	625	600	659	681	638	609	724
1950	Below Normal	636	631	798	853	991	993	537	448	596	669	633	592	698
1951	Above Normal	618	629	387	324	253	443	395	262	525	659	623	594	476
1952	Wet	588	616	755	570	623	424	229	204	292	385	352	363	450
1953	Wet	531	548	723	610	635	904	384	348	526	614	607	579	584
1954	Above Normal	581	621	782	807	941	982	530	489	664	679	635	607	693
1955	Dry	617	639	775	770	987	1,002	613	592	703	702	658	617	723
1956	Wet	657	663	705	370	358	365	385	376	411	490	476	431	474
1957	Above Normal	507	569	751	777	895	943	391	359	564	651	613	575	633
1958	Wet	566	619	774	790	746	475	209	190	331	433	362	363	488
1959	Below Normal	518	560	718	750	720	838	479	481	691	689	642	579	639
1960	Dry	615	661	814	840	946	1,001	616	578	707	699	672	642	733
1961	Dry	697	689	830	914	1,019	1,004	705	665	707	694	664	664	775
1962	Below Normal	715	700	826	942	741	734	511	482	696	671	624	594	686
1963	Wet	632	679	829	859	855	939	458	421	596	641	599	564	673
1964	Dry	587	610	817	827	991	1,004	622	582	703	693	655	617	726
1965	Wet	647	669	750	462	393	513	354	352	481	636	464	480	517
1966	Below Normal	541	464	612	645	604	870	513	504	702	700	661	629	620
1967	Wet	630	687	757	778	914	559	267	225	294	307	340	347	509
1968	Below Normal	493	576	736	763	743	917	462	453	683	693	636	604	646
1969	Wet	614	646	793	653	375	398	286	242	244	388	364	369	448
1970	Wet	408	505	626	282	341	367	365	401	490	640	609	560	466
1971	Wet	547	615	788	764	925	850	386	372	561	626	611	578	635
1972	Below Normal	552	636	797	823	936	1,003	573	535	705	697	649	624	711
1973	Above Normal	634	634	798	850	704	613	433	441	523	651	533	516	611
1974	Wet	502	517	619	524	612	318	368	394	446	587	501	472	488
1975	Wet	431	486	710	729	344	318	379	376	436	576	492	507	482
1976	Critical	428	512	762	776	921	1,003	612	573	706	703	645	630	689
1977	Critical	658	676	818	887	993	1,010	698	631	710	697	715	727	768
1978	Above Normal	761	756	865	772	743	677	384	319	413	555	495	451	599
1979	Below Normal	584	523	753	669	362	323	390	306	448	653	538	539	507
1980	Above Normal	518	561	770	422	343	395	361	362	383	464	464	494	461
1981	Dry	480	502	730	751	903	868	490	454	694	673	646	609	650
1982	Wet	588	637	792	727	290	303	223	212	367	421	346	250	430
1983	Wet	203	267	379	346	323	258	292	266	242	228	189	234	269
1984	Wet	351	206	302	334	223	364	370	364	530	633	537	463	390
1985	Dry	447	499	779	775	831	886	540	506	691	701	620	569	654
1986	Wet	580	588	766	825	459	310	243	228	393	607	496	445	495
1987	Dry	436	439	716	775	982	922	599	555	706	703	667	631	677
1988	Critical	648	664	813	876	992	1,010	682	643	707	705	711	668	760
1989	Dry	741	706	833	931	1,166	1,019	719	615	708	678	667	601	782
1990	Critical	689	694	835	946	1,151	1,023	713	651	709	694	687	666	788
1991	Critical	698	688	854	985	1,255	1,007	699	653	708	699	695	699	803
1992	Critical	734	731	888	1,012	988	1,002	758	783	779	697	707	721	817
1993	Above Normal	794	798	912	700	767	846	553	535	485	570	548	516	669
1994	Critical	572	618	858	959	1,000	1,011	694	637	749	736	708	688	769
Average		580	600	749	741	744	729	476	452	578	623	576	551	617
Wet		534	558	682	594	502	468	322	312	421	516	461	443	484
Above Normal		622	640	762	698	695	631	417	396	511	607	564	539	590
Below Normal		578	595	743	760	686	705	448	428	614	658	595	568	615
Dry		584	601	779	826	935	945	580	546	690	686	645	606	702
Critical		620	644	824	896	1,022	1,009	690	647	716	695	675	658	758

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	1	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	1	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	1	1	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	0	0	-1	0	0	0	0	0	0	0	0
1978	Above Normal	0	0	0	0	0	1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	1	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	-1	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	-1	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	684	649	765	798	646	551	351	352	335	530	515	520	558
1923	Below Normal	554	572	650	560	543	737	366	376	559	633	528	495	548
1924	Critical	521	578	786	821	1,000	1,008	656	662	698	667	644	624	722
1925	Dry	669	654	815	898	904	951	418	420	653	670	615	582	688
1926	Dry	615	632	820	861	1,000	1,001	527	546	698	679	626	587	716
1927	Wet	641	605	814	853	768	795	402	392	647	663	587	552	643
1928	Above Normal	538	541	773	779	913	495	414	456	678	672	612	576	621
1929	Critical	591	618	814	821	1,000	1,000	582	589	698	679	636	598	719
1930	Dry	659	660	864	897	1,000	1,000	577	588	698	678	635	593	737
1931	Critical	656	654	856	904	1,000	1,005	693	694	698	673	644	622	758
1932	Dry	685	692	749	845	738	900	542	506	667	656	600	573	679
1933	Critical	600	618	832	871	1,000	1,000	582	585	692	672	626	601	723
1934	Critical	645	674	829	881	1,002	1,001	676	661	696	667	644	624	750
1935	Below Normal	682	685	851	811	1,023	883	399	409	641	626	599	566	681
1936	Below Normal	585	619	837	841	552	329	356	412	593	643	528	525	568
1937	Below Normal	540	590	793	763	421	376	277	275	592	633	528	524	526
1938	Wet	553	553	520	563	366	327	257	253	251	382	348	346	393
1939	Dry	417	511	736	759	838	802	477	508	698	674	619	569	634
1940	Above Normal	595	637	835	722	722	328	330	378	531	635	583	524	568
1941	Wet	549	579	645	622	408	306	260	265	420	485	479	504	460
1942	Wet	501	523	645	436	293	419	313	278	411	462	363	357	417
1943	Wet	490	497	658	355	264	303	296	376	452	622	509	517	445
1944	Dry	526	530	723	750	813	792	405	465	643	656	609	585	625
1945	Below Normal	584	591	784	776	490	347	382	370	502	600	495	511	536
1946	Below Normal	492	553	492	564	456	496	385	375	534	651	579	547	510
1947	Dry	532	557	710	744	844	1,000	564	575	679	688	639	599	677
1948	Below Normal	616	628	807	849	1,000	1,000	543	550	624	638	613	592	705
1949	Dry	615	635	821	865	1,000	952	588	604	648	678	629	603	720
1950	Below Normal	635	630	807	845	1,000	991	493	448	587	669	625	586	693
1951	Above Normal	618	627	377	318	249	446	388	253	525	662	614	588	472
1952	Wet	587	616	756	550	624	418	225	201	291	383	345	360	446
1953	Wet	535	548	730	603	635	912	347	345	520	611	601	572	580
1954	Above Normal	579	622	792	803	949	979	492	487	662	675	626	601	689
1955	Dry	615	639	780	759	1,000	1,000	579	597	696	698	650	610	719
1956	Wet	657	663	703	355	357	362	381	374	406	488	470	425	470
1957	Above Normal	509	571	762	773	900	944	360	559	651	603	603	569	630
1958	Wet	564	621	782	782	726	458	202	188	331	431	354	359	483
1959	Below Normal	521	561	725	747	713	838	442	482	690	682	633	574	634
1960	Dry	614	663	826	834	949	1,000	573	583	698	692	666	635	728
1961	Dry	698	687	842	911	1,027	1,000	658	662	698	698	691	659	769
1962	Below Normal	717	698	835	948	723	733	487	485	693	663	616	588	682
1963	Wet	633	681	839	856	852	941	428	423	590	638	592	559	669
1964	Dry	588	609	833	821	1,000	1,000	579	587	698	687	647	610	722
1965	Wet	648	669	750	449	390	514	347	346	475	640	450	477	513
1966	Below Normal	542	459	616	644	601	877	470	509	698	696	654	623	616
1967	Wet	628	690	759	752	922	542	257	222	293	304	335	343	504
1968	Below Normal	496	578	745	755	740	924	426	454	684	689	629	597	643
1969	Wet	614	647	798	641	364	398	283	240	242	387	357	365	445
1970	Wet	408	508	629	270	341	365	354	398	476	644	600	552	462
1971	Wet	545	613	784	760	934	843	355	371	554	623	604	572	630
1972	Below Normal	549	639	808	817	943	999	526	542	698	692	640	620	706
1973	Above Normal	634	628	807	810	682	608	421	438	513	653	520	511	602
1974	Wet	500	515	620	518	614	309	367	391	439	587	490	466	485
1975	Wet	428	488	718	727	328	316	377	371	430	576	483	503	479
1976	Critical	424	514	774	771	928	999	566	578	698	699	636	627	685
1977	Critical	658	675	831	886	1,000	1,000	631	634	699	685	718	726	762
1978	Above Normal	762	755	871	756	739	669	376	316	410	554	486	446	595
1979	Below Normal	587	519	763	659	350	321	387	300	439	658	526	535	504
1980	Above Normal	516	562	781	408	338	395	357	358	379	462	458	491	459
1981	Dry	478	502	741	745	911	863	460	452	697	665	640	602	646
1982	Wet	586	637	797	712	277	298	221	209	367	418	338	246	426
1983	Wet	202	265	380	338	320	252	292	264	239	226	185	233	266
1984	Wet	353	201	302	334	220	365	362	359	525	633	526	455	386
1985	Dry	446	498	790	771	833	886	506	506	689	699	610	563	650
1986	Wet	579	587	777	821	442	305	240	224	391	608	484	440	491
1987	Dry	433	438	728	774	996	911	553	566	698	698	658	624	673
1988	Critical	648	664	829	872	1,000	1,005	637	643	699	698	711	660	755
1989	Dry	745	702	841	937	1,185	1,001	618	620	697	656	662	595	772
1990	Critical	694	693	849	949	1,169	1,000	638	654	699	682	683	660	781
1991	Critical	698	686	868	994	1,281	981	657	649	699	690	692	696	799
1992	Critical	736	730	902	1,023	979	1,000	698	850	715	681	710	720	812
1993	Above Normal	799	797	919	670	747	840	520	546	471	568	541	511	661
1994	Critical	573	619	874	961	1,000	1,008	617	641	751	703	707	683	761
Average		580	599	757	735	744	725	449	453	572	618	568	546	612
Wet		533	557	686	585	497	464	313	309	417	515	452	438	481
Above Normal		623	639	768	684	689	625	400	394	506	606	556	534	585
Below Normal		579	594	751	756	682	704	424	428	610	655	585	563	611
Dry		583	601	789	823	940	941	539	549	685	680	637	599	697
Critical		620	644	837	896	1,030	1,001	636	653	703	683	671	653	752

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
Alternative CP1 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	684	649	765	798	646	551	351	352	335	530	515	520	558
1923	Below Normal	554	572	650	560	543	737	386	376	559	633	528	495	548
1924	Critical	521	578	786	821	1,000	1,008	656	662	698	667	644	624	722
1925	Dry	669	654	815	898	904	951	418	420	653	670	615	582	688
1926	Dry	615	632	820	861	1,000	1,001	527	546	698	679	626	587	716
1927	Wet	641	605	814	853	768	795	402	392	647	663	587	552	643
1928	Above Normal	538	541	773	779	913	495	414	456	678	672	612	576	621
1929	Critical	591	618	814	821	1,000	1,000	582	589	698	679	637	598	719
1930	Dry	659	660	864	897	1,000	1,000	577	588	698	678	635	593	737
1931	Critical	656	654	856	904	1,000	1,005	693	694	698	673	644	622	758
1932	Dry	685	692	749	845	738	900	542	506	667	657	600	573	679
1933	Critical	600	618	832	871	1,000	1,000	582	585	692	672	626	601	723
1934	Critical	645	674	829	881	1,002	1,001	676	661	696	668	644	624	750
1935	Below Normal	682	685	851	811	1,023	883	399	409	641	626	599	566	681
1936	Below Normal	585	619	837	841	552	329	356	412	593	643	528	525	568
1937	Below Normal	540	590	793	764	421	376	277	275	592	633	528	524	526
1938	Wet	553	553	520	563	366	327	257	253	251	382	348	346	393
1939	Dry	417	511	736	759	838	802	477	508	698	675	620	570	634
1940	Above Normal	595	637	835	722	722	328	378	378	530	635	583	524	568
1941	Wet	549	579	645	621	408	306	260	265	420	485	479	504	460
1942	Wet	501	523	645	436	293	419	313	278	411	462	363	357	417
1943	Wet	490	497	658	355	264	303	296	376	452	622	509	517	445
1944	Dry	526	530	723	750	813	792	406	466	643	656	609	585	625
1945	Below Normal	584	591	784	776	490	347	382	370	502	600	495	511	536
1946	Below Normal	492	553	492	564	456	496	385	375	534	651	579	547	510
1947	Dry	532	557	710	744	844	1,000	564	575	679	688	639	599	677
1948	Below Normal	616	628	807	849	1,000	1,000	543	550	624	638	613	592	705
1949	Dry	615	635	821	865	1,000	952	588	604	648	678	629	603	720
1950	Below Normal	635	630	807	845	1,000	991	493	448	587	669	625	586	693
1951	Above Normal	618	627	377	318	249	446	388	253	525	662	614	588	472
1952	Wet	587	616	756	550	624	418	225	201	291	383	345	360	446
1953	Wet	535	548	730	603	635	912	347	345	520	611	601	572	580
1954	Above Normal	579	622	792	803	949	979	492	487	662	675	626	601	689
1955	Dry	615	639	780	759	1,000	1,000	579	597	696	698	650	610	719
1956	Wet	657	663	703	355	358	362	381	374	406	488	470	425	470
1957	Above Normal	509	571	762	773	900	944	354	360	559	651	603	569	630
1958	Wet	564	621	782	782	726	458	202	188	331	431	354	359	483
1959	Below Normal	521	561	725	747	713	838	442	482	690	682	633	574	634
1960	Dry	614	663	826	834	949	1,000	573	583	698	692	666	635	728
1961	Dry	698	687	842	911	1,027	1,000	658	662	698	698	691	659	769
1962	Below Normal	717	698	835	948	723	733	487	485	693	663	616	588	682
1963	Wet	633	681	839	856	852	941	428	423	590	638	592	559	669
1964	Dry	588	609	833	821	1,000	1,000	580	587	698	687	647	610	722
1965	Wet	648	669	750	449	391	514	347	346	475	640	450	477	513
1966	Below Normal	542	459	616	644	601	877	470	509	698	696	654	623	616
1967	Wet	628	690	759	752	922	524	222	293	532	394	335	343	504
1968	Below Normal	496	578	745	755	740	924	426	454	684	689	629	597	643
1969	Wet	614	647	798	641	364	398	283	240	242	387	357	365	445
1970	Wet	408	508	629	270	341	365	354	398	476	644	600	552	462
1971	Wet	545	613	784	760	934	843	355	371	554	622	604	572	630
1972	Below Normal	549	639	808	817	943	999	526	542	698	692	640	620	706
1973	Above Normal	634	628	807	810	682	608	421	438	513	653	520	511	602
1974	Wet	500	515	620	518	614	309	367	391	439	587	490	466	485
1975	Wet	428	488	718	727	328	316	377	371	430	576	483	503	479
1976	Critical	424	514	774	771	928	999	566	578	698	699	636	627	685
1977	Critical	658	675	831	886	1,000	1,000	631	634	699	685	718	726	762
1978	Above Normal	762	755	871	756	739	670	376	316	410	554	486	446	595
1979	Below Normal	587	519	763	659	350	321	387	300	439	658	526	535	504
1980	Above Normal	516	562	781	408	338	395	357	358	379	462	458	491	459
1981	Dry	478	502	741	745	911	863	460	452	697	665	640	602	646
1982	Wet	586	637	797	712	277	298	221	209	367	418	338	246	426
1983	Wet	202	265	380	338	320	252	292	264	239	226	185	233	266
1984	Wet	353	201	302	334	220	365	362	359	525	633	526	455	386
1985	Dry	446	498	790	771	833	886	506	506	689	699	610	563	650
1986	Wet	579	587	777	821	442	305	240	224	392	608	484	440	492
1987	Dry	433	438	728	774	996	911	553	566	698	698	659	624	673
1988	Critical	648	664	828	871	1,000	1,005	637	643	699	698	710	660	755
1989	Dry	745	702	841	937	1,185	1,001	618	620	697	656	662	595	772
1990	Critical	694	693	849	949	1,169	1,000	638	654	699	682	683	660	781
1991	Critical	698	686	868	994	1,281	981	657	649	699	690	692	696	799
1992	Critical	736	730	902	1,023	979	1,000	698	850	714	680	709	720	812
1993	Above Normal	799	797	919	670	747	840	520	546	472	568	541	511	661
1994	Critical	573	619	874	961	1,000	1,008	617	641	751	703	707	683	761
Average		580	599	757	735	744	725	449	453	572	618	568	546	612
Wet		533	557	686	586	497	464	313	309	417	515	452	438	481
Above Normal		623	639	768	684	689	626	400	394	506	606	556	534	585
Below Normal		579	594	751	756	682	704	424	428	610	655	585	563	611
Dry		583	601	789	823	940	941	539	549	685	680	637	599	697
Critical		620	644	837	896	1,030	1,001	636	653	703	683	671	653	752

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	1	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	1	1	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	Above Normal	0	0	0	0	0	1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	1	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	-1	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
Alternative CP1 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	664	665	768	847	720	576	373	359	345	532	536	537	577
1923	Below Normal	558	583	669	603	570	738	396	385	564	637	568	521	566
1924	Critical	526	578	768	841	989	1,021	787	694	721	701	632	636	741
1925	Dry	667	666	810	915	930	956	473	417	647	634	525	570	684
1926	Dry	619	638	804	876	997	1,012	653	597	712	704	646	619	740
1927	Wet	641	621	800	866	799	805	444	398	641	672	622	584	658
1928	Above Normal	548	550	759	801	911	534	440	459	674	690	640	609	635
1929	Critical	599	621	801	844	993	1,012	764	649	647	561	606	634	728
1930	Dry	657	668	845	924	1,004	1,006	728	611	681	647	611	602	749
1931	Critical	653	663	836	923	1,001	1,019	813	705	715	695	674	650	779
1932	Dry	680	699	765	861	809	901	603	505	674	679	665	602	704
1933	Critical	607	625	812	900	1,004	1,012	770	634	697	626	581	611	740
1934	Critical	647	678	818	896	1,004	1,015	815	684	652	547	559	626	745
1935	Below Normal	680	695	837	839	1,011	904	443	414	640	644	627	598	694
1936	Below Normal	591	624	817	865	578	352	369	418	600	650	565	543	581
1937	Below Normal	547	590	778	810	452	421	292	284	580	642	562	543	542
1938	Wet	559	560	529	590	396	338	268	258	258	388	372	363	407
1939	Dry	418	509	723	783	848	841	541	500	709	690	644	607	651
1940	Above Normal	600	637	817	780	832	371	339	387	544	636	611	558	593
1941	Wet	555	582	651	666	461	321	268	272	425	492	500	517	476
1942	Wet	509	528	646	494	312	425	325	286	417	471	391	373	431
1943	Wet	474	506	651	382	286	308	307	383	466	616	544	534	455
1944	Dry	534	537	712	767	851	805	457	462	651	668	638	616	641
1945	Below Normal	593	602	781	800	518	363	399	378	520	604	529	526	551
1946	Below Normal	503	553	502	584	483	509	412	384	545	650	612	575	526
1947	Dry	544	563	703	760	851	993	738	633	701	698	667	633	707
1948	Below Normal	621	635	791	861	994	1,008	703	594	653	651	635	621	731
1949	Dry	620	639	806	881	998	966	728	627	674	685	662	631	743
1950	Below Normal	640	639	792	883	996	998	685	529	609	671	653	624	727
1951	Above Normal	619	637	405	359	282	453	407	271	527	652	642	617	489
1952	Wet	595	618	763	697	646	432	237	209	296	390	367	373	468
1953	Wet	511	556	728	636	652	900	412	352	538	620	627	603	595
1954	Above Normal	588	623	781	823	946	988	555	492	665	687	658	629	703
1955	Dry	623	644	777	831	990	1,008	722	627	723	708	674	647	748
1956	Wet	659	669	721	434	376	378	393	381	418	495	493	449	489
1957	Above Normal	509	569	749	793	902	948	423	360	572	653	635	601	643
1958	Wet	572	619	771	817	843	564	221	193	333	437	378	373	510
1959	Below Normal	501	565	715	769	747	843	506	532	691	697	660	614	653
1960	Dry	619	662	809	860	959	1,007	735	625	719	708	687	664	754
1961	Dry	696	701	830	936	1,028	1,013	740	645	723	712	702	673	783
1962	Below Normal	714	709	824	954	813	750	536	476	700	680	640	616	701
1963	Wet	633	679	828	872	872	943	479	422	605	646	619	589	682
1964	Dry	591	616	816	841	991	1,011	735	633	713	699	676	645	747
1965	Wet	649	672	760	495	415	519	363	358	493	631	494	490	528
1966	Below Normal	543	480	615	670	628	869	536	499	707	708	675	653	632
1967	Wet	637	686	761	908	927	580	282	230	298	310	352	356	527
1968	Below Normal	484	573	735	786	760	915	497	501	681	698	686	635	663
1969	Wet	619	650	797	721	407	402	290	245	247	392	379	378	460
1970	Wet	411	504	625	307	358	377	377	405	512	634	627	589	477
1971	Wet	555	620	842	789	928	859	409	374	569	631	630	608	651
1972	Below Normal	561	631	794	837	941	1,008	726	603	716	706	672	645	737
1973	Above Normal	637	661	806	1,015	830	651	451	445	537	648	563	535	648
1974	Wet	509	526	631	557	631	334	374	399	456	585	525	490	501
1975	Wet	441	489	705	745	370	328	386	383	445	574	517	517	492
1976	Critical	438	510	757	791	925	1,008	749	641	724	714	689	657	717
1977	Critical	660	679	816	900	998	1,020	816	662	685	649	611	633	761
1978	Above Normal	744	770	866	822	763	697	393	324	418	557	515	471	612
1979	Below Normal	580	537	746	718	393	333	398	313	459	643	569	553	520
1980	Above Normal	526	563	769	449	364	401	371	368	387	468	478	503	471
1981	Dry	489	507	725	773	912	877	517	514	686	685	659	640	665
1982	Wet	596	639	791	792	306	321	226	216	370	426	364	257	442
1983	Wet	207	276	381	391	339	280	302	267	245	231	195	237	279
1984	Wet	352	210	310	343	239	372	381	371	538	633	563	482	400
1985	Dry	454	513	778	794	840	891	684	578	693	705	643	604	681
1986	Wet	585	596	764	840	505	318	251	234	396	600	518	466	506
1987	Dry	446	448	708	792	984	936	731	621	720	710	684	657	703
1988	Critical	652	669	818	890	995	1,018	745	651	672	628	537	641	743
1989	Dry	730	720	831	944	1,151	1,025	704	613	720	689	679	625	786
1990	Critical	681	700	834	954	1,148	1,036	778	631	632	611	633	662	775
1991	Critical	699	702	846	989	1,234	1,014	753	656	609	600	625	659	782
1992	Critical	731	744	882	1,019	1,007	1,006	716	685	567	465	535	672	752
1993	Above Normal	746	803	914	852	919	912	574	527	498	573	563	535	701
1994	Critical	573	620	853	970	1,006	1,017	738	621	746	723	710	704	773
Average		581	606	750	771	765	741	520	467	576	614	581	566	628
Wet		537	562	688	635	527	481	333	316	427	518	480	458	497
Above Normal		618	648	763	754	747	653	433	399	517	609	584	560	607
Below Normal		580	601	743	784	706	715	493	451	619	663	618	590	630
Dry		587	608	778	846	946	953	656	575	697	689	654	627	718
Critical		622	649	820	910	1,025	1,017	770	659	672	627	616	649	753

Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-2	9	11	2	2
1925	Dry	0	0	0	0	0	0	0	0	0	-2	-8	-4	-1
1926	Dry	0	0	0	0	1	0	0	0	0	0	10	2	1
1927	Wet	0	0	0	0	0	1	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	-1	-1	0	0	0	0	0	-1	0	0
1929	Critical	0	0	0	0	0	0	0	0	-3	-14	16	10	1
1930	Dry	0	0	0	0	0	0	0	-1	-38	-41	41	7	-3
1931	Critical	0	0	-1	0	0	0	8	7	2	0	33	13	5
1932	Dry	0	0	0	0	0	1	0	0	0	0	0	0	0
1933	Critical	0	0	0	1	-1	0	0	0	0	0	2	2	0
1934	Critical	0	0	0	-1	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	-1	2	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	1	-1	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	1	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	-1	-2	-3	0	-1
1940	Above Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	-1	1	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	-1	2	0	0	0	0	-1	-3	-1	0
1945	Below Normal	0	0	0	0	1	-1	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	2	0	0	0	-4	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	-1	0	0	0
1949	Dry	0	0	0	1	0	-1	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	1	0	0	0	-1	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	-2	-6	-1	-1
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	-1	0	0
1960	Dry	0	1	-1	0	1	0	0	0	2	0	-1	0	0
1961	Dry	0	0	0	0	0	2	2	2	0	0	0	-1	0
1962	Below Normal	0	0	0	0	0	0	0	0	1	0	1	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	-1	0	0
1965	Wet	0	0	0	0	1	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	2	-1	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	-1	0	0	0	0	-2	-1	0
1970	Wet	-1	0	0	0	2	0	0	0	0	0	0	0	0
1971	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	-1	-1	-5	-1	-1
1973	Above Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	1	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	-1	0	1	0	-1	0	22	4	5	1	3
1977	Critical	0	0	0	0	0	0	-7	-6	-8	0	-4	-14	-3
1978	Above Normal	-14	2	0	0	0	1	0	0	0	0	0	0	-1
1979	Below Normal	0	0	-1	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	-1	0	2	0	0	0	0	0	0
1981	Dry	0	0	0	-1	1	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	3	1	0
1983	Wet	1	0	0	1	1	0	-1	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	-1	0	0	0	0	0	0	0
1986	Wet	0	0	0	1	0	0	0	0	1	0	-1	0	0
1987	Dry	0	0	0	0	-1	-1	-3	-2	8	-3	-8	-1	-1
1988	Critical	0	0	0	0	0	0	-1	-1	-6	-4	-1	3	-1
1989	Dry	0	0	0	0	0	0	0	0	0	0	-1	-2	0
1990	Critical	0	0	-1	0	0	0	0	0	1	2	4	2	1
1991	Critical	0	0	0	0	0	0	0	0	0	0	5	1	1
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	-1	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	-1	1	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		-2	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	-2	-3	1	0	0
Critical		0	0	0	0	0	0	0	0	1	0	6	2	1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	3%	2%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-5%	-6%	7%	1%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	5%	2%	1%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1940	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1973	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	1%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%	-1%	-2%	0%
1978	Above Norma	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%

Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	678	655	764	805	659	556	361	355	340	531	521	525	562
1923	Below Normal	556	576	651	568	546	735	380	380	562	635	539	500	552
1924	Critical	523	578	779	825	994	1,014	708	671	707	678	651	631	730
1925	Dry	669	658	812	899	908	952	444	418	654	674	624	588	692
1926	Dry	617	633	814	864	995	1,005	595	549	705	686	635	595	724
1927	Wet	641	610	807	856	776	796	421	395	647	667	596	559	647
1928	Above Normal	542	544	766	784	909	511	426	458	679	678	621	583	625
1929	Critical	594	620	808	827	994	1,005	641	593	704	686	645	606	727
1930	Dry	659	662	855	904	998	1,002	633	589	706	685	643	600	745
1931	Critical	655	657	849	908	998	1,011	745	702	709	683	653	629	767
1932	Dry	684	695	750	845	749	897	569	507	671	662	610	580	685
1933	Critical	602	621	824	878	997	1,003	641	593	700	681	636	608	732
1934	Critical	646	676	824	883	1,000	1,006	727	668	707	680	652	631	758
1935	Below Normal	682	688	846	819	1,016	890	412	412	642	633	606	573	685
1936	Below Normal	587	620	829	846	562	336	361	414	598	646	540	530	573
1937	Below Normal	543	590	787	772	433	383	282	279	592	637	540	529	530
1938	Wet	555	555	523	565	375	329	259	255	254	384	356	351	397
1939	Dry	417	510	730	763	839	819	507	506	703	681	628	578	640
1940	Above Normal	597	637	828	735	736	343	333	382	538	637	592	532	574
1941	Wet	551	580	645	629	419	310	263	268	423	488	485	508	464
1942	Wet	503	524	643	448	299	419	317	281	414	466	372	362	421
1943	Wet	489	500	654	365	268	305	298	379	458	622	520	522	448
1944	Dry	529	533	717	753	816	796	428	465	647	661	618	592	630
1945	Below Normal	587	595	780	780	500	351	388	373	511	603	506	516	541
1946	Below Normal	496	554	495	565	461	498	398	379	540	651	589	555	515
1947	Dry	536	559	706	746	843	996	622	580	688	692	647	608	685
1948	Below Normal	618	630	800	850	995	1,003	611	554	635	643	620	598	713
1949	Dry	617	637	815	869	996	956	635	605	659	682	637	610	726
1950	Below Normal	637	633	801	852	995	993	547	455	596	670	633	593	700
1951	Above Normal	619	630	386	324	254	444	396	262	528	660	623	595	477
1952	Wet	590	617	755	571	625	425	230	205	293	386	353	365	451
1953	Wet	532	550	726	611	636	906	378	348	528	615	607	579	585
1954	Above Normal	582	622	786	807	945	982	522	491	665	679	634	608	694
1955	Dry	619	640	778	770	992	1,002	653	603	703	702	657	618	728
1956	Wet	658	665	705	371	359	366	385	377	412	491	477	431	475
1957	Above Normal	509	570	756	777	898	944	386	360	566	653	612	576	634
1958	Wet	567	620	777	789	745	475	209	190	332	434	363	364	489
1959	Below Normal	519	562	720	751	720	839	472	484	692	688	641	579	639
1960	Dry	616	663	820	840	948	1,002	635	587	707	698	672	642	736
1961	Dry	698	691	836	915	1,023	1,003	679	645	708	704	694	665	772
1962	Below Normal	716	702	830	947	741	735	509	483	696	670	624	594	687
1963	Wet	633	681	834	859	855	941	455	422	597	642	600	565	674
1964	Dry	589	611	825	826	994	1,004	633	592	703	692	654	617	728
1965	Wet	648	671	751	462	394	514	354	352	483	638	464	481	518
1966	Below Normal	543	466	613	646	605	871	502	507	702	700	661	630	620
1967	Wet	632	689	758	777	917	559	267	225	295	308	341	348	510
1968	Below Normal	494	577	740	763	743	920	458	457	685	693	636	604	647
1969	Wet	616	648	795	654	375	399	286	242	244	389	365	370	449
1970	Wet	409	506	627	282	342	367	365	402	491	641	609	561	467
1971	Wet	549	615	788	765	928	849	380	373	562	627	611	579	636
1972	Below Normal	553	637	802	821	939	1,003	586	543	705	697	648	625	713
1973	Above Normal	635	635	803	846	702	614	434	442	524	652	533	517	611
1974	Wet	503	519	619	525	613	319	368	395	447	588	501	473	489
1975	Wet	433	488	711	730	344	319	377	379	437	577	492	508	483
1976	Critical	430	513	766	777	925	1,005	634	582	707	703	644	631	693
1977	Critical	659	677	825	888	996	1,010	703	646	711	698	715	728	771
1978	Above Normal	762	758	868	771	743	677	384	320	414	556	495	452	600
1979	Below Normal	585	525	755	670	362	324	390	306	449	655	539	541	509
1980	Above Normal	519	563	774	422	343	395	362	363	383	465	465	495	462
1981	Dry	482	503	734	751	907	867	486	458	696	673	646	610	651
1982	Wet	589	638	794	728	290	305	224	212	368	422	346	250	430
1983	Wet	204	267	379	347	324	258	293	266	242	229	190	235	269
1984	Wet	352	206	303	334	224	365	370	365	532	634	537	464	391
1985	Dry	448	502	782	775	833	887	567	514	692	702	620	570	658
1986	Wet	581	590	770	825	460	311	243	228	393	608	495	446	496
1987	Dry	437	441	719	777	988	920	608	568	707	703	665	631	680
1988	Critical	649	666	823	876	996	1,010	691	644	709	705	711	669	762
1989	Dry	742	708	836	937	1,171	1,013	659	626	708	672	666	602	778
1990	Critical	690	696	843	947	1,157	1,015	698	640	711	695	687	667	787
1991	Critical	699	690	861	990	1,262	998	686	649	709	700	696	700	803
1992	Critical	735	733	895	1,020	987	1,003	710	813	773	699	708	722	816
1993	Above Normal	794	800	916	700	764	845	543	539	484	570	549	517	668
1994	Critical	573	619	865	961	1,001	1,011	662	617	751	715	708	689	764
Average		581	601	753	742	746	729	477	455	579	623	576	552	618
Wet		535	559	684	595	503	468	321	312	421	517	461	444	485
Above Normal		624	641	765	697	695	631	415	397	512	608	564	540	591
Below Normal		580	597	746	761	687	706	450	430	615	659	594	569	616
Dry		585	603	783	827	938	945	585	551	691	686	645	606	704
Critical		621	646	830	898	1,025	1,008	687	651	717	694	676	659	759

Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	1	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	1	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	-1	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	3	1	0	0	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	0	0	0	0	-3	-4	0	0	0	0	-1
1978	Above Normal	0	0	0	0	0	1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	-1	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	-1	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%
1978	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)

Existing Condition		SVI												Average
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	653	634	616	516	462	326	302	303	300	321	299	470	433
1923	Below Normal	651	633	544	344	341	324	321	349	280	273	330	520	409
1924	Critical	642	710	777	806	699	685	551	515	593	515	555	635	640
1925	Dry	796	840	832	872	629	393	326	323	316	329	389	616	555
1926	Dry	764	720	793	838	589	347	304	371	319	363	434	612	538
1927	Wet	806	543	310	307	330	302	278	311	235	245	280	490	370
1928	Above Normal	667	506	348	390	292	276	283	335	270	276	291	524	372
1929	Critical	767	784	866	803	873	586	467	467	435	433	519	671	639
1930	Dry	799	818	840	529	357	297	283	360	308	355	431	613	499
1931	Critical	789	705	808	862	752	582	535	524	585	483	561	665	654
1932	Dry	785	835	703	381	417	479	466	453	345	361	405	618	521
1933	Critical	746	670	736	684	557	461	421	413	431	442	494	598	554
1934	Critical	759	848	795	672	423	486	504	478	458	409	492	674	583
1935	Below Normal	810	832	884	610	375	309	317	368	282	258	337	563	496
1936	Below Normal	719	679	816	675	441	329	289	348	290	262	332	534	476
1937	Below Normal	685	679	766	793	633	512	380	314	290	304	323	505	515
1938	Wet	692	688	337	313	403	339	282	267	296	296	290	295	375
1939	Dry	232	271	481	630	596	455	424	414	342	396	457	636	445
1940	Above Normal	796	728	769	663	417	318	288	338	279	255	274	505	469
1941	Wet	676	731	665	371	460	382	317	276	313	334	306	369	433
1942	Wet	300	428	490	419	363	295	318	306	275	315	308	329	345
1943	Wet	264	281	248	394	332	315	318	363	344	285	294	505	329
1944	Dry	727	686	818	876	600	337	310	340	301	336	438	647	535
1945	Below Normal	786	651	552	515	499	371	346	346	278	274	328	528	456
1946	Below Normal	692	531	349	290	353	327	331	366	273	276	354	580	394
1947	Dry	769	705	674	575	558	379	322	353	317	355	479	588	506
1948	Below Normal	771	765	904	771	777	393	296	318	238	243	321	536	528
1949	Dry	621	637	784	870	701	361	302	392	294	336	491	593	532
1950	Below Normal	722	691	757	620	344	258	262	313	262	270	314	530	445
1951	Above Normal	732	427	340	365	355	289	315	321	245	262	273	535	372
1952	Wet	699	725	641	397	298	353	339	276	284	284	258	257	401
1953	Wet	239	337	452	310	317	274	290	298	231	248	286	424	309
1954	Above Normal	354	394	544	696	290	250	269	321	261	268	276	524	371
1955	Dry	748	806	650	344	341	353	370	380	324	323	441	616	475
1956	Wet	733	780	621	659	480	329	302	325	277	320	312	334	456
1957	Above Normal	245	280	523	818	590	281	281	313	251	248	282	553	389
1958	Wet	570	337	384	313	383	474	320	270	268	282	275	275	346
1959	Below Normal	243	359	682	725	341	338	363	353	318	306	332	548	409
1960	Dry	697	713	766	904	796	331	304	374	309	392	454	605	554
1961	Dry	784	820	921	751	683	348	311	346	334	366	469	630	564
1962	Below Normal	798	814	910	768	560	335	303	365	301	290	345	672	538
1963	Wet	678	295	374	323	311	268	327	351	245	243	275	487	348
1964	Dry	648	592	310	472	363	332	338	369	316	395	539	585	438
1965	Wet	760	818	492	323	283	288	317	273	253	287	484	408	408
1966	Below Normal	639	582	311	308	303	268	286	345	284	320	313	564	377
1967	Wet	799	818	720	398	299	301	409	313	288	307	262	248	430
1968	Below Normal	234	286	414	493	293	262	325	351	298	302	316	558	344
1969	Wet	793	748	577	478	401	409	301	250	252	291	297	307	425
1970	Wet	231	271	306	510	360	299	299	328	275	268	280	523	329
1971	Wet	748	527	328	255	272	255	271	303	227	238	298	379	342
1972	Below Normal	315	487	557	360	382	268	266	347	309	317	331	570	376
1973	Above Normal	841	563	332	354	373	317	308	342	283	253	305	512	399
1974	Wet	711	397	270	305	283	293	278	316	286	266	309	344	338
1975	Wet	246	311	489	454	371	302	295	327	264	294	299	329	332
1976	Critical	243	244	383	651	772	531	417	444	566	626	682	780	528
1977	Critical	873	751	899	754	820	696	566	544	642	639	617	721	710
1978	Above Normal	876	898	894	556	472	518	490	368	332	345	327	417	541
1979	Below Normal	476	652	777	652	377	304	320	334	288	269	329	549	444
1980	Above Normal	773	630	413	369	381	411	374	343	343	341	322	491	433
1981	Dry	625	637	783	716	333	274	318	342	338	411	467	623	489
1982	Wet	855	614	257	352	377	420	237	265	280	311	290	260	376
1983	Wet	208	249	403	378	336	275	304	270	249	238	225	208	279
1984	Wet	224	276	312	373	353	276	309	364	295	266	288	517	321
1985	Dry	655	471	259	292	451	359	333	344	310	405	481	692	421
1986	Wet	814	758	787	503	522	334	348	277	303	386	328	441	483
1987	Dry	507	594	807	862	667	376	350	365	350	395	492	619	532
1988	Critical	828	819	855	689	397	454	403	436	430	389	518	710	577
1989	Dry	830	863	861	802	956	453	253	306	275	391	503	606	592
1990	Critical	768	830	876	616	520	381	386	399	498	599	622	674	597
1991	Critical	867	892	877	923	916	590	399	383	467	601	605	639	680
1992	Critical	874	940	909	989	659	357	316	349	376	382	591	808	629
1993	Above Normal	876	929	943	587	398	333	284	313	268	299	302	449	498
1994	Critical	560	673	822	895	700	398	319	362	375	624	683	708	593
Average		645	622	620	568	475	367	338	351	322	340	382	530	464
Wet		574	521	451	387	359	323	308	303	274	284	288	372	370
Above Normal		681	599	572	531	403	332	319	330	283	287	295	498	428
Below Normal		610	617	659	566	430	328	315	344	285	283	329	554	443
Dry		687	688	705	670	565	367	332	364	319	369	461	619	512
Critical		726	739	800	779	674	517	440	443	488	512	578	690	616

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP1 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	653	634	616	516	462	326	302	303	300	321	299	470	433
1923	Below Normal	651	633	544	344	341	324	321	349	280	273	330	519	409
1924	Critical	642	710	777	806	699	685	551	515	585	501	558	653	640
1925	Dry	795	827	846	796	598	372	323	324	317	331	388	611	544
1926	Dry	755	716	792	837	589	347	305	368	316	362	435	617	537
1927	Wet	810	538	310	307	330	301	278	311	235	245	280	490	370
1928	Above Normal	668	515	366	398	291	276	281	331	268	277	292	535	375
1929	Critical	772	787	865	787	850	579	464	459	417	423	527	699	636
1930	Dry	802	787	830	540	358	293	281	363	330	356	452	655	504
1931	Critical	805	707	777	840	876	651	576	543	621	624	615	692	694
1932	Dry	800	835	702	380	412	474	465	453	345	361	405	618	521
1933	Critical	745	670	737	683	560	459	420	413	431	442	494	597	554
1934	Critical	758	847	795	677	443	494	506	478	458	409	492	673	586
1935	Below Normal	810	832	884	610	374	308	317	368	290	257	340	568	497
1936	Below Normal	725	682	815	675	436	320	286	346	290	261	340	541	476
1937	Below Normal	685	691	786	761	607	488	373	318	294	312	325	503	512
1938	Wet	681	674	341	305	402	339	289	266	296	296	290	296	373
1939	Dry	233	268	476	628	596	456	423	412	343	403	456	664	447
1940	Above Normal	805	733	775	664	419	319	288	346	283	255	275	505	472
1941	Wet	677	730	661	371	460	387	318	276	314	334	306	369	434
1942	Wet	301	429	490	419	363	295	318	306	275	311	306	329	345
1943	Wet	264	281	249	394	332	315	317	361	344	283	295	508	329
1944	Dry	725	692	805	879	747	362	312	345	296	339	445	622	548
1945	Below Normal	789	678	560	516	499	357	341	346	277	274	329	529	458
1946	Below Normal	686	607	427	292	357	327	330	364	271	276	353	580	406
1947	Dry	755	706	691	579	561	328	323	351	315	362	501	578	508
1948	Below Normal	754	743	869	801	787	387	293	318	244	247	346	588	531
1949	Dry	719	702	784	853	841	465	302	393	297	328	483	600	564
1950	Below Normal	746	716	777	586	330	257	263	313	261	265	317	535	447
1951	Above Normal	729	431	341	365	335	285	315	321	244	260	273	537	370
1952	Wet	696	689	598	397	298	352	338	276	284	284	258	257	394
1953	Wet	239	335	450	310	317	274	290	299	231	248	290	434	310
1954	Above Normal	358	368	451	630	283	249	269	344	258	267	276	527	357
1955	Dry	748	805	677	367	346	355	371	379	318	328	455	579	477
1956	Wet	705	768	618	659	474	320	300	325	277	321	313	339	452
1957	Above Normal	246	280	522	813	581	280	281	313	250	248	283	558	388
1958	Wet	580	354	395	315	379	469	303	266	268	282	275	276	347
1959	Below Normal	244	359	683	726	342	338	361	354	317	304	333	559	410
1960	Dry	739	780	823	743	758	329	303	373	312	384	454	581	548
1961	Dry	785	826	914	800	722	381	327	353	332	365	470	624	575
1962	Below Normal	798	815	909	779	563	336	303	366	308	292	348	681	541
1963	Wet	663	288	351	322	320	268	328	350	247	245	276	487	345
1964	Dry	650	586	304	466	363	333	338	369	315	398	552	577	438
1965	Wet	750	816	492	323	278	283	314	315	271	251	289	487	406
1966	Below Normal	639	595	318	310	299	265	286	344	283	318	315	566	378
1967	Wet	799	821	721	399	298	301	411	314	288	307	262	249	431
1968	Below Normal	234	285	412	492	294	262	325	353	300	303	317	560	345
1969	Wet	793	747	575	477	403	409	301	250	252	291	297	307	425
1970	Wet	231	270	304	510	360	299	300	325	274	268	280	528	329
1971	Wet	751	517	320	255	273	256	271	303	227	238	295	378	340
1972	Below Normal	318	490	559	360	382	268	266	347	308	317	330	576	377
1973	Above Normal	826	574	364	358	366	314	307	342	280	251	303	512	400
1974	Wet	711	398	270	305	277	289	278	316	286	266	310	344	337
1975	Wet	246	311	489	454	371	302	294	327	264	294	299	330	332
1976	Critical	243	244	383	651	774	531	416	444	566	614	686	790	528
1977	Critical	879	766	928	716	695	571	525	529	635	637	606	653	678
1978	Above Normal	838	955	913	631	474	518	519	369	335	346	328	419	554
1979	Below Normal	481	655	777	653	377	303	320	334	286	268	330	550	444
1980	Above Normal	770	674	464	369	388	411	374	345	342	341	322	491	441
1981	Dry	625	637	782	716	331	270	315	342	341	414	466	620	488
1982	Wet	854	618	258	352	371	417	237	265	280	311	290	261	376
1983	Wet	208	249	403	378	335	275	304	270	249	238	225	208	278
1984	Wet	224	276	312	373	353	276	309	364	293	266	288	513	321
1985	Dry	657	498	262	293	452	359	333	344	307	403	487	684	423
1986	Wet	812	750	775	501	524	334	339	275	304	345	313	423	475
1987	Dry	501	588	809	884	635	376	337	359	345	412	503	613	530
1988	Critical	815	810	849	685	378	430	397	441	441	389	510	703	571
1989	Dry	829	865	857	818	961	456	254	306	272	385	509	590	592
1990	Critical	753	827	879	609	516	381	387	400	499	605	629	676	597
1991	Critical	868	891	877	922	912	588	399	383	467	601	611	645	680
1992	Critical	885	944	907	993	653	356	316	348	376	382	591	809	630
1993	Above Normal	878	928	945	585	398	334	284	319	272	295	299	454	499
1994	Critical	564	675	820	895	701	400	320	362	369	621	699	691	593
Average		646	626	622	564	477	366	337	352	323	342	385	531	464
Wet		571	517	447	387	358	322	307	303	274	282	287	372	369
Above Normal		677	609	576	533	400	331	322	333	283	286	295	501	429
Below Normal		611	627	666	565	428	324	313	344	286	283	332	561	445
Dry		695	695	710	661	579	375	332	365	319	371	466	615	515
Critical		727	740	799	772	671	510	440	443	489	521	585	690	616

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-8	-13	3	19	0
1925	Dry	-1	-13	14	-76	-31	-21	-2	1	1	2	-1	-6	-11
1926	Dry	-9	-3	-1	0	0	0	1	-2	-3	-1	1	5	-1
1927	Wet	4	-4	0	0	0	0	0	0	0	0	1	0	0
1928	Above Normal	1	9	18	7	-1	0	-1	-3	-2	0	2	11	3
1929	Critical	5	3	-1	-16	-23	-8	-2	-9	-18	-10	8	29	-3
1930	Dry	3	-31	-9	11	2	-3	-2	2	22	1	21	42	5
1931	Critical	16	3	-31	-22	124	69	41	19	36	141	55	27	40
1932	Dry	15	0	-1	0	-5	-5	-1	0	0	0	0	0	0
1933	Critical	-1	0	1	-1	3	-2	-1	0	0	0	0	-1	0
1934	Critical	-1	-2	0	5	20	7	3	1	0	0	0	0	3
1935	Below Normal	0	0	0	0	-1	-1	0	0	8	-1	3	6	1
1936	Below Normal	6	3	-1	0	-5	-9	-3	-2	0	-1	8	6	0
1937	Below Normal	-1	12	20	-31	-26	-23	-7	4	3	7	2	-2	-4
1938	Wet	-10	-14	4	-8	-1	0	7	-1	0	0	0	2	-2
1939	Dry	1	-3	-5	-3	0	0	0	-2	1	7	0	28	2
1940	Above Normal	9	6	6	1	2	1	0	8	4	0	0	0	3
1941	Wet	1	-1	-3	0	0	5	2	0	0	0	0	0	0
1942	Wet	0	1	0	0	0	0	0	0	0	-4	-2	0	0
1943	Wet	0	0	0	0	0	0	-1	-2	-1	-1	0	3	0
1944	Dry	-2	6	-14	3	147	25	2	5	-4	4	7	-25	13
1945	Below Normal	3	27	8	1	0	-14	-5	0	-1	0	1	2	2
1946	Below Normal	-6	76	77	1	4	0	-1	-1	-2	0	-1	0	12
1947	Dry	-14	1	17	3	3	0	1	-1	-3	7	22	-10	2
1948	Below Normal	-17	-22	-35	30	10	-7	-3	0	6	4	25	51	4
1949	Dry	98	65	0	-17	141	104	0	1	3	-8	-8	7	32
1950	Below Normal	24	24	20	-34	-14	-1	0	0	-1	-5	3	5	2
1951	Above Normal	-3	4	0	0	-20	-3	0	0	-1	-3	0	2	-2
1952	Wet	-3	-36	-43	0	0	-1	-1	0	0	0	0	0	-7
1953	Wet	0	-1	-2	0	0	0	0	0	1	0	4	10	1
1954	Above Normal	3	-25	-93	-65	-6	-1	-1	24	-3	-1	0	2	-14
1955	Dry	0	-1	27	23	5	2	0	-1	-5	4	13	-38	2
1956	Wet	-28	-12	-3	0	-7	-9	-3	-1	1	0	1	5	-4
1957	Above Normal	1	0	-1	-5	-10	-1	0	0	-1	0	1	5	-1
1958	Wet	10	17	11	2	-4	-5	-17	-4	0	0	1	1	1
1959	Below Normal	0	1	1	0	1	0	-2	1	0	-1	1	12	1
1960	Dry	43	67	57	-161	-37	-3	-1	0	2	-7	0	-24	-5
1961	Dry	1	6	-7	49	38	33	16	7	-2	-2	0	-6	11
1962	Below Normal	0	1	-1	11	3	1	0	0	7	2	4	9	3
1963	Wet	-15	-6	-23	-1	9	0	0	0	1	1	1	0	-3
1964	Dry	2	-6	-5	-6	0	1	1	0	-1	3	14	-8	0
1965	Wet	-10	-3	0	0	-4	-4	-2	-2	-2	-2	2	3	-2
1966	Below Normal	0	13	7	2	-4	-2	0	0	0	-2	1	2	1
1967	Wet	-1	3	1	1	-1	-1	2	1	0	0	0	0	1
1968	Below Normal	0	0	-1	-1	1	0	0	2	2	1	1	2	1
1969	Wet	0	0	-1	-1	2	0	0	0	0	0	0	0	0
1970	Wet	0	-2	-2	0	0	-1	1	-3	-2	0	0	4	0
1971	Wet	3	-10	-8	0	1	0	0	0	0	-1	-3	-2	-2
1972	Below Normal	3	3	1	0	0	-1	-1	1	-1	0	-2	6	1
1973	Above Normal	-15	11	32	4	-6	-3	0	0	-3	-2	-3	0	1
1974	Wet	0	1	0	0	-6	-4	0	0	0	0	0	1	-1
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	0	1	0	-1	0	0	-12	5	10	0
1977	Critical	6	15	29	-38	-125	-125	-41	-15	-7	-2	-11	-68	-32
1978	Above Normal	-37	57	18	76	2	0	29	1	3	1	1	2	13
1979	Below Normal	5	3	0	1	0	-1	0	-1	-2	-1	1	1	1
1980	Above Normal	-2	43	51	0	7	1	0	2	-1	0	0	0	8
1981	Dry	0	0	-1	0	-2	-4	-3	0	3	3	-1	-3	-1
1982	Wet	-2	5	1	0	-6	-3	0	0	0	0	0	1	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-2	0	0	-4	0
1985	Dry	2	27	3	1	1	0	0	0	-3	-2	6	-8	2
1986	Wet	-2	-8	-12	-3	2	0	-9	-2	1	-41	-15	-18	-9
1987	Dry	-6	-6	2	21	-32	0	-13	-6	-4	17	11	-6	-2
1988	Critical	-13	-8	-7	-4	-19	-23	-6	5	11	0	-7	-7	-7
1989	Dry	-1	2	-4	16	4	2	1	0	-3	-6	6	-16	0
1990	Critical	-15	-3	3	-7	-4	-1	1	2	1	6	7	2	-1
1991	Critical	1	-1	-1	-1	-4	-2	0	0	0	0	5	5	0
1992	Critical	11	4	-2	4	-6	-1	0	0	0	0	0	1	1
1993	Above Normal	1	-1	2	-3	0	1	0	6	4	-5	-3	5	1
1994	Critical	5	3	-2	0	1	2	1	0	-6	-3	16	-17	0
Average		1	4	2	-3	2	-1	0	0	0	1	3	1	1
Wet		-3	-3	-4	0	-1	-1	-1	-1	0	-2	0	0	-1
Above Normal		-4	10	3	1	-3	-1	3	4	0	-1	0	3	1
Below Normal		1	10	7	-1	-2	-4	-1	0	1	0	3	7	2
Dry		8	7	5	-9	15	8	0	0	0	1	6	-4	3
Critical		1	1	-1	-7	-3	-7	-1	0	1	9	7	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake)
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-3%	1%	3%	0%
1925	Dry	0%	-2%	2%	-9%	-5%	-5%	-1%	0%	0%	1%	0%	-1%	-2%
1926	Dry	-1%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	1%	0%
1927	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	2%	5%	2%	0%	0%	0%	-1%	-1%	0%	1%	2%	1%
1929	Critical	1%	0%	0%	-2%	-3%	-1%	0%	-2%	-4%	-2%	2%	4%	-1%
1930	Dry	0%	-4%	-1%	2%	1%	-1%	0%	1%	7%	0%	5%	7%	1%
1931	Critical	2%	0%	-4%	-3%	16%	12%	8%	4%	6%	29%	10%	4%	7%
1932	Dry	2%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	5%	1%	1%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	1%	0%
1936	Below Normal	1%	0%	0%	0%	-1%	-3%	-1%	-1%	0%	0%	2%	1%	0%
1937	Below Normal	0%	2%	3%	-4%	-4%	-5%	-2%	1%	1%	2%	1%	0%	0%
1938	Wet	-2%	-2%	1%	-3%	0%	0%	3%	0%	0%	0%	0%	1%	0%
1939	Dry	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	2%	0%	4%	0%
1940	Above Norma	1%	1%	1%	0%	0%	0%	0%	3%	1%	0%	0%	0%	1%
1941	Wet	0%	0%	-1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	1%	0%
1944	Dry	0%	1%	-2%	0%	24%	7%	1%	1%	-1%	1%	2%	-4%	3%
1945	Below Normal	0%	4%	1%	0%	0%	-4%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	-1%	14%	22%	1%	1%	0%	0%	0%	-1%	0%	0%	0%	3%
1947	Dry	-2%	0%	3%	1%	1%	0%	0%	0%	-1%	2%	5%	-2%	1%
1948	Below Normal	-2%	-3%	-4%	4%	1%	-2%	-1%	0%	2%	2%	8%	10%	1%
1949	Dry	16%	10%	0%	-2%	20%	29%	0%	0%	1%	-3%	-2%	1%	6%
1950	Below Normal	3%	4%	3%	-5%	-4%	-1%	0%	0%	0%	-2%	1%	1%	0%
1951	Above Norma	0%	1%	0%	0%	-6%	-1%	0%	0%	0%	-1%	0%	0%	-1%
1952	Wet	0%	-5%	-7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Norma	1%	-6%	-17%	-9%	-2%	-1%	0%	7%	-1%	0%	0%	0%	-2%
1955	Dry	0%	0%	4%	7%	2%	0%	0%	0%	-2%	1%	3%	-6%	1%
1956	Wet	-4%	-2%	0%	0%	-1%	-3%	-1%	0%	0%	0%	0%	1%	-1%
1957	Above Norma	0%	0%	0%	-1%	-2%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	2%	5%	3%	1%	-1%	-1%	-5%	-1%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	2%	0%
1960	Dry	6%	9%	7%	-18%	-5%	0%	0%	1%	1%	-2%	0%	-4%	0%
1961	Dry	0%	1%	-1%	7%	6%	9%	5%	2%	-1%	0%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	1%	1%	0%	0%	0%	2%	1%	1%	1%	1%
1963	Wet	-2%	-2%	-6%	0%	3%	0%	0%	0%	0%	1%	0%	0%	-1%
1964	Dry	0%	-1%	-2%	-1%	0%	0%	0%	0%	0%	1%	3%	-1%	0%
1965	Wet	-1%	0%	0%	0%	-1%	0%	-1%	-1%	-1%	1%	1%	1%	0%
1966	Below Normal	0%	2%	2%	1%	-1%	-1%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	-1%	0%	0%	0%	0%	-1%	-1%	0%	0%	1%	0%
1971	Wet	0%	-2%	-3%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1973	Above Norma	-2%	2%	10%	1%	-2%	-1%	0%	0%	-1%	-1%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	1%	1%	0%
1977	Critical	1%	2%	3%	-5%	-15%	-18%	-7%	-3%	-1%	-2%	-2%	-9%	-5%
1978	Above Norma	-4%	6%	2%	14%	0%	0%	6%	0%	1%	0%	0%	1%	2%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1980	Above Norma	0%	7%	12%	0%	2%	0%	0%	1%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	-1%	-1%	-1%	0%	1%	1%	0%	-1%	0%
1982	Wet	0%	1%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	-1%	0%
1985	Dry	0%	6%	1%	0%	0%	0%	0%	0%	-1%	0%	1%	-1%	1%
1986	Wet	0%	-1%	-2%	-1%	0%	0%	-3%	-1%	0%	-11%	-5%	-4%	-2%
1987	Dry	-1%	-1%	0%	2%	-5%	0%	-4%	-2%	-1%	4%	2%	-1%	0%
1988	Critical	-2%	-1%	-1%	-1%	-5%	-5%	-2%	1%	3%	0%	-1%	-1%	-1%
1989	Dry	0%	0%	0%	2%	0%	1%	0%	0%	-1%	-2%	1%	-3%	0%
1990	Critical	-2%	0%	0%	-1%	-1%	0%	0%	0%	1%	0%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1992	Critical	1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	2%	2%	-2%	-1%	1%	0%
1994	Critical	1%	0%	0%	0%	0%	1%	0%	0%	-2%	-1%	2%	-2%	0%
Average		0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Wet		0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Norma		0%	1%	1%	1%	-1%	0%	1%	1%	0%	0%	0%	1%	0%
Below Normal		0%	2%	2%	0%	-1%	-1%	0%	0%	1%	0%	1%	1%	0%
Dry		1%	1%	1%	-1%	2%	2%	0%	0%	0%	0%	1%	-1%	1%
Critical		0%	0%	0%	-1%	0%	-1%	0%	0%	0%	2%	1%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	-1	0
1924	Critical	0	0	0	0	-1	0	0	1	-12	-15	6	28	1
1925	Dry	-6	-14	9	-93	-26	-9	-1	1	1	1	-2	-10	-12
1926	Dry	-11	-4	-1	-1	0	0	2	-2	-2	0	2	7	-1
1927	Wet	3	-5	0	0	0	0	0	1	0	0	0	0	0
1928	Above Normal	1	13	22	7	-1	0	-1	-2	-1	1	4	14	5
1929	Critical	5	4	-1	-24	-25	-6	-1	-5	-3	4	14	38	0
1930	Dry	-2	-47	-7	12	2	-1	0	3	5	-3	31	53	4
1931	Critical	21	1	-37	-7	173	89	39	15	75	179	50	33	52
1932	Dry	18	-2	-1	-1	-4	-3	-1	0	0	0	0	0	1
1933	Critical	-1	0	1	-1	4	2	3	1	0	0	0	-1	1
1934	Critical	-1	-2	0	11	24	6	1	0	0	0	0	-1	3
1935	Below Normal	-1	0	0	0	-1	0	0	0	4	0	5	7	1
1936	Below Normal	7	3	-1	0	-4	-7	-3	-1	0	2	11	7	1
1937	Below Normal	-1	19	17	-45	-24	-10	-3	-3	2	3	-1	-3	-4
1938	Wet	-17	-15	4	-6	-1	0	7	-2	0	0	1	2	-2
1939	Dry	0	-5	-7	-3	0	0	1	0	8	12	3	34	4
1940	Above Normal	10	7	7	0	3	1	0	-24	3	0	0	0	1
1941	Wet	1	-1	-4	0	0	3	1	0	0	0	0	0	0
1942	Wet	0	1	1	0	0	0	0	0	0	-3	-2	0	0
1943	Wet	0	0	0	0	0	0	-1	-2	-1	0	2	4	0
1944	Dry	-4	11	-28	30	170	25	3	-5	-7	8	7	-33	15
1945	Below Normal	9	34	9	1	0	-10	-4	0	0	1	2	2	4
1946	Below Normal	-10	115	86	1	3	0	-1	1	-1	2	-1	-1	16
1947	Dry	-19	5	20	4	4	0	-1	-2	-3	13	26	-15	3
1948	Below Normal	-22	-31	-37	40	6	-8	-3	0	3	12	35	68	5
1949	Dry	127	78	-8	-7	200	120	5	1	1	-13	-8	11	42
1950	Below Normal	31	33	18	-43	-14	-1	0	0	0	1	6	7	3
1951	Above Normal	-6	6	0	0	-9	-2	0	0	-1	-2	1	2	-1
1952	Wet	-4	-52	-47	0	0	-1	-1	0	0	0	0	0	-9
1953	Wet	0	-2	-3	0	0	0	0	0	0	0	7	12	1
1954	Above Normal	4	-38	-116	-66	-5	0	0	21	0	0	1	3	-16
1955	Dry	0	-2	37	26	5	1	0	-2	-7	14	14	-52	3
1956	Wet	-34	-15	-2	0	-4	-5	-2	0	0	0	3	6	-5
1957	Above Normal	1	0	-2	-5	-11	-1	0	0	0	0	3	5	-1
1958	Wet	14	22	12	2	-3	-4	-13	-2	0	0	0	0	2
1959	Below Normal	0	1	1	1	0	0	2	1	-1	-1	2	18	2
1960	Dry	56	91	41	-197	-33	-2	-1	0	-4	-9	-1	-32	-7
1961	Dry	6	2	0	56	45	26	10	4	-6	-2	0	-8	11
1962	Below Normal	1	0	1	12	4	1	0	0	3	2	5	10	3
1963	Wet	-19	-7	-27	2	9	0	0	-1	0	0	0	0	-4
1964	Dry	3	-9	-7	-7	-1	0	0	0	-3	6	15	-12	-1
1965	Wet	-13	-3	0	0	-4	-3	-1	-2	-1	-1	3	4	-2
1966	Below Normal	-1	18	8	2	-2	-1	0	0	-1	-3	2	2	2
1967	Wet	-1	4	1	1	0	0	2	0	0	0	0	0	1
1968	Below Normal	0	-1	-2	-1	0	0	0	1	3	1	2	2	1
1969	Wet	1	0	-2	-1	6	1	-1	0	0	0	0	0	0
1970	Wet	0	-2	-2	-1	0	0	-3	-3	-1	1	1	6	0
1971	Wet	3	-14	-9	0	1	0	0	0	0	0	-4	-2	-2
1972	Below Normal	4	4	2	0	0	0	0	1	2	1	0	7	2
1973	Above Normal	-21	18	38	3	-5	-2	0	0	-1	-1	-2	1	2
1974	Wet	0	1	0	0	-3	-2	0	0	0	0	0	1	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	1	1	0	1	0	-8	-13	2	13	0
1977	Critical	6	21	21	-50	-85	-74	-14	-7	-8	-4	-11	-92	-25
1978	Above Normal	8	77	38	80	1	0	27	2	3	1	0	3	20
1979	Below Normal	6	3	-1	1	1	0	1	0	-1	0	1	1	1
1980	Above Normal	-4	63	56	-2	9	3	0	1	-1	0	0	0	10
1981	Dry	0	-1	-1	0	-1	0	0	0	4	2	-1	-5	0
1982	Wet	-1	6	1	0	-3	-1	0	0	0	0	1	1	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-1	0	1	-6	-1
1985	Dry	6	33	3	1	1	0	0	0	-3	-1	7	-11	3
1986	Wet	-2	-10	-16	-1	2	0	-8	-1	1	-26	-17	-24	-8
1987	Dry	-7	-9	5	13	-28	14	0	-3	6	27	13	-9	2
1988	Critical	-16	-10	-8	-4	-9	-11	-2	5	2	-2	-8	-11	-6
1989	Dry	0	1	-2	19	0	3	1	0	-4	-6	6	-21	0
1990	Critical	-18	-3	2	-8	-4	0	0	1	1	5	8	2	-1
1991	Critical	1	-1	-1	-2	-7	-2	0	0	0	0	5	12	0
1992	Critical	14	3	-3	4	-8	-1	0	0	0	0	0	2	1
1993	Above Normal	1	-1	2	-3	0	1	0	4	2	-2	0	7	1
1994	Critical	6	3	-3	-2	3	2	1	0	-10	-1	16	-20	0
Average		2	5	1	-3	5	2	1	0	1	3	4	1	2
Wet		-3	-4	-4	0	0	-1	-1	-1	0	-1	0	0	-1
Above Normal		-1	15	5	1	-2	0	3	0	0	0	1	3	2
Below Normal		2	14	7	-2	-2	-3	-1	0	1	1	5	9	3
Dry		10	8	3	-9	21	11	1	0	-1	3	7	-6	4
Critical		1	1	-2	-7	6	0	2	1	3	13	7	0	2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	1%	4%	0%
1925	Dry	-1%	-1%	1%	-9%	-5%	-3%	-1%	0%	0%	0%	-1%	-1%	-2%
1926	Dry	-1%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%	0%	1%	0%
1927	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	2%	6%	2%	0%	0%	0%	-1%	0%	0%	1%	2%	1%
1929	Critical	1%	0%	0%	-3%	-3%	-1%	0%	-1%	-1%	1%	2%	5%	0%
1930	Dry	0%	-5%	-1%	2%	1%	0%	0%	1%	2%	-1%	7%	7%	1%
1931	Critical	2%	0%	-4%	-1%	23%	19%	9%	3%	12%	35%	8%	4%	9%
1932	Dry	2%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	2%	7%	2%	0%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	1%	0%
1936	Below Normal	1%	0%	0%	0%	-1%	-2%	-1%	0%	0%	1%	3%	1%	0%
1937	Below Normal	0%	2%	2%	-5%	-4%	-3%	-1%	-1%	1%	1%	0%	-1%	-1%
1938	Wet	-2%	-2%	2%	-3%	0%	0%	2%	-1%	0%	0%	0%	1%	0%
1939	Dry	0%	-2%	-1%	0%	0%	0%	0%	0%	3%	3%	1%	4%	1%
1940	Above Norma	1%	1%	1%	0%	1%	0%	0%	-8%	1%	0%	0%	0%	0%
1941	Wet	0%	0%	-1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	1%	0%
1944	Dry	0%	1%	-3%	3%	30%	9%	1%	-2%	-3%	2%	2%	-4%	3%
1945	Below Normal	1%	5%	1%	0%	0%	-3%	0%	0%	0%	2%	1%	0%	0%
1946	Below Normal	-1%	20%	28%	0%	1%	0%	0%	0%	0%	1%	0%	0%	4%
1947	Dry	-2%	1%	3%	1%	1%	0%	0%	-1%	-1%	3%	5%	-2%	1%
1948	Below Normal	-2%	-3%	-4%	5%	1%	-3%	-1%	0%	1%	5%	10%	11%	2%
1949	Dry	18%	11%	-1%	-1%	30%	42%	2%	0%	0%	-4%	-1%	2%	8%
1950	Below Normal	4%	4%	2%	-7%	-5%	-1%	0%	0%	0%	0%	2%	1%	0%
1951	Above Norma	-1%	2%	0%	0%	-3%	-1%	0%	0%	0%	-1%	0%	0%	0%
1952	Wet	-1%	-6%	-7%	0%	0%	0%	0%	-6%	0%	0%	0%	0%	-1%
1953	Wet	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1954	Above Norma	1%	-9%	-19%	-9%	-2%	0%	0%	8%	0%	0%	0%	0%	-2%
1955	Dry	0%	0%	5%	9%	2%	0%	0%	-1%	-2%	4%	3%	-7%	1%
1956	Wet	-4%	-2%	0%	0%	-1%	-2%	-1%	0%	0%	0%	1%	2%	-1%
1957	Above Norma	0%	0%	0%	-1%	-2%	0%	0%	0%	0%	0%	1%	1%	0%
1958	Wet	2%	7%	3%	1%	-1%	-1%	-4%	-1%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	3%	0%
1960	Dry	7%	11%	5%	-19%	-4%	-1%	0%	0%	-1%	-2%	0%	-4%	-1%
1961	Dry	1%	0%	0%	7%	6%	9%	4%	2%	-2%	0%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	1%	1%	0%	0%	0%	1%	1%	1%	1%	1%
1963	Wet	-3%	-3%	-7%	1%	4%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	-1%	-2%	-2%	0%	0%	0%	0%	-1%	1%	2%	-2%	0%
1965	Wet	-1%	0%	0%	0%	0%	-1%	-1%	-1%	-1%	0%	1%	1%	0%
1966	Below Normal	0%	3%	3%	1%	-1%	0%	0%	0%	0%	-1%	1%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%	1%	0%
1971	Wet	0%	-3%	-3%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
1973	Above Norma	-2%	3%	12%	1%	-2%	-1%	0%	0%	-1%	0%	-1%	0%	1%
1974	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	1%	0%
1977	Critical	1%	2%	2%	-6%	-11%	-15%	-3%	-1%	-1%	-2%	-2%	-10%	-4%
1978	Above Norma	1%	7%	4%	17%	0%	0%	7%	1%	1%	0%	0%	1%	3%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	9%	13%	0%	2%	1%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	-1%	0%
1982	Wet	0%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1985	Dry	1%	7%	1%	0%	0%	0%	0%	0%	-1%	0%	1%	-1%	1%
1986	Wet	0%	-1%	-2%	0%	0%	0%	-2%	0%	0%	-9%	-5%	-5%	-2%
1987	Dry	-1%	-1%	1%	0%	-4%	5%	0%	-1%	2%	6%	2%	-1%	1%
1988	Critical	-2%	-1%	-1%	-1%	-3%	-3%	-1%	1%	1%	-1%	-1%	-1%	-1%
1989	Dry	0%	0%	0%	2%	0%	1%	0%	0%	-1%	-1%	1%	-3%	0%
1990	Critical	-2%	0%	0%	-1%	-1%	0%	0%	0%	0%	1%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	2%	0%
1992	Critical	1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	-1%	0%	0%	0%	1%	1%	-1%	0%	1%	0%
1994	Critical	1%	0%	0%	0%	0%	1%	0%	0%	-2%	0%	2%	-2%	0%
Average		0%	1%	1%	0%	1%	1%	0%	0%	0%	1%	1%	0%	0%
Wet		0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	2%	2%	1%	-1%	0%	1%	0%	0%	0%	0%	1%	0%
Below Normal		0%	2%	2%	0%	-1%	-1%	0%	0%	0%	1%	1%	1%	1%
Dry		1%	1%	0%	0%	3%	4%	0%	0%	0%	1%	1%	-1%	1%
Critical		0%	0%	0%	-1%	1%	0%	1%	0%	0%	3%	1%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-5	-10	1	12	0
1925	Dry	2	-6	10	-44	-21	-30	-2	0	2	3	0	-2	-7
1926	Dry	-6	-2	-1	0	0	1	1	-1	-1	-1	1	4	0
1927	Wet	4	-3	0	0	0	0	0	0	0	0	1	0	0
1928	Above Normal	1	5	9	4	-1	0	0	-1	-1	-3	1	7	2
1929	Critical	3	2	-1	-7	-14	-2	-1	-11	-30	-24	-8	16	-6
1930	Dry	5	-18	-6	7	1	-20	-3	0	11	6	10	26	2
1931	Critical	11	3	-10	-20	34	31	26	16	20	102	41	19	23
1932	Dry	11	1	0	0	-2	0	0	0	0	0	0	0	1
1933	Critical	-1	0	-12	-5	-5	-11	-2	0	0	0	2	2	-3
1934	Critical	-1	-2	0	-3	5	1	2	1	0	0	0	0	0
1935	Below Normal	0	0	0	0	-5	-1	0	0	6	-32	13	4	-1
1936	Below Normal	4	2	0	0	-2	-6	-1	-1	0	-11	4	4	0
1937	Below Normal	0	6	11	-14	-3	-11	-1	0	1	6	4	-1	0
1938	Wet	-6	-10	2	-12	-1	0	1	0	0	0	-1	1	-2
1939	Dry	1	-1	-3	-2	0	1	0	-2	-3	-6	-12	17	-1
1940	Above Normal	7	4	2	0	1	0	0	2	3	0	0	0	2
1941	Wet	0	0	-2	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	-2	-1	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	-1	-1	2	0
1944	Dry	-1	2	-4	-7	74	14	1	0	-8	-11	-3	-16	3
1945	Below Normal	0	18	5	1	0	-2	-2	0	-1	-1	0	1	2
1946	Below Normal	-3	42	25	1	2	-2	0	0	-2	-1	-1	0	5
1947	Dry	-9	0	8	2	1	-1	0	0	-4	-1	11	-6	0
1948	Below Normal	-11	-13	-19	16	9	-3	-1	0	3	3	16	33	3
1949	Dry	66	45	3	-14	93	30	-3	0	3	-5	-6	4	18
1950	Below Normal	16	15	13	-17	-8	1	1	0	0	-15	0	4	1
1951	Above Normal	-1	2	0	0	-3	-1	0	0	0	0	0	2	0
1952	Wet	-2	-21	-24	0	0	0	0	0	0	0	0	0	-4
1953	Wet	0	-1	-1	0	0	0	0	0	1	0	2	7	1
1954	Above Normal	2	-14	-51	-42	-5	-3	-1	3	-5	-1	0	2	-10
1955	Dry	0	-1	14	13	3	0	0	-1	-4	-5	5	-24	0
1956	Wet	-19	-8	-1	0	0	-3	-1	0	0	0	1	3	-2
1957	Above Normal	1	0	0	-3	-5	0	0	0	-3	-1	4	0	0
1958	Wet	6	11	6	1	-3	-1	1	0	0	0	1	0	2
1959	Below Normal	0	1	0	0	1	0	-1	0	-2	-1	1	7	0
1960	Dry	29	43	42	-91	-24	-2	-1	0	2	-6	0	-16	-2
1961	Dry	-1	6	-6	30	22	73	14	6	0	-2	0	-4	12
1962	Below Normal	-1	1	-1	7	1	0	0	0	5	-1	5	6	2
1963	Wet	-11	-5	-14	-1	4	0	0	0	1	2	1	0	-2
1964	Dry	1	-3	-3	-4	6	3	1	0	0	0	9	-4	1
1965	Wet	-7	-2	0	0	-2	-4	0	-1	-1	-1	1	2	-1
1966	Below Normal	1	7	3	1	-4	-2	0	0	0	-2	1	1	1
1967	Wet	0	2	1	1	0	-1	0	0	0	0	0	0	0
1968	Below Normal	0	0	-1	0	1	0	0	1	2	1	1	1	0
1969	Wet	0	0	-1	0	0	-1	0	0	0	0	0	0	0
1970	Wet	0	-1	-1	0	0	0	2	0	-1	3	0	3	0
1971	Wet	2	-6	-4	0	0	0	0	0	0	0	-2	-1	-1
1972	Below Normal	2	2	1	0	0	3	-1	0	3	-1	-1	4	1
1973	Above Normal	-9	5	18	3	-4	-2	0	0	-2	-3	-2	0	0
1974	Wet	0	1	0	0	-4	-2	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	1	1	-7	0	-1	-14	-1	6	-1
1977	Critical	5	6	21	-29	-208	-47	-32	-11	-4	-6	3	-38	-28
1978	Above Normal	-30	41	3	41	1	1	1	2	0	1	2	2	5
1979	Below Normal	4	2	0	0	0	0	0	0	-1	-1	0	1	1
1980	Above Normal	-1	25	29	0	0	0	0	0	0	0	0	0	4
1981	Dry	0	0	0	0	-2	-14	-3	0	2	3	0	-2	-1
1982	Wet	-1	3	1	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	1	1	0	-1	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-1	1	0	-1	0
1985	Dry	0	17	2	0	0	0	0	0	-2	-2	4	-5	1
1986	Wet	-2	-5	-6	-2	0	0	1	0	1	-65	-11	-10	-8
1987	Dry	-4	-3	0	17	-26	-25	-16	-6	-4	-1	-3	-4	-6
1988	Critical	-9	-6	-4	-3	-56	-5	-5	6	15	3	2	-5	-5
1989	Dry	-2	2	-3	9	1	2	1	0	-2	-5	7	-9	0
1990	Critical	-10	-3	2	-4	-3	-1	1	1	2	3	5	2	0
1991	Critical	1	0	0	0	-2	-1	0	0	0	0	3	1	0
1992	Critical	7	4	-1	3	-3	-1	0	0	0	0	0	1	1
1993	Above Normal	1	-1	2	-1	0	0	0	3	3	-3	-4	3	0
1994	Critical	3	2	-1	0	1	2	0	0	1	-4	14	-14	0
Average		1	3	1	-2	-2	-1	0	0	0	-1	2	1	0
Wet		-2	-2	-2	-1	0	-1	0	0	0	-3	0	0	-1
Above Normal		-3	7	1	0	-2	-1	0	1	0	-1	0	2	0
Below Normal		1	6	3	0	-1	-2	0	0	1	-4	3	5	1
Dry		6	5	3	-5	8	2	-1	0	0	-2	1	-2	1
Critical		1	0	0	-6	-21	-3	-1	0	0	4	5	0	-2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	2%	0%
1925	Dry	0%	-1%	1%	-5%	-3%	-5%	-1%	0%	1%	1%	0%	0%	-1%
1926	Dry	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1927	Wet	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	1%	2%	1%	0%	0%	0%	0%	0%	-1%	0%	2%	0%
1929	Critical	1%	0%	0%	-1%	-2%	0%	0%	-2%	-6%	-5%	-2%	3%	-1%
1930	Dry	1%	-3%	-1%	1%	0%	-3%	-1%	0%	3%	2%	2%	5%	1%
1931	Critical	2%	1%	-1%	-2%	4%	4%	4%	3%	3%	21%	7%	3%	4%
1932	Dry	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	-2%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	2%	-8%	3%	1%	0%
1936	Below Normal	1%	0%	0%	0%	0%	-2%	0%	0%	0%	-3%	1%	1%	0%
1937	Below Normal	0%	1%	2%	-2%	0%	-2%	0%	0%	1%	1%	0%	0%	0%
1938	Wet	-1%	-2%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	-1%	0%	0%	0%	0%	-1%	-1%	-1%	-3%	3%	0%
1940	Above Norma	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	-1%	-1%	11%	3%	0%	0%	-2%	-3%	-1%	-3%	0%
1945	Below Normal	0%	3%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	-1%	8%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1947	Dry	-1%	0%	1%	0%	0%	0%	0%	0%	-1%	0%	2%	-1%	0%
1948	Below Normal	-2%	-2%	-2%	2%	1%	-1%	0%	0%	1%	1%	5%	7%	1%
1949	Dry	12%	8%	0%	-2%	12%	5%	-1%	0%	1%	-2%	-1%	1%	3%
1950	Below Normal	3%	2%	2%	-3%	-1%	0%	0%	0%	0%	-4%	0%	1%	0%
1951	Above Norma	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	-3%	-4%	0%	0%	0%	0%	-3%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Norma	1%	-3%	-9%	-6%	-1%	-1%	0%	1%	-1%	0%	0%	0%	-2%
1955	Dry	0%	0%	2%	2%	1%	0%	0%	0%	-1%	-2%	1%	-4%	0%
1956	Wet	-3%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%
1957	Above Norma	0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	1%	0%
1958	Wet	1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	0%
1960	Dry	5%	7%	6%	-11%	0%	0%	0%	0%	1%	-2%	0%	-3%	0%
1961	Dry	0%	1%	-1%	4%	3%	12%	3%	1%	0%	0%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	1%	1%	0%
1963	Wet	-2%	-1%	-3%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%
1964	Dry	0%	-1%	-1%	-1%	1%	0%	0%	0%	0%	0%	2%	-1%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	1%	1%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
1971	Wet	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
1973	Above Norma	-1%	1%	4%	0%	-1%	0%	0%	0%	0%	-1%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	0%	0%	-2%	0%	1%	0%
1977	Critical	1%	1%	3%	-4%	-2%	-5%	-2%	-2%	-1%	-1%	-6%	-3%	-3%
1978	Above Norma	-4%	5%	0%	6%	0%	0%	0%	1%	0%	0%	0%	0%	1%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	4%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	-3%	-1%	0%	1%	0%	0%	0%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	4%	0%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1986	Wet	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	-13%	-3%	-2%	-2%
1987	Dry	-1%	-1%	0%	2%	-3%	-4%	-3%	-1%	-1%	0%	-1%	-1%	-1%
1988	Critical	-1%	-1%	-1%	0%	-9%	-1%	-1%	1%	3%	1%	1%	-1%	-1%
1989	Dry	0%	0%	0%	1%	0%	0%	0%	0%	-1%	-1%	2%	-2%	0%
1990	Critical	-2%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	1%	1%	-1%	-1%	1%	0%
1994	Critical	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	2%	-2%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Norma		0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	1%	1%	0%
Dry		1%	1%	0%	-1%	1%	0%	0%	0%	0%	-1%	0%	0%	0%
Critical		0%	0%	0%	-1%	-2%	0%	0%	0%	0%	1%	1%	0%	0%

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)

Existing Condition		SVI												Average
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	
1922	Above Normal	754	711	701	584	554	311	330	310	279	290	286	527	470
1923	Below Normal	745	718	722	405	324	296	335	342	247	267	347	572	443
1924	Critical	739	814	885	923	746	592	592	476	653	580	652	738	699
1925	Dry	943	992	951	971	830	307	285	302	264	285	412	671	601
1926	Dry	894	824	924	965	726	308	293	338	298	391	495	673	594
1927	Wet	935	646	316	318	389	272	291	337	227	236	289	545	400
1928	Above Normal	761	630	358	444	321	274	328	327	253	279	308	583	405
1929	Critical	884	907	1,020	895	996	604	484	425	401	446	589	760	701
1930	Dry	952	947	984	657	364	274	318	318	296	390	490	698	557
1931	Critical	923	797	914	997	813	531	488	498	630	530	661	779	713
1932	Dry	933	970	907	475	485	368	408	439	289	296	413	664	554
1933	Critical	886	759	835	792	582	432	365	368	422	451	560	681	594
1934	Critical	880	1,011	908	797	459	418	406	394	406	401	551	796	619
1935	Below Normal	971	936	1,039	745	378	266	265	388	265	248	366	624	541
1936	Below Normal	843	769	926	838	500	339	327	345	254	255	358	592	529
1937	Below Normal	798	781	875	912	844	587	459	346	260	262	331	554	584
1938	Wet	786	804	318	273	729	614	477	368	348	293	291	319	468
1939	Dry	223	256	522	714	658	458	443	413	340	436	520	705	474
1940	Above Normal	946	855	886	921	579	299	278	359	256	246	290	560	540
1941	Wet	777	829	874	460	528	458	402	293	285	297	303	423	494
1942	Wet	314	455	636	624	457	299	319	313	261	279	309	387	388
1943	Wet	268	268	246	513	390	419	444	353	304	272	297	560	361
1944	Dry	848	812	897	1,006	649	315	329	361	300	358	497	712	590
1945	Below Normal	929	798	664	566	632	345	309	327	258	264	340	577	501
1946	Below Normal	816	616	358	252	295	314	346	374	254	289	389	635	411
1947	Dry	912	817	771	635	615	377	363	328	330	394	552	647	562
1948	Below Normal	892	866	1,068	847	859	344	265	294	225	237	349	593	570
1949	Dry	718	710	877	994	775	344	338	339	271	367	567	661	580
1950	Below Normal	842	786	855	761	353	236	251	311	247	258	339	587	486
1951	Above Normal	816	549	352	390	357	291	334	339	247	274	291	593	403
1952	Wet	814	805	745	531	335	386	452	292	274	275	259	271	453
1953	Wet	231	329	622	372	300	274	326	309	233	248	301	495	337
1954	Above Normal	393	416	591	838	325	270	326	307	243	276	293	581	405
1955	Dry	860	916	741	356	308	301	367	343	304	340	502	690	502
1956	Wet	858	850	1,008	712	455	315	332	331	252	271	309	365	505
1957	Above Normal	239	260	542	945	666	291	311	336	245	257	301	600	416
1958	Wet	732	339	423	390	763	834	718	320	266	268	278	296	469
1959	Below Normal	240	357	769	910	429	300	361	345	325	335	373	596	445
1960	Dry	799	820	865	1,027	940	337	345	333	313	444	529	664	618
1961	Dry	908	931	1,073	886	804	336	294	294	334	407	543	709	627
1962	Below Normal	926	920	1,059	863	831	292	261	369	276	304	379	726	601
1963	Wet	794	278	401	460	356	307	320	361	234	241	287	536	381
1964	Dry	744	738	315	518	348	297	397	342	318	440	635	652	479
1965	Wet	861	917	601	339	265	255	310	362	246	244	291	535	435
1966	Below Normal	732	680	305	297	296	267	325	330	282	349	349	610	402
1967	Wet	922	939	808	506	302	394	432	335	280	311	268	255	479
1968	Below Normal	224	272	451	615	309	251	328	360	305	329	341	600	365
1969	Wet	906	856	691	540	721	536	524	366	310	289	302	339	532
1970	Wet	224	263	343	644	458	300	357	322	260	276	294	585	360
1971	Wet	877	679	354	249	263	248	305	321	228	248	323	443	378
1972	Below Normal	328	496	685	379	403	311	347	333	307	341	367	611	409
1973	Above Normal	960	725	350	471	523	341	348	329	256	254	321	570	454
1974	Wet	806	471	275	296	280	284	327	313	259	249	325	383	356
1975	Wet	238	302	542	506	422	356	362	340	245	258	302	363	353
1976	Critical	231	227	396	725	874	569	490	432	645	715	801	868	581
1977	Critical	1,052	834	1,054	841	825	596	486	498	715	741	721	855	768
1978	Above Normal	1,060	1,053	1,052	993	489	602	447	346	301	292	316	470	619
1979	Below Normal	525	731	892	738	383	301	333	342	265	263	344	595	476
1980	Above Normal	887	785	458	363	709	575	518	326	310	310	324	542	509
1981	Dry	727	721	886	782	310	238	314	335	353	459	537	676	528
1982	Wet	966	868	253	486	389	528	546	301	265	278	288	278	454
1983	Wet	215	319	507	970	896	877	840	365	316	309	253	221	507
1984	Wet	221	288	469	450	394	287	355	380	271	268	297	569	354
1985	Dry	785	643	257	288	483	355	362	334	315	454	542	753	464
1986	Wet	959	880	939	556	590	660	405	293	285	328	322	492	559
1987	Dry	571	665	877	1,029	771	391	377	341	353	432	566	686	588
1988	Critical	942	953	976	767	340	360	427	397	397	419	603	825	617
1989	Dry	993	995	994	888	1,109	526	266	278	287	446	579	688	671
1990	Critical	890	943	1,008	703	561	370	374	347	547	703	737	792	665
1991	Critical	1,039	1,059	1,024	1,075	1,037	716	371	331	523	711	715	743	779
1992	Critical	1,046	1,135	1,048	1,162	821	383	315	319	401	422	695	963	726
1993	Above Normal	1,050	1,104	1,115	919	523	350	261	298	238	249	292	500	575
1994	Critical	620	764	937	1,014	778	371	361	308	401	710	803	800	656
Average		744	715	716	672	556	389	377	346	317	351	420	592	516
Wet		653	590	541	485	461	424	421	332	269	273	295	412	430
Above Normal		786	709	641	687	504	361	348	328	263	273	302	553	479
Below Normal		701	695	762	652	488	318	322	343	269	286	355	605	483
Dry		801	797	803	762	636	346	344	340	310	396	524	684	562
Critical		844	850	917	891	736	495	430	399	512	569	674	800	676

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP1 (2005)

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	754	711	701	584	554	311	330	310	279	290	286	527	470
1923	Below Normal	745	718	722	405	324	296	335	342	248	267	347	572	443
1924	Critical	738	814	885	923	746	592	592	476	643	564	654	764	699
1925	Dry	945	966	979	877	794	298	280	302	265	285	410	663	589
1926	Dry	882	820	923	964	726	308	295	336	296	391	496	679	593
1927	Wet	940	640	315	318	390	272	291	338	227	236	290	545	400
1928	Above Normal	763	638	380	453	319	274	328	324	252	280	311	597	410
1929	Critical	891	909	1,018	879	968	596	481	420	396	449	600	794	700
1930	Dry	958	902	969	671	366	274	318	322	302	386	515	752	561
1931	Critical	946	799	888	959	986	621	531	515	683	704	716	812	763
1932	Dry	953	969	906	474	483	364	406	438	289	296	413	664	555
1933	Critical	885	758	837	790	586	434	368	369	422	451	560	680	595
1934	Critical	879	1,009	909	801	486	425	408	395	406	401	551	795	622
1935	Below Normal	971	935	1,039	745	377	266	265	388	269	248	370	630	542
1936	Below Normal	851	773	925	838	497	331	324	343	253	256	368	600	530
1937	Below Normal	797	787	898	879	811	577	452	342	262	265	330	550	579
1938	Wet	780	782	323	267	724	614	479	368	348	293	291	322	466
1939	Dry	223	253	515	711	658	458	443	412	347	449	519	739	477
1940	Above Normal	959	863	893	922	581	300	278	333	258	246	290	560	540
1941	Wet	778	829	870	460	528	460	405	293	285	297	303	423	494
1942	Wet	315	456	637	624	457	299	319	313	261	276	308	387	388
1943	Wet	268	268	246	513	390	419	443	350	303	271	299	564	361
1944	Dry	848	811	903	989	829	345	333	357	293	365	508	683	605
1945	Below Normal	922	834	675	568	632	336	304	327	258	265	341	579	504
1946	Below Normal	812	691	463	253	298	315	344	375	253	291	388	636	427
1947	Dry	896	809	793	639	619	377	363	325	327	403	581	639	564
1948	Below Normal	871	841	1,021	884	870	336	262	294	227	248	382	645	573
1949	Dry	832	794	883	968	943	490	348	340	272	356	557	666	621
1950	Below Normal	872	813	883	720	337	235	250	311	247	259	345	593	489
1951	Above Normal	815	552	352	390	347	287	334	340	246	272	292	597	402
1952	Wet	810	782	693	531	335	386	451	292	274	275	259	271	447
1953	Wet	231	328	619	372	300	274	326	310	234	248	306	508	338
1954	Above Normal	396	385	480	756	317	270	326	333	243	276	294	584	388
1955	Dry	859	916	772	385	314	302	367	342	297	351	522	646	506
1956	Wet	819	833	1,003	712	450	310	329	330	252	271	311	371	499
1957	Above Normal	239	261	540	942	654	290	311	335	245	257	303	607	415
1958	Wet	740	361	436	393	764	831	721	317	266	268	278	297	473
1959	Below Normal	240	358	770	911	429	300	361	347	324	335	374	606	446
1960	Dry	845	895	952	828	896	334	345	333	310	434	532	639	612
1961	Dry	906	943	1,059	943	845	365	305	299	328	405	544	702	637
1962	Below Normal	926	922	1,056	876	834	293	261	369	279	306	384	736	604
1963	Wet	777	271	373	458	367	307	319	360	234	242	287	536	378
1964	Dry	746	735	309	510	346	297	397	342	316	444	654	646	478
1965	Wet	846	912	601	339	261	252	308	360	244	243	294	539	433
1966	Below Normal	732	695	314	300	294	266	325	330	281	346	350	612	404
1967	Wet	921	942	809	507	302	394	432	336	280	311	267	256	480
1968	Below Normal	225	272	449	614	309	251	328	361	308	330	342	602	366
1969	Wet	906	856	689	539	724	542	526	366	310	289	302	339	532
1970	Wet	224	261	341	643	457	299	357	318	260	276	294	590	360
1971	Wet	881	672	344	249	264	248	305	321	228	247	320	440	376
1972	Below Normal	332	500	687	379	403	311	347	334	308	342	366	621	411
1973	Above Normal	944	733	388	475	520	337	348	329	255	253	319	570	456
1974	Wet	807	472	275	296	277	282	327	313	259	249	325	384	355
1975	Wet	238	302	543	506	423	356	362	340	245	258	303	363	353
1976	Critical	231	227	396	725	875	569	490	433	640	701	800	878	581
1977	Critical	1,063	833	1,096	794	753	485	468	490	708	736	717	767	743
1978	Above Normal	1,040	1,153	1,045	1,097	490	602	470	352	304	293	317	472	636
1979	Below Normal	531	734	892	738	384	301	332	342	263	263	346	596	477
1980	Above Normal	885	817	522	361	713	583	520	327	309	310	323	541	518
1981	Dry	726	720	886	782	309	238	314	335	356	462	536	673	528
1982	Wet	962	873	254	486	387	525	544	301	265	278	288	279	453
1983	Wet	215	319	507	970	896	877	840	365	316	309	253	221	507
1984	Wet	221	288	469	450	394	287	355	380	270	268	298	567	354
1985	Dry	775	680	260	289	484	356	362	334	312	452	551	746	467
1986	Wet	954	876	924	553	592	661	397	291	286	300	305	468	551
1987	Dry	563	659	864	1,069	729	406	380	337	357	458	582	682	590
1988	Critical	926	942	968	763	331	347	421	402	401	418	597	814	611
1989	Dry	991	1,000	986	908	1,112	528	267	278	284	438	587	669	671
1990	Critical	871	938	1,013	695	557	370	374	347	547	708	746	794	663
1991	Critical	1,040	1,058	1,023	1,073	1,030	713	371	330	523	711	721	754	779
1992	Critical	1,060	1,140	1,044	1,168	813	381	315	319	401	422	694	965	727
1993	Above Normal	1,052	1,102	1,119	916	523	351	261	301	241	247	292	506	576
1994	Critical	626	767	935	1,013	779	373	361	308	394	702	829	775	655
Average		745	719	719	668	560	391	377	346	318	353	424	593	518
Wet		649	587	537	485	461	424	421	331	269	272	294	413	429
Above Normal		785	721	642	690	502	361	351	328	263	272	303	556	481
Below Normal		702	705	771	651	486	315	321	343	270	287	360	613	485
Dry		809	804	810	750	653	359	345	340	310	398	532	680	566
Critical		846	850	918	882	742	492	432	400	514	581	682	799	678

Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	-1	0
1924	Critical	0	0	0	0	-1	0	0	0	-10	-16	2	26	0
1925	Dry	2	-26	29	-93	-36	-10	-4	1	1	1	-2	-7	-12
1926	Dry	-12	-4	-1	-1	0	0	1	-2	-2	0	2	5	-1
1927	Wet	5	-6	0	0	0	0	0	1	0	0	0	0	0
1928	Above Norma	2	8	22	9	-1	0	1	-3	-1	1	3	13	5
1929	Critical	7	2	-2	-16	-28	-8	-3	-5	-5	3	12	34	-1
1930	Dry	6	-45	-15	14	2	-1	1	4	6	-4	25	54	4
1931	Critical	23	3	-25	-38	172	91	43	16	53	174	55	33	50
1932	Dry	20	-1	-1	0	-3	-4	-1	0	0	0	0	0	1
1933	Critical	-1	-1	1	-2	4	2	3	1	0	0	0	-1	1
1934	Critical	-1	-2	1	4	27	7	2	0	0	0	0	-1	3
1935	Below Normal	-1	0	0	0	-1	0	0	0	4	0	4	6	1
1936	Below Normal	7	3	-1	0	-3	-7	-3	-2	-1	2	10	8	1
1937	Below Normal	-1	6	22	-33	-33	-11	-8	-4	2	3	-1	-4	-5
1938	Wet	-6	-22	5	-5	-5	0	2	-1	0	0	1	2	-2
1939	Dry	0	-4	-7	-3	0	0	0	0	7	13	-2	34	3
1940	Above Norma	13	7	7	1	2	1	0	-25	3	0	0	0	1
1941	Wet	1	0	-5	0	0	2	3	0	0	0	0	0	0
1942	Wet	0	1	1	0	0	0	0	0	0	-2	-2	0	0
1943	Wet	0	0	0	0	0	0	-1	-3	-1	0	1	4	0
1944	Dry	0	-1	6	-16	181	30	4	-5	-7	7	12	-29	15
1945	Below Normal	-7	36	12	2	0	-9	-5	1	0	1	2	2	3
1946	Below Normal	-4	76	105	1	3	1	-1	1	-1	2	-1	1	15
1947	Dry	-16	-8	22	4	4	0	0	-3	-3	10	29	-8	3
1948	Below Normal	-22	-25	-48	36	11	-8	-3	0	3	10	33	52	3
1949	Dry	114	85	6	-26	168	146	10	1	1	-11	-11	4	41
1950	Below Normal	30	27	28	-41	-16	-1	0	0	0	0	5	7	3
1951	Above Norma	-1	3	0	0	-10	-4	0	0	-1	-2	0	3	-1
1952	Wet	-4	-22	-51	0	0	0	-1	0	0	0	0	0	-6
1953	Wet	0	-1	-3	0	0	0	0	0	0	0	6	13	1
1954	Above Norma	4	-31	-111	-82	-8	0	0	25	0	0	1	3	-17
1955	Dry	-1	0	31	28	6	1	0	-1	-7	11	20	-44	4
1956	Wet	-40	-17	-5	0	-4	-5	-4	-1	0	0	2	6	-6
1957	Above Norma	1	0	-1	-3	-12	-2	0	0	-1	0	2	8	-1
1958	Wet	8	22	14	3	1	-3	2	-3	0	0	0	1	4
1959	Below Normal	0	1	1	1	0	0	0	2	-1	-1	1	10	1
1960	Dry	47	75	87	-199	-44	-3	0	0	-3	-10	3	-25	-6
1961	Dry	-2	12	-14	56	41	29	11	5	-6	-2	1	-7	10
1962	Below Normal	0	2	-3	13	3	1	0	0	3	2	4	10	3
1963	Wet	-17	-7	-27	-2	12	0	0	0	0	0	0	0	-3
1964	Dry	2	-4	-7	-8	-1	0	0	0	-2	3	18	-6	0
1965	Wet	-15	-5	0	0	-3	-3	-2	-2	-2	-1	3	4	-2
1966	Below Normal	1	15	9	3	-1	-1	0	0	-1	-3	2	2	2
1967	Wet	-1	3	1	1	0	0	0	1	0	0	0	0	0
1968	Below Normal	0	0	-2	-1	0	0	0	1	3	1	1	3	1
1969	Wet	0	0	-2	-1	3	6	2	0	0	0	0	0	1
1970	Wet	0	-2	-2	-1	0	0	0	-5	-1	1	1	5	0
1971	Wet	4	-8	-11	0	0	0	0	0	0	0	-3	-3	-2
1972	Below Normal	4	4	2	0	0	0	0	1	2	1	-1	10	2
1973	Above Norma	-16	7	38	4	-3	-4	0	0	-1	-1	-2	1	2
1974	Wet	1	1	0	0	-3	-2	0	0	0	0	0	1	0
1975	Wet	0	0	0	0	0	0	1	0	0	0	0	1	0
1976	Critical	0	0	0	0	2	0	0	1	-5	-14	0	10	-1
1977	Critical	11	-1	42	-47	-72	-111	-18	-8	-7	-5	-4	-87	-26
1978	Above Norma	-20	100	-7	103	2	0	23	6	3	0	0	2	18
1979	Below Normal	6	4	0	0	1	0	-1	0	-1	0	1	1	1
1980	Above Norma	-2	32	64	-2	4	8	2	2	-1	0	0	0	9
1981	Dry	0	-1	-1	0	-1	0	0	0	4	3	-1	-3	0
1982	Wet	-3	5	1	0	-3	-3	-3	0	0	0	1	1	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-1	0	1	-2	0
1985	Dry	-10	37	3	1	1	0	0	0	-3	-2	8	-7	2
1986	Wet	-5	-4	-15	-3	3	1	-8	-2	1	-28	-17	-24	-8
1987	Dry	-8	-6	-13	40	-42	15	3	-4	5	26	15	-4	2
1988	Critical	-16	-11	-8	-4	-9	-13	-6	5	4	-1	-6	-11	-6
1989	Dry	-2	5	-8	20	2	2	1	0	-3	-8	8	-20	0
1990	Critical	-19	-6	5	-8	-4	0	0	1	1	5	9	2	-1
1991	Critical	1	-1	-1	-1	-7	-3	0	0	0	0	6	11	0
1992	Critical	15	5	-4	6	-8	-1	0	0	0	0	0	2	1
1993	Above Norma	2	-2	4	-3	0	1	0	3	2	-2	0	6	1
1994	Critical	6	3	-2	-1	1	2	0	0	-7	-7	26	-25	0
Average		1	4	2	-4	4	2	1	0	0	2	4	1	1
Wet		-3	-3	-5	0	0	0	-1	-1	0	-1	0	0	-1
Above Norma		-2	12	2	3	-3	0	2	1	0	0	0	4	2
Below Normal		1	11	9	-1	-3	-3	-1	0	1	1	4	8	2
Dry		9	7	7	-11	17	13	2	0	-1	2	8	-4	4
Critical		2	-1	1	-9	6	-3	2	1	2	12	8	-1	2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	0%	3%	0%
1925	Dry	0%	-3%	3%	-10%	-4%	-3%	-2%	0%	0%	0%	-1%	-1%	-2%
1926	Dry	-1%	-1%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	1%	0%
1927	Wet	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	1%	6%	2%	0%	0%	0%	-1%	0%	0%	1%	2%	1%
1929	Critical	1%	0%	0%	-2%	-3%	-1%	-1%	-1%	-1%	1%	2%	4%	0%
1930	Dry	1%	-5%	-2%	2%	1%	0%	0%	1%	2%	-1%	5%	8%	1%
1931	Critical	3%	0%	-3%	-4%	21%	17%	9%	3%	8%	33%	8%	4%	8%
1932	Dry	2%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	6%	2%	0%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	0%
1936	Below Normal	1%	0%	0%	0%	-1%	-2%	-1%	0%	0%	1%	3%	1%	0%
1937	Below Normal	0%	1%	3%	-4%	-4%	-2%	-2%	-1%	1%	1%	0%	-1%	-1%
1938	Wet	-1%	-3%	2%	-2%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1939	Dry	0%	-1%	-1%	0%	0%	0%	0%	0%	2%	3%	0%	5%	1%
1940	Above Norma	1%	1%	1%	0%	0%	0%	0%	-7%	1%	0%	0%	0%	0%
1941	Wet	0%	0%	-1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	1%	0%
1944	Dry	0%	0%	1%	-2%	28%	10%	1%	-1%	-2%	2%	2%	-4%	3%
1945	Below Normal	-1%	5%	2%	0%	0%	-3%	0%	0%	0%	0%	1%	0%	0%
1946	Below Normal	-1%	12%	29%	0%	1%	0%	0%	0%	0%	1%	0%	0%	4%
1947	Dry	-2%	-1%	3%	1%	1%	0%	0%	-1%	-1%	2%	5%	-1%	1%
1948	Below Normal	-2%	-3%	-4%	4%	1%	-2%	-1%	0%	1%	4%	9%	9%	1%
1949	Dry	16%	12%	1%	-3%	22%	43%	3%	0%	0%	-3%	-2%	1%	7%
1950	Below Normal	4%	3%	3%	-5%	-5%	-1%	0%	0%	0%	0%	2%	1%	0%
1951	Above Norma	0%	1%	0%	0%	-3%	-1%	0%	0%	0%	-1%	0%	1%	0%
1952	Wet	0%	-3%	-7%	0%	0%	0%	0%	-3%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1954	Above Norma	1%	-7%	-19%	-10%	-2%	0%	0%	8%	0%	0%	0%	1%	-2%
1955	Dry	0%	0%	4%	8%	2%	0%	0%	0%	-2%	3%	4%	-6%	1%
1956	Wet	-5%	-2%	0%	0%	-1%	-2%	-1%	0%	0%	0%	1%	2%	-1%
1957	Above Norma	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	1%	1%	0%
1958	Wet	1%	6%	3%	1%	0%	0%	0%	-1%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
1960	Dry	6%	9%	10%	-19%	-5%	-1%	0%	0%	-1%	-2%	1%	-4%	-1%
1961	Dry	0%	1%	-1%	6%	5%	9%	4%	2%	-2%	0%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	2%	0%	0%	0%	0%	1%	1%	1%	1%	1%
1963	Wet	-2%	-2%	-7%	0%	3%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	-1%	-2%	-2%	0%	0%	0%	0%	-1%	1%	3%	-1%	0%
1965	Wet	-2%	-1%	0%	0%	-1%	-1%	-1%	0%	-1%	0%	1%	1%	0%
1966	Below Normal	0%	2%	3%	1%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	-1%	0%	0%	0%	0%	-2%	0%	0%	0%	1%	0%
1971	Wet	0%	-1%	-3%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	2%	0%
1973	Above Norma	-2%	1%	11%	1%	-1%	-1%	0%	0%	0%	0%	-1%	0%	1%
1974	Wet	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	1%	0%
1977	Critical	1%	0%	4%	-6%	-9%	-19%	-4%	-2%	-1%	-1%	-10%	-4%	-4%
1978	Above Norma	-2%	9%	-1%	10%	0%	0%	5%	2%	1%	0%	0%	0%	2%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	4%	14%	0%	1%	1%	0%	0%	0%	0%	0%	2%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%
1982	Wet	0%	1%	0%	0%	-1%	-1%	0%	0%	0%	0%	1%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	-1%	6%	1%	0%	0%	0%	0%	-1%	0%	2%	-1%	0%	0%
1986	Wet	-1%	0%	-2%	-1%	0%	0%	-2%	-1%	0%	-8%	-5%	-5%	-2%
1987	Dry	-1%	-1%	-1%	4%	-5%	4%	1%	-1%	1%	6%	3%	-1%	1%
1988	Critical	-2%	-1%	-1%	-1%	-3%	-4%	-1%	1%	1%	0%	-1%	-1%	-1%
1989	Dry	0%	0%	-1%	2%	0%	0%	0%	0%	-1%	-2%	1%	-3%	0%
1990	Critical	-2%	-1%	0%	-1%	-1%	0%	0%	0%	1%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	1%	0%
1992	Critical	1%	0%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	1%	1%	-1%	0%	1%	0%
1994	Critical	1%	0%	0%	0%	0%	1%	0%	0%	-2%	-1%	3%	-3%	0%
Average		0%	1%	1%	0%	1%	1%	0%	0%	0%	0%	1%	0%	0%
Wet		0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	1%	1%	0%	-1%	0%	1%	0%	0%	0%	0%	1%	0%
Below Normal		0%	2%	2%	0%	0%	-1%	0%	0%	0%	1%	1%	1%	0%
Dry		1%	1%	1%	-1%	3%	4%	1%	0%	0%	1%	1%	-1%	1%
Critical		0%	0%	0%	-1%	1%	0%	0%	0%	0%	2%	1%	0%	0%

Shasta Lake Water Resources Investigation Physical Resource Appendix-Water Quality Technical Report

**Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP1 (2005)**

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	562	570	601	558	549	434	349	323	337	367	326	422	450
1923	Below Normal	567	564	562	447	460	516	369	340	335	298	326	461	437
1924	Critical	560	609	705	756	828	942	645	563	565	487	539	577	648
1925	Dry	686	720	766	744	668	569	383	348	386	373	396	531	547
1926	Dry	648	630	722	768	646	550	403	444	380	382	465	543	548
1927	Wet	689	508	388	400	468	502	339	317	271	265	284	435	406
1928	Above Normal	581	482	423	467	411	373	337	361	300	290	288	464	398
1929	Critical	664	677	767	740	832	806	590	497	443	423	494	606	628
1930	Dry	702	696	753	582	518	477	426	444	361	364	440	561	527
1931	Critical	695	635	739	788	887	819	649	581	605	586	579	611	681
1932	Dry	698	733	679	473	587	747	527	468	404	476	411	530	561
1933	Critical	646	607	703	730	735	716	560	483	476	459	495	555	597
1934	Critical	655	741	732	696	665	859	617	538	495	424	489	596	625
1935	Below Normal	709	720	815	643	627	478	365	401	356	314	348	499	523
1936	Below Normal	631	603	732	682	523	342	339	378	349	285	331	476	473
1937	Below Normal	594	604	711	725	474	410	307	280	399	457	334	448	479
1938	Wet	591	612	429	442	385	334	261	256	256	341	304	296	376
1939	Dry	256	282	479	619	657	657	465	380	346	377	409	574	458
1940	Above Normal	694	639	748	673	546	357	321	364	338	280	275	444	473
1941	Wet	588	629	629	477	441	337	277	273	390	386	322	351	425
1942	Wet	307	397	515	458	336	373	324	292	353	368	318	320	363
1943	Wet	278	306	348	379	308	306	306	375	406	317	303	448	340
1944	Dry	625	605	704	782	744	494	373	358	321	326	407	537	523
1945	Below Normal	678	602	557	552	507	372	372	347	322	295	331	465	450
1946	Below Normal	591	539	461	407	443	427	370	351	314	280	332	500	418
1947	Dry	646	613	641	605	615	546	435	403	321	337	449	507	510
1948	Below Normal	653	647	778	738	818	615	392	377	289	259	322	511	533
1949	Dry	627	616	712	799	872	568	435	477	341	309	434	518	559
1950	Below Normal	642	626	720	615	447	438	330	357	314	289	304	469	463
1951	Above Normal	624	432	380	343	282	378	355	269	273	291	267	467	363
1952	Wet	609	601	606	499	412	410	257	210	292	335	279	266	398
1953	Wet	261	334	494	436	462	477	321	292	256	264	285	397	357
1954	Above Normal	348	359	469	641	416	427	363	388	297	289	271	462	394
1955	Dry	649	694	649	463	525	675	511	441	340	319	407	505	515
1956	Wet	616	664	659	401	388	359	348	342	355	376	328	330	430
1957	Above Normal	266	302	509	744	668	489	328	301	283	260	277	478	409
1958	Wet	527	347	437	413	529	498	217	197	323	336	289	281	366
1959	Below Normal	261	349	607	708	481	517	418	377	326	298	310	481	428
1960	Dry	634	675	762	702	758	439	424	447	326	356	414	504	537
1961	Dry	674	710	808	767	725	625	445	420	345	338	416	535	567
1962	Below Normal	684	700	808	770	647	474	380	377	336	291	322	576	530
1963	Wet	609	308	409	404	460	394	356	311	291	268	279	433	377
1964	Dry	572	541	386	513	568	643	460	422	326	363	493	510	483
1965	Wet	646	703	545	409	340	411	352	320	316	271	296	435	420
1966	Below Normal	552	543	419	424	424	428	371	386	303	311	298	490	413
1967	Wet	686	709	697	532	434	406	280	235	295	310	277	261	427
1968	Below Normal	260	298	443	547	436	491	390	372	311	298	305	484	386
1969	Wet	678	655	585	595	385	399	288	243	246	342	308	304	419
1970	Wet	257	288	396	295	353	351	327	352	310	287	280	458	329
1971	Wet	649	485	430	375	465	394	304	296	248	250	284	355	378
1972	Below Normal	318	445	560	419	482	410	389	407	330	312	312	496	407
1973	Above Normal	700	537	442	508	527	442	384	393	344	271	300	457	442
1974	Wet	614	400	386	414	392	321	336	356	367	304	307	336	378
1975	Wet	268	315	489	503	377	323	343	322	341	334	309	322	354
1976	Critical	266	267	413	624	793	670	519	473	534	565	615	675	534
1977	Critical	753	659	829	729	737	792	600	565	604	592	561	577	667
1978	Above Normal	722	832	819	680	648	638	400	328	393	412	353	392	551
1979	Below Normal	439	569	684	646	393	327	358	319	319	289	327	482	429
1980	Above Normal	653	594	490	414	351	396	373	363	379	390	335	438	431
1981	Dry	543	556	690	706	459	440	401	369	342	382	421	536	487
1982	Wet	725	577	361	470	303	328	227	215	344	367	306	260	374
1983	Wet	213	264	379	358	328	271	294	266	244	230	215	223	274
1984	Wet	257	209	303	337	261	336	344	354	347	285	292	450	315
1985	Dry	568	473	362	386	525	522	445	387	318	372	437	586	448
1986	Wet	698	652	702	546	470	316	256	239	374	405	332	391	448
1987	Dry	451	515	696	809	699	496	437	401	348	377	450	532	518
1988	Critical	695	697	758	690	564	801	522	495	464	385	475	608	596
1989	Dry	721	762	789	763	1,066	555	330	353	275	351	453	521	578
1990	Critical	649	710	795	612	627	592	477	483	491	559	582	600	598
1991	Critical	743	780	814	905	1,013	650	532	453	456	558	572	579	671
1992	Critical	751	825	831	926	726	529	422	385	375	370	506	688	611
1993	Above Normal	759	811	864	656	558	513	369	397	377	364	320	414	533
1994	Critical	503	590	731	836	785	521	427	437	368	543	615	591	579
Average		569	561	606	584	551	496	391	372	355	355	372	472	474
Wet		513	474	485	435	395	374	303	289	315	316	295	350	379
Above Normal		591	556	575	568	495	445	358	349	332	321	301	444	445
Below Normal		541	558	633	594	512	446	368	362	329	305	322	488	455
Dry		606	614	662	655	665	563	431	410	342	363	431	533	523
Critical		632	650	735	753	766	725	547	496	490	496	544	605	620

Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-7	-12	1	16	0
1925	Dry	2	-6	13	-55	-36	-35	-2	0	2	3	1	-2	-10
1926	Dry	-7	-3	-1	0	0	1	1	-1	-2	-1	1	4	-1
1927	Wet	5	-4	0	0	0	2	0	0	0	0	1	0	0
1928	Above Normal	1	6	11	5	-1	0	-1	-1	-2	0	0	8	2
1929	Critical	4	2	-2	-9	-18	-4	-1	-13	-32	-24	-8	18	-7
1930	Dry	6	-21	-8	8	1	-31	-3	0	19	3	10	32	1
1931	Critical	12	4	-11	-26	39	32	31	17	24	109	44	23	25
1932	Dry	13	1	0	0	-2	-2	0	0	0	0	0	0	1
1933	Critical	-1	0	-10	-2	2	-8	-2	0	0	0	3	2	-1
1934	Critical	-1	0	0	-7	10	2	2	1	0	0	0	0	1
1935	Below Normal	0	0	0	0	-7	-2	0	0	11	-30	11	4	-1
1936	Below Normal	5	3	0	0	-4	-5	-2	-1	0	-14	4	6	-1
1937	Below Normal	0	9	10	-18	-3	-1	-1	0	3	8	5	-1	1
1938	Wet	-7	-12	2	-20	0	0	0	0	0	0	-1	1	-3
1939	Dry	1	-2	-4	-2	1	1	0	-3	-3	-1	-8	21	0
1940	Above Normal	9	4	2	1	1	1	0	4	4	0	0	0	2
1941	Wet	0	-1	-2	0	0	-1	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	-3	-2	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	-2	-1	2	0
1944	Dry	0	3	-6	-9	100	17	1	1	-9	-7	-5	-18	6
1945	Below Normal	0	21	6	1	0	-3	-2	0	-1	-1	0	1	2
1946	Below Normal	-4	52	41	1	2	-3	-1	0	-3	-1	-1	0	7
1947	Dry	-11	-1	11	2	1	-1	1	0	-5	2	14	-6	1
1948	Below Normal	-12	-16	-21	20	10	-4	-2	0	7	0	17	36	3
1949	Dry	77	50	5	-18	108	-1	-3	0	3	-5	-7	5	18
1950	Below Normal	19	17	14	-22	-10	2	3	0	-1	-19	0	4	1
1951	Above Normal	-2	3	0	0	2	-2	0	0	-1	-1	-1	2	0
1952	Wet	-2	-25	-29	0	0	0	0	0	0	0	0	0	-5
1953	Wet	0	-1	-1	0	0	1	0	1	1	0	2	8	1
1954	Above Normal	3	-17	-63	-51	-6	-12	-1	2	-5	-2	0	2	-13
1955	Dry	0	-1	17	17	4	0	0	-1	-4	-3	5	-27	1
1956	Wet	-20	-9	-1	0	0	-3	-1	0	1	0	0	4	-2
1957	Above Normal	1	0	0	-4	-6	-1	0	0	-1	0	0	4	0
1958	Wet	8	13	8	2	-5	-2	0	0	0	0	1	1	2
1959	Below Normal	0	1	1	0	1	0	-2	0	-2	-1	0	7	0
1960	Dry	34	53	41	-113	-32	-3	-1	0	5	-6	0	-18	-3
1961	Dry	-1	7	-8	36	29	103	16	7	0	-1	0	-4	15
1962	Below Normal	-1	1	-1	8	2	0	0	8	1	3	8	3	3
1963	Wet	-13	-5	-17	-1	6	0	0	0	2	2	1	0	-2
1964	Dry	2	-4	-3	-5	5	1	1	0	-1	2	11	-5	0
1965	Wet	-8	-2	0	0	-5	-7	-1	-2	-1	-2	1	3	-2
1966	Below Normal	1	9	5	2	-8	-3	0	-1	0	-2	1	2	1
1967	Wet	0	2	1	1	-3	-1	-1	0	0	0	0	0	0
1968	Below Normal	0	0	-1	0	1	0	0	1	2	1	1	1	0
1969	Wet	0	-1	-1	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	-1	-1	0	0	0	3	0	-2	3	0	4	0
1971	Wet	3	-7	-5	0	1	1	0	0	0	-1	-2	-1	-1
1972	Below Normal	2	2	1	0	0	1	-1	0	2	-2	-3	5	1
1973	Above Normal	-10	7	23	3	-8	-2	0	0	-4	-4	-3	0	0
1974	Wet	0	1	0	0	-10	-2	0	0	0	0	0	0	-1
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	1	1	-6	0	-2	-14	-1	6	-1
1977	Critical	6	10	21	-34	-211	-78	-38	-13	-4	-6	1	-40	-32
1978	Above Normal	-33	47	2	55	1	1	-6	5	1	1	2	2	7
1979	Below Normal	4	2	0	1	0	0	0	0	-1	-1	0	2	1
1980	Above Normal	-1	30	37	0	0	0	0	0	0	0	0	0	6
1981	Dry	0	0	0	0	-6	-30	-3	0	2	3	0	-2	-3
1982	Wet	-1	4	1	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-2	-1	0	-1	0
1985	Dry	-1	21	2	0	1	0	0	0	-3	-2	5	-6	1
1986	Wet	-2	-5	-8	-2	0	0	2	0	1	-78	-12	-13	-10
1987	Dry	-5	-5	-2	20	-46	-73	-17	-7	-8	-1	-5	-6	-13
1988	Critical	-10	-7	-5	-3	-63	-12	-5	7	13	2	2	-5	-7
1989	Dry	-3	2	-4	11	1	2	1	0	-2	-5	6	-10	0
1990	Critical	-12	-2	3	-5	-3	-1	1	1	2	3	5	2	-1
1991	Critical	1	-1	0	0	-2	-2	0	0	0	0	1	2	0
1992	Critical	8	4	-1	3	-4	-1	0	0	0	0	1	2	1
1993	Above Normal	2	-1	2	-1	0	0	0	8	4	-5	-5	3	1
1994	Critical	4	2	-1	1	2	2	0	0	-2	-4	15	-14	0
Average		1	3	1	-3	-2	-2	-1	0	0	-2	2	1	0
Wet		-2	-2	-3	-1	-1	-1	0	0	0	-4	-1	0	-1
Above Normal		-3	8	1	1	-2	-2	-1	2	0	-1	-1	2	0
Below Normal		1	7	4	-1	-1	-1	0	0	2	-4	3	5	1
Dry		7	6	3	-7	8	-3	-1	0	0	-1	2	-3	1
Critical		1	1	0	-7	-21	-6	-2	0	-1	5	5	1	-2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	3%	0%
1925	Dry	0%	-1%	2%	-7%	-5%	-6%	0%	1%	1%	0%	0%	-1%	0%
1926	Dry	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1927	Wet	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	1%	3%	1%	0%	0%	0%	0%	-1%	0%	0%	2%	0%
1929	Critical	1%	0%	0%	-1%	-2%	0%	0%	-3%	-7%	-5%	-2%	3%	-1%
1930	Dry	1%	-3%	-1%	1%	0%	-6%	-1%	0%	5%	1%	2%	6%	1%
1931	Critical	2%	1%	-1%	-3%	5%	4%	5%	3%	4%	23%	8%	4%	4%
1932	Dry	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	-1%	0%	0%	-1%	0%	0%	0%	0%	1%	0%	0%
1934	Critical	0%	0%	0%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	3%	-9%	3%	1%	0%
1936	Below Normal	1%	0%	0%	0%	-1%	-2%	-1%	0%	0%	-5%	1%	1%	0%
1937	Below Normal	0%	1%	1%	-2%	-1%	0%	0%	1%	2%	2%	0%	0%	0%
1938	Wet	-1%	-2%	1%	-4%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1939	Dry	0%	-1%	-1%	0%	0%	0%	0%	-1%	-1%	0%	-2%	4%	0%
1940	Above Norma	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1944	Dry	0%	1%	-1%	-1%	16%	4%	0%	0%	-3%	-2%	-1%	-3%	1%
1945	Below Normal	0%	4%	1%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%
1946	Below Normal	-1%	11%	10%	0%	1%	-1%	0%	0%	-1%	0%	0%	0%	1%
1947	Dry	-2%	0%	2%	0%	0%	0%	0%	0%	-2%	1%	3%	-1%	0%
1948	Below Normal	-2%	-2%	-3%	3%	1%	-1%	0%	0%	3%	0%	5%	8%	1%
1949	Dry	14%	9%	1%	-2%	14%	0%	-1%	0%	1%	-2%	-2%	1%	3%
1950	Below Normal	3%	3%	2%	-3%	-2%	0%	1%	0%	0%	-6%	0%	1%	0%
1951	Above Norma	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%
1952	Wet	0%	-4%	-5%	0%	0%	0%	0%	-4%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Norma	1%	-5%	-12%	-7%	-2%	-3%	0%	1%	-2%	-1%	0%	0%	-2%
1955	Dry	0%	0%	3%	4%	1%	0%	0%	0%	-1%	-1%	1%	-5%	0%
1956	Wet	-3%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%
1957	Above Norma	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	1%	4%	2%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1960	Dry	6%	8%	6%	-14%	-4%	-1%	0%	0%	2%	-2%	0%	-3%	0%
1961	Dry	0%	1%	-1%	5%	4%	20%	4%	2%	0%	0%	0%	-1%	3%
1962	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	2%	0%	1%	1%	1%
1963	Wet	-2%	-2%	-4%	0%	1%	0%	0%	0%	1%	1%	0%	0%	0%
1964	Dry	0%	-1%	-1%	-1%	1%	0%	0%	0%	0%	1%	2%	-1%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-2%	0%	-1%	0%	-1%	0%	1%	0%
1966	Below Normal	0%	2%	1%	0%	-2%	-1%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	1%	0%	-1%	0%	0%	1%	0%
1971	Wet	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	1%	0%
1973	Above Norma	-1%	1%	5%	1%	-1%	-1%	0%	0%	-1%	-1%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	0%	0%	-2%	0%	1%	0%
1977	Critical	1%	2%	3%	-5%	-22%	-9%	-6%	-2%	-1%	-1%	-6%	-4%	-4%
1978	Above Norma	-4%	6%	0%	9%	0%	0%	-2%	2%	0%	0%	1%	1%	1%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	5%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	-1%	-6%	-1%	0%	1%	1%	0%	0%	-1%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	5%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1986	Wet	0%	-1%	-1%	0%	0%	0%	1%	0%	0%	-16%	-4%	-3%	-2%
1987	Dry	-1%	-1%	0%	2%	-6%	-13%	-4%	-2%	0%	-1%	-1%	-2%	-2%
1988	Critical	-1%	-1%	-1%	0%	-10%	-2%	-1%	1%	3%	1%	0%	-1%	-1%
1989	Dry	0%	0%	0%	2%	0%	0%	0%	0%	-1%	-1%	1%	-2%	0%
1990	Critical	-2%	0%	0%	-1%	-1%	0%	0%	0%	0%	1%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	2%	1%	-1%	-2%	1%	0%
1994	Critical	1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	2%	-2%	0%
Average		0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Norma		0%	1%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Below Normal		0%	1%	1%	0%	0%	0%	0%	0%	1%	-1%	1%	1%	0%
Dry		1%	1%	0%	-1%	1%	-1%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	-1%	-2%	-1%	0%	0%	0%	1%	1%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-11	-17	-8	3	-3
1925	Dry	5	-9	11	-37	-32	-20	-3	1	0	2	4	3	-6
1926	Dry	-3	-1	0	0	0	0	1	0	-4	-3	-2	0	-1
1927	Wet	2	-2	0	0	0	0	0	-1	0	1	1	0	0
1928	Above Normal	0	2	7	5	0	0	-2	-2	-3	-1	-2	3	1
1929	Critical	2	1	-2	-3	-15	-6	-2	-4	-20	-23	-15	5	-7
1930	Dry	6	-6	-7	7	2	-6	-6	-2	30	5	-4	14	3
1931	Critical	11	4	8	-32	51	33	31	18	17	65	35	11	21
1932	Dry	7	2	0	0	-4	-4	-1	0	0	0	0	0	0
1933	Critical	0	0	0	-1	0	-4	-6	-1	0	0	0	0	-1
1934	Critical	0	-1	0	-5	8	5	2	1	0	0	0	0	1
1935	Below Normal	0	0	0	0	-1	-2	-1	0	11	0	-2	3	1
1936	Below Normal	3	2	0	0	-4	-8	-2	-1	1	-5	0	3	-1
1937	Below Normal	1	0	6	-9	-6	-9	-3	0	2	-9	8	2	0
1938	Wet	0	-7	3	-11	-1	0	-9	-1	0	0	-2	0	-2
1939	Dry	2	0	-2	-2	1	2	-2	-2	-6	-6	-8	11	-1
1940	Above Normal	4	1	2	1	1	1	0	14	5	0	0	0	3
1941	Wet	0	0	-2	0	0	2	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	-2	-2	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	-2	-3	0	0
1944	Dry	0	-1	0	-22	76	16	1	8	1	-4	2	-9	6
1945	Below Normal	-2	9	4	1	0	-6	-1	0	-1	-2	-1	0	0
1946	Below Normal	-1	15	25	0	2	-1	-2	0	-3	-3	-2	0	2
1947	Dry	-3	-1	7	2	0	-1	4	2	-2	-2	10	-2	1
1948	Below Normal	-6	-4	-23	12	12	-5	-1	0	8	-5	4	19	1
1949	Dry	32	23	8	-23	55	40	-14	-2	5	0	-6	1	10
1950	Below Normal	5	1	15	-13	-9	-1	2	0	-1	-9	-3	2	-1
1951	Above Normal	0	1	0	0	-8	-2	0	0	0	-3	-2	1	-1
1952	Wet	-1	-9	-24	0	0	-1	0	0	0	0	0	0	-3
1953	Wet	0	0	-1	0	0	0	0	0	1	0	-2	4	0
1954	Above Normal	1	-6	-40	-50	-7	-3	-1	10	-8	-2	-2	1	-9
1955	Dry	0	0	10	13	3	1	0	0	-3	-11	3	-12	0
1956	Wet	-10	-3	-1	0	-2	-3	-2	0	2	0	-1	2	-1
1957	Above Normal	1	1	1	-4	-4	0	0	0	0	0	-1	2	0
1958	Wet	3	6	6	2	-5	-3	3	-1	0	1	1	1	1
1959	Below Normal	0	1	0	0	2	0	-2	0	1	-1	-1	3	0
1960	Dry	13	11	44	-78	-33	-2	0	0	9	-1	0	-10	-4
1961	Dry	-4	5	-9	30	24	33	20	7	3	-1	0	-2	9
1962	Below Normal	-1	1	-2	7	2	1	0	0	8	1	0	5	2
1963	Wet	-8	-4	-13	-2	5	0	0	0	3	3	2	1	-1
1964	Dry	1	-1	-2	-4	1	3	2	1	1	0	7	-1	1
1965	Wet	-3	-1	0	0	-5	-4	-2	-1	-1	-2	0	1	-1
1966	Below Normal	2	4	3	1	-8	-6	0	0	1	0	0	1	0
1967	Wet	0	0	1	3	-2	-2	-1	0	0	0	0	0	0
1968	Below Normal	1	1	0	0	2	0	0	1	1	1	0	0	1
1969	Wet	0	-1	0	0	11	0	-1	0	0	0	0	0	1
1970	Wet	1	0	-1	0	0	0	1	-1	-2	0	-1	1	0
1971	Wet	1	-3	-3	0	1	1	0	0	0	-1	-1	-1	0
1972	Below Normal	1	1	1	0	0	-4	-2	0	-3	-3	-6	1	-1
1973	Above Normal	-4	2	18	4	-7	-2	0	0	-3	-5	-3	-1	0
1974	Wet	0	0	0	0	-12	-6	0	0	0	0	0	0	-1
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	1	0	-2	-1	-10	-12	-7	1	-2
1977	Critical	3	-8	24	-23	-95	-100	-51	-16	1	-10	17	-9	-22
1978	Above Normal	-5	41	-2	47	1	1	-2	4	1	1	4	2	8
1979	Below Normal	3	2	0	1	-1	-1	-1	0	0	-1	0	2	0
1980	Above Normal	1	10	25	1	24	3	0	1	0	0	1	1	5
1981	Dry	1	1	0	-1	-4	-10	-8	-1	1	3	0	-1	-2
1982	Wet	-2	2	1	0	-2	-1	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-1	-1	-1	-2	0
1985	Dry	-1	9	2	0	1	0	0	0	-2	-3	2	-2	1
1986	Wet	-1	-4	-5	-3	1	0	0	-1	1	-15	-9	-4	-3
1987	Dry	-2	0	-4	24	-30	-33	-29	-7	-16	-8	1	-3	-9
1988	Critical	-6	-4	-3	-3	-13	-26	-11	-2	12	3	0	-3	-5
1989	Dry	-2	2	-4	8	4	2	1	0	-2	-4	3	-4	0
1990	Critical	-6	-2	3	-3	-3	-1	2	2	2	1	1	2	0
1991	Critical	0	0	0	1	-2	-2	0	0	0	0	-9	-6	-1
1992	Critical	4	4	-1	3	-3	-1	0	0	0	0	0	0	0
1993	Above Normal	1	-1	2	-1	0	1	1	5	8	-4	-8	0	0
1994	Critical	2	1	0	2	0	2	0	0	-3	-4	11	-12	0
Average		1	1	1	-2	0	-2	-1	0	0	-1	0	0	0
Wet		-1	-1	-2	-1	-1	-1	-1	0	0	-1	-1	0	-1
Above Normal		0	5	1	0	0	0	-1	3	0	-1	-1	1	1
Below Normal		0	2	2	0	-1	-3	-1	0	2	-1	0	3	0
Dry		3	2	3	-5	4	1	-2	0	1	-2	1	-1	0
Critical		1	0	2	-5	-6	-8	-3	0	-1	0	2	-1	-2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-4%	-2%	1%	-1%
1925	Dry	1%	-2%	2%	-6%	-5%	-4%	-1%	0%	0%	0%	1%	1%	-1%
1926	Dry	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%	0%
1927	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	2%	1%	0%	0%	0%	-1%	-1%	0%	-1%	1%	0%
1929	Critical	0%	0%	0%	-1%	-2%	-1%	0%	-1%	-4%	-6%	-4%	1%	-1%
1930	Dry	1%	-1%	-1%	1%	0%	-2%	-2%	0%	9%	2%	-1%	4%	1%
1931	Critical	2%	1%	1%	-5%	8%	5%	5%	3%	3%	16%	8%	2%	4%
1932	Dry	1%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-1%	2%	1%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	-1%	1%	0%
1936	Below Normal	1%	0%	0%	0%	-1%	-2%	0%	0%	0%	-2%	0%	1%	0%
1937	Below Normal	0%	0%	1%	-2%	-1%	-2%	-1%	0%	1%	2%	2%	1%	0%
1938	Wet	0%	-1%	1%	-2%	0%	0%	-3%	0%	0%	0%	-1%	0%	-1%
1939	Dry	1%	0%	-1%	0%	0%	0%	0%	0%	-2%	-2%	-2%	3%	0%
1940	Above Normal	1%	0%	0%	0%	0%	0%	0%	4%	1%	0%	0%	0%	1%
1941	Wet	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1944	Dry	0%	0%	0%	-4%	13%	4%	0%	2%	0%	-1%	0%	-2%	1%
1945	Below Normal	0%	2%	1%	0%	0%	-1%	0%	0%	0%	-1%	0%	0%	0%
1946	Below Normal	0%	4%	6%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%	1%
1947	Dry	-1%	0%	1%	0%	0%	0%	1%	0%	-1%	-1%	3%	0%	0%
1948	Below Normal	-1%	-1%	-4%	2%	2%	-1%	0%	0%	3%	-2%	1%	5%	0%
1949	Dry	7%	5%	2%	-4%	9%	8%	-4%	0%	1%	0%	-2%	0%	2%
1950	Below Normal	1%	0%	3%	-2%	-2%	0%	1%	0%	0%	-3%	-1%	1%	0%
1951	Above Normal	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	-1%	-1%	0%	0%
1952	Wet	0%	-2%	-5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1954	Above Normal	0%	-2%	-10%	-9%	-2%	-1%	0%	3%	-3%	-1%	-1%	0%	-2%
1955	Dry	0%	0%	2%	3%	1%	0%	0%	0%	-1%	-4%	1%	-3%	0%
1956	Wet	-2%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	1%	2%	2%	1%	-1%	-1%	1%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	1%	0%
1960	Dry	3%	2%	8%	-12%	-5%	-1%	0%	0%	3%	0%	0%	-2%	0%
1961	Dry	-1%	1%	-2%	5%	4%	8%	5%	2%	1%	0%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	2%	0%	0%	1%	0%
1963	Wet	-2%	-1%	-4%	-1%	1%	0%	0%	0%	1%	1%	1%	0%	0%
1964	Dry	0%	0%	-1%	-1%	0%	1%	0%	0%	0%	0%	2%	0%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%	-1%	0%	0%	0%
1966	Below Normal	0%	1%	1%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1971	Wet	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	-1%	-1%	0%	-1%	-1%	-2%	0%	0%
1973	Above Normal	-1%	0%	5%	1%	-1%	-1%	0%	0%	-1%	-2%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-3%	-2%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	-1%	0%	-1%
1977	Critical	1%	-2%	4%	-4%	-13%	-14%	-8%	-3%	0%	-2%	4%	-2%	-3%
1978	Above Normal	-1%	7%	0%	8%	0%	0%	0%	1%	0%	0%	1%	1%	1%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	2%	7%	0%	6%	1%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	-1%	-2%	0%	0%	0%	1%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	2%	1%	0%	0%	0%	0%	0%	0%	-1%	1%	-1%	0%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%	-4%	-2%	-1%	-1%
1987	Dry	-1%	0%	-1%	4%	-5%	-7%	-7%	-2%	-4%	-2%	0%	-1%	-2%
1988	Critical	-1%	-1%	-1%	0%	-3%	-5%	-2%	0%	3%	1%	0%	-1%	-1%
1989	Dry	0%	0%	-1%	1%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1990	Critical	-1%	0%	1%	-1%	-1%	0%	0%	1%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	0%
1992	Critical	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	1%	2%	-1%	-2%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	3%	-3%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Below Normal		0%	1%	1%	0%	0%	-1%	0%	0%	1%	0%	0%	1%	0%
Dry		1%	0%	1%	-1%	1%	0%	0%	0%	0%	-1%	0%	0%	0%
Critical		0%	0%	0%	-1%	-1%	-1%	-1%	0%	0%	0%	1%	0%	0%

**Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Existing Condition**

SVI														
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	115	117	131	128	123	85	56	52	52	70	56	77	89
1923	Below Normal	111	111	118	94	88	105	62	57	61	50	56	86	83
1924	Critical	109	123	151	166	186	228	139	115	116	97	108	112	137
1925	Dry	142	151	164	180	164	129	70	58	70	66	72	106	114
1926	Dry	135	130	155	172	155	117	75	86	69	68	90	107	113
1927	Wet	144	102	84	91	110	108	61	53	47	41	45	81	81
1928	Above Normal	114	90	88	102	100	71	58	62	50	45	45	87	76
1929	Critical	136	139	167	165	196	200	133	98	91	82	97	117	135
1930	Dry	144	150	168	130	118	110	81	85	57	62	81	106	108
1931	Critical	142	130	162	182	192	180	136	114	117	90	106	118	139
1932	Dry	143	155	146	108	132	185	109	90	74	92	76	105	118
1933	Critical	133	123	153	172	176	177	127	93	93	85	94	109	128
1934	Critical	135	156	159	155	172	218	138	108	95	75	94	119	135
1935	Below Normal	148	152	179	143	141	111	66	70	65	64	62	96	108
1936	Below Normal	127	122	158	154	107	53	54	66	63	52	58	89	92
1937	Below Normal	118	120	150	163	85	83	41	36	74	90	57	84	92
1938	Wet	119	124	83	94	73	52	30	28	30	58	45	42	65
1939	Dry	42	51	102	135	145	142	92	67	58	67	79	108	91
1940	Above Normal	142	132	161	148	127	55	47	61	59	47	43	83	92
1941	Wet	116	127	130	103	83	47	32	32	69	74	54	61	77
1942	Wet	51	71	107	86	46	61	46	37	64	71	49	48	61
1943	Wet	42	50	72	61	38	43	40	62	73	56	51	83	56
1944	Dry	124	118	150	170	147	106	67	62	60	58	77	111	104
1945	Below Normal	140	117	120	120	96	58	63	56	54	52	57	87	85
1946	Below Normal	115	93	80	84	80	79	65	59	56	44	57	97	76
1947	Dry	133	122	133	129	137	123	82	73	56	55	84	102	102
1948	Below Normal	137	137	174	160	183	137	77	69	49	37	49	91	108
1949	Dry	110	115	153	181	172	129	83	92	60	49	84	102	111
1950	Below Normal	129	125	150	144	114	99	60	59	53	49	48	89	93
1951	Above Normal	128	85	65	54	36	64	58	31	41	47	41	90	62
1952	Wet	123	128	137	110	86	72	24	15	39	56	40	37	72
1953	Wet	38	58	103	88	94	103	51	43	39	37	44	71	64
1954	Above Normal	60	69	114	151	101	100	75	72	51	45	42	88	81
1955	Dry	134	144	137	102	114	149	104	85	58	52	75	107	105
1956	Wet	133	141	145	78	59	58	57	65	72	55	53	81	81
1957	Above Normal	40	49	109	163	151	111	53	44	45	38	43	92	78
1958	Wet	101	59	93	94	125	101	19	11	48	61	43	40	66
1959	Below Normal	39	61	128	153	104	107	79	64	55	46	51	93	82
1960	Dry	123	130	154	180	184	107	79	87	51	59	77	105	111
1961	Dry	143	149	180	165	168	116	81	78	52	52	77	110	114
1962	Below Normal	146	149	178	169	147	104	71	65	57	46	54	115	108
1963	Wet	127	55	93	95	110	98	66	50	50	42	43	81	76
1964	Dry	113	109	83	116	123	141	88	78	56	60	94	102	97
1965	Wet	136	148	119	79	56	76	55	51	51	43	48	78	78
1966	Below Normal	108	99	84	90	88	97	68	69	49	52	47	96	79
1967	Wet	144	149	150	125	107	79	37	21	39	42	39	36	81
1968	Below Normal	38	49	92	118	93	106	70	62	51	46	51	94	72
1969	Wet	141	136	127	135	74	66	38	25	27	58	46	45	76
1970	Wet	42	52	78	41	53	55	50	58	49	45	42	86	54
1971	Wet	130	96	97	84	99	95	49	46	37	33	45	63	73
1972	Below Normal	53	84	121	93	112	94	69	75	55	50	52	97	80
1973	Above Normal	149	108	90	124	123	92	70	72	63	43	51	85	89
1974	Wet	119	72	82	85	84	46	52	61	69	56	52	56	69
1975	Wet	40	51	103	108	58	45	55	54	66	62	52	54	62
1976	Critical	39	42	89	136	177	149	105	89	105	117	125	137	109
1977	Critical	160	136	176	168	222	215	141	118	123	120	110	127	151
1978	Above Normal	161	168	181	141	142	138	66	46	69	79	60	68	110
1979	Below Normal	81	110	147	137	63	46	59	45	51	45	55	92	78
1980	Above Normal	131	111	99	75	59	65	60	59	63	74	56	80	78
1981	Dry	103	107	146	153	110	105	76	62	56	67	78	108	98
1982	Wet	151	116	79	110	40	47	20	17	56	65	45	27	65
1983	Wet	13	31	61	71	53	39	40	31	27	21	13	20	35
1984	Wet	37	14	44	49	25	51	57	61	61	47	48	82	48
1985	Dry	105	83	76	84	119	115	85	68	53	66	82	119	88
1986	Wet	144	134	153	122	95	48	26	23	63	93	60	70	86
1987	Dry	81	94	146	171	168	126	84	73	58	66	88	108	105
1988	Critical	149	150	167	155	135	211	107	95	81	62	88	126	127
1989	Dry	153	162	173	169	258	133	57	60	35	57	85	106	121
1990	Critical	139	152	174	141	141	125	102	94	91	108	116	121	125
1991	Critical	157	167	178	206	245	156	117	86	81	108	114	116	144
1992	Critical	157	179	183	210	171	115	81	65	59	57	95	145	127
1993	Above Normal	163	177	193	150	132	119	74	75	77	72	55	75	113
1994	Critical	96	119	162	190	175	113	79	83	60	106	122	126	119
Average		113	111	129	128	120	105	70	63	61	62	65	89	93
Wet		100	91	102	91	75	66	43	40	51	54	46	58	68
Above Normal		120	111	123	124	109	90	62	57	57	56	49	82	87
Below Normal		106	109	134	130	107	91	65	61	57	52	54	93	88
Dry		120	123	142	147	151	127	82	75	58	62	81	107	106
Critical		129	135	160	171	182	174	117	97	93	92	106	123	132

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP1 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average	
Year	Year Type														
1922	Above Normal	115	117	131	128	123	85	56	52	52	70	56	77	89	
1923	Below Normal	111	111	118	94	88	105	62	57	62	50	56	86	83	
1924	Critical	109	123	151	166	186	228	139	115	115	94	108	115	137	
1925	Dry	143	150	167	168	158	121	69	58	70	66	72	105	112	
1926	Dry	133	130	155	172	155	117	76	85	69	67	90	108	113	
1927	Wet	145	101	84	91	110	108	61	53	47	41	45	82	81	
1928	Above Normal	114	92	90	104	99	71	58	62	49	44	45	89	77	
1929	Critical	137	140	167	163	192	199	133	95	83	76	95	121	133	
1930	Dry	146	145	166	132	118	105	80	86	61	64	84	113	108	
1931	Critical	145	131	159	177	201	188	143	119	123	118	117	123	145	
1932	Dry	146	155	146	108	131	185	109	90	74	92	76	105	118	
1933	Critical	133	123	150	171	175	174	127	93	93	85	95	109	127	
1934	Critical	135	156	160	154	173	218	138	108	95	75	95	119	135	
1935	Below Normal	147	152	179	143	139	111	66	70	67	56	65	97	108	
1936	Below Normal	128	123	158	154	107	51	54	66	63	49	60	90	92	
1937	Below Normal	118	121	153	159	85	80	40	36	74	92	58	84	92	
1938	Wet	117	121	83	90	73	52	30	28	30	58	45	42	64	
1939	Dry	42	50	101	135	145	142	92	67	57	65	76	113	90	
1940	Above Normal	144	133	162	148	127	56	47	61	60	47	43	83	93	
1941	Wet	116	126	129	103	83	47	32	32	69	74	55	61	77	
1942	Wet	51	72	107	86	46	61	46	37	64	70	49	48	61	
1943	Wet	42	50	72	61	38	43	40	62	73	56	51	84	56	
1944	Dry	124	118	149	169	167	110	67	61	58	55	76	107	105	
1945	Below Normal	140	121	121	120	96	57	62	56	54	52	57	87	85	
1946	Below Normal	114	104	87	84	80	79	65	59	55	44	57	97	77	
1947	Dry	130	122	135	129	138	122	83	73	55	55	86	100	102	
1948	Below Normal	134	134	168	164	185	136	77	69	50	38	54	100	109	
1949	Dry	128	127	154	177	198	137	82	91	61	48	82	103	116	
1950	Below Normal	134	129	153	139	112	99	61	59	53	45	48	90	94	
1951	Above Normal	128	85	65	54	35	64	58	31	41	47	41	90	62	
1952	Wet	123	122	130	110	86	72	24	15	39	56	40	37	71	
1953	Wet	38	58	103	88	94	103	51	43	40	37	45	73	64	
1954	Above Normal	60	66	100	139	100	99	75	73	50	45	42	88	78	
1955	Dry	133	144	140	106	114	149	104	84	57	50	76	100	105	
1956	Wet	127	139	145	78	59	57	57	57	65	72	55	53	80	
1957	Above Normal	40	49	109	162	150	110	53	44	45	37	43	93	78	
1958	Wet	103	62	95	94	124	100	20	11	48	61	43	40	67	
1959	Below Normal	39	61	128	153	104	107	79	64	54	46	51	94	82	
1960	Dry	130	141	166	156	178	106	78	87	51	57	77	101	111	
1961	Dry	142	151	178	173	174	136	85	79	52	52	77	109	117	
1962	Below Normal	146	149	178	171	147	104	71	65	58	46	55	116	109	
1963	Wet	124	53	89	95	111	98	66	50	50	42	43	81	75	
1964	Dry	114	108	82	115	124	142	88	78	56	60	97	101	97	
1965	Wet	134	148	119	79	56	75	54	51	51	43	48	79	78	
1966	Below Normal	108	101	85	90	87	96	68	69	49	51	48	96	79	
1967	Wet	144	150	150	126	107	79	37	21	39	42	39	36	81	
1968	Below Normal	38	49	92	118	93	105	70	62	51	46	52	95	73	
1969	Wet	141	136	126	135	74	66	38	25	27	58	46	45	76	
1970	Wet	42	52	78	41	53	55	51	58	48	46	42	87	54	
1971	Wet	131	95	96	84	99	95	49	46	37	33	44	63	73	
1972	Below Normal	54	85	121	93	112	95	69	75	56	50	51	98	80	
1973	Above Normal	147	110	95	125	122	92	70	72	62	42	50	85	89	
1974	Wet	119	72	82	85	83	46	52	61	69	56	52	56	69	
1975	Wet	40	51	104	108	58	45	55	54	66	62	52	54	62	
1976	Critical	39	42	89	136	177	150	103	89	105	113	125	139	109	
1977	Critical	161	138	182	160	165	202	132	115	122	118	111	117	144	
1978	Above Normal	153	180	182	152	143	138	67	47	69	79	61	68	111	
1979	Below Normal	82	110	147	137	63	46	59	45	51	45	55	92	78	
1980	Above Normal	130	118	107	75	59	65	60	59	63	74	57	80	79	
1981	Dry	103	107	146	153	109	102	75	62	57	67	78	107	97	
1982	Wet	151	117	79	110	40	47	20	17	56	65	45	27	65	
1983	Wet	13	31	61	71	54	39	40	31	27	21	13	20	35	
1984	Wet	37	14	44	49	25	51	57	61	60	47	48	82	48	
1985	Dry	105	88	76	85	119	115	85	68	53	66	83	117	88	
1986	Wet	144	133	151	121	95	48	27	23	63	75	57	68	84	
1987	Dry	80	93	146	176	161	119	80	71	57	66	87	107	104	
1988	Critical	147	148	166	155	120	210	106	96	85	63	89	124	126	
1989	Dry	153	162	172	172	258	133	57	60	35	55	87	104	121	
1990	Critical	136	151	174	140	141	125	102	94	91	108	117	121	125	
1991	Critical	158	167	178	206	244	155	117	86	81	108	114	116	144	
1992	Critical	159	180	183	210	170	115	81	65	59	57	96	145	127	
1993	Above Normal	163	176	193	150	132	119	74	76	77	72	54	75	114	
1994	Critical	97	120	161	190	176	113	79	83	60	105	126	122	119	
Average		113	112	129	128	119	105	70	63	61	62	66	90	93	
Wet		99	91	101	91	75	66	43	40	51	53	46	58	68	
Above Normal		119	112	123	124	109	90	62	58	57	56	49	83	87	
Below Normal		107	111	135	130	107	91	64	61	57	51	55	94	89	
Dry		122	125	143	145	153	128	82	75	58	62	82	106	107	
Critical		130	135	160	169	177	173	117	97	93	93	107	123	131	

Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-1	-3	0	3	0
1925	Dry	0	-2	3	-12	-6	-8	-1	0	1	1	0	-1	-2
1926	Dry	-2	-1	0	0	0	0	0	0	0	0	0	1	0
1927	Wet	1	-1	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	1	2	1	0	0	0	0	0	-1	0	2	0
1929	Critical	1	0	0	-2	-4	-1	0	-3	-8	-6	-2	4	-2
1930	Dry	1	-5	-2	2	0	-5	-1	0	3	2	3	7	0
1931	Critical	3	1	-3	-5	9	8	7	4	6	28	11	5	6
1932	Dry	3	0	0	0	-1	0	0	0	0	0	0	0	0
1933	Critical	0	0	-3	-1	-1	-3	-1	0	0	0	1	0	-1
1934	Critical	0	-1	0	-1	1	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	-1	0	0	0	2	-9	4	1	0
1936	Below Normal	1	1	0	0	-1	-2	0	0	0	-3	1	1	0
1937	Below Normal	0	2	3	-4	-1	-3	0	0	0	2	1	0	0
1938	Wet	-2	-3	0	-3	0	0	0	0	0	0	0	0	-1
1939	Dry	0	0	-1	0	0	0	0	-1	-1	-2	-3	5	0
1940	Above Normal	2	1	1	0	0	0	0	1	1	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	1	-1	-2	20	4	0	0	-2	-3	-1	-4	1
1945	Below Normal	0	5	1	0	0	-1	0	0	0	0	0	0	0
1946	Below Normal	-1	12	7	0	0	0	0	0	0	0	0	0	1
1947	Dry	-2	0	2	1	0	0	0	0	-1	0	3	-2	0
1948	Below Normal	-3	-4	-5	4	2	-1	0	0	1	1	4	9	1
1949	Dry	18	12	1	-4	25	8	-1	0	1	-1	-2	1	5
1950	Below Normal	4	4	3	-5	-2	0	0	0	0	-4	0	1	0
1951	Above Normal	0	1	0	0	-1	0	0	0	0	0	0	0	0
1952	Wet	-1	-6	-6	0	0	0	0	0	0	0	0	0	-1
1953	Wet	0	0	0	0	0	0	0	0	0	0	1	2	0
1954	Above Normal	1	-4	-14	-12	-1	-1	0	1	-1	0	0	0	-3
1955	Dry	0	0	4	4	1	0	0	0	-1	-1	1	-6	0
1956	Wet	-5	-2	0	0	0	-1	0	0	0	0	0	1	-1
1957	Above Normal	0	0	0	-1	-1	0	0	0	0	-1	0	1	0
1958	Wet	2	3	2	0	-1	0	0	0	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	0	0	-1	0	0	2	0
1960	Dry	8	12	11	-25	-6	-1	0	0	1	-2	0	-4	-1
1961	Dry	0	2	-2	8	6	20	4	2	0	0	0	-1	3
1962	Below Normal	0	0	0	2	0	0	0	0	1	0	1	2	1
1963	Wet	-3	-1	-4	0	1	0	0	0	0	0	0	0	0
1964	Dry	0	-1	-1	-1	2	1	0	0	0	0	3	-1	0
1965	Wet	-2	-1	0	0	-1	-1	0	0	0	0	0	1	0
1966	Below Normal	0	2	1	0	-1	0	0	0	0	-1	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	1	0	1	0
1971	Wet	1	-2	-1	0	0	0	0	0	0	0	-1	0	0
1972	Below Normal	1	1	0	0	0	1	0	0	1	0	0	1	0
1973	Above Normal	-2	1	5	1	-1	0	0	0	0	-1	-1	0	0
1974	Wet	0	0	0	0	-1	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-2	0	0	-4	0	2	0
1977	Critical	1	2	6	-8	-57	-13	-9	-3	-1	-2	1	-10	-8
1978	Above Normal	-8	11	1	11	0	0	0	1	0	0	0	0	1
1979	Below Normal	1	1	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	7	8	0	0	0	0	0	0	0	0	0	1
1981	Dry	0	0	0	0	-1	-4	-1	0	1	1	0	-1	0
1982	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	5	0	0	0	0	0	0	-1	-1	1	-1	0
1986	Wet	0	-1	-2	-1	0	0	0	0	0	-18	-3	-3	-2
1987	Dry	-1	-1	0	5	-7	-7	-4	-2	-1	0	-1	-1	-2
1988	Critical	-2	-2	-1	-1	-15	-1	-1	2	4	1	1	-1	-1
1989	Dry	0	0	-1	3	0	0	0	0	0	-1	2	-2	0
1990	Critical	-3	-1	1	-1	-1	0	0	0	0	1	1	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	1	0	0
1992	Critical	2	1	0	1	-1	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	1	1	-1	-1	1	0
1994	Critical	1	0	0	0	0	0	0	0	0	-1	4	-4	0
Average		0	1	0	-1	-1	0	0	0	0	0	0	0	0
Wet		0	-1	-1	0	0	0	0	0	0	-1	0	0	0
Above Normal		-1	2	0	0	0	0	0	0	0	0	0	1	0
Below Normal		0	2	1	0	0	0	0	0	0	-1	1	1	0
Dry		2	1	1	-1	2	1	0	0	0	-1	0	-1	0
Critical		0	0	0	-2	-6	-1	0	0	0	1	1	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-3%	0%	3%	0%
1925	Dry	0%	-1%	2%	-7%	-3%	-6%	-1%	0%	1%	1%	0%	-1%	-1%
1926	Dry	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1927	Wet	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	2%	3%	1%	0%	0%	0%	0%	-1%	-2%	1%	2%	0%
1929	Critical	1%	0%	0%	-1%	-2%	0%	0%	-3%	-9%	-8%	-2%	4%	-2%
1930	Dry	1%	-3%	-1%	1%	0%	-5%	0%	5%	3%	4%	7%	1%	1%
1931	Critical	2%	1%	-2%	-3%	5%	5%	5%	4%	5%	31%	11%	4%	6%
1932	Dry	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	-2%	-1%	-1%	-2%	0%	0%	0%	0%	1%	0%	0%
1934	Critical	0%	0%	0%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	3%	-13%	6%	1%	0%
1936	Below Normal	1%	1%	0%	0%	0%	-3%	-1%	0%	0%	-6%	2%	1%	0%
1937	Below Normal	0%	1%	2%	-2%	-1%	-4%	-1%	0%	2%	-2%	2%	0%	0%
1938	Wet	-1%	-2%	1%	-4%	0%	0%	1%	0%	0%	0%	0%	0%	-1%
1939	Dry	0%	-1%	-1%	0%	0%	0%	0%	-1%	-1%	-2%	-4%	4%	0%
1940	Above Norma	1%	1%	0%	0%	0%	0%	0%	1%	2%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	1%	0%
1944	Dry	0%	1%	-1%	-1%	14%	4%	0%	0%	-4%	-5%	-1%	-4%	0%
1945	Below Normal	0%	4%	1%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%
1946	Below Normal	-1%	12%	9%	0%	1%	-1%	0%	0%	-1%	0%	0%	0%	2%
1947	Dry	-2%	0%	2%	0%	0%	0%	0%	0%	-2%	0%	3%	-2%	0%
1948	Below Normal	-2%	-3%	-3%	3%	1%	-1%	0%	0%	2%	2%	9%	10%	2%
1949	Dry	16%	11%	1%	-2%	15%	6%	-1%	0%	1%	-3%	-2%	1%	4%
1950	Below Normal	3%	3%	2%	-3%	-2%	0%	0%	0%	0%	-8%	0%	1%	0%
1951	Above Norma	0%	1%	0%	0%	-3%	-1%	0%	0%	0%	0%	0%	1%	0%
1952	Wet	0%	-5%	-5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	0%
1954	Above Norma	1%	-6%	-12%	-8%	-1%	-1%	0%	1%	-2%	0%	0%	1%	-2%
1955	Dry	0%	0%	3%	3%	1%	0%	0%	0%	-2%	-3%	2%	-6%	0%
1956	Wet	-4%	-2%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	2%	0%
1957	Above Norma	0%	0%	0%	0%	-1%	0%	0%	0%	0%	-2%	1%	1%	0%
1958	Wet	2%	5%	2%	0%	-1%	0%	2%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	2%	0%
1960	Dry	6%	9%	7%	-14%	-4%	-1%	0%	0%	1%	-3%	0%	-4%	0%
1961	Dry	0%	1%	-1%	5%	4%	17%	5%	2%	0%	-1%	0%	-1%	3%
1962	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	2%	0%	2%	2%	1%
1963	Wet	-2%	-2%	-4%	0%	1%	0%	0%	0%	1%	1%	1%	0%	0%
1964	Dry	0%	-1%	-1%	-1%	1%	1%	0%	0%	0%	0%	3%	-1%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	0%	0%	-1%	-1%	0%	1%	0%
1966	Below Normal	0%	2%	1%	0%	-1%	0%	0%	0%	0%	-1%	1%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	1%	0%	-1%	2%	0%	1%	0%
1971	Wet	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1972	Below Normal	1%	1%	0%	0%	0%	1%	0%	0%	2%	-1%	-1%	1%	0%
1973	Above Norma	-2%	1%	6%	1%	-1%	-1%	0%	0%	-1%	-2%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-2%	0%	0%	-3%	0%	1%	0%
1977	Critical	1%	1%	3%	-5%	-26%	-6%	-3%	-3%	-1%	-1%	1%	-8%	-4%
1978	Above Norma	-5%	7%	0%	8%	0%	0%	0%	1%	0%	0%	1%	1%	1%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	6%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	-1%	-4%	-1%	0%	1%	1%	0%	-1%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	5%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1986	Wet	0%	-1%	-1%	0%	0%	0%	1%	0%	0%	-19%	-5%	-4%	-2%
1987	Dry	-1%	-1%	0%	3%	-4%	-5%	-2%	-2%	-2%	-1%	-1%	-1%	-2%
1988	Critical	-2%	-1%	-1%	0%	-11%	-1%	-1%	2%	5%	1%	1%	-1%	-1%
1989	Dry	0%	0%	-1%	2%	0%	0%	0%	0%	-1%	-2%	2%	-2%	0%
1990	Critical	-2%	-1%	0%	-1%	-1%	0%	0%	0%	0%	1%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1992	Critical	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	1%	1%	-1%	-2%	1%	0%
1994	Critical	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	3%	-3%	0%
Average		0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Norma		0%	1%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	1%	0%
Below Normal		0%	2%	1%	0%	0%	-1%	0%	0%	0%	-2%	2%	1%	0%
Dry		1%	1%	1%	-1%	1%	0%	0%	0%	0%	-1%	0%	-1%	0%
Critical		0%	0%	0%	-1%	-3%	0%	0%	0%	0%	1%	1%	0%	0%

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	178	167	164	133	124	59	64	59	51	54	53	117	102
1923	Below Normal	176	168	170	85	63	55	66	68	42	48	69	129	95
1924	Critical	174	194	213	223	176	135	135	104	151	131	151	174	163
1925	Dry	229	242	231	236	199	58	52	57	47	52	86	156	137
1926	Dry	216	197	224	235	171	59	55	67	56	81	109	156	135
1927	Wet	226	149	61	61	80	49	54	66	37	39	54	122	83
1928	Above Normal	180	145	72	95	62	49	64	64	44	51	59	132	85
1929	Critical	213	219	249	216	243	138	106	90	83	96	134	180	164
1930	Dry	231	230	240	152	74	50	61	61	55	81	107	163	125
1931	Critical	223	190	221	243	194	118	107	110	145	118	153	185	167
1932	Dry	226	236	219	103	106	75	85	94	53	55	87	154	124
1933	Critical	214	179	200	188	132	92	74	75	89	97	126	158	135
1934	Critical	212	247	219	190	99	88	85	82	85	84	124	189	142
1935	Below Normal	236	227	255	176	77	47	47	80	47	42	74	143	121
1936	Below Normal	202	182	224	201	110	67	64	68	44	44	72	135	118
1937	Below Normal	190	185	211	220	202	133	99	69	46	46	65	125	133
1938	Wet	187	191	61	49	171	141	104	75	69	54	54	62	102
1939	Dry	36	45	116	167	152	99	95	87	67	93	115	165	103
1940	Above Normal	229	205	213	223	131	56	50	72	44	42	54	126	121
1941	Wet	184	198	210	99	117	99	84	54	52	56	57	89	108
1942	Wet	60	98	147	143	98	56	61	60	46	51	59	80	80
1943	Wet	48	48	42	113	80	88	95	71	57	49	56	126	73
1944	Dry	203	194	216	245	150	60	64	73	56	72	109	167	134
1945	Below Normal	225	190	154	128	145	68	59	64	45	47	67	131	110
1946	Below Normal	195	141	72	44	55	60	69	76	44	53	80	146	86
1947	Dry	220	195	183	146	141	77	73	64	64	82	124	149	127
1948	Below Normal	215	208	262	203	206	68	47	55	36	40	70	135	129
1949	Dry	168	166	211	242	184	68	67	67	49	74	128	153	131
1950	Below Normal	202	187	205	180	71	39	43	59	42	45	67	133	106
1951	Above Normal	195	123	70	81	72	54	65	67	42	49	54	135	84
1952	Wet	194	192	176	118	66	79	97	54	49	50	45	49	97
1953	Wet	38	64	143	76	56	49	63	59	39	42	57	109	66
1954	Above Normal	81	87	134	201	63	48	63	58	41	50	55	132	85
1955	Dry	206	221	175	71	58	57	74	68	57	67	111	161	111
1956	Wet	206	204	246	167	98	60	65	65	44	49	59	74	111
1957	Above Normal	40	46	121	229	154	54	59	66	42	45	57	137	88
1958	Wet	172	67	89	81	181	200	169	62	47	48	50	55	102
1959	Below Normal	40	72	182	220	91	56	73	68	63	66	76	136	95
1960	Dry	190	196	208	251	228	66	69	65	60	95	118	154	142
1961	Dry	219	225	264	214	191	66	55	55	65	85	122	166	144
1962	Below Normal	224	223	260	207	199	54	46	75	50	58	78	171	137
1963	Wet	189	50	83	99	71	58	62	73	39	41	53	120	78
1964	Dry	176	174	61	115	69	56	82	68	61	94	146	151	104
1965	Wet	207	222	137	67	47	44	59	73	42	42	54	119	93
1966	Below Normal	172	158	58	56	55	48	63	64	52	69	69	139	84
1967	Wet	223	228	192	112	57	82	92	66	51	59	48	44	104
1968	Below Normal	36	49	97	141	59	43	64	72	58	64	67	137	74
1969	Wet	219	205	161	121	169	120	116	74	59	53	57	67	118
1970	Wet	36	47	68	148	99	56	72	62	46	50	55	133	73
1971	Wet	211	158	71	43	47	42	58	62	37	42	63	95	77
1972	Below Normal	64	109	160	78	84	59	69	65	58	67	74	140	86
1973	Above Normal	233	170	70	102	116	67	69	64	45	44	62	129	98
1974	Wet	192	102	50	55	51	52	64	60	46	43	63	79	71
1975	Wet	40	57	121	112	89	71	73	67	42	45	57	73	71
1976	Critical	38	37	82	170	210	128	107	92	149	168	191	209	132
1977	Critical	258	199	258	201	197	136	106	109	168	175	169	205	182
1978	Above Normal	260	258	258	242	107	137	96	69	57	54	61	102	142
1979	Below Normal	117	172	215	174	79	57	65	68	47	46	68	135	104
1980	Above Normal	214	186	99	73	166	130	115	63	59	59	63	121	112
1981	Dry	171	169	214	186	59	40	60	66	70	99	120	157	118
1982	Wet	235	209	44	106	80	118	122	57	47	50	53	50	98
1983	Wet	33	62	112	236	216	211	201	74	61	59	44	35	112
1984	Wet	35	53	102	97	82	53	71	78	49	48	56	129	71
1985	Dry	186	148	45	53	105	71	73	65	60	98	121	178	100
1986	Wet	233	212	228	125	134	153	85	55	52	64	62	108	126
1987	Dry	129	154	211	252	182	81	77	67	70	92	128	160	134
1988	Critical	229	231	237	182	67	72	90	82	82	88	138	197	141
1989	Dry	242	243	242	214	273	117	47	51	53	95	131	161	156
1990	Critical	214	229	246	164	126	75	76	69	122	165	174	188	154
1991	Critical	254	260	250	264	254	168	75	65	116	166	168	175	185
1992	Critical	256	280	257	287	196	79	60	62	84	89	162	234	171
1993	Above Normal	257	272	275	222	116	70	46	56	40	43	54	110	130
1994	Critical	142	181	227	248	185	75	73	59	84	166	191	190	152
Average		175	167	168	156	125	80	77	69	61	70	89	135	114
Wet		151	134	121	106	100	90	89	65	48	49	55	86	91
Above Normal		187	166	148	160	111	73	69	64	46	49	57	124	105
Below Normal		164	162	180	151	107	61	62	68	48	53	71	138	105
Dry		191	190	191	180	146	69	68	67	59	82	116	159	127
Critical		202	204	222	215	173	109	91	83	113	129	157	190	157

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Alternative CP1 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	178	167	164	133	124	59	64	59	51	54	53	117	102
1923	Below Normal	176	168	170	85	63	55	66	68	42	48	69	129	95
1924	Critical	174	194	213	223	176	135	135	104	148	127	151	181	163
1925	Dry	229	235	238	211	189	56	51	57	47	52	86	154	134
1926	Dry	212	196	223	234	171	59	55	66	55	81	109	158	135
1927	Wet	228	147	61	61	80	49	54	67	37	39	54	122	83
1928	Above Normal	180	147	78	97	62	49	64	63	44	51	59	136	86
1929	Critical	215	220	249	211	235	136	105	89	82	96	137	189	164
1930	Dry	233	218	236	156	74	49	61	62	57	79	114	177	126
1931	Critical	230	190	214	233	240	142	118	114	159	165	168	194	181
1932	Dry	232	236	219	103	105	74	85	94	53	55	87	154	125
1933	Critical	213	179	200	188	133	92	75	75	89	97	126	158	135
1934	Critical	211	246	220	191	106	90	85	82	85	84	124	189	143
1935	Below Normal	236	227	255	176	77	47	47	80	48	42	75	145	121
1936	Below Normal	204	183	224	201	109	65	63	68	44	45	75	137	118
1937	Below Normal	190	187	217	212	193	131	97	68	46	47	65	123	131
1938	Wet	185	186	63	48	170	141	104	75	69	54	54	62	101
1939	Dry	36	44	114	167	152	99	95	87	69	96	115	174	104
1940	Above Normal	233	207	215	223	132	56	51	65	45	42	54	126	121
1941	Wet	184	198	209	99	117	99	85	54	52	56	57	89	108
1942	Wet	60	98	147	143	98	56	61	60	46	50	58	80	80
1943	Wet	48	48	42	113	80	88	95	70	57	49	56	127	73
1944	Dry	203	193	218	241	198	69	65	72	54	74	112	159	138
1945	Below Normal	223	200	157	128	145	66	58	64	45	47	67	131	111
1946	Below Normal	193	161	100	44	56	60	68	77	44	54	80	146	90
1947	Dry	216	193	188	147	142	77	73	63	64	84	132	147	127
1948	Below Normal	209	201	250	213	209	66	46	55	37	42	78	149	130
1949	Dry	199	189	213	235	229	107	69	67	49	71	125	154	142
1950	Below Normal	210	194	213	169	66	39	43	59	42	45	68	135	107
1951	Above Normal	194	124	70	80	69	53	65	67	42	49	54	136	84
1952	Wet	193	186	162	118	66	79	97	54	49	50	45	49	96
1953	Wet	38	64	142	76	56	49	63	59	39	42	58	112	67
1954	Above Normal	82	79	105	179	61	48	63	65	41	50	55	133	80
1955	Dry	206	221	183	79	60	57	74	68	56	70	116	149	112
1956	Wet	195	199	245	167	97	59	64	65	44	49	59	75	110
1957	Above Normal	40	46	121	229	151	54	59	66	42	45	57	139	87
1958	Wet	174	73	93	81	181	199	169	61	47	48	51	55	103
1959	Below Normal	40	72	182	220	91	56	73	69	63	66	76	138	96
1960	Dry	203	216	231	198	216	66	68	65	59	92	119	147	140
1961	Dry	219	229	260	229	202	74	58	56	64	84	122	164	147
1962	Below Normal	224	223	259	211	200	55	46	75	51	58	79	173	138
1963	Wet	184	49	76	99	74	58	62	72	39	41	53	120	77
1964	Dry	176	173	59	113	69	56	82	68	61	95	151	149	104
1965	Wet	203	220	137	67	46	43	59	73	41	41	55	120	92
1966	Below Normal	172	162	60	56	55	47	63	64	51	69	70	140	84
1967	Wet	223	228	193	112	57	82	92	66	51	59	48	45	105
1968	Below Normal	36	49	96	141	59	43	64	73	59	64	68	137	74
1969	Wet	219	205	161	120	170	121	117	74	59	53	57	67	119
1970	Wet	36	46	67	148	99	56	72	61	46	50	55	134	73
1971	Wet	212	156	68	43	47	42	58	62	37	42	62	94	77
1972	Below Normal	65	110	160	78	84	59	69	65	59	68	74	142	86
1973	Above Normal	229	172	80	103	115	66	69	64	44	44	61	129	98
1974	Wet	192	103	50	55	50	52	64	60	46	43	63	79	71
1975	Wet	40	57	121	112	89	71	73	67	42	45	57	73	71
1976	Critical	38	37	82	170	211	129	107	92	147	164	191	211	132
1977	Critical	261	199	270	189	178	106	102	107	166	173	168	182	175
1978	Above Normal	255	285	256	270	107	137	102	70	57	54	61	103	147
1979	Below Normal	118	173	215	174	79	57	65	68	47	46	69	136	104
1980	Above Normal	213	195	116	73	167	132	115	64	59	59	63	121	115
1981	Dry	171	169	213	186	59	40	60	66	72	100	120	156	118
1982	Wet	234	210	44	106	80	117	122	57	47	50	53	51	98
1983	Wet	33	62	112	236	216	211	201	74	61	59	44	35	112
1984	Wet	35	53	102	97	82	53	71	78	48	48	56	128	71
1985	Dry	184	158	46	53	106	71	73	65	60	97	124	176	101
1986	Wet	232	211	224	124	135	153	82	54	53	57	58	101	124
1987	Dry	127	153	208	263	171	85	78	66	72	99	132	159	134
1988	Critical	224	229	235	180	65	69	89	84	83	88	136	194	140
1989	Dry	241	244	240	219	274	117	48	51	52	93	133	155	156
1990	Critical	209	227	247	162	125	75	76	69	123	166	176	189	154
1991	Critical	255	260	250	264	252	167	75	65	116	166	169	178	185
1992	Critical	260	282	256	289	194	78	60	62	84	89	162	235	171
1993	Above Normal	258	271	276	221	116	70	46	57	41	42	54	112	130
1994	Critical	144	182	227	247	185	76	73	59	82	164	198	184	152
Average		176	169	169	155	126	81	77	69	61	71	90	135	115
Wet		150	133	120	106	100	90	89	65	48	49	55	87	91
Above Normal		186	169	148	161	110	73	70	64	47	49	57	125	105
Below Normal		164	165	183	150	106	60	62	68	48	53	72	140	106
Dry		193	192	193	177	151	72	69	67	59	83	118	158	128
Critical		203	204	222	212	175	108	92	83	114	132	159	190	158

Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-3	-4	1	7	0
1925	Dry	0	-7	8	-25	-10	-3	-1	0	0	0	-1	-2	-3
1926	Dry	-3	-1	0	0	0	0	0	0	-1	0	0	1	0
1927	Wet	1	-2	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	1	2	6	3	0	0	0	-1	0	0	1	4	1
1929	Critical	2	0	-1	-4	-8	-2	-1	-1	-1	1	3	9	0
1930	Dry	2	-12	-4	4	1	0	0	1	2	-1	7	14	1
1931	Critical	6	1	-7	-10	46	24	11	4	14	47	15	9	13
1932	Dry	5	0	0	0	-1	-1	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	1	1	1	0	0	0	0	0	0
1934	Critical	0	-1	0	1	7	2	1	0	0	0	0	0	1
1935	Below Normal	0	0	0	0	0	0	0	0	1	0	1	2	0
1936	Below Normal	2	1	0	0	-1	-2	-1	0	0	0	3	2	0
1937	Below Normal	0	2	6	-9	-9	-3	-2	-1	1	0	-1	-1	-1
1938	Wet	-2	-6	1	-1	-1	0	1	0	0	0	0	1	-1
1939	Dry	0	-1	-2	-1	0	0	0	0	2	4	0	9	1
1940	Above Normal	3	2	2	0	1	0	0	-7	1	0	0	0	0
1941	Wet	0	0	-1	0	0	1	1	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	-1	0	0	0
1943	Wet	0	0	0	0	0	0	0	-1	0	0	0	1	0
1944	Dry	0	0	2	-4	48	8	1	-1	-2	2	3	-8	4
1945	Below Normal	-2	10	3	0	0	-2	-1	0	0	0	0	1	1
1946	Below Normal	-1	20	28	0	1	0	0	0	0	0	0	0	4
1947	Dry	-4	-2	6	1	1	0	0	-1	-1	3	8	-2	1
1948	Below Normal	-6	-7	-13	10	3	-2	-1	0	1	3	9	14	1
1949	Dry	31	23	2	-7	45	39	3	0	0	-3	-3	1	11
1950	Below Normal	8	7	7	-11	-4	0	0	0	0	0	0	2	1
1951	Above Normal	0	1	0	0	-3	-1	0	0	0	-1	0	1	0
1952	Wet	-1	-6	-14	0	0	0	0	0	0	0	0	0	-2
1953	Wet	0	0	-1	0	0	0	0	0	0	0	2	4	0
1954	Above Normal	1	-8	-30	-22	-2	0	0	7	0	0	0	1	-4
1955	Dry	0	0	8	8	2	0	0	0	-2	3	5	-12	1
1956	Wet	-11	-5	-1	0	-1	-1	-1	0	0	0	1	2	-1
1957	Above Normal	0	0	0	-1	-3	0	0	0	0	0	0	2	0
1958	Wet	2	6	4	1	0	-1	1	-1	0	0	0	0	1
1959	Below Normal	0	0	0	0	1	2	1	0	0	0	0	3	0
1960	Dry	13	20	23	-53	-12	-1	0	0	-1	-3	1	-7	-2
1961	Dry	-1	3	-4	15	11	8	3	1	-2	0	0	-2	3
1962	Below Normal	0	1	-1	4	1	0	0	0	1	0	1	3	1
1963	Wet	-5	-2	-7	0	3	0	0	0	0	0	0	0	-1
1964	Dry	1	-1	-2	-2	0	0	0	-1	1	5	-2	0	0
1965	Wet	-4	-1	0	0	-1	-1	-1	0	0	0	1	1	-1
1966	Below Normal	0	4	2	1	0	0	0	0	0	-1	0	1	1
1967	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	1	0	0	1	0
1969	Wet	0	0	0	0	1	2	1	0	0	0	0	0	0
1970	Wet	0	-1	-1	0	0	0	0	-1	0	0	0	1	0
1971	Wet	1	-2	-3	0	0	0	0	0	0	0	-1	-1	0
1972	Below Normal	1	1	1	0	0	0	0	0	0	0	0	3	0
1973	Above Normal	-4	2	10	1	-1	-1	0	0	0	0	-1	0	0
1974	Wet	0	0	0	0	-1	-1	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	-1	-4	0	3	0
1977	Critical	3	0	11	-13	-19	-30	-5	-2	-2	-1	-1	-23	-7
1978	Above Normal	-5	27	-2	28	0	0	6	1	1	0	0	1	5
1979	Below Normal	2	1	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	-1	9	17	0	1	2	1	0	0	0	0	0	2
1981	Dry	0	0	0	0	0	0	0	0	1	1	0	-1	0
1982	Wet	-1	1	0	0	-1	-1	-1	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	-1	0
1985	Dry	-3	10	1	0	0	0	0	0	-1	-1	2	-2	1
1986	Wet	-1	-1	-4	-1	1	0	-2	0	0	-7	-5	-6	-2
1987	Dry	-2	-2	-3	11	-11	4	1	-1	1	7	4	-1	1
1988	Critical	-4	-3	-2	-1	-3	-3	-2	1	1	0	-2	-3	-2
1989	Dry	-1	1	-2	5	1	1	0	0	-1	-2	2	-5	0
1990	Critical	-5	-2	1	-2	-1	0	0	0	0	1	2	1	0
1991	Critical	0	0	0	0	-2	-1	0	0	0	0	2	3	0
1992	Critical	4	1	-1	2	-2	0	0	0	0	0	0	0	0
1993	Above Normal	1	-1	1	-1	0	0	0	1	1	-1	0	2	0
1994	Critical	2	1	-1	0	0	1	0	0	-2	-2	7	-7	0
Average		0	1	1	-1	1	0	0	0	0	1	1	0	0
Wet		-1	-1	-1	0	0	0	0	0	0	0	0	0	0
Above Normal		0	3	0	1	-1	0	1	0	0	0	0	1	0
Below Normal		0	3	2	0	-1	-1	0	0	0	0	1	2	1
Dry		2	2	2	-3	5	3	0	0	0	1	2	-1	1
Critical		1	0	0	-2	2	-1	0	0	1	3	2	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	0%	4%	0%
1925	Dry	0%	-3%	3%	-11%	-5%	-4%	-2%	0%	0%	-1%	-1%	-2%	0%
1926	Dry	-1%	-1%	0%	0%	0%	0%	1%	-1%	-1%	0%	0%	1%	0%
1927	Wet	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	2%	8%	3%	0%	0%	0%	-1%	0%	0%	1%	3%	1%
1929	Critical	1%	0%	0%	-2%	-3%	-2%	-1%	-1%	-2%	1%	2%	5%	0%
1930	Dry	1%	-5%	-2%	2%	1%	0%	0%	2%	3%	-1%	6%	9%	1%
1931	Critical	3%	0%	-3%	-4%	24%	21%	11%	4%	10%	40%	10%	5%	10%
1932	Dry	2%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	7%	2%	1%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	2%	1%	0%
1936	Below Normal	1%	0%	0%	0%	-1%	-3%	-1%	-1%	0%	1%	4%	2%	0%
1937	Below Normal	0%	1%	3%	-4%	-4%	-2%	-2%	1%	2%	4%	0%	-1%	-1%
1938	Wet	-1%	-3%	2%	-3%	-1%	0%	1%	0%	0%	0%	0%	1%	0%
1939	Dry	0%	-2%	-2%	-1%	0%	0%	0%	0%	3%	4%	0%	6%	1%
1940	Above Norma	2%	1%	1%	0%	0%	1%	0%	-9%	2%	0%	0%	0%	0%
1941	Wet	0%	0%	-1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	1%	0%
1944	Dry	0%	0%	1%	-2%	32%	13%	2%	-2%	-3%	3%	3%	-5%	3%
1945	Below Normal	-1%	5%	2%	0%	0%	-3%	0%	0%	0%	0%	1%	0%	0%
1946	Below Normal	-1%	14%	39%	1%	1%	0%	-1%	0%	0%	1%	0%	0%	5%
1947	Dry	-2%	-3%	3%	1%	1%	0%	-1%	-1%	-1%	3%	6%	-1%	1%
1948	Below Normal	-3%	-3%	-5%	5%	1%	-3%	-2%	0%	2%	7%	13%	10%	2%
1949	Dry	18%	14%	1%	-3%	25%	58%	4%	0%	0%	-4%	-2%	1%	9%
1950	Below Normal	4%	4%	4%	-6%	-6%	-1%	0%	0%	0%	0%	2%	1%	0%
1951	Above Norma	0%	1%	0%	0%	-4%	-2%	0%	0%	0%	-1%	0%	1%	0%
1952	Wet	-1%	-3%	-8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%
1954	Above Norma	1%	-9%	-22%	-11%	-3%	0%	0%	12%	0%	0%	0%	1%	-3%
1955	Dry	0%	0%	5%	11%	3%	1%	0%	0%	-3%	4%	5%	-7%	1%
1956	Wet	-5%	-2%	-1%	0%	-1%	-2%	-1%	0%	0%	0%	1%	2%	-1%
1957	Above Norma	1%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	1%	2%	0%
1958	Wet	1%	9%	4%	1%	0%	0%	0%	-1%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	2%	0%
1960	Dry	7%	10%	11%	-21%	-5%	-1%	0%	0%	-1%	-3%	1%	-4%	-1%
1961	Dry	0%	1%	-1%	7%	6%	12%	5%	2%	-2%	-1%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	2%	0%	0%	0%	0%	1%	1%	2%	2%	1%
1963	Wet	-2%	-4%	-9%	0%	4%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	-1%	-3%	-2%	0%	0%	0%	-1%	-1%	1%	3%	-1%	0%
1965	Wet	-2%	-1%	0%	0%	-2%	0%	-1%	-1%	-1%	-1%	1%	1%	-1%
1966	Below Normal	0%	3%	4%	1%	-1%	-1%	0%	0%	0%	-1%	1%	0%	1%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	-1%	0%	0%	0%	0%	1%	1%	0%	1%	1%	0%
1969	Wet	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	-1%	0%	0%	0%	0%	-2%	0%	0%	0%	1%	0%
1971	Wet	1%	-1%	-4%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
1972	Below Normal	2%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	2%	0%
1973	Above Norma	-2%	1%	15%	1%	-1%	-1%	0%	0%	-1%	-1%	-1%	0%	1%
1974	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	1%	0%
1977	Critical	1%	0%	4%	-6%	-10%	-22%	-4%	-2%	-1%	-1%	-1%	-11%	-4%
1978	Above Norma	-2%	10%	-1%	11%	0%	0%	6%	2%	2%	0%	0%	1%	3%
1979	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1980	Above Norma	0%	5%	17%	-1%	1%	2%	0%	1%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	-1%	0%
1982	Wet	0%	1%	1%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	-1%	7%	2%	0%	0%	0%	0%	0%	-1%	-1%	2%	-1%	1%
1986	Wet	-1%	-1%	-2%	-1%	1%	0%	-3%	-1%	0%	-12%	-7%	-6%	-3%
1987	Dry	-2%	-1%	-2%	4%	-6%	5%	1%	-1%	2%	8%	3%	-1%	1%
1988	Critical	-2%	-1%	-1%	-1%	-4%	-5%	-2%	2%	1%	0%	-1%	-1%	-1%
1989	Dry	0%	1%	-1%	3%	0%	0%	1%	0%	-2%	-2%	2%	-3%	0%
1990	Critical	-2%	-1%	1%	-1%	-1%	0%	0%	0%	1%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	2%	0%
1992	Critical	2%	1%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	1%	2%	-1%	0%	2%	0%
1994	Critical	1%	0%	0%	0%	0%	1%	0%	0%	-2%	-1%	4%	-4%	0%
Average		0%	1%	1%	0%	1%	1%	0%	0%	0%	1%	1%	0%	0%
Wet		0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Norma		0%	1%	2%	0%	-1%	0%	1%	1%	0%	0%	0%	1%	0%
Below Normal		0%	2%	3%	0%	-1%	-1%	-1%	0%	0%	1%	2%	1%	1%
Dry		1%	1%	1%	-1%	3%	5%	1%	0%	0%	1%	2%	-1%	1%
Critical		0%	0%	0%	-1%	1%	0%	0%	0%	0%	3%	1%	0%	0%

Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average	
Year	Year Type														
1922	Above Normal	110	112	120	108	106	75	51	44	48	56	45	71	79	
1923	Below Normal	111	110	110	78	82	97	57	49	48	37	45	82	75	
1924	Critical	109	122	148	162	182	213	132	110	112	92	103	109	133	
1925	Dry	143	154	162	174	148	121	61	51	61	57	64	102	108	
1926	Dry	135	129	153	166	133	106	66	78	60	61	83	103	106	
1927	Wet	143	96	62	65	84	93	49	43	30	28	33	75	67	
1928	Above Normal	114	86	69	82	68	58	49	55	38	35	35	81	64	
1929	Critical	136	140	166	161	188	177	118	95	86	78	93	117	130	
1930	Dry	146	152	164	113	97	95	73	77	50	55	74	101	100	
1931	Critical	143	129	161	178	188	171	125	110	115	86	102	117	135	
1932	Dry	143	156	142	85	117	160	100	84	67	86	68	101	109	
1933	Critical	133	122	151	156	156	154	109	88	86	81	91	107	119	
1934	Critical	135	159	156	148	135	190	124	103	91	72	90	119	127	
1935	Below Normal	150	153	179	132	129	87	56	65	50	48	48	91	99	
1936	Below Normal	127	120	156	142	100	51	49	60	51	38	45	84	85	
1937	Below Normal	118	119	148	159	86	68	40	32	64	79	46	79	87	
1938	Wet	119	126	73	82	61	47	27	26	26	49	39	37	59	
1939	Dry	26	34	88	126	135	135	83	61	51	59	70	107	81	
1940	Above Normal	143	129	160	140	105	53	44	54	47	32	31	77	85	
1941	Wet	117	128	129	86	77	48	32	31	63	61	44	52	72	
1942	Wet	40	64	97	81	48	58	44	36	53	57	43	44	55	
1943	Wet	32	40	51	60	40	40	40	59	67	43	39	78	49	
1944	Dry	127	120	150	172	132	86	58	54	46	47	69	108	97	
1945	Below Normal	141	115	107	106	95	58	58	51	44	37	46	83	78	
1946	Below Normal	118	89	71	67	76	74	57	52	43	33	47	92	68	
1947	Dry	136	123	128	121	124	106	75	66	66	45	47	75	96	95
1948	Below Normal	138	137	174	152	177	125	63	59	33	27	40	86	101	
1949	Dry	106	111	149	179	165	111	76	86	48	42	76	96	104	
1950	Below Normal	126	122	149	130	81	75	45	54	42	40	39	83	82	
1951	Above Normal	127	73	60	50	32	60	53	30	31	36	29	83	55	
1952	Wet	123	127	130	92	69	68	26	13	36	48	32	29	66	
1953	Wet	27	48	91	75	82	86	44	36	26	28	33	62	53	
1954	Above Normal	50	59	101	145	71	76	56	61	39	35	30	82	67	
1955	Dry	133	146	129	78	99	141	96	77	50	44	66	101	97	
1956	Wet	130	140	136	66	62	55	51	50	53	59	46	45	74	
1957	Above Normal	29	38	95	160	140	90	46	38	34	27	32	85	68	
1958	Wet	98	47	73	68	102	93	15	10	44	48	35	33	55	
1959	Below Normal	27	51	122	149	87	97	71	59	46	38	41	86	73	
1960	Dry	120	126	153	178	172	77	72	78	44	55	69	99	104	
1961	Dry	140	148	179	156	146	99	73	69	50	49	70	103	107	
1962	Below Normal	143	147	177	164	132	85	60	59	46	35	43	111	100	
1963	Wet	126	42	72	67	80	64	53	41	35	29	32	74	60	
1964	Dry	112	105	62	97	110	131	82	71	45	55	88	97	88	
1965	Wet	135	149	105	68	50	70	52	44	43	31	37	74	71	
1966	Below Normal	107	102	69	71	74	74	57	62	39	42	37	89	69	
1967	Wet	144	149	146	101	76	67	33	20	37	41	32	27	73	
1968	Below Normal	27	37	77	106	75	90	62	58	41	37	39	88	61	
1969	Wet	141	135	116	118	61	65	35	23	23	50	40	39	71	
1970	Wet	26	35	64	37	53	52	45	52	41	33	33	80	46	
1971	Wet	133	90	75	58	83	64	39	37	24	25	34	53	60	
1972	Below Normal	42	77	109	71	88	68	62	67	46	42	42	90	67	
1973	Above Normal	150	101	71	94	102	77	61	63	51	31	39	81	77	
1974	Wet	124	65	61	69	66	44	48	53	56	39	40	48	59	
1975	Wet	29	42	90	93	59	44	50	44	49	47	40	44	53	
1976	Critical	29	29	69	126	172	139	99	85	102	114	124	139	102	
1977	Critical	160	133	177	164	215	194	130	114	122	119	109	125	147	
1978	Above Normal	162	170	179	127	133	130	67	44	63	68	52	63	105	
1979	Below Normal	75	111	143	132	64	45	54	43	43	35	45	87	73	
1980	Above Normal	135	110	80	69	52	64	58	55	60	63	47	76	72	
1981	Dry	104	108	144	149	83	84	67	57	49	60	71	103	90	
1982	Wet	154	113	54	84	39	46	18	15	50	56	40	27	58	
1983	Wet	14	28	60	54	46	30	36	29	23	19	15	17	31	
1984	Wet	26	13	39	48	27	48	50	53	51	34	36	79	42	
1985	Dry	111	80	54	61	99	98	77	62	44	58	74	118	78	
1986	Wet	147	136	150	106	84	42	25	21	58	88	50	66	81	
1987	Dry	80	98	147	172	159	111	80	68	53	59	80	103	101	
1988	Critical	149	148	164	145	127	178	100	89	79	61	85	123	121	
1989	Dry	154	164	173	161	247	107	46	52	32	53	78	101	114	
1990	Critical	137	151	172	124	128	118	86	88	90	108	114	119	120	
1991	Critical	159	169	178	203	233	134	101	80	80	108	112	114	139	
1992	Critical	159	180	183	208	155	101	71	61	58	57	94	143	123	
1993	Above Normal	163	178	191	136	108	96	57	62	58	57	45	68	102	
1994	Critical	93	117	156	184	170	98	73	75	57	105	120	121	114	
Average		111	108	121	116	107	92	63	58	53	53	57	85	85	
Wet		97	86	89	75	64	58	39	35	42	43	37	52	60	
Above Normal		118	106	113	111	92	78	54	51	47	44	38	77	77	
Below Normal		104	106	128	119	96	78	57	55	45	41	43	88	80	
Dry		120	122	136	137	135	111	74	68	50	55	73	102	99	
Critical		128	133	157	163	171	155	106	92	90	90	103	121	126	

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
Alternative CP1 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	110	112	120	108	106	75	51	44	48	56	45	71	79
1923	Below Normal	111	110	110	78	82	97	57	49	48	37	45	82	75
1924	Critical	109	122	148	162	182	213	132	110	110	89	103	114	133
1925	Dry	143	153	165	159	139	112	61	51	61	58	64	101	106
1926	Dry	133	128	153	166	132	106	66	77	60	60	83	104	106
1927	Wet	144	95	62	65	84	93	49	43	30	28	34	75	67
1928	Above Normal	115	88	72	83	68	58	48	55	38	35	35	83	65
1929	Critical	137	141	165	158	183	176	117	92	77	72	91	122	128
1930	Dry	148	146	162	115	97	86	72	77	55	56	76	109	100
1931	Critical	146	130	158	171	198	180	133	115	121	116	114	123	142
1932	Dry	147	156	141	85	116	160	100	84	66	86	68	101	109
1933	Critical	133	122	148	155	157	152	109	88	86	81	91	108	119
1934	Critical	135	158	156	146	138	190	125	103	91	72	90	119	127
1935	Below Normal	150	153	179	132	127	87	56	65	53	42	51	92	99
1936	Below Normal	128	121	156	142	99	50	49	59	52	34	46	86	85
1937	Below Normal	118	121	150	154	85	68	40	32	65	81	47	78	87
1938	Wet	117	123	73	77	61	47	27	26	26	49	39	37	59
1939	Dry	26	33	87	125	135	136	83	60	51	59	68	113	81
1940	Above Normal	146	131	160	140	105	54	44	55	48	33	31	77	85
1941	Wet	117	128	128	86	77	48	32	31	63	61	44	52	72
1942	Wet	40	65	97	81	48	58	44	36	53	57	43	44	55
1943	Wet	32	40	51	60	40	40	40	58	67	43	39	78	49
1944	Dry	127	121	148	169	159	91	58	54	44	45	67	103	99
1945	Below Normal	141	121	108	107	95	58	58	51	44	37	46	83	79
1946	Below Normal	117	103	82	67	77	73	57	52	42	33	47	92	70
1947	Dry	133	123	131	121	124	105	75	66	44	48	79	95	95
1948	Below Normal	134	133	169	157	179	124	63	59	35	27	44	96	102
1949	Dry	127	124	151	174	194	111	75	86	49	41	75	98	109
1950	Below Normal	131	127	153	124	78	76	46	54	42	35	39	84	82
1951	Above Normal	126	74	60	50	33	59	53	30	31	36	29	84	55
1952	Wet	122	120	121	92	69	68	26	13	36	48	32	29	65
1953	Wet	27	47	91	75	82	86	44	36	26	28	34	65	53
1954	Above Normal	51	54	84	131	70	73	55	62	37	35	30	82	64
1955	Dry	133	146	133	83	100	140	96	77	49	43	67	94	97
1956	Wet	124	137	136	66	62	54	51	50	53	59	46	46	74
1957	Above Normal	29	38	95	159	138	90	46	38	33	27	32	87	68
1958	Wet	100	51	75	69	100	92	15	10	44	48	35	33	56
1959	Below Normal	27	51	122	149	87	97	70	59	45	37	41	87	73
1960	Dry	129	140	164	148	163	76	72	78	45	53	69	94	103
1961	Dry	140	150	177	166	154	127	77	71	50	48	70	102	111
1962	Below Normal	143	147	177	166	133	86	60	59	48	35	44	113	101
1963	Wet	122	40	68	66	82	64	53	41	36	29	32	74	59
1964	Dry	112	104	61	96	111	132	82	71	45	55	91	95	88
1965	Wet	132	148	105	68	49	68	52	44	42	30	37	75	71
1966	Below Normal	107	104	71	72	72	73	57	62	39	41	38	90	69
1967	Wet	144	150	146	101	75	67	33	20	37	41	32	27	73
1968	Below Normal	27	38	77	105	75	90	62	58	41	37	39	88	62
1969	Wet	141	135	116	118	61	65	35	23	23	50	40	39	70
1970	Wet	26	35	64	37	53	52	45	52	41	34	33	81	46
1971	Wet	133	89	74	59	83	64	39	37	24	24	34	53	59
1972	Below Normal	43	78	109	71	88	68	67	109	46	41	41	91	67
1973	Above Normal	147	103	77	95	100	77	61	63	50	30	38	81	77
1974	Wet	124	65	61	69	63	44	48	53	56	39	40	48	59
1975	Wet	29	42	90	93	59	44	50	44	49	47	40	44	53
1976	Critical	29	29	69	126	173	139	98	85	102	110	124	140	102
1977	Critical	162	136	182	155	157	172	120	110	121	118	109	114	138
1978	Above Normal	153	183	180	142	133	130	65	46	63	69	52	63	107
1979	Below Normal	76	111	143	132	64	45	54	43	43	35	45	88	73
1980	Above Normal	135	118	90	69	52	64	58	55	60	63	48	76	74
1981	Dry	104	108	144	149	81	76	66	57	49	60	71	102	89
1982	Wet	154	114	55	84	39	46	18	15	50	56	40	27	58
1983	Wet	14	28	60	54	46	30	36	29	23	19	15	17	31
1984	Wet	26	13	39	48	27	48	50	53	51	34	36	79	42
1985	Dry	111	85	55	61	99	99	78	62	43	58	75	116	78
1986	Wet	147	134	148	105	84	42	26	21	58	67	47	63	79
1987	Dry	79	97	146	177	147	92	75	66	51	59	79	101	97
1988	Critical	146	146	163	144	110	175	99	91	83	61	86	122	119
1989	Dry	153	164	172	164	247	108	46	53	31	52	80	98	114
1990	Critical	133	150	173	123	127	118	86	88	90	109	115	120	119
1991	Critical	159	169	178	203	233	133	101	80	80	108	112	114	139
1992	Critical	161	181	183	209	154	100	71	61	58	57	94	144	123
1993	Above Normal	163	177	192	135	108	96	57	64	59	55	44	69	102
1994	Critical	94	117	156	184	170	98	73	75	57	104	124	118	114
Average		111	109	121	116	107	92	63	58	53	53	58	85	85
Wet		96	86	89	75	64	58	39	35	42	42	37	52	59
Above Normal		117	108	113	111	91	78	54	51	47	44	38	77	77
Below Normal		104	108	129	118	96	78	57	55	46	39	44	89	80
Dry		122	124	137	135	138	110	74	68	50	55	74	102	99
Critical		129	133	157	162	165	154	105	92	90	91	104	121	125

Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-2	-3	0	4	0
1925	Dry	0	-2	4	-15	-10	-10	-1	0	1	1	0	-1	-3
1926	Dry	-2	-1	0	0	0	0	0	0	0	0	0	1	0
1927	Wet	1	-1	0	0	0	1	0	0	0	0	0	0	0
1928	Above Normal	0	2	3	1	0	0	0	0	-1	0	0	2	1
1929	Critical	1	1	-1	-2	-5	-1	0	-4	-9	-6	-2	5	-2
1930	Dry	2	-6	-2	2	0	-8	-1	0	5	1	3	9	0
1931	Critical	3	1	-3	-7	11	9	8	5	6	30	12	6	7
1932	Dry	3	0	0	0	-1	-1	0	0	0	0	0	0	0
1933	Critical	0	0	-3	-1	0	-2	-1	0	0	0	1	0	0
1934	Critical	0	0	0	-2	3	1	1	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	-2	0	0	0	3	-8	3	1	0
1936	Below Normal	1	1	0	0	-1	-1	0	0	0	-4	1	2	0
1937	Below Normal	0	2	3	-5	-1	0	0	0	1	2	1	0	0
1938	Wet	-2	-3	1	-5	0	0	0	0	0	0	0	0	-1
1939	Dry	0	0	-1	-1	0	0	0	-1	-1	0	-2	6	0
1940	Above Normal	2	1	1	0	0	0	0	1	1	0	0	0	1
1941	Wet	0	0	-1	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	-1	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	-1	0	1	0
1944	Dry	0	1	-2	-2	27	5	0	0	-2	-2	-1	-5	2
1945	Below Normal	0	6	2	0	0	-1	-1	0	0	0	0	0	1
1946	Below Normal	-1	14	11	0	1	-1	0	0	-1	0	0	0	2
1947	Dry	-3	0	3	1	0	0	0	0	-1	1	4	-2	0
1948	Below Normal	-3	-4	-6	5	3	-1	0	0	2	0	5	10	1
1949	Dry	21	14	1	-5	29	0	-1	0	1	-1	-2	1	5
1950	Below Normal	5	5	4	-6	-3	1	1	0	0	-5	0	1	0
1951	Above Normal	-1	1	0	0	1	0	0	0	0	0	0	1	0
1952	Wet	-1	-7	-8	0	0	0	0	0	0	0	0	0	-1
1953	Wet	0	0	0	0	0	0	0	0	0	0	1	2	0
1954	Above Normal	1	-5	-17	-14	-2	-3	0	1	-1	0	0	1	-3
1955	Dry	0	0	5	5	1	0	0	0	-1	-1	1	-7	0
1956	Wet	-6	-2	0	0	0	-1	0	0	0	0	0	1	-1
1957	Above Normal	0	0	0	-1	-2	0	0	0	0	0	0	1	0
1958	Wet	2	4	2	0	-1	-1	0	0	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	2	0
1960	Dry	9	14	11	-31	-9	-1	0	0	1	-2	0	-5	-1
1961	Dry	0	2	-2	10	8	28	4	2	0	0	0	-1	4
1962	Below Normal	0	0	0	2	1	0	0	0	2	0	1	2	1
1963	Wet	-3	-1	-5	0	2	0	0	0	0	1	0	0	-1
1964	Dry	0	-1	-1	-1	1	0	0	0	0	1	3	-1	0
1965	Wet	-2	-1	0	0	-1	-2	0	-1	0	-1	0	1	-1
1966	Below Normal	0	2	1	0	-2	-1	0	0	0	0	0	0	0
1967	Wet	0	1	0	0	-1	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	1	0	-1	1	0	1	0
1971	Wet	1	-2	-1	0	0	0	0	0	0	0	-1	0	0
1972	Below Normal	1	1	0	0	0	0	0	0	1	0	-1	1	0
1973	Above Normal	-3	2	6	1	-2	-1	0	0	-1	-1	-1	0	0
1974	Wet	0	0	0	0	-3	-1	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-2	0	-1	-4	0	2	0
1977	Critical	2	3	6	-9	-58	-21	-10	-4	-1	-2	0	-11	-9
1978	Above Normal	-9	13	1	15	0	0	-2	1	0	0	1	1	2
1979	Below Normal	1	1	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	8	10	0	0	0	0	0	0	0	0	0	2
1981	Dry	0	0	0	0	-2	-8	-1	0	1	1	0	-1	-1
1982	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	6	1	0	0	0	0	0	-1	-1	1	-2	0
1986	Wet	-1	-1	-2	-1	0	0	1	0	0	-21	-3	-3	-3
1987	Dry	-1	-1	0	5	-12	-20	-5	-2	-2	0	-1	-2	-3
1988	Critical	-3	-2	-1	-1	-17	-3	-1	2	3	1	0	-1	-2
1989	Dry	-1	1	-1	3	0	1	0	0	-1	-1	2	-3	0
1990	Critical	-3	-1	1	-1	-1	0	0	0	0	1	1	1	0
1991	Critical	0	0	0	0	-1	0	0	0	0	0	0	0	0
1992	Critical	2	1	0	1	-1	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	2	1	-1	-1	1	0
1994	Critical	1	1	0	0	1	1	0	0	-1	-1	4	-4	0
Average		0	1	0	-1	-1	-1	0	0	0	0	0	0	0
Wet		0	-1	-1	0	0	0	0	0	0	-1	0	0	0
Above Normal		-1	2	0	0	0	0	0	0	0	0	0	1	0
Below Normal		0	2	1	0	0	0	0	0	0	-1	1	1	0
Dry		2	2	1	-2	2	-1	0	0	0	0	0	-1	0
Critical		0	0	0	-2	-6	-2	0	0	0	1	1	0	-1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-4%	0%	4%	0%
1925	Dry	0%	-1%	2%	-9%	-7%	-8%	-1%	0%	1%	0%	0%	-1%	-2%
1926	Dry	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	0%
1927	Wet	1%	-1%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%
1928	Above Norma	0%	2%	5%	2%	0%	0%	-1%	-1%	-1%	0%	0%	3%	1%
1929	Critical	1%	0%	0%	-1%	-3%	-1%	0%	-4%	-10%	-8%	-2%	4%	-2%
1930	Dry	1%	-4%	-1%	2%	0%	-9%	-1%	0%	10%	2%	4%	9%	1%
1931	Critical	2%	1%	-2%	-4%	6%	5%	7%	4%	6%	35%	12%	5%	6%
1932	Dry	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	-2%	0%	0%	-1%	-1%	0%	0%	0%	1%	0%	0%
1934	Critical	0%	0%	0%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	6%	-16%	7%	1%	0%
1936	Below Normal	1%	1%	0%	0%	-1%	-3%	-1%	-1%	0%	-10%	2%	2%	-1%
1937	Below Normal	0%	2%	2%	-3%	-1%	0%	-1%	0%	1%	3%	3%	-1%	0%
1938	Wet	-2%	-3%	1%	-7%	0%	0%	0%	0%	0%	0%	-1%	1%	-1%
1939	Dry	1%	-1%	-1%	0%	0%	0%	0%	-1%	-1%	0%	-3%	5%	0%
1940	Above Norma	2%	1%	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	1%	0%
1944	Dry	0%	1%	-1%	-1%	21%	6%	1%	1%	-5%	-4%	-2%	-5%	1%
1945	Below Normal	0%	5%	1%	0%	0%	-1%	0%	0%	-1%	-1%	0%	0%	0%
1946	Below Normal	-1%	16%	16%	0%	1%	-1%	0%	0%	-2%	-1%	-1%	0%	2%
1947	Dry	-2%	0%	2%	1%	0%	0%	0%	0%	-3%	1%	5%	-2%	0%
1948	Below Normal	-2%	-3%	-3%	4%	1%	-1%	-1%	0%	6%	0%	12%	12%	2%
1949	Dry	20%	12%	1%	-3%	18%	0%	-1%	0%	2%	-3%	-3%	1%	4%
1950	Below Normal	4%	4%	3%	-5%	-3%	1%	2%	0%	-1%	-13%	0%	1%	-1%
1951	Above Norma	0%	1%	0%	0%	2%	-1%	0%	0%	-1%	-1%	-1%	1%	0%
1952	Wet	-1%	-5%	-6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	2%	4%	1%
1954	Above Norma	1%	-8%	-17%	-10%	-2%	-4%	0%	1%	-4%	-1%	0%	1%	-4%
1955	Dry	0%	0%	4%	6%	1%	0%	0%	0%	-2%	-2%	2%	-7%	0%
1956	Wet	-4%	-2%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	2%	0%
1957	Above Norma	1%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	2%	8%	3%	1%	-1%	-1%	0%	0%	0%	0%	1%	1%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	-1%	0%	-1%	-1%	0%	2%	0%
1960	Dry	8%	11%	7%	-17%	-5%	-1%	0%	0%	3%	-3%	0%	-5%	0%
1961	Dry	0%	1%	-1%	6%	5%	29%	6%	3%	0%	-1%	0%	-1%	4%
1962	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	5%	1%	2%	2%	1%
1963	Wet	-3%	-4%	-6%	-1%	2%	0%	0%	0%	1%	2%	1%	0%	-1%
1964	Dry	0%	-1%	-1%	-1%	1%	0%	0%	0%	0%	1%	4%	-1%	0%
1965	Wet	-2%	0%	0%	0%	-3%	-3%	0%	-1%	-1%	-2%	1%	1%	-1%
1966	Below Normal	0%	2%	2%	1%	-3%	-1%	0%	0%	0%	-1%	1%	1%	0%
1967	Wet	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	0%	0%	0%	0%	2%	0%	-1%	3%	0%	1%	0%
1971	Wet	1%	-2%	-2%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	-1%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	1%	-1%	-2%	2%	0%
1973	Above Norma	-2%	2%	9%	1%	-2%	-1%	0%	0%	-2%	-3%	-2%	0%	0%
1974	Wet	0%	0%	0%	0%	-4%	-2%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-2%	0%	-1%	-3%	0%	1%	0%
1977	Critical	1%	2%	3%	-6%	-27%	-11%	-8%	-3%	-1%	-1%	-9%	-9%	-5%
1978	Above Norma	-6%	8%	0%	12%	0%	0%	-3%	3%	0%	0%	1%	1%	1%
1979	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	1%	0%
1980	Above Norma	0%	8%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	-2%	-10%	-1%	0%	1%	1%	0%	-1%	-1%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1985	Dry	0%	7%	1%	0%	0%	0%	0%	0%	-2%	-1%	2%	-1%	1%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	3%	0%	0%	-24%	-7%	-5%	-3%
1987	Dry	-2%	-1%	0%	3%	-8%	-18%	-3%	-3%	-4%	-1%	-2%	-2%	-4%
1988	Critical	-2%	-1%	-1%	-1%	-13%	-2%	-1%	2%	4%	1%	1%	-1%	-1%
1989	Dry	-1%	0%	-1%	2%	0%	1%	0%	0%	-2%	-2%	2%	-3%	0%
1990	Critical	-2%	0%	0%	-1%	-1%	0%	0%	0%	1%	1%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	1%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	0%	3%	2%	-2%	-3%	1%	0%
1994	Critical	1%	0%	0%	0%	0%	1%	0%	0%	-1%	-1%	3%	-3%	0%
Average		0%	1%	0%	0%	0%	-1%	0%	0%	0%	-1%	1%	0%	0%
Wet		0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Norma		0%	1%	1%	0%	0%	-1%	0%	1%	0%	-1%	0%	1%	0%
Below Normal		0%	2%	1%	0%	0%	-1%	0%	0%	1%	-3%	2%	2%	0%
Dry		2%	2%	1%	-1%	2%	0%	0%	0%	0%	-1%	1%	-1%	0%
Critical		0%	0%	0%	-1%	-3%	-1%	0%	0%	0%	2%	1%	0%	0%

Monthly Average X2 Location (km)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	80	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	86	86	70	67	67	74	74	71	71	80	85	85	76
1924	Critical	87	87	86	83	83	77	77	85	85	86	86	86	84
1925	Dry	89	89	84	83	83	65	65	72	72	82	86	86	80
1926	Dry	88	88	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	88	88	76	70	70	59	59	65	65	76	84	84	73
1928	Above Normal	86	86	80	74	74	57	57	69	69	78	84	84	75
1929	Critical	88	88	83	84	84	78	78	81	81	86	87	87	84
1930	Dry	88	88	81	75	75	68	68	76	76	83	86	86	79
1931	Critical	87	87	86	82	82	81	81	85	85	86	87	87	85
1932	Dry	89	89	78	76	76	74	74	75	75	82	86	86	80
1933	Critical	88	88	86	81	81	78	78	81	81	86	86	86	83
1934	Critical	90	90	84	77	77	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	84	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	86	70	70	63	63	69	69	79	85	85	76
1937	Below Normal	87	87	85	83	83	62	62	69	69	79	85	85	78
1938	Wet	87	87	61	63	63	47	47	54	54	72	82	82	67
1939	Dry	77	77	82	82	82	77	77	78	78	83	86	86	80
1940	Above Normal	88	88	86	72	72	53	53	65	65	76	84	84	74
1941	Wet	87	87	69	57	57	51	51	58	58	75	83	83	68
1942	Wet	81	81	65	57	57	61	61	61	61	75	83	83	69
1943	Wet	81	81	70	58	58	54	54	67	67	77	84	84	70
1944	Dry	87	87	86	82	82	72	72	77	77	83	86	86	81
1945	Below Normal	87	87	80	82	82	66	66	74	74	80	85	85	79
1946	Below Normal	87	87	62	60	60	69	69	73	73	80	85	85	74
1947	Dry	88	88	81	82	82	74	74	78	78	83	84	84	81
1948	Below Normal	88	88	85	82	82	76	76	69	69	78	84	84	80
1949	Dry	86	86	84	83	83	67	67	74	74	83	84	84	80
1950	Below Normal	88	88	86	77	77	71	71	72	72	80	85	85	79
1951	Above Normal	87	87	55	55	55	61	61	71	71	76	84	84	71
1952	Wet	86	86	69	58	58	55	55	55	55	70	79	79	67
1953	Wet	80	80	68	56	56	70	70	69	69	76	84	84	72
1954	Above Normal	82	82	84	71	71	61	61	66	66	76	84	84	74
1955	Dry	87	87	76	74	74	79	79	78	78	83	86	86	80
1956	Wet	88	88	62	50	50	58	58	63	63	76	83	83	69
1957	Above Normal	78	78	85	83	83	64	64	71	71	77	84	84	77
1958	Wet	80	80	75	66	66	51	51	56	56	73	80	80	68
1959	Below Normal	80	80	85	72	72	67	67	78	78	79	84	84	77
1960	Dry	87	87	85	84	84	72	72	76	76	83	85	85	81
1961	Dry	87	87	82	82	82	74	74	78	78	82	84	84	81
1962	Below Normal	88	88	82	82	82	69	69	74	74	78	84	84	79
1963	Wet	72	72	73	75	75	65	65	63	63	76	83	83	72
1964	Dry	85	85	82	74	74	78	78	78	78	83	83	83	80
1965	Wet	87	87	63	54	54	67	67	66	66	77	84	84	71
1966	Below Normal	87	87	76	69	69	69	69	75	75	79	84	84	77
1967	Wet	87	87	70	62	62	58	58	58	58	67	79	79	69
1968	Below Normal	78	78	81	71	71	64	64	75	75	79	84	84	75
1969	Wet	88	88	76	58	58	54	54	56	56	73	83	83	69
1970	Wet	78	78	65	49	49	59	59	73	73	77	84	84	69
1971	Wet	87	87	64	61	61	62	62	66	66	77	84	84	72
1972	Below Normal	83	83	77	78	78	68	68	76	76	80	85	85	78
1973	Above Normal	87	87	72	59	59	57	57	71	71	78	84	84	72
1974	Wet	85	85	59	51	51	53	53	64	64	76	83	83	67
1975	Wet	79	79	81	78	78	56	56	65	65	76	83	83	73
1976	Critical	76	76	82	83	83	78	78	85	85	86	87	87	82
1977	Critical	86	86	83	85	85	81	81	85	85	86	87	87	85
1978	Above Normal	89	89	82	64	64	57	57	66	66	77	84	84	73
1979	Below Normal	86	86	84	75	75	65	65	71	71	79	85	85	77
1980	Above Normal	88	88	76	57	57	54	54	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	68	68	78	78	83	85	85	79
1982	Wet	87	87	58	55	55	52	52	57	57	75	81	81	66
1983	Wet	71	71	56	52	52	42	42	52	52	59	67	67	57
1984	Wet	71	71	50	53	53	61	61	73	73	77	84	84	68
1985	Dry	85	85	73	79	79	73	73	76	76	82	86	86	79
1986	Wet	87	87	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	86	86	86	82	82	70	70	78	78	83	85	85	81
1988	Critical	88	88	82	73	73	78	78	81	81	85	87	87	82
1989	Dry	89	89	84	84	84	67	67	74	74	83	84	84	80
1990	Critical	87	87	81	78	78	79	79	83	83	86	87	87	83
1991	Critical	90	90	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	72	72	80	80	85	88	88	83
1993	Above Normal	89	89	83	65	65	62	62	64	64	75	83	83	74
1994	Critical	86	86	84	82	82	75	75	79	79	83	84	84	82
Average		85	85	77	72	72	66	66	71	71	79	84	84	76
Wet		83	83	67	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	78	68	68	59	59	67	67	76	84	84	74
Below Normal		86	86	80	74	74	68	68	72	72	79	85	85	77
Dry		87	87	82	80	80	72	72	76	76	83	85	85	80
Critical		87	87	84	81	81	77	77	82	82	86	87	87	83

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average X2 Location (km)
Alternative CP1 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	80	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	86	86	69	67	67	74	74	71	71	80	85	85	76
1924	Critical	87	87	86	83	83	77	77	85	85	86	86	86	84
1925	Dry	89	89	84	83	83	65	65	72	72	82	86	86	80
1926	Dry	88	88	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	87	87	76	70	70	59	59	65	65	76	84	84	73
1928	Above Normal	86	86	80	74	74	57	57	69	69	78	84	84	75
1929	Critical	88	88	83	84	84	78	78	81	81	86	88	88	84
1930	Dry	88	88	81	75	75	68	68	76	76	83	86	86	79
1931	Critical	88	88	86	83	83	82	82	85	85	86	87	87	85
1932	Dry	88	88	78	75	75	74	74	75	75	82	86	86	80
1933	Critical	88	88	86	81	81	78	78	81	81	86	86	86	83
1934	Critical	90	90	84	78	78	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	84	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	86	70	70	63	63	69	69	80	85	85	76
1937	Below Normal	87	87	84	82	82	62	62	69	69	79	85	85	78
1938	Wet	87	87	62	64	64	47	47	54	54	72	82	82	67
1939	Dry	77	77	82	82	82	77	77	78	78	82	85	85	80
1940	Above Normal	88	88	86	72	72	54	54	65	65	76	84	84	74
1941	Wet	87	87	69	57	57	51	51	58	58	75	83	83	68
1942	Wet	81	81	65	57	57	61	61	62	62	75	83	83	69
1943	Wet	81	81	70	58	58	54	54	67	67	77	84	84	70
1944	Dry	87	87	84	83	83	72	72	77	77	83	85	85	81
1945	Below Normal	87	87	80	82	82	66	66	74	74	80	85	85	79
1946	Below Normal	87	87	63	61	61	69	69	73	73	80	85	85	74
1947	Dry	87	87	81	82	82	74	74	78	78	83	83	83	81
1948	Below Normal	88	88	85	82	82	76	76	69	69	79	85	85	80
1949	Dry	87	87	84	84	84	68	68	74	74	83	84	84	80
1950	Below Normal	88	88	85	76	76	71	71	72	72	80	85	85	79
1951	Above Normal	87	87	56	55	55	61	61	71	71	76	84	84	71
1952	Wet	86	86	69	58	58	55	55	55	55	70	79	79	67
1953	Wet	80	80	68	56	56	70	70	69	69	76	84	84	72
1954	Above Normal	82	82	84	71	71	61	61	66	66	76	84	84	74
1955	Dry	87	87	77	74	74	79	79	77	77	83	85	85	80
1956	Wet	88	88	63	51	51	58	58	63	63	76	83	83	69
1957	Above Normal	78	78	85	82	82	64	64	71	71	77	84	84	77
1958	Wet	81	81	75	66	66	51	51	56	56	73	80	80	68
1959	Below Normal	80	80	85	72	72	67	67	78	78	79	84	84	77
1960	Dry	87	87	83	84	84	72	72	76	76	83	84	84	81
1961	Dry	88	88	82	82	82	75	75	78	78	82	84	84	82
1962	Below Normal	88	88	82	82	82	69	69	74	74	78	84	84	79
1963	Wet	72	72	72	76	76	65	65	63	63	76	83	83	72
1964	Dry	85	85	82	74	74	78	78	78	78	83	83	83	80
1965	Wet	87	87	63	54	54	67	67	66	66	77	84	84	71
1966	Below Normal	87	87	76	69	69	69	69	75	75	78	84	84	77
1967	Wet	87	87	70	62	62	58	58	58	58	67	79	79	69
1968	Below Normal	78	78	81	71	71	64	64	75	75	79	84	84	75
1969	Wet	88	88	76	58	58	54	54	56	56	73	83	83	69
1970	Wet	78	78	65	49	49	59	59	73	73	77	84	84	69
1971	Wet	87	87	64	61	61	62	62	66	66	77	84	84	72
1972	Below Normal	83	83	78	78	78	68	68	76	76	79	85	85	78
1973	Above Normal	87	87	72	59	59	57	57	71	71	77	84	84	72
1974	Wet	85	85	59	51	51	53	53	64	64	76	83	83	67
1975	Wet	79	79	81	78	78	56	56	65	65	76	83	83	73
1976	Critical	76	76	82	83	83	78	78	85	85	86	87	87	82
1977	Critical	86	86	82	85	85	81	81	85	85	86	86	86	85
1978	Above Normal	90	90	83	65	65	57	57	66	66	77	84	84	73
1979	Below Normal	86	86	84	75	75	65	65	71	71	79	85	85	77
1980	Above Normal	88	88	75	57	57	54	54	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	69	69	78	78	83	85	85	79
1982	Wet	87	87	58	56	56	52	52	57	57	75	81	81	66
1983	Wet	71	71	56	52	52	42	42	52	52	59	67	67	57
1984	Wet	71	71	50	53	53	61	61	73	73	77	84	84	68
1985	Dry	86	86	73	79	79	73	73	76	76	82	85	85	79
1986	Wet	87	87	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	86	86	86	82	82	70	70	78	78	83	84	84	81
1988	Critical	88	88	82	72	72	78	78	81	81	85	87	87	82
1989	Dry	89	89	85	84	84	67	67	74	74	83	84	84	80
1990	Critical	87	87	81	78	78	79	79	83	83	86	87	87	83
1991	Critical	90	90	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	72	72	80	80	85	88	88	83
1993	Above Normal	89	89	83	65	65	62	62	65	65	75	83	83	74
1994	Critical	86	86	84	82	82	75	75	79	79	84	83	83	82
Average		85	85	77	72	72	66	66	71	71	79	84	84	76
Wet		83	83	67	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	78	68	68	59	59	68	68	76	84	84	74
Below Normal		86	86	80	74	74	68	68	72	72	79	85	85	77
Dry		87	87	82	80	80	72	72	76	76	83	85	85	80
Critical		87	87	84	81	81	77	77	82	82	86	87	87	83

Change in Monthly Average X2 Position (km)
Alternative CP1 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	-1	-1	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	-1	0	0	0	0	0	0	0	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	1	1	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	1	1	0	0	0	0	0	0
1937	Below Normal	0	0	-1	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	-1	0	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	-1	1	1	0	0	0	0	0	-1	-1	0
1945	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	1	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	1	1	0	1	1	1	1	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	1	0	0	0	0	0	0	0	-1	-1	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	-2	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	1	1	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	-1	0	0	0	0	0	0	0	-1	-1	0
1978	Above Normal	1	1	1	0	0	0	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	-1	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	1	1	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	Dry	0	0	0	0	0	1	1	0	0	-1	-1	-1	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	1	1	1	1	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average X2 Position (km)
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1931	Critical	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Norma	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1937	Below Norma	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1940	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	-1%	1%	1%	0%	0%	0%	0%	0%	-1%	-1%	0%
1945	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Norma	0%	0%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1948	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1949	Dry	1%	1%	0%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%
1950	Below Norma	0%	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1956	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1961	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1962	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	1%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1978	Above Norma	1%	1%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1979	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	-1%	-1%	-1%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	1%	1%	2%	2%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	-2	-2	0	0	4	0	-3	0
1924	Critical	-1	0	2	-1	-1	0	14	0	-349	-315	30	130	-41
1925	Dry	-144	128	-102	-234	-7	1	-3	-2	-1	-3	-21	-39	-36
1926	Dry	-9	-2	1	-1	0	-2	46	14	-31	-12	25	-5	2
1927	Wet	-277	-75	32	2	1	0	0	-6	-13	13	16	35	-22
1928	Above Normal	-9	68	48	-18	-6	0	0	1	6	-1	-39	-13	3
1929	Critical	5	26	-439	-276	-45	-14	-3	-64	62	-21	93	146	-44
1930	Dry	-201	-271	24	29	2	4	9	-37	83	-105	126	239	-8
1931	Critical	178	-24	199	485	763	537	143	38	1,200	790	114	112	378
1932	Dry	100	14	-16	-4	-64	-33	-5	-1	0	1	1	-4	-1
1933	Critical	-4	-1	-8	0	3	19	59	-38	-3	2	-7	-2	2
1934	Critical	-5	5	-7	135	61	9	-3	-1	-1	0	-1	-1	16
1935	Below Normal	-4	2	-5	-2	-12	-2	0	0	4	-6	-31	47	-1
1936	Below Normal	41	19	-343	-54	-1	3	2	0	5	1	-14	-46	-32
1937	Below Normal	-40	29	-119	-40	-6	0	0	-9	-27	-2	-3	-16	-19
1938	Wet	5	127	6	1	0	0	0	0	0	0	11	0	12
1939	Dry	74	85	29	15	-38	6	15	1	71	-503	-455	-96	-66
1940	Above Normal	-43	-32	-10	-7	4	0	0	-20	-35	0	3	5	-11
1941	Wet	13	28	8	0	0	0	0	0	0	0	1	7	5
1942	Wet	11	14	1	0	0	0	0	0	0	0	2	3	3
1943	Wet	8	5	0	0	0	0	0	0	0	-2	-5	8	1
1944	Dry	-134	44	-576	283	310	27	-5	3	-66	-68	-406	-390	-81
1945	Below Normal	171	175	23	2	-3	-3	-2	-19	-17	-4	-13	-71	20
1946	Below Normal	-34	1,648	95	0	-1	-19	-17	-1	1	-108	-113	-114	112
1947	Dry	-53	149	58	6	-47	-25	-26	3	-152	-197	-294	-209	-65
1948	Below Normal	-67	-53	-65	-22	-180	-41	-10	0	247	244	75	922	87
1949	Dry	729	190	-169	311	3,349	266	20	7	-17	80	49	0	401
1950	Below Normal	-13	-194	-478	-393	-20	-2	-103	-10	-57	-32	-16	22	-100
1951	Above Normal	-100	55	0	0	-1	-1	-1	0	-42	-69	-54	-62	-23
1952	Wet	-15	-554	-36	0	0	0	0	0	0	0	10	5	-49
1953	Wet	-1	-13	-2	0	0	1	0	9	5	3	-24	17	0
1954	Above Normal	42	-647	-485	-53	-1	0	0	5	21	-40	-77	-12	-104
1955	Dry	193	54	475	150	19	9	-9	-150	-115	-120	-476	-425	-33
1956	Wet	-159	-80	17	0	0	0	0	0	1	1	-16	13	-18
1957	Above Normal	9	1	131	-103	-25	0	0	-10	-8	-48	-75	-69	-16
1958	Wet	296	215	32	2	0	0	0	0	0	0	13	12	48
1959	Below Normal	12	10	4	2	0	0	-1	0	-57	-94	-94	369	13
1960	Dry	196	-169	-1,016	-601	-47	-7	-1	-2	15	170	-207	-253	-160
1961	Dry	38	-284	27	136	227	272	187	-25	-68	68	-7	-36	45
1962	Below Normal	30	-40	16	20	17	1	0	1	9	-93	-106	-53	-17
1963	Wet	68	-111	-60	159	15	-1	0	0	0	7	8	27	9
1964	Dry	12	-10	1	-5	-2	10	-8	3	-137	-127	-224	-174	-55
1965	Wet	-15	6	13	0	0	-2	0	-4	-66	-19	25	13	-4
1966	Below Normal	-13	191	84	5	8	6	8	1	-50	-50	-21	-28	12
1967	Wet	-26	-17	5	0	0	0	0	0	0	1	11	9	-1
1968	Below Normal	3	-7	-8	-1	0	0	0	1	-49	-61	-43	-15	-15
1969	Wet	-11	-5	-203	-2	0	0	0	0	0	0	-1	17	-17
1970	Wet	-13	-31	-1	0	0	0	-2	4	3	-2	-19	-11	-6
1971	Wet	-7	-422	-19	0	0	0	0	0	0	-37	-31	54	-39
1972	Below Normal	54	26	7	1	1	2	9	-4	14	-131	-158	-140	-27
1973	Above Normal	-166	382	73	1	0	0	0	11	4	-91	-107	-4	9
1974	Wet	-5	6	0	0	0	0	0	0	0	0	12	10	2
1975	Wet	8	8	2	3	0	0	0	0	0	0	10	17	4
1976	Critical	8	5	2	3	3	10	-127	-139	-54	-13	-156	-115	-48
1977	Critical	42	-931	-1,064	-476	-449	-175	-33	-16	-38	118	-199	-425	-304
1978	Above Normal	393	-317	317	56	2	5	6	3	2	1	-1	86	46
1979	Below Normal	85	34	-17	30	4	0	1	-21	-8	2	-5	-4	8
1980	Above Normal	-24	808	480	5	0	0	0	-1	5	0	-2	-2	106
1981	Dry	0	-2	-1	1	7	40	75	16	-10	-36	-80	-47	-3
1982	Wet	-10	21	0	0	0	0	0	0	0	0	33	13	5
1983	Wet	1	0	0	0	0	0	0	0	0	0	1	0	0
1984	Wet	2	0	0	0	0	0	0	-1	-4	-1	-4	-206	-18
1985	Dry	300	81	6	10	5	3	4	-9	-106	-65	-121	-76	3
1986	Wet	1	-256	-140	-7	1	0	2	-11	-14	-44	69	-7	-34
1987	Dry	-28	51	-129	-218	192	87	9	-37	-41	-144	-394	-285	-78
1988	Critical	-126	-49	-26	-4	-8	4	2	4	-11	-28	49	82	-9
1989	Dry	-92	63	-182	-235	-94	10	4	-5	-156	-151	-275	-208	-110
1990	Critical	-63	-56	-64	-31	-3	-4	-4	-1	0	21	19	9	-15
1991	Critical	-2	0	6	-15	-15	-1	0	3	0	2	18	43	3
1992	Critical	19	-5	15	-34	-13	-1	0	0	-1	7	-206	86	-11
1993	Above Normal	-198	-348	124	17	0	3	0	27	64	92	39	71	-9
1994	Critical	79	43	-11	221	82	14	6	5	-212	75	-112	-330	-12
Average		15	-3	-47	-10	55	14	5	-6	-3	-16	-53	-19	-6
Wet		-6	-54	-16	8	1	0	0	0	-4	-4	6	2	-6
Above Normal		-10	-3	68	-10	-3	1	1	2	2	-16	-31	0	0
Below Normal		16	131	-58	-32	-14	-4	-2	-4	1	-24	-39	62	3
Dry		61	8	-98	-22	238	42	19	-14	-46	-76	-172	-125	-15
Critical		11	-82	-116	1	31	33	4	-16	49	53	-30	-22	-7

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average	
Year	Year Type														
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-5%	-5%	0%	1%	-1%	
1925	Dry	-1%	1%	-1%	-4%	-2%	0%	-1%	0%	0%	0%	0%	0%	-1%	
1926	Dry	0%	0%	0%	0%	0%	0%	11%	2%	-1%	0%	0%	0%	1%	
1927	Wet	-3%	-2%	2%	1%	1%	0%	0%	-3%	-1%	1%	0%	1%	0%	
1928	Above Normal	0%	2%	2%	-2%	-1%	0%	0%	0%	0%	0%	-1%	0%	0%	
1929	Critical	0%	0%	-6%	-4%	-1%	-1%	0%	-2%	1%	0%	1%	2%	-1%	
1930	Dry	-2%	-3%	0%	2%	0%	1%	1%	-2%	2%	-2%	2%	3%	0%	
1931	Critical	2%	0%	2%	8%	19%	13%	3%	1%	19%	12%	1%	1%	7%	
1932	Dry	1%	0%	0%	0%	-9%	-4%	0%	0%	0%	0%	0%	0%	-1%	
1933	Critical	0%	0%	0%	0%	0%	1%	3%	-1%	0%	0%	0%	0%	0%	
1934	Critical	0%	0%	0%	5%	5%	1%	0%	0%	0%	0%	0%	0%	1%	
1935	Below Normal	0%	0%	0%	0%	-2%	0%	0%	0%	1%	0%	-1%	1%	0%	
1936	Below Normal	0%	0%	-4%	-6%	0%	2%	1%	0%	0%	0%	0%	-1%	-1%	
1937	Below Normal	0%	0%	-2%	-1%	-1%	0%	0%	-2%	-3%	0%	0%	0%	-1%	
1938	Wet	0%	7%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	
1939	Dry	4%	2%	1%	0%	-1%	0%	1%	0%	2%	-10%	-7%	-1%	-1%	
1940	Above Normal	-1%	0%	0%	-1%	2%	0%	0%	-6%	-2%	0%	0%	0%	-1%	
1941	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1944	Dry	-2%	1%	-8%	5%	31%	6%	0%	0%	-2%	0%	-7%	-5%	2%	
1945	Below Normal	2%	3%	1%	0%	0%	-1%	0%	-2%	-1%	0%	0%	-1%	0%	
1946	Below Normal	0%	33%	35%	0%	-1%	-5%	-2%	0%	0%	-3%	-2%	-1%	4%	
1947	Dry	-1%	2%	1%	0%	-2%	-3%	-2%	0%	-5%	-5%	-5%	-3%	-2%	
1948	Below Normal	-1%	-1%	-1%	0%	-10%	-3%	-2%	0%	42%	11%	2%	15%	4%	
1949	Dry	10%	2%	-2%	5%	137%	100%	3%	1%	-1%	2%	1%	0%	21%	
1950	Below Normal	0%	-2%	-6%	-13%	-6%	0%	-2%	-1%	-3%	-1%	0%	0%	-3%	
1951	Above Normal	-1%	10%	0%	0%	0%	0%	0%	0%	-2%	-3%	-1%	-1%	0%	
1952	Wet	0%	-8%	-5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	
1953	Wet	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	-1%	0%	0%	
1954	Above Normal	1%	-17%	-10%	-6%	0%	0%	0%	2%	1%	-2%	-2%	0%	-3%	
1955	Dry	2%	1%	21%	17%	2%	0%	0%	-7%	-3%	-3%	-7%	-5%	1%	
1956	Wet	-2%	-1%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1957	Above Normal	0%	0%	2%	-2%	-4%	0%	0%	-2%	-1%	-2%	-2%	-1%	-1%	
1958	Wet	7%	6%	2%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%	
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	-2%	5%	0%	
1960	Dry	2%	-2%	-13%	-8%	-4%	-1%	0%	0%	0%	3%	-3%	-3%	-2%	
1961	Dry	0%	-3%	0%	2%	21%	39%	13%	-1%	-2%	2%	0%	0%	6%	
1962	Below Normal	0%	0%	0%	0%	3%	0%	0%	0%	0%	-4%	-2%	-1%	0%	
1963	Wet	7%	-7%	-7%	14%	6%	-1%	0%	0%	0%	0%	0%	0%	1%	
1964	Dry	0%	-1%	0%	0%	0%	0%	0%	0%	-4%	-3%	-4%	-2%	-1%	
1965	Wet	0%	0%	3%	0%	0%	-1%	0%	-2%	-6%	-1%	1%	0%	0%	
1966	Below Normal	0%	11%	6%	1%	3%	2%	1%	0%	-2%	-2%	0%	0%	2%	
1967	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	-1%	0%	0%	
1969	Wet	0%	0%	-8%	-1%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	
1970	Wet	-1%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	
1971	Wet	0%	-11%	-7%	0%	0%	0%	0%	0%	-2%	-1%	-1%	2%	-2%	
1972	Below Normal	1%	0%	0%	0%	0%	1%	1%	0%	0%	-4%	-3%	-2%	0%	
1973	Above Normal	-2%	12%	12%	1%	0%	0%	0%	2%	0%	-4%	-2%	0%	2%	
1974	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	
1976	Critical	1%	0%	0%	0%	0%	0%	-4%	-3%	0%	0%	-2%	-1%	-1%	
1977	Critical	0%	-10%	-15%	-7%	-18%	-6%	-1%	0%	0%	2%	-2%	-5%	-5%	
1978	Above Normal	4%	-3%	5%	15%	1%	2%	3%	1%	0%	0%	0%	2%	2%	
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	-3%	-1%	0%	0%	0%	0%	
1980	Above Normal	0%	14%	25%	3%	0%	0%	0%	0%	1%	0%	0%	0%	4%	
1981	Dry	0%	0%	0%	0%	2%	17%	10%	1%	0%	-1%	-1%	-1%	2%	
1982	Wet	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-3%	0%	
1985	Dry	4%	8%	1%	0%	0%	0%	0%	-1%	-3%	-2%	-2%	-1%	1%	
1986	Wet	0%	-3%	-3%	0%	0%	0%	1%	-2%	-1%	-2%	2%	0%	-1%	
1987	Dry	0%	1%	-2%	-4%	10%	23%	1%	-2%	-1%	-3%	-6%	-4%	1%	
1988	Critical	-1%	-1%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	1%	0%	
1989	Dry	-1%	1%	-2%	-4%	-2%	2%	1%	0%	-5%	-3%	-5%	-3%	-2%	
1990	Critical	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-2%	1%	0%	
1993	Above Normal	-2%	-4%	2%	4%	0%	1%	0%	13%	25%	7%	1%	1%	4%	
1994	Critical	1%	1%	0%	4%	6%	1%	0%	0%	-4%	1%	-2%	-4%	0%	
Average		0%	1%	0%	0%	3%	3%	1%	0%	0%	0%	-1%	0%	1%	
Wet		0%	-1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Above Normal		0%	1%	4%	1%	0%	0%	0%	1%	2%	0%	-1%	0%	1%	
Below Normal		0%	3%	2%	-1%	-1%	0%	0%	-1%	2%	-1%	-1%	1%	0%	
Dry		1%	1%	0%	1%	12%	11%	2%	-1%	-1%	-2%	-3%	-2%	2%	
Critical		0%	-1%	-2%	0%	1%	1%	0%	0%	1%	1%	0%	0%	0%	

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	-1	0	0	0	-3	-5	-1	0	3	0	-2	-1
1924	Critical	-1	0	2	-2	-2	0	13	-5	-357	20	120	-45	-45
1925	Dry	-133	109	-124	-272	-10	1	-12	-5	-2	-3	-29	-46	-44
1926	Dry	-11	-3	0	-1	0	-3	132	51	-24	-12	30	15	14
1927	Wet	-250	-95	57	3	1	0	0	-16	-20	20	20	35	-20
1928	Above Normal	-4	97	73	-41	-15	0	3	3	10	-4	-33	-12	7
1929	Critical	2	26	-440	-333	-75	-25	-6	-65	66	-12	112	150	-50
1930	Dry	-183	-262	35	45	4	19	23	-59	62	-80	149	237	-1
1931	Critical	161	11	133	595	1,046	691	194	56	1,227	915	179	132	445
1932	Dry	107	23	-16	-7	-175	-89	-13	-2	0	1	1	-3	-14
1933	Critical	-3	-1	-6	1	5	28	77	-46	-2	2	-6	-2	4
1934	Critical	-4	6	-8	230	115	17	5	0	-1	0	-1	-1	30
1935	Below Normal	-3	2	-4	-2	-23	-2	0	0	2	-6	-24	44	-1
1936	Below Normal	42	20	-330	-87	-1	21	14	0	8	3	-8	-45	-30
1937	Below Normal	-42	12	-92	-51	-17	0	1	-12	-46	-2	-2	-15	-22
1938	Wet	-7	261	16	10	0	0	0	0	0	-1	8	2	24
1939	Dry	114	113	38	20	-57	7	23	2	85	-550	-495	-119	-68
1940	Above Normal	-52	-36	-14	-14	6	0	0	-36	-53	1	4	5	-16
1941	Wet	12	25	17	0	0	0	0	0	0	0	1	10	5
1942	Wet	15	16	1	0	0	0	0	2	2	1	1	4	3
1943	Wet	11	7	1	0	0	0	0	0	0	-1	-2	8	2
1944	Dry	-119	45	-571	358	614	76	-9	17	-71	-48	-415	-401	-44
1945	Below Normal	138	190	35	8	-5	-3	-2	-33	-27	-6	-9	-67	18
1946	Below Normal	-37	1,915	176	0	-9	-57	-38	-4	2	-135	-132	-115	131
1947	Dry	-69	138	73	7	-73	-54	-47	2	-200	-215	-317	-236	-83
1948	Below Normal	-84	-55	-72	-32	-296	-95	-31	-1	510	445	131	947	114
1949	Dry	807	264	-177	368	4,336	526	30	13	-24	56	57	24	524
1950	Below Normal	8	-119	-506	-582	-53	-5	-25	-3	-66	-24	-11	19	-114
1951	Above Normal	-85	122	0	0	-1	0	-3	-1	-58	-107	-70	-66	-22
1952	Wet	-21	-588	-12	0	0	0	0	0	0	0	13	7	-50
1953	Wet	-2	-15	-3	0	0	2	0	36	18	5	-17	23	4
1954	Above Normal	52	-863	-668	-114	-2	0	0	13	28	-60	-83	-18	-143
1955	Dry	165	68	807	315	42	15	-12	-220	-161	-101	-494	-456	-3
1956	Wet	-181	-94	27	0	0	1	3	2	3	2	-11	19	-19
1957	Above Normal	15	2	134	-112	-45	0	0	-23	-15	-71	-84	-71	-22
1958	Wet	382	305	58	13	0	0	0	0	0	1	16	19	66
1959	Below Normal	17	13	5	3	0	0	-2	-1	-69	-127	-102	339	6
1960	Dry	259	-66	-1,051	-699	-115	-21	-2	-2	10	185	-201	-266	-164
1961	Dry	27	-263	54	171	543	585	333	-24	-77	74	-3	-39	115
1962	Below Normal	26	-37	24	29	43	5	0	3	10	-131	-126	-58	-18
1963	Wet	151	-145	-118	275	29	-7	0	0	0	11	10	28	19
1964	Dry	14	-19	-2	-12	-6	13	-11	2	-170	-146	-243	-192	-64
1965	Wet	-31	3	22	0	6	-4	1	-9	-109	-30	31	14	-9
1966	Below Normal	-10	376	166	14	34	25	17	2	-62	-66	-26	-29	37
1967	Wet	-26	-18	15	1	0	0	0	0	0	2	16	16	1
1968	Below Normal	6	-8	-10	-1	0	0	0	1	-60	-84	-51	-19	-19
1969	Wet	-11	-7	-339	-7	-1	0	0	0	0	0	-1	31	-28
1970	Wet	-16	-40	-2	0	0	0	-2	9	5	-5	-17	-8	-6
1971	Wet	-7	-593	-33	1	-2	-2	-1	0	1	-54	-46	83	-54
1972	Below Normal	75	32	10	2	2	13	20	-6	16	-168	-176	-145	-27
1973	Above Normal	-170	576	156	1	0	0	-1	27	10	-131	-130	-15	27
1974	Wet	-6	11	0	0	3	0	0	1	1	0	14	16	3
1975	Wet	13	10	3	4	1	0	0	1	0	0	12	26	6
1976	Critical	14	7	2	5	4	15	-157	-172	-39	2	-132	-109	-47
1977	Critical	31	-750	-1,115	-543	-715	-313	-61	-21	-47	134	-214	-433	-337
1978	Above Normal	304	-319	404	95	3	5	5	2	3	1	-1	99	50
1979	Below Normal	96	40	-15	57	11	2	0	-40	-19	5	-2	-4	11
1980	Above Normal	-22	927	760	12	0	0	1	-2	8	0	-1	-1	140
1981	Dry	0	-1	-1	4	27	168	172	30	-7	-40	-82	-54	18
1982	Wet	-12	49	0	0	0	0	0	0	0	0	39	21	8
1983	Wet	3	0	0	0	0	0	0	0	0	0	3	2	1
1984	Wet	4	0	0	0	0	1	0	-3	-5	-3	-3	-191	-17
1985	Dry	273	137	14	15	9	7	7	-14	-127	-76	-123	-87	3
1986	Wet	-5	-237	-175	-14	1	0	13	-16	-26	-48	46	-4	-39
1987	Dry	-25	33	-84	-291	408	271	49	-58	-34	-140	-411	-307	-49
1988	Critical	-136	-62	-36	-8	-7	4	3	5	-7	-19	55	82	-10
1989	Dry	-80	55	-193	-273	-113	33	13	-9	-190	-174	-295	-233	-122
1990	Critical	-81	-56	-82	-51	-9	-7	-6	-2	0	24	23	9	-20
1991	Critical	-2	0	6	-15	-16	-2	0	4	0	2	22	44	4
1992	Critical	20	-4	14	-36	-21	-1	0	0	-1	6	-186	68	-12
1993	Above Normal	-182	-341	132	26	0	18	4	125	218	187	63	81	28
1994	Critical	84	47	-10	230	140	31	10	6	-230	77	-119	-300	-3
Average		18	14	-39	-9	76	26	10	-7	-1	-14	-53	-19	0
Wet		1	-54	-22	14	2	0	1	0	-6	-5	6	8	-5
Above Normal		-14	17	98	-15	-5	2	1	11	15	-18	-34	0	5
Below Normal		17	170	-44	-46	-22	-7	-4	-7	14	-21	-38	61	6
Dry		72	23	-75	-16	340	97	42	-17	-58	-79	-179	-135	1
Critical		7	-65	-128	6	39	36	5	-18	51	67	-20	-20	-3

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-4%	-3%	0%	1%	0%
1925	Dry	-1%	1%	-1%	-3%	-1%	0%	-2%	0%	0%	0%	0%	0%	-1%
1926	Dry	0%	0%	0%	0%	0%	0%	14%	3%	0%	0%	0%	0%	1%
1927	Wet	-2%	-1%	2%	0%	1%	0%	0%	-4%	-1%	0%	0%	0%	0%
1928	Above Normal	0%	1%	1%	-1%	-1%	0%	1%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	-4%	-3%	-1%	-1%	0%	-1%	1%	0%	1%	-1%	-1%
1930	Dry	-1%	-2%	0%	1%	0%	3%	1%	-2%	1%	-1%	1%	2%	0%
1931	Critical	1%	0%	1%	6%	15%	10%	2%	1%	12%	9%	2%	1%	5%
1932	Dry	1%	0%	0%	0%	-10%	-4%	0%	0%	0%	0%	0%	0%	-1%
1933	Critical	0%	0%	0%	0%	0%	1%	2%	-1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	4%	4%	1%	0%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	-3%	-5%	-1%	8%	3%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	-1%	-1%	-1%	0%	0%	-1%	-2%	0%	0%	0%	0%
1938	Wet	0%	7%	7%	4%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1939	Dry	3%	2%	0%	0%	-1%	0%	1%	0%	1%	-7%	-5%	-1%	-1%
1940	Above Normal	0%	0%	0%	-1%	3%	0%	0%	-5%	-2%	0%	0%	0%	0%
1941	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	-1%	0%	-5%	4%	27%	7%	0%	0%	-1%	-1%	-4%	-3%	2%
1945	Below Normal	1%	2%	0%	0%	-1%	-1%	0%	-1%	-1%	0%	0%	-1%	0%
1946	Below Normal	0%	23%	46%	0%	-2%	-6%	-2%	0%	0%	-2%	-2%	-1%	4%
1947	Dry	-1%	1%	1%	0%	-1%	-2%	-2%	0%	-3%	-3%	-4%	-2%	-1%
1948	Below Normal	-1%	0%	-1%	0%	-7%	-3%	-2%	0%	33%	10%	2%	10%	3%
1949	Dry	7%	2%	-2%	4%	85%	117%	2%	0%	-1%	1%	1%	0%	18%
1950	Below Normal	0%	-1%	-4%	-10%	-8%	0%	-2%	0%	-2%	0%	0%	0%	-2%
1951	Above Normal	-1%	14%	0%	0%	-1%	0%	0%	0%	-1%	-2%	-1%	-1%	1%
1952	Wet	0%	-5%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	5%	2%	0%	0%	0%	1%
1954	Above Normal	1%	-12%	-8%	-6%	-1%	0%	0%	3%	1%	-1%	-1%	0%	-2%
1955	Dry	1%	1%	17%	14%	2%	0%	0%	-5%	-3%	-1%	-5%	-4%	1%
1956	Wet	-1%	-1%	4%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	1%	-1%	-3%	0%	0%	-2%	0%	-2%	-1%	-1%	-1%
1958	Wet	5%	5%	2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	3%	0%
1960	Dry	2%	-1%	-9%	-6%	-5%	-2%	0%	0%	0%	2%	-2%	-2%	-2%
1961	Dry	0%	-2%	1%	2%	22%	32%	10%	0%	-1%	1%	0%	0%	5%
1962	Below Normal	0%	0%	0%	0%	4%	1%	0%	0%	0%	-3%	-2%	-1%	0%
1963	Wet	8%	-5%	-6%	10%	9%	-2%	0%	0%	0%	0%	0%	0%	1%
1964	Dry	0%	-1%	0%	0%	0%	0%	0%	0%	-3%	-2%	-3%	-2%	-1%
1965	Wet	0%	0%	4%	0%	2%	-1%	0%	-2%	-4%	-1%	0%	0%	0%
1966	Below Normal	0%	10%	5%	1%	5%	3%	1%	0%	-1%	-1%	0%	0%	2%
1967	Wet	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	0%	0%
1969	Wet	0%	0%	-7%	-3%	0%	0%	0%	0%	0%	0%	0%	1%	-1%
1970	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-8%	-8%	1%	-1%	-1%	0%	0%	0%	-1%	-1%	1%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	3%	1%	0%	0%	-3%	-2%	-1%	0%
1973	Above Normal	-1%	10%	9%	1%	0%	0%	0%	2%	0%	-3%	-2%	0%	1%
1974	Wet	0%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-3%	-2%	0%	0%	-1%	-1%	0%
1977	Critical	0%	-6%	-10%	-5%	-14%	-6%	-1%	0%	0%	1%	-2%	-3%	-4%
1978	Above Normal	2%	-2%	4%	17%	2%	3%	2%	0%	0%	0%	0%	1%	2%
1979	Below Normal	1%	0%	0%	1%	3%	1%	0%	-2%	-1%	0%	0%	0%	0%
1980	Above Normal	0%	10%	18%	5%	0%	0%	0%	0%	0%	0%	0%	0%	3%
1981	Dry	0%	0%	0%	0%	3%	34%	9%	1%	0%	0%	-1%	0%	4%
1982	Wet	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%
1985	Dry	2%	6%	1%	0%	0%	0%	0%	0%	-2%	-1%	-1%	-1%	0%
1986	Wet	0%	-2%	-2%	0%	0%	0%	3%	-1%	-1%	-1%	1%	0%	0%
1987	Dry	0%	0%	-1%	-3%	10%	30%	2%	-1%	0%	-2%	-4%	-3%	2%
1988	Critical	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1989	Dry	-1%	0%	-2%	-3%	-1%	4%	2%	0%	-3%	-2%	-3%	-2%	-1%
1990	Critical	-1%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-2%	1%	0%
1993	Above Normal	-1%	-3%	1%	4%	0%	8%	2%	37%	37%	6%	1%	1%	8%
1994	Critical	1%	0%	0%	2%	5%	1%	0%	0%	-3%	1%	-1%	-3%	0%
Average		0%	1%	1%	0%	2%	3%	1%	0%	1%	0%	-1%	0%	1%
Wet		0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	2%	3%	2%	0%	1%	0%	4%	4%	0%	0%	0%	1%
Below Normal		0%	2%	3%	-1%	-1%	0%	0%	0%	2%	0%	0%	1%	0%
Dry		1%	1%	0%	1%	8%	14%	2%	0%	-1%	-1%	-2%	-1%	2%
Critical		0%	0%	-1%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	3	1	-2	0
1924	Critical	-1	0	1	0	0	0	0	7	-190	-171	-10	76	-24
1925	Dry	-80	63	-25	-89	-1	1	0	0	-1	-5	27	-10	-10
1926	Dry	-5	0	1	0	0	0	3	-1	-22	-10	-20	-55	-9
1927	Wet	-193	-18	4	1	1	0	0	-1	-2	3	7	19	-15
1928	Above Normal	-13	17	11	-2	-1	0	0	0	0	1	-27	-5	-2
1929	Critical	6	12	-197	-82	-11	-3	0	-37	-17	-82	-36	55	-33
1930	Dry	-113	-163	3	6	1	0	1	-4	78	-96	7	140	-12
1931	Critical	156	-60	222	118	171	185	46	13	686	284	-23	47	154
1932	Dry	53	5	-5	-1	-2	1	0	0	0	0	1	-2	4
1933	Critical	-2	-1	-3	-1	1	3	13	-9	-2	1	-3	-3	-1
1934	Critical	-4	0	-2	21	11	2	1	0	0	0	0	-1	2
1935	Below Normal	-2	1	-1	0	-1	0	0	0	2	-3	-24	30	0
1936	Below Normal	19	9	-183	-11	0	1	0	0	1	-1	-17	-26	-17
1937	Below Normal	-18	39	-94	-4	-1	0	0	-2	-3	-1	-4	-9	-8
1938	Wet	23	18	1	0	0	0	0	0	0	0	12	0	5
1939	Dry	11	23	8	4	-7	2	3	0	13	-198	-193	-25	-30
1940	Above Normal	-20	-19	-2	-1	3	0	0	-3	-6	0	1	3	-4
1941	Wet	7	17	1	0	0	0	0	0	0	0	1	2	2
1942	Wet	3	5	0	0	0	0	0	0	0	-3	1	0	1
1943	Wet	2	1	0	0	0	0	0	0	0	-2	-9	6	0
1944	Dry	-93	23	-276	81	61	5	0	-2	-21	-45	-207	-198	-56
1945	Below Normal	121	70	7	-1	0	-2	-1	-3	-4	-2	-18	-45	10
1946	Below Normal	-9	539	10	0	0	-1	-1	0	-2	-30	-46	-64	33
1947	Dry	0	79	16	2	-6	-2	-3	-1	-41	-75	-110	-82	-18
1948	Below Normal	-21	-29	-25	-7	-22	0	0	0	23	26	12	442	33
1949	Dry	288	36	-55	99	888	26	5	1	-3	40	6	-35	108
1950	Below Normal	-47	-219	-146	-91	-4	0	-1	-3	-16	-26	-23	17	-47
1951	Above Normal	-72	7	0	0	0	0	0	0	-11	-13	-18	-27	-11
1952	Wet	-3	-243	-8	0	0	0	0	0	0	0	3	1	-21
1953	Wet	0	-5	-1	0	0	0	0	0	0	0	-16	8	-1
1954	Above Normal	13	-161	-144	-14	0	0	0	1	4	-8	-35	6	-28
1955	Dry	131	8	82	19	3	2	-2	-30	-28	-87	-233	-200	-28
1956	Wet	-74	-36	3	0	0	0	0	0	0	0	-12	4	-10
1957	Above Normal	2	0	55	-42	-3	0	0	-1	-2	-10	-35	-37	-6
1958	Wet	84	53	7	1	0	0	0	0	0	0	4	2	13
1959	Below Normal	3	4	2	0	0	0	0	0	-18	-22	-43	285	17
1960	Dry	6	-223	-424	-229	-8	-1	0	0	13	79	-115	-118	-85
1961	Dry	23	-155	6	50	29	28	25	-7	-24	25	-8	-14	-2
1962	Below Normal	18	-24	4	8	3	0	0	0	5	-18	-38	-25	-5
1963	Wet	8	-26	-10	22	1	0	0	0	0	1	3	13	1
1964	Dry	3	-2	1	0	0	2	-2	1	-44	-43	-85	-71	-20
1965	Wet	8	3	2	0	0	0	0	-1	-12	-5	4	6	0
1966	Below Normal	-9	24	12	1	0	0	1	0	-17	-13	-8	-14	-2
1967	Wet	-13	-6	1	0	0	0	0	0	0	0	3	1	-1
1968	Below Normal	0	-2	-3	0	0	0	0	0	-15	-13	-17	-4	-5
1969	Wet	-6	-2	-35	0	0	0	0	0	0	0	0	2	-3
1970	Wet	-3	-9	0	0	0	0	0	0	-2	0	-13	-8	-3
1971	Wet	-4	-101	-2	0	0	0	0	0	0	-8	-4	10	-9
1972	Below Normal	14	10	1	0	0	0	1	0	1	-37	-79	-74	-14
1973	Above Normal	-87	81	13	1	0	0	0	1	-1	-21	-43	8	-4
1974	Wet	-3	1	0	0	0	0	0	0	0	0	4	2	0
1975	Wet	2	3	1	1	0	0	0	0	0	0	4	3	1
1976	Critical	1	1	0	1	1	2	-46	-46	-100	-42	-176	-83	-41
1977	Critical	29	-753	-372	-202	-106	-37	-6	-9	11	-8	-16	-171	-137
1978	Above Normal	610	-81	107	10	1	2	2	1	0	0	0	32	57
1979	Below Normal	34	14	-8	5	1	0	0	-3	-1	-2	-12	-3	2
1980	Above Normal	-14	295	97	1	0	0	0	0	0	0	-1	-1	31
1981	Dry	1	-1	0	0	0	2	6	2	-6	-15	-44	-18	-6
1982	Wet	-5	4	0	0	0	0	0	0	0	0	11	2	1
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-3	0	-6	-146	-13
1985	Dry	187	12	1	2	1	0	0	-1	-38	-20	-59	-24	5
1986	Wet	4	-160	-38	-2	0	0	0	-1	-2	-41	76	-17	-15
1987	Dry	-16	59	-117	-39	15	10	-2	-7	-48	-76	-183	-130	-44
1988	Critical	-63	-16	-7	-1	-4	1	0	1	-26	-37	-14	36	-11
1989	Dry	-61	33	-66	-87	-42	1	0	-1	-51	-54	-112	-82	-44
1990	Critical	-20	-34	-17	-7	0	-1	-1	0	0	-1	-4	5	-6
1991	Critical	-1	-1	4	-8	-7	0	0	1	0	1	-10	21	0
1992	Critical	12	-3	8	-10	-3	0	0	0	-2	4	-162	90	-6
1993	Above Normal	-153	-213	48	3	0	1	0	2	4	9	-5	29	-23
1994	Critical	37	19	-5	85	11	2	1	1	-97	31	-40	-252	-17
Average		9	-16	-21	-5	13	3	1	-2	0	-11	-31	-9	-6
Wet		-8	-24	-4	1	0	0	0	0	-1	-2	3	-4	-3
Above Normal		27	-8	19	-5	0	0	0	0	-1	-4	-16	1	1
Below Normal		7	31	-30	-7	-2	0	0	-1	-3	-10	-23	36	0
Dry		21	-13	-53	-11	58	5	2	-3	-14	-36	-83	-58	-15
Critical		12	-70	-31	-7	5	13	1	-7	22	-2	-41	-15	-10

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-11%	-8%	0%	2%	-1%
1925	Dry	-2%	2%	-1%	-6%	0%	0%	0%	0%	0%	0%	1%	0%	-1%
1926	Dry	0%	0%	0%	0%	0%	0%	2%	0%	-3%	-1%	-1%	-2%	0%
1927	Wet	-7%	-3%	1%	0%	1%	0%	0%	0%	-1%	1%	1%	1%	-1%
1928	Above Normal	-1%	2%	2%	-1%	0%	0%	0%	0%	0%	0%	-3%	0%	0%
1929	Critical	0%	0%	-11%	-5%	-2%	-1%	0%	-4%	-1%	-4%	-1%	2%	-2%
1930	Dry	-3%	-4%	0%	2%	0%	0%	0%	-1%	10%	-7%	0%	5%	0%
1931	Critical	5%	-2%	10%	8%	19%	20%	4%	1%	36%	14%	-1%	1%	10%
1932	Dry	1%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	1%	3%	-1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	4%	4%	1%	0%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	1%	-1%	-2%	2%	0%
1936	Below Normal	1%	0%	-7%	-4%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
1937	Below Normal	-1%	2%	-4%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	-1%
1938	Wet	1%	4%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%
1939	Dry	3%	3%	1%	0%	-1%	1%	1%	0%	1%	-17%	-12%	-1%	-2%
1940	Above Normal	-1%	-1%	0%	0%	2%	0%	0%	-1%	-2%	0%	0%	0%	0%
1941	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1944	Dry	-4%	1%	-13%	6%	20%	2%	0%	-1%	-3%	-5%	-12%	-8%	-1%
1945	Below Normal	5%	4%	1%	0%	0%	-1%	-1%	-1%	-1%	0%	-1%	-2%	0%
1946	Below Normal	0%	56%	5%	0%	0%	0%	-1%	0%	0%	-5%	-3%	-3%	4%
1947	Dry	0%	4%	2%	0%	-1%	-1%	-1%	0%	-6%	-8%	-8%	-4%	-2%
1948	Below Normal	-1%	-1%	-1%	-1%	-6%	0%	0%	0%	12%	6%	1%	30%	3%
1949	Dry	14%	2%	-3%	6%	189%	14%	2%	0%	-1%	5%	1%	-2%	19%
1950	Below Normal	-2%	-9%	-6%	-15%	-2%	0%	-1%	-1%	-5%	-4%	-2%	1%	-4%
1951	Above Normal	-3%	3%	0%	0%	0%	0%	0%	0%	-3%	-3%	-2%	-2%	-1%
1952	Wet	0%	-13%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	1%	0%
1954	Above Normal	2%	-21%	-13%	-4%	0%	0%	0%	0%	1%	-2%	-4%	0%	-3%
1955	Dry	6%	0%	17%	8%	1%	0%	0%	-7%	-4%	-8%	-13%	-7%	-1%
1956	Wet	-3%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1957	Above Normal	0%	0%	4%	-3%	-1%	0%	0%	0%	-1%	-2%	-3%	-2%	-1%
1958	Wet	10%	8%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%	2%
1959	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-3%	-4%	-4%	13%	0%
1960	Dry	0%	-9%	-20%	-12%	-2%	0%	0%	0%	2%	6%	-8%	-5%	-4%
1961	Dry	1%	-7%	0%	4%	9%	13%	8%	-2%	-2%	3%	-1%	-1%	2%
1962	Below Normal	1%	-1%	0%	1%	1%	0%	0%	0%	1%	-4%	-4%	-1%	0%
1963	Wet	2%	-7%	-4%	8%	1%	0%	0%	0%	0%	0%	0%	1%	0%
1964	Dry	0%	0%	0%	0%	0%	1%	0%	0%	-6%	-4%	-6%	-3%	-2%
1965	Wet	0%	0%	1%	0%	0%	0%	0%	-1%	-4%	-1%	0%	0%	0%
1966	Below Normal	0%	7%	4%	0%	0%	0%	0%	0%	-2%	-2%	-1%	-1%	0%
1967	Wet	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	-2%	0%	-1%
1969	Wet	0%	0%	-7%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%
1970	Wet	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1971	Wet	0%	-12%	-1%	0%	0%	0%	0%	0%	0%	-2%	0%	2%	-1%
1972	Below Normal	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	-6%	-3%	-1%
1973	Above Normal	-3%	13%	6%	0%	0%	0%	0%	0%	0%	-5%	-3%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-6%	-3%	-4%	-2%	-6%	-3%	-2%
1977	Critical	1%	-25%	-21%	-10%	-20%	-5%	-1%	0%	0%	0%	-1%	-5%	-7%
1978	Above Normal	16%	-2%	6%	5%	1%	1%	1%	0%	0%	0%	0%	3%	3%
1979	Below Normal	2%	1%	0%	1%	0%	0%	0%	-2%	0%	0%	-1%	0%	0%
1980	Above Normal	0%	22%	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%
1981	Dry	0%	0%	0%	0%	0%	1%	3%	1%	-1%	-1%	-3%	-1%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%	-6%	-1%
1985	Dry	9%	5%	1%	0%	0%	0%	0%	0%	-4%	-2%	-4%	-1%	0%
1986	Wet	0%	-7%	-3%	0%	0%	0%	0%	-1%	-1%	-8%	7%	-1%	-1%
1987	Dry	-1%	2%	-5%	-3%	4%	5%	-1%	-1%	-4%	-6%	-11%	-5%	-2%
1988	Critical	-2%	-1%	-1%	0%	-1%	0%	0%	0%	-2%	-2%	-1%	1%	-1%
1989	Dry	-2%	1%	-3%	-6%	-2%	0%	0%	0%	-7%	-5%	-8%	-4%	-3%
1990	Critical	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-6%	3%	0%
1993	Above Normal	-4%	-6%	2%	1%	0%	0%	0%	1%	2%	3%	0%	2%	0%
1994	Critical	2%	1%	0%	6%	3%	1%	0%	0%	-8%	3%	-3%	-10%	0%
Average		1%	0%	-1%	0%	3%	1%	0%	0%	0%	-1%	-2%	0%	0%
Wet		0%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		1%	1%	3%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	0%
Below Normal		0%	4%	-1%	-1%	0%	0%	0%	0%	0%	-2%	-2%	2%	0%
Dry		2%	0%	-2%	0%	13%	2%	1%	-1%	-2%	-3%	-5%	-2%	0%
Critical		1%	-2%	-2%	0%	0%	1%	0%	-1%	1%	0%	-2%	-1%	0%

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	-6	-6	-3	-1
1924	Critical	0	0	1	-1	-1	0	0	5	-10	-6	79	79	12
1925	Dry	-96	95	-123	-167	-2	1	1	1	0	1	-22	-41	-29
1926	Dry	-7	-1	0	0	0	0	9	-1	7	15	42	114	15
1927	Wet	-11	-29	8	4	1	0	0	-3	-2	0	0	3	-2
1928	Above Normal	6	20	19	-2	-3	0	0	0	3	1	36	33	9
1929	Critical	2	20	-10	-104	-35	-6	-1	15	64	64	160	145	26
1930	Dry	-113	-148	33	23	2	2	0	0	-58	55	187	140	10
1931	Critical	-29	40	-225	239	490	191	48	14	397	451	136	59	151
1932	Dry	47	-5	-12	-1	-4	7	1	0	0	0	1	-3	3
1933	Critical	-3	-1	-5	-1	1	6	16	-3	-1	0	-3	-1	0
1934	Critical	-3	2	-5	76	34	4	1	0	0	0	-1	-1	9
1935	Below Normal	-2	3	-2	-2	-1	0	0	0	-2	-4	27	22	3
1936	Below Normal	19	10	-163	-69	-3	0	0	0	0	6	29	9	-13
1937	Below Normal	-16	-49	42	16	-2	0	0	-3	0	1	7	1	0
1938	Wet	-62	26	9	-1	-2	0	0	0	0	0	-13	-6	-4
1939	Dry	13	25	14	8	-3	-3	1	7	58	25	49	48	20
1940	Above Normal	16	13	6	-2	4	1	0	-6	-3	-1	1	1	2
1941	Wet	2	-8	3	0	0	1	0	0	0	0	-2	1	0
1942	Wet	3	7	1	0	0	0	0	0	0	-1	-5	-2	0
1943	Wet	2	1	0	0	0	0	0	0	0	4	15	14	3
1944	Dry	-2	69	-194	297	284	28	2	-12	-31	90	-9	-117	34
1945	Below Normal	94	116	17	10	2	-5	-3	-1	0	6	26	5	22
1946	Below Normal	-16	622	121	1	2	1	-1	0	6	2	-1	-13	60
1947	Dry	-74	40	36	4	4	-4	-5	-1	-22	58	29	-70	0
1948	Below Normal	-54	0	-24	-15	64	2	0	0	10	115	141	243	40
1949	Dry	387	230	-150	254	761	232	9	1	-3	-104	-19	88	141
1950	Below Normal	154	352	-147	-211	-26	-2	-5	-6	-6	52	76	46	23
1951	Above Normal	-21	24	0	0	-3	-1	0	0	-5	-2	9	-3	0
1952	Wet	-11	-268	-73	0	0	-1	0	0	0	0	2	1	-29
1953	Wet	-1	-7	-3	0	0	0	0	0	1	0	34	23	4
1954	Above Normal	17	-205	-290	-67	-4	0	0	4	4	1	36	20	-40
1955	Dry	-36	-3	133	51	6	2	0	-16	-23	147	8	-157	9
1956	Wet	-69	-34	0	0	0	-1	-1	0	0	0	22	12	-6
1957	Above Normal	2	0	12	-12	-22	-1	0	-1	2	-1	21	1	0
1958	Wet	86	89	23	2	0	-1	0	0	0	0	3	3	17
1959	Below Normal	3	5	2	1	0	0	0	0	0	0	30	69	9
1960	Dry	382	433	-298	-282	-31	-4	-1	0	-29	2	-19	-106	4
1961	Dry	72	-52	86	87	87	37	27	-8	-24	1	-5	-29	23
1962	Below Normal	14	-16	19	13	8	1	0	0	-2	4	11	12	5
1963	Wet	-12	-32	-52	34	14	0	0	0	0	0	0	2	-4
1964	Dry	9	-3	-2	-1	-1	0	1	2	-20	18	11	-61	-4
1965	Wet	-35	-2	4	0	-1	-1	0	-5	-4	6	19	11	-1
1966	Below Normal	-6	57	19	4	0	1	1	1	-7	-2	9	1	7
1967	Wet	-2	-8	2	1	0	0	0	0	0	0	2	2	0
1968	Below Normal	0	-4	-4	-1	0	0	0	0	-1	1	7	1	0
1969	Wet	2	3	-62	-6	-1	0	0	0	0	0	0	3	-5
1970	Wet	-3	-12	-2	0	0	0	0	-1	4	0	14	21	2
1971	Wet	11	-127	-22	0	0	0	0	0	0	-2	-25	6	-13
1972	Below Normal	17	11	3	0	0	1	1	2	19	0	28	5	7
1973	Above Normal	-58	103	62	2	-1	-1	0	0	2	-3	-3	0	9
1974	Wet	-3	5	0	0	0	0	0	0	0	-1	4	4	1
1975	Wet	1	3	1	1	0	0	0	0	0	0	3	5	1
1976	Critical	1	1	1	3	2	1	-3	-33	65	130	83	18	22
1977	Critical	41	208	98	42	133	-34	-13	-6	-45	100	-180	-298	4
1978	Above Normal	73	-201	360	133	2	14	12	3	0	0	-1	31	36
1979	Below Normal	37	16	-7	4	2	0	1	-3	0	5	11	7	6
1980	Above Normal	-11	329	219	10	-1	0	0	0	0	0	-1	-1	45
1981	Dry	-3	-3	-1	1	1	4	5	1	8	-2	1	-17	0
1982	Wet	3	17	1	0	-1	0	0	0	0	0	9	3	3
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	1	0	10	-26	-1
1985	Dry	54	63	3	3	3	1	0	-1	-21	3	5	-38	6
1986	Wet	-2	-32	-54	-7	1	0	-1	-1	0	-3	-101	-60	-22
1987	Dry	-16	-64	121	-180	38	66	5	3	66	105	17	-77	7
1988	Critical	-13	-13	-13	-4	3	0	0	1	13	51	91	69	15
1989	Dry	-59	71	-107	-154	-47	1	1	0	-29	-7	2	-73	-33
1990	Critical	-47	6	-21	-16	-4	-1	0	0	0	20	22	7	-3
1991	Critical	-2	0	3	-8	-7	-1	0	1	0	1	12	20	1
1992	Critical	11	-4	13	-21	-18	-1	0	0	1	3	-30	61	1
1993	Above Normal	-122	-185	107	30	0	1	0	2	0	6	34	46	-7
1994	Critical	31	16	-16	12	24	3	1	1	-53	26	-5	58	8
Average		8	22	-7	0	24	7	1	-1	5	20	16	5	8
Wet		-5	-19	-10	1	1	0	0	0	0	0	0	1	-3
Above Normal		-10	-10	49	9	-3	1	1	0	0	0	13	13	5
Below Normal		17	80	-9	-18	3	0	-1	-1	1	13	28	29	12
Dry		35	47	-29	-4	69	23	4	-2	-8	26	17	-25	13
Critical		-1	23	-15	18	52	14	4	-1	36	70	30	18	21

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	5%	4%	1%
1925	Dry	-4%	4%	-5%	-7%	0%	0%	1%	0%	0%	0%	-2%	-2%	-1%
1926	Dry	0%	0%	0%	0%	0%	0%	4%	0%	1%	2%	3%	5%	1%
1927	Wet	0%	-2%	2%	1%	1%	0%	0%	-1%	-1%	0%	0%	0%	0%
1928	Above Normal	0%	2%	2%	0%	-1%	0%	0%	0%	1%	0%	4%	2%	1%
1929	Critical	0%	1%	0%	-5%	-2%	-1%	0%	3%	8%	6%	10%	6%	2%
1930	Dry	-5%	-5%	2%	3%	1%	1%	0%	0%	-9%	5%	14%	6%	1%
1931	Critical	-1%	2%	-9%	11%	49%	29%	6%	1%	31%	29%	8%	3%	13%
1932	Dry	2%	0%	-1%	0%	-1%	3%	1%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	1%	5%	-1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	7%	8%	1%	0%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	2%	1%	0%
1936	Below Normal	1%	0%	-6%	-8%	-1%	0%	0%	0%	0%	1%	3%	0%	-1%
1937	Below Normal	-1%	-2%	2%	1%	0%	0%	0%	-1%	0%	0%	1%	0%	0%
1938	Wet	-3%	2%	4%	0%	-1%	0%	0%	0%	0%	0%	-2%	-1%	0%
1939	Dry	5%	3%	1%	1%	0%	-1%	0%	2%	7%	2%	3%	2%	2%
1940	Above Normal	1%	1%	0%	0%	2%	0%	0%	-3%	-1%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	1%	0%
1944	Dry	0%	3%	-7%	15%	34%	11%	1%	-3%	-5%	9%	-1%	-5%	4%
1945	Below Normal	4%	5%	1%	1%	0%	-2%	-1%	0%	0%	1%	3%	0%	1%
1946	Below Normal	-1%	43%	39%	0%	1%	0%	-1%	0%	2%	0%	0%	-1%	7%
1947	Dry	-3%	2%	2%	0%	0%	-1%	-2%	0%	-3%	5%	2%	-3%	0%
1948	Below Normal	-2%	0%	-1%	-1%	7%	1%	0%	0%	5%	31%	13%	12%	5%
1949	Dry	19%	10%	-6%	13%	75%	84%	4%	0%	-1%	-9%	-1%	4%	16%
1950	Below Normal	7%	16%	-6%	-18%	-8%	-1%	-2%	-3%	-2%	11%	7%	2%	0%
1951	Above Normal	-1%	5%	0%	0%	-1%	-1%	0%	0%	-1%	-1%	1%	0%	0%
1952	Wet	0%	-10%	-9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%
1953	Wet	0%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%	4%	2%	0%
1954	Above Normal	2%	-17%	-16%	-7%	-2%	0%	0%	2%	1%	0%	4%	1%	-3%
1955	Dry	-1%	0%	12%	15%	2%	0%	0%	-4%	-4%	16%	1%	-7%	2%
1956	Wet	-3%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	2%	2%	0%
1957	Above Normal	1%	0%	1%	-1%	-3%	0%	0%	0%	1%	0%	2%	0%	0%
1958	Wet	6%	9%	3%	1%	0%	0%	0%	0%	0%	0%	1%	1%	2%
1959	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	1%
1960	Dry	16%	19%	-12%	-11%	-3%	-2%	0%	0%	-4%	0%	-1%	-5%	0%
1961	Dry	3%	-2%	4%	5%	8%	12%	10%	-2%	-3%	0%	0%	-1%	3%
1962	Below Normal	0%	-1%	1%	1%	1%	0%	0%	0%	-1%	1%	1%	0%	0%
1963	Wet	-1%	-7%	-9%	9%	6%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-3%	1%	1%	-3%	0%
1965	Wet	-1%	0%	1%	0%	0%	0%	0%	-2%	-2%	2%	2%	1%	0%
1966	Below Normal	0%	5%	5%	1%	0%	0%	0%	0%	-1%	0%	1%	0%	1%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1969	Wet	0%	0%	-6%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1970	Wet	-1%	-2%	-1%	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%
1971	Wet	0%	-10%	-7%	0%	0%	0%	0%	0%	0%	-1%	-2%	1%	-2%
1972	Below Normal	2%	1%	0%	0%	0%	1%	0%	1%	3%	0%	3%	0%	1%
1973	Above Normal	-2%	9%	16%	1%	0%	0%	0%	0%	1%	-1%	0%	0%	2%
1974	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-3%	4%	6%	4%	1%	1%
1977	Critical	2%	8%	4%	2%	18%	-7%	-2%	-1%	-2%	6%	-10%	-12%	0%
1978	Above Normal	3%	-7%	16%	27%	1%	5%	5%	1%	0%	0%	0%	2%	4%
1979	Below Normal	2%	1%	0%	0%	1%	0%	0%	-1%	0%	1%	1%	0%	0%
1980	Above Normal	0%	18%	30%	4%	0%	0%	0%	0%	0%	0%	0%	0%	4%
1981	Dry	0%	0%	0%	0%	1%	2%	2%	0%	1%	0%	0%	-1%	0%
1982	Wet	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%
1985	Dry	2%	8%	1%	1%	0%	0%	0%	0%	-3%	0%	0%	-1%	1%
1986	Wet	0%	-1%	-3%	-1%	0%	0%	-1%	0%	0%	-1%	-11%	-4%	-2%
1987	Dry	-1%	-3%	4%	-9%	4%	21%	2%	1%	8%	9%	1%	-3%	3%
1988	Critical	0%	-1%	-1%	0%	1%	0%	0%	0%	2%	4%	5%	3%	1%
1989	Dry	-2%	3%	-5%	-7%	-3%	0%	0%	0%	-4%	-1%	0%	-3%	-2%
1990	Critical	-2%	0%	-1%	-1%	-1%	0%	0%	0%	0%	1%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1992	Critical	0%	0%	0%	-1%	-2%	0%	0%	0%	0%	0%	-1%	2%	0%
1993	Above Normal	-4%	-7%	5%	6%	0%	0%	0%	1%	0%	3%	4%	3%	1%
1994	Critical	1%	1%	-1%	1%	3%	1%	0%	0%	-5%	1%	0%	2%	0%
Average		1%	1%	1%	1%	3%	2%	0%	0%	0%	2%	1%	0%	1%
Wet		0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	5%	3%	-1%	0%	0%	0%	0%	0%	2%	1%	1%
Below Normal		1%	5%	2%	-2%	0%	0%	0%	0%	0%	3%	3%	1%	1%
Dry		2%	3%	-1%	1%	7%	8%	1%	0%	-1%	3%	1%	-1%	2%
Critical		0%	1%	-1%	1%	6%	2%	1%	0%	3%	4%	2%	1%	2%

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	1	1	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	1	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	1	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	1	1	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	-1	0	-1	0	0	0	0	0	-1	0	0
1978	Above Normal	0	0	0	0	0	1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	1	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	-1	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	1	1	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	1	0	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	0	0	0	0	-1	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	Above Normal	0	0	0	0	0	1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-2	9	11	2	2
1925	Dry	0	0	0	0	1	0	0	0	0	4	-9	-5	-1
1926	Dry	0	0	0	0	0	0	0	0	0	0	21	6	2
1927	Wet	0	0	0	0	0	2	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	-1	-1	0	0	0	0	0	-1	0	0
1929	Critical	0	0	0	0	0	0	0	0	4	-13	25	13	2
1930	Dry	0	0	0	0	0	0	0	-1	-37	-36	47	8	-2
1931	Critical	0	0	-1	0	-1	0	8	8	3	0	35	15	6
1932	Dry	0	0	0	0	1	2	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	-4	0	0	0	2	2	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	1	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	-1	0	0	0	1	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	-1	-2	-3	0	-1
1940	Above Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	-1	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	-1	2	0	0	0	0	-1	-3	-1	0
1945	Below Normal	0	0	0	0	1	-1	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	2	0	0	0	-4	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	-1	0	0	0
1949	Dry	0	0	0	1	0	-1	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	1	1	0	0	-2	-1	0
1951	Above Normal	0	0	0	0	1	3	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	-3	-6	-1	-1
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	1	0	0	0	0	0	0	-1	0	0
1960	Dry	0	1	0	-1	0	0	0	0	1	0	-1	0	0
1961	Dry	0	0	0	0	0	2	2	3	0	0	0	-2	0
1962	Below Normal	0	0	0	0	0	-2	0	0	0	0	1	0	0
1963	Wet	0	0	0	-1	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	-1	0	0
1965	Wet	0	0	0	0	1	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	-1	0	0	0	0	-2	-1	0
1970	Wet	-1	0	-1	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	-1	-1	-5	-1	-1
1973	Above Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	1	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	-1	0	0	0	-2	0	22	3	13	4	3
1977	Critical	0	0	1	0	0	0	-9	-8	-10	3	-1	-15	-3
1978	Above Normal	-42	1	0	0	0	0	0	0	0	0	0	0	-3
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	-1	0	2	0	0	0	0	0	0
1981	Dry	0	0	0	-1	1	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	1	0	0	0	0	0	0	3	1	0
1983	Wet	1	0	0	1	1	0	-1	0	0	1	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	-1	0	0	0	0	0	0	0
1986	Wet	0	0	0	1	0	0	5	0	1	0	-2	-1	0
1987	Dry	-1	-1	1	0	0	-1	-3	-2	8	-2	-6	-1	-1
1988	Critical	0	0	0	0	0	0	-1	-1	18	38	15	2	6
1989	Dry	-1	0	0	0	0	0	0	0	0	-1	-1	0	0
1990	Critical	0	0	-1	0	0	0	0	0	1	2	3	1	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	3	1	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	-1	-3	0
1993	Above Normal	-7	-3	0	0	0	0	0	0	0	0	0	0	-1
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		-1	0	0	0	0	0	0	0	0	0	2	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		-5	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	-2	-3	2	0	0
Critical		0	0	0	0	0	0	-1	0	3	3	9	2	1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-2%	-1%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	1%	-2%	4%	2%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-5%	-5%	8%	1%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	5%	2%	1%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	2%	1%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%	0%	-2%	0%
1978	Above Normal	-6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	3%	6%	3%	0%	1%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%

Shasta Lake Water Resources Investigation Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm) Alternative CP2 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	678	655	764	805	659	556	361	355	340	531	521	525	562
1923	Below Normal	556	576	651	568	546	735	380	380	562	635	539	500	552
1924	Critical	523	578	780	825	994	1,014	708	671	707	678	651	631	730
1925	Dry	669	658	812	899	908	952	444	418	654	674	624	588	692
1926	Dry	617	633	814	864	995	1,005	595	549	705	686	635	595	724
1927	Wet	641	610	807	856	776	796	421	395	647	667	596	559	647
1928	Above Normal	542	544	766	784	909	511	426	458	679	678	621	583	625
1929	Critical	594	620	808	827	994	1,005	641	593	704	687	646	606	727
1930	Dry	659	662	855	904	998	1,002	633	589	706	685	643	600	745
1931	Critical	655	657	849	908	998	1,011	745	702	709	683	653	629	767
1932	Dry	684	695	750	845	749	897	569	507	671	662	610	580	685
1933	Critical	602	621	824	878	997	1,003	639	593	700	681	636	608	732
1934	Critical	646	676	824	883	1,000	1,006	727	668	708	680	652	631	758
1935	Below Normal	682	688	846	819	1,016	890	418	412	642	633	606	573	685
1936	Below Normal	587	620	829	846	562	336	361	414	598	646	540	530	573
1937	Below Normal	543	590	787	771	433	383	282	279	592	637	540	529	530
1938	Wet	555	555	523	565	375	329	259	255	254	384	356	351	397
1939	Dry	417	510	730	763	839	819	507	507	703	682	629	578	640
1940	Above Normal	597	637	828	735	736	343	333	382	538	637	592	532	574
1941	Wet	551	580	645	629	419	310	263	268	423	488	485	508	464
1942	Wet	503	524	643	448	299	419	317	281	414	466	372	362	421
1943	Wet	489	500	654	365	268	305	298	379	458	622	520	522	448
1944	Dry	529	533	717	753	816	796	429	465	647	662	618	592	630
1945	Below Normal	587	595	780	780	501	351	388	373	511	603	506	516	541
1946	Below Normal	496	554	495	565	461	498	398	379	540	651	589	555	515
1947	Dry	536	559	706	746	843	996	624	581	688	692	647	608	685
1948	Below Normal	618	630	800	850	995	1,003	610	554	635	643	620	598	713
1949	Dry	617	637	815	869	996	956	634	605	659	682	637	610	726
1950	Below Normal	637	633	801	852	995	993	547	456	596	670	633	593	701
1951	Above Normal	619	630	386	324	254	444	396	262	528	660	623	595	477
1952	Wet	590	617	755	571	625	425	230	205	293	386	353	365	451
1953	Wet	532	550	726	611	636	906	378	348	528	616	608	579	585
1954	Above Normal	582	622	786	807	945	982	522	491	665	679	634	608	694
1955	Dry	619	640	778	770	992	1,002	653	603	703	702	657	618	728
1956	Wet	658	665	705	371	359	366	385	377	412	491	477	431	475
1957	Above Normal	509	570	756	777	898	944	386	360	566	653	612	576	634
1958	Wet	567	620	777	789	745	475	209	190	332	434	363	364	489
1959	Below Normal	519	562	720	751	720	839	472	484	692	688	641	579	639
1960	Dry	616	663	820	840	948	1,002	635	587	707	698	672	642	736
1961	Dry	698	691	836	915	1,023	1,003	682	646	708	704	694	665	772
1962	Below Normal	717	702	830	947	741	735	509	483	696	670	624	594	688
1963	Wet	633	681	834	859	855	941	455	422	597	642	600	565	674
1964	Dry	589	611	825	826	994	1,004	633	592	703	692	654	617	728
1965	Wet	648	671	751	462	394	514	354	352	483	638	464	481	518
1966	Below Normal	543	466	613	646	605	871	502	507	702	700	661	630	620
1967	Wet	632	689	758	777	917	959	267	225	295	307	341	348	510
1968	Below Normal	494	577	740	763	743	920	458	457	685	693	636	604	647
1969	Wet	616	648	795	654	375	399	286	242	244	389	365	370	449
1970	Wet	409	506	627	282	342	367	365	402	491	641	609	561	467
1971	Wet	549	615	788	765	928	849	380	373	562	627	611	579	636
1972	Below Normal	553	637	802	821	939	1,003	586	543	705	697	648	625	713
1973	Above Normal	635	635	803	846	702	614	434	442	524	652	533	517	611
1974	Wet	503	519	619	525	613	319	368	395	447	588	501	473	489
1975	Wet	433	488	711	730	344	319	379	377	437	577	492	508	483
1976	Critical	430	513	766	777	925	1,005	633	582	706	703	644	631	693
1977	Critical	659	677	825	888	996	1,010	700	640	711	697	715	728	771
1978	Above Normal	762	758	868	771	743	678	384	320	414	556	495	452	600
1979	Below Normal	585	525	755	670	362	324	390	306	449	655	539	541	509
1980	Above Normal	519	563	774	422	343	395	362	363	383	465	465	495	462
1981	Dry	482	503	734	751	907	867	486	458	696	673	646	610	651
1982	Wet	589	638	794	728	290	305	224	212	368	422	346	250	430
1983	Wet	204	267	379	347	324	258	293	266	242	229	190	235	269
1984	Wet	352	206	303	334	224	365	370	365	532	634	537	464	391
1985	Dry	448	502	782	775	833	887	567	514	692	702	620	570	658
1986	Wet	581	590	770	825	460	311	243	229	394	608	495	446	496
1987	Dry	437	441	719	777	988	920	608	568	706	703	665	631	680
1988	Critical	649	666	823	876	996	1,010	691	644	709	705	711	669	762
1989	Dry	742	708	836	937	1,171	1,013	659	626	707	672	666	602	778
1990	Critical	690	696	843	948	1,157	1,015	698	641	711	695	687	667	787
1991	Critical	699	690	861	990	1,262	998	686	649	709	700	695	700	803
1992	Critical	735	733	895	1,020	987	1,003	710	813	772	699	708	722	816
1993	Above Normal	794	800	916	700	764	845	543	539	484	570	549	517	668
1994	Critical	573	619	865	961	1,001	1,011	662	617	751	715	708	689	764
Average		581	601	753	742	746	729	477	455	579	623	576	552	618
Wet		535	559	684	595	503	468	321	312	422	517	461	444	485
Above Normal		624	641	765	697	695	631	415	397	512	608	564	540	591
Below Normal		580	597	746	761	687	706	450	431	615	659	594	569	616
Dry		585	603	783	827	937	945	585	551	691	686	645	606	704
Critical		621	646	830	898	1,025	1,008	687	651	716	694	676	659	759

Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	1	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	-2	-1	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	1	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	-1	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	1	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	3	1	0	0	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-1	0	0	0	0	0	0
1977	Critical	0	0	0	0	0	0	-4	-6	0	-1	0	0	-1
1978	Above Normal	0	0	0	0	0	1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	1	0	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	1	-1	-1	0
1924	Critical	0	0	0	0	0	0	0	0	-8	-13	3	19	0
1925	Dry	-1	-13	14	-75	-31	3	10	4	-1	-3	-3	-5	-8
1926	Dry	-4	-1	0	0	0	0	1	-3	-6	0	5	15	1
1927	Wet	3	-15	0	2	0	-1	-1	6	1	0	0	0	0
1928	Above Normal	2	2	5	2	-1	0	-1	-2	-2	1	2	11	1
1929	Critical	5	3	0	-16	-24	-8	-2	-10	-23	-12	12	37	-3
1930	Dry	3	-41	-12	15	3	-5	-3	2	22	2	25	45	5
1931	Critical	18	5	-18	-18	131	72	46	21	35	139	67	20	43
1932	Dry	14	6	-5	-1	21	20	4	1	0	0	0	0	5
1933	Critical	-1	0	-1	-1	0	-1	-6	3	0	0	0	-1	-1
1934	Critical	-1	-2	0	6	21	8	3	1	0	0	0	0	3
1935	Below Normal	0	0	1	-1	-1	-1	-1	0	8	1	3	7	1
1936	Below Normal	6	3	-25	-44	-7	-4	0	-1	0	0	3	5	-5
1937	Below Normal	-3	-4	-7	18	8	0	-2	4	3	0	1	1	1
1938	Wet	-7	3	7	-8	-1	0	7	-1	0	0	1	-1	0
1939	Dry	0	3	5	3	1	1	1	-1	2	7	-2	22	4
1940	Above Normal	6	2	3	0	2	1	0	9	3	-1	0	0	2
1941	Wet	0	-1	-1	0	1	5	1	0	0	0	0	0	0
1942	Wet	0	1	1	0	0	0	0	0	-1	-4	-3	-1	0
1943	Wet	0	0	0	0	0	0	-1	-2	-1	-2	-1	3	0
1944	Dry	-2	6	-14	3	152	26	2	5	-5	5	10	-33	13
1945	Below Normal	4	39	11	3	2	-15	-5	-1	-1	-1	1	2	3
1946	Below Normal	-4	84	78	2	8	0	-2	-2	-2	0	-1	-1	13
1947	Dry	-13	1	15	3	3	0	1	-1	-3	8	25	-8	2
1948	Below Normal	-15	-5	3	-7	-27	-10	-1	0	6	5	30	56	3
1949	Dry	98	62	5	-21	207	114	3	2	1	-19	-26	15	37
1950	Below Normal	38	50	55	-67	-21	-2	0	-5	-3	-8	9	16	5
1951	Above Normal	-2	5	0	0	-32	-6	0	0	-1	-3	0	3	-3
1952	Wet	-2	-46	-58	-1	0	-1	0	0	0	0	0	0	-9
1953	Wet	0	-1	-2	0	0	0	0	0	1	0	4	10	1
1954	Above Normal	4	-25	-92	-65	-6	-1	-1	24	-3	-1	3	11	-13
1955	Dry	-2	-4	27	24	5	2	0	-1	-5	7	20	-38	3
1956	Wet	-28	-12	-3	0	-1	-8	-3	-1	1	0	1	5	-4
1957	Above Normal	1	0	-1	-4	-8	-1	0	0	-1	0	1	5	-1
1958	Wet	12	19	12	2	-4	-5	-17	-4	0	0	1	1	1
1959	Below Normal	0	1	1	1	1	0	-1	0	0	-1	3	22	2
1960	Dry	73	79	44	-133	-29	-5	-1	0	1	-4	0	-27	0
1961	Dry	0	6	-2	56	40	35	17	8	-2	-2	0	-8	12
1962	Below Normal	0	1	-2	13	4	1	0	0	2	1	4	9	3
1963	Wet	-16	-7	-23	-1	8	0	0	0	0	0	0	0	-3
1964	Dry	2	0	-1	-1	1	1	0	0	-3	3	13	-8	1
1965	Wet	-10	-2	1	0	-4	-4	-2	23	2	-2	2	3	1
1966	Below Normal	0	13	8	2	-4	-2	0	0	0	-2	1	2	1
1967	Wet	-1	3	1	1	-1	-1	2	1	0	0	0	1	1
1968	Below Normal	0	0	-1	0	1	0	0	0	0	0	1	2	0
1969	Wet	0	1	-12	-6	2	0	0	0	0	0	0	0	-1
1970	Wet	0	-1	-1	0	0	-1	1	-2	-1	1	1	6	0
1971	Wet	5	-16	-15	0	1	1	0	0	1	0	-3	-2	-3
1972	Below Normal	3	3	2	0	0	0	0	1	1	1	-1	7	1
1973	Above Normal	-14	9	28	4	-6	-3	0	0	-3	-3	-3	0	1
1974	Wet	0	1	0	0	-6	-4	0	0	0	0	0	1	-1
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	1	1	1	-3	-5	1	21	21	-5	3
1977	Critical	8	23	48	34	-100	-136	-54	-22	-9	2	-5	-69	-23
1978	Above Normal	-60	51	16	111	0	40	50	21	1	1	1	4	20
1979	Below Normal	10	5	0	-1	1	0	-2	-6	-2	-2	0	1	0
1980	Above Normal	-2	51	82	14	8	0	0	2	-1	0	0	0	13
1981	Dry	0	-1	-1	0	-2	-4	-4	-1	0	1	-2	-4	-1
1982	Wet	-2	6	1	0	-6	-3	0	0	0	0	1	1	0
1983	Wet	0	0	0	0	0	0	-1	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-2	0	0	-3	0
1985	Dry	2	27	3	1	1	0	0	0	-3	-2	6	-8	2
1986	Wet	-2	-7	-12	-6	-1	0	-10	-2	1	-44	-15	-19	-10
1987	Dry	-6	-6	9	29	-40	7	-11	-6	-4	18	11	-14	-1
1988	Critical	-11	-2	-4	-3	-14	-16	-5	-1	-11	-2	19	22	-2
1989	Dry	2	-5	18	-56	-43	-6	0	0	-3	-5	8	-12	-9
1990	Critical	-14	-4	1	-7	-3	0	1	1	1	5	5	2	-1
1991	Critical	1	-1	1	0	-2	-1	0	0	0	0	2	2	0
1992	Critical	4	2	0	3	-8	-1	0	0	0	0	-3	-8	-1
1993	Above Normal	12	-64	-13	20	0	1	0	7	8	-7	-2	9	-2
1994	Critical	9	6	-2	-1	5	3	1	0	-6	-4	17	-12	1
Average		2	-4	2	-2	3	1	0	1	0	1	4	2	1
Wet		-2	-4	-5	-1	-1	-1	-1	1	0	-2	0	0	-1
Above Normal		-5	3	3	8	-4	3	5	6	0	-1	0	4	2
Below Normal		3	14	9	-6	-3	-2	-1	-1	1	0	4	9	2
Dry		10	8	7	-10	18	12	1	1	-1	1	6	-4	4
Critical		1	3	2	0	1	-7	-2	-1	-2	11	11	1	2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake)
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-3%	1%	3%	0%
1925	Dry	0%	-2%	2%	-9%	-5%	1%	3%	1%	0%	-1%	-1%	-1%	-1%
1926	Dry	-1%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	1%	3%	0%
1927	Wet	0%	-3%	0%	1%	0%	0%	0%	2%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	2%	0%	0%	0%	0%	-1%	-1%	0%	1%	2%	0%
1929	Critical	1%	0%	0%	-2%	-3%	-1%	0%	-2%	-5%	-3%	2%	6%	-1%
1930	Dry	0%	-5%	-1%	3%	1%	-2%	-1%	1%	7%	0%	6%	7%	1%
1931	Critical	2%	1%	-2%	-2%	17%	12%	9%	4%	6%	29%	12%	3%	8%
1932	Dry	2%	1%	-1%	0%	5%	4%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-1%	1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	5%	2%	1%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	1%	0%
1936	Below Normal	1%	1%	-3%	-6%	-2%	-1%	0%	0%	0%	0%	1%	1%	-1%
1937	Below Normal	0%	-1%	-1%	2%	1%	0%	0%	1%	1%	0%	0%	0%	0%
1938	Wet	-1%	0%	2%	-2%	0%	0%	3%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	1%	1%	0%	0%	0%	0%	0%	0%	2%	0%	3%	1%
1940	Above Normal	1%	0%	0%	0%	1%	0%	0%	3%	1%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%	0%	1%	0%
1944	Dry	0%	1%	-2%	0%	25%	8%	1%	1%	-2%	2%	2%	-5%	3%
1945	Below Normal	-1%	6%	2%	1%	0%	-4%	-2%	0%	-1%	0%	0%	0%	0%
1946	Below Normal	-1%	16%	22%	1%	2%	0%	-1%	0%	-1%	0%	0%	0%	3%
1947	Dry	-2%	0%	2%	1%	0%	0%	0%	0%	-1%	2%	5%	-1%	1%
1948	Below Normal	-2%	-1%	0%	-1%	-3%	-2%	0%	0%	2%	2%	9%	11%	1%
1949	Dry	16%	10%	1%	-2%	30%	32%	1%	0%	0%	-6%	-5%	3%	7%
1950	Below Normal	5%	7%	7%	-11%	-6%	-1%	0%	-2%	-1%	-3%	3%	3%	0%
1951	Above Normal	0%	1%	0%	0%	-9%	-2%	0%	0%	0%	-1%	0%	1%	-1%
1952	Wet	0%	-6%	-9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	-6%	-17%	-9%	-2%	-1%	0%	7%	-1%	0%	1%	2%	-2%
1955	Dry	0%	-1%	4%	7%	2%	0%	0%	0%	-2%	2%	5%	-6%	1%
1956	Wet	-4%	-2%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	1%	-1%
1957	Above Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	2%	6%	3%	1%	-1%	-1%	-5%	-1%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	4%	0%
1960	Dry	10%	11%	6%	-15%	-4%	-1%	0%	0%	0%	-1%	0%	-5%	0%
1961	Dry	0%	1%	0%	8%	6%	10%	6%	2%	-1%	0%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	2%	1%	0%	0%	0%	1%	0%	1%	1%	0%
1963	Wet	-2%	-2%	-6%	0%	3%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	2%	-1%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	-1%	7%	1%	-1%	1%	1%	0%
1966	Below Normal	0%	2%	2%	1%	-1%	-1%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	0%	0%	0%	0%	0%	-1%	0%	1%	0%	1%	0%
1971	Wet	1%	-3%	-5%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1973	Above Normal	-2%	2%	9%	1%	-2%	-1%	0%	0%	-1%	-1%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	3%	3%	-1%	0%
1977	Critical	1%	3%	5%	5%	-12%	-20%	-10%	-4%	-1%	0%	-1%	-10%	-4%
1978	Above Normal	-7%	6%	2%	20%	0%	8%	10%	6%	0%	0%	0%	1%	4%
1979	Below Normal	2%	1%	0%	0%	0%	0%	-1%	-2%	-1%	-1%	0%	0%	0%
1980	Above Normal	0%	8%	20%	4%	2%	0%	0%	1%	0%	0%	0%	0%	3%
1981	Dry	0%	0%	0%	0%	-1%	-2%	-1%	0%	0%	0%	0%	-1%	0%
1982	Wet	0%	1%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	-1%	0%
1985	Dry	0%	6%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	1%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	-3%	-1%	0%	-11%	-4%	-4%	-2%
1987	Dry	-1%	-1%	1%	3%	-6%	2%	-3%	-2%	-1%	5%	2%	-2%	0%
1988	Critical	-1%	0%	0%	0%	-4%	-4%	-1%	0%	-3%	-1%	4%	3%	-1%
1989	Dry	0%	-1%	2%	-7%	-5%	-1%	0%	0%	-1%	-1%	2%	-2%	-1%
1990	Critical	-2%	0%	0%	-1%	-1%	0%	0%	0%	0%	1%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%
1993	Above Normal	1%	-7%	-1%	3%	0%	0%	0%	2%	3%	-2%	-1%	2%	0%
1994	Critical	2%	1%	0%	0%	1%	1%	0%	0%	-2%	-1%	2%	-2%	0%
Average		0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Wet		0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		-1%	0%	1%	2%	-1%	0%	1%	2%	0%	0%	1%	1%	0%
Below Normal		1%	2%	2%	-1%	-1%	-1%	0%	0%	0%	0%	1%	2%	0%
Dry		2%	1%	1%	-1%	3%	3%	0%	0%	0%	0%	1%	-1%	1%
Critical		0%	0%	0%	0%	0%	-1%	0%	0%	0%	2%	2%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1924	Critical	0	0	0	0	-1	0	0	1	-12	-15	6	28	1
1925	Dry	-6	-14	9	-91	-25	4	5	2	-1	-1	-3	-9	-11
1926	Dry	-5	-1	0	0	0	0	2	-2	-3	2	7	21	2
1927	Wet	-1	-18	1	3	0	0	0	-15	0	0	0	0	-3
1928	Above Normal	2	3	7	1	-2	0	-1	-1	-1	1	4	14	2
1929	Critical	5	4	0	-25	-26	-6	-1	-6	-3	7	20	48	1
1930	Dry	-4	-61	-8	17	2	-1	-1	3	5	-1	35	57	4
1931	Critical	22	5	-20	-2	182	104	46	17	71	179	65	20	57
1932	Dry	18	7	-6	-1	14	17	3	1	0	0	0	0	4
1933	Critical	-1	0	-1	-2	1	0	-1	3	0	0	0	-1	0
1934	Critical	-1	-2	0	12	25	6	1	0	0	0	0	0	3
1935	Below Normal	-1	0	1	-1	-1	0	0	0	4	-1	4	9	1
1936	Below Normal	7	4	-40	-48	-6	-3	0	-1	0	0	5	5	-6
1937	Below Normal	-4	-7	-7	21	5	0	-1	-18	3	0	1	1	-1
1938	Wet	-11	6	7	-6	-1	0	7	-2	0	0	-1	-2	0
1939	Dry	0	5	6	3	1	0	2	0	8	11	1	27	5
1940	Above Normal	6	3	4	0	3	1	0	-24	2	0	0	0	0
1941	Wet	1	-1	-1	0	1	3	1	0	0	0	0	0	0
1942	Wet	1	2	1	0	0	0	0	0	0	-3	-2	-1	0
1943	Wet	0	0	0	0	0	0	-1	-2	-1	-1	1	4	0
1944	Dry	-4	11	-29	31	177	26	3	-4	-7	12	10	-44	15
1945	Below Normal	12	49	12	4	2	-11	-5	-1	-1	0	3	3	6
1946	Below Normal	-6	125	87	1	5	1	-1	1	-1	2	-1	-2	17
1947	Dry	-18	5	18	3	4	0	-1	-2	-4	14	29	-13	3
1948	Below Normal	-18	-6	3	-8	-15	1	0	0	3	13	42	75	7
1949	Dry	125	77	-9	0	278	127	8	2	0	-29	-28	23	48
1950	Below Normal	49	71	52	-86	-21	-2	-1	-4	-3	2	16	19	8
1951	Above Normal	-5	7	0	0	-16	-3	0	0	-1	-2	1	3	-1
1952	Wet	-3	-67	-64	0	0	-1	0	0	0	0	0	0	-11
1953	Wet	0	-1	-2	0	0	0	0	0	0	0	7	12	1
1954	Above Normal	4	-37	-116	-66	-5	0	0	21	0	0	7	13	-15
1955	Dry	-3	-5	37	26	5	1	0	-2	-7	19	22	-53	3
1956	Wet	-34	-15	-2	-1	0	-5	-2	0	0	0	2	5	-4
1957	Above Normal	1	0	-1	-5	-10	-1	0	0	0	0	3	5	-1
1958	Wet	16	25	13	2	-3	-4	-13	-2	0	0	1	1	3
1959	Below Normal	0	1	1	1	0	0	0	0	0	-1	5	34	3
1960	Dry	95	103	29	-161	-27	-4	-1	0	-2	-4	-2	-36	-1
1961	Dry	5	2	6	64	46	28	11	5	-6	-2	0	-10	12
1962	Below Normal	1	-1	0	14	4	1	0	0	1	1	6	11	3
1963	Wet	-20	-7	-27	2	9	0	0	0	0	0	0	0	-4
1964	Dry	2	0	-1	-1	0	0	0	0	-3	6	15	-12	1
1965	Wet	-13	-2	1	0	-4	-3	-1	-6	0	-1	3	4	-2
1966	Below Normal	-1	19	8	2	-2	-1	0	0	-1	-3	2	2	2
1967	Wet	-1	4	1	1	0	0	2	1	0	0	0	1	1
1968	Below Normal	0	0	-2	-1	0	0	0	0	0	0	1	2	0
1969	Wet	1	1	-17	-6	5	1	-1	0	0	0	0	0	-1
1970	Wet	0	-2	-2	-1	0	-1	-3	-3	0	1	2	7	0
1971	Wet	5	-24	-18	0	0	0	0	0	0	0	-4	-2	-4
1972	Below Normal	4	4	2	0	0	0	0	1	2	1	1	7	2
1973	Above Normal	-19	16	33	3	-5	-3	0	0	-1	-1	-2	1	2
1974	Wet	0	1	0	0	-3	-2	0	0	0	0	1	1	0
1975	Wet	0	1	0	0	0	0	0	0	0	0	1	1	0
1976	Critical	0	0	0	1	2	1	-1	-9	-2	29	17	-7	3
1977	Critical	11	28	50	39	-67	-94	-28	-11	-9	1	-3	-94	-15
1978	Above Normal	4	70	44	117	-1	31	44	13	0	0	0	6	27
1979	Below Normal	13	7	0	-1	1	0	-6	-6	-2	0	1	1	1
1980	Above Normal	-3	75	97	13	10	3	0	1	-1	0	0	0	16
1981	Dry	0	-1	-1	0	-1	0	0	0	1	1	-2	-5	-1
1982	Wet	-1	7	1	0	-3	-1	0	0	0	0	1	1	0
1983	Wet	0	0	0	0	0	0	-1	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-1	0	1	-6	0
1985	Dry	6	34	3	1	1	0	0	0	-3	-1	7	-11	3
1986	Wet	-2	-10	-15	-6	-1	0	-8	-1	1	-28	-18	-26	-9
1987	Dry	-7	-9	15	17	-35	23	2	-3	6	28	12	-19	2
1988	Critical	-13	-2	-5	-3	-7	-7	-2	-1	-5	5	22	27	1
1989	Dry	-2	-2	14	-71	-44	-4	0	0	-4	-5	9	-17	-11
1990	Critical	-18	-3	0	-9	-3	0	0	1	1	4	6	3	-2
1991	Critical	1	-1	1	-1	-4	-1	0	0	0	0	2	4	0
1992	Critical	5	1	1	2	-10	-1	0	0	0	1	-11	-4	-1
1993	Above Normal	8	-94	-4	24	0	1	0	4	7	-2	2	13	-3
1994	Critical	11	8	-3	-1	6	2	1	0	-10	-1	17	-15	1
Average		3	5	2	-2	6	3	1	-1	0	3	5	2	2
Wet		-3	-5	-6	-1	0	-1	-1	-1	0	-2	0	0	-2
Above Normal		0	4	6	9	-2	3	4	1	1	0	1	5	3
Below Normal		4	19	8	-7	-2	-1	-1	-2	0	1	6	12	3
Dry		13	9	5	-10	25	13	2	0	-1	3	7	-6	5
Critical		2	3	2	1	8	0	1	0	3	18	12	1	4

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	1%	4%	0%
1925	Dry	-1%	-1%	1%	-9%	-4%	2%	2%	1%	0%	0%	-1%	-1%	-1%
1926	Dry	-1%	0%	0%	0%	0%	0%	1%	-1%	-1%	1%	1%	3%	0%
1927	Wet	0%	-3%	0%	1%	0%	0%	0%	-5%	0%	0%	0%	0%	-1%
1928	Above Normal	0%	1%	2%	0%	-1%	0%	0%	0%	0%	0%	1%	2%	0%
1929	Critical	1%	0%	0%	-3%	-3%	-1%	0%	-1%	-1%	2%	3%	6%	0%
1930	Dry	0%	-6%	-1%	3%	1%	0%	0%	1%	2%	0%	7%	8%	1%
1931	Critical	2%	1%	-2%	0%	24%	23%	11%	4%	12%	35%	10%	3%	10%
1932	Dry	2%	1%	-1%	0%	4%	5%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	2%	7%	2%	0%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	1%	0%
1936	Below Normal	1%	1%	-4%	-7%	-2%	-1%	0%	0%	0%	0%	1%	1%	-1%
1937	Below Normal	-1%	-1%	-1%	2%	1%	0%	0%	-6%	1%	0%	0%	0%	0%
1938	Wet	-1%	1%	2%	-2%	0%	0%	2%	-1%	0%	0%	0%	-1%	0%
1939	Dry	0%	2%	1%	1%	0%	0%	1%	0%	2%	3%	0%	4%	1%
1940	Above Normal	1%	0%	0%	0%	1%	1%	0%	-8%	1%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	1%	0%
1944	Dry	0%	1%	-3%	3%	31%	10%	1%	-1%	-3%	3%	2%	-6%	3%
1945	Below Normal	1%	7%	2%	1%	0%	-3%	-2%	0%	0%	0%	1%	0%	1%
1946	Below Normal	-1%	22%	28%	0%	2%	0%	-1%	0%	0%	1%	0%	0%	4%
1947	Dry	-2%	1%	2%	1%	1%	0%	0%	-1%	-1%	4%	5%	-2%	1%
1948	Below Normal	-2%	-1%	0%	-1%	-2%	0%	0%	0%	1%	6%	12%	12%	2%
1949	Dry	18%	11%	-1%	0%	41%	44%	3%	1%	0%	-8%	-5%	3%	9%
1950	Below Normal	6%	9%	6%	-14%	-7%	-1%	0%	-1%	-1%	1%	5%	3%	0%
1951	Above Normal	-1%	2%	0%	0%	-5%	-1%	0%	0%	0%	-1%	0%	1%	0%
1952	Wet	0%	-8%	-10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1954	Above Normal	1%	-9%	-19%	-9%	-2%	0%	0%	8%	0%	0%	2%	2%	-2%
1955	Dry	0%	-1%	5%	9%	2%	0%	0%	-1%	-2%	6%	4%	-7%	1%
1956	Wet	-4%	-2%	0%	0%	0%	-2%	-1%	0%	0%	0%	1%	2%	-1%
1957	Above Normal	0%	0%	0%	-1%	-2%	0%	0%	0%	0%	0%	1%	1%	0%
1958	Wet	3%	7%	3%	1%	-1%	-1%	-4%	-1%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	5%	1%
1960	Dry	12%	13%	3%	-16%	-3%	-2%	0%	0%	-1%	-1%	0%	-5%	0%
1961	Dry	1%	0%	1%	8%	7%	9%	5%	2%	-2%	0%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	2%	1%	1%
1963	Wet	-3%	-3%	-7%	1%	4%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	2%	-2%	0%
1965	Wet	-1%	0%	0%	0%	-2%	-1%	-1%	-2%	0%	0%	1%	1%	0%
1966	Below Normal	0%	3%	3%	1%	-1%	0%	0%	0%	0%	-1%	1%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-3%	-2%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	-1%	0%	0%	0%	-1%	-1%	0%	0%	1%	1%	0%
1971	Wet	1%	-4%	-6%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
1973	Above Normal	-2%	3%	11%	1%	-2%	-1%	0%	0%	-1%	0%	-1%	0%	1%
1974	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-2%	0%	4%	2%	-1%	0%
1977	Critical	1%	3%	5%	5%	-9%	-20%	-7%	-2%	-1%	0%	0%	-11%	-3%
1978	Above Normal	0%	7%	4%	24%	0%	8%	11%	4%	0%	0%	0%	1%	5%
1979	Below Normal	2%	1%	0%	0%	0%	0%	-2%	-2%	-1%	0%	0%	0%	0%
1980	Above Normal	0%	11%	23%	4%	2%	1%	0%	0%	0%	0%	0%	0%	3%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1982	Wet	0%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1985	Dry	1%	7%	1%	0%	0%	0%	0%	0%	-1%	0%	1%	-1%	1%
1986	Wet	0%	-1%	-2%	-1%	0%	0%	-3%	0%	0%	-9%	-6%	-5%	-2%
1987	Dry	-1%	-1%	2%	2%	-5%	7%	1%	-1%	2%	7%	2%	-3%	1%
1988	Critical	-1%	0%	-1%	0%	-2%	-2%	-1%	0%	-1%	1%	4%	3%	0%
1989	Dry	0%	0%	1%	-8%	-4%	-1%	0%	0%	-1%	-1%	2%	-2%	-1%
1990	Critical	-2%	0%	0%	-1%	-1%	0%	0%	0%	0%	1%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1992	Critical	1%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	-1%	0%	0%
1993	Above Normal	1%	-8%	0%	5%	0%	0%	0%	2%	3%	-1%	1%	3%	0%
1994	Critical	2%	1%	0%	0%	1%	1%	0%	0%	-3%	0%	2%	-2%	0%
Average		0%	1%	1%	0%	1%	1%	0%	0%	0%	1%	1%	0%	0%
Wet		0%	-1%	-1%	0%	0%	0%	0%	-1%	0%	-1%	0%	0%	0%
Above Normal		0%	1%	2%	2%	-1%	1%	1%	1%	0%	0%	1%	1%	1%
Below Normal		1%	3%	2%	-1%	-1%	0%	0%	-1%	0%	0%	2%	2%	1%
Dry		2%	2%	1%	0%	4%	5%	1%	0%	0%	1%	1%	-1%	1%
Critical		0%	0%	0%	0%	1%	0%	0%	0%	0%	3%	2%	0%	1%

Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	582	589	640	631	611	474	366	350	353	419	365	445	485
1923	Below Normal	569	568	592	504	485	546	388	370	386	343	365	475	466
1924	Critical	558	611	713	769	841	997	671	582	586	517	555	571	664
1925	Dry	682	715	763	820	761	635	417	374	416	401	425	549	580
1926	Dry	654	639	728	791	730	590	437	474	413	408	489	552	575
1927	Wet	687	535	469	496	564	555	384	354	334	313	325	459	456
1928	Above Normal	579	491	483	536	525	420	375	387	343	326	326	480	439
1929	Critical	658	671	773	765	878	893	649	519	495	463	517	590	656
1930	Dry	690	710	776	638	593	565	457	474	371	388	456	548	556
1931	Critical	680	639	755	827	863	820	660	579	591	491	550	591	670
1932	Dry	684	727	697	555	644	837	561	491	434	499	438	547	593
1933	Critical	648	613	721	792	805	808	627	500	500	473	507	560	629
1934	Critical	656	733	745	729	790	958	665	556	510	434	507	598	657
1935	Below Normal	701	719	816	686	676	567	402	415	400	397	387	511	556
1936	Below Normal	624	609	740	725	555	354	360	404	393	349	375	487	498
1937	Below Normal	592	600	710	756	474	465	310	291	432	491	369	469	497
1938	Wet	596	615	464	505	429	351	271	265	271	373	326	315	398
1939	Dry	314	347	534	655	692	681	497	407	373	405	452	557	493
1940	Above Normal	680	643	752	701	626	364	334	384	378	333	319	467	498
1941	Wet	587	624	636	538	465	333	278	279	414	432	360	383	444
1942	Wet	346	423	552	477	330	385	330	296	396	420	341	335	386
1943	Wet	315	345	426	383	298	320	309	388	428	366	347	465	366
1944	Dry	615	592	710	785	698	550	405	386	381	373	443	568	542
1945	Below Normal	673	588	599	601	512	372	390	366	359	352	369	479	472
1946	Below Normal	583	501	453	468	453	450	399	378	364	322	371	515	438
1947	Dry	647	609	647	633	664	610	463	427	366	362	467	533	536
1948	Below Normal	663	663	796	745	830	662	443	415	339	298	342	496	558
1949	Dry	565	581	723	823	792	632	463	496	382	348	467	535	567
1950	Below Normal	635	620	710	688	580	522	382	376	354	339	337	488	503
1951	Above Normal	629	471	398	360	292	397	373	274	310	332	312	489	387
1952	Wet	613	628	661	562	477	425	249	217	303	368	307	297	426
1953	Wet	301	372	539	485	506	537	348	317	305	295	322	420	396
1954	Above Normal	380	415	577	714	532	527	437	424	349	326	313	482	456
1955	Dry	650	690	662	536	577	706	540	470	373	350	436	551	545
1956	Wet	646	679	692	447	377	372	371	370	398	425	363	353	458
1957	Above Normal	307	340	560	757	713	566	355	323	326	301	319	497	447
1958	Wet	532	379	501	506	617	530	232	201	336	383	319	308	404
1959	Below Normal	303	383	628	721	542	553	450	396	362	330	348	500	460
1960	Dry	610	636	727	822	835	551	448	479	347	376	444	546	568
1961	Dry	683	707	821	765	776	587	459	446	351	351	442	562	579
1962	Below Normal	694	706	813	781	699	540	421	398	369	328	357	580	557
1963	Wet	626	361	502	510	562	521	401	346	343	313	319	459	439
1964	Dry	576	559	466	587	610	678	482	448	367	382	506	536	517
1965	Wet	660	703	597	449	367	438	361	347	349	319	337	447	448
1966	Below Normal	557	525	467	489	483	515	410	413	341	351	334	511	450
1967	Wet	688	708	711	620	551	450	295	239	305	316	303	292	457
1968	Below Normal	300	342	498	592	502	547	417	389	346	328	349	506	426
1969	Wet	678	660	624	657	430	402	299	254	259	374	329	325	441
1970	Wet	315	351	448	313	354	360	345	374	339	326	316	476	360
1971	Wet	637	514	517	470	524	509	341	329	295	282	324	391	428
1972	Below Normal	355	469	604	501	570	505	414	435	363	344	350	515	452
1973	Above Normal	707	557	491	616	612	499	416	424	390	319	346	472	488
1974	Wet	597	425	459	471	468	329	352	384	413	365	350	366	415
1975	Wet	308	348	540	556	375	326	363	360	401	388	352	357	390
1976	Critical	305	314	486	659	809	708	546	488	547	590	620	664	561
1977	Critical	746	659	805	775	973	949	677	593	610	599	563	627	715
1978	Above Normal	751	778	823	676	682	666	404	329	414	449	382	408	564
1979	Below Normal	456	563	698	663	391	331	375	325	348	325	363	497	445
1980	Above Normal	639	566	523	434	378	400	379	378	393	430	368	453	445
1981	Dry	539	552	696	721	564	547	440	389	367	405	447	555	519
1982	Wet	715	587	451	562	309	335	232	224	366	401	325	259	397
1983	Wet	210	274	384	419	357	303	309	273	258	239	209	232	289
1984	Wet	297	213	321	341	253	348	371	383	383	332	338	463	337
1985	Dry	546	467	438	470	597	581	471	409	356	404	461	595	483
1986	Wet	690	653	721	606	509	338	257	245	392	501	380	419	476
1987	Dry	457	506	695	788	776	621	470	428	374	403	484	557	547
1988	Critical	708	709	773	730	657	934	553	507	457	387	485	621	627
1989	Dry	722	753	795	781	1,105	647	370	381	289	368	473	549	603
1990	Critical	668	718	797	678	679	620	534	505	494	555	585	604	620
1991	Critical	737	772	814	916	1,058	731	591	477	459	557	577	586	690
1992	Critical	737	816	833	929	788	584	457	400	376	370	511	690	624
1993	Above Normal	756	808	868	709	645	598	431	435	441	426	364	434	576
1994	Critical	513	598	753	856	803	574	449	466	380	550	608	623	598
Average		576	569	634	630	601	547	419	393	385	388	400	488	502
Wet		526	495	534	494	434	403	319	307	347	359	328	373	410
Above Normal		601	566	611	613	562	491	387	371	370	366	341	463	479
Below Normal		551	561	652	637	554	495	397	384	368	350	358	502	484
Dry		602	612	680	698	713	626	461	436	373	389	458	552	550
Critical		635	654	747	785	829	798	590	514	500	499	549	610	643

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP2 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	582	589	640	631	611	474	366	350	353	419	365	445	485
1923	Below Normal	569	568	592	504	485	546	388	370	386	345	365	474	466
1924	Critical	558	611	713	769	841	997	671	582	580	507	556	583	664
1925	Dry	684	709	773	777	741	656	422	374	413	397	423	547	576
1926	Dry	652	638	728	791	730	579	437	473	401	407	481	561	573
1927	Wet	692	524	469	497	564	554	383	355	336	313	325	459	456
1928	Above Normal	580	492	485	537	525	420	374	387	341	324	327	487	440
1929	Critical	662	673	773	757	864	890	648	506	457	432	507	611	648
1930	Dry	695	687	768	647	595	537	454	474	381	392	467	576	556
1931	Critical	692	641	751	811	883	851	689	597	611	591	598	607	693
1932	Dry	694	731	694	554	687	839	563	491	434	499	438	547	597
1933	Critical	647	613	719	791	804	805	616	501	500	473	509	561	628
1934	Critical	656	731	745	726	796	959	667	556	510	434	507	598	657
1935	Below Normal	701	719	817	685	671	566	401	415	405	385	396	516	556
1936	Below Normal	629	612	730	699	552	352	360	403	393	352	376	490	496
1937	Below Normal	591	598	705	765	476	464	309	292	433	491	369	470	497
1938	Wet	592	616	466	493	429	351	271	265	271	373	327	315	397
1939	Dry	314	348	537	657	693	683	498	405	371	400	440	571	493
1940	Above Normal	685	645	753	702	627	364	334	385	380	332	318	466	499
1941	Wet	587	624	635	538	464	333	278	279	414	432	360	383	444
1942	Wet	346	423	552	477	330	385	330	296	396	419	339	335	386
1943	Wet	315	344	426	383	298	320	309	388	428	363	345	466	365
1944	Dry	614	595	706	779	774	564	406	386	372	361	439	547	545
1945	Below Normal	673	612	605	602	513	369	388	366	358	351	367	481	474
1946	Below Normal	581	549	479	468	457	447	399	378	363	321	370	514	444
1947	Dry	639	608	654	635	665	606	463	427	361	361	480	529	536
1948	Below Normal	653	659	798	741	818	651	442	415	342	301	361	532	560
1949	Dry	631	623	730	801	920	669	462	496	383	330	446	544	586
1950	Below Normal	661	649	747	653	567	524	383	375	354	321	340	499	506
1951	Above Normal	630	474	398	360	287	395	374	275	310	330	312	491	386
1952	Wet	612	601	629	562	477	425	249	217	303	368	307	298	421
1953	Wet	301	372	538	485	506	537	348	317	306	295	324	427	396
1954	Above Normal	382	401	526	672	528	524	436	427	344	318	315	490	447
1955	Dry	648	687	675	549	580	705	540	470	370	346	445	527	545
1956	Wet	627	671	691	447	378	368	370	370	399	425	363	356	455
1957	Above Normal	308	340	559	754	709	566	355	323	326	298	320	500	447
1958	Wet	539	391	508	507	615	529	233	201	336	384	319	309	406
1959	Below Normal	304	384	629	722	543	554	450	396	355	332	350	513	461
1960	Dry	660	688	760	746	817	547	447	479	348	371	444	528	570
1961	Dry	682	713	817	800	799	671	475	452	351	349	442	557	592
1962	Below Normal	694	707	811	789	700	541	421	399	370	326	363	588	559
1963	Wet	615	355	488	509	567	521	401	346	343	313	319	459	436
1964	Dry	577	559	466	587	618	682	483	448	366	381	515	532	518
1965	Wet	653	702	598	449	365	435	360	350	351	318	337	449	447
1966	Below Normal	558	532	471	491	479	513	410	413	342	349	335	512	450
1967	Wet	688	710	712	622	551	449	296	239	305	316	304	293	457
1968	Below Normal	300	342	497	592	503	547	417	389	346	328	350	507	426
1969	Wet	678	660	618	655	430	401	299	254	259	374	329	326	440
1970	Wet	315	350	447	313	354	360	347	374	339	330	317	480	361
1971	Wet	640	504	509	470	524	509	341	329	296	282	322	390	426
1972	Below Normal	357	472	604	501	571	507	413	435	367	344	350	520	454
1973	Above Normal	698	562	507	618	608	497	416	424	389	316	344	471	488
1974	Wet	597	426	460	471	463	328	352	384	413	365	350	367	415
1975	Wet	308	349	540	557	375	326	363	360	401	388	352	358	390
1976	Critical	305	314	486	659	809	709	537	485	543	595	630	662	561
1977	Critical	751	671	835	780	778	898	637	578	604	595	570	587	690
1978	Above Normal	709	818	821	737	682	685	406	330	414	449	382	411	570
1979	Below Normal	463	566	698	663	391	331	378	325	346	324	363	498	445
1980	Above Normal	638	596	568	437	377	400	380	378	393	430	367	452	451
1981	Dry	539	551	696	721	561	532	437	388	367	405	446	553	516
1982	Wet	713	591	452	562	309	335	232	224	366	401	326	259	397
1983	Wet	210	274	384	420	357	303	307	274	259	239	209	232	289
1984	Wet	297	213	321	341	253	348	371	383	382	333	338	461	337
1985	Dry	546	483	440	470	598	581	471	409	354	402	465	591	484
1986	Wet	688	648	715	603	509	337	260	245	393	430	369	409	467
1987	Dry	453	503	699	811	742	598	454	423	371	405	483	548	541
1988	Critical	700	708	770	728	615	931	550	506	445	379	494	636	622
1989	Dry	726	748	807	749	1,097	642	370	381	288	363	479	543	599
1990	Critical	658	714	799	673	680	620	535	506	496	558	589	605	619
1991	Critical	738	771	815	917	1,057	730	591	477	459	557	578	586	690
1992	Critical	740	817	833	931	784	583	457	400	376	370	510	683	624
1993	Above Normal	768	768	855	718	645	598	431	439	444	421	360	439	574
1994	Critical	519	602	752	855	806	577	450	466	380	546	623	611	599
Average		577	572	636	628	600	547	419	393	384	386	402	489	503
Wet		524	493	531	493	434	403	319	307	347	355	328	373	409
Above Normal		598	568	611	616	560	492	387	372	369	364	341	465	479
Below Normal		552	569	656	634	552	494	397	384	369	348	361	508	485
Dry		610	617	684	692	726	631	461	436	371	386	458	550	552
Critical		636	656	749	783	810	796	587	513	497	503	556	611	641

Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	2	0	-1	0
1924	Critical	0	0	0	0	0	0	0	0	-5	-10	1	12	0
1925	Dry	2	-6	10	-43	-21	22	5	0	-3	-4	-2	-2	-3
1926	Dry	-3	0	0	0	0	-11	-1	-1	-12	-1	-8	9	-2
1927	Wet	4	-10	0	1	0	-1	0	0	2	0	0	0	0
1928	Above Normal	1	1	3	1	-1	0	0	0	-2	-3	1	7	1
1929	Critical	3	-2	-1	-7	-15	-2	-1	-12	-39	-31	-10	21	-8
1930	Dry	5	-24	-8	9	2	-28	-4	0	10	4	11	28	0
1931	Critical	12	2	-4	-17	21	31	29	18	20	100	48	16	23
1932	Dry	10	5	-2	0	43	2	2	0	0	0	0	0	5
1933	Critical	0	0	-2	-1	-1	-3	-11	0	0	0	2	2	-1
1934	Critical	-1	-2	0	-3	6	1	2	1	0	0	0	0	0
1935	Below Normal	0	0	0	0	-5	-1	0	0	6	-13	9	5	0
1936	Below Normal	4	3	-10	-25	-3	-2	0	-1	0	3	1	3	-2
1937	Below Normal	-1	-2	-5	9	2	-1	0	1	1	0	1	1	0
1938	Wet	-4	1	3	-12	0	0	0	0	0	0	1	0	-1
1939	Dry	0	1	3	2	1	3	1	-2	-2	-5	-12	14	0
1940	Above Normal	5	2	1	0	1	1	0	2	2	-1	-1	0	1
1941	Wet	0	-1	-1	0	0	1	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	-2	-2	-1	0
1943	Wet	0	0	0	0	0	0	0	0	0	-3	-2	1	0
1944	Dry	-1	2	-4	-7	76	15	1	0	-9	-13	-4	-21	3
1945	Below Normal	0	25	6	2	1	-3	-2	0	-1	-1	-2	1	2
1946	Below Normal	-3	48	25	1	4	-3	-1	0	-2	-1	-1	0	6
1947	Dry	-8	0	8	2	1	-5	0	0	-5	0	13	-5	0
1948	Below Normal	-10	-4	2	-4	-12	-11	-1	0	3	3	19	36	2
1949	Dry	67	42	7	-21	128	37	-1	0	1	-12	-20	9	20
1950	Below Normal	26	29	37	-34	-12	2	1	-2	0	-19	3	11	4
1951	Above Normal	0	2	0	0	-5	-2	0	0	0	-1	0	2	0
1952	Wet	-2	-27	-32	0	0	0	0	0	0	0	0	0	-5
1953	Wet	0	0	-1	0	0	0	0	0	1	0	2	7	1
1954	Above Normal	2	-14	-51	-42	-5	-3	-1	3	-5	-8	2	8	-9
1955	Dry	-2	-3	14	13	3	0	0	0	-4	-4	10	-24	0
1956	Wet	-19	-8	-1	0	0	-3	-1	0	0	0	1	3	-2
1957	Above Normal	1	0	0	-2	-4	0	0	0	0	-3	1	4	0
1958	Wet	7	12	7	1	-3	-1	1	0	0	0	1	1	2
1959	Below Normal	0	1	1	0	1	0	0	0	-7	2	2	13	1
1960	Dry	50	53	34	-76	-18	-4	-1	0	1	-6	-1	-18	1
1961	Dry	-1	6	-4	35	23	83	16	6	0	-2	0	-5	13
1962	Below Normal	-1	1	-2	8	2	0	0	0	1	-2	5	7	2
1963	Wet	-12	-5	-14	-1	4	0	0	0	0	0	0	0	-2
1964	Dry	1	0	0	-1	8	4	0	0	-1	-1	9	-4	1
1965	Wet	-7	-2	0	0	-2	-4	0	2	2	-1	1	2	-1
1966	Below Normal	0	7	3	1	-4	-2	0	0	0	-2	1	1	1
1967	Wet	0	2	1	1	0	-1	0	0	0	0	0	0	0
1968	Below Normal	0	0	-1	0	1	0	0	0	0	0	1	1	0
1969	Wet	0	0	-6	-2	0	-1	0	0	0	0	0	0	-1
1970	Wet	0	0	-1	0	0	0	2	0	0	3	1	4	1
1971	Wet	3	-10	-8	0	0	1	0	0	1	0	-2	-1	-1
1972	Below Normal	2	2	1	0	0	3	-1	0	4	0	0	5	1
1973	Above Normal	-8	5	16	2	-4	-2	0	0	-2	-3	-2	0	0
1974	Wet	0	1	0	0	-4	-2	0	0	0	0	0	1	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	0	1	1	-9	-3	-4	5	9	-2	0
1977	Critical	5	12	31	5	-195	-51	-40	-15	-6	-4	7	-40	-24
1978	Above Normal	-42	40	-2	61	-1	19	2	1	0	0	1	2	7
1979	Below Normal	6	3	0	0	0	0	2	0	-1	-2	-1	1	1
1980	Above Normal	-1	29	44	3	-1	0	0	0	0	0	0	0	6
1981	Dry	0	0	0	0	-3	-14	-3	-1	0	0	-1	-2	-2
1982	Wet	-1	4	1	0	0	0	0	0	0	0	0	1	0
1983	Wet	0	0	0	1	1	0	-1	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-1	1	0	-1	0
1985	Dry	0	17	2	0	1	0	0	0	-2	-2	4	-5	1
1986	Wet	-2	-5	-6	-3	0	0	3	0	1	-71	-11	-10	-9
1987	Dry	-4	-3	4	22	-35	-24	-15	-6	-3	3	0	-9	-6
1988	Critical	-8	-1	-2	-2	-42	-3	-4	-1	-12	-9	9	15	-5
1989	Dry	4	-5	12	-32	-8	-5	0	0	-2	-5	5	-6	-3
1990	Critical	-10	-3	1	-5	1	0	1	1	2	3	4	2	0
1991	Critical	0	-1	0	1	-1	-1	0	0	0	0	2	0	0
1992	Critical	3	2	0	2	-4	-1	0	0	0	0	-1	-8	-1
1993	Above Normal	12	-40	-13	8	0	0	0	4	3	-5	-4	5	-2
1994	Critical	6	4	-1	-1	3	3	1	0	0	-4	15	-12	1
Average		1	3	1	-2	-1	0	0	0	-1	-2	2	1	0
Wet		-2	-2	-3	-1	0	-1	0	0	0	-3	0	0	-1
Above Normal		-3	3	0	3	-2	1	0	1	0	-2	0	3	0
Below Normal		2	8	4	-3	-2	-1	0	0	0	-2	3	6	1
Dry		7	5	5	-6	12	5	0	0	-2	-3	0	-3	2
Critical		1	1	2	-2	-19	-2	-3	-1	-4	4	7	0	-1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	2%	0%
1925	Dry	0%	-1%	1%	-5%	-3%	3%	1%	0%	-1%	-1%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	-2%	0%	0%	-3%	0%	-2%	2%	-1%
1927	Wet	1%	-2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
1928	Above Normal	0%	0%	1%	0%	0%	0%	0%	0%	-1%	-1%	0%	2%	0%
1929	Critical	1%	0%	0%	-1%	-2%	0%	0%	-2%	-8%	-7%	-2%	4%	-1%
1930	Dry	1%	-3%	-1%	1%	0%	-5%	-1%	0%	3%	1%	2%	5%	0%
1931	Critical	2%	0%	-1%	-2%	2%	4%	4%	3%	3%	20%	9%	3%	4%
1932	Dry	1%	1%	0%	0%	7%	0%	0%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	1%	-3%	2%	1%	0%
1936	Below Normal	1%	0%	-1%	-3%	0%	-1%	0%	0%	0%	1%	0%	1%	0%
1937	Below Normal	0%	0%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	-1%	0%	1%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	-3%	2%	0%
1940	Above Normal	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1944	Dry	0%	0%	-1%	-1%	11%	3%	0%	0%	-2%	-3%	-1%	-4%	0%
1945	Below Normal	0%	4%	1%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%
1946	Below Normal	0%	10%	6%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	1%
1947	Dry	-1%	0%	1%	0%	0%	-1%	0%	0%	-1%	0%	3%	-1%	0%
1948	Below Normal	-1%	-1%	0%	-1%	-1%	-2%	0%	0%	1%	1%	6%	7%	1%
1949	Dry	12%	7%	1%	-3%	16%	6%	0%	0%	0%	-4%	-4%	2%	3%
1950	Below Normal	4%	5%	5%	-5%	-2%	0%	0%	0%	0%	-6%	1%	2%	0%
1951	Above Normal	0%	1%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	-4%	-5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	-3%	-9%	-6%	-1%	-1%	0%	1%	-1%	-2%	0%	2%	-2%
1955	Dry	0%	0%	2%	2%	1%	0%	0%	0%	-1%	-1%	2%	-4%	0%
1956	Wet	-3%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	1%	0%
1958	Wet	1%	3%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	0%	3%	0%
1960	Dry	8%	8%	5%	-9%	-2%	-1%	0%	0%	0%	-1%	0%	-3%	0%
1961	Dry	0%	1%	0%	5%	3%	14%	3%	1%	0%	-1%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	1%	1%	0%
1963	Wet	-2%	-1%	-3%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	2%	-1%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	0%	1%	1%	0%	0%	0%	0%
1966	Below Normal	0%	1%	1%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
1971	Wet	1%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1972	Below Normal	1%	1%	0%	0%	0%	1%	0%	0%	1%	0%	0%	1%	0%
1973	Above Normal	-1%	1%	3%	0%	-1%	0%	0%	0%	0%	-1%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-2%	-1%	0%	1%	2%	0%	0%
1977	Critical	1%	2%	4%	1%	-20%	-5%	-6%	-3%	-1%	-1%	1%	-6%	-3%
1978	Above Normal	-6%	5%	0%	9%	0%	3%	1%	0%	0%	0%	0%	1%	1%
1979	Below Normal	1%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	5%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	-1%	-3%	-1%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	4%	0%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	1%	0%	0%	-14%	-3%	-2%	-2%
1987	Dry	-1%	-1%	1%	3%	-4%	-4%	-3%	-1%	-1%	1%	0%	-2%	-1%
1988	Critical	-1%	0%	0%	0%	-6%	0%	-1%	0%	-3%	-2%	2%	2%	-1%
1989	Dry	1%	-1%	2%	-4%	-1%	-1%	0%	0%	-1%	-1%	1%	-1%	-1%
1990	Critical	-1%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%
1993	Above Normal	2%	-5%	-1%	1%	0%	0%	0%	0%	1%	-1%	-1%	1%	0%
1994	Critical	1%	1%	0%	0%	0%	1%	0%	0%	0%	-1%	2%	-2%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	0%	1%	0%
Below Normal		0%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	1%	1%	0%
Dry		1%	1%	1%	-1%	2%	1%	0%	0%	-1%	-1%	0%	0%	0%
Critical		0%	0%	0%	0%	-2%	0%	0%	0%	-1%	1%	1%	0%	0%

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	754	711	701	584	554	311	330	310	279	290	286	527	470
1923	Below Normal	745	718	722	405	324	296	335	342	247	267	347	572	443
1924	Critical	739	814	885	923	746	592	592	476	653	580	652	738	699
1925	Dry	943	992	951	971	830	307	285	302	264	285	412	671	601
1926	Dry	894	824	924	965	726	308	293	338	298	391	495	673	594
1927	Wet	935	646	316	318	389	272	291	337	227	236	289	545	400
1928	Above Normal	761	630	358	444	321	274	328	327	253	279	308	583	405
1929	Critical	884	907	1,020	895	996	604	484	425	401	446	589	760	701
1930	Dry	952	947	984	657	364	274	318	318	296	390	490	698	557
1931	Critical	923	797	914	997	813	531	488	498	630	530	661	779	713
1932	Dry	933	970	907	475	485	368	408	439	289	296	413	664	554
1933	Critical	886	759	835	792	582	432	365	368	422	451	560	681	594
1934	Critical	880	1,011	908	797	459	418	406	394	406	401	551	796	619
1935	Below Normal	971	936	1,039	745	378	266	265	388	265	248	366	624	541
1936	Below Normal	843	769	926	838	500	339	327	345	254	255	358	592	529
1937	Below Normal	798	781	875	912	844	587	459	346	260	262	331	554	584
1938	Wet	786	804	318	273	729	614	477	368	348	293	291	319	468
1939	Dry	223	256	522	714	658	458	443	413	340	436	520	705	474
1940	Above Normal	946	855	886	921	579	299	278	359	256	246	290	560	540
1941	Wet	777	829	874	460	528	458	402	293	285	297	303	423	494
1942	Wet	314	455	636	624	457	299	319	313	261	279	309	387	388
1943	Wet	268	268	246	513	390	419	444	353	304	272	297	560	361
1944	Dry	848	812	897	1,006	649	315	329	361	300	358	497	712	590
1945	Below Normal	929	798	664	566	632	345	309	327	258	264	340	577	501
1946	Below Normal	816	616	358	252	295	314	346	374	254	289	389	635	411
1947	Dry	912	817	771	635	615	377	363	328	330	394	552	647	562
1948	Below Normal	892	866	1,068	847	859	344	265	294	225	237	349	593	570
1949	Dry	718	710	877	994	775	344	338	339	271	367	567	661	580
1950	Below Normal	842	786	855	761	353	236	251	311	247	258	339	587	486
1951	Above Normal	816	549	352	390	357	291	334	339	247	274	291	593	403
1952	Wet	814	805	745	531	335	386	452	292	274	275	259	271	453
1953	Wet	231	329	622	372	300	274	326	309	233	248	301	495	337
1954	Above Normal	393	416	591	838	325	270	326	307	243	276	293	581	405
1955	Dry	860	916	741	356	308	301	367	343	304	340	502	690	502
1956	Wet	858	850	1,008	712	455	315	332	331	252	271	309	365	505
1957	Above Normal	239	260	542	945	666	291	311	336	245	257	301	600	416
1958	Wet	732	339	423	390	763	834	718	320	266	268	278	296	469
1959	Below Normal	240	357	769	910	429	300	361	345	325	335	373	596	445
1960	Dry	799	820	865	1,027	940	337	345	333	313	444	529	664	618
1961	Dry	908	931	1,073	886	804	336	294	294	334	407	543	709	627
1962	Below Normal	926	920	1,059	863	831	292	261	369	276	304	379	726	601
1963	Wet	794	278	401	460	356	307	320	361	234	241	287	536	381
1964	Dry	744	738	315	518	348	297	397	342	318	440	635	652	479
1965	Wet	861	917	601	339	265	255	310	362	246	244	291	535	435
1966	Below Normal	732	680	305	297	296	267	325	330	282	349	349	610	402
1967	Wet	922	939	808	506	302	394	432	335	280	311	268	255	479
1968	Below Normal	224	272	451	615	309	251	328	360	305	329	341	600	365
1969	Wet	906	856	691	540	721	536	524	366	310	289	302	339	532
1970	Wet	224	263	343	644	458	300	357	322	260	276	294	585	360
1971	Wet	877	679	354	249	263	248	305	321	228	248	323	443	378
1972	Below Normal	328	496	685	379	403	311	347	333	307	341	367	611	409
1973	Above Normal	960	725	350	471	523	341	348	329	256	254	321	570	454
1974	Wet	806	471	275	296	280	284	327	313	259	249	325	383	356
1975	Wet	238	302	542	506	422	356	362	340	245	258	302	363	353
1976	Critical	231	227	396	725	874	569	490	432	645	715	801	868	581
1977	Critical	1,052	834	1,054	841	825	596	486	498	715	741	721	855	768
1978	Above Normal	1,060	1,053	1,052	993	489	602	447	346	301	292	316	470	619
1979	Below Normal	525	731	892	738	383	301	333	342	265	263	344	595	476
1980	Above Normal	887	785	458	363	709	575	518	326	310	310	324	542	509
1981	Dry	727	721	886	782	310	238	314	335	353	459	537	676	528
1982	Wet	966	868	253	486	389	528	546	301	265	278	288	278	454
1983	Wet	215	319	507	970	896	877	840	365	316	309	253	221	507
1984	Wet	221	288	469	450	394	287	355	380	271	268	297	569	354
1985	Dry	785	643	257	288	483	355	362	334	315	454	542	753	464
1986	Wet	959	880	939	556	590	660	405	293	285	328	322	492	559
1987	Dry	571	665	877	1,029	771	391	377	341	353	432	566	686	588
1988	Critical	942	953	976	767	340	360	427	397	397	419	603	825	617
1989	Dry	993	995	994	888	1,109	526	266	278	287	446	579	688	671
1990	Critical	890	943	1,008	703	561	370	374	347	547	703	737	792	665
1991	Critical	1,039	1,059	1,024	1,075	1,037	716	371	331	523	711	715	743	779
1992	Critical	1,046	1,135	1,048	1,162	821	383	315	319	401	422	695	963	726
1993	Above Normal	1,050	1,104	1,115	919	523	350	261	298	238	249	292	500	575
1994	Critical	620	764	937	1,014	778	371	361	308	401	710	803	800	656
Average		744	715	716	672	556	389	377	346	317	351	420	592	516
Wet		653	590	541	485	461	424	421	332	269	273	295	412	430
Above Normal		786	709	641	687	504	361	348	328	263	273	302	553	479
Below Normal		701	695	762	652	488	318	322	343	269	286	355	605	483
Dry		801	797	803	762	636	346	344	340	310	396	524	684	562
Critical		844	850	917	891	736	495	430	399	512	569	674	800	676

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP2 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	754	711	701	584	554	311	330	310	279	290	286	527	470
1923	Below Normal	745	718	722	405	324	296	335	342	248	267	346	571	443
1924	Critical	738	814	885	923	746	592	592	476	643	564	654	763	699
1925	Dry	945	966	979	879	795	311	292	304	263	283	408	663	591
1926	Dry	888	823	924	965	726	308	295	336	296	393	500	689	595
1927	Wet	940	625	316	321	390	272	290	321	227	236	290	545	398
1928	Above Normal	763	632	365	446	319	274	328	326	252	280	311	597	408
1929	Critical	891	909	1,018	878	967	596	481	420	395	452	605	804	701
1930	Dry	958	888	965	676	367	274	318	322	302	387	519	755	561
1931	Critical	948	801	906	964	995	632	538	517	681	702	732	801	768
1932	Dry	951	979	902	474	495	386	412	440	289	296	413	664	558
1933	Critical	885	758	835	790	582	432	364	373	421	451	560	680	594
1934	Critical	879	1,009	908	802	487	425	408	395	406	401	551	795	622
1935	Below Normal	971	935	1,040	744	377	265	265	388	268	247	369	633	542
1936	Below Normal	851	773	898	782	495	335	327	344	253	255	362	598	523
1937	Below Normal	795	777	861	937	850	587	458	319	263	262	331	555	583
1938	Wet	780	805	326	268	725	615	479	368	348	293	290	317	468
1939	Dry	224	261	528	718	660	457	444	413	347	448	517	733	479
1940	Above Normal	955	859	890	922	582	301	278	333	258	246	290	560	539
1941	Wet	778	829	872	460	528	460	404	293	285	297	303	423	494
1942	Wet	315	457	638	624	457	299	319	313	261	276	307	386	388
1943	Wet	268	268	246	513	390	419	443	350	303	271	299	564	361
1944	Dry	848	810	904	989	836	346	333	357	293	369	513	674	606
1945	Below Normal	919	849	680	570	636	335	303	326	258	265	342	581	505
1946	Below Normal	811	703	463	253	300	316	343	375	253	291	388	635	428
1947	Dry	896	810	791	639	618	377	363	325	326	404	584	640	565
1948	Below Normal	874	859	1,073	839	842	345	265	294	227	249	388	651	576
1949	Dry	836	787	893	955	1,027	499	351	341	272	343	533	672	626
1950	Below Normal	890	833	932	678	328	234	250	307	244	259	353	607	493
1951	Above Normal	818	553	352	390	341	285	333	340	246	272	292	598	402
1952	Wet	810	776	675	531	335	385	451	292	274	275	259	271	445
1953	Wet	231	328	619	372	300	274	326	310	234	248	306	508	338
1954	Above Normal	397	386	480	756	317	270	326	332	243	277	298	595	390
1955	Dry	858	911	772	385	314	302	367	342	297	356	530	645	507
1956	Wet	819	833	1,002	712	454	310	330	330	252	271	311	371	500
1957	Above Normal	239	261	541	943	655	290	311	335	245	257	303	607	416
1958	Wet	741	363	438	393	764	831	721	317	266	268	278	297	473
1959	Below Normal	240	358	771	911	429	300	361	345	325	334	376	616	447
1960	Dry	879	915	933	861	907	332	344	333	311	440	532	635	618
1961	Dry	905	943	1,064	951	846	366	306	300	328	405	544	700	638
1962	Below Normal	926	922	1,055	878	835	294	261	368	277	306	384	738	604
1963	Wet	776	271	373	458	367	307	319	360	234	242	287	536	378
1964	Dry	746	739	315	516	348	297	397	342	316	444	654	646	480
1965	Wet	846	912	602	339	261	252	308	359	246	244	294	539	433
1966	Below Normal	732	696	314	300	294	266	325	330	281	346	350	612	404
1967	Wet	921	942	810	507	302	394	432	336	280	311	268	256	480
1968	Below Normal	225	272	449	615	309	251	328	359	305	329	342	602	365
1969	Wet	906	857	679	532	723	542	526	366	310	289	302	339	531
1970	Wet	224	261	341	643	457	299	357	318	260	276	295	592	360
1971	Wet	883	666	335	249	263	248	305	321	228	247	320	439	375
1972	Below Normal	332	500	687	379	403	311	347	334	309	342	366	621	411
1973	Above Normal	944	732	384	474	520	337	348	329	255	253	319	570	455
1974	Wet	807	472	276	296	277	282	327	313	259	249	325	385	356
1975	Wet	238	302	543	506	423	356	362	340	245	258	303	364	353
1976	Critical	232	227	397	725	875	569	490	425	643	740	824	862	584
1977	Critical	1,058	846	1,107	883	781	466	453	484	706	740	726	766	751
1978	Above Normal	1,031	1,153	1,027	1,145	489	619	493	366	301	293	316	474	642
1979	Below Normal	537	738	893	737	384	301	333	333	283	262	345	596	477
1980	Above Normal	887	823	559	379	715	584	520	327	309	310	323	541	523
1981	Dry	726	720	886	782	309	238	314	334	353	461	535	673	528
1982	Wet	962	873	254	486	387	525	544	301	265	278	289	279	454
1983	Wet	215	319	507	970	896	877	840	367	317	309	253	221	507
1984	Wet	222	288	469	450	394	287	357	380	270	268	298	567	354
1985	Dry	775	680	260	289	485	356	362	334	312	451	551	746	467
1986	Wet	954	876	925	549	589	660	397	291	286	298	304	465	550
1987	Dry	562	659	868	1,083	717	415	382	338	357	458	582	672	591
1988	Critical	925	952	971	764	333	351	423	396	393	422	622	852	617
1989	Dry	995	982	1,024	820	1,062	517	266	278	284	439	589	673	661
1990	Critical	872	938	1,010	694	557	370	374	347	547	707	743	794	663
1991	Critical	1,040	1,058	1,025	1,074	1,033	714	371	330	523	711	717	747	779
1992	Critical	1,051	1,137	1,047	1,167	811	381	315	319	401	423	687	952	724
1993	Above Normal	1,072	1,012	1,090	946	524	351	261	302	246	247	293	511	571
1994	Critical	631	772	936	1,012	783	374	362	308	394	702	829	780	657
Average		746	719	719	669	561	392	378	346	317	354	425	594	518
Wet		649	587	535	485	461	424	421	331	269	272	294	413	428
Above Normal		786	712	639	698	502	362	353	330	263	272	303	558	482
Below Normal		703	710	774	645	486	317	322	340	270	287	360	616	486
Dry		812	805	813	749	657	361	347	340	309	398	531	680	567
Critical		846	852	920	890	746	492	431	399	513	585	688	800	680

Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1924	Critical	0	0	0	0	-1	0	0	0	-10	-15	2	25	0
1925	Dry	2	-26	28	-92	-35	4	7	3	-1	-1	-3	-7	-10
1926	Dry	-6	-1	0	0	0	0	2	-2	-3	2	6	16	1
1927	Wet	5	-21	0	3	0	0	0	-16	0	0	0	0	-2
1928	Above Normal	3	2	6	2	-2	0	1	-1	-1	1	3	14	2
1929	Critical	7	2	-2	-17	-29	-8	-3	-5	-6	6	16	44	0
1930	Dry	6	-59	-19	19	3	-1	1	4	6	-3	28	57	3
1931	Critical	25	5	-8	-33	181	102	50	19	51	172	71	22	55
1932	Dry	18	9	-5	-1	10	19	4	1	0	0	0	0	5
1933	Critical	-1	0	0	-2	0	0	-2	5	0	0	0	-1	0
1934	Critical	-1	-2	1	5	28	7	2	0	0	0	0	0	3
1935	Below Normal	0	0	1	-1	-1	0	0	0	4	0	4	9	1
1936	Below Normal	8	4	-27	-56	-6	-3	0	-1	-1	0	4	6	-6
1937	Below Normal	-2	-4	-15	24	6	0	-1	-27	3	0	1	1	-1
1938	Wet	-6	1	8	-5	-5	0	3	-1	0	0	0	-2	-1
1939	Dry	0	4	6	3	2	0	1	0	7	12	-4	27	5
1940	Above Normal	9	3	4	1	3	2	0	-25	3	0	0	0	0
1941	Wet	1	0	-2	0	1	2	2	0	0	0	0	0	0
1942	Wet	0	2	2	0	0	0	0	0	0	-3	-2	-1	0
1943	Wet	0	0	0	0	0	0	-1	-3	-1	-1	1	4	0
1944	Dry	0	-1	7	-17	188	31	4	-4	-7	10	16	-38	16
1945	Below Normal	-10	51	16	4	3	-10	-6	-1	-1	0	3	4	4
1946	Below Normal	-5	88	105	1	5	2	-2	1	-1	2	-1	1	16
1947	Dry	-15	-7	20	4	3	0	0	-3	-4	10	32	-6	3
1948	Below Normal	-19	-8	5	-9	-17	0	0	0	2	11	39	58	5
1949	Dry	118	77	16	-39	253	155	13	2	0	-25	-35	10	46
1950	Below Normal	48	47	76	-83	-25	-2	-1	-4	-3	1	14	21	7
1951	Above Normal	2	3	0	0	-16	-6	-1	0	-1	-2	1	5	-1
1952	Wet	-3	-28	-70	0	0	0	-1	0	0	0	0	1	-8
1953	Wet	0	-1	-3	0	0	0	0	0	0	0	5	13	1
1954	Above Normal	4	-30	-111	-82	-8	0	0	25	0	0	5	14	-15
1955	Dry	-2	-4	31	29	6	1	0	-1	-7	15	28	-45	4
1956	Wet	-39	-17	-5	0	-1	-5	-2	-1	0	0	2	6	-5
1957	Above Normal	1	0	-1	-3	-10	-1	0	0	-1	0	2	8	0
1958	Wet	9	24	15	3	1	-3	2	-3	0	0	1	1	4
1959	Below Normal	0	1	1	1	0	0	0	0	0	-1	4	20	2
1960	Dry	80	95	68	-166	-33	-5	-1	-1	-2	-5	3	-29	0
1961	Dry	-3	12	-9	65	43	30	12	5	-6	-2	1	-9	12
1962	Below Normal	-1	2	-4	15	4	1	0	0	1	1	4	12	3
1963	Wet	-18	-7	-27	-2	12	0	0	0	0	0	0	0	-3
1964	Dry	2	1	-1	-1	0	0	0	0	-2	3	18	-6	1
1965	Wet	-15	-5	1	0	-3	-3	-2	-3	0	-1	3	4	-2
1966	Below Normal	1	16	9	3	-1	-1	0	0	-1	-3	2	3	2
1967	Wet	-1	3	2	1	0	0	0	1	0	0	0	1	0
1968	Below Normal	0	0	-2	-1	0	0	0	0	0	0	1	3	0
1969	Wet	0	1	-12	-8	3	6	2	0	0	0	0	0	-1
1970	Wet	0	-2	-2	0	0	0	0	-5	0	1	1	7	0
1971	Wet	6	-13	-20	0	0	0	0	0	0	0	-4	-3	-3
1972	Below Normal	4	4	2	0	0	0	0	1	2	1	-1	10	2
1973	Above Normal	-15	6	33	4	-3	-4	-1	0	-1	-1	-2	1	1
1974	Wet	1	1	0	0	-3	-2	0	0	0	0	0	1	0
1975	Wet	0	0	1	0	0	0	1	0	0	0	0	1	0
1976	Critical	0	0	0	1	2	1	0	-7	-2	25	24	-6	3
1977	Critical	6	12	53	42	-44	-130	-33	-13	-9	0	5	-89	-17
1978	Above Normal	-29	100	-25	152	1	16	46	19	0	0	0	4	24
1979	Below Normal	12	7	1	-1	1	0	0	-9	-2	0	1	1	1
1980	Above Normal	-1	38	101	17	6	10	2	2	-1	0	0	0	14
1981	Dry	0	-1	-1	0	-1	0	0	0	1	1	-2	-3	-1
1982	Wet	-4	6	1	0	-3	-3	-3	0	0	0	1	2	0
1983	Wet	0	0	0	0	0	0	0	2	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	2	0	-1	0	1	-2	0
1985	Dry	-10	37	4	1	1	0	0	0	-3	-2	8	-7	2
1986	Wet	-5	-4	-14	-7	-1	0	-9	-2	1	-30	-18	-26	-10
1987	Dry	-8	-6	-9	54	-54	24	6	-3	5	26	16	-13	3
1988	Critical	-18	-2	-5	-3	-7	-9	-4	-1	-5	3	18	26	0
1989	Dry	3	-13	29	-68	-47	-9	1	0	-3	-6	10	-15	-10
1990	Critical	-18	-6	3	-9	-4	-1	0	1	1	3	6	3	-2
1991	Critical	1	-1	1	0	-4	-2	0	0	0	0	3	4	0
1992	Critical	6	2	-1	5	-10	-2	0	0	0	0	-7	-11	-2
1993	Above Normal	22	-92	-25	27	0	1	0	3	7	-2	1	11	-4
1994	Critical	12	8	-2	-1	5	3	0	0	-7	-8	26	-20	1
Average		2	4	3	-3	5	3	1	-1	0	3	5	2	2
Wet		-3	-3	-6	-1	0	0	0	-1	0	-2	0	0	-1
Above Normal		0	3	-2	12	-3	2	5	2	1	0	1	6	2
Below Normal		3	15	12	-7	-2	-1	-1	-3	0	1	5	10	3
Dry		11	7	10	-13	21	16	3	0	-1	2	8	-4	5
Critical		2	1	3	-1	10	-3	1	0	1	15	14	0	4

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	0%	3%	0%
1925	Dry	0%	-3%	3%	-9%	-4%	1%	3%	1%	0%	0%	-1%	-1%	-1%
1926	Dry	-1%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%	1%	2%	0%
1927	Wet	1%	-3%	0%	1%	0%	0%	0%	-5%	0%	0%	0%	0%	-1%
1928	Above Normal	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1929	Critical	1%	0%	0%	-2%	-3%	-1%	-1%	-1%	-1%	1%	3%	6%	0%
1930	Dry	1%	-6%	-2%	3%	1%	0%	1%	1%	2%	-1%	6%	8%	1%
1931	Critical	3%	1%	-1%	-3%	22%	19%	10%	4%	8%	32%	11%	3%	9%
1932	Dry	2%	1%	-1%	0%	2%	5%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	6%	2%	0%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	0%
1936	Below Normal	1%	1%	-3%	-7%	-1%	-1%	0%	0%	0%	0%	1%	1%	-1%
1937	Below Normal	0%	-1%	-2%	3%	1%	0%	0%	-8%	1%	0%	0%	0%	0%
1938	Wet	-1%	0%	3%	-2%	-1%	0%	1%	0%	0%	0%	0%	-1%	0%
1939	Dry	0%	2%	1%	0%	0%	0%	0%	0%	2%	3%	-1%	4%	1%
1940	Above Normal	1%	0%	0%	0%	0%	1%	0%	-7%	1%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	1%	0%
1944	Dry	0%	0%	1%	-2%	29%	10%	1%	-1%	-2%	3%	3%	-5%	3%
1945	Below Normal	-1%	6%	2%	1%	1%	-3%	-2%	0%	0%	0%	1%	1%	0%
1946	Below Normal	-1%	14%	29%	0%	2%	1%	-1%	0%	0%	1%	0%	0%	4%
1947	Dry	-2%	-1%	3%	1%	1%	0%	0%	-1%	-1%	3%	6%	-1%	1%
1948	Below Normal	-2%	-1%	0%	-1%	-2%	0%	0%	0%	1%	5%	11%	10%	2%
1949	Dry	16%	11%	2%	-4%	33%	45%	4%	1%	0%	-7%	-6%	2%	8%
1950	Below Normal	6%	6%	9%	-11%	-7%	-1%	0%	-1%	-1%	0%	4%	4%	1%
1951	Above Normal	0%	1%	0%	0%	-5%	-2%	0%	0%	0%	-1%	0%	1%	0%
1952	Wet	0%	-3%	-9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1954	Above Normal	1%	-7%	-19%	-10%	-2%	0%	0%	8%	0%	0%	2%	2%	-2%
1955	Dry	0%	0%	4%	8%	2%	0%	0%	0%	-2%	4%	6%	-6%	1%
1956	Wet	-5%	-2%	-1%	0%	0%	-1%	-1%	0%	0%	0%	1%	2%	-1%
1957	Above Normal	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	1%	1%	0%
1958	Wet	1%	7%	4%	1%	0%	0%	0%	-1%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	0%
1960	Dry	10%	12%	8%	-16%	-4%	-2%	0%	0%	-1%	-1%	1%	-4%	0%
1961	Dry	0%	1%	-1%	7%	5%	9%	4%	2%	-2%	-1%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1963	Wet	-2%	-2%	-7%	0%	3%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	3%	-1%	0%
1965	Wet	-2%	-1%	0%	0%	-1%	-1%	-1%	-1%	0%	0%	1%	1%	0%
1966	Below Normal	0%	2%	3%	1%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-2%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%	1%	0%
1971	Wet	1%	-2%	-6%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	2%	0%
1973	Above Normal	-2%	1%	10%	1%	-1%	-1%	0%	0%	-1%	0%	-1%	0%	1%
1974	Wet	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-2%	0%	3%	3%	-1%	0%
1977	Critical	1%	1%	5%	5%	-5%	-22%	-7%	-3%	-1%	0%	1%	-10%	-3%
1978	Above Normal	-3%	9%	-2%	15%	0%	3%	10%	6%	0%	0%	0%	1%	3%
1979	Below Normal	2%	1%	0%	0%	0%	0%	0%	-3%	-1%	0%	0%	0%	0%
1980	Above Normal	0%	5%	22%	5%	1%	2%	0%	0%	0%	0%	0%	0%	3%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1982	Wet	0%	1%	1%	0%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1985	Dry	-1%	6%	1%	0%	0%	0%	0%	0%	-1%	-1%	2%	-1%	0%
1986	Wet	-1%	0%	-2%	-1%	0%	0%	-2%	-1%	0%	-9%	-6%	-5%	-2%
1987	Dry	-1%	-1%	-1%	5%	-7%	6%	1%	-1%	1%	6%	3%	-2%	1%
1988	Critical	-2%	0%	-1%	0%	-2%	-2%	-1%	0%	-1%	1%	3%	3%	0%
1989	Dry	0%	-1%	3%	-8%	-4%	-2%	0%	0%	-1%	-1%	2%	-2%	-1%
1990	Critical	-2%	-1%	0%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-1%	-1%	0%
1993	Above Normal	2%	-8%	-2%	3%	0%	0%	0%	1%	3%	-1%	0%	2%	0%
1994	Critical	2%	1%	0%	0%	1%	1%	0%	0%	-2%	-1%	3%	-3%	0%
Average		0%	1%	1%	0%	1%	1%	0%	0%	0%	1%	1%	0%	0%
Wet		0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	1%	1%	-1%	0%	1%	1%	0%	0%	0%	1%	0%
Below Normal		0%	2%	3%	-1%	0%	0%	0%	-1%	0%	0%	1%	2%	1%
Dry		2%	1%	1%	-1%	3%	5%	1%	0%	0%	1%	1%	-1%	1%
Critical		0%	0%	0%	0%	1%	0%	0%	0%	0%	3%	2%	0%	1%

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP2 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	562	570	601	558	549	434	349	323	337	367	326	422	450
1923	Below Normal	567	564	562	447	460	516	369	340	335	298	326	461	437
1924	Critical	560	609	705	756	828	942	645	563	565	487	539	577	648
1925	Dry	686	720	766	745	669	633	391	349	380	366	394	531	552
1926	Dry	652	632	722	768	646	535	400	444	370	381	456	547	546
1927	Wet	689	499	388	402	468	498	339	321	273	265	284	435	405
1928	Above Normal	582	477	415	462	410	373	337	361	299	290	288	464	397
1929	Critical	663	677	767	740	831	806	590	495	434	416	492	611	627
1930	Dry	703	690	751	586	518	464	425	443	360	362	441	563	525
1931	Critical	696	630	746	791	871	817	652	583	605	583	587	607	681
1932	Dry	696	737	676	473	630	755	529	468	405	476	411	531	566
1933	Critical	647	607	711	731	733	722	551	484	476	459	495	555	598
1934	Critical	655	741	731	696	665	859	617	538	494	424	489	596	626
1935	Below Normal	709	720	816	643	628	478	365	401	355	334	343	500	524
1936	Below Normal	631	603	720	650	522	346	341	378	349	301	327	474	470
1937	Below Normal	592	592	693	754	476	411	308	283	397	449	330	450	478
1938	Wet	592	625	431	443	385	334	261	256	256	341	307	295	377
1939	Dry	254	286	486	623	657	659	466	380	347	377	408	570	459
1940	Above Normal	691	637	747	673	546	357	321	364	336	279	274	443	472
1941	Wet	588	629	631	477	441	337	277	273	390	386	321	350	425
1942	Wet	307	397	515	458	336	373	324	292	353	368	317	320	363
1943	Wet	278	306	348	379	309	306	306	375	406	315	302	447	340
1944	Dry	624	605	704	782	747	494	373	359	320	326	407	531	523
1945	Below Normal	677	611	559	552	508	372	372	346	321	294	330	466	451
1946	Below Normal	592	546	461	407	445	425	370	351	314	280	332	499	419
1947	Dry	647	613	640	605	615	541	435	403	320	337	452	508	510
1948	Below Normal	655	658	801	713	788	608	392	376	289	258	326	515	532
1949	Dry	626	614	718	789	911	577	437	478	339	303	418	524	561
1950	Below Normal	653	646	746	594	441	440	330	357	313	284	306	477	466
1951	Above Normal	628	432	380	343	283	377	355	269	273	290	267	468	364
1952	Wet	610	594	595	498	412	410	256	210	292	335	279	266	397
1953	Wet	261	334	494	436	462	477	321	292	256	264	285	397	357
1954	Above Normal	348	359	469	641	416	427	363	388	297	282	273	469	394
1955	Dry	646	692	649	463	525	675	511	441	341	320	413	504	515
1956	Wet	615	664	659	401	389	359	348	342	355	376	328	330	430
1957	Above Normal	266	302	510	745	668	489	328	301	283	260	277	478	409
1958	Wet	528	348	438	414	529	498	217	197	323	336	289	281	366
1959	Below Normal	261	349	607	708	481	517	419	377	324	298	311	489	429
1960	Dry	659	685	754	720	765	437	424	446	323	359	413	502	541
1961	Dry	673	710	811	773	726	629	446	420	345	338	416	533	568
1962	Below Normal	684	700	807	771	647	474	380	377	330	289	322	577	530
1963	Wet	608	307	409	404	460	394	356	311	290	267	278	433	376
1964	Dry	572	545	389	517	571	643	459	422	324	363	492	511	484
1965	Wet	646	704	546	409	340	411	352	327	320	271	296	435	421
1966	Below Normal	552	544	420	424	424	428	371	386	303	311	298	490	413
1967	Wet	687	709	697	532	434	406	280	235	295	310	277	261	427
1968	Below Normal	260	298	443	547	436	491	390	372	310	297	305	484	386
1969	Wet	678	657	578	592	385	399	288	244	246	342	308	304	418
1970	Wet	258	288	396	295	353	351	327	352	312	287	281	459	330
1971	Wet	651	481	426	375	465	395	304	296	249	250	285	355	378
1972	Below Normal	318	446	560	419	482	411	389	407	331	314	313	496	407
1973	Above Normal	702	536	439	508	527	442	384	393	344	271	299	457	442
1974	Wet	614	400	386	414	391	321	336	356	367	304	307	336	378
1975	Wet	268	315	489	503	377	323	343	322	341	334	309	323	354
1976	Critical	266	267	413	624	793	671	515	470	531	587	627	664	536
1977	Critical	753	668	838	766	751	787	591	560	602	593	564	575	671
1978	Above Normal	707	830	812	706	645	662	403	325	392	412	351	393	553
1979	Below Normal	442	571	684	645	394	327	362	318	318	288	325	481	430
1980	Above Normal	654	600	511	420	351	396	373	363	379	390	334	438	434
1981	Dry	543	556	690	707	458	440	401	369	339	380	420	536	486
1982	Wet	725	578	361	470	303	328	227	215	344	367	306	260	374
1983	Wet	213	264	379	358	328	271	294	266	244	230	215	223	274
1984	Wet	257	209	303	337	261	336	345	354	347	285	292	450	315
1985	Dry	568	473	362	386	525	522	445	387	318	372	437	585	448
1986	Wet	698	653	703	544	469	316	257	239	374	398	333	390	448
1987	Dry	450	515	701	815	684	494	438	402	349	380	454	527	517
1988	Critical	697	702	760	690	579	805	523	487	439	376	483	630	598
1989	Dry	728	753	806	713	1,050	547	329	353	274	350	453	524	573
1990	Critical	650	709	793	611	631	592	477	483	491	559	581	600	598
1991	Critical	743	779	815	905	1,014	650	532	453	455	557	571	577	671
1992	Critical	745	822	832	925	725	528	422	385	374	370	502	679	609
1993	Above Normal	772	767	848	669	558	513	369	398	379	360	320	417	531
1994	Critical	507	593	732	835	789	523	427	437	368	543	616	598	581
Average		570	561	606	585	552	497	391	372	354	354	372	472	474
Wet		513	474	484	435	395	373	303	289	316	316	295	350	379
Above Normal		591	551	573	572	495	447	358	348	332	320	301	445	445
Below Normal		542	560	634	591	510	446	368	362	328	307	321	490	455
Dry		608	614	664	654	669	565	432	410	341	362	430	533	523
Critical		632	650	737	756	768	725	545	495	486	496	546	606	620

Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	1	0	-1	0
1924	Critical	0	0	0	0	0	0	0	0	-7	-12	1	16	0
1925	Dry	2	-6	13	-54	-35	28	6	1	-3	-4	-2	-3	-5
1926	Dry	-3	-1	0	0	0	-14	-2	-2	-12	-2	-9	8	-3
1927	Wet	5	-12	0	2	0	-1	0	4	2	0	1	0	0
1928	Above Normal	2	1	3	1	-1	0	-1	-1	-3	0	0	8	1
1929	Critical	4	-2	-2	-9	-18	-4	-1	-15	-41	-31	-10	23	-9
1930	Dry	7	-27	-10	11	2	-43	-4	0	17	1	10	34	0
1931	Critical	13	-2	-3	-23	23	31	34	19	23	107	52	19	24
1932	Dry	11	5	-3	-1	41	7	2	0	0	0	0	0	5
1933	Critical	0	0	-2	-1	0	-2	-11	1	0	0	2	1	-1
1934	Critical	-1	0	0	-7	10	2	2	1	0	0	0	0	1
1935	Below Normal	0	0	0	-1	-6	-2	0	0	10	-10	6	6	0
1936	Below Normal	5	3	-12	-32	-5	-2	0	-1	0	2	1	4	-3
1937	Below Normal	-1	-3	-8	12	0	0	0	4	1	-1	1	1	0
1938	Wet	-5	2	4	-18	0	0	0	0	0	0	2	0	-1
1939	Dry	-1	2	4	2	1	2	1	-3	-2	-1	-9	17	1
1940	Above Normal	6	2	1	0	1	1	0	4	3	-1	-1	0	1
1941	Wet	0	-1	-1	0	0	0	0	0	0	0	-1	0	0
1942	Wet	0	1	0	0	0	0	0	0	0	-3	-3	-1	-1
1943	Wet	0	0	0	0	0	0	0	0	-1	-3	-3	1	0
1944	Dry	-1	3	-6	-9	103	18	1	1	-10	-7	-5	-25	5
1945	Below Normal	0	29	8	2	1	-3	-2	0	-2	-1	-1	2	3
1946	Below Normal	-2	59	41	1	5	-5	-1	0	-3	-1	-1	0	8
1947	Dry	-11	-1	10	2	1	-7	1	0	-6	2	17	-5	0
1948	Below Normal	-11	-4	2	-5	-20	-11	-2	0	7	-1	20	40	1
1949	Dry	76	48	10	-28	147	8	-1	0	1	-12	-23	11	20
1950	Below Normal	30	36	40	-43	-16	4	3	0	-2	-24	3	12	4
1951	Above Normal	2	4	0	0	4	-3	0	0	-1	-2	-1	3	1
1952	Wet	-2	-32	-40	-1	0	0	0	0	0	0	0	0	-6
1953	Wet	0	-1	-1	0	0	1	0	1	1	0	2	8	1
1954	Above Normal	3	-17	-62	-50	-6	-12	-1	2	-5	-8	1	9	-12
1955	Dry	-3	-3	17	17	4	-1	0	-1	-4	-2	11	-27	1
1956	Wet	-21	-9	-1	0	0	-3	-1	0	1	0	0	4	-3
1957	Above Normal	1	0	0	-3	-5	0	0	0	-1	0	0	4	0
1958	Wet	9	15	9	2	-5	-2	0	0	0	0	1	1	2
1959	Below Normal	0	1	1	0	1	0	0	0	-4	-1	1	15	1
1960	Dry	59	63	33	-94	-25	-5	-1	0	2	-4	-1	-20	1
1961	Dry	-2	7	-5	42	30	108	17	7	0	-2	0	-5	17
1962	Below Normal	-1	1	-2	9	2	1	0	0	2	0	3	9	2
1963	Wet	-14	-6	-17	-1	6	0	0	0	0	0	0	0	-3
1964	Dry	1	0	0	-1	8	2	0	0	-2	1	11	-5	1
1965	Wet	-8	-2	1	0	-5	-7	-1	4	2	-2	1	3	-1
1966	Below Normal	1	9	5	2	-8	-3	0	-1	0	-2	1	2	1
1967	Wet	0	2	1	1	-3	-1	-1	0	0	0	1	1	0
1968	Below Normal	1	0	-1	0	1	0	0	0	0	0	1	1	0
1969	Wet	0	1	-8	-3	0	0	0	0	0	0	1	0	-1
1970	Wet	1	-1	-1	0	0	0	3	0	0	4	1	5	1
1971	Wet	4	-11	-10	0	1	1	0	0	1	0	-2	-2	-1
1972	Below Normal	3	3	1	0	0	1	-1	0	4	0	-2	6	1
1973	Above Normal	-9	6	20	3	-8	-2	0	0	-4	-4	-3	0	0
1974	Wet	0	1	0	0	-10	-3	0	0	0	0	0	1	-1
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	0	1	1	-9	-3	-5	8	11	-5	0
1977	Critical	6	19	30	3	-197	-84	-48	-18	-5	-5	4	-42	-28
1978	Above Normal	-48	45	-5	82	-1	25	-4	2	0	1	1	3	8
1979	Below Normal	7	4	0	0	0	0	4	-1	-2	-2	-1	1	1
1980	Above Normal	-1	36	57	6	0	0	0	0	0	0	-1	0	8
1981	Dry	0	0	0	0	-7	-31	-3	-1	0	0	-1	-3	-4
1982	Wet	-1	4	1	0	0	0	0	0	0	0	1	1	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-2	-1	0	-1	0
1985	Dry	-1	21	2	1	1	0	0	0	-3	-2	5	-6	2
1986	Wet	-2	-5	-7	-4	0	0	3	0	1	-85	-11	-13	-10
1987	Dry	-5	-4	3	26	-60	-75	-16	-7	-7	2	-1	-10	-13
1988	Critical	-8	-1	-3	-2	-47	-8	-4	-1	-12	-7	10	17	-6
1989	Dry	4	-7	13	-39	-15	-6	0	0	-3	-5	6	-7	-5
1990	Critical	-11	-3	2	-6	0	0	1	1	2	3	4	2	0
1991	Critical	0	-1	0	0	-1	-1	0	0	0	0	1	0	0
1992	Critical	3	1	0	3	-5	-1	0	0	0	0	-2	-7	-1
1993	Above Normal	15	-44	-14	12	0	0	0	9	6	-8	-6	6	-2
1994	Critical	7	5	-1	1	6	3	1	0	-3	-4	15	-7	2
Average		2	3	1	-3	-2	-1	0	0	-1	-2	2	1	0
Wet		-2	-3	-3	-1	-1	-1	0	0	0	-4	0	0	-1
Above Normal		-3	3	0	5	-2	1	-1	2	0	-2	-1	3	0
Below Normal		2	10	5	-4	-3	-2	0	0	1	-3	2	7	1
Dry		8	6	5	-8	12	-1	0	0	-2	-2	1	-3	1
Critical		1	2	2	-3	-19	-5	-3	-1	-4	5	7	1	-1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	3%	0%
1925	Dry	0%	-1%	2%	-7%	-5%	5%	2%	0%	-1%	-1%	0%	0%	-1%
1926	Dry	0%	0%	0%	0%	0%	-3%	-1%	0%	-3%	-1%	-2%	2%	-1%
1927	Wet	1%	-2%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%
1928	Above Normal	0%	0%	1%	0%	0%	0%	0%	0%	-1%	0%	0%	2%	0%
1929	Critical	1%	-1%	0%	-1%	-2%	0%	0%	-3%	-9%	-7%	-2%	4%	-2%
1930	Dry	1%	-4%	-1%	2%	0%	-8%	-1%	0%	5%	0%	2%	6%	0%
1931	Critical	2%	0%	0%	-3%	3%	4%	6%	3%	4%	22%	10%	3%	4%
1932	Dry	2%	1%	0%	0%	7%	1%	0%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	3%	-3%	2%	1%	0%
1936	Below Normal	1%	0%	-2%	-5%	-1%	-1%	0%	0%	0%	1%	0%	1%	0%
1937	Below Normal	0%	-1%	-1%	2%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1938	Wet	-1%	0%	1%	-4%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1939	Dry	0%	1%	1%	0%	0%	0%	0%	-1%	-1%	0%	-2%	3%	0%
1940	Above Normal	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1944	Dry	0%	1%	-1%	-1%	16%	4%	0%	0%	-3%	-2%	-1%	-5%	1%
1945	Below Normal	0%	5%	1%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	12%	10%	0%	1%	-1%	0%	0%	-1%	0%	0%	0%	2%
1947	Dry	-2%	0%	2%	0%	0%	-1%	0%	0%	-2%	1%	4%	-1%	0%
1948	Below Normal	-2%	-1%	0%	-1%	-3%	-2%	0%	0%	2%	0%	7%	8%	1%
1949	Dry	14%	8%	1%	-3%	19%	1%	0%	0%	-4%	-5%	-2%	3%	3%
1950	Below Normal	5%	6%	6%	-7%	-4%	1%	1%	0%	-1%	-8%	1%	3%	0%
1951	Above Normal	0%	1%	0%	0%	1%	-1%	0%	0%	0%	-1%	0%	1%	0%
1952	Wet	0%	-5%	-6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	-5%	-12%	-7%	-2%	-3%	0%	1%	-2%	-3%	0%	2%	-2%
1955	Dry	0%	0%	3%	4%	1%	0%	0%	0%	-1%	-1%	3%	-5%	0%
1956	Wet	-3%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	2%	4%	2%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	3%	0%
1960	Dry	10%	10%	5%	-12%	-3%	-1%	0%	0%	1%	-1%	0%	-4%	0%
1961	Dry	0%	1%	-1%	6%	4%	21%	4%	2%	0%	0%	0%	-1%	3%
1962	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	1%	2%	0%
1963	Wet	-2%	-2%	-4%	0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	0%	1%	0%	0%	0%	-1%	0%	2%	-1%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-2%	0%	1%	1%	-1%	0%	1%	0%
1966	Below Normal	0%	2%	1%	0%	-2%	-1%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	1%	0%
1971	Wet	1%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	1%	0%
1973	Above Normal	-1%	1%	5%	1%	-1%	-1%	0%	0%	-1%	-1%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-3%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-2%	-1%	0%	1%	2%	-1%	0%
1977	Critical	1%	3%	4%	0%	-21%	-10%	-8%	-3%	-1%	-1%	1%	-7%	-3%
1978	Above Normal	-6%	6%	-1%	13%	0%	4%	-1%	1%	0%	0%	0%	1%	1%
1979	Below Normal	2%	1%	0%	0%	0%	0%	1%	0%	-1%	-1%	0%	0%	0%
1980	Above Normal	0%	6%	13%	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	-2%	-6%	-1%	0%	0%	0%	0%	0%	-1%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	5%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	1%	0%	0%	-18%	-3%	-3%	-2%
1987	Dry	-1%	-1%	0%	3%	-8%	-13%	-4%	-2%	-2%	1%	0%	-2%	-2%
1988	Critical	-1%	0%	0%	0%	-8%	-1%	-1%	0%	-3%	-2%	2%	3%	-1%
1989	Dry	1%	-1%	2%	-5%	-1%	-1%	0%	0%	-1%	-2%	1%	-1%	-1%
1990	Critical	-2%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%
1993	Above Normal	2%	-5%	-2%	2%	0%	0%	0%	2%	2%	-2%	-2%	1%	0%
1994	Critical	1%	1%	0%	0%	1%	1%	0%	0%	-1%	-1%	3%	-1%	0%
Average		0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	0%	1%	0%
Below Normal		0%	2%	1%	-1%	-1%	0%	0%	0%	0%	-1%	1%	1%	0%
Dry		1%	1%	1%	-1%	2%	0%	0%	0%	-1%	-1%	0%	-1%	0%
Critical		0%	0%	0%	0%	-2%	-1%	-1%	0%	-1%	1%	1%	0%	0%

Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	430	465	466	477	543	436	387	343	352	400	360	335	416
1923	Below Normal	419	431	497	474	479	467	421	376	358	327	320	362	411
1924	Critical	418	454	509	592	640	676	615	568	486	399	416	435	517
1925	Dry	501	559	566	612	636	513	449	361	376	382	371	410	478
1926	Dry	483	496	513	583	550	428	396	434	368	330	361	412	446
1927	Wet	492	433	308	335	439	435	366	338	284	285	288	343	362
1928	Above Normal	429	402	315	380	351	384	356	366	328	302	282	356	354
1929	Critical	474	488	558	583	698	616	561	513	455	423	414	448	519
1930	Dry	523	555	567	460	414	396	348	434	345	312	351	402	426
1931	Critical	495	498	541	638	679	641	570	541	534	410	413	451	534
1932	Dry	517	563	548	411	546	625	554	488	414	398	407	416	491
1933	Critical	492	499	530	577	571	555	511	485	444	436	438	450	499
1934	Critical	496	570	547	545	485	544	561	545	487	412	391	443	502
1935	Below Normal	525	531	629	558	475	449	416	358	351	300	298	374	439
1936	Below Normal	464	470	517	574	527	364	347	379	368	304	305	363	415
1937	Below Normal	441	457	512	601	535	488	360	309	342	376	335	357	426
1938	Wet	440	497	426	462	420	339	292	273	287	354	326	289	367
1939	Dry	289	305	354	503	576	597	516	446	349	336	337	409	418
1940	Above Normal	489	491	552	595	544	412	337	357	352	298	274	345	421
1941	Wet	433	451	511	477	499	374	307	289	368	433	342	312	400
1942	Wet	316	347	427	504	387	361	378	326	352	417	337	298	371
1943	Wet	302	336	321	434	354	316	322	367	408	358	318	352	349
1944	Dry	446	446	517	628	580	460	381	356	327	307	340	410	433
1945	Below Normal	492	449	421	450	515	432	394	378	343	321	334	363	407
1946	Below Normal	434	398	404	419	462	454	419	388	342	287	304	377	391
1947	Dry	470	457	482	506	528	440	384	427	314	294	345	395	420
1948	Below Normal	481	489	618	553	696	506	360	384	295	278	284	364	442
1949	Dry	434	455	513	646	643	481	395	457	361	281	352	399	451
1950	Below Normal	474	483	531	521	383	343	329	348	307	303	289	356	389
1951	Above Normal	454	399	387	389	343	357	390	324	270	280	259	353	351
1952	Wet	451	457	511	491	397	425	314	236	296	351	304	276	376
1953	Wet	296	334	393	420	466	390	359	320	271	283	277	324	344
1954	Above Normal	325	343	388	580	362	337	346	376	326	290	264	352	357
1955	Dry	468	494	489	409	452	480	479	461	363	314	330	407	429
1956	Wet	488	502	599	501	423	377	366	361	368	420	348	308	422
1957	Above Normal	299	335	379	584	554	369	330	324	299	271	269	358	364
1958	Wet	415	326	331	365	514	550	277	229	308	364	306	283	356
1959	Below Normal	291	334	410	600	458	483	477	392	323	281	275	367	391
1960	Dry	448	482	518	623	673	392	338	441	325	307	333	394	440
1961	Dry	488	506	601	574	577	416	365	433	349	294	323	400	444
1962	Below Normal	493	510	595	602	632	489	382	371	353	282	277	409	450
1963	Wet	506	335	333	333	420	381	410	357	299	293	280	337	357
1964	Dry	424	448	300	413	449	454	408	444	325	303	374	397	395
1965	Wet	479	504	461	408	364	396	404	335	331	294	307	343	385
1966	Below Normal	418	435	373	413	447	386	350	371	308	293	274	369	370
1967	Wet	494	511	586	510	400	425	369	276	303	327	296	276	398
1968	Below Normal	301	318	322	452	398	374	379	384	312	283	287	372	349
1969	Wet	492	493	457	581	424	412	309	249	249	351	321	292	386
1970	Wet	288	299	337	389	364	360	353	348	326	293	281	353	333
1971	Wet	463	413	359	334	377	369	340	321	266	264	268	312	341
1972	Below Normal	314	374	422	337	383	315	310	396	327	301	294	376	346
1973	Above Normal	500	444	341	452	511	446	408	391	365	299	300	358	401
1974	Wet	433	378	363	438	413	371	329	356	380	351	299	311	369
1975	Wet	305	320	369	430	420	346	340	352	349	387	321	302	353
1976	Critical	304	307	315	484	623	553	451	472	470	458	466	478	448
1977	Critical	536	496	595	598	714	701	602	564	544	508	449	456	564
1978	Above Normal	545	589	603	582	635	683	491	358	399	430	379	338	503
1979	Below Normal	366	419	477	565	451	356	359	358	336	314	324	373	391
1980	Above Normal	460	434	357	437	422	410	396	378	393	426	349	342	400
1981	Dry	411	430	494	617	425	405	426	383	332	332	351	404	417
1982	Wet	504	475	307	443	365	415	237	236	331	397	324	262	358
1983	Wet	225	273	390	383	333	275	296	268	246	238	227	227	282
1984	Wet	275	230	302	385	332	322	352	372	355	306	298	356	324
1985	Dry	415	401	301	318	441	466	440	407	322	320	354	431	385
1986	Wet	498	489	529	455	531	338	306	268	348	420	362	336	407
1987	Dry	375	399	497	635	593	479	421	432	350	331	352	409	439
1988	Critical	508	528	559	593	464	500	491	494	461	356	373	461	482
1989	Dry	544	567	604	567	808	526	286	384	271	297	345	403	467
1990	Critical	478	522	589	479	510	465	406	444	472	478	459	457	480
1991	Critical	540	603	656	741	775	604	442	461	435	478	489	459	557
1992	Critical	533	630	656	719	626	444	357	399	357	339	382	489	494
1993	Above Normal	557	615	645	642	551	485	355	353	370	410	354	338	473
1994	Critical	391	452	518	639	641	488	374	434	352	401	441	444	465
Average		437	447	469	507	502	446	393	383	354	343	335	371	416
Wet		409	400	410	432	412	380	335	308	320	342	306	309	364
Above Normal		449	452	443	512	482	432	380	357	345	341	309	348	404
Below Normal		422	436	481	508	489	422	379	371	333	300	300	370	401
Dry		452	473	492	531	556	472	412	424	343	321	352	406	436
Critical		472	504	548	599	619	566	495	493	458	425	428	456	505

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP2 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	430	465	466	477	543	437	387	343	352	400	360	335	416
1923	Below Normal	419	431	497	474	479	467	421	376	358	328	321	362	411
1924	Critical	418	454	509	592	640	676	615	568	476	382	408	438	515
1925	Dry	506	550	576	576	604	504	462	364	376	379	372	413	474
1926	Dry	482	496	513	582	550	427	395	433	360	326	359	413	445
1927	Wet	495	427	308	337	440	434	365	347	288	286	289	343	363
1928	Above Normal	429	402	317	382	350	384	354	365	325	301	280	359	354
1929	Critical	477	489	556	580	682	610	559	509	429	390	396	454	511
1930	Dry	531	547	557	469	416	387	340	432	374	316	347	418	428
1931	Critical	507	499	554	609	725	666	603	561	552	472	454	461	555
1932	Dry	522	567	546	410	556	643	557	489	414	398	407	416	494
1933	Critical	492	499	530	576	571	554	502	482	444	436	438	449	498
1934	Critical	496	569	547	541	493	549	563	546	487	412	391	443	503
1935	Below Normal	524	531	630	558	474	447	415	358	361	304	297	378	440
1936	Below Normal	468	473	511	548	522	360	347	379	369	304	305	365	412
1937	Below Normal	441	458	506	608	537	488	359	307	343	377	336	357	426
1938	Wet	440	497	431	452	419	339	283	272	287	354	329	290	366
1939	Dry	288	305	357	505	578	599	517	445	345	331	329	418	418
1940	Above Normal	492	491	553	595	546	413	337	371	355	296	273	345	422
1941	Wet	432	451	510	476	500	376	308	289	368	433	341	312	400
1942	Wet	316	346	427	504	387	361	378	327	350	415	334	297	370
1943	Wet	301	335	321	434	354	316	322	367	408	353	313	351	348
1944	Dry	445	445	518	606	657	476	382	364	325	301	341	397	438
1945	Below Normal	487	462	426	452	516	425	392	378	341	319	331	363	408
1946	Below Normal	433	415	429	420	465	452	417	388	338	284	302	376	393
1947	Dry	467	456	488	507	528	439	388	429	311	291	357	394	421
1948	Below Normal	476	486	620	550	672	479	358	384	303	271	289	386	440
1949	Dry	470	475	527	609	734	533	384	456	362	281	337	401	464
1950	Below Normal	484	486	573	496	369	341	332	347	307	286	284	362	389
1951	Above Normal	456	400	387	389	329	354	389	324	269	277	257	355	349
1952	Wet	450	445	479	491	397	424	314	236	296	351	304	277	372
1953	Wet	296	334	392	420	466	390	360	320	272	283	275	328	345
1954	Above Normal	326	337	349	531	355	334	344	385	318	288	261	357	349
1955	Dry	469	493	500	422	455	482	479	461	361	301	337	396	430
1956	Wet	478	499	598	501	423	374	364	361	369	420	347	309	420
1957	Above Normal	299	336	381	581	550	369	330	324	299	271	268	360	364
1958	Wet	419	333	338	367	510	547	280	228	308	365	307	284	357
1959	Below Normal	292	335	410	600	460	483	476	392	324	279	273	373	391
1960	Dry	471	501	554	557	648	388	337	440	330	307	334	383	438
1961	Dry	484	511	594	609	603	451	388	441	352	293	323	397	454
1962	Below Normal	492	512	592	611	635	490	382	371	354	281	277	413	451
1963	Wet	496	330	320	331	424	380	410	357	299	293	280	337	355
1964	Dry	425	448	300	413	451	457	409	444	323	301	381	396	395
1965	Wet	476	503	462	408	359	392	403	366	335	293	306	345	387
1966	Below Normal	419	439	377	415	439	380	351	371	309	293	274	370	370
1967	Wet	494	512	587	512	398	423	368	276	303	327	297	277	398
1968	Below Normal	302	319	322	452	400	374	379	384	313	283	287	373	349
1969	Wet	492	493	452	578	435	412	309	249	249	351	322	292	386
1970	Wet	289	300	337	389	364	360	354	348	327	295	281	355	333
1971	Wet	466	410	354	335	378	370	340	321	268	264	269	311	340
1972	Below Normal	316	375	423	337	384	312	308	396	327	301	289	378	345
1973	Above Normal	496	446	356	455	504	444	407	391	361	294	297	358	401
1974	Wet	433	378	363	438	401	364	329	356	380	352	299	311	367
1975	Wet	305	320	369	430	420	346	340	352	349	387	321	303	353
1976	Critical	304	307	315	484	624	554	448	470	458	457	470	475	447
1977	Critical	538	488	623	609	643	595	540	542	544	494	464	446	544
1978	Above Normal	543	643	593	653	636	700	494	363	399	431	380	339	515
1979	Below Normal	369	421	478	565	451	356	366	356	334	311	322	373	392
1980	Above Normal	460	445	393	444	448	414	396	379	393	426	348	342	407
1981	Dry	411	430	493	617	420	394	418	382	331	331	349	402	415
1982	Wet	502	477	308	443	364	414	237	236	331	397	324	262	358
1983	Wet	225	273	390	382	333	275	295	268	246	238	227	227	282
1984	Wet	275	230	302	385	332	322	352	372	354	305	297	355	323
1985	Dry	414	411	303	318	441	466	440	407	320	317	356	429	385
1986	Wet	497	486	525	451	531	338	305	267	349	404	356	333	403
1987	Dry	373	399	495	668	556	448	394	425	336	327	356	404	432
1988	Critical	502	527	557	591	455	483	484	492	451	342	375	468	477
1989	Dry	549	563	619	543	775	520	287	384	269	292	347	400	462
1990	Critical	472	519	591	475	507	465	408	446	474	480	459	458	480
1991	Critical	540	603	656	742	774	603	442	461	435	478	486	456	556
1992	Critical	534	632	655	722	623	443	357	399	356	339	380	481	494
1993	Above Normal	566	596	628	651	552	486	355	358	377	400	345	339	471
1994	Critical	395	454	518	640	644	492	375	434	349	397	452	435	465
Average		438	448	470	505	501	445	392	384	354	342	335	372	415
Wet		408	399	408	432	411	379	334	310	321	341	306	309	363
Above Normal		450	456	442	516	481	433	380	360	345	339	307	349	405
Below Normal		423	439	485	506	486	418	379	370	334	302	299	373	401
Dry		457	475	496	526	561	476	411	425	343	318	352	405	437
Critical		473	503	551	597	615	557	491	493	455	423	431	455	504

Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	2	1	0	0
1924	Critical	0	0	0	0	0	0	0	0	-10	-17	-8	3	-3
1925	Dry	5	-9	10	-36	-32	-9	13	3	0	-2	1	3	-4
1926	Dry	-1	0	0	0	0	0	-1	-1	-7	-4	-3	1	-1
1927	Wet	3	-6	0	1	0	-1	-1	9	3	0	1	0	1
1928	Above Normal	0	0	2	1	-1	0	-2	-1	-3	0	-2	3	0
1929	Critical	2	1	-2	-3	-16	-7	-2	-4	-26	-32	-19	7	-8
1930	Dry	8	-8	-9	9	2	-9	-8	-3	29	4	-4	15	2
1931	Critical	12	1	13	-29	46	25	33	19	18	62	41	10	21
1932	Dry	5	3	-2	-1	10	19	4	1	0	0	0	0	3
1933	Critical	0	0	0	-1	0	-1	-9	-3	0	0	0	0	-1
1934	Critical	0	-1	0	-4	8	5	2	1	0	0	0	0	1
1935	Below Normal	0	0	1	0	-1	-2	-1	0	10	4	-1	4	1
1936	Below Normal	3	2	-6	-26	-6	-4	0	0	1	0	0	2	-3
1937	Below Normal	0	1	-6	7	2	0	-1	-2	2	1	1	1	0
1938	Wet	0	1	5	-10	-1	0	-9	-1	0	0	3	1	-1
1939	Dry	-1	0	2	2	2	2	0	-1	-4	-4	-8	9	0
1940	Above Normal	3	0	1	0	2	1	0	14	3	-2	-2	-1	2
1941	Wet	-1	0	-1	-1	0	2	0	0	0	0	-1	0	0
1942	Wet	-1	0	0	0	0	0	0	0	-1	-2	-3	-1	-1
1943	Wet	0	-1	0	0	0	0	0	0	-1	-5	-5	-1	-1
1944	Dry	-1	-1	0	-23	77	16	1	9	-1	-7	1	-13	5
1945	Below Normal	-4	12	5	2	1	-7	-2	0	-1	-2	-3	0	0
1946	Below Normal	-1	18	25	1	3	-2	-3	-1	-3	-3	-2	0	3
1947	Dry	-3	-1	7	2	0	-1	4	2	-3	-3	11	-1	1
1948	Below Normal	-5	-3	3	-3	-23	-27	-3	0	8	-7	5	22	-3
1949	Dry	35	20	14	-37	91	52	-12	-1	1	0	-15	2	13
1950	Below Normal	10	3	42	-25	-14	-1	3	-2	0	-17	-5	6	0
1951	Above Normal	1	1	0	0	-14	-3	0	0	0	-3	-2	1	-2
1952	Wet	-1	-12	-32	0	0	-1	0	0	0	0	0	0	-4
1953	Wet	0	0	-1	0	0	0	0	0	1	0	-2	4	0
1954	Above Normal	1	-6	-40	-49	-7	-3	-1	9	-8	-1	-3	5	-9
1955	Dry	1	-1	10	13	3	1	0	0	-3	-13	7	-11	1
1956	Wet	-10	-3	-1	0	0	-3	-2	0	2	0	-1	2	-1
1957	Above Normal	1	1	1	-4	-4	0	0	0	0	0	-1	2	0
1958	Wet	4	6	7	2	-5	-3	3	-1	0	1	1	1	1
1959	Below Normal	0	1	1	0	2	0	-1	0	1	-1	-2	6	1
1960	Dry	23	19	35	-66	-25	-4	-1	0	5	0	1	-11	-2
1961	Dry	-4	5	-7	35	25	35	22	8	3	-1	0	-3	10
1962	Below Normal	-1	1	-3	8	2	1	0	0	2	-1	0	5	1
1963	Wet	-10	-5	-13	-3	4	0	0	0	0	1	0	0	-2
1964	Dry	1	0	0	-1	1	3	1	0	-2	-2	7	-1	0
1965	Wet	-3	-1	1	0	-5	-4	-2	31	4	-1	0	1	2
1966	Below Normal	1	4	4	1	-8	-6	0	0	1	0	0	1	0
1967	Wet	0	0	1	3	-2	-2	-1	0	0	0	1	1	0
1968	Below Normal	1	1	0	0	2	0	0	0	1	0	0	0	0
1969	Wet	0	0	-5	-3	11	0	-1	0	0	0	1	1	0
1970	Wet	1	0	0	0	0	0	1	0	1	2	0	2	1
1971	Wet	3	-4	-5	1	2	2	0	0	2	0	0	-1	0
1972	Below Normal	2	2	1	0	1	-3	-1	0	-1	0	-4	2	0
1973	Above Normal	-4	1	16	3	-7	-2	0	0	-3	-5	-3	-1	0
1974	Wet	0	0	0	0	-13	-6	0	0	0	0	0	0	-1
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	1	1	-4	-2	-12	-1	4	-3	-1
1977	Critical	2	-8	28	11	-72	-106	-62	-22	0	-14	15	-10	-20
1978	Above Normal	-2	53	-10	71	1	17	3	5	0	1	1	1	12
1979	Below Normal	3	2	0	0	0	0	7	-2	-1	-3	-2	0	0
1980	Above Normal	0	11	36	7	26	3	0	1	0	0	-1	-1	7
1981	Dry	0	0	0	0	-6	-11	-8	-1	-1	0	-2	-2	-3
1982	Wet	-1	2	1	0	-2	-1	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	-1	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-2	-1	-1	-2	0
1985	Dry	-1	10	2	0	1	0	0	0	-2	-3	2	-2	1
1986	Wet	-1	-3	-4	-4	0	0	-1	-1	1	-16	-6	-3	-3
1987	Dry	-2	1	-1	32	-37	-30	-28	-7	-14	-4	4	-5	-8
1988	Critical	-6	-1	-2	-2	-9	-18	-7	-2	-10	-13	2	7	-5
1989	Dry	5	-5	14	-24	-33	-6	0	0	-2	-5	2	-3	-5
1990	Critical	-5	-3	2	-4	-3	1	2	2	2	1	0	1	0
1991	Critical	0	0	0	1	-1	-1	0	0	0	0	-4	-3	-1
1992	Critical	1	1	-1	3	-3	-1	0	0	-1	0	-2	-7	-1
1993	Above Normal	9	-19	-17	8	0	1	1	6	7	-10	-9	1	-2
1994	Critical	3	2	0	1	3	4	1	0	-3	-4	11	-10	1
Average		1	1	2	-2	0	-1	-1	1	0	-2	0	1	0
Wet		-1	-1	-2	-1	0	-1	-1	2	0	-1	0	0	0
Above Normal		1	4	-1	4	0	1	0	3	-1	-2	-2	1	1
Below Normal		1	3	5	-2	-3	-4	0	0	1	-2	-1	3	0
Dry		4	2	5	-6	5	4	-1	1	0	-3	0	-1	1
Critical		1	-1	3	-2	-4	-8	-4	-1	-4	-1	3	0	-1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-4%	-2%	1%	-1%
1925	Dry	1%	-2%	2%	-6%	-5%	-2%	3%	1%	0%	-1%	0%	1%	-1%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	-1%	0%	0%
1927	Wet	1%	-1%	0%	0%	0%	0%	0%	3%	1%	0%	0%	0%	0%
1928	Above Normal	0%	0%	1%	0%	0%	0%	0%	0%	-1%	0%	-1%	1%	0%
1929	Critical	0%	0%	0%	-1%	-2%	-1%	0%	-1%	-6%	-8%	-5%	2%	-2%
1930	Dry	2%	-1%	-2%	2%	1%	-2%	-2%	-1%	8%	1%	-1%	4%	1%
1931	Critical	2%	0%	2%	-4%	7%	4%	6%	4%	3%	15%	10%	2%	4%
1932	Dry	1%	1%	0%	0%	2%	3%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-1%	2%	1%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	-1%	0%	0%	3%	1%	0%	1%	0%
1936	Below Normal	1%	0%	-1%	-4%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%
1937	Below Normal	0%	0%	-1%	1%	0%	0%	0%	-1%	1%	0%	0%	0%	0%
1938	Wet	0%	0%	1%	-2%	0%	0%	-3%	0%	0%	0%	1%	0%	0%
1939	Dry	0%	0%	1%	0%	0%	0%	0%	0%	-1%	-1%	-2%	2%	0%
1940	Above Normal	1%	0%	0%	0%	0%	0%	0%	4%	1%	-1%	-1%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	0%
1944	Dry	0%	0%	0%	-4%	13%	3%	0%	2%	0%	-2%	0%	-3%	1%
1945	Below Normal	-1%	3%	1%	0%	0%	-2%	0%	0%	0%	-1%	-1%	0%	0%
1946	Below Normal	0%	4%	6%	0%	1%	0%	-1%	0%	-1%	-1%	-1%	0%	1%
1947	Dry	-1%	0%	1%	0%	0%	0%	1%	0%	-1%	-1%	3%	0%	0%
1948	Below Normal	-1%	-1%	0%	-1%	-3%	-5%	-1%	0%	3%	-2%	2%	6%	0%
1949	Dry	8%	4%	3%	-6%	14%	11%	-3%	0%	0%	0%	-4%	0%	2%
1950	Below Normal	2%	1%	8%	-5%	-4%	0%	1%	0%	0%	-6%	-2%	2%	0%
1951	Above Normal	0%	0%	0%	0%	-4%	-1%	0%	0%	0%	-1%	-1%	0%	-1%
1952	Wet	0%	-3%	-6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1954	Above Normal	0%	-2%	-10%	-9%	-2%	-1%	0%	3%	-3%	0%	-1%	1%	-2%
1955	Dry	0%	0%	2%	3%	1%	0%	0%	0%	-1%	-4%	2%	-3%	0%
1956	Wet	-2%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	1%	2%	2%	1%	-1%	-1%	1%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	2%	0%
1960	Dry	5%	4%	7%	-11%	-4%	-1%	0%	0%	2%	0%	0%	-3%	0%
1961	Dry	-1%	1%	-1%	6%	4%	8%	6%	2%	1%	0%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	1%	0%
1963	Wet	-2%	-2%	-4%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	0%	0%	1%	0%	0%	-1%	-1%	2%	0%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	0%	9%	1%	0%	0%	0%	1%
1966	Below Normal	0%	1%	1%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-1%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
1971	Wet	1%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
1972	Below Normal	1%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	1%	0%
1973	Above Normal	-1%	0%	5%	1%	-1%	-1%	0%	0%	-1%	-2%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-3%	-2%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	0%	-3%	0%	1%	-1%	0%
1977	Critical	0%	-2%	5%	2%	-10%	-15%	-10%	-4%	0%	-3%	3%	-2%	-3%
1978	Above Normal	0%	9%	-2%	12%	0%	3%	1%	2%	0%	0%	0%	0%	2%
1979	Below Normal	1%	0%	0%	0%	0%	0%	2%	-1%	0%	-1%	-1%	0%	0%
1980	Above Normal	0%	3%	10%	2%	6%	1%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	-1%	-3%	-2%	0%	0%	0%	0%	0%	-1%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	2%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	0%	0%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%	-4%	-2%	-1%	-1%
1987	Dry	0%	0%	0%	5%	-6%	-6%	-7%	-2%	-4%	-1%	1%	-1%	-2%
1988	Critical	-1%	0%	0%	0%	-2%	-4%	-1%	0%	-2%	-4%	1%	2%	-1%
1989	Dry	1%	-1%	2%	-4%	-4%	-1%	0%	0%	-1%	-2%	1%	-1%	-1%
1990	Critical	-1%	-1%	0%	-1%	-1%	0%	0%	1%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%
1993	Above Normal	2%	-3%	-3%	1%	0%	0%	0%	2%	2%	-2%	-3%	0%	0%
1994	Critical	1%	0%	0%	0%	0%	1%	0%	0%	-1%	-1%	3%	-2%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
Above Normal		0%	1%	0%	1%	0%	0%	0%	1%	0%	-1%	-1%	0%	0%
Below Normal		0%	1%	1%	0%	-1%	-1%	0%	0%	0%	-1%	0%	1%	0%
Dry		1%	0%	1%	-1%	1%	1%	0%	0%	0%	-1%	0%	0%	0%
Critical		0%	0%	1%	0%	-1%	-1%	-1%	0%	-1%	0%	1%	0%	0%

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	115	117	131	128	123	85	56	52	52	70	56	77	89
1923	Below Normal	111	111	118	94	88	105	62	57	61	50	56	86	83
1924	Critical	109	123	151	166	186	228	139	115	116	97	108	112	137
1925	Dry	142	151	164	180	164	129	70	58	70	66	72	106	114
1926	Dry	135	130	155	172	155	117	75	86	69	68	90	107	113
1927	Wet	144	102	84	91	110	108	61	53	47	41	45	81	81
1928	Above Normal	114	90	88	102	100	71	58	62	50	45	45	87	76
1929	Critical	136	139	167	165	196	200	133	98	91	82	97	117	135
1930	Dry	144	150	168	130	118	110	81	85	57	62	81	106	108
1931	Critical	142	130	162	182	192	180	136	114	117	90	106	118	139
1932	Dry	143	155	146	108	132	185	109	90	74	92	76	105	118
1933	Critical	133	123	153	172	176	177	127	93	93	85	94	109	128
1934	Critical	135	156	159	155	172	218	138	108	95	75	94	119	135
1935	Below Normal	148	152	179	143	141	111	66	70	65	64	62	96	108
1936	Below Normal	127	122	158	154	107	53	54	66	63	52	58	89	92
1937	Below Normal	118	120	150	163	85	83	41	36	74	90	57	84	92
1938	Wet	119	124	83	94	73	52	30	28	30	58	45	42	65
1939	Dry	42	51	102	135	145	142	92	67	58	67	79	108	91
1940	Above Normal	142	132	161	148	127	55	47	61	59	47	43	83	92
1941	Wet	116	127	130	103	83	47	32	32	69	74	54	61	77
1942	Wet	51	71	107	86	46	61	46	37	64	71	49	48	61
1943	Wet	42	50	72	61	38	43	40	62	73	56	51	83	56
1944	Dry	124	118	150	170	147	106	67	62	60	58	77	111	104
1945	Below Normal	140	117	120	120	96	58	63	56	54	52	57	87	85
1946	Below Normal	115	93	80	84	80	79	65	59	56	44	57	97	76
1947	Dry	133	122	133	129	137	123	82	73	56	55	84	102	102
1948	Below Normal	137	137	174	160	183	137	77	69	49	37	49	91	108
1949	Dry	110	115	153	181	172	129	83	92	60	49	84	102	111
1950	Below Normal	129	125	150	144	114	99	60	59	53	49	48	89	93
1951	Above Normal	128	85	65	54	36	64	58	31	41	47	41	90	62
1952	Wet	123	128	137	110	86	72	24	15	39	56	40	37	72
1953	Wet	38	58	103	88	94	103	51	43	39	37	44	71	64
1954	Above Normal	60	69	114	151	101	100	75	72	51	45	42	88	81
1955	Dry	134	144	137	102	114	149	104	85	58	52	75	107	105
1956	Wet	133	141	145	78	59	58	57	57	65	72	55	53	81
1957	Above Normal	40	49	109	163	151	111	53	44	45	38	43	92	78
1958	Wet	101	59	93	94	125	101	19	11	48	61	43	40	66
1959	Below Normal	39	61	128	153	104	107	79	64	55	46	51	93	82
1960	Dry	123	130	154	180	184	107	79	87	51	59	77	105	111
1961	Dry	143	149	180	165	168	116	81	78	52	52	77	110	114
1962	Below Normal	146	149	178	169	147	104	71	65	57	46	54	115	108
1963	Wet	127	55	93	95	110	98	66	50	50	42	43	81	76
1964	Dry	113	109	83	116	123	141	88	78	56	60	94	102	97
1965	Wet	136	148	119	79	56	76	55	51	51	43	48	78	78
1966	Below Normal	108	99	84	90	88	97	68	69	49	52	47	96	79
1967	Wet	144	149	150	125	107	79	37	21	39	42	39	36	81
1968	Below Normal	38	49	92	118	93	106	70	62	51	46	51	94	72
1969	Wet	141	136	127	135	74	66	38	25	27	58	46	45	76
1970	Wet	42	52	78	41	53	55	50	58	49	45	42	86	54
1971	Wet	130	96	97	84	99	95	49	46	37	33	45	63	73
1972	Below Normal	53	84	121	93	112	94	69	75	55	50	52	97	80
1973	Above Normal	149	108	90	124	123	92	70	72	63	43	51	85	89
1974	Wet	119	72	82	85	84	46	52	61	69	56	52	56	69
1975	Wet	40	51	103	108	58	45	55	54	66	62	52	54	62
1976	Critical	39	42	89	136	177	149	105	89	105	117	125	137	109
1977	Critical	160	136	176	168	222	215	141	118	123	120	110	127	151
1978	Above Normal	161	168	181	141	142	138	66	46	69	79	60	68	110
1979	Below Normal	81	110	147	137	63	46	59	45	51	45	55	92	78
1980	Above Normal	131	111	99	75	59	65	60	59	63	74	56	80	78
1981	Dry	103	107	146	153	110	105	76	62	56	67	78	108	98
1982	Wet	151	116	79	110	40	47	20	17	56	65	45	27	65
1983	Wet	13	31	61	71	53	39	40	31	27	21	13	20	35
1984	Wet	37	14	44	49	25	51	57	61	61	47	48	82	48
1985	Dry	105	83	76	84	119	115	85	68	53	66	82	119	88
1986	Wet	144	134	153	122	95	48	26	23	63	93	60	70	86
1987	Dry	81	94	146	171	168	126	84	73	58	66	88	108	105
1988	Critical	149	150	167	155	135	211	107	95	81	62	88	126	127
1989	Dry	153	162	173	169	258	133	57	60	35	57	85	106	121
1990	Critical	139	152	174	141	141	125	102	94	91	108	116	121	125
1991	Critical	157	167	178	206	245	156	117	86	81	108	114	116	144
1992	Critical	157	179	183	210	171	115	81	65	59	57	95	145	127
1993	Above Normal	163	177	193	150	132	119	74	75	77	72	55	75	113
1994	Critical	96	119	162	190	175	113	79	83	60	106	122	126	119
Average		113	111	129	128	120	105	70	63	61	62	65	89	93
Wet		100	91	102	91	75	66	43	40	51	54	46	58	68
Above Normal		120	111	123	124	109	90	62	57	57	56	49	82	87
Below Normal		106	109	134	130	107	91	65	61	57	52	54	93	88
Dry		120	123	142	147	151	127	82	75	58	62	81	107	106
Critical		129	135	160	171	182	174	117	97	93	92	106	123	132

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP2 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	115	117	131	128	123	85	56	52	52	70	56	77	89
1923	Below Normal	111	111	118	94	88	105	62	57	62	50	56	86	83
1924	Critical	109	123	151	166	186	228	139	115	115	94	108	115	137
1925	Dry	143	150	167	168	158	135	71	58	69	64	72	105	113
1926	Dry	134	130	155	172	155	114	75	85	66	67	87	109	113
1927	Wet	145	99	84	92	110	107	61	53	48	41	45	82	81
1928	Above Normal	114	91	89	103	99	71	58	62	49	44	45	89	76
1929	Critical	137	140	167	163	192	199	133	94	81	74	94	123	133
1930	Dry	146	144	166	133	118	103	80	85	60	63	84	113	108
1931	Critical	145	131	161	177	197	189	144	119	123	117	119	122	145
1932	Dry	145	156	146	107	144	185	110	90	74	92	76	105	119
1933	Critical	133	123	152	172	176	176	124	93	93	85	95	109	128
1934	Critical	135	156	160	154	173	218	138	108	95	75	94	119	135
1935	Below Normal	147	152	179	143	139	111	66	70	67	61	64	97	108
1936	Below Normal	128	123	155	147	107	52	54	66	63	52	59	90	91
1937	Below Normal	117	119	149	165	86	83	41	36	74	90	57	84	92
1938	Wet	118	124	83	91	73	52	30	28	30	58	45	42	65
1939	Dry	42	51	103	135	145	143	92	67	57	65	76	112	91
1940	Above Normal	143	132	162	148	127	56	47	61	60	47	43	83	92
1941	Wet	116	126	129	103	83	47	32	32	69	74	54	61	77
1942	Wet	51	72	107	86	46	61	46	37	64	70	49	47	61
1943	Wet	42	50	72	61	38	43	40	62	73	55	50	83	56
1944	Dry	124	118	149	169	167	110	67	62	58	55	76	106	105
1945	Below Normal	140	123	121	121	96	57	62	56	54	52	56	87	85
1946	Below Normal	115	106	87	84	81	78	65	59	55	44	57	97	77
1947	Dry	130	122	135	129	138	121	82	73	55	55	87	100	102
1948	Below Normal	134	136	174	158	180	134	77	69	49	38	55	101	109
1949	Dry	128	126	155	175	207	139	82	92	61	46	78	105	116
1950	Below Normal	137	133	160	134	111	99	61	58	53	44	49	92	94
1951	Above Normal	128	85	65	54	34	64	58	31	41	46	41	90	62
1952	Wet	123	120	128	110	86	72	24	15	39	56	40	37	71
1953	Wet	38	58	103	88	94	103	51	43	40	37	45	73	64
1954	Above Normal	60	66	100	139	100	99	75	73	50	43	42	90	78
1955	Dry	133	144	140	106	114	149	104	84	57	51	78	100	105
1956	Wet	127	139	145	78	59	57	57	57	65	72	55	53	80
1957	Above Normal	40	49	109	162	150	110	53	44	45	37	43	93	78
1958	Wet	103	63	95	95	124	100	20	11	48	61	43	40	67
1959	Below Normal	39	61	128	153	104	107	79	64	53	47	52	96	82
1960	Dry	136	144	164	160	179	106	78	87	51	57	77	100	112
1961	Dry	142	151	179	175	174	139	86	79	52	52	77	108	118
1962	Below Normal	145	149	178	171	147	104	71	65	57	45	55	117	109
1963	Wet	124	53	89	95	111	98	65	50	50	42	43	81	75
1964	Dry	114	109	83	116	125	142	88	78	56	60	97	101	97
1965	Wet	134	148	119	79	56	75	54	52	52	43	48	79	78
1966	Below Normal	108	101	85	90	87	96	68	69	49	51	48	96	79
1967	Wet	144	150	150	126	107	79	37	21	39	42	39	36	81
1968	Below Normal	38	49	92	118	93	105	70	62	51	46	52	95	73
1969	Wet	141	136	125	135	74	66	38	25	27	58	46	45	76
1970	Wet	42	52	78	41	53	54	51	58	49	46	43	87	55
1971	Wet	131	94	95	84	99	95	49	46	37	33	44	63	73
1972	Below Normal	54	85	121	93	112	95	69	75	56	50	52	98	80
1973	Above Normal	147	109	95	125	122	92	70	72	62	42	50	85	89
1974	Wet	119	72	82	85	83	46	52	61	69	56	52	56	69
1975	Wet	40	51	104	108	58	45	55	54	66	62	52	54	62
1976	Critical	39	42	89	136	177	150	103	89	104	119	128	137	109
1977	Critical	161	139	184	169	169	201	130	114	121	119	112	116	145
1978	Above Normal	150	179	180	157	142	143	67	46	69	79	60	68	112
1979	Below Normal	82	111	147	137	63	46	59	45	51	45	55	92	78
1980	Above Normal	130	119	111	75	59	65	60	59	63	74	56	80	79
1981	Dry	103	107	146	153	109	101	75	62	56	67	78	107	97
1982	Wet	151	117	79	110	40	47	20	17	56	65	45	27	65
1983	Wet	13	31	61	71	54	39	40	31	27	21	13	20	35
1984	Wet	37	14	44	49	25	51	57	61	60	47	48	82	48
1985	Dry	105	88	76	85	119	115	85	68	53	66	83	117	88
1986	Wet	144	133	151	121	95	48	27	23	63	73	57	68	84
1987	Dry	80	93	147	177	159	119	80	71	57	67	88	106	104
1988	Critical	147	149	166	155	124	210	106	94	78	59	91	130	126
1989	Dry	154	160	176	161	256	131	57	60	35	55	87	104	120
1990	Critical	136	151	174	140	142	125	102	94	91	108	117	121	125
1991	Critical	158	167	179	206	245	155	117	86	81	108	114	116	144
1992	Critical	158	179	183	210	170	115	81	65	59	57	95	142	126
1993	Above Normal	166	166	190	152	132	119	74	76	77	71	54	76	113
1994	Critical	98	121	162	190	176	114	79	83	60	105	126	123	120
Average		114	112	130	128	120	105	70	63	61	61	66	90	93
Wet		99	91	101	91	75	66	43	40	51	53	46	58	68
Above Normal		119	111	123	124	109	91	62	58	57	55	49	83	87
Below Normal		107	111	135	129	107	91	64	61	57	51	55	95	89
Dry		123	125	143	145	154	128	82	75	57	61	81	106	107
Critical		130	135	161	170	177	173	116	96	92	93	108	123	131

Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-1	-3	0	3	0
1925	Dry	0	-2	3	-12	-6	6	1	0	-1	-1	0	-1	-1
1926	Dry	-1	0	0	0	0	-3	0	0	-3	0	-2	2	-1
1927	Wet	1	-3	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	1	0	0	0	0	0	0	-1	0	2	0
1929	Critical	1	0	0	-2	-4	-1	0	-3	-11	-8	-3	6	-2
1930	Dry	1	-6	-2	2	0	-8	-1	0	3	1	3	8	0
1931	Critical	3	1	-1	-5	6	8	8	5	6	27	13	4	6
1932	Dry	3	1	-1	0	12	0	0	0	0	0	0	0	1
1933	Critical	0	0	-1	0	0	-1	-3	0	0	0	1	0	0
1934	Critical	0	-1	0	-1	2	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	-1	0	0	0	2	-3	2	1	0
1936	Below Normal	1	1	-3	-7	-1	-1	0	0	0	1	0	1	-1
1937	Below Normal	0	-1	-1	2	0	0	0	0	0	0	0	0	0
1938	Wet	-1	0	1	-3	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	1	0	0	1	0	-1	0	-1	-3	4	0
1940	Above Normal	1	0	0	0	0	0	0	1	1	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	-1	0	0	0
1944	Dry	0	1	-1	-2	21	4	0	0	-2	-3	-1	-6	1
1945	Below Normal	0	7	2	0	0	-1	0	0	0	0	-1	0	1
1946	Below Normal	-1	13	7	0	1	-1	0	0	0	0	0	0	2
1947	Dry	-2	0	2	0	0	-1	0	0	-1	0	4	-1	0
1948	Below Normal	-3	-1	0	-1	-3	-3	0	0	1	1	5	10	1
1949	Dry	18	11	2	-6	35	10	0	0	0	-3	-6	2	5
1950	Below Normal	7	8	10	-9	-3	1	0	0	0	-5	1	3	1
1951	Above Normal	0	1	0	0	-1	-1	0	0	0	0	0	1	0
1952	Wet	0	-7	-9	0	0	0	0	0	0	0	0	0	-1
1953	Wet	0	0	0	0	0	0	0	0	0	0	1	2	0
1954	Above Normal	1	-4	-14	-12	-1	-1	0	1	-1	-2	0	2	-3
1955	Dry	0	-1	4	4	1	0	0	0	-1	-1	3	-6	0
1956	Wet	-5	-2	0	0	0	-1	0	0	0	0	0	-1	-1
1957	Above Normal	0	0	0	-1	-1	0	0	0	0	-1	0	1	0
1958	Wet	2	3	2	0	-1	0	0	0	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	0	0	-2	0	0	4	0
1960	Dry	14	14	9	-21	-5	-1	0	0	0	-2	0	-5	0
1961	Dry	0	2	-1	9	6	23	4	2	0	0	0	-1	4
1962	Below Normal	0	0	0	2	0	0	0	0	0	-1	1	2	0
1963	Wet	-3	-1	-4	0	1	0	0	0	0	0	0	0	-1
1964	Dry	0	0	0	0	2	1	0	0	0	0	2	-1	0
1965	Wet	-2	0	0	0	-1	-1	0	1	1	0	0	1	0
1966	Below Normal	0	2	1	0	-1	0	0	0	0	-1	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	-2	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	1	0	1	0
1971	Wet	1	-3	-2	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	1	1	0	0	0	1	0	0	1	0	0	1	0
1973	Above Normal	-2	1	4	1	-1	0	0	0	0	-1	-1	0	0
1974	Wet	0	0	0	0	-1	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-3	-1	-1	1	3	-1	0
1977	Critical	1	3	8	1	-53	-14	-11	-4	-2	-1	2	-11	-7
1978	Above Normal	-12	11	0	17	0	5	1	0	0	0	0	1	2
1979	Below Normal	2	1	0	0	0	0	1	0	0	0	0	0	0
1980	Above Normal	0	8	12	1	0	0	0	0	0	0	0	0	2
1981	Dry	0	0	0	0	-1	-4	-1	0	0	0	0	-1	-1
1982	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	5	1	0	0	0	0	0	-1	-1	1	-1	0
1986	Wet	0	-1	-2	-1	0	0	1	0	0	-19	-3	-3	-2
1987	Dry	-1	-1	1	6	-9	-6	-4	-2	-1	1	0	-2	-2
1988	Critical	-2	0	-1	-1	-11	-1	-1	0	-3	-2	2	4	-1
1989	Dry	1	-1	3	-9	-2	-1	0	0	-1	-1	1	-2	-1
1990	Critical	-3	-1	0	-1	0	0	0	0	0	1	1	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	1	0	0	1	-1	0	0	0	0	0	0	-2	0
1993	Above Normal	3	-11	-3	2	0	0	0	1	1	-1	-1	1	-1
1994	Critical	2	1	0	0	1	1	0	0	0	-1	4	-3	0
Average		0	1	0	-1	0	0	0	0	0	0	0	0	0
Wet		0	-1	-1	0	0	0	0	0	0	-1	0	0	0
Above Normal		-1	1	0	1	-1	0	0	0	0	-1	0	1	0
Below Normal		0	2	1	-1	-1	0	0	0	0	-1	1	2	0
Dry		2	1	1	-2	3	1	0	0	-1	-1	0	-1	0
Critical		0	0	1	-1	-5	-1	-1	0	-1	1	2	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-3%	0%	3%	0%
1925	Dry	0%	-1%	2%	-6%	-3%	5%	2%	0%	-1%	-2%	-1%	-1%	-1%
1926	Dry	-1%	0%	0%	0%	0%	-2%	0%	0%	-5%	-1%	-2%	2%	-1%
1927	Wet	1%	-3%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
1928	Above Normal	0%	0%	1%	0%	0%	0%	0%	0%	-1%	-2%	1%	2%	0%
1929	Critical	1%	0%	0%	-1%	-2%	0%	0%	-3%	-12%	-10%	-3%	5%	-2%
1930	Dry	1%	-4%	-1%	2%	0%	-7%	-1%	0%	5%	2%	4%	7%	1%
1931	Critical	2%	1%	-1%	-3%	3%	5%	6%	4%	5%	30%	12%	4%	6%
1932	Dry	2%	1%	0%	0%	9%	0%	0%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%	1%	0%	0%
1934	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	2%	-5%	4%	1%	0%
1936	Below Normal	1%	1%	-2%	-4%	-1%	-1%	0%	0%	0%	2%	1%	1%	0%
1937	Below Normal	0%	-1%	-1%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%
1938	Wet	-1%	0%	1%	-3%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1939	Dry	0%	1%	1%	0%	0%	0%	0%	-1%	-1%	-2%	-4%	3%	0%
1940	Above Normal	1%	0%	0%	0%	0%	0%	0%	1%	1%	-1%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1944	Dry	0%	1%	-1%	-1%	14%	4%	0%	0%	-4%	-6%	-1%	-5%	0%
1945	Below Normal	0%	6%	1%	0%	0%	-1%	-1%	0%	0%	0%	-1%	0%	0%
1946	Below Normal	-1%	14%	9%	0%	1%	-1%	0%	0%	-1%	0%	0%	0%	2%
1947	Dry	-2%	0%	2%	0%	0%	-1%	0%	0%	-2%	0%	4%	-1%	0%
1948	Below Normal	-2%	-1%	0%	-1%	-2%	-2%	0%	0%	2%	2%	11%	11%	2%
1949	Dry	16%	10%	1%	-3%	20%	8%	0%	0%	0%	-7%	-7%	2%	3%
1950	Below Normal	5%	6%	7%	-7%	-3%	1%	0%	-1%	0%	-11%	2%	3%	0%
1951	Above Normal	0%	1%	0%	0%	-4%	-1%	0%	0%	0%	-1%	0%	1%	0%
1952	Wet	0%	-6%	-6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	0%
1954	Above Normal	1%	-6%	-12%	-8%	-1%	-1%	0%	1%	-2%	-5%	1%	2%	-2%
1955	Dry	0%	-1%	3%	3%	1%	0%	0%	0%	-2%	-2%	4%	-6%	0%
1956	Wet	-4%	-2%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	-2%	0%	1%	0%
1958	Wet	2%	6%	2%	0%	-1%	0%	2%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-4%	1%	1%	4%	0%
1960	Dry	11%	11%	6%	-11%	-3%	-1%	0%	0%	0%	-3%	0%	-5%	0%
1961	Dry	0%	1%	-1%	6%	4%	20%	5%	2%	0%	-1%	0%	-1%	3%
1962	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	1%	-1%	3%	2%	0%
1963	Wet	-3%	-3%	-4%	0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	0%	2%	1%	0%	0%	-1%	0%	3%	-1%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	0%	1%	1%	0%	0%	1%	0%
1966	Below Normal	0%	2%	1%	0%	-1%	0%	0%	0%	0%	-1%	1%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	2%	1%	1%	0%
1971	Wet	1%	-3%	-2%	0%	0%	0%	0%	0%	1%	0%	-1%	-1%	0%
1972	Below Normal	1%	1%	0%	0%	0%	1%	0%	0%	2%	0%	0%	1%	1%
1973	Above Normal	-2%	1%	5%	1%	-1%	-1%	0%	0%	-1%	-2%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-2%	-1%	0%	1%	2%	0%	0%
1977	Critical	1%	2%	5%	1%	-24%	-6%	-8%	-4%	-1%	-1%	2%	-9%	-4%
1978	Above Normal	-7%	6%	0%	12%	0%	4%	1%	0%	0%	0%	0%	1%	1%
1979	Below Normal	2%	1%	0%	0%	0%	0%	1%	0%	-1%	-1%	0%	0%	0%
1980	Above Normal	0%	7%	12%	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	-1%	-4%	-1%	0%	0%	0%	0%	-1%	-1%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1985	Dry	0%	6%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	3%	0%	0%	-21%	-5%	-4%	-2%
1987	Dry	-1%	-1%	1%	4%	-6%	-5%	-5%	-2%	-1%	1%	0%	-2%	-2%
1988	Critical	-1%	0%	0%	0%	-8%	0%	-1%	0%	-4%	-4%	3%	3%	-1%
1989	Dry	1%	-1%	2%	-5%	-1%	-1%	0%	0%	-1%	-3%	2%	-2%	-1%
1990	Critical	-2%	-1%	0%	-1%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%
1993	Above Normal	2%	-6%	-2%	1%	0%	0%	0%	2%	1%	-2%	-2%	2%	0%
1994	Critical	2%	1%	0%	0%	0%	1%	0%	0%	0%	-1%	3%	-3%	0%
Average		0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%	0%
Wet		0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	0%	0%	1%	-1%	0%	0%	0%	0%	-1%	0%	1%	0%
Below Normal		1%	2%	1%	-1%	0%	0%	0%	0%	0%	-1%	1%	2%	0%
Dry		2%	1%	1%	-1%	2%	1%	0%	0%	-1%	-1%	0%	-1%	0%
Critical		0%	0%	0%	0%	-3%	0%	-1%	0%	-1%	1%	2%	0%	0%

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	178	167	164	133	124	59	64	59	51	54	53	117	102
1923	Below Normal	176	168	170	85	63	55	66	68	42	48	69	129	95
1924	Critical	174	194	213	223	176	135	135	104	151	131	151	174	163
1925	Dry	229	242	231	236	199	58	52	57	47	52	86	156	137
1926	Dry	216	197	224	235	171	59	55	67	56	81	109	156	135
1927	Wet	226	149	61	61	80	49	54	66	37	39	54	122	83
1928	Above Normal	180	145	72	95	62	49	64	64	44	51	59	132	85
1929	Critical	213	219	249	216	243	138	106	90	83	96	134	180	164
1930	Dry	231	230	240	152	74	50	61	61	55	81	107	163	125
1931	Critical	223	190	221	243	194	118	107	110	145	118	153	185	167
1932	Dry	226	236	219	103	106	75	85	94	53	55	87	154	124
1933	Critical	214	179	200	188	132	92	74	75	89	97	126	158	135
1934	Critical	212	247	219	190	99	88	85	82	85	84	124	189	142
1935	Below Normal	236	227	255	176	77	47	47	80	47	42	74	143	121
1936	Below Normal	202	182	224	201	110	67	64	68	44	44	72	135	118
1937	Below Normal	190	185	211	220	202	133	99	69	46	46	65	125	133
1938	Wet	187	191	61	49	171	141	104	75	69	54	62	102	102
1939	Dry	36	45	116	167	152	99	95	87	67	93	115	165	103
1940	Above Normal	229	205	213	223	131	56	50	72	44	42	54	126	121
1941	Wet	184	198	210	99	117	99	84	54	52	56	57	89	108
1942	Wet	60	98	147	143	98	56	61	60	46	51	59	80	80
1943	Wet	48	48	42	113	80	88	95	71	57	49	56	126	73
1944	Dry	203	194	216	245	150	60	64	73	56	72	109	167	134
1945	Below Normal	225	190	154	128	145	68	59	64	45	47	67	131	110
1946	Below Normal	195	141	72	44	55	60	69	76	44	53	80	146	86
1947	Dry	220	195	183	146	141	77	73	64	64	82	124	149	127
1948	Below Normal	215	208	262	203	206	68	47	55	36	40	70	135	129
1949	Dry	168	166	211	242	184	68	67	67	49	74	128	153	131
1950	Below Normal	202	187	205	180	71	39	43	59	42	45	67	133	106
1951	Above Normal	195	123	70	81	72	54	65	67	42	49	54	135	84
1952	Wet	194	192	176	118	66	79	97	54	49	50	45	49	97
1953	Wet	38	64	143	76	56	49	63	59	39	42	57	109	66
1954	Above Normal	81	87	134	201	63	48	63	58	41	50	55	132	85
1955	Dry	206	221	175	71	58	57	74	68	57	67	111	161	111
1956	Wet	206	204	246	167	98	60	65	65	44	49	59	74	111
1957	Above Normal	40	46	121	229	154	54	59	66	42	45	57	137	88
1958	Wet	172	67	89	81	181	200	169	62	47	48	50	55	102
1959	Below Normal	40	72	182	220	91	56	73	68	63	66	76	136	95
1960	Dry	190	196	208	251	228	66	69	65	60	95	118	154	142
1961	Dry	219	225	264	214	191	66	55	55	65	85	122	166	144
1962	Below Normal	224	223	260	207	199	54	46	75	50	58	78	171	137
1963	Wet	189	50	83	99	71	58	62	73	39	41	53	120	78
1964	Dry	176	174	61	115	69	56	82	68	61	94	146	151	104
1965	Wet	207	222	137	67	47	44	59	73	42	42	54	119	93
1966	Below Normal	172	158	58	56	55	48	63	64	52	69	69	139	84
1967	Wet	223	228	192	112	57	82	92	66	51	59	48	44	104
1968	Below Normal	36	49	97	141	59	43	64	72	58	64	67	137	74
1969	Wet	219	205	161	121	169	120	116	74	59	53	57	67	118
1970	Wet	36	47	68	148	99	56	72	62	46	50	55	133	73
1971	Wet	211	158	71	43	47	42	58	62	37	42	63	95	77
1972	Below Normal	64	109	160	78	84	59	69	65	58	67	74	140	86
1973	Above Normal	233	170	70	102	116	67	69	64	45	44	62	129	98
1974	Wet	192	102	50	55	51	52	64	60	46	43	63	79	71
1975	Wet	40	57	121	112	89	71	73	67	42	45	57	73	71
1976	Critical	38	37	82	170	210	128	107	92	149	168	191	209	132
1977	Critical	258	199	258	201	197	136	106	109	168	175	169	205	182
1978	Above Normal	260	258	258	242	107	137	96	69	57	54	61	102	142
1979	Below Normal	117	172	215	174	79	57	65	68	47	46	68	135	104
1980	Above Normal	214	186	99	73	166	130	115	63	59	59	63	121	112
1981	Dry	171	169	214	186	59	40	60	66	70	99	120	157	118
1982	Wet	235	209	44	106	80	118	122	57	47	50	53	50	98
1983	Wet	33	62	112	236	216	211	201	74	61	59	44	35	112
1984	Wet	35	53	102	97	82	53	71	78	49	48	56	129	71
1985	Dry	186	148	45	53	105	71	73	65	60	98	121	178	100
1986	Wet	233	212	228	125	134	153	85	55	52	64	62	108	126
1987	Dry	129	154	211	252	182	81	77	67	70	92	128	160	134
1988	Critical	229	231	237	182	67	72	90	82	82	88	138	197	141
1989	Dry	242	243	242	214	273	117	47	51	53	95	131	161	156
1990	Critical	214	229	246	164	126	75	76	69	122	165	174	188	154
1991	Critical	254	260	250	264	254	168	75	65	116	166	168	175	185
1992	Critical	256	280	257	287	196	79	60	62	84	89	162	234	171
1993	Above Normal	257	272	275	222	116	70	46	56	40	43	54	110	130
1994	Critical	142	181	227	248	185	75	73	59	84	166	191	190	152
Average		175	167	168	156	125	80	77	69	61	70	89	135	114
Wet		151	134	121	106	100	90	89	65	48	49	55	86	91
Above Normal		187	166	148	160	111	73	69	64	46	49	57	124	105
Below Normal		164	162	180	151	107	61	62	68	48	53	71	138	105
Dry		191	190	191	180	146	69	68	67	59	82	116	159	127
Critical		202	204	222	215	173	109	91	83	113	129	157	190	157

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Alternative CP2 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	178	167	164	133	124	59	64	59	51	54	53	117	102
1923	Below Normal	176	168	170	85	63	55	66	68	42	48	69	129	95
1924	Critical	174	194	213	223	176	135	135	104	148	127	151	181	163
1925	Dry	229	235	238	212	189	59	54	58	47	52	85	154	134
1926	Dry	214	197	224	235	171	59	55	66	55	81	110	161	136
1927	Wet	228	144	61	62	80	49	54	62	37	39	54	122	83
1928	Above Normal	181	145	74	95	61	49	64	63	43	51	59	136	85
1929	Critical	215	220	249	211	235	136	105	89	82	97	138	191	164
1930	Dry	233	214	235	157	74	49	61	62	57	80	115	178	126
1931	Critical	230	191	219	234	243	145	120	115	159	164	172	191	182
1932	Dry	231	238	218	103	109	80	86	94	53	55	87	154	126
1933	Critical	213	179	200	188	132	92	74	76	89	97	126	158	135
1934	Critical	211	246	219	191	107	90	85	82	85	84	124	189	143
1935	Below Normal	236	227	255	175	77	47	47	80	48	42	75	146	121
1936	Below Normal	204	183	217	186	109	66	64	68	44	44	73	136	116
1937	Below Normal	189	184	207	227	204	133	99	61	47	46	65	125	132
1938	Wet	185	192	63	48	170	141	104	74	69	54	54	61	101
1939	Dry	36	46	118	168	153	99	95	87	69	96	115	172	104
1940	Above Normal	232	206	215	223	132	57	51	65	45	42	54	126	121
1941	Wet	184	198	210	99	118	99	84	54	52	56	57	89	108
1942	Wet	60	98	147	143	99	56	61	60	46	50	58	79	80
1943	Wet	48	48	42	113	80	88	95	70	57	49	56	127	73
1944	Dry	203	193	218	241	200	69	65	72	54	75	113	157	138
1945	Below Normal	222	204	158	129	146	66	57	63	45	47	68	132	111
1946	Below Normal	193	164	100	44	56	61	68	76	44	54	80	146	91
1947	Dry	216	193	188	147	142	77	73	63	63	84	133	148	127
1948	Below Normal	210	206	264	201	202	68	47	55	37	43	80	151	130
1949	Dry	200	187	215	232	251	110	70	67	49	68	119	156	144
1950	Below Normal	215	199	226	158	64	39	43	58	42	45	71	139	108
1951	Above Normal	195	124	70	80	67	52	65	67	42	49	54	136	84
1952	Wet	193	184	157	118	66	79	97	54	49	50	45	49	95
1953	Wet	38	64	142	76	56	49	63	59	39	42	58	112	67
1954	Above Normal	82	79	105	179	61	48	63	65	41	50	56	136	80
1955	Dry	206	220	183	79	60	57	74	68	56	71	118	149	112
1956	Wet	195	199	245	167	98	59	64	65	44	49	59	75	110
1957	Above Normal	40	46	121	229	152	54	59	66	42	45	57	139	87
1958	Wet	175	73	93	81	181	199	169	61	47	48	51	56	103
1959	Below Normal	40	72	183	220	91	56	73	68	63	66	77	141	96
1960	Dry	212	221	226	207	219	65	68	65	59	94	118	146	142
1961	Dry	219	229	261	231	203	74	58	56	64	84	122	164	147
1962	Below Normal	224	223	259	211	200	55	46	75	50	58	79	174	138
1963	Wet	184	49	76	99	74	58	62	73	39	41	53	120	77
1964	Dry	176	174	60	114	69	56	83	68	61	95	151	149	105
1965	Wet	203	220	137	67	46	43	59	72	42	41	55	120	92
1966	Below Normal	172	162	60	56	55	47	63	64	51	69	70	140	84
1967	Wet	223	228	193	112	57	82	92	66	51	59	48	45	105
1968	Below Normal	36	49	96	141	59	43	64	72	58	64	68	137	74
1969	Wet	219	206	158	119	170	121	117	74	59	53	57	67	118
1970	Wet	36	46	67	148	99	56	72	61	46	50	55	135	73
1971	Wet	213	155	66	43	47	42	58	62	37	42	62	94	77
1972	Below Normal	65	110	160	78	84	59	69	66	59	68	74	142	86
1973	Above Normal	229	172	79	103	115	66	69	64	44	44	61	129	98
1974	Wet	192	103	50	55	50	51	64	60	45	43	63	79	71
1975	Wet	40	57	122	112	89	71	73	67	42	45	57	74	71
1976	Critical	38	37	82	170	211	129	107	90	148	174	197	207	133
1977	Critical	260	203	273	213	185	101	97	106	165	174	171	181	177
1978	Above Normal	252	285	251	283	107	142	108	74	57	54	61	103	148
1979	Below Normal	120	174	215	174	79	57	65	65	46	46	69	136	104
1980	Above Normal	214	197	126	78	168	133	115	64	59	59	63	121	116
1981	Dry	171	169	213	186	59	40	60	66	71	99	119	156	117
1982	Wet	234	210	44	106	80	117	122	57	47	50	53	51	98
1983	Wet	34	62	112	236	216	211	201	74	61	59	44	35	112
1984	Wet	35	53	102	97	82	53	72	78	48	48	56	128	71
1985	Dry	184	158	46	53	106	71	73	65	60	97	124	176	101
1986	Wet	232	211	224	123	134	153	82	54	53	56	57	101	123
1987	Dry	127	153	209	266	168	87	79	66	72	99	132	156	134
1988	Critical	224	231	236	181	65	70	89	82	81	89	143	204	141
1989	Dry	243	239	250	196	261	114	47	51	52	94	134	156	153
1990	Critical	210	227	247	162	125	75	76	69	123	165	175	189	154
1991	Critical	255	260	251	264	253	167	75	65	116	166	168	176	185
1992	Critical	258	281	257	289	193	78	60	62	84	89	160	231	170
1993	Above Normal	263	247	268	229	116	70	46	57	42	55	71	113	129
1994	Critical	145	183	227	247	186	76	73	59	82	164	198	185	152
Average		176	169	169	155	126	81	77	69	61	71	90	135	115
Wet		150	133	120	106	100	90	89	65	48	49	55	87	91
Above Normal		187	167	147	163	110	73	71	64	47	49	57	126	105
Below Normal		164	166	183	149	106	61	62	67	48	53	73	141	106
Dry		194	192	194	177	152	73	69	67	59	83	118	158	128
Critical		203	204	223	214	176	108	91	83	113	133	160	190	158

Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-3	-4	1	7	0
1925	Dry	0	-7	8	-25	-9	1	2	1	0	0	-1	-2	-3
1926	Dry	-2	0	0	0	0	0	0	0	-1	0	1	4	0
1927	Wet	1	-6	0	1	0	0	0	-4	0	0	0	0	-1
1928	Above Normal	1	0	2	1	0	0	0	0	0	0	1	4	1
1929	Critical	2	0	-1	-4	-8	-2	-1	-1	-1	2	4	12	0
1930	Dry	2	-16	-5	5	1	0	0	1	2	-1	8	15	1
1931	Critical	7	1	-2	-9	49	27	14	5	14	46	19	6	15
1932	Dry	5	3	-1	0	3	5	1	0	0	0	0	0	1
1933	Critical	0	0	0	0	0	0	0	1	0	0	0	0	0
1934	Critical	0	-1	0	1	8	2	1	0	0	0	0	0	1
1935	Below Normal	0	0	0	0	0	0	0	0	1	0	1	2	0
1936	Below Normal	2	1	-7	-15	-2	-1	0	0	0	0	1	2	-2
1937	Below Normal	-1	-1	-4	7	2	0	0	-7	1	0	0	0	0
1938	Wet	-1	0	2	-1	-1	0	1	0	0	0	0	-1	0
1939	Dry	0	1	2	1	0	0	0	0	2	3	-1	7	1
1940	Above Normal	2	1	1	0	1	0	0	-7	1	0	0	0	0
1941	Wet	0	0	-1	0	0	1	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	-1	-1	0	0
1943	Wet	0	0	0	0	0	0	0	-1	0	0	0	1	0
1944	Dry	0	0	2	-5	50	8	1	-1	-2	3	4	-10	4
1945	Below Normal	-3	14	4	1	1	-3	-2	0	0	0	1	1	1
1946	Below Normal	-1	23	28	0	1	1	-1	0	0	0	0	0	4
1947	Dry	-4	-2	5	1	1	0	0	-1	-1	3	9	-2	1
1948	Below Normal	-5	-2	1	-2	-4	0	0	0	1	3	10	16	1
1949	Dry	32	21	4	-10	68	42	3	1	0	-7	-9	3	12
1950	Below Normal	13	13	20	-22	-7	-1	0	-1	-1	0	4	6	2
1951	Above Normal	0	1	0	0	-4	-2	0	0	0	-1	0	1	0
1952	Wet	-1	-8	-19	0	0	0	0	0	0	0	0	0	-2
1953	Wet	0	0	-1	0	0	0	0	0	0	0	1	3	0
1954	Above Normal	1	-8	-30	-22	-2	0	0	7	0	0	1	4	-4
1955	Dry	-1	-1	8	8	2	0	0	0	-2	4	8	-12	1
1956	Wet	-11	-5	-1	0	0	-1	-1	0	0	0	1	2	-1
1957	Above Normal	0	0	0	-1	-3	0	0	0	0	0	0	2	0
1958	Wet	2	6	4	1	0	-1	1	-1	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	1	5	1
1960	Dry	22	25	18	-44	-9	-1	0	0	-1	-1	1	-8	0
1961	Dry	-1	3	-3	17	11	8	3	1	-2	-1	0	-3	3
1962	Below Normal	0	1	-1	4	1	0	0	0	0	0	1	3	1
1963	Wet	-5	-2	-7	0	3	0	0	0	0	0	0	0	-1
1964	Dry	1	0	0	0	0	0	0	0	-1	1	5	-2	0
1965	Wet	-4	-1	0	0	-1	-1	-1	-1	0	0	1	1	-1
1966	Below Normal	0	4	3	1	0	0	0	0	0	-1	0	1	1
1967	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	1	0
1969	Wet	0	0	-3	-2	1	2	1	0	0	0	0	0	0
1970	Wet	0	0	-1	0	0	0	0	-1	0	0	0	2	0
1971	Wet	2	-4	-5	0	0	0	0	0	0	0	-1	-1	-1
1972	Below Normal	1	1	1	0	0	0	0	0	1	0	0	3	1
1973	Above Normal	-4	2	9	1	-1	-1	0	0	0	0	-1	0	0
1974	Wet	0	0	0	0	-1	-1	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	-2	-1	7	6	-2	1
1977	Critical	2	3	14	11	-12	-35	-9	-4	-2	0	1	-24	-4
1978	Above Normal	-8	27	-7	41	0	4	12	5	0	0	0	1	6
1979	Below Normal	3	2	0	0	0	0	0	-2	0	0	0	0	0
1980	Above Normal	0	10	27	5	2	3	1	0	0	0	0	0	4
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	-1	0
1982	Wet	-1	1	0	0	-1	-1	-1	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	1	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	1	0	0	0	0	-1	0
1985	Dry	-3	10	1	0	0	0	0	0	-1	-1	2	-2	1
1986	Wet	-1	-1	-4	-2	0	0	-2	-1	0	-8	-5	-7	-3
1987	Dry	-2	-2	-2	15	-14	6	1	-1	1	7	4	-4	1
1988	Critical	-5	0	-1	-1	-2	-2	-1	0	-1	1	5	7	0
1989	Dry	1	-3	8	-18	-13	-2	0	0	-1	-2	3	-4	-3
1990	Critical	-5	-2	1	-2	-1	0	0	0	0	1	2	1	0
1991	Critical	0	0	0	0	-1	0	0	0	0	0	1	1	0
1992	Critical	2	1	0	1	-3	0	0	0	0	0	-2	-3	0
1993	Above Normal	6	-25	-7	7	0	0	0	1	2	-1	0	3	-1
1994	Critical	3	2	-1	0	1	1	0	0	-2	-2	7	-5	0
Average		1	1	1	-1	1	1	0	0	0	1	1	0	1
Wet		-1	-1	-2	0	0	0	0	0	0	0	0	0	0
Above Normal		0	1	0	3	-1	0	1	1	0	0	0	1	1
Below Normal		1	4	3	-2	-1	0	0	-1	0	0	1	3	1
Dry		3	2	3	-3	6	4	1	0	0	1	2	-1	1
Critical		0	0	1	0	3	-1	0	0	0	4	4	0	1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	0%	4%	0%
1925	Dry	0%	-3%	3%	-10%	-5%	2%	4%	1%	0%	-1%	-1%	-1%	-1%
1926	Dry	-1%	0%	0%	0%	0%	0%	1%	-1%	-1%	1%	1%	3%	0%
1927	Wet	1%	-4%	0%	1%	0%	0%	0%	-6%	0%	0%	0%	0%	-1%
1928	Above Normal	0%	0%	2%	1%	-1%	0%	0%	0%	-1%	0%	1%	3%	1%
1929	Critical	1%	0%	0%	-2%	-3%	-2%	-1%	-2%	-2%	2%	3%	7%	0%
1930	Dry	1%	-7%	-2%	3%	1%	0%	0%	2%	3%	-1%	7%	9%	1%
1931	Critical	3%	1%	-1%	-4%	25%	23%	13%	5%	9%	39%	12%	3%	11%
1932	Dry	2%	1%	-1%	0%	2%	7%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-1%	2%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	8%	2%	1%	0%	0%	0%	0%	0%	1%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	2%	0%
1936	Below Normal	1%	1%	-3%	-8%	-1%	-1%	0%	0%	0%	0%	1%	1%	-1%
1937	Below Normal	0%	-1%	-2%	3%	1%	0%	0%	-10%	2%	0%	0%	0%	-1%
1938	Wet	-1%	0%	4%	-3%	-1%	0%	1%	0%	0%	0%	0%	-1%	0%
1939	Dry	0%	2%	2%	1%	0%	0%	0%	0%	3%	3%	-1%	4%	1%
1940	Above Normal	1%	0%	1%	0%	1%	1%	0%	-9%	2%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	1%	0%
1944	Dry	0%	0%	1%	-2%	34%	14%	2%	-2%	-3%	4%	4%	-6%	4%
1945	Below Normal	-1%	7%	3%	1%	1%	-4%	-3%	0%	0%	0%	1%	1%	0%
1946	Below Normal	-1%	17%	39%	1%	2%	1%	-1%	0%	0%	1%	0%	0%	5%
1947	Dry	-2%	-1%	3%	1%	1%	0%	0%	-1%	-2%	3%	7%	-1%	1%
1948	Below Normal	-2%	-1%	0%	-1%	-2%	0%	0%	0%	2%	8%	15%	12%	3%
1949	Dry	19%	12%	2%	-4%	37%	61%	5%	1%	0%	-9%	-7%	2%	10%
1950	Below Normal	6%	7%	10%	-12%	-9%	-1%	0%	-2%	-2%	0%	6%	4%	1%
1951	Above Normal	0%	1%	0%	0%	-6%	-3%	0%	0%	0%	-1%	0%	1%	-1%
1952	Wet	0%	-4%	-11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%
1954	Above Normal	1%	-9%	-22%	-11%	-3%	0%	0%	12%	0%	0%	2%	3%	-2%
1955	Dry	0%	-1%	5%	11%	3%	1%	0%	0%	-3%	6%	7%	-7%	2%
1956	Wet	-5%	-2%	-1%	0%	0%	-2%	0%	0%	0%	0%	1%	2%	-1%
1957	Above Normal	1%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	1%	1%	0%
1958	Wet	1%	10%	5%	1%	0%	0%	0%	-1%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	4%	0%
1960	Dry	11%	13%	9%	-18%	-4%	-2%	0%	0%	-1%	-1%	1%	-5%	0%
1961	Dry	0%	1%	-1%	8%	6%	12%	6%	3%	-2%	-1%	0%	-2%	3%
1962	Below Normal	0%	0%	0%	2%	1%	1%	0%	0%	0%	1%	1%	2%	1%
1963	Wet	-3%	-4%	-9%	0%	4%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	3%	-1%	0%
1965	Wet	-2%	-1%	0%	0%	-2%	-2%	-1%	-1%	0%	-1%	1%	1%	-1%
1966	Below Normal	0%	3%	4%	1%	-1%	-1%	0%	0%	0%	-1%	1%	0%	1%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1969	Wet	0%	0%	-2%	-2%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	-1%	0%	0%	0%	0%	-2%	0%	0%	1%	1%	0%
1971	Wet	1%	-2%	-7%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	-1%
1972	Below Normal	2%	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%	2%	1%
1973	Above Normal	-2%	1%	13%	1%	-1%	-2%	0%	0%	-1%	-1%	-1%	0%	1%
1974	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-2%	0%	4%	3%	-1%	0%
1977	Critical	1%	2%	6%	6%	-6%	-26%	-8%	-3%	-1%	0%	1%	-12%	-4%
1978	Above Normal	-3%	10%	-3%	17%	0%	3%	13%	8%	0%	0%	0%	1%	4%
1979	Below Normal	3%	1%	0%	0%	0%	0%	0%	-4%	-1%	0%	0%	0%	0%
1980	Above Normal	0%	6%	27%	6%	1%	2%	0%	1%	0%	0%	0%	0%	4%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1982	Wet	0%	1%	1%	0%	-1%	-1%	-1%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1985	Dry	-1%	7%	2%	0%	0%	0%	0%	0%	-1%	-1%	2%	-1%	1%
1986	Wet	-1%	0%	-2%	-2%	0%	0%	-3%	-1%	0%	-12%	-8%	-7%	-3%
1987	Dry	-2%	-1%	-1%	6%	-8%	8%	2%	-1%	2%	8%	3%	-2%	1%
1988	Critical	-2%	0%	-1%	0%	-3%	-3%	-1%	0%	-2%	1%	4%	4%	0%
1989	Dry	0%	-1%	3%	-9%	-5%	-2%	0%	0%	-2%	-2%	2%	-3%	-1%
1990	Critical	-2%	-1%	0%	-1%	-1%	0%	0%	0%	0%	1%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1992	Critical	1%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	-1%	-1%	0%
1993	Above Normal	2%	-9%	-2%	3%	0%	0%	0%	2%	5%	-1%	1%	3%	0%
1994	Critical	2%	1%	0%	0%	1%	1%	0%	0%	-2%	-1%	4%	-3%	0%
Average		0%	1%	1%	0%	1%	1%	0%	0%	0%	1%	1%	0%	1%
Wet		0%	0%	-1%	0%	0%	0%	0%	-1%	0%	-1%	0%	0%	0%
Above Normal		0%	0%	2%	2%	-1%	0%	1%	1%	0%	0%	1%	1%	1%
Below Normal		1%	2%	4%	-1%	-1%	0%	0%	-1%	0%	1%	2%	2%	1%
Dry		2%	1%	2%	-1%	4%	6%	1%	0%	-1%	1%	2%	-1%	1%
Critical		0%	0%	0%	0%	2%	0%	0%	0%	0%	3%	2%	0%	1%

Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	-2	-3	0	4	0
1925	Dry	0	-2	4	-15	-10	8	2	0	-1	-1	-1	-1	-1
1926	Dry	-1	0	0	0	0	-4	-1	0	-3	-1	-2	2	-1
1927	Wet	1	-3	0	0	0	0	0	1	1	0	0	0	0
1928	Above Normal	0	0	1	0	0	0	0	0	-1	0	0	2	0
1929	Critical	1	1	-1	-2	-5	-1	0	-4	-11	-8	-3	6	-2
1930	Dry	2	-7	-3	3	1	-12	-1	0	5	0	3	9	0
1931	Critical	4	0	-1	-6	6	8	9	5	6	29	14	5	7
1932	Dry	3	1	-1	0	11	2	-1	0	0	0	0	0	1
1933	Critical	0	0	-1	0	0	-1	-3	0	0	0	1	0	0
1934	Critical	0	0	0	-2	3	1	1	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	-2	-1	0	0	3	-3	2	2	0
1936	Below Normal	1	1	-3	-9	-1	-1	0	0	0	1	0	1	-1
1937	Below Normal	0	-1	-2	3	0	0	0	1	0	0	0	0	0
1938	Wet	-1	1	1	-5	0	0	0	0	0	0	1	0	0
1939	Dry	0	1	1	1	0	1	0	-1	0	0	-3	5	0
1940	Above Normal	2	1	0	0	0	0	0	1	1	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	-1	-1	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	-1	-1	0	0
1944	Dry	0	1	-2	-2	28	5	0	0	-3	-2	-1	-7	1
1945	Below Normal	0	8	2	1	0	-1	-1	0	0	0	0	1	1
1946	Below Normal	-1	16	11	0	1	-1	0	0	-1	0	0	0	2
1947	Dry	-3	0	3	1	0	-2	0	0	-2	1	5	-1	0
1948	Below Normal	-3	-1	0	-1	-6	-3	0	0	2	0	5	11	0
1949	Dry	21	13	3	-8	40	2	0	0	0	-3	-6	3	5
1950	Below Normal	8	10	11	-12	-4	1	1	0	0	-7	1	3	1
1951	Above Normal	1	1	0	0	1	-1	0	0	0	-1	0	1	0
1952	Wet	-1	-9	-11	0	0	0	0	0	0	0	0	0	-2
1953	Wet	0	0	0	0	0	0	0	0	0	0	1	2	0
1954	Above Normal	1	-5	-17	-14	-2	-3	0	1	-1	-2	0	2	-3
1955	Dry	-1	-1	5	5	1	0	0	0	-1	-1	3	-7	0
1956	Wet	-6	-2	0	0	0	-1	0	0	0	0	0	1	-1
1957	Above Normal	0	0	0	-1	-1	0	0	0	0	0	0	1	0
1958	Wet	2	4	2	1	-1	-1	0	0	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	0	0	-1	0	0	4	0
1960	Dry	16	17	9	-26	-7	-1	0	0	1	-1	0	-6	0
1961	Dry	0	2	-1	11	8	29	5	2	0	0	0	-1	5
1962	Below Normal	0	0	-1	2	1	0	0	0	0	0	1	2	1
1963	Wet	-4	-2	-5	0	2	0	0	0	0	0	0	0	-1
1964	Dry	0	0	0	0	2	0	0	0	-1	0	3	-1	0
1965	Wet	-2	0	0	0	-1	-2	0	1	1	0	0	1	0
1966	Below Normal	0	3	1	0	-2	-1	0	0	0	0	0	0	0
1967	Wet	0	1	0	0	-1	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	-2	-1	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	1	0	0	1	0	1	0
1971	Wet	1	-3	-3	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	1	1	0	0	0	0	0	0	1	0	-1	2	0
1973	Above Normal	-2	2	5	1	-2	-1	0	0	-1	-1	-1	0	0
1974	Wet	0	0	0	0	-3	-1	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-3	-1	-1	2	3	-1	0
1977	Critical	2	5	8	1	-54	-23	-13	-5	-1	-1	1	-12	-8
1978	Above Normal	-13	12	-1	22	0	7	-1	0	0	0	0	1	2
1979	Below Normal	2	1	0	0	0	0	1	0	-1	-1	0	0	0
1980	Above Normal	0	10	16	2	0	0	0	0	0	0	0	0	2
1981	Dry	0	0	0	0	-2	-8	-1	0	0	0	0	-1	-1
1982	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	6	1	0	0	0	0	0	-1	-1	1	-2	0
1986	Wet	-1	-1	-2	-1	0	0	1	0	0	-23	-3	-4	-3
1987	Dry	-1	-1	1	7	-16	-20	-4	-2	-2	1	0	-3	-4
1988	Critical	-2	0	-1	-1	-13	-2	-1	0	-3	-2	3	5	-2
1989	Dry	1	-2	4	-11	-4	-2	0	0	-1	-1	2	-2	-1
1990	Critical	-3	-1	0	-2	0	0	0	0	0	1	1	1	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	1	0	0	1	-1	0	0	0	0	0	-1	-2	0
1993	Above Normal	4	-12	-4	3	0	0	0	3	2	-2	-2	2	-1
1994	Critical	2	1	0	0	2	1	0	0	-1	-1	4	-2	1
Average		0	1	0	-1	0	0	0	0	0	0	0	0	0
Wet		0	-1	-1	0	0	0	0	0	0	-1	0	0	0
Above Normal		-1	1	0	1	0	0	0	0	0	-1	0	1	0
Below Normal		1	3	1	-1	-1	0	0	0	0	-1	1	2	0
Dry		2	2	1	-2	3	0	0	0	-1	-1	0	-1	0
Critical		0	0	0	-1	-5	-1	-1	0	-1	1	2	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-4%	0%	4%	0%
1925	Dry	0%	-1%	2%	-8%	-6%	6%	3%	0%	-1%	-2%	-1%	-1%	-1%
1926	Dry	-1%	0%	0%	0%	0%	-4%	-1%	-1%	-5%	-1%	-3%	2%	-1%
1927	Wet	1%	-3%	0%	1%	0%	0%	0%	2%	2%	0%	1%	0%	0%
1928	Above Normal	0%	0%	1%	0%	0%	0%	-1%	0%	-2%	0%	0%	3%	0%
1929	Critical	1%	0%	0%	-2%	-3%	-1%	0%	-4%	-13%	-11%	-3%	5%	-3%
1930	Dry	1%	-5%	-2%	3%	1%	-12%	-2%	0%	9%	1%	4%	9%	1%
1931	Critical	2%	0%	-1%	-3%	3%	5%	7%	5%	6%	34%	14%	4%	6%
1932	Dry	2%	1%	-1%	0%	10%	1%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-3%	0%	0%	0%	1%	0%	0%
1934	Critical	0%	0%	0%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	-1%	-1%	0%	0%	6%	-5%	4%	2%	0%
1936	Below Normal	1%	1%	-2%	-6%	-1%	-1%	0%	-1%	0%	2%	0%	1%	-1%
1937	Below Normal	0%	-1%	-1%	2%	0%	0%	0%	3%	0%	0%	0%	0%	0%
1938	Wet	-1%	0%	2%	-6%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1939	Dry	-1%	2%	1%	0%	0%	0%	0%	-1%	-1%	0%	-4%	4%	0%
1940	Above Normal	1%	0%	0%	0%	0%	0%	0%	2%	2%	-1%	-1%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	-1%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	0%	0%
1944	Dry	0%	1%	-1%	-1%	21%	6%	1%	1%	-6%	-4%	-2%	-6%	1%
1945	Below Normal	0%	7%	2%	1%	0%	-1%	-1%	0%	-1%	-1%	-1%	1%	0%
1946	Below Normal	-1%	18%	16%	0%	2%	-2%	0%	0%	-2%	-1%	-1%	0%	2%
1947	Dry	-2%	0%	2%	0%	0%	-2%	0%	0%	-4%	1%	6%	-1%	0%
1948	Below Normal	-2%	-1%	0%	-1%	-3%	-2%	-1%	0%	5%	-1%	14%	13%	2%
1949	Dry	20%	12%	2%	-4%	24%	2%	0%	0%	-8%	-8%	-8%	3%	4%
1950	Below Normal	6%	8%	7%	-9%	-5%	1%	2%	0%	-1%	-16%	2%	4%	0%
1951	Above Normal	0%	1%	0%	0%	3%	-1%	0%	0%	-1%	-2%	-1%	1%	0%
1952	Wet	0%	-7%	-8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	2%	3%	1%
1954	Above Normal	2%	-8%	-17%	-10%	-2%	-4%	0%	1%	-4%	-6%	1%	3%	-4%
1955	Dry	-1%	-1%	4%	6%	1%	0%	0%	0%	-2%	-1%	4%	-7%	0%
1956	Wet	-4%	-2%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	2%	0%
1957	Above Normal	1%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	2%	8%	3%	1%	-1%	-1%	0%	-1%	0%	0%	1%	1%	1%
1959	Below Normal	0%	1%	0%	0%	0%	0%	0%	0%	-2%	-1%	1%	5%	0%
1960	Dry	13%	14%	6%	-14%	-4%	-2%	0%	0%	2%	-2%	0%	-6%	0%
1961	Dry	0%	1%	-1%	7%	6%	30%	6%	3%	0%	-1%	0%	-1%	4%
1962	Below Normal	0%	0%	0%	2%	1%	0%	0%	0%	1%	0%	2%	2%	1%
1963	Wet	-3%	-4%	-7%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	0%	2%	0%	0%	0%	-1%	1%	3%	-1%	0%
1965	Wet	-2%	0%	0%	0%	-2%	-3%	0%	3%	2%	-1%	1%	1%	0%
1966	Below Normal	0%	3%	2%	1%	-3%	-1%	0%	0%	0%	-1%	1%	1%	0%
1967	Wet	0%	0%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	1%	0%
1968	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1969	Wet	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	1%	0%	0%	0%	0%	0%	2%	0%	0%	3%	1%	2%	1%
1971	Wet	1%	-3%	-3%	0%	0%	0%	0%	0%	1%	0%	-1%	-1%	-1%
1972	Below Normal	2%	1%	0%	0%	0%	0%	0%	0%	2%	0%	-1%	2%	1%
1973	Above Normal	-2%	2%	8%	1%	-2%	-1%	0%	0%	-2%	-3%	-2%	0%	0%
1974	Wet	0%	0%	0%	0%	-4%	-2%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-3%	-1%	0%	2%	3%	-1%	0%
1977	Critical	1%	4%	5%	0%	-25%	-12%	-10%	-4%	-1%	-1%	1%	-9%	-4%
1978	Above Normal	-8%	7%	-1%	18%	0%	5%	-1%	1%	0%	0%	1%	1%	2%
1979	Below Normal	3%	1%	0%	0%	0%	0%	2%	-1%	-1%	-2%	-1%	0%	0%
1980	Above Normal	0%	9%	19%	2%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	-2%	-10%	-1%	0%	0%	0%	0%	-1%	-1%
1982	Wet	0%	1%	1%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1985	Dry	0%	7%	1%	0%	0%	0%	0%	0%	-2%	-1%	2%	-1%	1%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	3%	0%	0%	-26%	-6%	-5%	-3%
1987	Dry	-2%	-1%	0%	4%	-10%	-18%	-6%	-3%	-4%	1%	0%	-3%	-3%
1988	Critical	-2%	0%	0%	0%	-10%	-1%	-1%	0%	-4%	-3%	3%	4%	-1%
1989	Dry	1%	-1%	2%	-7%	-2%	-2%	0%	0%	-2%	-3%	2%	-2%	-1%
1990	Critical	-2%	-1%	0%	-1%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-1%	-1%	0%
1993	Above Normal	2%	-7%	-2%	2%	0%	0%	0%	4%	3%	-4%	-4%	2%	0%
1994	Critical	2%	1%	0%	0%	1%	1%	0%	0%	-1%	-1%	3%	-2%	0%
Average		0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	1%	0%
Wet		0%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	1%	1%	1%	0%	0%	0%	1%	0%	-2%	-1%	1%	0%
Below Normal		1%	3%	2%	-1%	-1%	0%	0%	0%	1%	-2%	2%	2%	0%
Dry		2%	2%	1%	-1%	3%	0%	0%	0%	-1%	0%	0%	-1%	0%
Critical		0%	0%	0%	-1%	-3%	-1%	-1%	0%	-1%	1%	2%	0%	0%

Monthly Average X2 Location (km)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	80	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	86	86	70	67	67	74	74	71	71	80	85	85	76
1924	Critical	87	87	86	83	83	77	77	85	85	86	86	86	84
1925	Dry	89	89	84	83	83	65	65	72	72	82	86	86	80
1926	Dry	88	88	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	88	88	76	70	70	59	59	65	65	76	84	84	73
1928	Above Normal	86	86	80	74	74	57	57	69	69	78	84	84	75
1929	Critical	88	88	83	84	84	78	78	81	81	86	87	87	84
1930	Dry	88	88	81	75	75	68	68	76	76	83	86	86	79
1931	Critical	87	87	86	82	82	81	81	85	85	86	87	87	85
1932	Dry	89	89	78	76	76	74	74	75	75	82	86	86	80
1933	Critical	88	88	86	81	81	78	78	81	81	86	86	86	83
1934	Critical	90	90	84	77	77	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	84	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	86	70	70	63	63	69	69	79	85	85	76
1937	Below Normal	87	87	85	83	83	62	62	69	69	79	85	85	78
1938	Wet	87	87	61	63	63	47	47	54	54	72	82	82	67
1939	Dry	77	77	82	82	82	77	77	78	78	83	86	86	80
1940	Above Normal	88	88	86	72	72	53	53	65	65	76	84	84	74
1941	Wet	87	87	69	57	57	51	51	58	58	75	83	83	68
1942	Wet	81	81	65	57	57	61	61	61	61	75	83	83	69
1943	Wet	81	81	70	58	58	54	54	67	67	77	84	84	70
1944	Dry	87	87	86	82	82	72	72	77	77	83	86	86	81
1945	Below Normal	87	87	80	82	82	66	66	74	74	80	85	85	79
1946	Below Normal	87	87	62	60	60	69	69	73	73	80	85	85	74
1947	Dry	88	88	81	82	82	74	74	78	78	83	84	84	81
1948	Below Normal	88	88	85	82	82	76	76	69	69	78	84	84	80
1949	Dry	86	86	84	83	83	67	67	74	74	83	84	84	80
1950	Below Normal	88	88	86	77	77	71	71	72	72	80	85	85	79
1951	Above Normal	87	87	55	55	55	61	61	71	71	76	84	84	71
1952	Wet	86	86	69	58	58	55	55	55	55	70	79	79	67
1953	Wet	80	80	68	56	56	70	70	69	69	76	84	84	72
1954	Above Normal	82	82	84	71	71	61	61	66	66	76	84	84	74
1955	Dry	87	87	76	74	74	79	79	78	78	83	86	86	80
1956	Wet	88	88	62	50	50	58	58	63	63	76	83	83	69
1957	Above Normal	78	78	85	83	83	64	64	71	71	77	84	84	77
1958	Wet	80	80	75	66	66	51	51	56	56	73	80	80	68
1959	Below Normal	80	80	85	72	72	67	67	78	78	79	84	84	77
1960	Dry	87	87	85	84	84	72	72	76	76	83	85	85	81
1961	Dry	87	87	82	82	82	74	74	78	78	82	84	84	81
1962	Below Normal	88	88	82	82	82	69	69	74	74	78	84	84	79
1963	Wet	72	72	73	75	75	65	65	63	63	76	83	83	72
1964	Dry	85	85	82	74	74	78	78	78	78	83	83	83	80
1965	Wet	87	87	63	54	54	67	67	66	66	77	84	84	71
1966	Below Normal	87	87	76	69	69	69	69	75	75	79	84	84	77
1967	Wet	87	87	70	62	62	58	58	58	58	67	79	79	69
1968	Below Normal	78	78	81	71	71	64	64	75	75	79	84	84	75
1969	Wet	88	88	76	58	58	54	54	56	56	73	83	83	69
1970	Wet	78	78	65	49	49	59	59	73	73	77	84	84	69
1971	Wet	87	87	64	61	61	62	62	66	66	77	84	84	72
1972	Below Normal	83	83	77	78	78	68	68	76	76	80	85	85	78
1973	Above Normal	87	87	72	59	59	57	57	71	71	78	84	84	72
1974	Wet	85	85	59	51	51	53	53	64	64	76	83	83	67
1975	Wet	79	79	81	78	78	56	56	65	65	76	83	83	73
1976	Critical	76	76	82	83	83	78	78	85	85	86	87	87	82
1977	Critical	86	86	83	85	85	81	81	85	85	86	87	87	85
1978	Above Normal	89	89	82	64	64	57	57	66	66	77	84	84	73
1979	Below Normal	86	86	84	75	75	65	65	71	71	79	85	85	77
1980	Above Normal	88	88	76	57	57	54	54	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	68	68	78	78	83	85	85	79
1982	Wet	87	87	58	55	55	52	52	57	57	75	81	81	66
1983	Wet	71	71	56	52	52	42	42	52	52	59	67	67	57
1984	Wet	71	71	50	53	53	61	61	73	73	77	84	84	68
1985	Dry	85	85	73	79	79	73	73	76	76	82	86	86	79
1986	Wet	87	87	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	86	86	86	82	82	70	70	78	78	83	85	85	81
1988	Critical	88	88	82	73	73	78	78	81	81	85	87	87	82
1989	Dry	89	89	84	84	84	67	67	74	74	83	84	84	80
1990	Critical	87	87	81	78	78	79	79	83	83	86	87	87	83
1991	Critical	90	90	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	72	72	80	80	85	88	88	83
1993	Above Normal	89	89	83	65	65	62	62	64	64	75	83	83	74
1994	Critical	86	86	84	82	82	75	75	79	79	83	84	84	82
Average		85	85	77	72	72	66	66	71	71	79	84	84	76
Wet		83	83	67	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	78	68	68	59	59	67	67	76	84	84	74
Below Normal		86	86	80	74	74	68	68	72	72	79	85	85	77
Dry		87	87	82	80	80	72	72	76	76	83	85	85	80
Critical		87	87	84	81	81	77	77	82	82	86	87	87	83

Shasta Lake Water Resources Investigation
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Monthly Average X2 Location (km)

Alternative CP2 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	80	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	86	86	69	67	67	74	74	71	71	80	85	85	76
1924	Critical	87	87	86	83	83	77	77	85	85	86	86	86	84
1925	Dry	89	89	84	83	83	65	65	72	72	82	86	86	80
1926	Dry	88	88	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	87	87	76	70	70	59	59	65	65	76	84	84	73
1928	Above Normal	86	86	80	74	74	57	57	69	69	78	84	84	75
1929	Critical	88	88	83	84	84	78	78	81	81	86	88	88	84
1930	Dry	88	88	81	75	75	68	68	76	76	83	86	86	79
1931	Critical	88	88	86	83	83	82	82	85	85	86	87	87	85
1932	Dry	89	89	78	76	76	74	74	75	75	82	86	86	80
1933	Critical	88	88	86	81	81	78	78	81	81	86	86	86	83
1934	Critical	90	90	84	78	78	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	84	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	85	70	70	63	63	69	69	80	85	85	76
1937	Below Normal	87	87	85	82	82	62	62	69	69	79	85	85	78
1938	Wet	87	87	62	64	64	47	47	54	54	72	82	82	67
1939	Dry	78	78	82	82	82	77	77	78	78	82	85	85	80
1940	Above Normal	88	88	86	72	72	54	54	65	65	76	84	84	74
1941	Wet	87	87	69	57	57	51	51	58	58	75	83	83	68
1942	Wet	81	81	65	57	57	61	61	62	62	75	83	83	69
1943	Wet	81	81	70	58	58	54	54	67	67	77	84	84	70
1944	Dry	87	87	84	83	83	72	72	77	77	83	85	85	81
1945	Below Normal	88	88	80	82	82	66	66	74	74	80	85	85	79
1946	Below Normal	87	87	63	61	61	69	69	73	73	80	85	85	74
1947	Dry	87	87	81	82	82	74	74	78	78	83	83	83	81
1948	Below Normal	88	88	84	81	81	76	76	69	69	79	85	85	80
1949	Dry	87	87	84	84	84	68	68	74	74	83	84	84	80
1950	Below Normal	88	88	85	76	76	71	71	72	72	80	85	85	79
1951	Above Normal	87	87	56	55	55	62	62	71	71	76	84	84	71
1952	Wet	86	86	69	58	58	55	55	55	55	70	79	79	67
1953	Wet	80	80	68	56	56	70	70	69	69	76	84	84	72
1954	Above Normal	82	82	84	71	71	61	61	66	66	76	84	84	74
1955	Dry	87	87	77	74	74	79	79	77	77	83	85	85	80
1956	Wet	88	88	63	51	51	58	58	63	63	76	83	83	69
1957	Above Normal	78	78	85	82	82	64	64	71	71	77	84	84	77
1958	Wet	81	81	75	66	66	51	51	56	56	73	80	80	68
1959	Below Normal	80	80	85	72	72	67	67	78	78	79	84	84	77
1960	Dry	87	87	83	84	84	72	72	76	76	83	84	84	81
1961	Dry	88	88	82	82	82	75	75	78	78	82	84	84	82
1962	Below Normal	88	88	82	82	82	69	69	74	74	78	84	84	79
1963	Wet	72	72	72	76	76	65	65	63	63	76	83	83	72
1964	Dry	85	85	82	74	74	78	78	78	78	83	83	83	80
1965	Wet	87	87	63	54	54	67	67	66	66	77	84	84	71
1966	Below Normal	87	87	76	69	69	69	69	75	75	78	84	84	77
1967	Wet	87	87	70	62	62	58	58	58	58	67	79	79	69
1968	Below Normal	78	78	81	71	71	64	64	75	75	79	84	84	75
1969	Wet	88	88	76	58	58	54	54	56	56	73	83	83	69
1970	Wet	78	78	65	49	49	59	59	73	73	77	84	84	69
1971	Wet	87	87	64	61	61	62	62	66	66	77	84	84	72
1972	Below Normal	83	83	78	78	78	68	68	76	76	79	85	85	78
1973	Above Normal	87	87	72	59	59	57	57	71	71	77	84	84	72
1974	Wet	85	85	59	51	51	53	53	64	64	76	83	83	67
1975	Wet	79	79	81	78	78	56	56	65	65	76	83	83	73
1976	Critical	76	76	82	83	83	78	78	85	85	87	87	87	82
1977	Critical	86	86	82	85	85	81	81	85	85	86	86	86	85
1978	Above Normal	90	90	83	65	65	57	57	66	66	77	84	84	74
1979	Below Normal	86	86	84	75	75	65	65	71	71	79	85	85	77
1980	Above Normal	88	88	76	58	58	54	54	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	69	69	78	78	83	85	85	79
1982	Wet	87	87	58	56	56	52	52	57	57	75	81	81	66
1983	Wet	71	71	56	52	52	42	42	52	52	59	67	67	57
1984	Wet	71	71	50	53	53	61	61	73	73	77	84	84	68
1985	Dry	86	86	73	79	79	73	73	76	76	82	85	85	79
1986	Wet	87	87	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	86	86	86	82	82	71	71	78	78	83	84	84	81
1988	Critical	88	88	82	72	72	78	78	81	81	85	88	88	82
1989	Dry	88	88	84	84	84	67	67	74	74	82	83	83	80
1990	Critical	87	87	81	78	78	79	79	83	83	86	87	87	83
1991	Critical	90	90	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	72	72	80	80	85	88	88	83
1993	Above Normal	88	88	84	65	65	62	62	66	66	76	83	83	74
1994	Critical	86	86	84	82	82	75	75	79	79	84	83	83	82
Average		85	85	77	72	72	66	66	71	71	79	84	84	76
Wet		83	83	67	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	79	68	68	59	59	68	68	76	84	84	74
Below Normal		86	86	80	74	74	68	68	72	72	79	85	85	77
Dry		87	87	82	80	80	72	72	76	76	83	85	85	80
Critical		87	87	84	81	81	77	77	82	82	86	87	87	83

Change in Monthly Average X2 Position (km)
 Alternative CP2 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	-1	-1	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	-1	0	0	0	0	0	0	0	0	0	0
1930	Dry	-1	-1	0	0	0	0	0	0	0	0	1	1	0
1931	Critical	0	0	0	1	1	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	-1	0	0	1	1	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	-1	0	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	-1	1	1	0	0	0	0	0	-1	-1	0
1945	Below Normal	1	1	0	0	0	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	1	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	1	1	-1	1	1	1	1	0	0	0	0	0	1
1950	Below Normal	0	0	-1	-1	-1	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	1	0	0	0	0	0	0	0	-1	-1	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	1	1	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	-2	0	0	0	0	0	0	0	-1	-1	0
1961	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	1	1	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	-1	0	0	0	0	0	0	1	-1	-1	0
1978	Above Normal	1	1	1	0	0	1	1	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	1	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	1	1	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	Dry	0	0	0	0	0	1	1	0	0	0	-1	-1	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	-1	-1	0	0	0	1	1	1	1	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
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Percent Change in Monthly Average X2 Position (km)
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1931	Critical	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Norma	0%	0%	-1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1937	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1940	Above Norma	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	-1%	2%	2%	0%	0%	0%	0%	0%	-1%	-1%	0%
1945	Below Norma	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Norma	0%	0%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1948	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1949	Dry	1%	1%	-1%	1%	1%	2%	2%	0%	0%	0%	0%	0%	1%
1950	Below Norma	0%	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Norma	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1956	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1961	Dry	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%
1962	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	1%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%
1978	Above Norma	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	1%
1979	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	-1%	-1%	1%	1%	0%	0%	0%	-1%	-1%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1993	Above Norma	-1%	-1%	0%	0%	0%	1%	1%	2%	2%	1%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	-1	0	0	0	-2	-2	0	0	9	-1	-5	0
1924	Critical	13	-127	-693	399	1,304	623	106	131	-152	-74	50	103	140
1925	Dry	-75	112	-52	-154	-4	2	1	0	0	-4	-22	-44	-20
1926	Dry	-12	-4	-1	-1	0	-2	35	-52	-105	-24	33	40	-8
1927	Wet	-134	-1,127	-306	-14	2	0	0	-1	-4	5	6	30	-129
1928	Above Normal	-11	93	62	-2	-2	0	1	1	7	10	-32	-9	10
1929	Critical	9	29	-466	-293	-49	-13	35	-105	57	-28	37	46	-62
1930	Dry	-154	-190	18	20	1	3	9	-17	-52	44	106	241	2
1931	Critical	-4	-168	31	273	-1,349	-1,008	-245	-107	-3	87	2	-6	-208
1932	Dry	-35	-41	-12	-3	-89	-35	5	0	0	-1	1	0	-17
1933	Critical	0	0	-3	-45	-342	-226	-45	-11	-2	-1	-1	0	-56
1934	Critical	-10	11	-12	-25	-4	0	0	0	-2	7	2	2	-3
1935	Below Normal	-1	9	-12	-5	0	-15	-1	1	5	14	-69	29	-4
1936	Below Normal	40	19	-368	-58	0	3	1	0	5	13	-36	-49	-36
1937	Below Normal	-49	120	553	5	-83	0	0	-9	-26	0	-4	-60	37
1938	Wet	-53	144	9	0	0	0	0	0	0	-1	15	90	17
1939	Dry	180	192	67	25	-75	4	24	2	76	-619	-734	-361	-102
1940	Above Normal	-147	-58	-22	-11	6	0	0	-1	-4	4	6	10	-18
1941	Wet	7	18	15	0	0	0	0	0	0	0	1	10	4
1942	Wet	15	18	1	0	0	0	0	0	0	0	2	5	4
1943	Wet	12	7	0	0	0	0	0	0	0	-2	-5	9	2
1944	Dry	-146	49	-605	247	161	0	-11	-2	4	-63	-436	-417	-102
1945	Below Normal	189	190	26	-19	-2	-3	-1	-38	-31	-6	-26	-72	17
1946	Below Normal	-37	1,618	101	0	-1	-19	-18	-1	1	-114	-121	-115	108
1947	Dry	-52	150	58	6	-47	-25	-11	-15	-157	-247	-442	-321	-92
1948	Below Normal	-142	-75	-150	-82	56	27	-3	2	242	239	70	1,054	103
1949	Dry	834	213	-208	134	3,358	272	15	3	-17	40	-21	-46	381
1950	Below Normal	-56	-78	-184	-245	-16	-1	-22	-2	0	-39	-1	22	-52
1951	Above Normal	-119	67	0	0	-1	-1	-5	6	-47	-77	-50	-69	-25
1952	Wet	-16	-551	-38	0	0	0	0	0	0	0	14	8	-49
1953	Wet	1	-11	-2	0	0	1	0	10	6	3	-23	21	0
1954	Above Normal	47	-643	-483	-52	-1	0	0	5	21	-42	-78	-17	-104
1955	Dry	191	53	474	150	19	9	-9	-149	-114	-122	-477	-451	-36
1956	Wet	-164	-79	23	0	0	0	0	0	1	1	-14	15	-18
1957	Above Normal	12	3	120	-96	-22	0	0	-10	-8	-50	-78	-72	-17
1958	Wet	320	240	38	3	0	0	0	0	0	1	18	17	53
1959	Below Normal	17	14	5	2	0	0	-1	0	-59	-97	-96	369	13
1960	Dry	195	-124	-2,067	-1,195	-85	-11	-3	-6	51	142	87	-2	-251
1961	Dry	23	-1	15	1	242	283	186	-24	-73	53	-19	-37	54
1962	Below Normal	29	-49	20	19	30	2	-1	1	25	-140	-129	-41	-20
1963	Wet	76	-106	-59	161	15	-1	0	0	0	8	8	38	12
1964	Dry	16	29	36	1	-1	16	-149	-153	-163	-157	-219	-136	-73
1965	Wet	-6	-10	19	0	1	-2	0	-4	-67	-19	26	13	-4
1966	Below Normal	-14	203	89	6	9	7	9	1	-51	-51	-21	-27	13
1967	Wet	-25	-18	6	0	0	0	0	0	0	1	16	13	-1
1968	Below Normal	6	-6	-9	-1	0	0	0	1	-51	-63	-45	-16	-15
1969	Wet	-11	-5	-266	-3	0	0	0	0	0	0	-1	24	-22
1970	Wet	-9	-30	-1	0	0	0	-2	4	3	-3	-17	-12	-6
1971	Wet	-5	-516	-24	0	0	0	0	0	1	-41	-33	63	-46
1972	Below Normal	64	32	8	2	1	2	10	-5	13	-139	-168	-147	-27
1973	Above Normal	-145	467	89	1	0	0	0	12	5	-96	-113	-3	18
1974	Wet	-5	6	0	0	0	0	0	0	0	1	16	14	3
1975	Wet	11	11	2	3	0	0	0	0	0	0	14	25	6
1976	Critical	11	7	2	3	2	16	-122	-136	-95	-186	-397	-263	-96
1977	Critical	128	-1,079	-969	-424	3,178	1,888	236	99	6	43	-219	-317	214
1978	Above Normal	213	-185	275	42	2	9	8	-5	-6	1	-2	103	38
1979	Below Normal	100	38	-17	-30	-1	0	2	-21	-8	3	-4	7	6
1980	Above Normal	-15	812	486	5	0	0	0	-1	4	-1	-2	-3	107
1981	Dry	-1	-2	-3	0	7	41	76	12	11	-35	-83	-49	-2
1982	Wet	-14	23	0	0	0	0	0	0	0	0	40	15	5
1983	Wet	1	0	0	0	0	0	0	0	0	0	1	1	0
1984	Wet	2	0	0	0	0	0	0	-2	-4	-1	-3	-206	-18
1985	Dry	301	80	6	8	4	2	3	-9	-106	-65	-119	-75	2
1986	Wet	-2	-262	-140	-97	0	0	2	-29	-34	-61	86	273	-22
1987	Dry	246	116	-68	-165	278	101	7	-38	-44	-497	-640	-301	-84
1988	Critical	-131	-62	-40	-7	-11	4	2	5	-16	5	38	75	-12
1989	Dry	-71	69	-182	-231	-87	6	3	-3	-165	-150	-286	-221	-110
1990	Critical	-67	-59	-67	-34	-4	-5	-5	-2	-1	2	11	17	-18
1991	Critical	-9	16	-17	24	43	2	0	3	1	0	16	-5	6
1992	Critical	-3	-1	5	-14	-4	-1	0	8	0	-9	6	148	11
1993	Above Normal	-156	-261	142	17	0	2	0	27	105	166	64	117	19
1994	Critical	116	59	-38	260	90	-9	0	4	-225	78	-177	-368	-17
Average		18	-8	-65	-20	89	27	2	-9	-17	-32	-64	-18	-8
Wet		0	-107	-34	3	1	0	0	-1	-5	-5	8	22	-10
Above Normal		-32	29	67	-10	-2	1	0	3	8	-9	-29	6	3
Below Normal		10	145	4	-29	0	0	-2	-5	5	-27	-46	68	10
Dry		90	44	-158	-72	230	42	11	-28	-53	-106	-205	-136	-29
Critical		4	-115	-189	10	238	106	-3	-9	-36	-6	-53	-47	-8

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	-1%	-9%	6%	53%	38%	3%	2%	-2%	-1%	1%	1%	8%
1925	Dry	-1%	1%	-1%	-2%	-1%	1%	0%	0%	0%	0%	0%	-1%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	9%	-6%	-3%	0%	0%	0%	0%
1927	Wet	-2%	-33%	-23%	-4%	1%	0%	0%	0%	0%	0%	0%	0%	-5%
1928	Above Normal	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1929	Critical	0%	0%	-7%	-5%	-1%	-1%	1%	-3%	1%	0%	0%	0%	-1%
1930	Dry	-2%	-2%	0%	1%	0%	1%	1%	-1%	-1%	1%	2%	3%	0%
1931	Critical	0%	-2%	0%	5%	-34%	-24%	-5%	-2%	0%	1%	0%	0%	-5%
1932	Dry	0%	0%	0%	0%	-13%	-4%	0%	0%	0%	0%	0%	0%	-1%
1933	Critical	0%	0%	0%	-1%	-9%	-8%	-2%	0%	0%	0%	0%	0%	-2%
1934	Critical	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	-3%	0%	0%	1%	1%	-1%	0%	0%
1936	Below Normal	0%	0%	-4%	-7%	0%	2%	0%	0%	0%	0%	-1%	-1%	-1%
1937	Below Normal	-1%	1%	7%	0%	-12%	0%	0%	-2%	0%	0%	0%	-1%	-1%
1938	Wet	-1%	8%	4%	0%	0%	0%	0%	0%	0%	0%	0%	4%	1%
1939	Dry	9%	5%	1%	1%	-3%	0%	1%	0%	2%	-12%	-4%	-4%	-1%
1940	Above Normal	-2%	-1%	0%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	-2%	1%	-8%	4%	16%	0%	-1%	0%	0%	-1%	-7%	-5%	0%
1945	Below Normal	2%	3%	1%	0%	0%	-1%	0%	-3%	-2%	0%	0%	-1%	0%
1946	Below Normal	0%	33%	37%	0%	0%	-5%	-2%	0%	0%	-4%	-2%	-2%	5%
1947	Dry	-1%	2%	1%	0%	-2%	-3%	-1%	-1%	-5%	-6%	-8%	-4%	-2%
1948	Below Normal	-2%	-1%	-2%	-2%	3%	2%	-1%	1%	41%	11%	1%	18%	6%
1949	Dry	11%	3%	-3%	2%	137%	102%	2%	0%	-1%	1%	0%	-1%	21%
1950	Below Normal	-1%	-1%	-2%	-8%	-5%	0%	-3%	0%	0%	-1%	0%	0%	-2%
1951	Above Normal	-1%	12%	0%	0%	-1%	0%	-1%	1%	-2%	-4%	-1%	-1%	0%
1952	Wet	0%	-8%	-5%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	-1%	1%	0%
1954	Above Normal	1%	-17%	-10%	-6%	-1%	0%	0%	2%	1%	-2%	-2%	0%	-3%
1955	Dry	2%	1%	21%	17%	2%	0%	0%	-7%	-3%	-3%	-7%	-6%	1%
1956	Wet	-2%	-1%	5%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	1%	0%	2%	-2%	-3%	0%	0%	-2%	-1%	-2%	-2%	-1%	-1%
1958	Wet	8%	7%	2%	1%	0%	0%	0%	0%	0%	0%	1%	1%	2%
1959	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	-2%	5%	0%
1960	Dry	2%	-1%	-26%	-16%	-7%	-2%	0%	0%	1%	3%	1%	0%	-4%
1961	Dry	0%	0%	0%	0%	22%	41%	13%	-1%	-2%	1%	0%	0%	6%
1962	Below Normal	0%	-1%	0%	0%	5%	1%	0%	0%	1%	-5%	-3%	-1%	0%
1963	Wet	8%	-7%	-7%	14%	6%	-1%	0%	0%	0%	0%	0%	1%	1%
1964	Dry	0%	2%	1%	0%	0%	1%	-6%	-6%	-5%	-3%	-4%	-2%	-2%
1965	Wet	0%	0%	5%	0%	0%	-1%	0%	-2%	-6%	-1%	1%	0%	0%
1966	Below Normal	0%	12%	6%	1%	3%	2%	1%	0%	-2%	-2%	0%	0%	2%
1967	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	-1%	0%	0%
1969	Wet	0%	0%	-11%	-1%	0%	0%	0%	0%	0%	0%	0%	1%	-1%
1970	Wet	-1%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-13%	-8%	0%	0%	0%	0%	0%	-2%	-1%	-2%	2%	-2%
1972	Below Normal	2%	0%	0%	0%	0%	1%	1%	0%	0%	-4%	-3%	-2%	0%
1973	Above Normal	-2%	15%	14%	1%	0%	0%	0%	2%	0%	-4%	-2%	0%	2%
1974	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	1%	0%	0%	0%	0%	1%	-4%	-2%	-1%	-2%	-5%	-3%	-1%
1977	Critical	1%	-12%	-14%	-6%	126%	65%	5%	2%	0%	1%	-3%	-3%	14%
1978	Above Normal	2%	-2%	4%	11%	1%	4%	4%	-2%	-1%	0%	0%	2%	2%
1979	Below Normal	1%	0%	0%	-1%	0%	0%	0%	-3%	-1%	0%	0%	0%	0%
1980	Above Normal	0%	14%	25%	3%	0%	0%	0%	0%	1%	0%	0%	0%	4%
1981	Dry	0%	0%	0%	0%	2%	18%	10%	1%	0%	-1%	-1%	-1%	2%
1982	Wet	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-3%	0%
1985	Dry	4%	8%	1%	0%	0%	0%	0%	-1%	-3%	-1%	-2%	-1%	1%
1986	Wet	0%	-3%	-3%	-6%	0%	0%	1%	-5%	-3%	-3%	2%	5%	-1%
1987	Dry	3%	1%	-1%	-3%	15%	27%	1%	-2%	-1%	-9%	-10%	-4%	1%
1988	Critical	-1%	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1989	Dry	-1%	1%	-2%	-3%	-1%	1%	1%	0%	-5%	-3%	-5%	-3%	-2%
1990	Critical	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
1993	Above Normal	-2%	-3%	2%	4%	0%	1%	0%	13%	42%	12%	1%	2%	6%
1994	Critical	2%	1%	-1%	5%	6%	-1%	0%	0%	-4%	2%	-3%	-5%	0%
Average		1%	0%	0%	0%	4%	3%	0%	0%	0%	-1%	-1%	0%	1%
Wet		1%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Above Normal		0%	2%	4%	1%	0%	1%	0%	1%	4%	0%	-1%	0%	1%
Below Normal		0%	3%	3%	-1%	0%	0%	0%	-1%	2%	-1%	-1%	1%	1%
Dry		2%	1%	-1%	0%	11%	11%	2%	-1%	-2%	-2%	-3%	-2%	1%
Critical		0%	-1%	-3%	0%	12%	6%	0%	0%	-1%	0%	-1%	-1%	1%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	-1	0	0	0	-4	-5	-1	-1	6	0	-4	-1
1924	Critical	12	-74	-705	461	1,989	1,020	182	116	-131	-66	59	102	247
1925	Dry	-66	100	-64	-178	-6	3	-2	-1	0	-3	-30	-50	-25
1926	Dry	-13	-6	-2	-1	0	-4	100	-78	-131	-23	39	48	-6
1927	Wet	-122	-1,790	-626	-44	2	0	0	-4	-8	7	7	29	-212
1928	Above Normal	-7	131	94	-7	-5	0	3	4	11	12	-22	-8	17
1929	Critical	5	28	-467	-354	-80	-24	37	-112	63	-18	46	52	-69
1930	Dry	-143	-185	25	32	3	18	22	-26	-58	32	145	244	9
1931	Critical	1	-140	-1	326	-1,945	-1,467	-363	-143	4	85	8	-6	-303
1932	Dry	-33	-40	-17	-6	-253	-108	3	-1	0	0	1	0	-38
1933	Critical	0	0	-5	-63	-464	-336	-75	-18	-3	-1	-1	-1	-81
1934	Critical	-9	10	-14	-40	-8	0	0	0	-2	5	3	2	-4
1935	Below Normal	-1	9	-12	-8	0	-51	-4	3	7	12	-48	25	-6
1936	Below Normal	41	19	-355	-93	0	17	7	-1	7	14	-22	-48	-35
1937	Below Normal	-49	66	572	-2	-153	0	-1	-12	-42	-1	-1	-57	27
1938	Wet	-58	297	24	-2	0	0	0	0	0	-1	10	150	35
1939	Dry	288	254	89	35	-111	2	35	2	92	-679	-784	-368	-95
1940	Above Normal	-161	-70	-31	-23	11	1	0	-4	-7	6	7	10	-22
1941	Wet	8	16	34	0	0	0	0	0	0	0	1	14	6
1942	Wet	21	21	2	0	0	0	0	2	3	1	1	8	5
1943	Wet	16	11	1	0	0	0	0	0	0	-1	-2	8	3
1944	Dry	-129	50	-601	322	262	-10	-23	-4	4	-42	-446	-431	-87
1945	Below Normal	153	206	38	-7	-4	-3	-1	-68	-49	-9	-19	-69	14
1946	Below Normal	-40	1,885	191	0	-10	-60	-40	-4	2	-143	-140	-117	127
1947	Dry	-69	138	73	7	-73	-54	-23	-22	-208	-252	-476	-360	-110
1948	Below Normal	-156	-84	-153	-106	101	54	-8	5	502	436	126	1,071	149
1949	Dry	919	298	-220	167	4,344	527	17	5	-26	27	-19	-33	500
1950	Below Normal	-35	-51	-195	-374	-41	-2	-42	-8	1	-30	-2	19	-63
1951	Above Normal	-101	149	0	0	-1	0	-12	16	-64	-119	-70	-74	-23
1952	Wet	-23	-585	-17	0	0	0	0	0	0	0	18	13	-50
1953	Wet	3	-13	-3	0	0	2	0	37	19	6	-16	28	5
1954	Above Normal	59	-858	-665	-114	-2	0	0	13	28	-63	-85	-23	-142
1955	Dry	162	66	805	314	42	15	-12	-220	-160	-102	-496	-475	-5
1956	Wet	-188	-94	35	0	0	0	2	2	3	2	-9	22	-19
1957	Above Normal	19	6	123	-104	-40	0	0	-23	-15	-74	-88	-75	-23
1958	Wet	411	338	69	13	0	0	0	0	1	22	27	73	7
1959	Below Normal	24	18	6	4	0	0	-2	-1	-72	-131	-104	339	7
1960	Dry	259	-25	-2,112	-1,427	-190	-33	-6	-8	34	161	100	5	-270
1961	Dry	24	1	23	3	583	610	335	-22	-83	58	-16	-42	123
1962	Below Normal	26	-46	29	31	73	7	-2	2	23	-193	-161	-51	-22
1963	Wet	169	-136	-114	279	30	-7	0	0	0	11	10	38	23
1964	Dry	20	55	55	-2	-5	22	-217	-244	-218	-178	-237	-153	-92
1965	Wet	-18	-13	32	0	6	-4	1	-9	-110	-30	31	14	-8
1966	Below Normal	-11	399	176	15	35	26	18	3	-63	-67	-26	-28	40
1967	Wet	-26	-19	18	1	0	0	0	0	0	3	22	22	2
1968	Below Normal	10	-7	-11	-1	0	0	1	1	-63	-88	-53	-20	-19
1969	Wet	-12	-7	-446	-9	-1	0	0	0	0	0	-1	43	-36
1970	Wet	-9	-39	-2	0	0	0	-2	9	5	-5	-16	-9	-6
1971	Wet	-5	-729	-41	1	-3	-2	-1	1	-61	-51	96	-66	-66
1972	Below Normal	89	40	13	3	2	15	22	-8	14	-179	-186	-153	-27
1973	Above Normal	-152	697	190	2	0	0	-1	29	11	-138	-137	-14	41
1974	Wet	-5	12	0	0	3	0	0	1	1	1	19	23	4
1975	Wet	18	14	4	4	1	0	0	1	0	0	17	39	8
1976	Critical	21	11	3	5	3	23	-151	-168	-75	-153	-368	-264	-93
1977	Critical	101	-880	-1,005	-454	4,384	2,797	427	148	17	49	-239	-331	418
1978	Above Normal	190	-177	350	70	3	10	7	-12	-13	1	-2	118	45
1979	Below Normal	114	44	-15	-48	-3	1	2	-40	-19	6	-2	6	4
1980	Above Normal	-13	933	770	13	0	0	1	-2	7	0	-2	-2	142
1981	Dry	-1	-2	-3	2	27	171	175	22	13	-39	-86	-56	18
1982	Wet	-15	55	0	0	0	0	0	0	0	0	48	26	9
1983	Wet	3	0	0	0	0	0	0	0	0	0	3	2	1
1984	Wet	5	0	0	0	0	0	0	-3	-5	-3	-3	-192	-17
1985	Dry	274	134	12	13	7	6	6	-15	-127	-76	-121	-86	2
1986	Wet	-8	-243	-174	-180	-1	0	14	-54	-66	-66	56	302	-35
1987	Dry	276	128	-20	-222	555	305	46	-61	-34	-516	-678	-335	-46
1988	Critical	-147	-75	-53	-14	-11	3	2	5	-12	4	48	74	-15
1989	Dry	-61	62	-192	-268	-106	22	9	-6	-201	-173	-307	-248	-123
1990	Critical	-86	-59	-85	-54	-11	-9	-7	-2	-1	2	13	16	-24
1991	Critical	-8	15	-15	22	46	4	0	3	1	0	14	-4	6
1992	Critical	-2	-1	4	-15	-8	-1	0	7	-3	-7	-5	138	9
1993	Above Normal	-139	-254	155	26	0	13	3	124	344	334	108	134	71
1994	Critical	125	66	-40	279	115	-15	0	4	-244	80	-187	-351	-14
Average		24	1	-61	-24	124	48	7	-12	-15	-32	-66	-17	-2
Wet		8	-138	-57	3	2	-1	1	-1	-7	-6	8	34	-13
Above Normal		-31	56	99	-14	-4	2	0	14	30	-4	-29	7	11
Below Normal		12	178	20	-42	0	0	-4	-9	18	-26	-46	65	14
Dry		107	64	-134	-76	317	93	29	-42	-69	-113	-213	-146	-15
Critical		1	-92	-199	8	334	166	4	-13	-32	-2	-51	-48	7

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	-1%	-6%	5%	40%	28%	3%	1%	-1%	1%	1%	1%	6%
1925	Dry	0%	1%	-1%	-2%	-1%	1%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	11%	-4%	-2%	0%	0%	0%	0%
1927	Wet	-1%	-28%	-19%	-4%	1%	0%	0%	-1%	0%	0%	0%	0%	-4%
1928	Above Normal	0%	2%	2%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	-4%	-3%	-1%	-1%	1%	-2%	1%	0%	0%	0%	-1%
1930	Dry	-1%	-1%	0%	1%	0%	3%	1%	-1%	-1%	0%	1%	2%	0%
1931	Critical	0%	-1%	0%	3%	-27%	-20%	-4%	-1%	0%	1%	0%	0%	-4%
1932	Dry	0%	0%	0%	0%	-14%	-5%	0%	0%	0%	0%	0%	0%	-2%
1933	Critical	0%	0%	0%	-1%	-7%	-6%	-2%	0%	0%	0%	0%	0%	-1%
1934	Critical	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	-5%	-2%	1%	0%	0%	-1%	0%	0%
1936	Below Normal	0%	0%	-3%	-6%	0%	7%	1%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	1%	5%	0%	-13%	0%	0%	-1%	-2%	0%	0%	-1%	-1%
1938	Wet	-1%	8%	10%	-1%	0%	0%	0%	0%	0%	0%	0%	3%	2%
1939	Dry	7%	4%	1%	0%	-2%	0%	1%	0%	1%	-8%	-8%	-3%	-1%
1940	Above Normal	-1%	-1%	0%	-1%	5%	0%	0%	-1%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	-1%	0%	-5%	3%	12%	-1%	-1%	0%	0%	-1%	-5%	-4%	0%
1945	Below Normal	1%	2%	1%	0%	0%	-1%	0%	-2%	-1%	0%	0%	-1%	0%
1946	Below Normal	0%	22%	50%	0%	-3%	-6%	-2%	0%	0%	-2%	-2%	-1%	5%
1947	Dry	-1%	1%	1%	0%	-1%	-2%	-1%	0%	-4%	-3%	-5%	-3%	-2%
1948	Below Normal	-1%	-1%	-1%	-1%	3%	2%	-1%	1%	32%	10%	2%	11%	5%
1949	Dry	8%	3%	-2%	2%	86%	118%	1%	0%	-1%	0%	0%	0%	18%
1950	Below Normal	0%	0%	-2%	-6%	-6%	0%	-3%	0%	0%	-1%	0%	0%	-2%
1951	Above Normal	-1%	17%	0%	0%	-1%	0%	-1%	1%	-1%	-3%	-1%	-1%	1%
1952	Wet	0%	-5%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	5%	2%	0%	0%	0%	1%
1954	Above Normal	1%	-12%	-8%	-6%	-1%	0%	0%	3%	1%	-1%	-1%	0%	-2%
1955	Dry	1%	1%	17%	14%	2%	0%	0%	-5%	-3%	-1%	-5%	-4%	1%
1956	Wet	-2%	-1%	5%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	1%	-1%	-3%	0%	0%	-2%	0%	-2%	-1%	-1%	-1%
1958	Wet	6%	5%	2%	4%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	3%	0%
1960	Dry	2%	0%	-18%	-13%	-8%	-3%	0%	0%	1%	2%	1%	0%	-3%
1961	Dry	0%	0%	0%	0%	24%	34%	10%	0%	-1%	1%	0%	0%	6%
1962	Below Normal	0%	0%	0%	0%	7%	1%	0%	0%	0%	-4%	-2%	0%	0%
1963	Wet	9%	-4%	-6%	10%	9%	-2%	0%	0%	0%	0%	0%	0%	1%
1964	Dry	0%	2%	1%	0%	0%	0%	-5%	-5%	-3%	-2%	-3%	-1%	-1%
1965	Wet	0%	0%	5%	0%	2%	-1%	1%	-2%	-4%	-1%	0%	0%	0%
1966	Below Normal	0%	11%	6%	2%	6%	3%	1%	0%	-1%	-1%	0%	0%	2%
1967	Wet	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	0%	0%
1969	Wet	0%	0%	-9%	-4%	0%	0%	0%	0%	0%	0%	0%	1%	-1%
1970	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-10%	-9%	1%	-1%	-1%	0%	0%	-2%	-1%	2%	-2%	0%
1972	Below Normal	1%	0%	0%	0%	0%	3%	1%	0%	0%	-3%	-2%	-1%	0%
1973	Above Normal	-1%	12%	11%	1%	0%	0%	0%	2%	0%	-3%	-2%	0%	2%
1974	Wet	0%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	1%	0%	0%	0%	0%	0%	-2%	-2%	-1%	-3%	-2%	-1%	-1%
1977	Critical	1%	-7%	-9%	-4%	89%	52%	6%	2%	0%	0%	-2%	-3%	10%
1978	Above Normal	1%	-1%	3%	13%	2%	5%	3%	-2%	-1%	0%	0%	1%	2%
1979	Below Normal	1%	0%	0%	-1%	-1%	0%	0%	-2%	-1%	0%	0%	0%	0%
1980	Above Normal	0%	10%	19%	5%	0%	0%	0%	0%	0%	0%	0%	0%	3%
1981	Dry	0%	0%	0%	0%	3%	35%	9%	0%	0%	0%	-1%	0%	4%
1982	Wet	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%
1985	Dry	2%	6%	1%	0%	0%	0%	0%	0%	-2%	-1%	-1%	-1%	0%
1986	Wet	0%	-2%	-2%	-5%	-1%	0%	4%	-4%	-2%	-1%	1%	3%	-1%
1987	Dry	3%	1%	0%	-2%	13%	34%	2%	-1%	0%	-6%	-7%	-3%	3%
1988	Critical	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1989	Dry	0%	0%	-2%	-3%	-1%	3%	1%	0%	-3%	-2%	-3%	-2%	-1%
1990	Critical	-1%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1993	Above Normal	-1%	-2%	1%	4%	0%	6%	1%	37%	58%	11%	1%	1%	10%
1994	Critical	1%	1%	0%	3%	4%	-1%	0%	0%	-3%	1%	-2%	-3%	0%
Average		0%	0%	1%	0%	3%	4%	0%	0%	1%	0%	-1%	0%	1%
Wet		1%	-2%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%
Above Normal		0%	2%	3%	1%	0%	1%	0%	4%	6%	0%	0%	1%	1%
Below Normal		0%	3%	4%	-1%	-1%	0%	0%	0%	2%	0%	-1%	1%	1%
Dry		1%	1%	0%	0%	7%	14%	2%	-1%	-1%	-2%	-1%	1%	1%
Critical		0%	-1%	-2%	0%	8%	4%	0%	0%	0%	0%	0%	0%	1%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	7	0	-3	0
1924	Critical	8	-158	-309	133	281	129	23	127	-92	-51	-9	55	11
1925	Dry	-42	56	-11	-60	0	1	1	0	-1	-4	26	-13	-4
1926	Dry	-7	-1	0	0	0	0	3	-9	-43	-24	-25	-7	-9
1927	Wet	-101	-209	-47	-3	2	0	0	0	0	1	2	17	-28
1928	Above Normal	-13	23	14	0	0	0	0	0	0	4	-26	-4	0
1929	Critical	9	13	-208	-87	-11	-3	-1	-49	-23	-93	-31	-3	-41
1930	Dry	-89	-114	3	5	0	0	1	-3	-23	55	-37	137	-5
1931	Critical	9	-131	67	73	-321	-228	-61	-37	-51	48	-17	-5	-54
1932	Dry	-20	-25	-3	0	-2	4	2	0	0	0	4	0	-3
1933	Critical	0	0	-3	-11	-80	-42	-9	-3	0	0	0	0	-12
1934	Critical	-6	5	-4	-5	-1	0	0	0	-1	15	2	1	0
1935	Below Normal	-1	5	-4	-1	0	-1	0	0	2	9	-59	27	-2
1936	Below Normal	19	10	-195	-12	0	1	0	0	1	5	-40	-23	-20
1937	Below Normal	-23	173	240	18	-11	0	0	-1	-4	-3	-8	-35	29
1938	Wet	-20	22	2	0	0	0	0	0	0	0	20	14	3
1939	Dry	27	54	19	7	-14	2	5	0	14	-237	-320	-221	-55
1940	Above Normal	-72	-25	-7	-2	5	0	0	0	-1	1	2	5	-8
1941	Wet	3	11	3	0	0	0	0	0	0	1	1	2	2
1942	Wet	4	7	0	0	0	0	0	0	0	-2	2	1	1
1943	Wet	3	1	0	0	0	0	0	0	0	-2	-9	6	0
1944	Dry	-100	26	-288	66	42	3	-1	0	2	-43	-221	-211	-60
1945	Below Normal	133	76	7	-12	0	-2	-1	-5	-6	-2	-32	-43	9
1946	Below Normal	-10	527	11	0	1	0	-1	0	-2	-31	-50	-64	32
1947	Dry	1	79	16	2	-6	-2	-1	-3	-42	-98	-162	-128	-29
1948	Below Normal	-69	-32	-85	-23	7	2	0	0	23	25	10	519	32
1949	Dry	332	38	-68	32	887	27	5	1	-2	20	-17	-46	101
1950	Below Normal	-69	-92	-57	-53	-3	0	-2	0	-2	-31	-5	14	-25
1951	Above Normal	-82	8	0	0	0	0	0	0	-13	-14	-15	-32	-12
1952	Wet	-3	-242	-9	0	0	0	0	0	0	0	4	2	-21
1953	Wet	0	-4	0	0	0	0	0	0	0	0	-15	9	-1
1954	Above Normal	14	-160	-143	-14	0	0	0	1	4	-8	-36	4	-28
1955	Dry	131	7	82	19	3	2	-2	-30	-28	-89	-233	-236	-31
1956	Wet	-76	-36	4	0	0	0	0	0	0	0	-11	4	-10
1957	Above Normal	2	1	50	-39	-3	0	0	-1	-2	-10	-36	-38	-6
1958	Wet	91	59	8	1	0	0	0	0	0	0	6	3	14
1959	Below Normal	4	5	2	0	0	0	0	0	-19	-22	-44	286	18
1960	Dry	5	-199	-857	-400	-17	-2	-1	-1	48	50	35	-10	-112
1961	Dry	11	0	4	2	29	29	25	-6	-26	19	-12	-12	5
1962	Below Normal	17	-29	5	6	5	0	0	0	20	-27	-41	-13	-5
1963	Wet	9	-25	-10	22	1	0	0	0	0	2	3	20	2
1964	Dry	3	4	8	1	0	3	-30	-26	-45	-56	-82	-53	-23
1965	Wet	9	-5	3	0	0	0	0	-1	-12	-5	5	6	0
1966	Below Normal	-10	26	13	1	0	0	1	0	-18	-13	-8	-13	-2
1967	Wet	-13	-6	1	0	0	0	0	0	0	0	4	2	-1
1968	Below Normal	1	-2	-3	0	0	0	0	0	-16	-14	-18	-4	-5
1969	Wet	-6	-2	-45	0	0	0	0	0	0	0	-1	3	-4
1970	Wet	-2	-9	0	0	0	0	0	0	-2	0	-11	-9	-3
1971	Wet	-3	-123	-2	0	0	0	0	0	0	-9	-4	11	-11
1972	Below Normal	17	12	2	0	0	0	1	0	0	-39	-84	-77	-14
1973	Above Normal	-73	100	16	1	0	0	0	1	-1	-22	-45	9	-1
1974	Wet	-3	1	0	0	0	0	0	0	0	1	6	3	1
1975	Wet	2	3	1	1	0	0	0	0	0	0	5	5	1
1976	Critical	1	1	1	1	1	3	-45	-44	-142	-160	-337	-159	-73
1977	Critical	85	-846	-334	-196	763	464	38	31	18	27	3	-102	-4
1978	Above Normal	140	-95	90	7	1	4	3	0	0	1	-1	39	16
1979	Below Normal	39	15	-8	-6	0	0	0	-3	-1	-2	-12	4	2
1980	Above Normal	-10	296	98	1	0	0	0	0	0	0	-1	-1	32
1981	Dry	1	-1	-1	0	0	2	6	2	2	-14	-45	-19	-6
1982	Wet	-8	4	0	0	0	0	0	0	0	0	14	2	1
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-2	0	-6	-146	-13
1985	Dry	188	12	1	2	1	0	0	-1	-38	-20	-58	-24	5
1986	Wet	2	-163	-38	-15	0	0	0	-3	-4	-58	103	102	-6
1987	Dry	108	58	-80	-25	28	12	-2	-7	-57	-230	-277	-123	-49
1988	Critical	-63	-26	-10	-1	-5	1	0	1	-31	4	-19	40	-9
1989	Dry	-43	36	-67	-85	-39	1	0	0	-54	-53	-117	-87	-42
1990	Critical	-22	-35	-17	-7	-1	-1	-1	0	0	0	-2	10	-6
1991	Critical	-6	7	-7	8	19	1	0	1	1	0	10	-2	3
1992	Critical	-2	-1	5	-6	-1	0	0	5	15	-8	35	102	12
1993	Above Normal	-116	-161	57	3	0	1	0	2	6	16	-9	47	-13
1994	Critical	52	26	-15	95	11	-2	0	1	-102	32	-63	-253	-18
Average		4	-16	-29	-8	22	6	-1	-1	-10	-16	-33	-10	-8
Wet		-5	-34	-6	0	0	0	0	0	-1	-3	6	3	-3
Above Normal		-21	-1	17	-4	0	0	0	0	-1	-3	-17	3	-2
Below Normal		3	49	-5	-6	0	0	0	-1	-2	-10	-28	41	4
Dry		32	2	-78	-27	57	5	1	-5	-18	-45	-96	-66	-20
Critical		6	-96	-70	0	55	27	-5	3	-34	-15	-36	-27	-16

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1924	Critical	0%	-6%	-14%	9%	56%	37%	3%	7%	-5%	-2%	0%	2%	7%
1925	Dry	-1%	2%	-1%	-4%	0%	1%	0%	0%	0%	0%	1%	-1%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	1%	-4%	-5%	-2%	-1%	0%	-1%
1927	Wet	-4%	-32%	-16%	-1%	1%	0%	0%	0%	0%	0%	0%	1%	-4%
1928	Above Normal	-1%	3%	2%	0%	0%	0%	0%	0%	0%	1%	-2%	0%	0%
1929	Critical	0%	1%	-12%	-6%	-2%	-1%	0%	-6%	-2%	-5%	-1%	0%	-3%
1930	Dry	-2%	-3%	0%	1%	0%	0%	0%	-1%	-3%	4%	-2%	5%	0%
1931	Critical	0%	-5%	3%	5%	-36%	-25%	-6%	-2%	-3%	2%	-1%	0%	-5%
1932	Dry	-1%	-1%	0%	0%	-4%	1%	1%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	-1%	-11%	-9%	-2%	0%	0%	0%	0%	0%	-2%
1934	Critical	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	-4%	1%	0%
1936	Below Normal	1%	0%	-8%	-4%	0%	1%	0%	0%	0%	1%	-3%	-1%	-1%
1937	Below Normal	-1%	7%	11%	1%	-4%	0%	0%	-1%	-1%	-1%	-2%	-2%	1%
1938	Wet	-1%	5%	1%	0%	0%	0%	0%	0%	0%	0%	2%	4%	1%
1939	Dry	8%	6%	2%	1%	-2%	1%	1%	0%	1%	-20%	-20%	-8%	-3%
1940	Above Normal	-3%	-1%	0%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1943	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1944	Dry	-4%	1%	-14%	5%	14%	1%	0%	0%	0%	-4%	-13%	-8%	-2%
1945	Below Normal	5%	5%	1%	-1%	0%	-1%	-1%	-2%	-2%	0%	-2%	-2%	0%
1946	Below Normal	0%	55%	6%	0%	0%	0%	-1%	0%	0%	-5%	-4%	-3%	4%
1947	Dry	0%	4%	2%	0%	-1%	-1%	0%	-1%	-6%	-10%	-12%	-6%	-3%
1948	Below Normal	-3%	-1%	-3%	-2%	2%	1%	0%	0%	11%	6%	1%	35%	4%
1949	Dry	16%	2%	-4%	2%	189%	14%	2%	0%	2%	0%	-1%	-2%	18%
1950	Below Normal	-3%	-4%	-2%	-9%	-1%	0%	-1%	0%	-1%	-5%	0%	1%	-2%
1951	Above Normal	-3%	4%	0%	0%	0%	0%	0%	0%	-3%	-4%	-2%	-2%	-1%
1952	Wet	0%	-13%	-3%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	1%	0%
1954	Above Normal	2%	-21%	-13%	-4%	0%	0%	0%	0%	1%	-2%	-4%	0%	-3%
1955	Dry	6%	0%	17%	8%	1%	0%	0%	-7%	-4%	-8%	-13%	-9%	-1%
1956	Wet	-3%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1957	Above Normal	1%	0%	4%	-3%	-1%	0%	0%	0%	-1%	-3%	-3%	-2%	-1%
1958	Wet	11%	8%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%	2%
1959	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-3%	-4%	-4%	13%	0%
1960	Dry	0%	-8%	-39%	-20%	-5%	-1%	0%	0%	6%	4%	2%	0%	-5%
1961	Dry	0%	0%	0%	0%	9%	13%	8%	-1%	-3%	2%	-1%	0%	2%
1962	Below Normal	1%	-1%	0%	0%	2%	0%	0%	0%	3%	-6%	-4%	-1%	0%
1963	Wet	3%	-7%	-4%	8%	1%	0%	0%	0%	0%	0%	0%	1%	0%
1964	Dry	0%	1%	1%	0%	0%	1%	-7%	-6%	-6%	-6%	-6%	-2%	-2%
1965	Wet	0%	0%	1%	0%	0%	0%	0%	-1%	-4%	-1%	0%	0%	0%
1966	Below Normal	0%	7%	4%	0%	0%	0%	0%	0%	-2%	-2%	-1%	-1%	0%
1967	Wet	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-3%	-3%	-2%	0%	-1%
1969	Wet	0%	0%	-9%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%
1970	Wet	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1971	Wet	0%	-15%	-1%	0%	0%	0%	0%	0%	0%	-2%	0%	2%	-1%
1972	Below Normal	2%	1%	0%	0%	0%	0%	0%	0%	0%	-6%	-6%	-3%	-1%
1973	Above Normal	-3%	16%	7%	0%	0%	0%	0%	0%	0%	-5%	-4%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1975	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1976	Critical	1%	0%	0%	0%	0%	1%	-6%	-3%	-6%	-7%	-12%	-5%	-3%
1977	Critical	3%	-28%	-19%	-10%	143%	67%	4%	2%	1%	1%	0%	-3%	13%
1978	Above Normal	4%	-2%	5%	3%	1%	2%	1%	0%	0%	0%	0%	3%	1%
1979	Below Normal	2%	1%	0%	-1%	0%	0%	0%	-2%	0%	0%	-1%	0%	0%
1980	Above Normal	0%	22%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%
1981	Dry	0%	0%	0%	0%	0%	1%	3%	1%	0%	-1%	-3%	-1%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	-6%	-1%
1985	Dry	9%	5%	0%	0%	0%	0%	0%	0%	-4%	-2%	-4%	-1%	0%
1986	Wet	0%	-7%	-3%	-4%	0%	0%	0%	-1%	-1%	-12%	10%	7%	-1%
1987	Dry	5%	2%	-3%	-2%	7%	6%	-1%	-1%	-5%	-17%	-17%	-5%	-3%
1988	Critical	-2%	-1%	-1%	0%	-2%	0%	0%	0%	-3%	0%	-1%	1%	-1%
1989	Dry	-1%	1%	-3%	-6%	-2%	0%	0%	0%	-7%	-5%	-8%	-4%	-3%
1990	Critical	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	3%	0%
1993	Above Normal	-3%	-4%	3%	1%	0%	0%	0%	1%	3%	5%	-1%	3%	1%
1994	Critical	3%	1%	-1%	7%	3%	-1%	0%	0%	-8%	3%	-5%	-10%	-1%
Average		1%	0%	-1%	0%	5%	1%	0%	0%	-1%	-2%	-2%	0%	0%
Wet		0%	-3%	-1%	0%	0%	0%	0%	0%	0%	-1%	1%	1%	0%
Above Normal		-1%	2%	3%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	0%
Below Normal		0%	5%	1%	-1%	0%	0%	0%	0%	0%	-2%	-2%	3%	0%
Dry		2%	1%	-3%	-1%	13%	2%	1%	-1%	-2%	-4%	-6%	-3%	0%
Critical		0%	-3%	-4%	0%	13%	6%	-1%	0%	-2%	-1%	-2%	-1%	1%

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	-13	-10	-5	-2
1924	Critical	8	211	-202	420	769	154	23	-26	-47	19	61	57	121
1925	Dry	-55	75	-80	-114	0	4	5	1	0	1	-23	-41	-19
1926	Dry	-8	-2	-1	0	0	0	8	-4	2	41	62	86	15
1927	Wet	9	-302	-136	-15	2	0	0	0	0	0	0	3	-36
1928	Above Normal	4	27	25	3	-1	0	0	0	4	2	41	37	12
1929	Critical	3	22	-12	-111	-38	-6	25	6	65	68	85	75	15
1930	Dry	-86	-104	25	17	2	2	0	-3	5	-40	176	163	13
1931	Critical	-60	-11	-94	138	-92	-167	-55	-28	49	46	18	1	-21
1932	Dry	-21	-23	-6	-1	-3	15	3	0	0	-1	-2	-1	-3
1933	Critical	0	0	-4	-27	-132	-86	-12	-2	0	0	0	-1	-22
1934	Critical	-8	6	-12	-15	-4	0	0	0	0	-5	2	1	-3
1935	Below Normal	-1	9	-6	-6	0	-6	0	1	-2	-19	66	39	6
1936	Below Normal	20	10	-175	-74	0	1	1	0	0	-7	52	20	-13
1937	Below Normal	-19	-191	279	-48	-57	0	0	-3	0	3	17	5	-1
1938	Wet	-40	42	12	1	0	0	0	0	0	0	-23	2	0
1939	Dry	30	57	34	13	-6	-5	2	7	61	36	72	101	34
1940	Above Normal	54	20	6	-4	7	2	0	0	0	0	0	0	7
1941	Wet	2	-8	9	0	0	0	0	0	0	0	-3	1	0
1942	Wet	5	9	2	0	0	0	0	0	0	-1	-5	-2	1
1943	Wet	3	2	0	0	0	0	0	0	0	5	15	14	3
1944	Dry	-3	74	-203	298	255	17	1	0	2	104	-7	-128	34
1945	Below Normal	102	126	19	34	9	-5	-4	-2	-1	6	41	12	28
1946	Below Normal	-17	607	125	1	3	2	-1	0	6	2	0	-13	60
1947	Dry	-75	39	36	5	5	-4	-2	-2	-23	115	47	-100	3
1948	Below Normal	-37	-3	-33	-43	-2	5	1	0	10	114	141	253	34
1949	Dry	433	263	-179	125	763	245	9	1	-8	-61	-8	48	136
1950	Below Normal	120	160	-53	-112	-18	-1	-8	0	3	62	55	31	20
1951	Above Normal	-32	27	0	0	-4	-2	0	-2	-6	-3	0	-8	-2
1952	Wet	-15	-267	-74	0	0	-1	0	0	0	0	3	2	-29
1953	Wet	-1	-7	-3	0	0	0	0	0	1	0	32	23	4
1954	Above Normal	19	-203	-289	-67	-4	0	0	4	4	1	36	19	-40
1955	Dry	-39	-4	133	50	6	2	0	-16	-22	151	10	-128	12
1956	Wet	-60	-32	1	0	0	-1	-1	0	0	0	20	12	-5
1957	Above Normal	3	1	11	-12	-21	-1	0	-1	2	-1	22	1	0
1958	Wet	93	98	27	3	0	-1	0	0	0	0	5	4	19
1959	Below Normal	4	6	3	2	0	0	0	0	-1	0	31	70	10
1960	Dry	382	460	-240	-501	-89	-9	-1	-1	-82	-22	-4	-8	-10
1961	Dry	15	-4	14	-14	74	39	26	-9	-26	1	-3	-32	7
1962	Below Normal	17	-19	23	15	14	2	0	0	-11	7	1	8	5
1963	Wet	-8	-31	-51	35	15	0	0	-1	0	0	0	2	-3
1964	Dry	16	-1	7	5	-1	1	-6	-20	-38	13	13	-42	-4
1965	Wet	-21	-7	3	0	-1	-1	0	-5	-5	6	20	12	0
1966	Below Normal	-6	60	20	5	0	1	1	1	-7	-2	9	1	7
1967	Wet	-2	-8	2	1	0	0	0	0	0	0	3	3	0
1968	Below Normal	0	-4	-5	-1	0	0	0	0	-1	1	8	1	0
1969	Wet	3	4	-81	-8	-1	0	0	0	0	0	0	3	-7
1970	Wet	-3	-12	-2	0	0	0	0	-1	5	0	11	19	1
1971	Wet	13	-154	-27	0	0	0	0	0	0	-2	-29	6	-16
1972	Below Normal	21	14	4	1	0	2	1	3	21	1	33	6	9
1973	Above Normal	-61	128	75	3	-1	-1	0	0	2	-3	-3	0	12
1974	Wet	-3	5	0	0	0	0	0	0	0	-1	5	5	1
1975	Wet	2	4	1	1	0	0	0	0	0	0	5	8	2
1976	Critical	2	1	1	3	2	1	-2	-32	75	153	63	-38	19
1977	Critical	83	193	150	89	902	387	56	20	-28	5	-206	-244	117
1978	Above Normal	158	-153	285	99	2	24	16	0	2	0	0	38	39
1979	Below Normal	45	19	-7	-10	-1	0	0	-3	0	5	10	8	6
1980	Above Normal	-7	332	221	10	-1	0	0	0	0	0	-1	-1	46
1981	Dry	-3	-2	-2	0	1	4	5	5	19	1	1	-17	1
1982	Wet	1	18	1	0	-1	0	0	0	0	0	11	3	3
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	1	0	9	-26	-1
1985	Dry	54	63	3	3	2	0	0	-1	-21	3	5	-38	6
1986	Wet	-2	-33	-54	-31	-1	0	-1	-1	0	1	-125	37	-17
1987	Dry	107	30	137	-156	73	79	6	3	87	109	44	-36	40
1988	Critical	-3	-3	-14	-7	4	0	-1	1	14	10	66	51	10
1989	Dry	-50	71	-107	-151	-45	-1	1	0	-30	-7	2	-79	-33
1990	Critical	-49	6	-22	-17	-5	-1	-1	0	0	-1	12	10	-5
1991	Critical	-7	9	-11	13	22	3	0	1	1	0	9	-2	3
1992	Critical	-2	-1	1	-7	-5	0	0	-6	-23	-10	-62	72	-4
1993	Above Normal	-108	-141	114	29	0	1	0	2	2	13	60	78	4
1994	Critical	50	23	-41	44	-19	-3	1	1	-56	25	-7	10	2
Average		13	22	-6	-1	33	9	1	-1	0	13	14	7	9
Wet		-1	-32	-18	-1	1	0	0	0	0	0	-2	6	-4
Above Normal		3	4	45	6	-2	2	2	0	1	1	16	16	8
Below Normal		18	57	14	-17	-4	0	-1	0	1	11	32	31	12
Dry		44	62	-27	-26	65	24	4	-2	-5	28	24	-16	14
Critical		1	38	-22	44	117	24	3	-5	4	26	3	-1	19

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-3%	-1%	0%	0%
1924	Critical	0%	9%	-8%	21%	99%	50%	5%	-2%	-3%	1%	4%	3%	15%
1925	Dry	-2%	3%	-3%	-5%	0%	2%	2%	0%	0%	0%	-2%	-2%	-1%
1926	Dry	0%	0%	0%	0%	0%	0%	3%	-2%	0%	4%	5%	4%	1%
1927	Wet	0%	-25%	-26%	-5%	1%	0%	0%	0%	0%	0%	0%	0%	-5%
1928	Above Normal	0%	2%	3%	1%	0%	0%	0%	0%	1%	0%	5%	2%	1%
1929	Critical	0%	1%	-1%	-5%	-2%	-1%	5%	1%	8%	6%	5%	3%	2%
1930	Dry	-4%	-4%	1%	2%	0%	1%	0%	-1%	1%	-4%	13%	7%	1%
1931	Critical	-2%	0%	-4%	7%	-9%	-25%	-7%	-2%	4%	3%	1%	0%	-3%
1932	Dry	-1%	-1%	0%	0%	-1%	6%	1%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	-2%	-15%	-15%	-4%	0%	0%	0%	0%	0%	-3%
1934	Critical	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
1935	Below Normal	0%	0%	0%	-1%	0%	-3%	0%	0%	-1%	-4%	6%	2%	0%
1936	Below Normal	1%	0%	-7%	-8%	0%	1%	0%	0%	0%	-1%	5%	1%	-1%
1937	Below Normal	-1%	-8%	12%	-2%	-11%	0%	0%	-1%	0%	1%	2%	0%	-1%
1938	Wet	-2%	3%	5%	0%	0%	0%	0%	0%	0%	0%	-3%	0%	0%
1939	Dry	11%	7%	2%	1%	-1%	-1%	1%	2%	8%	3%	5%	4%	3%
1940	Above Normal	2%	1%	0%	0%	3%	1%	0%	0%	0%	0%	0%	0%	1%
1941	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	1%	0%
1944	Dry	0%	3%	-8%	15%	30%	7%	0%	0%	10%	0%	0%	-5%	4%
1945	Below Normal	4%	6%	1%	3%	2%	-2%	-2%	-1%	0%	1%	4%	1%	1%
1946	Below Normal	-1%	42%	41%	1%	2%	1%	0%	0%	2%	0%	0%	-1%	7%
1947	Dry	-3%	2%	2%	0%	0%	-1%	-1%	-1%	-3%	10%	3%	-5%	0%
1948	Below Normal	-1%	0%	-2%	-2%	0%	1%	0%	0%	5%	31%	13%	12%	5%
1949	Dry	22%	12%	-7%	6%	75%	89%	4%	0%	-2%	-5%	-1%	2%	16%
1950	Below Normal	5%	7%	-2%	-10%	-6%	-1%	-3%	0%	1%	13%	5%	2%	1%
1951	Above Normal	-1%	6%	0%	0%	-2%	-1%	0%	-1%	-2%	-1%	0%	0%	0%
1952	Wet	-1%	-10%	-9%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-2%
1953	Wet	0%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%	3%	2%	0%
1954	Above Normal	2%	-17%	-16%	-7%	-2%	0%	0%	2%	1%	0%	4%	1%	-3%
1955	Dry	-1%	0%	12%	15%	2%	0%	0%	-4%	-4%	17%	1%	-6%	3%
1956	Wet	-3%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%
1957	Above Normal	1%	0%	1%	-1%	-3%	0%	0%	0%	1%	0%	2%	0%	0%
1958	Wet	7%	10%	4%	1%	0%	0%	0%	0%	0%	0%	1%	1%	2%
1959	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	1%
1960	Dry	16%	20%	-10%	-20%	-7%	-3%	0%	0%	-11%	-2%	0%	0%	-2%
1961	Dry	1%	0%	1%	-1%	7%	13%	10%	-2%	-4%	0%	0%	-1%	2%
1962	Below Normal	1%	-1%	1%	1%	2%	1%	0%	0%	-3%	1%	0%	0%	0%
1963	Wet	-1%	-6%	-9%	9%	6%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	1%	0%	1%	1%	0%	0%	-1%	-5%	-5%	1%	1%	-2%	-1%
1965	Wet	-1%	0%	1%	0%	0%	0%	0%	-2%	-2%	2%	2%	1%	0%
1966	Below Normal	0%	5%	5%	2%	0%	1%	0%	0%	-1%	0%	1%	0%	1%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1969	Wet	0%	0%	-7%	-3%	0%	0%	0%	0%	0%	0%	0%	1%	-1%
1970	Wet	-1%	-2%	-1%	0%	0%	0%	0%	0%	1%	0%	1%	1%	0%
1971	Wet	0%	-12%	-9%	0%	0%	0%	0%	0%	-1%	-3%	1%	-2%	0%
1972	Below Normal	2%	1%	0%	0%	0%	1%	0%	1%	3%	0%	3%	0%	1%
1973	Above Normal	-2%	12%	19%	1%	0%	-1%	0%	0%	1%	-1%	0%	0%	2%
1974	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1976	Critical	1%	0%	0%	0%	0%	0%	0%	-3%	5%	7%	3%	-1%	1%
1977	Critical	3%	7%	6%	5%	123%	84%	8%	2%	-2%	0%	-11%	-10%	18%
1978	Above Normal	6%	-6%	12%	20%	1%	9%	6%	0%	1%	0%	0%	3%	4%
1979	Below Normal	3%	1%	0%	-1%	0%	0%	0%	-1%	0%	1%	1%	0%	0%
1980	Above Normal	0%	18%	30%	4%	0%	0%	0%	0%	0%	0%	0%	0%	4%
1981	Dry	0%	0%	0%	0%	0%	2%	2%	1%	2%	0%	0%	-1%	1%
1982	Wet	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%
1985	Dry	2%	8%	1%	0%	0%	0%	0%	0%	-3%	0%	0%	-1%	1%
1986	Wet	0%	-1%	-3%	-4%	0%	0%	0%	-1%	0%	0%	-14%	2%	-2%
1987	Dry	6%	1%	5%	-8%	7%	26%	2%	1%	11%	9%	3%	-2%	5%
1988	Critical	0%	0%	-1%	-1%	1%	0%	0%	0%	2%	1%	4%	2%	1%
1989	Dry	-2%	3%	-5%	-6%	-3%	0%	0%	0%	-4%	-1%	0%	-4%	-2%
1990	Critical	-2%	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%	0%
1991	Critical	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	0%	0%
1992	Critical	0%	0%	0%	0%	-1%	0%	0%	-1%	-3%	-1%	-3%	3%	0%
1993	Above Normal	-4%	-5%	5%	6%	0%	0%	0%	1%	5%	8%	5%	2%	2%
1994	Critical	2%	1%	-2%	2%	-2%	-1%	0%	0%	-5%	1%	0%	0%	0%
Average		1%	1%	0%	0%	4%	3%	0%	0%	0%	1%	1%	0%	1%
Wet		0%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Above Normal		0%	1%	5%	2%	0%	1%	1%	0%	0%	0%	2%	1%	1%
Below Normal		1%	4%	4%	-1%	-1%	0%	0%	0%	0%	3%	3%	2%	1%
Dry		3%	3%	-1%	0%	7%	9%	1%	-1%	-1%	3%	2%	-1%	2%
Critical		0%	2%	-1%	2%	16%	8%	1%	-1%	1%	2%	0%	0%	2%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	677	653	763	806	659	555	361	355	340	530	521	524	562
1923	Below Normal	554	573	651	566	545	734	381	380	561	634	539	499	551
1924	Critical	521	577	776	823	989	1,014	702	665	707	678	651	629	728
1925	Dry	668	656	809	897	908	951	448	418	653	674	623	588	691
1926	Dry	616	632	810	863	991	1,005	561	544	704	686	635	594	720
1927	Wet	640	608	801	855	776	796	424	394	644	667	596	558	646
1928	Above Normal	540	542	764	783	905	511	426	457	677	677	621	583	624
1929	Critical	592	618	802	826	989	1,005	623	584	704	686	645	605	723
1930	Dry	658	660	846	906	995	1,002	622	582	706	685	643	600	742
1931	Critical	655	655	842	907	995	1,011	747	697	709	684	652	628	765
1932	Dry	683	693	750	843	748	896	574	505	669	661	609	579	684
1933	Critical	601	619	820	877	994	1,003	627	580	699	680	636	607	729
1934	Critical	644	674	819	881	997	1,006	727	662	706	680	652	630	756
1935	Below Normal	681	686	843	819	1,010	893	420	411	640	633	606	572	684
1936	Below Normal	586	618	825	846	562	335	360	414	596	646	540	529	571
1937	Below Normal	541	589	783	771	433	382	281	278	591	636	539	528	529
1938	Wet	553	553	522	564	374	329	259	255	254	384	355	350	396
1939	Dry	416	509	728	762	836	818	510	503	702	682	629	577	639
1940	Above Normal	595	635	824	736	736	343	332	381	537	636	592	531	573
1941	Wet	549	579	645	628	419	309	263	267	422	487	484	507	463
1942	Wet	502	523	643	447	298	417	317	281	413	465	371	361	420
1943	Wet	487	498	653	365	267	304	298	378	457	621	520	521	448
1944	Dry	527	531	716	751	815	796	432	464	646	661	618	591	629
1945	Below Normal	585	593	776	780	501	351	388	373	510	601	506	514	540
1946	Below Normal	494	552	495	564	460	497	398	378	539	650	589	553	514
1947	Dry	534	558	705	745	841	992	610	570	688	692	647	607	682
1948	Below Normal	616	628	796	850	991	1,002	582	545	635	643	621	597	709
1949	Dry	615	635	809	868	993	957	625	600	659	681	638	609	724
1950	Below Normal	636	631	798	853	991	993	537	448	595	669	633	592	698
1951	Above Normal	618	629	387	324	253	443	395	262	525	659	623	594	476
1952	Wet	588	616	755	570	623	424	229	204	292	385	352	363	450
1953	Wet	531	548	723	610	635	904	384	348	526	614	607	579	584
1954	Above Normal	581	621	782	807	941	982	530	489	664	679	635	607	693
1955	Dry	617	639	775	770	987	1,002	613	592	703	702	658	617	723
1956	Wet	657	663	705	370	358	365	385	376	411	490	476	431	474
1957	Above Normal	507	569	751	777	895	943	391	359	564	651	612	575	633
1958	Wet	566	619	774	790	746	475	209	190	331	433	362	363	488
1959	Below Normal	518	560	718	750	720	838	479	481	691	689	642	579	639
1960	Dry	615	661	814	840	946	1,001	616	578	707	699	672	642	733
1961	Dry	697	689	830	914	1,019	1,005	705	665	707	707	695	664	775
1962	Below Normal	715	700	826	942	741	734	511	482	696	671	624	594	686
1963	Wet	632	679	829	859	855	939	458	421	596	641	599	564	673
1964	Dry	587	610	817	827	991	1,004	622	582	703	693	655	617	726
1965	Wet	647	669	750	462	393	513	354	352	481	636	464	480	517
1966	Below Normal	541	464	612	645	604	870	513	504	702	700	661	629	620
1967	Wet	630	688	757	778	914	559	267	225	294	307	340	347	509
1968	Below Normal	493	576	736	763	743	917	462	453	683	693	636	604	646
1969	Wet	614	646	793	653	375	398	286	242	244	388	364	369	448
1970	Wet	408	505	626	282	341	366	365	401	490	640	609	560	466
1971	Wet	547	615	788	764	925	850	386	372	561	627	611	578	635
1972	Below Normal	552	636	797	823	936	1,003	573	535	704	697	649	624	711
1973	Above Normal	634	634	798	850	703	613	433	441	523	651	533	516	611
1974	Wet	502	517	619	524	612	318	368	394	446	587	501	472	488
1975	Wet	431	486	710	729	344	318	379	376	436	576	492	507	482
1976	Critical	428	512	762	776	921	1,003	612	573	706	703	644	630	689
1977	Critical	658	676	818	887	993	1,010	698	631	710	696	715	727	768
1978	Above Normal	761	756	865	772	743	677	384	319	413	555	495	451	599
1979	Below Normal	584	523	753	669	362	323	390	306	448	653	538	539	507
1980	Above Normal	518	561	770	422	343	395	361	362	383	464	464	494	461
1981	Dry	480	502	730	750	903	868	490	454	694	673	646	609	650
1982	Wet	588	637	792	727	290	303	223	212	367	421	346	250	430
1983	Wet	203	267	379	346	323	258	292	266	242	228	189	234	269
1984	Wet	351	206	302	334	223	364	370	364	530	633	537	463	390
1985	Dry	447	499	779	775	831	886	540	506	691	701	620	569	654
1986	Wet	580	588	766	825	459	310	242	228	392	607	495	445	495
1987	Dry	436	439	716	775	982	922	599	555	706	703	666	630	677
1988	Critical	648	665	813	876	992	1,010	682	643	707	705	711	668	760
1989	Dry	741	706	833	931	1,166	1,019	719	615	708	677	667	601	782
1990	Critical	689	694	835	946	1,151	1,023	713	651	709	694	687	666	788
1991	Critical	698	688	854	985	1,255	1,007	699	653	708	699	695	699	803
1992	Critical	734	731	888	1,012	988	1,002	758	783	780	697	707	722	817
1993	Above Normal	794	798	912	700	767	846	553	535	485	570	548	516	669
1994	Critical	572	618	858	959	1,000	1,011	693	637	749	737	708	688	769
Average		580	600	749	741	744	729	476	452	578	622	576	551	617
Wet		534	558	682	594	502	468	322	312	420	516	461	443	484
Above Normal		622	640	762	698	694	631	417	396	511	607	564	539	590
Below Normal		578	595	743	760	686	705	448	428	614	658	595	568	615
Dry		584	601	779	826	935	945	580	546	690	686	645	606	702
Critical		620	644	824	896	1,022	1,009	690	647	716	695	675	658	758

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	677	653	763	806	659	555	361	355	340	530	521	524	562
1923	Below Normal	554	573	651	566	545	734	381	379	561	634	539	499	551
1924	Critical	521	577	776	824	989	1,014	702	665	707	678	651	629	728
1925	Dry	668	656	809	897	908	951	448	418	653	674	623	588	691
1926	Dry	616	632	810	863	991	1,005	561	544	704	686	635	594	720
1927	Wet	640	608	801	855	776	796	424	394	644	667	596	558	646
1928	Above Normal	540	542	764	783	905	511	426	457	677	677	621	583	624
1929	Critical	592	618	802	826	989	1,005	624	585	704	687	646	605	724
1930	Dry	658	660	846	906	995	1,002	622	582	706	685	643	600	742
1931	Critical	655	655	842	907	994	1,011	747	697	709	684	652	628	765
1932	Dry	683	693	750	843	748	896	574	505	669	661	608	579	684
1933	Critical	601	619	820	877	994	1,003	627	580	699	680	636	607	729
1934	Critical	644	674	819	881	997	1,006	727	662	706	678	652	630	756
1935	Below Normal	681	686	843	819	1,011	893	420	411	640	633	606	572	684
1936	Below Normal	586	618	824	846	562	335	360	414	596	646	540	529	571
1937	Below Normal	541	589	783	770	433	382	281	278	591	636	539	528	529
1938	Wet	553	553	522	564	374	329	259	255	254	384	355	350	396
1939	Dry	416	509	728	762	837	818	510	503	702	683	630	577	640
1940	Above Normal	595	635	824	736	736	343	332	381	537	636	592	531	573
1941	Wet	549	579	645	628	419	309	263	267	422	487	484	507	463
1942	Wet	502	523	643	447	298	417	317	281	413	465	371	361	420
1943	Wet	487	498	653	365	267	304	298	378	457	621	520	521	448
1944	Dry	527	531	716	751	815	796	432	464	646	662	618	591	629
1945	Below Normal	585	593	776	780	502	351	388	373	510	601	506	514	540
1946	Below Normal	494	552	495	564	460	497	398	378	539	650	589	553	514
1947	Dry	534	558	705	745	841	992	610	570	688	692	648	607	682
1948	Below Normal	616	628	796	850	991	1,002	582	545	635	643	621	597	709
1949	Dry	615	635	809	868	993	957	625	600	659	681	638	609	724
1950	Below Normal	636	631	798	853	991	993	537	448	596	669	633	592	698
1951	Above Normal	618	629	387	324	253	443	395	262	525	659	623	594	476
1952	Wet	588	616	755	570	623	424	229	204	292	385	352	363	450
1953	Wet	531	548	723	610	635	904	384	348	526	614	607	579	584
1954	Above Normal	581	621	782	807	941	982	530	489	664	679	635	607	693
1955	Dry	617	639	775	770	987	1,002	613	592	703	702	658	617	723
1956	Wet	657	663	705	370	358	365	385	376	411	490	476	431	474
1957	Above Normal	507	569	751	777	895	943	391	359	564	651	613	575	633
1958	Wet	566	619	774	790	746	475	209	190	331	433	362	363	488
1959	Below Normal	518	560	718	750	720	838	479	481	691	689	642	579	639
1960	Dry	615	661	813	840	946	1,001	616	578	706	699	672	642	732
1961	Dry	697	689	830	914	1,020	1,004	705	665	707	707	694	664	775
1962	Below Normal	715	700	826	942	741	734	511	482	696	671	624	594	686
1963	Wet	632	679	829	859	855	939	458	421	596	641	599	564	673
1964	Dry	587	610	817	827	991	1,004	622	582	703	693	655	617	726
1965	Wet	647	669	750	462	393	513	354	352	481	636	464	480	517
1966	Below Normal	541	464	612	645	604	870	513	504	702	700	661	629	620
1967	Wet	630	687	757	778	914	559	267	225	294	307	340	347	509
1968	Below Normal	493	576	736	763	743	917	462	453	683	693	636	604	646
1969	Wet	614	646	793	653	375	398	286	242	244	388	364	369	448
1970	Wet	408	505	626	282	341	367	365	401	490	640	609	560	466
1971	Wet	547	615	788	764	925	850	386	372	561	626	611	578	635
1972	Below Normal	552	636	797	823	936	1,003	573	535	705	697	649	624	711
1973	Above Normal	634	634	798	850	704	613	433	441	523	651	533	516	611
1974	Wet	502	517	619	524	612	318	368	394	446	587	501	472	488
1975	Wet	431	486	710	729	344	318	379	376	436	576	492	507	482
1976	Critical	428	512	762	776	921	1,003	612	574	706	703	645	630	689
1977	Critical	658	676	817	887	992	1,010	698	631	710	696	715	727	768
1978	Above Normal	761	756	865	772	743	678	384	319	413	555	495	451	599
1979	Below Normal	584	523	753	669	362	323	390	306	448	653	538	539	507
1980	Above Normal	518	561	770	422	343	395	361	362	383	464	464	494	461
1981	Dry	480	502	730	751	903	868	490	454	694	673	646	609	650
1982	Wet	588	637	792	727	290	303	223	212	367	421	346	250	430
1983	Wet	203	267	379	346	323	258	292	266	242	228	189	234	269
1984	Wet	351	206	302	334	223	364	370	364	530	633	537	463	390
1985	Dry	447	499	779	775	831	886	540	506	691	701	620	569	654
1986	Wet	580	588	766	825	459	310	243	228	394	607	496	445	495
1987	Dry	436	439	716	774	982	922	599	555	706	703	667	631	677
1988	Critical	648	664	813	876	992	1,010	683	643	707	705	711	669	760
1989	Dry	741	706	833	931	1,166	1,019	719	615	708	678	667	601	782
1990	Critical	689	694	835	946	1,151	1,023	713	651	709	694	687	666	788
1991	Critical	698	688	854	985	1,255	1,007	699	653	708	699	695	699	803
1992	Critical	734	731	888	1,012	988	1,002	759	785	779	697	707	721	817
1993	Above Normal	794	798	911	700	767	846	553	535	485	570	548	516	669
1994	Critical	572	618	858	959	1,000	1,011	694	637	748	736	708	688	769
Average		580	600	749	741	744	729	476	452	578	623	576	551	617
Wet		534	558	682	594	502	468	322	312	421	516	461	443	484
Above Normal		622	640	762	698	694	631	417	396	511	607	564	539	590
Below Normal		578	595	743	760	686	705	448	428	614	658	595	568	615
Dry		584	601	779	826	935	945	581	546	690	686	645	606	702
Critical		620	644	824	896	1,022	1,009	690	647	716	695	675	658	758

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	1	0	0	1	1	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	1	1	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	1	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	-1	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	1	0	0	0	0	0	-1	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	1	0	0
1977	Critical	0	0	-1	0	-1	0	0	0	0	0	0	0	0
1978	Above Normal	0	0	0	0	0	1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	1	1	1	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	1	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	1	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	1	2	-1	-1	-1	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	-1	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
 Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge
 From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	684	649	765	798	646	551	351	352	335	530	515	520	558
1923	Below Normal	554	572	650	560	543	737	366	376	559	633	528	495	548
1924	Critical	521	578	786	821	1,000	1,008	656	662	698	667	644	624	722
1925	Dry	669	654	815	898	904	951	418	420	653	670	615	582	688
1926	Dry	615	632	820	861	1,000	1,001	527	546	698	679	626	587	716
1927	Wet	641	605	814	853	768	795	402	392	647	663	587	552	643
1928	Above Normal	538	541	773	779	913	495	414	456	678	672	612	576	621
1929	Critical	591	618	814	821	1,000	1,000	582	589	698	679	636	598	719
1930	Dry	659	660	864	897	1,000	1,000	577	588	698	678	635	593	737
1931	Critical	656	654	856	904	1,000	1,005	693	694	698	673	644	622	758
1932	Dry	685	692	749	845	738	900	542	506	667	656	600	573	679
1933	Critical	600	618	832	871	1,000	1,000	582	585	692	672	626	601	723
1934	Critical	645	674	829	881	1,002	1,001	676	661	696	667	644	624	750
1935	Below Normal	682	685	851	811	1,023	883	399	409	641	626	599	566	681
1936	Below Normal	585	619	837	841	552	329	356	412	593	643	528	525	568
1937	Below Normal	540	590	793	763	421	376	277	275	592	633	528	524	526
1938	Wet	553	553	520	563	366	327	257	253	251	382	348	346	393
1939	Dry	417	511	736	759	838	802	477	508	698	674	619	569	634
1940	Above Normal	595	637	835	722	722	328	330	378	531	635	583	524	568
1941	Wet	549	579	645	622	408	306	260	265	420	485	479	504	460
1942	Wet	501	523	645	436	293	419	313	278	411	462	363	357	417
1943	Wet	490	497	658	355	264	303	296	376	452	622	509	517	445
1944	Dry	526	530	723	750	813	792	405	465	643	656	609	585	625
1945	Below Normal	584	591	784	776	490	347	382	370	502	600	495	511	536
1946	Below Normal	492	553	492	564	456	496	385	375	534	651	579	547	510
1947	Dry	532	557	710	744	844	1,000	564	575	679	688	639	599	677
1948	Below Normal	616	628	807	849	1,000	1,000	543	550	624	638	613	592	705
1949	Dry	615	635	821	865	1,000	952	588	604	648	678	629	603	720
1950	Below Normal	635	630	807	845	1,000	991	493	448	587	669	625	586	693
1951	Above Normal	618	627	377	318	249	446	388	253	525	662	614	588	472
1952	Wet	587	616	756	550	624	418	225	201	291	383	345	360	446
1953	Wet	535	548	730	603	635	912	347	345	520	611	601	572	580
1954	Above Normal	579	622	792	803	949	979	492	487	662	675	626	601	689
1955	Dry	615	639	780	759	1,000	1,000	579	597	696	698	650	610	719
1956	Wet	657	663	703	355	357	362	381	374	406	488	470	425	470
1957	Above Normal	509	571	762	773	900	944	354	360	559	651	603	569	630
1958	Wet	564	621	782	782	726	458	202	188	331	431	354	359	483
1959	Below Normal	521	561	725	747	713	838	442	482	690	682	633	574	634
1960	Dry	614	663	826	834	949	1,000	573	583	698	692	666	635	728
1961	Dry	698	687	842	911	1,027	1,000	658	662	698	698	691	659	769
1962	Below Normal	717	698	835	948	723	733	487	485	693	663	616	588	682
1963	Wet	633	681	839	856	852	941	428	423	590	638	592	559	669
1964	Dry	588	609	833	821	1,000	1,000	579	587	698	687	647	610	722
1965	Wet	648	669	750	449	390	514	347	346	475	640	450	477	513
1966	Below Normal	542	459	616	644	601	877	470	509	698	696	654	623	616
1967	Wet	628	690	759	752	922	542	257	222	293	304	335	343	504
1968	Below Normal	496	578	745	755	740	924	426	454	684	689	629	597	643
1969	Wet	614	647	798	641	364	398	283	240	242	387	357	365	445
1970	Wet	408	508	629	270	341	365	354	398	476	644	600	552	462
1971	Wet	545	613	784	760	934	843	355	371	554	623	604	572	630
1972	Below Normal	549	639	808	817	943	999	526	542	698	692	640	620	706
1973	Above Normal	634	628	807	810	682	608	421	438	513	653	520	511	602
1974	Wet	500	515	620	518	614	309	367	391	439	587	490	466	485
1975	Wet	428	488	718	727	328	316	377	371	430	576	483	503	479
1976	Critical	424	514	774	771	928	999	566	578	698	699	636	627	685
1977	Critical	658	675	831	886	1,000	1,000	631	634	699	685	718	726	762
1978	Above Normal	762	755	871	756	739	669	376	316	410	554	486	446	595
1979	Below Normal	587	519	763	659	350	321	387	300	439	658	526	535	504
1980	Above Normal	516	562	781	408	338	395	357	358	379	462	458	491	459
1981	Dry	478	502	741	745	911	863	460	452	697	665	640	602	646
1982	Wet	586	637	797	712	277	298	221	209	367	418	338	246	426
1983	Wet	202	265	380	338	320	252	292	264	239	226	185	233	266
1984	Wet	353	201	302	334	220	365	362	359	525	633	526	455	386
1985	Dry	446	498	790	771	833	886	506	506	689	699	610	563	650
1986	Wet	579	587	777	821	442	305	240	224	391	608	484	440	491
1987	Dry	433	438	728	774	996	911	553	566	698	698	658	624	673
1988	Critical	648	664	829	872	1,000	1,005	637	643	699	698	711	660	755
1989	Dry	745	702	841	937	1,185	1,001	618	620	697	656	662	595	772
1990	Critical	694	693	849	949	1,169	1,000	638	654	699	682	683	660	781
1991	Critical	698	686	868	994	1,281	981	657	649	699	690	692	696	799
1992	Critical	736	730	902	1,023	979	1,000	698	850	715	681	710	720	812
1993	Above Normal	799	797	919	670	747	840	520	546	471	568	541	511	661
1994	Critical	573	619	874	961	1,000	1,008	617	641	751	703	707	683	761
Average		580	599	757	735	744	725	449	453	572	618	568	546	612
Wet		533	557	686	585	497	464	313	309	417	515	452	438	481
Above Normal		623	639	768	684	689	625	400	394	506	606	556	534	585
Below Normal		579	594	751	756	682	704	424	428	610	655	585	563	611
Dry		583	601	789	823	940	941	539	549	685	680	637	599	697
Critical		620	644	837	896	1,030	1,001	636	653	703	683	671	653	752

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	684	649	765	798	646	551	351	352	335	530	515	520	558
1923	Below Normal	554	572	650	560	543	737	366	376	559	632	528	495	548
1924	Critical	521	578	786	821	1,000	1,008	656	662	698	667	644	624	722
1925	Dry	669	654	815	898	904	951	419	420	653	670	615	582	688
1926	Dry	615	632	820	861	1,000	1,001	527	547	698	679	626	587	716
1927	Wet	641	605	814	853	768	795	402	392	647	663	587	552	643
1928	Above Normal	538	541	773	779	913	495	414	456	678	672	612	576	621
1929	Critical	591	618	814	821	1,000	1,000	582	589	698	680	637	598	719
1930	Dry	659	660	864	897	1,000	1,000	577	588	698	678	635	593	737
1931	Critical	656	654	856	904	1,000	1,005	693	694	698	673	644	622	758
1932	Dry	685	692	749	845	738	900	542	506	667	656	600	573	679
1933	Critical	600	618	832	871	1,000	1,000	582	585	692	672	626	601	723
1934	Critical	645	674	829	881	1,002	1,001	676	661	695	667	644	624	750
1935	Below Normal	682	685	851	811	1,023	883	399	409	641	626	599	566	681
1936	Below Normal	585	619	837	841	552	329	356	412	593	643	528	525	588
1937	Below Normal	540	590	793	763	421	376	277	275	592	633	528	524	526
1938	Wet	553	553	520	563	366	327	257	253	251	382	348	346	393
1939	Dry	417	511	736	759	838	802	477	508	698	675	620	570	634
1940	Above Normal	595	637	835	722	722	328	330	378	531	635	583	524	568
1941	Wet	549	579	645	622	408	306	260	265	420	485	479	504	460
1942	Wet	501	523	645	436	293	419	313	278	411	462	363	357	417
1943	Wet	490	497	658	355	264	303	296	376	452	622	509	517	445
1944	Dry	526	530	723	750	813	792	406	466	643	657	609	585	625
1945	Below Normal	584	591	784	776	491	347	382	370	502	600	495	511	536
1946	Below Normal	492	553	492	564	456	496	385	375	534	651	579	547	510
1947	Dry	532	557	710	744	844	1,000	564	575	679	688	639	599	678
1948	Below Normal	616	628	807	849	1,000	1,000	543	550	624	638	613	592	705
1949	Dry	615	635	821	865	1,000	952	588	604	648	678	629	603	720
1950	Below Normal	635	630	807	845	1,000	991	494	449	587	670	625	586	693
1951	Above Normal	618	627	377	318	249	446	388	253	525	662	614	588	472
1952	Wet	587	616	756	550	624	418	225	201	291	383	345	360	446
1953	Wet	535	548	730	603	635	912	347	345	520	611	601	572	580
1954	Above Normal	579	622	792	803	949	979	492	487	662	675	626	601	689
1955	Dry	615	639	780	759	1,000	1,000	579	597	696	698	650	610	719
1956	Wet	657	663	703	355	358	362	381	374	406	488	470	425	470
1957	Above Normal	509	571	762	773	900	944	354	360	559	651	603	569	630
1958	Wet	564	621	782	782	726	458	202	188	331	431	354	359	483
1959	Below Normal	521	561	725	747	713	838	442	482	690	682	633	574	634
1960	Dry	614	663	826	834	949	1,000	573	583	698	692	666	635	728
1961	Dry	698	687	842	911	1,028	1,000	658	662	698	698	690	659	769
1962	Below Normal	717	698	835	948	723	733	487	485	693	663	616	588	682
1963	Wet	633	681	839	856	852	941	428	423	590	638	592	559	669
1964	Dry	588	609	833	821	1,000	1,000	580	587	698	687	647	610	722
1965	Wet	648	669	750	449	391	514	347	346	475	640	450	477	513
1966	Below Normal	542	459	616	644	601	877	470	509	698	696	654	623	616
1967	Wet	628	690	759	752	922	542	257	222	293	304	335	343	504
1968	Below Normal	496	578	745	755	740	924	426	454	684	689	629	597	643
1969	Wet	614	647	798	641	364	398	283	240	242	387	357	365	445
1970	Wet	408	508	629	270	341	365	354	398	476	644	600	552	462
1971	Wet	545	613	784	760	934	843	355	371	554	622	604	572	630
1972	Below Normal	549	639	808	817	943	999	526	542	698	692	640	620	706
1973	Above Normal	634	628	807	810	682	608	421	438	513	653	520	511	602
1974	Wet	500	515	620	518	614	309	367	391	439	587	490	466	485
1975	Wet	428	488	718	727	328	316	377	371	430	576	483	503	479
1976	Critical	424	514	774	771	928	999	566	578	698	699	637	627	685
1977	Critical	658	675	831	886	1,000	1,000	631	634	699	685	718	726	762
1978	Above Normal	762	755	871	756	739	671	376	316	410	554	486	446	595
1979	Below Normal	587	519	763	659	350	321	387	300	439	658	526	535	504
1980	Above Normal	516	562	781	408	338	395	357	358	379	462	458	491	459
1981	Dry	478	502	741	745	911	863	460	452	697	665	640	602	646
1982	Wet	586	637	797	712	277	298	221	209	367	418	338	246	426
1983	Wet	202	265	380	338	320	252	292	264	239	226	185	233	266
1984	Wet	353	201	302	334	220	365	362	359	525	633	526	455	386
1985	Dry	446	498	790	771	833	886	506	506	689	699	610	563	650
1986	Wet	579	587	777	821	442	305	240	225	393	608	484	440	492
1987	Dry	433	438	728	774	996	911	553	566	698	698	659	624	673
1988	Critical	648	664	828	871	1,000	1,005	637	643	699	698	711	661	755
1989	Dry	745	702	841	937	1,185	1,001	618	620	697	656	662	595	771
1990	Critical	694	693	849	949	1,169	1,000	638	654	699	682	683	660	781
1991	Critical	698	686	868	994	1,281	981	657	649	699	690	692	696	799
1992	Critical	736	730	902	1,023	979	1,000	698	850	714	680	709	720	812
1993	Above Normal	799	797	919	670	747	840	520	546	472	568	541	511	661
1994	Critical	573	619	874	961	1,000	1,008	617	641	751	703	706	683	761
Average		580	599	757	735	744	725	449	453	572	618	569	546	612
Wet		533	557	686	585	497	464	313	309	417	515	452	438	481
Above Normal		623	639	768	684	689	626	400	394	506	606	556	534	585
Below Normal		579	594	751	756	682	704	424	428	610	655	585	563	611
Dry		583	601	789	823	940	941	539	549	685	680	637	599	697
Critical		620	644	837	896	1,030	1,001	636	653	703	683	671	653	752

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	1	0	1	1	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	1	1	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	1	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	1	0	0	0	0	0	-1	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	Above Normal	0	0	0	0	0	1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	1	2	0	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	1	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	1	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	-1	-1	-1	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average	
Year	Year Type														
1922	Above Normal	664	665	768	847	720	576	373	359	345	532	536	537	577	
1923	Below Normal	558	583	669	603	570	738	396	385	564	637	568	521	566	
1924	Critical	526	578	768	841	989	1,021	787	694	723	692	622	634	740	
1925	Dry	667	666	810	915	930	956	473	417	647	637	533	574	685	
1926	Dry	619	638	804	876	997	1,012	653	597	712	704	636	616	739	
1927	Wet	641	621	800	866	799	804	444	398	641	672	621	584	658	
1928	Above Normal	548	550	758	802	912	534	440	459	674	689	641	609	635	
1929	Critical	599	621	801	844	993	1,012	764	649	650	575	590	624	727	
1930	Dry	657	668	845	925	1,003	1,006	728	611	719	688	570	595	751	
1931	Critical	653	663	837	923	1,001	1,019	806	698	713	695	641	637	774	
1932	Dry	680	699	765	861	809	900	603	505	674	679	665	602	704	
1933	Critical	607	625	812	899	1,004	1,012	771	635	697	626	579	610	740	
1934	Critical	647	678	818	897	1,005	1,015	815	684	652	547	559	626	745	
1935	Below Normal	680	695	837	839	1,011	904	443	414	640	645	626	598	694	
1936	Below Normal	591	624	817	865	578	353	369	418	600	650	564	543	581	
1937	Below Normal	547	590	777	811	452	421	292	283	580	642	563	543	542	
1938	Wet	559	560	529	590	396	338	268	258	258	388	372	363	406	
1939	Dry	419	509	723	783	848	841	541	499	710	692	647	608	652	
1940	Above Normal	600	637	817	780	831	370	339	387	544	636	611	558	593	
1941	Wet	555	582	651	666	461	321	268	272	425	492	500	517	476	
1942	Wet	509	528	647	493	312	425	325	286	417	471	391	373	431	
1943	Wet	474	506	651	382	286	308	307	383	466	616	544	534	455	
1944	Dry	534	537	712	768	848	805	457	462	651	669	640	617	642	
1945	Below Normal	593	602	781	801	517	364	399	378	520	604	529	526	551	
1946	Below Normal	503	553	502	584	483	508	412	384	545	650	612	575	526	
1947	Dry	544	563	703	760	851	993	736	632	701	698	670	633	707	
1948	Below Normal	621	635	791	861	994	1,008	703	594	652	651	636	621	731	
1949	Dry	620	639	806	880	998	967	728	628	674	685	662	631	743	
1950	Below Normal	640	639	793	883	996	998	685	529	609	670	654	624	727	
1951	Above Normal	619	636	405	359	281	453	407	271	527	652	642	617	489	
1952	Wet	595	618	763	697	646	432	237	209	296	390	367	373	468	
1953	Wet	511	556	728	637	652	900	412	352	538	620	627	603	595	
1954	Above Normal	588	623	781	823	946	988	555	492	665	687	658	629	703	
1955	Dry	623	644	777	831	990	1,008	722	627	723	710	681	648	749	
1956	Wet	659	669	720	434	376	378	393	381	418	495	493	449	489	
1957	Above Normal	509	569	749	793	902	948	423	360	572	653	635	601	643	
1958	Wet	572	619	771	817	843	564	221	193	333	437	378	373	510	
1959	Below Normal	501	565	715	769	747	843	506	532	691	697	661	614	653	
1960	Dry	619	661	810	860	958	1,007	735	625	717	708	688	664	754	
1961	Dry	696	701	830	935	1,028	1,012	738	642	723	711	702	674	783	
1962	Below Normal	714	709	824	954	813	749	536	475	699	680	640	615	701	
1963	Wet	633	679	828	872	943	479	422	605	646	619	589	682	682	
1964	Dry	591	616	816	842	991	1,011	735	633	713	699	678	645	748	
1965	Wet	649	672	760	495	415	519	363	358	494	631	494	490	528	
1966	Below Normal	543	480	615	669	629	869	536	499	707	708	675	653	632	
1967	Wet	637	686	761	908	927	580	282	230	298	310	352	356	527	
1968	Below Normal	484	573	735	787	759	915	497	502	681	699	686	635	663	
1969	Wet	619	650	797	721	407	403	290	245	247	393	381	379	461	
1970	Wet	412	503	625	308	356	377	377	405	512	634	627	589	477	
1971	Wet	555	618	842	789	928	859	409	374	569	632	630	608	651	
1972	Below Normal	561	631	794	837	941	1,008	726	603	717	708	677	647	737	
1973	Above Normal	637	661	806	1,014	829	651	451	445	537	648	563	535	648	
1974	Wet	509	526	631	556	631	334	374	399	456	585	525	490	501	
1975	Wet	441	489	705	745	370	328	386	383	445	574	517	517	492	
1976	Critical	438	510	758	791	924	1,008	750	641	702	711	684	656	714	
1977	Critical	660	679	816	900	997	1,021	823	667	693	648	615	647	764	
1978	Above Normal	758	768	865	821	763	697	393	324	418	557	515	471	612	
1979	Below Normal	580	537	747	718	392	333	398	313	459	644	570	553	520	
1980	Above Normal	526	563	769	449	365	401	369	368	387	468	478	503	470	
1981	Dry	489	507	725	774	911	877	517	514	686	685	660	640	665	
1982	Wet	596	639	791	792	306	321	226	216	370	426	361	256	442	
1983	Wet	207	276	381	390	338	281	304	267	245	231	195	237	279	
1984	Wet	352	210	310	343	239	372	381	371	538	633	563	482	400	
1985	Dry	454	513	779	794	840	892	684	578	693	705	643	604	682	
1986	Wet	585	596	765	840	505	318	251	233	395	600	519	466	506	
1987	Dry	446	448	708	792	985	936	734	622	711	713	692	657	704	
1988	Critical	652	669	818	890	995	1,018	745	652	678	632	538	638	744	
1989	Dry	730	720	831	944	1,151	1,024	704	613	721	689	680	628	786	
1990	Critical	681	700	835	954	1,148	1,036	778	630	631	609	630	661	774	
1991	Critical	699	702	846	989	1,234	1,014	753	656	609	600	620	657	782	
1992	Critical	731	744	882	1,019	1,007	1,006	717	685	568	465	535	671	752	
1993	Above Normal	747	803	914	852	919	912	574	527	498	572	563	535	701	
1994	Critical	573	620	853	970	1,006	1,017	738	621	746	723	710	704	773	
Average		581	606	750	771	765	741	520	466	576	614	580	566	628	
Wet		537	562	688	635	527	481	333	316	427	518	480	458	497	
Above Normal		620	647	763	754	747	653	432	399	517	609	584	560	607	
Below Normal		580	601	743	784	706	715	493	451	619	663	619	591	630	
Dry		587	608	778	846	946	953	656	575	699	692	653	627	718	
Critical		622	649	820	910	1,025	1,017	770	659	672	627	610	647	752	

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	664	665	768	847	720	576	373	359	345	532	536	537	577
1923	Below Normal	558	583	669	603	570	738	396	385	564	637	568	521	566
1924	Critical	526	578	768	840	990	1,021	792	698	722	697	629	636	741
1925	Dry	667	666	810	915	930	956	473	417	647	639	524	569	684
1926	Dry	619	638	804	876	996	1,012	653	597	712	703	664	625	742
1927	Wet	641	621	800	866	799	804	444	398	641	672	622	584	658
1928	Above Normal	548	550	758	802	912	534	440	459	674	690	640	609	635
1929	Critical	599	621	802	845	993	1,012	758	647	656	562	600	631	727
1930	Dry	657	668	845	924	1,004	1,006	728	611	719	611	554	599	744
1931	Critical	653	663	837	923	1,001	1,019	801	693	724	697	645	639	775
1932	Dry	680	699	765	861	810	901	603	505	674	679	664	602	704
1933	Critical	607	625	811	899	1,005	1,012	770	634	697	626	579	610	739
1934	Critical	647	678	818	897	1,005	1,015	815	684	651	548	562	626	746
1935	Below Normal	680	695	837	838	1,010	903	443	414	640	645	625	597	694
1936	Below Normal	591	624	817	864	578	353	369	418	600	650	564	543	581
1937	Below Normal	547	590	777	810	452	421	291	283	580	642	563	543	542
1938	Wet	559	560	529	590	396	338	268	258	258	388	372	363	406
1939	Dry	418	509	723	783	848	841	541	500	709	690	643	605	651
1940	Above Normal	600	637	817	780	832	370	339	387	544	636	611	558	593
1941	Wet	555	582	650	667	461	321	268	272	425	492	500	517	476
1942	Wet	509	528	646	494	312	425	325	286	417	471	391	372	431
1943	Wet	474	506	651	382	287	308	307	383	466	616	544	534	455
1944	Dry	534	537	712	767	851	805	457	462	651	668	637	616	641
1945	Below Normal	593	602	781	801	518	364	399	378	520	604	528	526	551
1946	Below Normal	503	553	502	584	483	509	412	384	545	650	612	575	526
1947	Dry	544	563	703	760	851	993	736	632	701	697	666	632	706
1948	Below Normal	621	635	791	861	994	1,008	703	594	653	650	635	621	731
1949	Dry	620	639	806	880	998	966	728	627	674	685	662	631	743
1950	Below Normal	640	638	792	883	996	998	686	530	609	671	652	623	727
1951	Above Normal	620	636	405	359	282	456	407	271	527	652	642	617	490
1952	Wet	595	618	762	697	646	432	237	209	296	390	367	373	468
1953	Wet	511	556	728	636	652	900	412	352	538	620	627	603	595
1954	Above Normal	588	623	781	823	946	988	555	492	665	687	658	629	703
1955	Dry	623	644	777	831	990	1,008	722	627	723	708	675	647	748
1956	Wet	659	669	721	434	376	378	393	381	418	495	493	449	489
1957	Above Normal	509	569	749	793	902	948	423	360	572	653	635	601	643
1958	Wet	572	619	771	817	843	564	221	193	333	437	378	373	510
1959	Below Normal	501	565	715	770	747	843	506	532	691	697	660	613	653
1960	Dry	619	662	812	860	958	1,007	735	625	721	708	690	664	755
1961	Dry	696	701	830	935	1,028	1,014	741	645	723	711	702	672	783
1962	Below Normal	714	709	824	954	813	748	536	476	700	680	640	616	701
1963	Wet	633	680	828	870	872	943	479	422	605	646	619	589	682
1964	Dry	591	616	816	842	992	1,011	734	633	713	699	676	645	747
1965	Wet	649	672	760	495	415	519	363	358	493	631	494	489	528
1966	Below Normal	543	480	615	669	629	869	536	499	707	708	675	653	632
1967	Wet	637	686	761	908	927	580	282	230	298	310	352	356	527
1968	Below Normal	484	573	735	786	760	915	497	502	681	698	686	635	663
1969	Wet	619	650	797	721	407	402	290	245	247	392	379	378	460
1970	Wet	411	504	625	307	357	377	377	405	512	634	627	589	477
1971	Wet	555	619	842	789	928	859	409	374	569	631	630	608	651
1972	Below Normal	561	631	794	837	941	1,008	726	603	716	706	672	645	737
1973	Above Normal	637	661	806	1,015	830	651	451	445	537	648	563	535	648
1974	Wet	509	526	631	556	632	334	374	399	456	585	525	490	501
1975	Wet	441	489	704	745	370	328	386	383	445	574	517	517	492
1976	Critical	438	510	757	791	925	1,008	748	640	724	712	701	662	718
1977	Critical	660	679	817	900	998	1,021	830	675	691	648	612	632	764
1978	Above Normal	758	770	866	822	763	698	393	324	418	557	515	471	613
1979	Below Normal	580	537	747	717	393	333	398	313	459	643	569	553	520
1980	Above Normal	526	563	769	449	364	401	371	368	387	468	478	503	471
1981	Dry	489	507	725	773	912	877	517	514	686	685	659	640	665
1982	Wet	596	639	791	793	306	321	226	216	370	426	364	257	442
1983	Wet	207	276	381	391	339	280	302	267	245	231	195	237	279
1984	Wet	352	210	310	343	239	372	381	371	538	633	563	482	400
1985	Dry	454	513	778	794	840	891	684	578	693	705	643	604	681
1986	Wet	585	596	765	841	505	318	254	233	397	600	517	466	506
1987	Dry	446	448	708	792	985	936	732	621	719	709	682	656	703
1988	Critical	652	669	818	890	995	1,018	745	652	698	636	542	637	746
1989	Dry	729	719	831	944	1,151	1,024	704	613	720	688	679	628	786
1990	Critical	681	700	834	954	1,148	1,036	778	631	632	611	631	661	775
1991	Critical	699	702	846	989	1,234	1,014	753	656	609	600	617	656	781
1992	Critical	731	744	882	1,019	1,007	1,006	717	683	563	467	534	668	752
1993	Above Normal	741	800	914	852	919	912	574	527	498	573	563	535	701
1994	Critical	573	620	853	970	1,006	1,017	737	620	746	723	710	704	773
Average		581	606	750	771	765	741	520	467	577	613	580	566	628
Wet		537	562	688	635	527	481	333	316	427	518	480	458	497
Above Normal		619	647	763	754	747	653	433	399	517	609	584	560	607
Below Normal		580	601	743	784	706	715	493	451	619	663	618	590	630
Dry		587	608	778	846	947	953	655	575	699	687	651	627	718
Critical		622	649	820	910	1,026	1,017	770	659	676	627	613	647	753

Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	1	0	5	4	-1	5	7	2	2
1925	Dry	0	0	0	0	0	0	0	0	0	2	-9	-5	-1
1926	Dry	0	0	0	0	0	0	-1	0	-1	-1	28	9	3
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	1	-1	0	0
1929	Critical	0	0	1	1	0	0	-5	-2	6	-13	10	7	0
1930	Dry	0	0	0	0	0	0	0	0	-1	-76	-16	4	-8
1931	Critical	0	0	0	0	-1	0	-5	-5	11	2	5	2	1
1932	Dry	0	0	0	0	1	0	0	0	0	0	-1	0	0
1933	Critical	0	0	-1	0	0	0	-1	-1	0	1	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	2	3	0	0
1935	Below Normal	0	0	0	-1	-1	-1	-1	0	0	0	-1	0	0
1936	Below Normal	0	0	0	-1	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	-1	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	1	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	-1	-2	-4	-2	-1
1940	Above Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1941	Wet	0	0	-1	1	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	-2	1	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	-1	2	0	0	0	0	-1	-3	-1	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	-1	-5	-1	-1
1948	Below Normal	0	0	0	0	0	0	0	0	0	-1	0	0	0
1949	Dry	0	0	0	0	0	-1	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	2	0	0	0	-1	-1	0
1951	Above Normal	0	0	0	0	1	3	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	-3	-6	-1	-1
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	1	0	0	0	0	0	0	-1	0	0
1960	Dry	0	1	2	-1	0	0	0	0	4	0	2	0	1
1961	Dry	0	0	0	0	1	2	3	3	0	0	0	-3	0
1962	Below Normal	0	0	0	0	0	-2	0	0	1	0	0	0	0
1963	Wet	0	0	0	-1	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	2	0	-1	0	0	0	-1	0	0
1965	Wet	0	0	0	0	1	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	-1	0	0	0	0	-2	-1	0
1970	Wet	-1	0	1	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	-1	-1	-5	-1	-1
1973	Above Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	1	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	-1	0	1	0	-2	0	22	1	17	6	4
1977	Critical	0	0	1	0	0	0	8	8	-2	0	-3	-15	0
1978	Above Normal	0	2	0	0	0	1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	-1	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	-1	0	2	0	0	0	0	0	0
1981	Dry	0	0	0	-1	1	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	1	0	0	0	0	0	0	3	1	0
1983	Wet	1	0	0	1	1	0	-1	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	-1	0	0	0	0	0	0	0
1986	Wet	0	0	0	1	0	0	3	0	1	0	-1	0	0
1987	Dry	0	0	0	0	-1	-1	-3	-1	7	-4	-10	-1	-1
1988	Critical	0	0	0	0	0	0	-1	-1	20	4	4	0	2
1989	Dry	-1	0	0	0	0	0	0	0	0	-1	-1	0	0
1990	Critical	0	0	-1	0	0	0	0	0	1	1	1	1	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	-3	-1	0
1992	Critical	0	0	0	0	0	0	0	-2	-5	3	-2	-3	-1
1993	Above Normal	-7	-3	0	0	0	0	0	0	0	0	0	0	-1
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	1	-1	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		-1	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	-1	0	0
Dry		0	0	0	0	0	0	0	0	0	-5	-2	0	-1
Critical		0	0	0	0	0	0	0	0	4	0	3	0	1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	1%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	1%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	-1%	0%	1%	-2%	2%	1%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-11%	-3%	1%	-1%
1931	Critical	0%	0%	0%	0%	0%	0%	-1%	-1%	2%	0%	1%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	1%
1977	Critical	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	-1%	-2%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	1%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%	0%	0%
1993	Above Normal	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%

Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	678	655	764	805	659	556	361	355	340	531	521	525	562
1923	Below Normal	556	576	651	568	546	735	380	380	562	635	539	500	552
1924	Critical	523	578	779	825	994	1,014	708	671	707	678	651	631	730
1925	Dry	669	658	812	899	908	952	444	418	654	674	624	588	692
1926	Dry	617	633	814	864	995	1,005	595	549	705	686	635	595	724
1927	Wet	641	610	807	856	776	796	421	395	647	667	596	559	647
1928	Above Normal	542	544	766	784	909	511	426	458	679	678	621	583	625
1929	Critical	594	620	808	827	994	1,005	641	593	704	696	645	606	727
1930	Dry	659	662	855	904	998	1,002	633	589	706	685	643	600	745
1931	Critical	655	657	849	908	998	1,011	745	702	709	683	653	629	767
1932	Dry	684	695	750	845	749	897	569	507	671	662	610	580	685
1933	Critical	602	621	824	878	997	1,003	641	593	700	681	636	608	732
1934	Critical	646	676	824	883	1,000	1,006	727	668	707	680	652	631	758
1935	Below Normal	682	688	846	819	1,016	890	418	412	642	633	606	573	685
1936	Below Normal	587	620	829	846	562	336	361	414	598	646	540	530	573
1937	Below Normal	543	590	787	772	433	383	282	279	592	637	540	529	530
1938	Wet	555	555	523	565	375	329	259	255	254	384	356	351	397
1939	Dry	417	510	730	763	839	819	507	506	703	681	628	578	640
1940	Above Normal	597	637	828	735	736	343	333	382	538	637	592	532	574
1941	Wet	551	580	645	629	419	310	263	268	423	488	485	508	464
1942	Wet	503	524	643	448	299	419	317	281	414	466	372	362	421
1943	Wet	489	500	654	365	268	305	298	379	458	622	520	522	448
1944	Dry	529	533	717	753	816	796	428	465	647	661	618	592	630
1945	Below Normal	587	595	780	780	500	351	388	373	511	603	506	516	541
1946	Below Normal	496	554	495	565	461	498	398	379	540	651	589	555	515
1947	Dry	536	559	706	746	843	996	622	580	688	692	647	608	685
1948	Below Normal	618	630	800	850	995	1,003	611	554	635	643	620	598	713
1949	Dry	617	637	815	869	996	956	635	605	659	682	637	610	726
1950	Below Normal	637	633	801	852	995	993	547	455	596	670	633	593	700
1951	Above Normal	619	630	386	324	254	444	396	262	528	660	623	595	477
1952	Wet	590	617	755	571	625	425	230	205	293	386	353	365	451
1953	Wet	532	550	726	611	636	906	378	348	528	615	607	579	585
1954	Above Normal	582	622	786	807	945	982	522	491	665	679	634	608	694
1955	Dry	619	640	778	770	992	1,002	653	603	703	702	657	618	728
1956	Wet	658	665	705	371	359	366	385	377	412	491	477	431	475
1957	Above Normal	509	570	756	777	898	944	386	360	566	653	612	576	634
1958	Wet	567	620	777	789	745	475	209	190	332	434	363	364	489
1959	Below Normal	519	562	720	751	720	839	472	484	692	688	641	579	639
1960	Dry	616	663	820	840	948	1,002	635	587	707	698	672	642	736
1961	Dry	698	691	836	915	1,023	1,003	679	645	708	704	694	665	772
1962	Below Normal	716	702	830	947	741	735	509	483	696	670	624	594	687
1963	Wet	633	681	834	859	855	941	455	422	597	642	600	565	674
1964	Dry	589	611	825	826	994	1,004	633	592	703	692	654	617	728
1965	Wet	648	671	751	462	394	514	354	352	483	638	464	481	518
1966	Below Normal	543	466	613	646	605	871	502	507	702	700	661	630	620
1967	Wet	632	689	758	777	917	559	267	225	295	308	341	348	510
1968	Below Normal	494	577	740	763	743	920	458	457	685	693	636	604	647
1969	Wet	616	648	795	654	375	399	286	242	244	389	365	370	449
1970	Wet	409	506	627	282	342	367	365	402	491	641	609	561	467
1971	Wet	549	615	788	765	928	849	380	373	562	627	611	579	636
1972	Below Normal	553	637	802	821	939	1,003	586	543	705	697	648	625	713
1973	Above Normal	635	635	803	846	702	614	434	442	524	652	533	517	611
1974	Wet	503	519	619	525	613	319	368	395	447	588	501	473	489
1975	Wet	433	488	711	730	344	319	379	377	437	577	492	508	483
1976	Critical	430	513	766	777	925	1,005	634	582	707	703	644	631	693
1977	Critical	659	677	825	888	996	1,010	703	646	711	698	715	728	771
1978	Above Normal	762	758	868	771	743	677	384	320	414	556	495	452	600
1979	Below Normal	585	525	755	670	362	324	390	306	449	655	539	541	509
1980	Above Normal	519	563	774	422	343	395	362	363	383	465	465	495	462
1981	Dry	482	503	734	751	907	867	486	458	696	673	646	610	651
1982	Wet	589	638	794	728	290	305	224	212	368	422	346	250	430
1983	Wet	204	267	379	347	324	258	293	266	242	229	190	235	269
1984	Wet	352	206	303	334	224	365	370	365	532	634	537	464	391
1985	Dry	448	502	782	775	833	887	567	514	692	702	620	570	658
1986	Wet	581	590	770	825	460	311	243	228	393	608	495	446	496
1987	Dry	437	441	719	777	988	920	608	568	707	703	665	631	680
1988	Critical	649	666	823	876	996	1,010	691	644	709	705	711	669	762
1989	Dry	742	708	836	937	1,171	1,013	659	626	708	672	666	602	778
1990	Critical	690	696	843	947	1,157	1,015	698	640	711	695	687	667	787
1991	Critical	699	690	861	990	1,262	998	686	649	709	700	696	700	803
1992	Critical	735	733	895	1,020	987	1,003	710	813	773	699	708	722	816
1993	Above Normal	794	800	916	700	764	845	543	539	484	570	549	517	668
1994	Critical	573	619	865	961	1,001	1,011	662	617	751	715	708	689	764
Average		581	601	753	742	746	729	477	455	579	623	576	552	618
Wet		535	559	684	595	503	468	321	312	421	517	461	444	485
Above Normal		624	641	765	697	695	631	415	397	512	608	564	540	591
Below Normal		580	597	746	761	687	706	450	430	615	659	594	569	616
Dry		585	603	783	827	938	945	585	551	691	686	645	606	704
Critical		621	646	830	898	1,025	1,008	687	651	717	694	676	659	759

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	678	655	764	805	659	556	361	355	340	531	521	525	562
1923	Below Normal	556	576	651	568	546	735	380	380	562	635	539	500	552
1924	Critical	523	578	780	825	994	1,014	709	671	707	678	651	631	730
1925	Dry	669	658	812	899	908	952	444	418	654	674	624	588	692
1926	Dry	617	633	814	864	995	1,005	595	549	704	686	635	595	724
1927	Wet	641	610	807	856	776	796	421	395	647	667	596	559	647
1928	Above Normal	542	544	766	784	909	511	426	458	679	678	621	583	625
1929	Critical	594	620	808	827	994	1,005	640	593	704	687	646	606	727
1930	Dry	659	662	855	904	998	1,002	633	589	706	685	643	600	745
1931	Critical	655	657	849	908	998	1,011	745	701	709	683	653	629	766
1932	Dry	684	695	750	845	749	897	569	507	671	662	609	580	685
1933	Critical	602	621	824	878	997	1,003	641	593	700	681	636	608	732
1934	Critical	646	676	824	883	1,000	1,006	726	668	707	679	652	631	758
1935	Below Normal	682	688	846	819	1,016	890	418	412	642	633	606	573	685
1936	Below Normal	587	620	829	846	562	336	360	414	598	646	540	530	572
1937	Below Normal	543	590	787	771	433	383	282	279	592	637	540	529	530
1938	Wet	555	555	523	565	375	329	259	255	254	384	356	351	397
1939	Dry	417	510	730	763	839	819	507	507	703	682	629	578	640
1940	Above Normal	597	637	828	735	736	343	333	382	538	637	592	532	574
1941	Wet	551	580	645	629	419	310	263	268	423	488	485	508	464
1942	Wet	503	524	643	448	299	419	317	281	414	466	372	362	421
1943	Wet	489	500	654	365	268	305	298	379	458	622	520	522	448
1944	Dry	529	533	717	753	816	796	429	465	647	662	618	592	630
1945	Below Normal	587	595	780	780	501	351	388	373	511	603	506	516	541
1946	Below Normal	496	554	495	565	461	498	398	379	540	651	589	555	515
1947	Dry	536	559	706	746	843	996	622	580	688	692	647	608	685
1948	Below Normal	618	630	800	850	995	1,003	611	554	635	643	620	598	713
1949	Dry	617	637	815	869	996	956	634	605	659	682	637	610	726
1950	Below Normal	637	633	801	852	995	993	547	455	596	671	633	593	701
1951	Above Normal	619	630	386	324	254	444	396	262	528	660	623	595	477
1952	Wet	590	617	755	571	625	425	230	205	293	386	353	365	451
1953	Wet	532	550	726	611	636	906	378	348	528	616	608	579	585
1954	Above Normal	582	622	786	807	945	982	522	491	665	679	634	608	694
1955	Dry	619	640	778	770	992	1,002	653	603	703	702	657	618	728
1956	Wet	658	665	705	371	359	366	385	377	412	491	477	431	475
1957	Above Normal	509	570	756	777	898	944	386	360	566	653	612	576	634
1958	Wet	567	620	777	789	745	475	209	190	332	434	363	364	489
1959	Below Normal	519	562	720	751	720	839	472	484	692	688	641	579	639
1960	Dry	616	663	820	840	948	1,002	635	587	707	698	672	642	736
1961	Dry	698	691	836	915	1,024	1,003	682	646	708	704	694	665	772
1962	Below Normal	717	702	830	947	741	735	509	483	696	670	624	594	688
1963	Wet	633	681	834	859	855	941	455	422	597	642	600	565	674
1964	Dry	589	611	825	826	994	1,004	633	592	703	692	654	617	728
1965	Wet	648	671	751	462	394	514	354	352	483	638	464	481	518
1966	Below Normal	543	466	613	646	605	871	502	507	702	700	661	630	620
1967	Wet	632	689	758	777	917	959	267	225	295	307	341	348	510
1968	Below Normal	494	577	740	763	743	520	458	457	685	693	636	604	647
1969	Wet	616	648	795	654	375	399	286	242	244	389	365	370	449
1970	Wet	409	506	627	282	342	367	365	402	491	641	609	561	467
1971	Wet	549	615	788	765	928	849	380	373	562	627	611	579	636
1972	Below Normal	553	637	802	821	939	1,003	586	543	705	697	648	625	713
1973	Above Normal	635	635	803	846	702	614	434	442	524	652	533	517	611
1974	Wet	503	519	619	525	613	319	368	395	447	588	501	473	489
1975	Wet	433	488	711	730	344	319	379	377	437	577	492	508	483
1976	Critical	430	513	766	777	925	1,005	633	582	706	703	644	631	693
1977	Critical	659	677	825	888	996	1,010	706	651	711	698	715	728	772
1978	Above Normal	762	758	868	771	743	679	384	320	414	556	495	452	600
1979	Below Normal	585	525	755	670	362	324	390	306	449	655	539	541	509
1980	Above Normal	519	563	774	422	343	395	362	363	383	465	465	495	462
1981	Dry	482	503	734	751	907	867	486	457	696	673	646	610	651
1982	Wet	589	638	794	728	290	305	224	212	368	422	346	250	430
1983	Wet	204	267	379	347	324	258	293	266	242	229	190	235	269
1984	Wet	352	206	303	334	224	365	370	365	532	634	537	464	391
1985	Dry	448	502	782	775	833	887	567	514	692	702	620	570	658
1986	Wet	581	590	770	825	460	311	243	229	394	608	496	446	496
1987	Dry	437	441	719	777	988	920	608	568	706	702	665	631	680
1988	Critical	649	666	823	876	996	1,010	690	644	709	705	711	669	762
1989	Dry	742	708	836	937	1,171	1,013	659	626	707	672	666	602	778
1990	Critical	690	696	843	948	1,157	1,015	698	641	711	695	687	667	787
1991	Critical	699	690	861	990	1,262	998	686	649	709	700	696	700	803
1992	Critical	735	733	895	1,020	987	1,003	710	813	773	699	708	722	816
1993	Above Normal	794	800	916	700	764	845	543	539	484	570	549	517	668
1994	Critical	573	619	865	961	1,001	1,011	661	616	750	715	708	689	764
Average		581	601	753	742	746	729	477	455	579	623	576	552	618
Wet		535	559	684	595	503	468	321	312	422	517	461	444	485
Above Normal		624	641	765	697	695	631	415	397	512	608	564	540	591
Below Normal		580	597	746	761	687	706	450	430	615	659	594	569	616
Dry		585	603	783	827	938	945	585	551	691	686	645	606	704
Critical		621	646	830	898	1,025	1,008	687	652	717	694	676	659	759

Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	1	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	-1	1	0	1	1	0	0
1930	Dry	0	0	0	0	0	0	-1	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	1	1	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	-1	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	1	0	3	2	0	0	-1	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-1	0	0	0	0	0	0
1977	Critical	0	0	0	0	0	0	2	5	0	0	0	0	1
1978	Above Normal	0	0	0	0	0	1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	1	2	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	-1	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	1	-1	-1	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	653	634	616	516	462	326	302	303	300	321	299	470	433
1923	Below Normal	651	633	544	344	341	324	321	349	280	273	330	520	409
1924	Critical	642	710	777	806	699	685	551	515	593	515	555	635	640
1925	Dry	796	840	832	872	629	393	326	323	316	329	389	616	555
1926	Dry	764	720	793	838	589	347	304	371	319	363	434	612	538
1927	Wet	806	543	310	307	330	302	278	311	235	245	280	490	370
1928	Above Normal	667	506	348	390	292	276	283	335	270	276	291	524	372
1929	Critical	767	784	866	803	873	586	467	467	435	433	519	671	639
1930	Dry	799	818	840	529	357	297	283	360	308	355	431	613	499
1931	Critical	789	705	808	862	752	582	535	524	585	483	561	665	654
1932	Dry	785	835	703	381	417	479	466	453	345	361	405	618	521
1933	Critical	746	670	736	684	557	461	421	413	431	442	494	598	554
1934	Critical	759	848	795	672	423	486	504	478	458	409	492	674	583
1935	Below Normal	810	832	884	610	375	309	317	368	282	258	337	563	496
1936	Below Normal	719	679	816	675	441	329	289	348	290	262	332	534	476
1937	Below Normal	685	679	766	793	633	512	380	314	290	304	323	505	515
1938	Wet	692	688	337	313	403	339	282	267	296	296	290	295	375
1939	Dry	232	271	481	630	596	455	424	414	342	396	457	636	445
1940	Above Normal	796	728	769	663	417	318	288	338	279	255	274	505	469
1941	Wet	676	731	665	371	460	382	317	276	313	334	306	369	433
1942	Wet	300	428	490	419	363	295	318	306	275	315	308	329	345
1943	Wet	264	281	248	394	332	315	318	363	344	285	294	505	329
1944	Dry	727	686	818	876	600	337	310	340	301	336	438	647	535
1945	Below Normal	786	651	552	515	499	371	346	346	278	274	328	528	456
1946	Below Normal	692	531	349	290	353	327	331	366	273	276	354	580	394
1947	Dry	769	705	674	575	558	379	322	353	317	355	479	588	506
1948	Below Normal	771	765	904	771	777	393	296	318	238	243	321	536	528
1949	Dry	621	637	784	870	701	361	302	392	294	336	491	593	532
1950	Below Normal	722	691	757	620	344	258	262	313	262	270	314	530	445
1951	Above Normal	732	427	340	365	355	289	315	321	245	262	273	535	372
1952	Wet	699	725	641	397	298	353	339	276	284	284	258	257	401
1953	Wet	239	337	452	310	317	274	290	298	231	248	286	424	309
1954	Above Normal	354	394	544	696	290	250	269	321	261	268	276	524	371
1955	Dry	748	806	650	344	341	353	370	380	324	323	441	616	475
1956	Wet	733	780	621	659	480	329	302	325	277	320	312	334	456
1957	Above Normal	245	280	523	818	590	281	281	313	251	248	282	553	389
1958	Wet	570	337	384	313	383	474	320	270	268	282	275	275	346
1959	Below Normal	243	359	682	725	341	338	363	353	318	306	332	548	409
1960	Dry	697	713	766	904	796	331	304	374	309	392	454	605	554
1961	Dry	784	820	921	751	683	348	311	346	334	366	469	630	564
1962	Below Normal	798	814	910	768	560	335	303	365	301	290	345	672	538
1963	Wet	678	295	374	323	311	268	327	351	245	243	275	487	348
1964	Dry	648	592	310	472	363	332	338	369	316	395	539	585	438
1965	Wet	760	818	492	323	283	288	316	317	273	253	287	484	408
1966	Below Normal	639	582	311	308	303	268	286	345	284	320	313	564	377
1967	Wet	799	818	720	398	299	301	409	313	288	307	262	248	430
1968	Below Normal	234	286	414	493	293	262	325	351	298	302	316	558	344
1969	Wet	793	748	577	478	401	409	301	250	252	291	297	307	425
1970	Wet	231	271	306	510	360	299	299	328	275	268	280	523	329
1971	Wet	748	527	328	255	272	255	271	303	227	238	298	379	342
1972	Below Normal	315	487	557	360	382	268	266	347	309	317	331	570	376
1973	Above Normal	841	563	332	354	373	317	308	342	283	253	305	512	399
1974	Wet	711	397	270	305	283	293	278	316	286	266	309	344	338
1975	Wet	246	311	489	454	371	302	295	327	264	294	299	329	332
1976	Critical	243	244	383	651	772	531	417	444	566	626	682	780	528
1977	Critical	873	751	899	754	820	696	566	544	642	639	617	721	710
1978	Above Normal	876	898	894	556	472	518	490	368	332	345	327	417	541
1979	Below Normal	476	652	777	652	377	304	320	334	288	269	329	549	444
1980	Above Normal	773	630	413	369	381	411	374	343	343	341	322	491	433
1981	Dry	625	637	783	716	333	274	318	342	338	411	467	623	489
1982	Wet	855	614	257	352	377	420	237	265	280	311	290	260	376
1983	Wet	208	249	403	378	336	275	304	270	249	238	225	208	279
1984	Wet	224	276	312	373	353	276	309	364	295	266	288	517	321
1985	Dry	655	471	259	292	451	359	333	344	310	405	481	692	421
1986	Wet	814	758	787	503	522	334	348	277	303	386	328	441	483
1987	Dry	507	594	807	862	667	376	350	365	350	395	492	619	532
1988	Critical	828	819	855	689	397	454	403	436	430	389	518	710	577
1989	Dry	830	863	861	802	956	453	253	306	275	391	503	606	592
1990	Critical	768	830	876	616	520	381	386	399	498	599	622	674	597
1991	Critical	867	892	877	923	916	590	399	383	467	601	605	639	680
1992	Critical	874	940	909	989	659	357	316	349	376	382	591	808	629
1993	Above Normal	876	929	943	587	398	333	284	313	268	299	302	449	498
1994	Critical	560	673	822	895	700	398	319	362	375	624	683	708	593
Average		645	622	620	568	475	367	338	351	322	340	382	530	464
Wet		574	521	451	387	359	323	308	303	274	284	288	372	370
Above Normal		681	599	572	531	403	332	319	330	283	287	295	498	428
Below Normal		610	617	659	566	430	328	315	344	285	283	329	554	443
Dry		687	688	705	670	565	367	332	364	319	369	461	619	512
Critical		726	739	800	779	674	517	440	443	488	512	578	690	616

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	653	634	616	516	462	326	302	303	300	321	299	470	433
1923	Below Normal	651	633	544	344	341	324	321	349	280	274	329	518	409
1924	Critical	643	729	789	826	915	753	593	539	586	512	560	647	674
1925	Dry	797	833	843	820	606	428	347	329	315	327	386	611	554
1926	Dry	760	719	792	837	589	347	305	367	309	364	442	627	538
1927	Wet	812	498	264	293	329	298	277	310	235	245	280	490	361
1928	Above Normal	669	509	355	393	292	276	281	333	268	277	293	536	374
1929	Critical	772	787	865	785	847	578	445	451	409	420	522	688	631
1930	Dry	796	788	832	541	358	292	279	361	305	355	446	660	501
1931	Critical	801	688	798	857	790	555	509	511	575	488	569	665	650
1932	Dry	782	828	699	380	458	513	471	454	346	362	405	618	526
1933	Critical	746	670	733	683	553	443	412	411	431	442	494	598	551
1934	Critical	757	847	794	666	420	486	503	478	458	413	494	674	583
1935	Below Normal	810	833	886	608	374	314	327	369	288	262	344	578	500
1936	Below Normal	727	683	788	629	442	331	291	347	290	263	335	544	472
1937	Below Normal	683	668	767	872	641	519	381	319	292	302	323	508	523
1938	Wet	685	697	346	316	404	340	290	266	296	296	291	294	377
1939	Dry	233	278	494	636	598	456	425	413	344	405	460	668	451
1940	Above Normal	806	735	774	662	420	321	288	338	278	254	274	505	471
1941	Wet	676	730	666	371	461	385	318	276	313	335	306	368	434
1942	Wet	301	430	491	419	363	295	318	306	274	311	305	328	345
1943	Wet	264	281	249	394	332	315	317	361	343	282	294	508	328
1944	Dry	724	693	804	878	749	358	312	341	300	345	449	612	547
1945	Below Normal	791	693	564	521	507	355	340	346	277	274	329	532	461
1946	Below Normal	689	613	427	292	368	329	329	364	271	276	353	580	407
1947	Dry	756	706	689	578	561	378	322	353	314	374	523	576	511
1948	Below Normal	754	761	903	756	770	394	296	318	244	247	350	595	532
1949	Dry	729	707	789	816	862	475	304	394	296	324	477	603	565
1950	Below Normal	750	717	778	587	330	257	263	313	260	262	321	540	448
1951	Above Normal	727	431	341	365	317	282	321	317	244	259	272	535	368
1952	Wet	696	679	582	397	298	352	335	276	284	284	258	258	392
1953	Wet	239	336	450	310	317	274	290	299	231	248	290	433	310
1954	Above Normal	358	369	452	631	283	249	269	344	258	267	280	535	358
1955	Dry	745	802	677	368	346	355	371	379	318	331	463	581	478
1956	Wet	708	769	618	659	480	325	301	325	277	321	313	338	453
1957	Above Normal	246	280	523	814	582	280	281	313	250	247	283	558	388
1958	Wet	582	358	398	315	379	469	302	266	268	282	276	277	348
1959	Below Normal	244	360	684	726	342	338	363	353	318	304	335	570	411
1960	Dry	770	798	812	769	726	321	302	373	315	378	458	599	552
1961	Dry	786	822	920	755	706	383	329	354	332	364	470	622	570
1962	Below Normal	798	815	909	783	566	337	303	366	310	293	348	679	542
1963	Wet	664	289	351	322	320	268	328	350	247	245	276	488	346
1964	Dry	651	591	309	474	366	334	337	367	310	398	551	583	439
1965	Wet	754	817	491	323	279	283	314	340	273	250	288	487	408
1966	Below Normal	639	596	319	310	299	265	286	344	282	317	314	566	378
1967	Wet	799	821	721	399	298	301	412	314	288	307	262	249	431
1968	Below Normal	234	285	412	492	293	261	325	351	297	301	317	560	344
1969	Wet	793	748	561	470	403	409	301	250	252	291	297	307	423
1970	Wet	231	270	304	510	364	299	300	325	273	268	280	528	329
1971	Wet	752	506	309	255	273	256	271	303	227	238	295	376	338
1972	Below Normal	319	491	559	360	382	267	266	348	309	317	330	578	377
1973	Above Normal	827	577	366	359	366	314	307	342	280	251	303	512	400
1974	Wet	711	398	270	305	276	289	278	316	286	266	310	345	338
1975	Wet	246	312	490	454	371	302	294	327	264	294	299	331	332
1976	Critical	243	244	383	652	774	531	415	438	568	648	695	755	529
1977	Critical	881	781	947	818	805	725	628	569	647	636	602	663	725
1978	Above Normal	872	920	903	637	474	587	553	371	335	346	327	422	562
1979	Below Normal	488	659	778	648	376	303	318	328	285	268	329	550	444
1980	Above Normal	772	682	495	383	390	411	374	345	342	341	322	490	446
1981	Dry	624	636	782	715	330	270	315	342	340	413	466	620	488
1982	Wet	853	620	258	352	370	417	237	265	280	311	291	262	376
1983	Wet	208	249	403	378	336	275	304	270	249	238	225	208	279
1984	Wet	224	276	312	373	353	276	309	364	293	266	288	513	321
1985	Dry	657	498	262	293	452	359	333	344	307	403	487	685	423
1986	Wet	812	750	776	493	518	335	339	277	306	326	309	433	473
1987	Dry	535	608	834	891	639	390	340	359	346	417	505	627	541
1988	Critical	823	819	853	685	379	433	397	435	418	386	527	726	573
1989	Dry	832	861	877	747	914	447	253	306	272	386	511	593	583
1990	Critical	753	826	877	608	516	381	387	400	499	601	624	677	586
1991	Critical	868	891	878	921	921	593	400	383	467	601	607	640	681
1992	Critical	873	940	909	988	657	357	316	350	378	383	578	811	628
1993	Above Normal	885	878	938	607	399	333	284	320	281	292	299	465	498
1994	Critical	575	682	816	892	720	400	317	361	368	620	701	689	595
Average		648	626	623	565	481	371	339	352	322	340	385	532	465
Wet		572	516	443	386	358	322	306	304	274	281	287	372	369
Above Normal		681	602	576	537	399	338	326	333	284	286	295	503	430
Below Normal		613	629	666	566	431	328	315	344	286	283	333	564	446
Dry		699	698	713	656	579	382	334	365	317	372	468	618	517
Critical		728	742	804	782	692	520	443	444	484	513	581	686	618

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	1	-1	-2	0
1924	Critical	1	20	12	20	216	68	42	25	-7	-2	6	12	34
1925	Dry	1	-7	11	-52	-23	35	21	6	-1	-2	-3	-5	-2
1926	Dry	-4	-1	0	0	0	0	1	-4	-11	1	8	15	0
1927	Wet	6	-45	-47	-15	-1	-3	-1	-1	0	0	0	0	-9
1928	Above Normal	1	3	7	3	0	0	-1	-2	-2	1	2	12	2
1929	Critical	5	3	0	-18	-26	-8	-22	-16	-26	-13	3	17	-8
1930	Dry	-3	-30	-8	11	2	-5	-4	1	-2	0	15	47	2
1931	Critical	12	-16	-10	-5	37	-27	-26	-13	-10	6	8	0	-4
1932	Dry	-3	-7	-3	-1	41	34	4	1	1	0	0	0	6
1933	Critical	0	0	-3	-1	-4	-18	-9	-2	0	0	0	0	-3
1934	Critical	-1	-1	0	-6	-3	-1	0	0	0	4	2	1	-1
1935	Below Normal	0	1	2	-3	-1	5	9	1	7	4	7	16	4
1936	Below Normal	8	4	-27	-47	0	2	2	-1	0	1	3	10	-4
1937	Below Normal	-2	-12	1	79	7	7	1	5	1	-2	0	2	7
1938	Wet	-7	9	9	3	0	1	8	-1	0	0	1	-1	2
1939	Dry	1	7	13	6	2	1	1	-1	2	9	3	32	6
1940	Above Normal	10	7	5	-1	3	3	0	0	-1	-1	0	0	2
1941	Wet	0	-1	1	0	1	4	1	0	0	0	0	0	0
1942	Wet	0	2	1	0	0	0	0	0	-1	-4	-3	-1	0
1943	Wet	0	0	0	0	0	0	-1	-2	-1	-2	-1	3	0
1944	Dry	-3	6	-14	2	149	21	2	1	0	9	12	-35	12
1945	Below Normal	5	42	12	6	8	-16	-5	0	-2	-1	2	4	5
1946	Below Normal	-4	82	78	2	14	2	-2	-2	-2	0	-1	-1	14
1947	Dry	-13	1	15	3	3	0	0	0	-3	19	44	-12	5
1948	Below Normal	-17	-4	-1	-15	-7	1	0	0	6	4	30	58	5
1949	Dry	108	70	5	-53	161	114	3	2	2	-12	-14	9	33
1950	Below Normal	28	26	21	-33	-13	-1	1	0	-2	-8	8	11	3
1951	Above Normal	-5	5	1	0	-38	-7	6	-3	-1	-3	-1	0	-4
1952	Wet	-4	-46	-59	-1	0	-1	-4	0	0	0	0	1	-9
1953	Wet	0	-1	-2	0	0	0	0	1	1	0	4	10	1
1954	Above Normal	4	-24	-92	-65	-6	-1	-1	24	-3	-1	3	11	-13
1955	Dry	-3	-5	27	24	5	2	0	-1	-5	7	21	-36	3
1956	Wet	-26	-11	-2	0	-1	-4	-1	0	1	0	1	4	-3
1957	Above Normal	1	0	0	-4	-8	-1	0	0	-1	0	1	5	-1
1958	Wet	13	21	14	3	-4	-5	-18	-4	0	1	1	1	2
1959	Below Normal	0	1	2	1	1	0	-1	0	0	-1	3	22	2
1960	Dry	73	84	47	-135	-70	-10	-2	-1	6	-14	4	-5	-2
1961	Dry	2	2	-1	4	22	35	18	8	-2	-2	1	-8	7
1962	Below Normal	0	1	-2	15	6	2	0	0	9	3	4	7	4
1963	Wet	-14	-6	-23	0	9	0	0	0	1	1	1	1	-3
1964	Dry	3	-2	0	2	2	2	0	-2	-6	3	12	-2	1
1965	Wet	-6	-2	-1	0	-4	-4	-2	23	0	-3	1	3	1
1966	Below Normal	0	14	8	2	-4	-3	0	-1	-1	-3	1	2	1
1967	Wet	-1	3	2	1	-1	-1	3	1	0	0	0	1	1
1968	Below Normal	0	0	-1	-1	0	0	0	0	-1	-1	1	2	0
1969	Wet	0	1	-16	-8	2	0	0	0	0	0	0	0	-2
1970	Wet	0	-1	-2	0	4	0	1	-3	-2	0	0	5	0
1971	Wet	4	-20	-19	0	1	0	0	0	0	-1	-4	-3	-3
1972	Below Normal	4	4	2	0	0	-1	-1	1	0	0	-1	8	1
1973	Above Normal	-14	14	34	4	-7	-3	0	0	-3	-3	-3	0	2
1974	Wet	0	1	0	0	-6	-4	0	0	0	0	1	1	-1
1975	Wet	0	1	1	0	0	0	0	0	0	0	1	2	0
1976	Critical	0	0	0	1	1	1	-3	-5	2	22	14	-25	1
1977	Critical	8	30	48	64	-15	29	62	25	4	-2	-15	-58	15
1978	Above Normal	-3	22	9	82	2	69	63	4	3	1	1	5	21
1979	Below Normal	12	6	1	-4	-1	-1	-2	-6	-2	-2	0	1	0
1980	Above Normal	-1	51	82	14	9	0	0	2	-1	0	0	0	13
1981	Dry	0	0	-1	0	-3	-4	-4	0	2	2	-1	-4	-1
1982	Wet	-2	6	1	0	-7	-3	0	0	0	0	1	1	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-2	0	0	-4	0
1985	Dry	2	27	3	1	1	0	0	0	-3	-2	6	-8	2
1986	Wet	-2	-8	-12	-10	-4	1	-9	0	2	-59	-19	-8	-11
1987	Dry	27	14	27	29	-28	13	-10	-5	-4	22	12	8	9
1988	Critical	-5	0	-2	-4	-18	-20	-6	-2	-12	-4	10	16	-4
1989	Dry	2	-2	16	-55	-42	-7	0	0	-3	-6	8	-13	-9
1990	Critical	-15	-4	1	-8	-4	0	1	1	1	2	2	3	-2
1991	Critical	0	-1	1	-2	5	3	1	0	0	0	1	1	1
1992	Critical	0	0	0	0	-3	-1	0	1	2	1	-13	3	-1
1993	Above Normal	8	-50	-5	20	0	0	0	7	13	-7	-3	16	0
1994	Critical	15	9	-6	-4	20	2	-2	-1	-7	-5	19	-19	2
Average		3	4	2	-2	5	4	2	1	-1	-1	3	2	2
Wet		-2	-5	-7	-1	0	-1	-1	1	0	-3	-1	1	-2
Above Normal		0	3	4	5	-4	6	7	3	0	-1	0	5	2
Below Normal		2	12	7	0	1	0	0	0	1	0	4	10	3
Dry		12	10	8	-13	14	14	2	0	-2	2	8	-1	5
Critical		2	3	3	3	17	2	3	1	-4	1	3	-4	3

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake)
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	3%	2%	2%	31%	10%	8%	5%	-1%	0%	1%	2%	5%
1925	Dry	0%	-1%	1%	-6%	-4%	9%	6%	2%	0%	-1%	-1%	-1%	0%
1926	Dry	-1%	0%	0%	0%	0%	0%	0%	-1%	-3%	0%	2%	2%	0%
1927	Wet	1%	-8%	-15%	-5%	0%	-1%	-1%	0%	0%	0%	0%	0%	-2%
1928	Above Normal	0%	1%	2%	1%	0%	0%	0%	-1%	-1%	0%	1%	2%	0%
1929	Critical	1%	0%	0%	-2%	-3%	-1%	-5%	-4%	-6%	-3%	1%	3%	-2%
1930	Dry	0%	-4%	-1%	2%	1%	-2%	-1%	0%	-1%	0%	3%	8%	0%
1931	Critical	2%	-2%	-1%	-1%	5%	-5%	-5%	-3%	-2%	1%	1%	0%	-1%
1932	Dry	0%	-1%	0%	0%	10%	7%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	-1%	-4%	-2%	-1%	0%	0%	0%	0%	-1%
1934	Critical	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	1%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	2%	3%	0%	2%	2%	2%	3%	1%
1936	Below Normal	1%	1%	-3%	-7%	0%	0%	1%	0%	0%	1%	1%	2%	0%
1937	Below Normal	0%	-2%	0%	10%	1%	1%	0%	2%	1%	-1%	0%	0%	1%
1938	Wet	-1%	1%	3%	1%	0%	0%	3%	0%	0%	0%	0%	0%	1%
1939	Dry	0%	3%	3%	1%	0%	0%	0%	0%	1%	2%	1%	5%	1%
1940	Above Normal	1%	1%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%	0%	1%	0%
1944	Dry	0%	1%	-2%	0%	25%	6%	1%	0%	0%	3%	3%	-5%	3%
1945	Below Normal	1%	6%	2%	1%	2%	-4%	-2%	0%	-1%	0%	0%	1%	1%
1946	Below Normal	-1%	15%	22%	1%	4%	1%	0%	0%	-1%	0%	0%	0%	3%
1947	Dry	-2%	0%	2%	1%	0%	0%	0%	0%	-1%	5%	9%	-2%	1%
1948	Below Normal	-2%	0%	0%	-2%	-1%	0%	0%	0%	3%	2%	9%	11%	2%
1949	Dry	17%	11%	1%	-6%	23%	32%	1%	1%	1%	-4%	-3%	2%	6%
1950	Below Normal	4%	4%	3%	-5%	-4%	-1%	0%	0%	-1%	-3%	2%	2%	0%
1951	Above Normal	-1%	1%	0%	0%	-11%	-2%	2%	-1%	0%	-1%	0%	0%	-1%
1952	Wet	-1%	-6%	-9%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	-6%	-17%	-9%	-2%	-1%	0%	7%	-1%	0%	1%	2%	-2%
1955	Dry	0%	-1%	4%	7%	2%	0%	0%	0%	-2%	2%	5%	-6%	1%
1956	Wet	-4%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	2%	6%	4%	1%	-1%	-1%	-6%	-1%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	4%	0%
1960	Dry	11%	12%	6%	-15%	-9%	-3%	-1%	0%	2%	-3%	1%	-1%	0%
1961	Dry	0%	0%	0%	1%	3%	10%	6%	2%	-1%	0%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	2%	1%	1%	0%	0%	3%	1%	1%	1%	1%
1963	Wet	-2%	-2%	-6%	0%	3%	0%	0%	0%	0%	1%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	1%	1%	0%	0%	-2%	1%	2%	0%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	-1%	7%	0%	-1%	1%	1%	0%
1966	Below Normal	0%	2%	3%	1%	-1%	-1%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-3%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	0%	0%	1%	0%	0%	-1%	-1%	0%	0%	1%	0%
1971	Wet	1%	-4%	-6%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1973	Above Normal	-2%	2%	10%	1%	-2%	-1%	0%	0%	-1%	-1%	-1%	0%	1%
1974	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	4%	2%	-3%	0%
1977	Critical	1%	4%	5%	8%	-2%	4%	11%	5%	1%	0%	-2%	-8%	2%
1978	Above Normal	0%	3%	1%	15%	0%	13%	13%	1%	1%	0%	0%	1%	4%
1979	Below Normal	2%	1%	0%	-1%	0%	0%	-1%	-2%	-1%	-1%	0%	0%	0%
1980	Above Normal	0%	8%	20%	4%	2%	0%	0%	1%	0%	0%	0%	0%	3%
1981	Dry	0%	0%	0%	0%	-1%	-2%	-1%	0%	1%	1%	0%	-1%	0%
1982	Wet	0%	1%	1%	0%	-2%	-1%	0%	0%	0%	0%	0%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	-1%	0%
1985	Dry	0%	6%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	1%
1986	Wet	0%	-1%	-1%	-2%	-1%	0%	-3%	0%	1%	-15%	-6%	-2%	-3%
1987	Dry	5%	2%	3%	3%	-4%	4%	-3%	-1%	-1%	6%	2%	1%	1%
1988	Critical	-1%	0%	0%	-1%	-5%	-4%	-1%	0%	-3%	-1%	2%	2%	-1%
1989	Dry	0%	0%	2%	-7%	-4%	-1%	0%	0%	-1%	-1%	2%	-2%	-1%
1990	Critical	-2%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-2%	0%	0%
1993	Above Normal	1%	-5%	-1%	3%	0%	0%	0%	2%	5%	-2%	-1%	3%	1%
1994	Critical	3%	1%	-1%	0%	3%	1%	-1%	0%	-2%	-1%	3%	-3%	0%
Average		1%	1%	0%	0%	1%	1%	0%	0%	0%	0%	1%	0%	0%
Wet		0%	-1%	-2%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	0%	2%	1%	-1%	1%	1%	1%	0%	0%	1%	1%	1%
Below Normal		0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	1%	2%	1%
Dry		2%	2%	1%	-1%	3%	4%	1%	0%	-1%	1%	2%	0%	1%
Critical		0%	0%	0%	0%	2%	0%	0%	0%	-1%	0%	1%	-1%	0%

Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	749	705	667	510	389	262	242	253	256	257	269	540	425
1923	Below Normal	748	711	531	269	263	243	248	284	224	241	339	597	392
1924	Critical	739	823	892	881	658	476	374	456	640	571	635	755	658
1925	Dry	956	985	940	984	564	268	236	267	240	267	412	721	570
1926	Dry	893	826	932	932	561	270	242	303	274	378	484	713	567
1927	Wet	941	556	300	283	256	231	219	282	202	214	277	564	360
1928	Above Normal	769	524	362	374	254	223	228	271	225	248	295	611	365
1929	Critical	892	908	981	891	916	478	339	384	382	431	587	807	666
1930	Dry	949	973	932	524	312	239	224	284	275	375	478	722	524
1931	Critical	912	795	931	934	749	457	429	479	607	517	655	796	688
1932	Dry	928	994	729	340	327	328	367	366	259	274	408	725	504
1933	Critical	853	748	846	703	515	379	304	333	393	430	554	691	562
1934	Critical	900	1,005	893	688	366	347	334	346	380	377	568	825	586
1935	Below Normal	957	967	986	597	301	238	248	351	230	227	360	654	510
1936	Below Normal	821	766	959	671	369	290	238	290	227	233	347	619	486
1937	Below Normal	786	775	878	862	584	400	318	283	235	240	316	582	522
1938	Wet	801	748	276	238	425	352	319	289	309	255	272	287	381
1939	Dry	204	263	543	673	577	348	352	352	323	419	512	758	444
1940	Above Normal	919	828	886	647	312	260	241	307	227	223	274	587	476
1941	Wet	780	855	681	279	365	315	264	241	263	266	289	385	415
1942	Wet	289	482	482	328	303	245	262	263	229	249	294	332	313
1943	Wet	245	251	213	318	282	325	285	297	273	237	283	587	300
1944	Dry	846	779	953	958	574	268	270	313	277	346	483	765	569
1945	Below Normal	903	721	591	534	463	309	281	285	231	243	326	613	458
1946	Below Normal	799	566	305	225	267	258	260	311	228	265	379	684	379
1947	Dry	888	804	738	587	555	333	252	284	310	380	536	679	529
1948	Below Normal	891	883	1,038	862	745	304	247	267	201	217	339	618	551
1949	Dry	694	716	905	945	678	286	230	297	244	363	549	685	549
1950	Below Normal	820	781	863	626	305	212	223	267	221	238	327	612	458
1951	Above Normal	858	394	296	313	291	239	258	275	221	241	281	625	358
1952	Wet	799	844	651	304	236	302	289	237	251	242	233	241	386
1953	Wet	210	347	453	241	238	214	229	251	204	214	293	461	280
1954	Above Normal	361	414	621	710	237	202	211	252	216	244	283	611	363
1955	Dry	864	938	678	295	267	260	289	306	282	322	496	721	476
1956	Wet	841	910	568	495	368	268	246	270	225	251	295	335	423
1957	Above Normal	216	259	603	907	563	227	254	280	215	225	290	660	392
1958	Wet	607	338	394	275	290	372	380	240	238	234	259	262	324
1959	Below Normal	219	383	814	736	263	238	259	298	303	306	360	637	401
1960	Dry	806	813	878	1,027	800	284	240	294	292	429	506	710	590
1961	Dry	910	961	1,033	802	696	292	242	260	313	397	534	741	598
1962	Below Normal	928	949	1,024	818	481	253	234	323	250	286	380	803	561
1963	Wet	720	265	385	287	249	212	249	286	204	210	273	562	325
1964	Dry	740	634	306	486	290	250	279	299	303	437	605	675	442
1965	Wet	880	952	450	267	234	226	247	306	221	221	282	556	403
1966	Below Normal	732	622	270	255	233	211	230	278	262	322	332	663	368
1967	Wet	926	948	735	305	236	233	327	263	255	276	239	229	414
1968	Below Normal	201	276	455	486	233	205	280	306	281	301	330	656	334
1969	Wet	920	846	598	393	434	429	341	266	263	255	285	301	444
1970	Wet	203	265	282	427	299	248	247	269	234	243	279	613	301
1971	Wet	863	550	296	210	212	198	223	263	200	216	314	397	329
1972	Below Normal	312	548	595	355	368	234	221	288	285	313	350	670	378
1973	Above Normal	992	569	312	271	283	247	236	272	226	223	311	587	377
1974	Wet	829	367	216	240	217	246	236	260	229	217	317	344	310
1975	Wet	215	315	540	446	327	261	247	279	215	228	288	331	308
1976	Critical	210	217	423	724	817	489	358	408	642	716	792	930	561
1977	Critical	1,001	879	1,007	817	760	479	427	484	716	732	718	882	742
1978	Above Normal	1,060	1,076	1,000	483	345	406	401	312	278	270	300	450	532
1979	Below Normal	526	763	902	646	322	266	271	286	236	234	334	639	452
1980	Above Normal	907	693	417	320	428	434	319	282	289	280	309	564	437
1981	Dry	714	727	904	719	270	211	238	291	333	446	519	730	509
1982	Wet	1,006	632	221	266	308	328	251	245	242	257	272	249	356
1983	Wet	194	227	400	420	352	282	317	278	257	256	214	193	283
1984	Wet	197	249	323	388	303	234	278	314	243	237	284	604	304
1985	Dry	749	474	228	280	447	296	258	289	297	441	538	818	426
1986	Wet	938	870	876	492	420	359	315	244	264	302	309	489	490
1987	Dry	563	680	951	938	667	307	256	296	335	424	555	720	558
1988	Critical	965	941	970	694	307	312	313	352	375	401	614	862	592
1989	Dry	1,001	1,001	961	901	1,080	378	215	236	270	433	573	702	646
1990	Critical	891	966	975	650	486	311	317	328	551	703	713	810	642
1991	Critical	1,050	1,055	1,033	1,063	996	549	301	297	530	711	694	757	753
1992	Critical	1,080	1,114	1,076	1,106	630	290	252	278	373	412	718	974	692
1993	Above Normal	1,061	1,119	1,052	501	290	242	221	253	213	228	277	502	497
1994	Critical	634	770	960	989	681	311	258	287	387	727	778	827	634
Average		737	697	676	567	431	298	276	297	293	329	408	611	468
Wet		638	563	445	329	302	280	275	269	239	242	279	396	355
Above Normal		789	658	622	504	339	274	261	276	237	244	289	574	422
Below Normal		689	694	729	567	371	261	254	294	244	262	344	646	446
Dry		794	786	788	712	542	289	262	296	289	383	512	724	531
Critical		844	852	915	845	657	406	334	369	498	561	669	826	648

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average	
Year	Year Type														
1922	Above Normal	749	705	667	510	389	262	242	253	256	257	269	540	425	
1923	Below Normal	748	711	531	269	263	243	248	284	224	240	337	595	391	
1924	Critical	741	852	890	938	951	582	410	468	623	570	642	773	703	
1925	Dry	955	979	948	921	546	294	248	270	240	266	408	713	566	
1926	Dry	888	825	931	932	561	270	244	300	268	384	496	733	569	
1927	Wet	946	494	245	268	256	229	218	283	202	214	277	565	350	
1928	Above Normal	770	528	371	378	254	223	227	270	225	250	300	626	368	
1929	Critical	897	913	980	865	888	472	331	374	377	438	597	828	683	
1930	Dry	940	929	926	537	313	238	224	284	273	374	499	783	527	
1931	Critical	922	772	920	938	781	405	395	464	598	531	663	795	682	
1932	Dry	924	984	725	339	354	358	371	367	259	274	408	725	507	
1933	Critical	853	748	842	699	496	347	294	331	393	430	554	691	556	
1934	Critical	899	1,004	891	680	363	346	334	346	380	378	570	825	585	
1935	Below Normal	957	969	987	593	301	239	254	354	234	227	370	673	513	
1936	Below Normal	830	770	916	619	369	291	239	289	227	233	352	632	481	
1937	Below Normal	783	755	894	944	569	403	318	265	236	239	318	584	526	
1938	Wet	791	761	286	240	425	354	327	287	309	255	271	286	383	
1939	Dry	206	274	558	679	578	347	355	353	332	433	519	796	453	
1940	Above Normal	930	838	891	646	317	262	241	307	227	223	274	587	479	
1941	Wet	780	853	683	280	366	317	264	241	263	266	289	385	416	
1942	Wet	290	484	484	328	304	245	262	263	228	246	292	331	313	
1943	Wet	245	252	213	318	282	325	284	295	272	236	285	592	300	
1944	Dry	842	791	924	988	745	289	272	314	278	362	496	718	585	
1945	Below Normal	916	774	605	543	473	298	276	285	230	243	331	618	466	
1946	Below Normal	794	687	392	226	276	260	259	312	227	267	378	682	397	
1947	Dry	870	808	756	590	559	333	252	284	305	410	586	660	535	
1948	Below Normal	871	880	1,032	843	739	305	248	267	204	229	381	695	558	
1949	Dry	832	802	894	901	907	417	238	299	244	345	534	700	593	
1950	Below Normal	856	816	882	583	290	211	222	267	220	240	341	625	463	
1951	Above Normal	849	402	296	312	273	235	253	267	220	239	281	624	354	
1952	Wet	795	777	587	303	236	301	286	237	251	242	233	242	374	
1953	Wet	210	346	450	241	238	214	229	251	205	214	300	472	281	
1954	Above Normal	366	377	506	644	232	202	211	273	216	244	290	624	349	
1955	Dry	861	932	714	321	272	261	289	304	275	342	519	671	480	
1956	Wet	809	895	566	495	367	265	244	270	225	251	297	340	419	
1957	Above Normal	217	260	602	903	553	226	254	280	214	225	293	665	391	
1958	Wet	625	365	409	277	287	368	366	238	238	234	260	263	328	
1959	Below Normal	219	384	816	737	263	238	259	298	303	305	364	672	405	
1960	Dry	901	923	916	848	729	275	238	293	287	411	510	703	586	
1961	Dry	913	963	1,034	805	726	320	253	264	307	396	535	731	604	
1962	Below Normal	929	948	1,025	835	487	255	235	323	253	288	385	811	564	
1963	Wet	702	258	358	289	258	212	249	286	204	211	273	563	322	
1964	Dry	744	631	306	489	291	251	278	297	293	443	619	671	443	
1965	Wet	872	949	450	267	230	223	246	299	221	220	285	560	402	
1966	Below Normal	732	642	279	257	231	210	230	278	261	319	334	665	370	
1967	Wet	925	952	737	306	235	233	329	264	255	276	239	230	415	
1968	Below Normal	201	276	453	485	233	205	279	306	280	300	332	658	334	
1969	Wet	920	847	577	385	439	430	340	266	263	255	285	302	442	
1970	Wet	203	262	280	426	301	248	244	266	234	243	281	619	301	
1971	Wet	868	521	275	210	212	198	223	263	200	216	309	395	324	
1972	Below Normal	317	553	597	355	368	235	222	289	288	314	352	679	381	
1973	Above Normal	972	591	352	275	277	245	235	272	224	222	308	588	380	
1974	Wet	828	369	216	240	214	244	236	260	229	217	318	345	310	
1975	Wet	215	316	541	446	327	260	247	279	215	228	289	333	308	
1976	Critical	211	217	423	725	819	490	358	400	641	745	795	897	560	
1977	Critical	1,016	913	1,062	890	848	626	504	503	719	727	699	806	776	
1978	Above Normal	1,068	1,099	1,031	569	346	457	452	314	281	270	301	457	554	
1979	Below Normal	541	770	902	641	321	265	265	280	235	234	335	641	452	
1980	Above Normal	905	768	514	333	439	437	319	283	288	280	309	564	453	
1981	Dry	713	726	903	719	269	211	237	291	338	449	517	725	508	
1982	Wet	1,005	640	222	266	305	327	251	245	242	257	273	250	357	
1983	Wet	194	227	400	420	352	282	317	278	257	256	214	193	283	
1984	Wet	197	249	323	388	303	234	278	314	242	237	285	597	304	
1985	Dry	754	507	231	280	449	296	258	289	294	440	545	808	429	
1986	Wet	935	859	861	480	416	361	307	244	265	265	287	480	480	
1987	Dry	600	697	986	955	647	337	259	293	343	458	570	729	573	
1988	Critical	959	942	967	689	299	303	310	351	370	402	625	882	592	
1989	Dry	999	1,002	972	831	1,037	374	215	236	266	427	583	682	635	
1990	Critical	873	963	975	641	483	310	317	329	552	704	714	813	640	
1991	Critical	1,051	1,054	1,035	1,059	1,007	552	302	297	531	711	696	758	754	
1992	Critical	1,079	1,113	1,076	1,105	627	289	252	279	370	409	705	984	691	
1993	Above Normal	1,065	1,045	1,057	525	291	242	221	257	224	226	242	524	497	
1994	Critical	653	781	950	988	695	307	257	287	377	725	796	804	635	
Average		740	702	678	565	440	304	277	297	292	331	412	613	471	
Wet		636	556	436	327	303	280	274	268	239	240	278	397	353	
Above Normal		789	661	629	509	337	279	266	278	237	244	291	580	425	
Below Normal		693	710	737	567	370	261	254	293	244	263	351	659	450	
Dry		809	798	795	696	562	304	264	296	288	388	522	722	537	
Critical		846	856	918	852	688	419	339	369	494	564	671	821	653	

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	-1	-2	-2	0
1924	Critical	2	29	-1	57	294	106	36	12	-17	-1	7	18	45
1925	Dry	-1	-6	8	-62	-19	25	12	3	0	-1	-4	-9	-4
1926	Dry	-5	-1	0	0	0	0	2	-3	-6	6	11	20	2
1927	Wet	5	-62	-55	-15	0	-2	-1	2	0	0	0	1	-11
1928	Above Normal	2	5	9	3	0	0	-1	-1	-1	1	5	15	3
1929	Critical	6	5	-1	-27	-28	-7	-8	-10	-5	7	10	21	-3
1930	Dry	-9	-44	-5	12	2	-1	-1	0	-1	-1	20	61	3
1931	Critical	11	-22	-11	4	33	-53	-34	-15	-8	13	8	-1	-6
1932	Dry	-4	-10	-4	-1	27	30	4	1	0	0	0	0	4
1933	Critical	0	0	-4	-3	-19	-32	-10	-2	0	0	0	0	-6
1934	Critical	-2	-1	-1	-8	-3	-1	0	0	0	0	1	1	-1
1935	Below Normal	0	2	2	-3	0	1	5	3	3	-1	10	19	3
1936	Below Normal	9	4	-43	-52	0	2	2	0	0	0	5	12	-5
1937	Below Normal	-4	-19	17	82	-16	3	0	-18	2	-1	2	2	4
1938	Wet	-10	14	10	2	0	1	8	-2	0	0	-1	-1	2
1939	Dry	2	11	15	6	1	-1	3	1	8	14	7	37	9
1940	Above Normal	11	9	5	-1	5	3	0	0	0	0	0	0	3
1941	Wet	1	-2	2	0	1	2	1	0	0	0	0	0	0
1942	Wet	1	2	2	0	0	0	0	0	0	-3	-2	-1	0
1943	Wet	0	0	0	0	0	0	-1	-2	-1	-1	2	4	0
1944	Dry	-4	12	-30	30	172	20	2	1	0	16	12	-47	15
1945	Below Normal	13	53	13	10	10	-11	-5	0	-1	0	5	6	8
1946	Below Normal	-5	121	87	1	9	3	-1	1	-1	2	-1	-1	18
1947	Dry	-18	4	18	3	4	0	0	0	-4	30	50	-19	6
1948	Below Normal	-20	-3	-6	-19	-6	1	1	0	3	13	42	78	7
1949	Dry	138	86	-11	-44	229	131	7	2	1	-18	-15	15	43
1950	Below Normal	36	35	20	-42	-14	-1	-1	0	-1	3	14	13	5
1951	Above Normal	-9	8	0	0	-19	-4	-5	-8	-1	-2	0	0	-3
1952	Wet	-4	-67	-64	0	0	-1	-3	0	0	0	0	1	-11
1953	Wet	0	-1	-2	0	0	0	0	0	0	0	6	11	1
1954	Above Normal	5	-37	-115	-66	-5	0	0	21	0	0	7	13	-15
1955	Dry	-4	-6	37	26	5	1	0	-2	-7	20	23	-50	4
1956	Wet	-32	-14	-2	0	0	-3	-1	0	0	0	2	5	-4
1957	Above Normal	1	0	-1	-4	-9	-1	0	0	0	0	3	5	-1
1958	Wet	18	27	15	3	-3	-4	-14	-2	0	0	1	1	3
1959	Below Normal	1	2	2	1	0	0	0	0	0	-1	5	34	4
1960	Dry	95	110	38	-179	-72	-9	-2	-1	-5	-18	5	-7	-4
1961	Dry	3	2	1	3	30	28	11	5	-7	-2	0	-10	5
1962	Below Normal	1	-1	1	16	7	2	0	0	3	2	5	8	4
1963	Wet	-18	-7	-27	2	9	0	0	-1	0	0	0	1	-3
1964	Dry	4	-3	0	3	1	1	0	-3	-9	6	13	-4	1
1965	Wet	-8	-3	0	0	-3	-3	-1	-7	0	-1	3	4	-2
1966	Below Normal	-1	20	9	3	-2	-1	0	0	-1	-3	2	2	2
1967	Wet	-1	4	2	1	0	0	2	1	0	0	0	1	1
1968	Below Normal	0	0	-2	-1	0	0	0	0	-1	0	1	2	0
1969	Wet	0	1	-22	-8	6	1	-1	0	0	0	0	1	-2
1970	Wet	0	-2	-2	-1	2	0	-3	-3	-1	1	1	6	0
1971	Wet	5	-29	-21	0	0	0	0	0	0	-1	-5	-3	-4
1972	Below Normal	5	5	2	0	0	0	0	1	3	1	2	9	2
1973	Above Normal	-20	22	40	4	-6	-3	0	0	-1	-1	-2	1	3
1974	Wet	0	2	0	0	-4	-2	0	0	0	0	1	2	0
1975	Wet	0	1	1	0	0	0	0	0	0	0	1	2	0
1976	Critical	0	0	0	1	2	1	-1	-9	-1	29	4	-33	0
1977	Critical	15	33	55	73	88	147	78	19	3	-5	-20	-76	34
1978	Above Normal	8	22	31	86	1	52	51	2	3	1	0	7	22
1979	Below Normal	15	8	0	-5	-1	-1	-6	-6	-1	0	1	2	0
1980	Above Normal	-1	75	98	13	11	3	0	1	-1	0	0	0	16
1981	Dry	0	-1	-1	0	-1	0	0	0	4	2	-1	-5	0
1982	Wet	-2	8	1	0	-3	-1	0	0	0	0	2	2	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-1	0	1	-6	-1
1985	Dry	6	33	3	1	1	0	0	0	-4	-1	7	-10	3
1986	Wet	-2	-11	-15	-12	-4	2	-8	0	1	-38	-22	-9	-10
1987	Dry	37	17	36	18	-20	30	3	-3	8	34	16	8	15
1988	Critical	-6	0	-3	-5	-8	-9	-2	-1	-5	1	11	20	-1
1989	Dry	-1	1	12	-69	-43	-5	0	0	-4	-6	10	-19	-10
1990	Critical	-19	-3	0	-9	-4	-1	0	1	1	1	1	4	-2
1991	Critical	0	-1	2	-4	11	3	0	0	0	0	2	1	1
1992	Critical	-1	0	0	-1	-3	0	0	0	-2	-3	-14	10	-1
1993	Above Normal	4	-74	4	24	0	1	0	4	11	-2	5	22	0
1994	Critical	19	11	-10	-1	14	-4	-1	0	-10	-2	19	-23	1
Average		4	5	2	-2	9	6	2	0	-1	1	4	2	3
Wet		-2	-7	-8	-1	0	0	-1	-1	0	-2	0	1	-2
Above Normal		0	3	7	6	-2	5	5	2	1	0	2	6	3
Below Normal		4	16	7	-1	-1	0	0	-1	1	1	6	13	4
Dry		15	13	7	-16	20	16	3	0	-2	5	10	-2	6
Critical		2	4	2	6	31	13	5	0	-4	3	2	-5	5

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1924	Critical	0%	4%	0%	6%	45%	22%	10%	3%	-3%	0%	1%	2%	8%
1925	Dry	0%	-1%	1%	-6%	-3%	9%	5%	1%	0%	0%	-1%	-1%	0%
1926	Dry	-1%	0%	0%	0%	0%	0%	1%	-1%	-2%	2%	2%	3%	0%
1927	Wet	1%	-11%	-18%	-5%	0%	-1%	0%	1%	0%	0%	0%	0%	-3%
1928	Above Normal	0%	1%	2%	1%	0%	0%	0%	0%	0%	0%	2%	3%	1%
1929	Critical	1%	1%	0%	-3%	-3%	-1%	-2%	-3%	-1%	2%	2%	3%	-1%
1930	Dry	-1%	-5%	-1%	2%	1%	0%	0%	0%	0%	0%	4%	8%	1%
1931	Critical	1%	-3%	-1%	0%	4%	-12%	-8%	-3%	-1%	3%	1%	0%	-2%
1932	Dry	0%	-1%	-1%	0%	8%	9%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	-4%	-9%	-3%	-1%	0%	0%	0%	0%	-1%
1934	Critical	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	-1%	0%	0%	2%	1%	1%	0%	3%	3%	1%
1936	Below Normal	1%	1%	-4%	-8%	0%	1%	1%	0%	0%	0%	2%	2%	-1%
1937	Below Normal	0%	-3%	2%	9%	-3%	1%	0%	-6%	1%	0%	1%	0%	0%
1938	Wet	-1%	2%	3%	1%	0%	0%	2%	-1%	0%	0%	0%	0%	1%
1939	Dry	1%	4%	3%	1%	0%	0%	1%	0%	3%	3%	1%	5%	2%
1940	Above Normal	1%	1%	1%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	1%	0%
1944	Dry	-1%	2%	-3%	3%	30%	8%	1%	0%	0%	5%	3%	-6%	3%
1945	Below Normal	1%	7%	2%	2%	2%	-4%	-2%	0%	0%	0%	1%	1%	1%
1946	Below Normal	-1%	21%	29%	0%	3%	1%	0%	0%	0%	1%	0%	0%	4%
1947	Dry	-2%	1%	2%	1%	1%	0%	0%	0%	-1%	8%	9%	-3%	1%
1948	Below Normal	-2%	0%	-1%	-2%	-1%	0%	0%	0%	1%	6%	12%	13%	2%
1949	Dry	20%	12%	-1%	-5%	34%	46%	3%	1%	0%	-5%	-3%	2%	9%
1950	Below Normal	4%	4%	2%	-7%	-5%	-1%	0%	0%	0%	1%	4%	2%	1%
1951	Above Normal	-1%	2%	0%	0%	-6%	-2%	-2%	-3%	0%	-1%	0%	0%	-1%
1952	Wet	-1%	-8%	-10%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	-2%
1953	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%
1954	Above Normal	1%	-9%	-19%	-9%	-2%	0%	0%	8%	0%	0%	2%	2%	-2%
1955	Dry	0%	-1%	5%	9%	2%	0%	0%	-1%	-2%	6%	5%	-7%	1%
1956	Wet	-4%	-2%	0%	0%	0%	-1%	0%	0%	0%	0%	1%	2%	0%
1957	Above Normal	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	1%	1%	0%
1958	Wet	3%	8%	4%	1%	-1%	-1%	-4%	-1%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	5%	1%
1960	Dry	12%	14%	4%	-17%	-9%	-3%	-1%	0%	-2%	-4%	1%	-1%	-1%
1961	Dry	0%	0%	0%	0%	4%	9%	5%	2%	-2%	0%	0%	-1%	1%
1962	Below Normal	0%	0%	0%	2%	1%	1%	0%	0%	1%	1%	1%	1%	1%
1963	Wet	-2%	-3%	-7%	1%	4%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	1%	0%	0%	0%	-1%	-3%	1%	2%	-1%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	-1%	-2%	0%	-1%	1%	1%	0%
1966	Below Normal	0%	3%	3%	1%	-1%	0%	0%	0%	0%	-1%	1%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-4%	-2%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	-1%	0%	1%	0%	-1%	-1%	0%	0%	0%	1%	0%
1971	Wet	1%	-5%	-7%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	-1%
1972	Below Normal	2%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	1%
1973	Above Normal	-2%	4%	13%	1%	-2%	-1%	0%	0%	-1%	0%	-1%	0%	1%
1974	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-2%	0%	4%	0%	-4%	0%
1977	Critical	2%	4%	5%	9%	12%	31%	18%	4%	0%	-1%	-3%	-9%	6%
1978	Above Normal	1%	2%	3%	18%	0%	13%	13%	1%	1%	0%	0%	2%	4%
1979	Below Normal	3%	1%	0%	-1%	0%	0%	-2%	-2%	-1%	0%	0%	0%	0%
1980	Above Normal	0%	11%	23%	4%	3%	1%	0%	0%	0%	0%	0%	0%	3%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	-1%	0%
1982	Wet	0%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1985	Dry	1%	7%	1%	0%	0%	0%	0%	0%	-1%	0%	1%	-1%	1%
1986	Wet	0%	-1%	-2%	-2%	-1%	0%	-3%	0%	1%	-12%	-7%	-2%	-2%
1987	Dry	7%	2%	4%	2%	-3%	10%	1%	-1%	2%	8%	3%	1%	3%
1988	Critical	-1%	0%	0%	-1%	-3%	-3%	-1%	0%	-1%	0%	2%	2%	0%
1989	Dry	0%	0%	1%	-8%	-4%	-1%	0%	0%	-2%	-1%	2%	-3%	-1%
1990	Critical	-2%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-2%	1%	0%
1993	Above Normal	0%	-7%	0%	5%	0%	0%	0%	2%	5%	-1%	2%	4%	1%
1994	Critical	3%	1%	-1%	0%	2%	-1%	0%	0%	-3%	0%	2%	-3%	0%
Average		1%	1%	1%	0%	1%	2%	0%	0%	0%	0%	1%	0%	1%
Wet		0%	-1%	-2%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	1%	2%	2%	-1%	1%	1%	1%	0%	0%	1%	1%	1%
Below Normal		1%	3%	2%	0%	0%	0%	0%	-1%	0%	0%	2%	2%	1%
Dry		2%	2%	1%	-1%	4%	5%	1%	0%	-1%	1%	2%	0%	1%
Critical		0%	1%	0%	1%	4%	2%	1%	0%	-1%	1%	0%	-1%	1%

Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	582	589	640	631	611	474	366	350	353	419	365	445	485
1923	Below Normal	569	568	592	504	485	546	388	370	386	343	365	475	466
1924	Critical	558	611	713	769	841	997	671	582	586	517	555	571	664
1925	Dry	682	715	763	820	761	635	417	374	416	401	425	549	580
1926	Dry	654	639	728	791	730	590	437	474	413	408	489	552	575
1927	Wet	687	535	469	496	564	555	384	354	334	313	325	459	456
1928	Above Normal	579	491	483	536	525	420	375	387	343	326	326	480	439
1929	Critical	658	671	773	765	878	893	649	519	495	463	517	590	656
1930	Dry	690	710	776	638	593	565	457	474	371	388	456	548	556
1931	Critical	680	639	755	827	863	820	660	579	591	491	550	591	670
1932	Dry	684	727	697	555	644	837	561	491	434	499	438	547	593
1933	Critical	648	613	721	792	805	808	627	500	500	473	507	560	629
1934	Critical	656	733	745	729	790	958	665	556	510	434	507	598	657
1935	Below Normal	701	719	816	686	676	567	402	415	400	397	387	511	556
1936	Below Normal	624	609	740	725	555	354	360	404	393	349	375	487	498
1937	Below Normal	592	600	710	756	474	465	310	291	432	491	369	469	497
1938	Wet	596	615	464	505	429	351	271	265	271	373	326	315	398
1939	Dry	314	347	534	655	692	681	497	407	373	405	452	557	493
1940	Above Normal	680	643	752	701	626	364	334	384	378	333	319	467	498
1941	Wet	587	624	636	538	465	333	278	279	414	432	360	383	444
1942	Wet	346	423	552	477	330	385	330	296	396	420	341	335	386
1943	Wet	315	345	426	383	298	320	309	388	428	366	347	465	366
1944	Dry	615	592	710	785	698	550	405	386	381	373	443	568	542
1945	Below Normal	673	588	599	601	512	372	390	366	359	352	369	479	472
1946	Below Normal	583	501	453	468	453	450	399	378	364	322	371	515	438
1947	Dry	647	609	647	633	664	610	463	427	366	362	467	533	536
1948	Below Normal	663	663	796	745	830	662	443	415	339	298	342	496	558
1949	Dry	565	581	723	823	792	632	463	496	382	348	467	535	567
1950	Below Normal	635	620	710	688	580	522	382	376	354	339	337	488	503
1951	Above Normal	629	471	398	360	292	397	373	274	310	332	312	489	387
1952	Wet	613	628	661	562	477	425	249	217	303	368	307	297	426
1953	Wet	301	372	539	485	506	537	348	317	305	295	322	420	396
1954	Above Normal	380	415	577	714	532	527	437	424	349	326	313	482	456
1955	Dry	650	690	662	536	577	706	540	470	373	350	436	551	545
1956	Wet	646	679	692	447	377	372	371	370	398	425	363	353	458
1957	Above Normal	307	340	560	757	713	566	355	323	326	301	319	497	447
1958	Wet	532	379	501	506	617	530	232	201	336	383	319	308	404
1959	Below Normal	303	383	628	721	542	553	450	396	362	330	348	500	460
1960	Dry	610	636	727	822	835	551	448	479	347	376	444	546	568
1961	Dry	683	707	821	765	776	587	459	446	351	351	442	562	579
1962	Below Normal	694	706	813	781	699	540	421	398	369	328	357	580	557
1963	Wet	626	361	502	510	562	521	401	346	343	313	319	459	439
1964	Dry	576	559	466	587	610	678	482	448	367	382	506	536	517
1965	Wet	660	703	597	449	367	438	361	347	349	319	337	447	448
1966	Below Normal	557	525	467	489	483	515	410	413	341	351	334	511	450
1967	Wet	688	708	711	620	551	450	295	239	305	316	303	292	457
1968	Below Normal	300	342	498	592	502	547	417	389	346	328	349	506	426
1969	Wet	678	660	624	657	430	402	299	254	259	374	329	325	441
1970	Wet	315	351	448	313	354	360	345	374	339	326	316	476	360
1971	Wet	637	514	517	470	524	509	341	329	295	282	324	391	428
1972	Below Normal	355	469	604	501	570	505	414	435	363	344	350	515	452
1973	Above Normal	707	557	491	616	612	499	416	424	390	319	346	472	488
1974	Wet	597	425	459	471	468	329	352	384	413	365	350	366	415
1975	Wet	308	348	540	556	375	326	363	360	401	388	352	357	390
1976	Critical	305	314	486	659	809	708	546	488	547	590	620	664	561
1977	Critical	746	659	805	775	973	949	677	593	610	599	563	627	715
1978	Above Normal	751	778	823	676	682	666	404	329	414	449	382	408	564
1979	Below Normal	456	563	698	663	391	331	375	325	348	325	363	497	445
1980	Above Normal	639	566	523	434	378	400	379	378	393	430	368	453	445
1981	Dry	539	552	696	721	564	547	440	389	367	405	447	555	519
1982	Wet	715	587	451	562	309	335	232	224	366	401	325	259	397
1983	Wet	210	274	384	419	357	303	309	273	258	239	209	232	289
1984	Wet	297	213	321	341	253	348	371	383	383	332	338	463	337
1985	Dry	546	467	438	470	597	581	471	409	356	404	461	595	483
1986	Wet	690	653	721	606	509	338	257	245	392	501	380	419	476
1987	Dry	457	506	695	788	776	621	470	428	374	403	484	557	547
1988	Critical	708	709	773	730	657	934	553	507	457	387	485	621	627
1989	Dry	722	753	795	781	1,105	647	370	381	289	368	473	549	603
1990	Critical	668	718	797	678	679	620	534	505	494	555	585	604	620
1991	Critical	737	772	814	916	1,058	731	591	477	459	557	577	586	690
1992	Critical	737	816	833	929	788	584	457	400	376	370	511	690	624
1993	Above Normal	756	808	868	709	645	598	431	435	441	426	364	434	576
1994	Critical	513	598	753	856	803	574	449	466	380	550	608	623	598
Average		576	569	634	630	601	547	419	393	385	388	400	488	502
Wet		526	495	534	494	434	403	319	307	347	359	328	373	410
Above Normal		601	566	611	613	562	491	387	371	370	366	341	463	479
Below Normal		551	561	652	637	554	495	397	384	368	350	358	502	484
Dry		602	612	680	698	713	626	461	436	373	389	458	552	550
Critical		635	654	747	785	829	798	590	514	500	499	549	610	643

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	582	589	640	631	611	474	366	350	353	419	365	445	485
1923	Below Normal	569	568	592	504	485	546	388	370	386	346	365	474	466
1924	Critical	559	622	725	769	907	998	694	597	585	514	558	581	676
1925	Dry	684	712	770	790	750	734	427	374	414	398	423	547	585
1926	Dry	652	638	728	791	730	579	436	472	394	404	479	560	572
1927	Wet	693	507	443	486	563	550	383	355	335	313	325	459	451
1928	Above Normal	580	493	486	538	525	420	374	387	341	324	328	488	440
1929	Critical	662	673	773	757	863	890	600	501	454	429	501	598	642
1930	Dry	690	693	770	645	594	537	453	474	365	376	461	576	553
1931	Critical	690	627	747	821	838	812	645	569	583	491	556	592	664
1932	Dry	683	723	695	555	735	833	563	491	435	499	438	547	600
1933	Critical	648	613	739	803	843	808	624	499	500	473	507	559	635
1934	Critical	656	732	745	727	790	958	665	556	510	440	509	598	657
1935	Below Normal	701	720	817	685	676	585	408	415	405	411	388	522	561
1936	Below Normal	630	612	729	697	555	355	361	403	393	364	372	493	497
1937	Below Normal	592	594	707	799	477	464	309	292	433	488	369	471	500
1938	Wet	592	620	467	509	430	351	271	265	271	373	327	315	399
1939	Dry	314	350	541	659	693	684	498	405	372	400	439	578	494
1940	Above Normal	688	648	753	701	627	365	334	383	377	332	318	466	499
1941	Wet	587	623	636	539	465	333	278	279	414	432	360	383	444
1942	Wet	346	423	552	478	330	385	330	296	396	419	339	334	386
1943	Wet	315	345	426	383	298	320	309	388	428	363	345	466	365
1944	Dry	614	595	706	777	773	562	406	387	374	363	440	546	545
1945	Below Normal	673	615	606	603	514	369	388	366	358	351	366	482	474
1946	Below Normal	581	547	479	468	460	448	399	378	362	321	370	514	444
1947	Dry	639	608	654	635	665	604	462	427	361	366	492	527	537
1948	Below Normal	652	660	796	736	825	662	443	415	342	301	361	533	561
1949	Dry	638	629	731	785	893	668	462	496	384	334	455	540	585
1950	Below Normal	654	636	724	671	572	523	383	377	353	313	340	496	503
1951	Above Normal	627	473	398	360	286	395	378	274	310	333	311	489	386
1952	Wet	611	601	629	562	477	425	249	217	303	368	307	298	421
1953	Wet	301	372	538	485	506	537	348	317	306	295	324	427	396
1954	Above Normal	382	402	526	672	528	524	436	427	344	318	315	490	447
1955	Dry	648	687	675	549	580	705	540	470	370	347	446	528	545
1956	Wet	628	671	691	447	378	370	371	370	399	425	363	356	456
1957	Above Normal	308	340	560	755	710	566	355	323	326	298	320	501	447
1958	Wet	540	392	509	507	614	529	233	201	336	384	319	309	406
1959	Below Normal	304	384	629	722	543	554	450	396	354	332	350	513	461
1960	Dry	660	691	752	749	794	544	447	479	354	369	454	542	570
1961	Dry	684	709	820	768	788	672	475	452	351	349	442	557	589
1962	Below Normal	694	707	811	790	701	541	421	399	376	330	362	586	560
1963	Wet	616	356	489	509	567	521	401	345	344	314	320	459	437
1964	Dry	578	558	466	589	620	683	480	447	364	382	514	535	518
1965	Wet	655	702	597	449	365	435	360	349	350	316	337	449	447
1966	Below Normal	557	533	471	490	479	512	410	412	340	347	335	512	450
1967	Wet	688	709	712	621	551	450	296	239	305	316	303	293	457
1968	Below Normal	300	342	497	592	502	547	417	389	345	327	349	507	426
1969	Wet	678	660	616	654	430	401	299	254	259	374	329	325	440
1970	Wet	315	350	447	313	355	361	347	374	338	330	316	480	360
1971	Wet	640	501	507	470	524	509	341	329	295	282	321	389	426
1972	Below Normal	357	472	605	501	571	507	413	435	366	342	349	521	453
1973	Above Normal	698	564	511	619	608	497	416	424	389	316	344	471	488
1974	Wet	597	426	460	471	463	327	352	384	413	365	351	367	415
1975	Wet	308	349	540	556	375	326	363	360	401	388	352	358	390
1976	Critical	306	314	486	659	810	709	537	485	541	594	624	649	560
1977	Critical	750	677	834	796	820	935	711	609	618	598	566	595	709
1978	Above Normal	741	796	819	720	683	702	406	331	415	450	382	411	571
1979	Below Normal	464	567	699	662	391	330	378	325	346	324	363	498	445
1980	Above Normal	639	596	568	437	377	400	380	378	393	430	367	452	451
1981	Dry	539	551	696	721	561	532	437	389	368	406	446	553	517
1982	Wet	713	591	452	562	309	335	232	224	366	401	326	260	398
1983	Wet	210	274	384	420	357	303	307	273	258	239	209	232	289
1984	Wet	297	213	321	341	253	348	371	383	382	333	338	461	337
1985	Dry	546	483	440	471	598	581	471	409	354	402	465	591	484
1986	Wet	688	648	715	600	508	337	259	245	393	407	364	415	465
1987	Dry	472	515	709	810	748	601	455	423	372	403	477	563	546
1988	Critical	705	709	771	727	604	930	549	506	443	378	486	632	620
1989	Dry	725	750	806	750	1,097	642	370	381	288	363	479	542	599
1990	Critical	658	714	799	673	679	620	535	506	496	557	587	605	619
1991	Critical	738	771	815	914	1,059	733	591	478	459	557	575	586	690
1992	Critical	737	816	833	929	787	583	457	401	381	373	504	690	624
1993	Above Normal	766	777	860	718	645	598	431	439	446	421	358	443	575
1994	Critical	523	604	750	852	831	582	448	465	376	545	624	607	601
Average		577	572	636	629	602	549	419	393	384	385	401	490	503
Wet		525	492	530	493	434	402	319	307	347	354	327	373	409
Above Normal		601	568	612	615	560	494	388	372	369	364	341	466	479
Below Normal		552	568	654	637	554	496	398	384	369	350	360	509	486
Dry		610	618	685	690	726	635	461	436	370	385	459	552	552
Critical		636	656	752	786	819	796	588	514	496	496	550	608	641

Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	4	0	-1	0
1924	Critical	1	11	12	0	66	1	23	14	-1	-3	3	10	11
1925	Dry	2	-3	7	-30	-11	99	11	1	-2	-3	-1	-2	6
1926	Dry	-3	-1	0	0	0	-10	-1	-2	-19	-4	-10	8	-3
1927	Wet	6	-27	-26	-9	-1	-6	-1	1	1	0	0	0	-5
1928	Above Normal	1	2	3	2	0	0	0	0	-2	-2	1	8	1
1929	Critical	4	2	-1	-8	-16	-2	-48	-18	-42	-33	-17	9	-14
1930	Dry	0	-17	-6	7	1	-28	-4	0	-6	-11	4	28	-3
1931	Critical	11	-12	-8	-7	-25	-8	-15	-10	-7	0	6	0	-6
1932	Dry	-2	-4	-2	0	91	-4	2	0	1	0	0	0	7
1933	Critical	0	0	18	11	38	0	-3	-1	0	0	0	0	5
1934	Critical	-1	-1	0	-3	-1	0	0	0	0	7	2	0	0
1935	Below Normal	0	1	1	-1	0	18	6	0	5	14	1	11	4
1936	Below Normal	5	3	-11	-27	0	1	1	-1	0	14	-3	6	-1
1937	Below Normal	0	-6	-4	43	3	0	0	1	1	-2	0	2	3
1938	Wet	-4	5	4	5	0	0	0	0	0	0	2	0	1
1939	Dry	0	3	7	3	1	3	1	-2	-1	-5	-13	21	2
1940	Above Normal	8	5	2	-1	1	1	0	0	-1	-1	-1	0	1
1941	Wet	0	-1	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	1	0	0	0	0	0	0	0	-2	-2	-1	0
1943	Wet	0	0	0	0	0	0	0	0	0	-3	-2	1	0
1944	Dry	-1	2	-4	-8	75	12	1	0	-7	-11	-3	-23	3
1945	Below Normal	0	27	7	2	2	-3	-2	0	-1	-1	-3	3	3
1946	Below Normal	-2	46	25	1	7	-2	-1	0	-2	-1	-1	0	6
1947	Dry	-8	-1	8	2	1	-6	0	0	-5	4	25	-6	1
1948	Below Normal	-11	-3	0	-9	-5	0	0	0	3	3	19	37	3
1949	Dry	73	47	8	-38	101	36	-1	0	2	-8	-11	6	18
1950	Below Normal	19	16	14	-17	-8	1	2	1	-1	-26	3	7	1
1951	Above Normal	-2	2	0	0	-7	-2	5	0	-1	2	-1	0	0
1952	Wet	-2	-27	-32	0	0	0	0	0	0	0	0	0	-5
1953	Wet	0	0	-1	0	0	0	0	0	1	0	2	6	1
1954	Above Normal	3	-14	-51	-42	-5	-3	-1	3	-5	-8	2	8	-9
1955	Dry	-2	-3	13	13	3	-1	0	0	-4	-3	10	-23	0
1956	Wet	-18	-8	-1	0	0	-2	0	0	0	0	1	3	-2
1957	Above Normal	1	0	0	-2	-4	0	0	0	0	-3	1	4	0
1958	Wet	8	13	8	2	-3	-1	1	0	0	0	1	1	3
1959	Below Normal	0	1	1	0	1	0	0	0	-7	1	2	13	1
1960	Dry	50	56	25	-72	-41	-7	-2	0	7	-7	9	-4	1
1961	Dry	1	2	-1	3	12	84	16	6	0	-2	0	-5	10
1962	Below Normal	0	2	-2	9	3	1	0	0	6	1	5	5	3
1963	Wet	-10	-5	-13	-1	5	0	0	0	1	2	1	0	-2
1964	Dry	2	-1	0	1	10	5	-2	-1	-3	0	8	-1	1
1965	Wet	-4	-1	-1	0	-2	-4	0	2	1	-2	0	2	-1
1966	Below Normal	0	8	3	1	-4	-2	0	-1	-1	-3	0	1	0
1967	Wet	-1	1	1	0	-1	-1	0	0	0	0	0	0	0
1968	Below Normal	0	0	-1	-1	0	-1	0	0	-1	-1	0	1	0
1969	Wet	0	0	-8	-2	0	-1	0	0	0	0	0	0	-1
1970	Wet	0	-1	-1	0	1	0	2	0	-1	3	0	3	1
1971	Wet	3	-12	-10	0	0	1	0	0	0	-1	-2	-2	-2
1972	Below Normal	2	3	1	0	0	3	-1	0	3	-2	-1	6	1
1973	Above Normal	-9	7	20	3	-5	-2	0	0	-2	-3	-2	0	1
1974	Wet	0	1	0	0	-4	-2	0	0	0	0	0	1	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	0	1	1	-9	-2	-6	4	4	-15	-2
1977	Critical	4	18	29	21	-153	-14	34	16	7	-1	3	-32	-6
1978	Above Normal	-10	18	-4	44	1	36	3	2	0	1	1	3	8
1979	Below Normal	8	4	1	-2	0	0	2	0	-1	-2	-1	1	1
1980	Above Normal	0	30	45	3	-1	0	0	0	0	-1	0	6	6
1981	Dry	0	0	0	0	-3	-14	-3	0	1	2	-1	-2	-2
1982	Wet	-1	4	1	0	0	0	0	0	0	0	0	1	0
1983	Wet	0	0	0	1	1	0	-1	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-1	1	0	-1	0
1985	Dry	0	17	2	0	0	0	0	0	-2	-2	4	-5	1
1986	Wet	-2	-5	-6	-6	0	-1	2	0	1	-94	-16	-4	-11
1987	Dry	15	8	14	22	-29	-20	-14	-6	-2	1	-7	6	-1
1988	Critical	-3	0	-1	-3	-52	-4	-5	-2	-13	-9	1	11	-7
1989	Dry	3	-3	12	-32	-8	-5	0	0	-2	-6	6	-7	-3
1990	Critical	-11	-3	1	-5	1	0	1	1	2	2	2	2	-1
1991	Critical	0	-1	1	-2	1	2	1	0	0	0	-1	1	0
1992	Critical	0	0	0	0	-1	0	0	1	5	3	-6	-1	0
1993	Above Normal	10	-31	-7	8	0	0	0	4	5	-4	-6	9	-1
1994	Critical	10	6	-3	-4	27	8	-2	-1	-3	-5	16	-16	3
Average		2	2	1	-2	1	2	0	0	-1	-3	0	1	0
Wet		-1	-3	-4	-1	0	-1	0	0	0	-5	-1	1	-1
Above Normal		0	2	1	2	-2	3	1	1	0	-2	-1	3	1
Below Normal		1	7	3	0	0	1	0	0	0	0	1	7	2
Dry		8	6	5	-8	13	9	0	0	-3	-4	1	0	2
Critical		1	2	4	0	-9	-1	-2	0	-5	-3	1	-3	-1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1924	Critical	0%	2%	2%	0%	8%	0%	3%	2%	0%	-1%	1%	2%	2%
1925	Dry	0%	0%	1%	-4%	-1%	16%	3%	0%	0%	-1%	0%	0%	1%
1926	Dry	0%	0%	0%	0%	0%	-2%	0%	0%	-5%	-1%	-2%	1%	-1%
1927	Wet	1%	-5%	-6%	-2%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%
1928	Above Normal	0%	0%	1%	0%	0%	0%	0%	0%	-1%	-1%	0%	2%	0%
1929	Critical	1%	0%	0%	-1%	-2%	0%	-7%	-3%	-8%	-7%	-3%	1%	-3%
1930	Dry	0%	-2%	-1%	1%	0%	-5%	-1%	0%	-2%	-3%	1%	5%	-1%
1931	Critical	2%	-2%	-1%	-1%	-3%	-1%	-2%	-2%	-1%	0%	1%	0%	-1%
1932	Dry	0%	-1%	0%	0%	14%	0%	0%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	3%	1%	5%	0%	0%	0%	0%	0%	0%	0%	1%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	3%	2%	0%	1%	3%	0%	2%	1%
1936	Below Normal	1%	0%	-1%	-4%	0%	0%	0%	0%	0%	4%	-1%	1%	0%
1937	Below Normal	0%	-1%	-1%	6%	1%	0%	0%	0%	0%	-1%	0%	0%	0%
1938	Wet	-1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1939	Dry	0%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	-3%	4%	0%
1940	Above Normal	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1944	Dry	0%	0%	-1%	-1%	11%	2%	0%	0%	-2%	-3%	-1%	-4%	0%
1945	Below Normal	0%	5%	1%	0%	0%	-1%	-1%	0%	0%	0%	-1%	1%	0%
1946	Below Normal	0%	9%	6%	0%	1%	0%	0%	0%	-1%	0%	0%	0%	1%
1947	Dry	-1%	0%	1%	0%	0%	-1%	0%	0%	-1%	1%	5%	-1%	0%
1948	Below Normal	-2%	0%	0%	-1%	-1%	0%	0%	0%	1%	1%	6%	7%	1%
1949	Dry	13%	8%	1%	-5%	13%	6%	0%	1%	-2%	-2%	1%	3%	3%
1950	Below Normal	3%	3%	2%	-2%	-1%	0%	0%	0%	0%	-8%	1%	1%	0%
1951	Above Normal	0%	0%	0%	0%	-2%	-1%	1%	0%	0%	1%	0%	0%	0%
1952	Wet	0%	-4%	-5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	-3%	-9%	-6%	0%	-1%	0%	1%	-1%	-2%	0%	2%	-2%
1955	Dry	0%	0%	2%	2%	1%	0%	0%	0%	-1%	-1%	2%	-4%	0%
1956	Wet	-3%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	1%	0%
1958	Wet	1%	4%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	0%	3%	0%
1960	Dry	8%	9%	4%	-9%	-5%	-1%	0%	0%	2%	-2%	2%	-1%	1%
1961	Dry	0%	0%	0%	0%	2%	14%	4%	1%	0%	-1%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	2%	0%	1%	1%	1%
1963	Wet	-2%	-1%	-3%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	2%	1%	0%	0%	-1%	0%	2%	0%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	0%	1%	0%	-1%	0%	0%	0%
1966	Below Normal	0%	1%	1%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
1971	Wet	0%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1972	Below Normal	1%	1%	0%	0%	0%	1%	0%	0%	1%	-1%	0%	1%	0%
1973	Above Normal	-1%	1%	4%	0%	-1%	0%	0%	0%	0%	-1%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-2%	-1%	-1%	1%	1%	-2%	0%
1977	Critical	0%	3%	4%	3%	-16%	-1%	5%	3%	1%	0%	1%	-5%	0%
1978	Above Normal	-1%	2%	0%	7%	0%	5%	1%	1%	0%	0%	0%	1%	1%
1979	Below Normal	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	5%	9%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	-1%	-3%	-1%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	4%	0%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	1%	0%	0%	-19%	-4%	-1%	-2%
1987	Dry	3%	2%	2%	3%	-4%	-3%	-3%	-1%	-1%	0%	-1%	1%	0%
1988	Critical	0%	0%	0%	0%	-8%	0%	-1%	0%	-3%	-2%	0%	2%	-1%
1989	Dry	0%	0%	1%	-4%	-1%	-1%	0%	0%	-1%	-2%	1%	-1%	-1%
1990	Critical	-2%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	-1%	0%	0%
1993	Above Normal	1%	-4%	-1%	1%	0%	0%	0%	1%	1%	-1%	-2%	2%	0%
1994	Critical	2%	1%	0%	0%	3%	1%	0%	0%	-1%	-1%	3%	-2%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	1%	0%
Below Normal		0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Dry		1%	1%	1%	-1%	2%	1%	0%	0%	-1%	-1%	0%	0%	0%
Critical		0%	0%	1%	0%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	754	711	701	584	554	311	330	310	279	290	286	527	470
1923	Below Normal	745	718	722	405	324	296	335	342	247	267	347	572	443
1924	Critical	739	814	885	923	746	592	592	476	653	580	652	738	699
1925	Dry	943	992	951	971	830	307	285	302	264	285	412	671	601
1926	Dry	894	824	924	965	726	308	293	338	298	391	495	673	594
1927	Wet	935	646	316	318	389	272	291	337	227	236	289	545	400
1928	Above Normal	761	630	358	444	321	274	328	327	253	279	308	583	405
1929	Critical	884	907	1,020	895	996	604	484	425	401	446	589	760	701
1930	Dry	952	947	984	657	364	274	318	318	296	390	490	698	557
1931	Critical	923	797	914	997	813	531	488	498	630	530	661	779	713
1932	Dry	933	970	907	475	485	368	408	439	289	296	413	664	554
1933	Critical	886	759	835	792	582	432	365	368	422	451	560	681	594
1934	Critical	880	1,011	908	797	459	418	406	394	406	401	551	796	619
1935	Below Normal	971	936	1,039	745	378	266	265	388	265	248	366	624	541
1936	Below Normal	843	769	926	838	500	339	327	345	254	255	358	592	529
1937	Below Normal	798	781	875	912	844	587	459	346	260	262	331	554	584
1938	Wet	786	804	318	273	729	614	477	368	348	293	291	319	468
1939	Dry	223	256	522	714	658	458	443	413	340	436	520	705	474
1940	Above Normal	946	855	886	921	579	299	278	359	256	246	290	560	540
1941	Wet	777	829	874	460	528	458	402	293	285	297	303	423	494
1942	Wet	314	455	636	624	457	299	319	313	261	279	309	387	388
1943	Wet	268	268	246	513	390	419	444	353	304	272	297	560	361
1944	Dry	848	812	897	1,006	649	315	329	361	300	358	497	712	590
1945	Below Normal	929	798	664	566	632	345	309	327	258	264	340	577	501
1946	Below Normal	816	616	358	252	295	314	346	374	254	289	389	635	411
1947	Dry	912	817	771	635	615	377	363	328	330	394	552	647	562
1948	Below Normal	892	866	1,068	847	859	344	265	294	225	237	349	593	570
1949	Dry	718	710	877	994	775	344	338	339	271	367	567	661	580
1950	Below Normal	842	786	855	761	353	236	251	311	247	258	339	587	486
1951	Above Normal	816	549	352	390	357	291	334	339	247	274	291	593	403
1952	Wet	814	805	745	531	335	386	452	292	274	275	259	271	453
1953	Wet	231	329	622	372	300	274	326	309	233	248	301	495	337
1954	Above Normal	393	416	591	838	325	270	326	307	243	276	293	581	405
1955	Dry	860	916	741	356	308	301	367	343	304	340	502	690	502
1956	Wet	858	850	1,008	712	455	315	332	331	252	271	309	365	505
1957	Above Normal	239	260	542	945	666	291	311	336	245	257	301	600	416
1958	Wet	732	339	423	390	763	834	718	320	266	268	278	296	469
1959	Below Normal	240	357	769	910	429	300	361	345	325	335	373	596	445
1960	Dry	799	820	865	1,027	940	337	345	333	313	444	529	664	618
1961	Dry	908	931	1,073	886	804	336	294	294	334	407	543	709	627
1962	Below Normal	926	920	1,059	863	831	292	261	369	276	304	379	726	601
1963	Wet	794	278	401	460	356	307	320	361	234	241	287	536	381
1964	Dry	744	738	315	518	348	297	397	342	318	440	635	652	479
1965	Wet	861	917	601	339	265	255	310	362	246	244	291	535	435
1966	Below Normal	732	680	305	297	296	267	325	330	282	349	349	610	402
1967	Wet	922	939	808	506	302	394	432	335	280	311	268	255	479
1968	Below Normal	224	272	451	615	309	251	328	360	305	329	341	600	365
1969	Wet	906	856	691	540	721	536	524	366	310	289	302	339	532
1970	Wet	224	263	343	644	458	300	357	322	260	276	294	585	360
1971	Wet	877	679	354	249	263	248	305	321	228	248	323	443	378
1972	Below Normal	328	496	685	379	403	311	347	333	307	341	367	611	409
1973	Above Normal	960	725	350	471	523	341	348	329	256	254	321	570	454
1974	Wet	806	471	275	296	280	284	327	313	259	249	325	383	356
1975	Wet	238	302	542	506	422	356	362	340	245	258	302	363	353
1976	Critical	231	227	396	725	874	569	490	432	645	715	801	868	581
1977	Critical	1,052	834	1,054	841	825	596	486	498	715	741	721	855	768
1978	Above Normal	1,060	1,053	1,052	993	489	602	447	346	301	292	316	470	619
1979	Below Normal	525	731	892	738	383	301	333	342	265	263	344	595	476
1980	Above Normal	887	785	458	363	709	575	518	326	310	310	324	542	509
1981	Dry	727	721	886	782	310	238	314	335	353	459	537	676	528
1982	Wet	966	868	253	486	389	528	546	301	265	278	288	278	454
1983	Wet	215	319	507	970	896	877	840	365	316	309	253	221	507
1984	Wet	221	288	469	450	394	287	355	380	271	268	297	569	354
1985	Dry	785	643	257	288	483	355	362	334	315	454	542	753	464
1986	Wet	959	880	939	556	590	660	405	293	285	328	322	492	559
1987	Dry	571	665	877	1,029	771	391	377	341	353	432	566	686	588
1988	Critical	942	953	976	767	340	360	427	397	397	419	603	825	617
1989	Dry	993	995	994	888	1,109	526	266	278	287	446	579	688	671
1990	Critical	890	943	1,008	703	561	370	374	347	547	703	737	792	665
1991	Critical	1,039	1,059	1,024	1,075	1,037	716	371	331	523	711	715	743	779
1992	Critical	1,046	1,135	1,048	1,162	821	383	315	319	401	422	695	963	726
1993	Above Normal	1,050	1,104	1,115	919	523	350	261	298	238	249	292	500	575
1994	Critical	620	764	937	1,014	778	371	361	308	401	710	803	800	656
Average		744	715	716	672	556	389	377	346	317	351	420	592	516
Wet		653	590	541	485	461	424	421	332	269	273	295	412	430
Above Normal		786	709	641	687	504	361	348	328	263	273	302	553	479
Below Normal		701	695	762	652	488	318	322	343	269	286	355	605	483
Dry		801	797	803	762	636	346	344	340	310	396	524	684	562
Critical		844	850	917	891	736	495	430	399	512	569	674	800	676

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	754	711	701	584	554	311	330	310	279	290	286	527	470
1923	Below Normal	745	718	722	405	324	296	335	342	248	267	345	570	443
1924	Critical	739	827	907	922	1,045	716	648	493	637	578	657	755	744
1925	Dry	947	978	972	908	805	335	309	305	264	284	408	663	598
1926	Dry	888	823	924	964	726	308	295	335	292	396	505	691	596
1927	Wet	943	595	258	301	389	271	290	338	228	236	289	545	390
1928	Above Normal	763	633	367	448	320	274	328	326	252	280	312	599	408
1929	Critical	891	909	1,018	877	965	595	476	415	393	452	598	779	697
1930	Dry	949	904	970	671	366	273	318	318	295	389	500	758	559
1931	Critical	940	773	908	985	862	482	453	483	622	541	670	779	708
1932	Dry	930	960	903	474	506	402	413	440	289	297	413	663	557
1933	Critical	886	759	831	790	567	399	353	366	421	451	560	681	589
1934	Critical	878	1,009	908	789	455	417	406	394	406	402	552	796	618
1935	Below Normal	971	936	1,042	742	377	267	270	392	268	247	374	644	544
1936	Below Normal	854	773	896	778	499	340	328	345	253	255	362	605	524
1937	Below Normal	797	773	859	1,026	812	592	459	320	263	261	332	557	588
1938	Wet	779	812	329	275	731	618	482	368	348	293	290	318	470
1939	Dry	225	265	538	721	660	456	445	414	347	450	523	742	482
1940	Above Normal	959	866	892	921	583	302	278	359	255	246	290	560	543
1941	Wet	778	828	875	461	529	460	405	293	285	297	303	423	495
1942	Wet	315	458	638	624	457	299	319	313	261	276	307	386	388
1943	Wet	268	268	246	513	390	419	443	350	303	271	299	564	361
1944	Dry	848	810	905	986	832	340	331	363	300	373	515	672	606
1945	Below Normal	918	854	681	573	647	335	304	327	257	265	344	584	507
1946	Below Normal	812	700	463	254	304	319	344	375	253	291	388	636	428
1947	Dry	896	810	791	639	619	377	363	328	326	418	609	638	568
1948	Below Normal	870	861	1,066	829	851	345	266	295	227	249	388	653	575
1949	Dry	847	797	895	919	971	502	351	341	272	351	549	667	622
1950	Below Normal	877	815	885	722	337	235	250	311	246	260	352	600	491
1951	Above Normal	814	553	352	390	338	284	335	328	246	272	291	594	400
1952	Wet	809	776	675	531	335	386	451	292	274	275	259	272	444
1953	Wet	231	328	619	372	300	274	326	310	234	248	306	507	338
1954	Above Normal	397	386	481	756	317	270	326	332	243	277	298	596	390
1955	Dry	857	911	772	385	314	302	367	342	297	356	532	647	507
1956	Wet	822	834	1,002	712	454	312	331	331	252	271	311	370	500
1957	Above Normal	240	261	541	943	656	290	311	335	245	257	303	608	416
1958	Wet	742	366	440	393	764	830	721	317	266	268	278	297	474
1959	Below Normal	240	359	771	911	429	300	361	345	325	334	376	616	447
1960	Dry	879	920	931	867	856	326	343	333	309	426	534	657	615
1961	Dry	910	934	1,072	891	825	366	307	300	327	405	545	701	632
1962	Below Normal	926	923	1,055	881	836	294	261	369	279	306	383	735	604
1963	Wet	779	272	374	458	368	307	319	360	234	242	287	536	378
1964	Dry	748	738	315	520	349	298	397	339	310	444	651	653	480
1965	Wet	851	914	600	339	261	252	308	358	246	243	294	539	434
1966	Below Normal	732	696	315	300	294	266	325	330	281	346	350	612	404
1967	Wet	921	942	810	507	302	394	432	337	280	311	268	256	480
1968	Below Normal	225	272	449	614	309	251	328	360	305	329	342	602	365
1969	Wet	906	857	675	530	723	542	526	366	310	289	302	340	530
1970	Wet	224	261	341	643	460	300	357	318	260	276	294	591	360
1971	Wet	883	663	330	249	263	248	305	321	228	247	319	438	375
1972	Below Normal	332	501	688	380	403	311	347	334	309	342	367	623	411
1973	Above Normal	944	736	391	475	519	337	348	329	255	253	319	570	456
1974	Wet	807	472	276	296	277	282	327	313	259	249	326	385	356
1975	Wet	238	303	543	506	423	356	362	340	245	258	303	365	353
1976	Critical	232	227	397	725	875	569	491	425	644	740	817	837	582
1977	Critical	1,051	861	1,101	921	897	706	574	520	719	935	708	781	798
1978	Above Normal	1,050	1,102	1,029	1,105	490	632	506	352	304	293	317	475	638
1979	Below Normal	540	739	894	734	382	300	333	333	263	262	345	597	477
1980	Above Normal	888	824	560	380	716	585	520	327	309	310	323	541	524
1981	Dry	726	720	885	782	309	238	314	335	356	462	536	673	528
1982	Wet	962	873	254	486	387	525	544	301	265	278	289	280	454
1983	Wet	215	319	507	970	896	877	840	365	316	309	253	221	507
1984	Wet	222	288	469	450	394	287	355	380	270	268	298	567	354
1985	Dry	775	680	260	289	484	356	362	334	312	451	551	746	467
1986	Wet	954	876	925	544	585	661	397	292	287	289	299	478	549
1987	Dry	607	686	894	1,082	731	423	384	338	359	465	581	699	604
1988	Critical	935	954	973	762	331	349	422	396	392	419	610	845	616
1989	Dry	995	986	1,022	821	1,064	516	266	278	284	439	589	671	661
1990	Critical	871	938	1,010	693	557	370	374	347	547	704	738	795	662
1991	Critical	1,040	1,058	1,027	1,070	1,046	721	372	331	523	711	716	744	780
1992	Critical	1,045	1,134	1,048	1,162	818	382	315	320	399	420	683	966	724
1993	Above Normal	1,066	1,031	1,100	946	524	350	261	302	249	248	295	520	574
1994	Critical	639	775	930	1,010	795	368	359	308	394	701	832	775	657
Average		747	719	719	670	564	396	379	346	316	352	424	594	519
Wet		650	586	533	484	461	424	421	332	269	271	294	413	428
Above Normal		787	710	641	695	502	364	354	330	264	273	303	559	482
Below Normal		703	709	770	653	486	318	322	341	270	287	361	617	486
Dry		814	808	815	745	651	364	348	340	309	400	534	684	568
Critical		846	852	922	892	768	506	437	400	508	571	678	794	681

Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	-2	-2	0
1924	Critical	0	13	22	-1	299	124	56	17	-16	-2	5	16	45
1925	Dry	4	-14	21	-63	-25	27	24	4	0	-1	-4	-7	-3
1926	Dry	-6	-1	-1	0	0	0	1	-3	-6	5	10	18	1
1927	Wet	9	-51	-58	-17	-1	-2	-1	1	0	0	0	0	-10
1928	Above Normal	2	3	9	4	0	0	1	-1	-1	1	4	15	3
1929	Critical	8	2	-2	-18	-31	-9	-8	-10	-8	6	9	19	-4
1930	Dry	-3	-43	-13	14	2	-1	1	0	-1	-1	10	60	2
1931	Critical	17	-24	-6	-12	48	-48	-35	-15	-9	11	8	0	-5
1932	Dry	-3	-10	-4	-1	20	35	6	1	0	0	0	0	4
1933	Critical	0	0	-4	-2	-15	-33	-12	-2	0	0	0	0	-6
1934	Critical	-1	-2	1	-8	-4	-1	0	0	0	1	1	1	-1
1935	Below Normal	0	1	3	-3	-1	1	5	4	3	0	8	20	3
1936	Below Normal	10	4	-29	-60	-1	2	1	0	0	0	4	13	-5
1937	Below Normal	0	-8	-16	113	-32	5	0	-26	2	-1	1	3	3
1938	Wet	-6	8	11	2	1	4	5	-1	0	0	-1	-2	2
1939	Dry	2	9	16	7	2	-1	1	1	7	15	2	37	8
1940	Above Normal	14	10	6	0	4	3	0	0	0	0	0	0	3
1941	Wet	1	-1	1	1	1	2	3	0	0	0	0	0	0
1942	Wet	1	2	2	0	0	0	0	0	0	-3	-2	-1	0
1943	Wet	0	0	0	0	0	0	-1	-2	-1	-1	1	4	0
1944	Dry	0	-1	8	-19	184	25	3	1	0	15	18	-40	16
1945	Below Normal	-11	56	18	6	15	-10	-6	0	-1	0	4	7	6
1946	Below Normal	-4	85	105	1	9	5	-2	1	-1	2	-1	1	17
1947	Dry	-16	-8	20	4	3	0	0	0	-4	24	57	-9	6
1948	Below Normal	-22	-5	-3	-18	-8	1	1	0	3	11	39	60	5
1949	Dry	129	87	18	-75	197	158	13	2	1	-16	-19	6	42
1950	Below Normal	35	29	29	-40	-16	-1	-1	0	-1	2	13	14	5
1951	Above Normal	-2	3	0	0	-19	-7	1	-12	-1	-2	0	1	-3
1952	Wet	-5	-28	-70	0	0	0	-1	0	0	0	0	1	-9
1953	Wet	0	-1	-3	0	0	0	0	0	0	0	5	13	1
1954	Above Normal	5	-30	-111	-82	-8	0	0	25	0	0	5	15	-15
1955	Dry	-3	-5	31	29	6	1	0	-1	-7	16	30	-42	5
1956	Wet	-36	-16	-5	0	-1	-2	-1	0	0	0	2	5	-5
1957	Above Normal	1	0	-1	-2	-10	-1	0	0	-1	0	2	8	0
1958	Wet	10	27	17	3	1	-4	2	-3	0	0	1	1	5
1959	Below Normal	0	1	2	1	0	0	0	0	0	-1	4	20	2
1960	Dry	81	100	66	-160	-84	-11	-2	-1	-4	-19	5	-7	-3
1961	Dry	2	3	-2	5	21	30	12	5	-6	-2	1	-9	5
1962	Below Normal	-1	3	-4	18	6	2	0	0	3	2	4	8	3
1963	Wet	-16	-6	-27	-2	12	0	0	-1	0	0	0	0	-3
1964	Dry	3	0	0	3	1	1	0	-2	-9	3	15	1	1
1965	Wet	-9	-2	-1	0	-3	-3	-2	-4	0	-1	3	4	-2
1966	Below Normal	1	16	10	3	-1	-1	0	0	-1	-3	2	2	2
1967	Wet	-1	3	2	1	0	0	0	1	0	0	0	1	1
1968	Below Normal	0	0	-2	-1	0	0	0	0	-1	0	1	3	0
1969	Wet	0	1	-16	-10	3	6	2	0	0	0	0	0	-1
1970	Wet	0	-2	-2	0	2	0	0	-5	-1	1	1	6	0
1971	Wet	6	-16	-24	0	0	0	0	0	0	0	-4	-4	-4
1972	Below Normal	5	5	3	0	0	0	0	1	2	1	-1	12	2
1973	Above Normal	-16	10	41	4	-3	-4	-1	0	-1	-1	-2	1	2
1974	Wet	1	1	0	0	-3	-3	0	0	0	0	1	2	0
1975	Wet	0	1	1	0	0	0	1	0	0	0	1	2	0
1976	Critical	1	0	0	1	2	1	1	-7	-1	25	16	-31	1
1977	Critical	-1	27	47	79	72	110	88	22	4	-6	-13	-73	30
1978	Above Normal	-10	48	-23	112	2	30	59	6	3	1	0	5	19
1979	Below Normal	15	8	2	-5	-1	-1	0	-9	-2	0	1	1	1
1980	Above Normal	1	39	102	17	7	10	2	1	-1	0	0	0	15
1981	Dry	0	-1	-1	0	-1	0	0	0	4	3	-1	-3	0
1982	Wet	-4	5	2	0	-3	-3	-3	0	0	0	1	2	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-1	0	1	-2	0
1985	Dry	-10	37	3	1	1	0	0	0	-3	-2	8	-7	2
1986	Wet	-5	-4	-14	-12	-5	1	-8	-1	2	-39	-23	-14	-10
1987	Dry	36	21	17	53	-40	32	7	-3	7	33	15	14	16
1988	Critical	-8	1	-2	-5	-9	-11	-5	-1	-5	0	7	20	-2
1989	Dry	3	-9	27	-67	-46	-9	0	0	-3	-7	10	-17	-10
1990	Critical	-19	-6	3	-10	-4	-1	0	1	1	1	1	3	-3
1991	Critical	1	-2	3	-5	9	5	1	0	0	0	1	1	1
1992	Critical	-1	0	0	0	-3	-1	0	0	-2	-2	-12	3	-1
1993	Above Normal	15	-73	-15	27	0	1	0	3	11	-1	3	20	-1
1994	Critical	20	12	-7	-4	17	-4	-2	0	-8	-9	29	-25	2
Average		3	4	3	-3	8	6	3	0	-1	1	4	2	3
Wet		-3	-4	-9	-2	0	0	0	-1	0	-2	-1	1	-2
Above Normal		1	1	1	8	-3	3	6	2	1	0	1	6	2
Below Normal		2	14	8	1	-2	0	0	-2	1	1	5	12	3
Dry		14	10	13	-17	15	18	4	0	-2	4	10	0	6
Critical		1	2	4	1	32	11	7	0	-4	2	4	-5	5

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1924	Critical	0%	2%	2%	0%	40%	21%	9%	4%	-2%	0%	1%	2%	7%
1925	Dry	0%	-1%	2%	-7%	-3%	9%	8%	1%	0%	0%	-1%	-1%	1%
1926	Dry	-1%	0%	0%	0%	0%	0%	0%	-1%	-2%	1%	2%	3%	0%
1927	Wet	1%	-8%	-18%	-5%	0%	-1%	0%	0%	0%	0%	0%	0%	-3%
1928	Above Normal	0%	0%	-2%	1%	0%	0%	0%	0%	0%	0%	1%	3%	1%
1929	Critical	1%	0%	0%	-2%	-3%	-1%	-2%	-2%	-2%	1%	1%	-3%	-1%
1930	Dry	0%	-5%	-1%	2%	1%	0%	0%	0%	0%	0%	2%	9%	1%
1931	Critical	2%	-3%	-1%	-1%	6%	-9%	-7%	-3%	-1%	2%	1%	0%	-1%
1932	Dry	0%	-1%	0%	0%	4%	9%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	-3%	-8%	-3%	-1%	0%	0%	0%	0%	-1%
1934	Critical	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	2%	1%	1%	0%	2%	3%	1%
1936	Below Normal	1%	1%	-3%	-7%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1937	Below Normal	0%	-1%	-2%	12%	-4%	1%	0%	-8%	1%	0%	0%	1%	0%
1938	Wet	-1%	1%	3%	1%	0%	1%	1%	0%	0%	0%	0%	-1%	0%
1939	Dry	1%	4%	3%	1%	0%	0%	0%	0%	2%	3%	0%	5%	2%
1940	Above Normal	1%	1%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	1%	0%
1944	Dry	0%	0%	1%	-2%	28%	8%	1%	0%	0%	4%	4%	-6%	3%
1945	Below Normal	-1%	7%	3%	1%	2%	-3%	-2%	0%	0%	0%	1%	1%	1%
1946	Below Normal	0%	14%	29%	1%	3%	2%	-1%	0%	0%	1%	0%	0%	4%
1947	Dry	-2%	-1%	3%	1%	1%	0%	0%	0%	-1%	6%	10%	-1%	1%
1948	Below Normal	-2%	-1%	0%	-2%	-1%	0%	0%	0%	1%	5%	11%	10%	2%
1949	Dry	18%	12%	2%	-8%	25%	46%	4%	1%	0%	-4%	-3%	1%	8%
1950	Below Normal	4%	4%	3%	-5%	-5%	-1%	0%	0%	0%	1%	4%	2%	1%
1951	Above Normal	0%	1%	0%	0%	-5%	-3%	0%	-3%	0%	-1%	0%	0%	-1%
1952	Wet	-1%	-4%	-9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1954	Above Normal	1%	-7%	-19%	-10%	-2%	0%	0%	8%	0%	0%	2%	3%	-2%
1955	Dry	0%	-1%	4%	8%	2%	0%	0%	0%	-2%	5%	6%	-6%	1%
1956	Wet	-4%	-2%	-1%	0%	0%	-1%	0%	0%	0%	0%	1%	1%	0%
1957	Above Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	1%	0%
1958	Wet	1%	8%	4%	1%	0%	0%	0%	-1%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	0%
1960	Dry	10%	12%	8%	-16%	-9%	-3%	-1%	0%	-1%	-4%	1%	-1%	0%
1961	Dry	0%	0%	0%	1%	3%	9%	4%	2%	-2%	-1%	0%	-1%	1%
1962	Below Normal	0%	0%	0%	2%	1%	1%	0%	0%	1%	1%	1%	1%	1%
1963	Wet	-2%	-2%	-7%	0%	3%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	1%	0%	0%	0%	-1%	-3%	1%	2%	0%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	-1%	-1%	0%	-1%	1%	1%	0%
1966	Below Normal	0%	2%	3%	1%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-2%	-2%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	-1%	0%	0%	0%	0%	-2%	0%	0%	0%	1%	0%
1971	Wet	1%	-2%	-7%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	2%	1%
1973	Above Normal	-2%	1%	12%	1%	-1%	-1%	0%	0%	-1%	0%	-1%	0%	1%
1974	Wet	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-2%	0%	3%	2%	-4%	0%
1977	Critical	0%	3%	4%	9%	9%	18%	18%	4%	1%	-1%	-2%	-9%	5%
1978	Above Normal	-1%	5%	-2%	11%	0%	5%	13%	2%	1%	0%	0%	1%	3%
1979	Below Normal	3%	1%	0%	-1%	0%	0%	0%	-3%	-1%	0%	0%	0%	0%
1980	Above Normal	0%	5%	22%	5%	1%	2%	0%	0%	0%	0%	0%	0%	3%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	-1%	0%
1982	Wet	0%	1%	1%	0%	-1%	-1%	-1%	0%	0%	0%	0%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	-1%	6%	1%	0%	0%	0%	0%	0%	-1%	-1%	2%	-1%	0%
1986	Wet	-1%	0%	-2%	-2%	-1%	0%	-2%	0%	1%	-12%	-7%	-3%	-2%
1987	Dry	6%	3%	2%	5%	-5%	8%	2%	-1%	2%	8%	3%	2%	3%
1988	Critical	-1%	0%	0%	-1%	-3%	-3%	-1%	0%	-1%	0%	1%	2%	-1%
1989	Dry	0%	-1%	3%	-8%	-4%	-2%	0%	0%	-1%	-2%	2%	-2%	-1%
1990	Critical	-2%	-1%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-2%	0%	0%
1993	Above Normal	1%	-7%	-1%	3%	0%	0%	0%	1%	5%	0%	1%	4%	1%
1994	Critical	3%	2%	-1%	0%	2%	-1%	-1%	0%	-2%	-1%	4%	-3%	0%
Average		0%	1%	1%	0%	1%	1%	1%	0%	0%	0%	1%	0%	0%
Wet		0%	0%	-2%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	0%	1%	1%	-1%	0%	1%	1%	0%	0%	0%	1%	1%
Below Normal		0%	2%	2%	0%	0%	0%	0%	-1%	0%	0%	2%	2%	1%
Dry		2%	2%	2%	-1%	3%	5%	1%	0%	-1%	1%	2%	0%	1%
Critical		0%	0%	0%	0%	4%	1%	1%	0%	-1%	0%	1%	-1%	1%

Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	562	570	601	558	549	434	349	323	337	367	326	422	450
1923	Below Normal	567	564	562	447	460	516	369	340	335	297	326	461	437
1924	Critical	560	609	705	756	828	942	645	563	573	499	538	561	648
1925	Dry	684	726	753	799	704	605	384	348	383	370	396	534	557
1926	Dry	655	632	722	768	646	549	402	446	381	383	465	538	549
1927	Wet	684	511	388	401	468	500	339	317	271	264	283	435	405
1928	Above Normal	580	476	412	461	411	374	339	362	302	290	288	456	396
1929	Critical	660	675	769	749	849	810	591	510	475	447	502	588	635
1930	Dry	696	717	761	574	516	507	429	443	343	361	430	529	526
1931	Critical	683	632	749	814	848	786	618	564	582	477	535	588	656
1932	Dry	685	732	679	474	589	748	527	468	404	476	411	530	560
1933	Critical	647	607	713	732	733	724	562	483	476	459	492	553	599
1934	Critical	656	741	731	702	655	856	615	537	494	424	489	596	625
1935	Below Normal	709	721	815	643	634	480	366	401	345	344	337	495	524
1936	Below Normal	626	600	732	682	527	348	341	379	349	299	327	470	473
1937	Below Normal	593	595	701	743	477	411	308	279	396	449	329	450	478
1938	Wet	597	623	426	462	386	334	261	256	256	341	305	295	379
1939	Dry	255	284	483	621	656	657	465	383	349	378	417	553	458
1940	Above Normal	686	635	746	673	545	356	321	360	333	280	275	444	471
1941	Wet	588	630	632	477	441	338	276	273	390	386	321	351	425
1942	Wet	307	397	514	458	336	373	324	292	353	371	319	320	364
1943	Wet	278	306	348	379	308	306	306	375	406	319	304	446	340
1944	Dry	625	601	710	790	644	477	372	357	330	333	412	556	517
1945	Below Normal	678	581	552	550	507	375	374	347	323	295	331	464	448
1946	Below Normal	595	487	420	406	441	430	371	351	318	281	333	499	411
1947	Dry	658	613	630	603	614	547	434	404	326	335	435	513	509
1948	Below Normal	666	663	799	718	808	619	393	377	282	259	306	475	530
1949	Dry	550	566	707	817	764	569	438	478	338	315	441	513	541
1950	Below Normal	623	609	706	637	457	437	327	357	314	308	303	465	462
1951	Above Normal	626	429	380	343	280	380	355	269	274	293	267	465	363
1952	Wet	612	626	635	499	412	410	256	210	292	335	279	266	403
1953	Wet	261	335	495	436	462	475	321	291	256	264	283	389	356
1954	Above Normal	345	376	532	692	423	439	364	385	302	290	271	460	407
1955	Dry	649	695	632	447	522	675	511	442	345	322	402	531	514
1956	Wet	636	672	660	401	388	362	349	342	354	375	328	327	433
1957	Above Normal	265	301	509	748	673	490	328	302	284	260	277	474	409
1958	Wet	519	334	429	412	534	500	217	197	323	335	288	280	364
1959	Below Normal	261	348	606	708	480	517	420	377	328	299	310	474	427
1960	Dry	600	622	722	815	790	442	424	447	321	362	414	522	540
1961	Dry	675	703	816	731	696	522	429	413	345	339	416	539	552
1962	Below Normal	685	699	809	762	645	474	380	377	328	289	319	568	528
1963	Wet	622	314	426	406	454	394	356	311	289	266	278	433	379
1964	Dry	570	545	389	518	563	641	459	422	326	361	481	515	483
1965	Wet	654	706	545	409	344	417	353	322	318	273	295	433	422
1966	Below Normal	551	534	415	423	432	431	371	387	303	313	297	488	412
1967	Wet	687	707	696	531	438	408	281	235	295	310	277	260	427
1968	Below Normal	260	298	444	547	436	491	390	372	310	297	304	482	386
1969	Wet	678	656	586	595	385	399	288	244	246	342	308	304	419
1970	Wet	257	289	397	295	353	352	324	352	312	283	281	454	329
1971	Wet	647	492	436	375	464	394	304	296	248	251	287	357	379
1972	Below Normal	315	443	559	419	482	410	390	407	328	314	316	490	406
1973	Above Normal	710	530	419	505	534	445	385	393	348	275	302	457	442
1974	Wet	614	399	386	414	402	323	336	356	367	303	307	335	378
1975	Wet	268	314	489	503	377	323	343	322	341	334	308	322	354
1976	Critical	266	267	413	624	792	670	525	473	536	579	616	669	536
1977	Critical	747	649	808	763	948	871	639	578	608	598	560	617	699
1978	Above Normal	756	784	817	624	647	638	406	323	392	411	350	390	545
1979	Below Normal	435	567	684	645	394	327	358	319	320	290	326	481	429
1980	Above Normal	655	564	454	414	351	396	373	363	379	390	335	438	426
1981	Dry	543	556	690	707	465	470	404	370	339	379	421	538	490
1982	Wet	726	573	360	470	303	328	227	215	344	367	306	260	373
1983	Wet	213	264	379	358	328	271	294	266	244	230	215	223	274
1984	Wet	257	209	303	337	261	336	344	354	348	286	293	451	315
1985	Dry	569	452	360	385	524	522	445	387	320	374	432	592	447
1986	Wet	700	657	710	549	469	316	254	239	373	482	344	403	458
1987	Dry	455	519	698	789	744	569	454	409	356	378	455	537	530
1988	Critical	705	703	763	693	626	813	527	488	451	383	473	613	603
1989	Dry	724	760	793	752	1,065	553	329	353	277	355	447	531	578
1990	Critical	661	712	792	617	631	592	477	481	489	556	577	598	599
1991	Critical	742	780	814	905	1,015	651	531	453	455	557	570	577	671
1992	Critical	742	821	832	923	730	530	423	385	374	370	504	686	610
1993	Above Normal	757	812	862	657	558	513	369	389	373	369	326	411	533
1994	Critical	500	588	732	835	783	519	426	436	371	547	601	606	579
Average		568	558	605	587	553	499	392	372	355	356	370	471	474
Wet		514	477	488	436	396	374	303	289	315	320	296	350	380
Above Normal		594	548	573	567	497	446	359	347	332	322	302	442	444
Below Normal		540	551	629	595	513	448	368	362	327	310	319	483	454
Dry		600	608	659	662	656	566	432	410	343	364	430	536	522
Critical		631	649	735	759	787	730	548	496	490	491	538	604	622

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	562	570	601	558	549	434	349	323	337	367	326	422	450
1923	Below Normal	567	564	562	447	460	516	369	340	335	299	326	460	437
1924	Critical	561	625	719	752	895	950	672	580	571	496	542	574	661
1925	Dry	686	723	763	761	687	709	398	349	381	367	394	531	562
1926	Dry	652	631	722	768	646	535	398	443	363	378	454	548	545
1927	Wet	690	478	356	389	468	487	338	318	271	264	283	435	398
1928	Above Normal	581	478	416	463	411	374	338	361	299	290	288	465	397
1929	Critical	664	677	767	739	830	806	570	489	430	414	485	597	622
1930	Dry	696	697	754	583	518	464	424	444	335	352	433	564	522
1931	Critical	693	614	743	805	822	775	600	553	572	477	542	588	649
1932	Dry	684	727	677	473	652	755	529	468	405	476	412	531	566
1933	Critical	647	607	720	733	747	721	557	482	476	459	493	553	600
1934	Critical	655	740	731	700	654	856	615	537	494	430	491	597	625
1935	Below Normal	709	721	817	642	634	514	378	401	354	361	335	507	531
1936	Below Normal	633	603	719	647	529	348	342	378	350	312	324	478	472
1937	Below Normal	593	586	695	799	468	412	308	283	396	446	329	451	481
1938	Wet	593	630	432	466	386	334	261	256	256	341	308	295	380
1939	Dry	254	288	491	625	657	659	466	380	348	378	412	569	461
1940	Above Normal	695	640	748	672	546	359	321	360	332	279	274	443	472
1941	Wet	588	628	632	477	441	337	277	273	390	386	321	350	425
1942	Wet	307	398	515	458	336	373	324	292	353	368	317	320	363
1943	Wet	278	306	348	379	309	306	306	375	406	315	302	447	340
1944	Dry	624	605	704	780	747	491	373	358	323	329	409	529	523
1945	Below Normal	677	613	560	552	510	372	371	346	321	294	329	467	451
1946	Below Normal	593	544	461	408	449	426	370	351	314	280	332	499	419
1947	Dry	647	612	640	605	615	539	434	404	320	345	466	506	511
1948	Below Normal	652	659	799	707	802	619	393	377	289	258	325	515	533
1949	Dry	633	620	719	770	881	575	437	478	341	307	428	520	559
1950	Below Normal	645	628	721	616	447	438	333	358	313	278	306	473	463
1951	Above Normal	625	432	380	343	285	377	362	269	273	294	266	465	364
1952	Wet	609	594	595	499	412	410	258	210	292	335	279	267	397
1953	Wet	261	334	494	436	462	477	321	292	257	264	285	397	357
1954	Above Normal	348	360	470	641	416	427	363	387	297	282	273	469	394
1955	Dry	646	692	648	463	525	674	511	441	341	321	413	504	515
1956	Wet	616	664	659	401	389	360	348	342	355	376	328	330	431
1957	Above Normal	266	302	510	745	669	489	328	301	283	260	277	478	409
1958	Wet	528	350	439	414	529	498	217	197	323	336	289	281	367
1959	Below Normal	262	349	607	708	481	517	419	377	324	298	311	489	429
1960	Dry	659	688	739	725	734	432	423	446	332	355	422	518	539
1961	Dry	676	705	815	735	712	629	447	420	345	337	417	534	564
1962	Below Normal	684	700	807	772	649	475	380	377	339	293	323	575	531
1963	Wet	610	308	409	404	460	394	356	311	291	268	279	433	377
1964	Dry	573	543	389	520	573	644	457	421	322	363	491	515	484
1965	Wet	649	704	544	409	340	411	352	327	318	270	295	435	421
1966	Below Normal	551	544	420	424	424	428	370	386	302	310	298	489	412
1967	Wet	686	708	697	531	434	407	280	235	295	310	277	261	427
1968	Below Normal	260	298	443	547	435	491	389	372	309	296	304	484	386
1969	Wet	678	656	576	591	385	399	288	244	246	342	308	304	418
1970	Wet	257	288	396	295	354	352	327	352	310	287	280	458	330
1971	Wet	650	478	423	375	465	395	304	296	248	250	284	354	377
1972	Below Normal	318	446	560	419	482	410	389	407	330	312	313	497	407
1973	Above Normal	701	539	443	509	526	442	384	393	344	271	299	457	442
1974	Wet	614	400	386	414	391	320	336	356	367	304	307	336	378
1975	Wet	268	315	489	503	377	323	343	322	341	334	309	323	354
1976	Critical	266	267	413	624	793	671	516	470	529	586	621	647	534
1977	Critical	752	674	836	785	798	860	680	597	615	597	560	583	695
1978	Above Normal	740	805	811	684	647	674	404	328	393	412	351	394	554
1979	Below Normal	443	571	684	643	393	327	362	318	318	288	325	481	430
1980	Above Normal	654	600	511	420	351	396	373	363	379	390	334	438	434
1981	Dry	543	556	690	706	458	439	401	369	340	381	420	536	487
1982	Wet	725	578	361	470	303	328	227	215	344	367	306	260	374
1983	Wet	213	264	379	358	328	271	294	266	244	230	215	223	274
1984	Wet	257	209	303	337	261	336	344	354	347	285	292	450	315
1985	Dry	568	473	362	386	525	522	445	387	318	372	437	585	448
1986	Wet	698	652	703	541	469	316	257	239	375	366	328	398	445
1987	Dry	474	529	713	815	692	497	438	402	348	381	449	543	523
1988	Critical	703	703	762	689	568	803	522	486	438	376	476	625	596
1989	Dry	726	755	805	714	1,050	546	329	353	274	350	453	523	573
1990	Critical	649	709	794	611	631	592	477	483	491	558	579	600	598
1991	Critical	743	779	816	903	1,017	654	532	453	456	558	570	578	671
1992	Critical	742	820	832	923	729	529	422	386	379	372	504	687	610
1993	Above Normal	770	777	854	669	558	513	369	398	385	359	316	422	533
1994	Critical	511	595	729	831	809	527	424	436	366	542	618	592	582
Average		570	561	606	585	553	500	392	372	353	353	371	472	474
Wet		513	474	483	436	395	373	303	289	316	314	295	350	378
Above Normal		594	550	574	570	496	448	359	348	332	320	301	445	445
Below Normal		542	559	632	595	512	449	370	362	328	309	320	490	456
Dry		609	615	664	652	667	569	432	410	340	362	432	535	524
Critical		632	651	738	758	774	729	549	496	485	489	540	602	620

Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	2	0	-1	0
1924	Critical	1	16	14	-4	67	8	26	17	-2	-3	3	13	13
1925	Dry	2	-3	10	-37	-17	104	14	1	-2	-3	-2	-2	5
1926	Dry	-3	-1	0	0	0	-14	-4	-2	-19	-5	-11	9	-4
1927	Wet	6	-33	-32	-12	0	-12	-1	1	1	0	0	0	-7
1928	Above Normal	1	2	4	2	0	0	-1	-1	-3	0	1	9	1
1929	Critical	4	-2	-2	-10	-19	-4	-22	-21	-45	-33	-17	9	-13
1930	Dry	0	-20	-7	8	1	-44	-5	0	-8	-9	3	35	-4
1931	Critical	10	-18	-6	-9	-26	-11	-18	-11	-9	1	6	0	-8
1932	Dry	-2	-5	-2	0	63	6	2	0	1	0	1	0	5
1933	Critical	0	0	8	2	14	-3	-5	-2	0	0	0	-1	1
1934	Critical	-1	-1	0	-3	-1	0	0	0	0	6	2	1	0
1935	Below Normal	0	1	1	-2	0	34	12	0	9	18	-1	12	7
1936	Below Normal	7	3	-13	-34	1	1	1	-1	0	13	-3	8	-2
1937	Below Normal	0	-9	-6	56	-9	1	0	4	0	-3	0	2	3
1938	Wet	-5	7	6	4	0	0	0	0	0	0	3	0	1
1939	Dry	-1	4	9	4	1	3	1	-3	-1	0	-5	17	2
1940	Above Normal	9	5	2	-1	2	2	0	0	-1	-1	-1	0	1
1941	Wet	0	-1	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	1	1	0	0	0	0	0	0	-3	-3	-1	0
1943	Wet	0	0	0	0	0	0	0	0	-1	-4	-3	1	0
1944	Dry	-1	3	-6	-10	103	15	1	0	-7	-4	-4	-27	5
1945	Below Normal	-1	32	9	2	3	-3	-3	0	-2	-1	-1	3	3
1946	Below Normal	-2	57	41	1	9	-4	-1	0	-4	-1	-1	0	8
1947	Dry	-11	-1	10	2	1	-8	0	0	-6	11	32	-7	2
1948	Below Normal	-13	-3	0	-11	-6	0	0	0	7	-1	20	40	3
1949	Dry	83	54	12	-47	117	6	-1	1	3	-8	-12	7	18
1950	Below Normal	22	18	15	-21	-10	2	6	1	-2	-30	2	8	1
1951	Above Normal	-1	3	0	0	5	-3	7	0	-1	1	-1	1	1
1952	Wet	-3	-32	-40	-1	0	0	1	0	0	0	0	0	-6
1953	Wet	0	0	-1	0	0	1	0	1	1	0	2	8	1
1954	Above Normal	3	-16	-62	-50	-6	-12	-1	2	-5	-8	1	9	-12
1955	Dry	-3	-3	17	17	4	-1	0	-1	-4	-2	11	-27	1
1956	Wet	-19	-8	-1	0	0	-2	-1	0	1	0	0	3	-2
1957	Above Normal	1	0	0	-3	-5	0	0	0	-1	0	0	4	0
1958	Wet	9	16	10	2	-6	-2	0	0	0	1	1	1	3
1959	Below Normal	0	1	1	0	1	0	0	0	-4	-1	1	15	1
1960	Dry	59	66	17	-89	-55	-10	-2	0	11	-8	8	-4	-1
1961	Dry	1	2	-1	4	16	107	18	7	0	-2	0	-5	12
1962	Below Normal	-1	2	-2	11	4	1	0	0	10	3	4	7	3
1963	Wet	-12	-5	-17	-1	6	0	0	0	2	2	1	0	-2
1964	Dry	2	-1	0	2	9	2	-3	-1	-4	2	10	0	2
1965	Wet	-5	-1	-1	0	-4	-7	-1	4	1	-3	0	2	-1
1966	Below Normal	0	10	5	1	-8	-3	0	-1	-1	-3	0	1	0
1967	Wet	-1	2	1	1	-4	-1	-1	0	0	0	0	0	0
1968	Below Normal	0	0	-1	-1	0	-1	0	0	-1	-1	0	1	0
1969	Wet	0	0	-10	-4	0	0	0	0	0	0	0	0	-1
1970	Wet	0	-1	-1	0	1	0	3	0	-2	3	0	4	1
1971	Wet	4	-14	-12	0	1	1	0	0	0	-1	-3	-2	-2
1972	Below Normal	3	3	1	0	0	0	-1	0	2	-2	-3	6	1
1973	Above Normal	-9	9	24	4	-8	-3	0	0	-4	-4	-3	0	0
1974	Wet	0	1	0	0	-11	-3	0	0	0	1	0	1	-1
1975	Wet	0	0	0	0	0	0	0	0	0	0	1	1	0
1976	Critical	0	0	0	0	1	2	-9	-3	-7	7	5	-22	-2
1977	Critical	4	25	29	22	-150	-11	41	19	8	-1	0	-34	-4
1978	Above Normal	-15	21	-6	60	1	36	-2	5	1	1	1	4	9
1979	Below Normal	9	5	1	-2	0	0	4	-1	-2	-2	-1	1	1
1980	Above Normal	0	36	57	6	0	0	0	0	0	0	-1	0	8
1981	Dry	0	0	0	0	-7	-31	-3	0	1	2	-1	-3	-4
1982	Wet	-1	5	1	0	0	0	0	0	0	0	1	1	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-2	-1	0	-1	0
1985	Dry	-1	21	2	0	1	0	0	0	-3	-2	5	-6	1
1986	Wet	-2	-5	-7	-7	-1	0	3	0	2	-116	-16	-6	-13
1987	Dry	18	10	15	26	-53	-72	-15	-7	-7	3	-6	6	-7
1988	Critical	-2	0	-2	-3	-59	-10	-5	-2	-13	-7	3	12	-7
1989	Dry	2	-5	12	-38	-15	-6	0	0	-3	-6	6	-8	-5
1990	Critical	-12	-3	2	-6	0	0	1	1	2	2	2	2	-1
1991	Critical	0	-1	1	-2	2	2	1	0	0	0	-1	1	0
1992	Critical	0	0	0	0	-2	0	0	1	5	2	-1	1	0
1993	Above Normal	13	-35	-8	12	0	0	0	9	12	-9	-9	11	0
1994	Critical	12	7	-3	-3	26	8	-2	-1	-5	-5	17	-13	3
Average		2	3	1	-2	0	1	0	0	-1	-3	1	1	0
Wet		-1	-3	-5	-1	-1	-1	0	0	0	-6	-1	1	-1
Above Normal		0	3	1	3	-1	2	0	2	0	-2	-1	4	1
Below Normal		2	9	4	0	-1	2	1	0	1	-1	1	7	2
Dry		9	8	5	-10	11	4	0	0	-3	-2	2	-1	2
Critical		1	2	3	-1	-12	-2	1	0	-5	-3	2	-3	-1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1924	Critical	0%	3%	2%	-1%	8%	1%	4%	3%	0%	-1%	1%	2%	2%
1925	Dry	0%	0%	1%	-5%	-2%	17%	4%	0%	-1%	-1%	0%	0%	1%
1926	Dry	0%	0%	0%	0%	0%	-2%	-1%	-1%	-5%	-1%	-2%	2%	-1%
1927	Wet	1%	-6%	-8%	-3%	0%	-2%	0%	0%	0%	0%	0%	0%	-2%
1928	Above Normal	0%	0%	1%	0%	0%	0%	0%	0%	-1%	0%	0%	2%	0%
1929	Critical	1%	0%	0%	-1%	-2%	0%	-4%	-4%	-9%	-7%	-3%	1%	-2%
1930	Dry	0%	-3%	-1%	1%	0%	-9%	-1%	0%	-2%	-3%	1%	7%	-1%
1931	Critical	1%	-3%	-1%	-1%	-3%	-1%	-3%	-2%	-2%	0%	1%	0%	-1%
1932	Dry	0%	-1%	0%	0%	11%	1%	0%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	1%	0%	2%	0%	-1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	7%	3%	0%	3%	5%	0%	2%	2%
1936	Below Normal	1%	1%	-2%	-5%	0%	0%	0%	0%	0%	4%	-1%	2%	0%
1937	Below Normal	0%	-1%	-1%	8%	-2%	0%	0%	1%	0%	-1%	0%	0%	0%
1938	Wet	-1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1939	Dry	0%	2%	2%	1%	0%	0%	0%	-1%	0%	0%	-1%	3%	0%
1940	Above Normal	1%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1944	Dry	0%	1%	-1%	-1%	16%	3%	0%	0%	-2%	-1%	-1%	-5%	1%
1945	Below Normal	0%	5%	-2%	0%	1%	-1%	-1%	0%	-1%	0%	0%	1%	0%
1946	Below Normal	0%	12%	10%	0%	2%	-1%	0%	0%	-1%	0%	0%	0%	2%
1947	Dry	-2%	0%	2%	0%	0%	-1%	0%	0%	-2%	3%	7%	-1%	1%
1948	Below Normal	-2%	0%	0%	-2%	-1%	0%	0%	0%	3%	0%	7%	8%	1%
1949	Dry	15%	9%	2%	-6%	15%	1%	0%	1%	-2%	-3%	-1%	3%	3%
1950	Below Normal	4%	3%	2%	-3%	-2%	0%	2%	0%	-1%	-10%	1%	2%	0%
1951	Above Normal	0%	1%	0%	0%	2%	-1%	2%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	-5%	-6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	-4%	-12%	-7%	-2%	-3%	0%	1%	-2%	-3%	0%	2%	-2%
1955	Dry	0%	0%	3%	4%	1%	0%	0%	0%	-1%	-1%	3%	-5%	0%
1956	Wet	-3%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	2%	5%	2%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	3%	0%
1960	Dry	10%	11%	2%	-11%	-7%	-2%	0%	0%	3%	-2%	2%	-1%	0%
1961	Dry	0%	0%	0%	1%	2%	21%	4%	2%	0%	-1%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	1%	1%	0%	0%	0%	3%	1%	1%	1%	1%
1963	Wet	-2%	-2%	-4%	0%	1%	0%	0%	0%	1%	1%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	2%	0%	-1%	0%	-1%	1%	2%	0%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-2%	0%	1%	0%	-1%	0%	0%	0%
1966	Below Normal	0%	2%	1%	0%	-2%	-1%	0%	0%	-1%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	1%	0%	-1%	1%	0%	1%	0%
1971	Wet	1%	-3%	-3%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	1%	-1%	-1%	1%	0%
1973	Above Normal	-1%	2%	6%	1%	-2%	-1%	0%	0%	-1%	-2%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-3%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-2%	-1%	0%	1%	1%	-3%	0%
1977	Critical	1%	4%	4%	3%	-16%	-1%	6%	3%	1%	0%	0%	-5%	0%
1978	Above Normal	-2%	3%	-1%	10%	0%	6%	-1%	2%	0%	0%	0%	1%	2%
1979	Below Normal	2%	1%	0%	0%	0%	0%	1%	0%	-1%	-1%	0%	0%	0%
1980	Above Normal	0%	6%	13%	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	-2%	-7%	-1%	0%	0%	0%	0%	0%	-1%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	5%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	1%	0%	0%	-24%	-5%	-1%	-3%
1987	Dry	4%	2%	2%	3%	-7%	-13%	-3%	-2%	-2%	1%	-1%	1%	-1%
1988	Critical	0%	0%	0%	0%	-9%	-1%	-1%	0%	-3%	-2%	1%	2%	-1%
1989	Dry	0%	-1%	2%	-5%	-1%	-1%	0%	0%	-1%	-2%	1%	-1%	-1%
1990	Critical	-2%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%
1993	Above Normal	2%	-4%	-1%	2%	0%	0%	0%	2%	3%	-3%	-3%	3%	0%
1994	Critical	2%	1%	0%	0%	3%	1%	0%	0%	-1%	-1%	3%	-2%	0%
Average		0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	0%	1%	1%	0%	0%	0%	0%	0%	-1%	0%	1%	0%
Below Normal		0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
Dry		2%	1%	1%	-1%	2%	1%	0%	0%	-1%	-1%	1%	0%	0%
Critical		0%	0%	0%	0%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	430	465	466	477	543	436	387	343	352	400	360	335	416
1923	Below Normal	419	431	497	474	479	467	421	376	358	327	320	362	411
1924	Critical	418	454	509	592	640	676	615	568	486	399	416	435	517
1925	Dry	501	559	566	612	636	513	449	361	376	382	371	410	478
1926	Dry	483	496	513	583	550	428	396	434	368	330	361	412	446
1927	Wet	492	433	308	335	439	435	366	338	284	285	288	343	362
1928	Above Normal	429	402	315	380	351	384	356	366	328	302	282	356	354
1929	Critical	474	488	558	583	698	616	561	513	455	423	414	448	519
1930	Dry	523	555	567	460	414	396	348	434	345	312	351	402	426
1931	Critical	495	498	541	638	679	641	570	541	534	410	413	451	534
1932	Dry	517	563	548	411	546	625	554	488	414	398	407	416	491
1933	Critical	492	499	530	577	571	555	511	485	444	436	438	450	499
1934	Critical	496	570	547	545	485	544	561	545	487	412	391	443	502
1935	Below Normal	525	531	629	558	475	449	416	358	351	300	298	374	439
1936	Below Normal	464	470	517	574	527	364	347	379	368	304	305	363	415
1937	Below Normal	441	457	512	601	535	488	360	309	342	376	335	357	426
1938	Wet	440	497	426	462	420	339	292	273	287	354	326	289	367
1939	Dry	289	305	354	503	576	597	516	446	349	336	337	409	418
1940	Above Normal	489	491	552	595	544	412	337	357	352	298	274	345	421
1941	Wet	433	451	511	477	499	374	307	289	368	433	342	312	400
1942	Wet	316	347	427	504	387	361	378	326	352	417	337	298	371
1943	Wet	302	336	321	434	354	316	322	367	408	358	318	352	349
1944	Dry	446	446	517	628	580	460	381	356	327	307	340	410	433
1945	Below Normal	492	449	421	450	515	432	394	378	343	321	334	363	407
1946	Below Normal	434	398	404	419	462	454	419	388	342	287	304	377	391
1947	Dry	470	457	482	506	528	440	384	427	314	294	345	395	420
1948	Below Normal	481	489	618	553	696	506	360	384	295	278	284	364	442
1949	Dry	434	455	513	646	643	481	395	457	361	281	352	399	451
1950	Below Normal	474	483	531	521	383	343	329	348	307	303	289	356	389
1951	Above Normal	454	399	387	389	343	357	390	324	270	280	259	353	351
1952	Wet	451	457	511	491	397	425	314	236	296	351	304	276	376
1953	Wet	296	334	393	420	466	390	359	320	271	283	277	324	344
1954	Above Normal	325	343	388	580	362	337	346	376	326	290	264	352	357
1955	Dry	468	494	489	409	452	480	479	461	363	314	330	407	429
1956	Wet	488	502	599	501	423	377	366	361	368	420	348	308	422
1957	Above Normal	299	335	379	584	554	369	330	324	299	271	269	358	364
1958	Wet	415	326	331	365	514	550	277	229	308	364	306	283	356
1959	Below Normal	291	334	410	600	458	483	477	392	323	281	275	367	391
1960	Dry	448	482	518	623	673	392	338	441	325	307	333	394	440
1961	Dry	488	506	601	574	577	416	365	433	349	294	323	400	444
1962	Below Normal	493	510	595	602	632	489	382	371	353	282	277	409	450
1963	Wet	506	335	333	333	420	381	410	357	299	293	280	337	357
1964	Dry	424	448	300	413	449	454	408	444	325	303	374	397	395
1965	Wet	479	504	461	408	364	396	404	335	331	294	307	343	385
1966	Below Normal	418	435	373	413	447	386	350	371	308	293	274	369	370
1967	Wet	494	511	586	510	400	425	369	276	303	327	296	276	398
1968	Below Normal	301	318	322	452	398	374	379	384	312	283	287	372	349
1969	Wet	492	493	457	581	424	412	309	249	249	351	321	292	386
1970	Wet	288	299	337	389	364	360	353	348	326	293	281	353	333
1971	Wet	463	413	359	334	377	369	340	321	266	264	268	312	341
1972	Below Normal	314	374	422	337	383	315	310	396	327	301	294	376	346
1973	Above Normal	500	444	341	452	511	446	408	391	365	299	300	358	401
1974	Wet	433	378	363	438	413	371	329	356	380	351	299	311	369
1975	Wet	305	320	369	430	420	346	340	352	349	387	321	302	353
1976	Critical	304	307	315	484	623	553	451	472	470	458	466	478	448
1977	Critical	536	496	595	598	714	701	602	564	544	508	449	456	564
1978	Above Normal	545	589	603	582	635	683	491	358	399	430	379	338	503
1979	Below Normal	366	419	477	565	451	356	359	358	336	314	324	373	391
1980	Above Normal	460	434	357	437	422	410	396	378	393	426	349	342	400
1981	Dry	411	430	494	617	425	405	426	383	332	332	351	404	417
1982	Wet	504	475	307	443	365	415	237	236	331	397	324	262	358
1983	Wet	225	273	390	383	333	275	296	268	246	238	227	227	282
1984	Wet	275	230	302	385	332	322	352	372	355	306	298	356	324
1985	Dry	415	401	301	318	441	466	440	407	322	320	354	431	385
1986	Wet	498	489	529	455	531	338	306	268	348	420	362	336	407
1987	Dry	375	399	497	635	593	479	421	432	350	331	352	409	439
1988	Critical	508	528	559	593	464	500	491	494	461	356	373	461	482
1989	Dry	544	567	604	567	808	526	286	384	271	297	345	403	467
1990	Critical	478	522	589	479	510	465	406	444	472	478	459	457	480
1991	Critical	540	603	656	741	775	604	442	461	435	478	489	459	557
1992	Critical	533	630	656	719	626	444	357	399	357	339	382	489	494
1993	Above Normal	557	615	645	642	551	485	355	353	370	410	354	338	473
1994	Critical	391	452	518	639	641	488	374	434	352	401	441	444	465
Average		437	447	469	507	502	446	393	383	354	343	335	371	416
Wet		409	400	410	432	412	380	335	308	320	342	306	309	364
Above Normal		449	452	443	512	482	432	380	357	345	341	309	348	404
Below Normal		422	436	481	508	489	422	379	371	333	303	300	370	401
Dry		452	473	492	531	556	472	412	424	343	321	352	406	436
Critical		472	504	548	599	619	566	495	493	458	425	428	456	505

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	430	465	466	477	543	437	387	343	352	400	360	335	416
1923	Below Normal	419	431	497	474	479	467	421	376	358	330	322	362	411
1924	Critical	418	454	523	570	739	712	639	583	492	392	413	436	531
1925	Dry	505	554	574	587	612	521	474	365	376	380	373	413	478
1926	Dry	482	496	513	582	550	427	394	433	355	322	358	413	444
1927	Wet	496	419	287	325	439	430	363	335	285	286	288	343	358
1928	Above Normal	429	403	317	382	351	384	354	365	325	302	280	360	354
1929	Critical	477	489	556	579	681	609	547	501	427	388	397	449	508
1930	Dry	526	549	560	466	415	387	340	433	342	316	348	417	425
1931	Critical	505	491	543	624	704	633	553	532	518	406	417	451	531
1932	Dry	517	561	546	410	562	654	557	489	414	398	408	417	494
1933	Critical	493	499	530	578	577	560	507	484	444	436	438	450	499
1934	Critical	496	569	547	542	484	543	560	545	487	416	393	444	502
1935	Below Normal	525	531	631	557	475	460	430	359	359	309	298	381	443
1936	Below Normal	469	473	511	546	529	364	348	379	370	308	304	366	414
1937	Below Normal	442	462	505	646	542	491	360	307	343	374	334	357	430
1938	Wet	439	499	433	465	420	339	283	272	287	354	330	290	368
1939	Dry	287	305	360	506	579	599	516	444	346	330	329	419	418
1940	Above Normal	494	492	554	593	545	415	337	356	350	296	273	345	421
1941	Wet	432	451	511	476	500	376	308	289	368	433	342	312	400
1942	Wet	316	347	427	504	387	361	378	327	350	415	334	297	370
1943	Wet	301	335	321	434	354	316	322	367	408	353	313	351	348
1944	Dry	445	445	518	604	659	474	381	356	325	302	342	396	437
1945	Below Normal	487	463	427	450	517	424	392	378	341	319	329	363	408
1946	Below Normal	433	415	429	420	468	453	417	388	338	283	302	376	394
1947	Dry	467	456	488	507	528	439	384	427	311	293	366	393	422
1948	Below Normal	474	487	617	545	689	507	360	384	304	271	289	386	443
1949	Dry	473	477	529	597	703	528	383	456	365	280	343	400	461
1950	Below Normal	481	485	547	509	374	341	334	349	305	286	285	361	388
1951	Above Normal	454	400	388	389	327	354	393	324	269	277	257	353	349
1952	Wet	450	445	479	491	397	424	313	236	296	351	304	277	372
1953	Wet	297	334	392	420	466	390	360	320	272	283	275	328	345
1954	Above Normal	326	338	349	531	355	334	344	385	318	288	261	357	349
1955	Dry	469	492	499	422	455	482	479	461	361	301	337	396	430
1956	Wet	479	499	598	501	423	375	365	361	369	420	348	309	421
1957	Above Normal	299	336	381	581	550	369	330	324	299	271	267	360	364
1958	Wet	419	333	339	368	510	547	280	228	308	365	308	284	357
1959	Below Normal	292	335	410	600	460	483	476	392	324	279	273	373	391
1960	Dry	471	502	540	569	623	384	336	440	342	304	335	392	437
1961	Dry	488	508	600	578	588	451	389	441	352	293	323	398	451
1962	Below Normal	492	512	592	612	637	490	383	372	363	286	278	412	452
1963	Wet	498	331	321	331	425	381	411	357	302	296	282	338	356
1964	Dry	426	447	300	415	452	459	408	444	325	303	380	398	396
1965	Wet	477	504	460	408	359	392	403	366	332	290	305	344	387
1966	Below Normal	418	439	377	414	439	379	349	370	306	290	273	369	369
1967	Wet	493	511	586	510	397	424	368	276	303	327	296	277	397
1968	Below Normal	301	318	322	451	398	374	379	384	311	281	286	373	348
1969	Wet	492	492	451	577	435	412	309	249	249	351	321	292	386
1970	Wet	289	299	336	389	366	360	354	347	324	292	280	354	333
1971	Wet	465	408	351	334	378	370	341	321	266	263	268	310	340
1972	Below Normal	315	375	423	337	383	311	308	396	324	298	287	378	345
1973	Above Normal	496	447	360	456	504	443	407	391	361	294	297	358	401
1974	Wet	433	378	363	438	400	364	329	356	380	352	300	311	367
1975	Wet	305	320	369	429	420	346	340	352	349	387	321	303	353
1976	Critical	304	307	315	484	624	554	448	470	456	454	465	466	446
1977	Critical	535	491	620	626	663	682	634	584	554	510	469	449	568
1978	Above Normal	533	608	592	633	637	713	499	362	400	431	380	339	511
1979	Below Normal	370	421	478	564	450	355	365	356	334	311	322	373	392
1980	Above Normal	460	445	393	444	449	414	396	379	393	426	348	342	407
1981	Dry	411	430	493	617	419	394	418	382	331	332	349	402	415
1982	Wet	502	478	308	443	364	414	237	236	331	397	324	262	358
1983	Wet	225	273	390	383	333	275	296	268	246	238	227	227	282
1984	Wet	275	230	302	385	332	322	352	372	354	305	298	355	323
1985	Dry	414	411	303	318	441	466	440	407	320	317	356	429	385
1986	Wet	497	486	525	449	530	339	305	268	349	394	351	336	402
1987	Dry	380	403	504	667	561	452	394	425	334	324	352	413	434
1988	Critical	506	528	558	590	452	478	483	492	449	346	373	466	477
1989	Dry	548	564	618	544	776	520	287	384	269	292	348	400	462
1990	Critical	472	519	592	475	507	465	408	446	474	481	459	458	480
1991	Critical	541	602	658	739	775	606	443	461	435	478	490	460	557
1992	Critical	533	630	656	719	625	443	357	399	365	343	379	485	495
1993	Above Normal	566	600	633	651	552	486	355	358	382	401	339	340	472
1994	Critical	397	456	518	635	663	502	371	433	349	396	453	432	467
Average		438	448	470	505	503	447	393	384	353	341	335	372	416
Wet		408	399	407	431	411	379	334	310	320	341	305	309	363
Above Normal		449	453	443	514	481	435	380	359	345	339	306	349	404
Below Normal		423	439	483	509	489	421	380	371	334	302	299	374	402
Dry		457	475	497	524	558	477	411	424	342	318	353	406	437
Critical		473	503	551	597	624	566	496	494	454	420	429	454	505

Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	3	1	0	0
1924	Critical	0	0	14	-22	99	36	24	15	6	-7	-3	1	14
1925	Dry	3	-6	8	-25	-24	8	25	4	0	-2	2	3	0
1926	Dry	-1	0	0	0	0	0	-2	-1	-13	-8	-3	2	-2
1927	Wet	4	-14	-21	-11	0	-5	-3	-2	1	0	0	0	-4
1928	Above Normal	0	1	3	2	0	0	-2	-1	-3	0	-2	4	0
1929	Critical	3	1	-2	-4	-17	-7	-14	-13	-28	-35	-18	1	-11
1930	Dry	3	-6	-7	7	2	-10	-8	-1	-3	4	-3	14	-1
1931	Critical	11	-7	2	-14	25	-8	-17	-10	-17	-4	3	0	-3
1932	Dry	0	-2	-2	0	16	29	4	0	0	0	0	1	4
1933	Critical	0	0	0	1	6	5	-4	-1	0	0	0	0	1
1934	Critical	0	-1	0	-3	-1	-1	0	0	0	4	3	0	0
1935	Below Normal	0	0	2	-1	0	11	14	1	9	9	0	7	4
1936	Below Normal	4	2	-6	-27	1	1	1	0	2	4	-1	3	-1
1937	Below Normal	1	5	-8	46	7	2	0	-2	1	-2	-1	1	4
1938	Wet	-1	3	7	3	0	0	-10	-1	0	0	5	1	1
1939	Dry	-2	0	5	3	2	2	0	-1	-4	-5	-8	10	0
1940	Above Normal	4	1	2	-1	1	3	0	0	-2	-2	-1	-1	0
1941	Wet	-1	-1	0	-1	0	1	0	0	0	0	-1	0	0
1942	Wet	-1	0	0	0	0	0	0	0	-1	-2	-3	-1	-1
1943	Wet	0	-1	0	0	0	0	0	0	-1	-5	-5	-1	-1
1944	Dry	-1	-1	0	-24	79	14	0	0	-2	-5	2	-14	4
1945	Below Normal	-5	14	6	1	2	-7	-2	0	-2	-2	-4	0	0
1946	Below Normal	-1	17	25	1	6	-1	-3	-1	-4	-3	-2	0	3
1947	Dry	-3	-1	7	2	0	-1	0	0	-2	-1	21	-1	2
1948	Below Normal	-7	-3	-1	-8	-7	1	0	0	8	-7	5	23	0
1949	Dry	39	22	16	-48	61	47	-12	-1	4	0	-9	1	10
1950	Below Normal	6	2	15	-12	-9	-1	5	1	-2	-17	-4	4	-1
1951	Above Normal	0	1	0	0	-16	-4	4	0	-1	-3	-2	0	-2
1952	Wet	-1	-12	-32	0	0	0	-1	0	0	0	0	0	-4
1953	Wet	0	0	-1	0	0	0	0	0	1	0	-2	4	0
1954	Above Normal	1	-5	-39	-49	-7	-3	-2	9	-9	-1	-3	5	-9
1955	Dry	1	-1	10	13	3	2	0	0	-3	-13	7	-11	1
1956	Wet	-9	-3	-1	0	0	-1	-1	0	1	0	0	2	-1
1957	Above Normal	1	1	1	-3	-4	0	0	0	0	0	-1	2	0
1958	Wet	4	7	8	2	-5	-3	3	-1	0	1	1	1	2
1959	Below Normal	0	1	1	0	2	0	-1	0	1	-2	-2	7	1
1960	Dry	23	20	22	-54	-51	-9	-2	0	17	-2	2	-2	-3
1961	Dry	0	1	-1	4	11	34	23	8	3	-1	0	-3	7
1962	Below Normal	-1	2	-3	9	5	1	1	1	11	4	1	4	3
1963	Wet	-8	-4	-13	-2	5	0	0	0	3	3	2	1	-1
1964	Dry	1	0	0	1	3	4	0	0	0	0	6	1	1
1965	Wet	-1	0	-1	0	-4	-4	-2	31	1	-4	-2	1	1
1966	Below Normal	0	4	3	1	-7	-7	-1	-1	-2	-2	-1	0	-1
1967	Wet	0	0	1	1	-3	-1	-1	0	0	0	0	0	0
1968	Below Normal	0	0	0	-1	0	0	0	0	-2	-2	-1	1	0
1969	Wet	0	-1	-6	-4	12	0	-1	0	0	0	0	0	0
1970	Wet	1	0	-1	0	2	0	1	-1	-2	-1	-1	1	0
1971	Wet	2	-5	-8	0	2	1	0	0	0	-1	-1	-2	-1
1972	Below Normal	1	1	1	0	0	-4	-2	0	-4	-3	-6	2	-1
1973	Above Normal	-4	3	19	4	-7	-3	0	0	-4	-5	-4	-1	0
1974	Wet	0	0	0	0	-13	-7	0	0	0	1	0	0	-1
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	0	1	1	-3	-2	-14	-5	-1	-12	-3
1977	Critical	-1	-5	25	27	-52	-19	32	20	10	2	20	-7	4
1978	Above Normal	-13	19	-12	51	1	30	8	4	1	1	1	2	8
1979	Below Normal	4	2	1	-1	-1	0	7	-2	-1	-3	-2	0	0
1980	Above Normal	0	11	36	7	27	4	0	1	0	0	-1	-1	7
1981	Dry	0	0	0	0	-6	-11	-8	-1	-1	1	-1	-2	-3
1982	Wet	-1	3	1	0	-2	-1	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	-1	-1	-1	-2	0
1985	Dry	-1	10	2	0	1	0	0	0	-2	-3	2	-2	1
1986	Wet	-1	-4	-4	-5	-1	1	0	0	1	-25	-12	0	-4
1987	Dry	5	4	7	32	-31	-27	-27	-6	-16	-7	1	4	-5
1988	Critical	-2	0	-1	-3	-11	-23	-9	-2	-11	-9	0	5	-5
1989	Dry	4	-3	13	-24	-33	-7	0	0	-2	-5	2	-3	-5
1990	Critical	-6	-3	2	-4	-3	1	2	2	2	3	0	1	0
1991	Critical	1	-1	2	-3	0	2	1	0	0	0	1	1	0
1992	Critical	0	0	0	0	-1	0	-1	0	8	3	-3	-3	0
1993	Above Normal	9	-15	-12	9	0	0	0	6	12	-9	-15	2	-1
1994	Critical	5	4	-1	-4	22	14	-3	-1	-4	-5	12	-12	2
Average		1	1	1	-2	1	1	0	1	-1	-2	0	1	0
Wet		-1	-2	-3	-1	0	-1	-1	1	0	-2	-1	0	-1
Above Normal		0	2	0	2	0	3	1	2	-1	-2	-3	1	0
Below Normal		0	3	3	1	0	0	1	0	1	-2	-1	4	1
Dry		4	2	5	-7	2	5	0	0	-1	-3	1	0	1
Critical		1	-1	4	-2	6	0	1	1	-4	-4	1	-2	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1924	Critical	0%	0%	3%	-4%	16%	5%	4%	3%	1%	-2%	-1%	0%	2%
1925	Dry	1%	-1%	1%	-4%	-4%	1%	5%	1%	0%	0%	0%	1%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-3%	-2%	-1%	0%	-1%
1927	Wet	1%	-3%	-7%	-3%	0%	-1%	-1%	-1%	0%	0%	0%	0%	-1%
1928	Above Normal	0%	0%	1%	1%	0%	0%	0%	0%	-1%	0%	-1%	1%	0%
1929	Critical	1%	0%	0%	-1%	-2%	-1%	-2%	0%	-6%	-8%	-4%	0%	-2%
1930	Dry	1%	-1%	-1%	1%	0%	-2%	-2%	0%	-1%	1%	-1%	4%	0%
1931	Critical	2%	-1%	0%	-2%	4%	-1%	-3%	-2%	-3%	-1%	1%	0%	-1%
1932	Dry	0%	0%	0%	0%	3%	5%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	1%	1%	-1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	2%	3%	0%	2%	3%	0%	2%	1%
1936	Below Normal	1%	0%	-1%	-5%	0%	0%	0%	0%	1%	1%	0%	1%	0%
1937	Below Normal	0%	1%	-1%	8%	1%	0%	0%	-1%	0%	0%	0%	0%	1%
1938	Wet	0%	1%	2%	1%	0%	0%	-3%	0%	0%	0%	1%	0%	0%
1939	Dry	-1%	0%	2%	1%	0%	0%	0%	0%	-1%	-2%	-2%	2%	0%
1940	Above Normal	1%	0%	0%	0%	0%	1%	0%	0%	-1%	-1%	-1%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	0%
1944	Dry	0%	0%	0%	-4%	14%	3%	0%	0%	-1%	-2%	1%	-3%	1%
1945	Below Normal	-1%	3%	1%	0%	0%	-2%	0%	0%	0%	-1%	-1%	0%	0%
1946	Below Normal	0%	4%	6%	0%	1%	0%	-1%	0%	-1%	-1%	-1%	0%	1%
1947	Dry	-1%	0%	1%	0%	0%	0%	0%	0%	-1%	0%	6%	0%	0%
1948	Below Normal	-1%	-1%	0%	-1%	-1%	0%	0%	0%	3%	-2%	2%	6%	0%
1949	Dry	9%	5%	3%	-7%	9%	10%	-3%	0%	1%	0%	-3%	0%	2%
1950	Below Normal	1%	0%	3%	-2%	-2%	0%	1%	0%	-1%	-6%	-2%	1%	0%
1951	Above Normal	0%	0%	0%	0%	-5%	-1%	1%	0%	0%	-1%	-1%	0%	-1%
1952	Wet	0%	-3%	-6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1954	Above Normal	0%	-1%	-10%	-9%	-2%	-1%	0%	3%	-3%	0%	-1%	1%	-2%
1955	Dry	0%	0%	2%	3%	1%	0%	0%	0%	-1%	-4%	2%	-3%	0%
1956	Wet	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	1%	0%
1958	Wet	1%	2%	2%	1%	-1%	-1%	1%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	2%	0%
1960	Dry	5%	4%	4%	-9%	-8%	-2%	-1%	0%	5%	-1%	1%	0%	0%
1961	Dry	0%	0%	0%	1%	2%	8%	6%	2%	1%	0%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	2%	1%	0%	0%	0%	3%	1%	0%	1%	1%
1963	Wet	-2%	-1%	-4%	-1%	1%	0%	0%	0%	1%	1%	1%	0%	0%
1964	Dry	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	2%	0%	0%
1965	Wet	0%	0%	0%	0%	-1%	-1%	0%	9%	0%	-1%	-1%	0%	0%
1966	Below Normal	0%	1%	1%	0%	-2%	-2%	0%	0%	-1%	-1%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1969	Wet	0%	0%	-1%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1971	Wet	0%	-1%	-2%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%	0%
1972	Below Normal	0%	0%	0%	0%	0%	-1%	-1%	0%	-1%	-1%	-2%	0%	0%
1973	Above Normal	-1%	1%	6%	1%	-1%	-1%	0%	0%	-1%	-2%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-3%	-2%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	0%	-3%	-1%	0%	-2%	-1%
1977	Critical	0%	-1%	4%	5%	-7%	-3%	5%	4%	2%	0%	4%	-2%	1%
1978	Above Normal	-2%	3%	-2%	9%	0%	4%	2%	1%	0%	0%	0%	0%	1%
1979	Below Normal	1%	0%	0%	0%	0%	0%	2%	-1%	0%	-1%	-1%	0%	0%
1980	Above Normal	0%	3%	10%	2%	6%	1%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	-1%	-3%	-2%	0%	0%	0%	0%	0%	-1%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	2%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	0%	0%
1986	Wet	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%	-6%	-3%	0%	-1%
1987	Dry	1%	1%	1%	5%	-5%	-6%	-6%	-1%	-5%	-2%	0%	1%	-1%
1988	Critical	0%	0%	0%	0%	-2%	-5%	-2%	0%	-2%	-3%	0%	1%	-1%
1989	Dry	1%	-1%	2%	-4%	-4%	-1%	0%	0%	-1%	-2%	1%	-1%	-1%
1990	Critical	-1%	-1%	0%	-1%	-1%	0%	0%	1%	0%	1%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	-1%	-1%	0%
1993	Above Normal	2%	-3%	-2%	1%	0%	0%	0%	2%	3%	-2%	-4%	1%	0%
1994	Critical	1%	1%	0%	-1%	3%	3%	-1%	0%	-1%	-1%	3%	-3%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	-1%	0%	0%
Below Normal		0%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	1%	0%
Dry		1%	1%	1%	-1%	1%	1%	0%	0%	0%	-1%	0%	0%	0%
Critical		0%	0%	1%	0%	1%	0%	0%	0%	-1%	-1%	0%	0%	0%

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	115	117	131	128	123	85	56	52	52	70	56	77	89
1923	Below Normal	111	111	118	94	88	105	62	57	61	50	56	86	83
1924	Critical	109	123	151	166	186	228	139	115	116	97	108	112	137
1925	Dry	142	151	164	180	164	129	70	58	70	66	72	106	114
1926	Dry	135	130	155	172	155	117	75	86	69	68	90	107	113
1927	Wet	144	102	84	91	110	108	61	53	47	41	45	81	81
1928	Above Normal	114	90	88	102	100	71	58	62	50	45	45	87	76
1929	Critical	136	139	167	165	196	200	133	98	91	82	97	117	135
1930	Dry	144	150	168	130	118	110	81	85	57	62	81	106	108
1931	Critical	142	130	162	182	192	180	136	114	117	90	106	118	139
1932	Dry	143	155	146	108	132	185	109	90	74	92	76	105	118
1933	Critical	133	123	153	172	176	177	127	93	93	85	94	109	128
1934	Critical	135	156	159	155	172	218	138	108	95	75	94	119	135
1935	Below Normal	148	152	179	143	141	111	66	70	65	64	62	96	108
1936	Below Normal	127	122	158	154	107	53	54	66	63	52	58	89	92
1937	Below Normal	118	120	150	163	85	83	41	36	74	90	57	84	92
1938	Wet	119	124	83	94	73	52	30	28	30	58	45	42	65
1939	Dry	42	51	102	135	145	142	92	67	58	67	79	108	91
1940	Above Normal	142	132	161	148	127	55	47	61	59	47	43	83	92
1941	Wet	116	127	130	103	83	47	32	32	69	74	54	61	77
1942	Wet	51	71	107	86	46	61	46	37	64	71	49	48	61
1943	Wet	42	50	72	61	38	43	40	62	73	56	51	83	56
1944	Dry	124	118	150	170	147	106	67	62	60	58	77	111	104
1945	Below Normal	140	117	120	120	96	58	63	56	54	52	57	87	85
1946	Below Normal	115	93	80	84	80	79	65	59	56	44	57	97	76
1947	Dry	133	122	133	129	137	123	82	73	56	55	84	102	102
1948	Below Normal	137	137	174	160	183	137	77	69	49	37	49	91	108
1949	Dry	110	115	153	181	172	129	83	92	60	49	84	102	111
1950	Below Normal	129	125	150	144	114	99	60	59	53	49	48	89	93
1951	Above Normal	128	85	65	54	36	64	58	31	41	47	41	90	62
1952	Wet	123	128	137	110	86	72	24	15	39	56	40	37	72
1953	Wet	38	58	103	88	94	103	51	43	39	37	44	71	64
1954	Above Normal	60	69	114	151	101	100	75	72	51	45	42	88	81
1955	Dry	134	144	137	102	114	149	104	85	58	52	75	107	105
1956	Wet	133	141	145	78	59	58	57	57	65	72	55	53	81
1957	Above Normal	40	49	109	163	151	111	53	44	45	38	43	92	78
1958	Wet	101	59	93	94	125	101	19	11	48	61	43	40	66
1959	Below Normal	39	61	128	153	104	107	79	64	55	46	51	93	82
1960	Dry	123	130	154	180	184	107	79	87	51	59	77	105	111
1961	Dry	143	149	180	165	168	116	81	78	52	52	77	110	114
1962	Below Normal	146	149	178	169	147	104	71	65	57	46	54	115	108
1963	Wet	127	55	93	95	110	98	66	50	50	42	43	81	76
1964	Dry	113	109	83	116	123	141	88	78	56	60	94	102	97
1965	Wet	136	148	119	79	56	76	55	51	51	43	48	78	78
1966	Below Normal	108	99	84	90	88	97	68	69	49	52	47	96	79
1967	Wet	144	149	150	125	107	79	37	21	39	42	39	36	81
1968	Below Normal	38	49	92	118	93	106	70	62	51	46	51	94	72
1969	Wet	141	136	127	135	74	66	38	25	27	58	46	45	76
1970	Wet	42	52	78	41	53	55	50	58	49	45	42	86	54
1971	Wet	130	96	97	84	99	95	49	46	37	33	45	63	73
1972	Below Normal	53	84	121	93	112	94	69	75	55	50	52	97	80
1973	Above Normal	149	108	90	124	123	92	70	72	63	43	51	85	89
1974	Wet	119	72	82	85	84	46	52	61	69	56	52	56	69
1975	Wet	40	51	103	108	58	45	55	54	66	62	52	54	62
1976	Critical	39	42	89	136	177	149	105	89	105	117	125	137	109
1977	Critical	160	136	176	168	222	215	141	118	123	120	110	127	151
1978	Above Normal	161	168	181	141	142	138	66	46	69	79	60	68	110
1979	Below Normal	81	110	147	137	63	46	59	45	51	45	55	92	78
1980	Above Normal	131	111	99	75	59	65	60	59	63	74	56	80	78
1981	Dry	103	107	146	153	110	105	76	62	56	67	78	108	98
1982	Wet	151	116	79	110	40	47	20	17	56	65	45	27	65
1983	Wet	13	31	61	71	53	39	40	31	27	21	13	20	35
1984	Wet	37	14	44	49	25	51	57	61	61	47	48	82	48
1985	Dry	105	83	76	84	119	115	85	68	53	66	82	119	88
1986	Wet	144	134	153	122	95	48	26	23	63	93	60	70	86
1987	Dry	81	94	146	171	168	126	84	73	58	66	88	108	105
1988	Critical	149	150	167	155	135	211	107	95	81	62	88	126	127
1989	Dry	153	162	173	169	258	133	57	60	35	57	85	106	121
1990	Critical	139	152	174	141	141	125	102	94	91	108	116	121	125
1991	Critical	157	167	178	206	245	156	117	86	81	108	114	116	144
1992	Critical	157	179	183	210	171	115	81	65	59	57	95	145	127
1993	Above Normal	163	177	193	150	132	119	74	75	77	72	55	75	113
1994	Critical	96	119	162	190	175	113	79	83	60	106	122	126	119
Average		113	111	129	128	120	105	70	63	61	62	65	89	93
Wet		100	91	102	91	75	66	43	40	51	54	46	58	68
Above Normal		120	111	123	124	109	90	62	57	57	56	49	82	87
Below Normal		106	109	134	130	107	91	65	61	57	52	54	93	88
Dry		120	123	142	147	151	127	82	75	58	62	81	107	106
Critical		129	135	160	171	182	174	117	97	93	92	106	123	132

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	115	117	131	128	123	85	56	52	52	70	56	77	89
1923	Below Normal	111	111	118	94	88	105	62	57	61	51	56	85	83
1924	Critical	109	126	154	166	204	228	146	119	116	96	108	115	141
1925	Dry	143	150	166	172	161	157	73	58	69	65	72	105	116
1926	Dry	134	130	155	172	155	114	75	85	64	66	87	109	112
1927	Wet	145	95	77	89	110	106	61	53	48	41	45	82	79
1928	Above Normal	114	91	89	103	100	71	58	62	49	45	46	89	76
1929	Critical	137	140	167	163	192	199	120	93	80	73	93	119	131
1930	Dry	144	145	166	132	118	103	80	85	56	59	82	113	107
1931	Critical	145	127	160	180	185	178	132	111	115	90	108	118	137
1932	Dry	142	153	146	107	157	184	110	90	75	92	76	105	120
1933	Critical	133	123	158	175	186	177	126	92	93	85	94	109	129
1934	Critical	135	156	159	154	172	218	138	108	95	76	95	119	135
1935	Below Normal	148	153	179	143	141	116	67	70	67	68	62	98	109
1936	Below Normal	128	123	155	147	108	53	55	66	63	55	58	91	92
1937	Below Normal	118	118	149	174	86	83	41	36	74	89	57	85	92
1938	Wet	118	125	84	95	73	52	30	28	30	58	45	42	65
1939	Dry	42	52	104	136	145	143	92	67	58	65	76	114	91
1940	Above Normal	144	133	162	147	127	56	47	61	59	47	43	83	92
1941	Wet	116	126	130	103	83	47	32	32	69	74	54	61	77
1942	Wet	51	72	107	86	46	61	46	37	64	70	49	47	61
1943	Wet	42	50	72	61	38	43	40	62	73	55	50	83	56
1944	Dry	124	119	149	168	167	110	67	62	58	55	76	105	105
1945	Below Normal	140	124	121	121	97	57	62	56	54	52	56	88	86
1946	Below Normal	115	105	87	84	82	78	65	59	55	44	57	97	77
1947	Dry	130	122	135	129	138	121	82	73	55	56	90	100	103
1948	Below Normal	134	136	173	157	181	137	77	69	50	38	55	102	109
1949	Dry	130	128	156	170	200	139	82	92	61	47	80	104	116
1950	Below Normal	135	130	154	139	112	99	61	59	53	42	49	91	94
1951	Above Normal	127	85	65	54	34	64	59	31	41	47	41	90	62
1952	Wet	123	120	128	110	86	72	24	15	39	56	40	37	71
1953	Wet	38	58	103	88	94	103	51	43	40	37	45	73	64
1954	Above Normal	60	66	100	139	100	99	75	73	50	43	42	90	78
1955	Dry	133	144	140	106	114	148	104	84	57	51	78	100	105
1956	Wet	128	139	145	78	59	57	57	57	65	72	55	53	81
1957	Above Normal	40	49	109	162	150	111	53	44	45	37	43	93	78
1958	Wet	103	63	95	95	124	100	20	11	48	61	43	40	67
1959	Below Normal	39	61	128	153	104	107	79	64	53	47	52	96	82
1960	Dry	136	145	161	161	173	105	78	87	53	57	80	104	112
1961	Dry	143	150	180	166	171	139	86	79	52	52	77	108	117
1962	Below Normal	146	149	178	172	148	104	71	65	59	46	55	116	109
1963	Wet	124	53	89	95	111	98	66	50	50	42	43	82	75
1964	Dry	114	109	83	117	125	143	87	78	55	60	96	102	98
1965	Wet	135	148	119	79	56	75	54	52	52	42	48	79	78
1966	Below Normal	108	102	85	90	87	96	68	69	49	51	47	96	79
1967	Wet	144	150	150	126	106	79	37	21	39	42	39	36	81
1968	Below Normal	38	49	92	118	93	105	70	62	50	45	51	95	72
1969	Wet	141	136	124	135	74	66	38	25	27	58	46	45	76
1970	Wet	42	52	78	41	53	55	51	58	48	46	42	87	54
1971	Wet	131	93	95	84	99	95	49	46	37	33	44	62	72
1972	Below Normal	54	85	121	93	112	95	69	75	56	49	52	98	80
1973	Above Normal	147	110	96	125	122	92	70	72	62	42	50	85	89
1974	Wet	119	72	82	85	83	46	52	61	69	56	52	56	69
1975	Wet	40	51	104	108	58	45	55	54	66	62	52	54	62
1976	Critical	40	42	89	136	177	150	103	89	104	118	127	133	109
1977	Critical	161	141	184	174	180	211	150	122	125	119	111	119	150
1978	Above Normal	158	174	180	153	143	148	67	47	69	79	60	68	112
1979	Below Normal	83	111	147	137	63	46	59	45	51	45	55	92	78
1980	Above Normal	130	119	111	75	59	65	60	59	63	74	56	80	79
1981	Dry	103	107	146	153	109	101	75	62	57	67	78	107	97
1982	Wet	151	117	79	110	40	47	20	17	56	65	45	27	65
1983	Wet	13	31	61	71	54	39	40	31	27	21	13	20	35
1984	Wet	37	14	44	49	25	51	57	61	60	47	48	82	48
1985	Dry	105	88	76	85	119	115	85	68	53	66	83	117	88
1986	Wet	144	133	151	120	95	48	27	23	64	67	56	69	83
1987	Dry	85	97	150	177	160	120	80	72	58	66	86	110	105
1988	Critical	149	150	167	155	121	210	106	94	77	59	89	129	125
1989	Dry	154	161	176	161	256	131	57	60	35	55	87	104	120
1990	Critical	136	151	174	140	142	125	102	94	91	108	116	121	125
1991	Critical	158	167	179	206	245	156	118	86	81	108	113	116	144
1992	Critical	157	179	183	210	171	115	81	66	60	58	94	144	127
1993	Above Normal	165	168	191	152	132	119	74	76	78	71	54	77	113
1994	Critical	99	121	161	189	183	115	78	83	59	105	126	122	120
Average		114	112	130	128	120	106	70	63	61	61	66	90	93
Wet		99	90	101	91	75	66	43	40	51	53	45	58	68
Above Normal		120	111	123	124	109	91	62	58	57	56	49	83	87
Below Normal		107	111	135	130	107	91	65	61	57	52	54	95	89
Dry		123	125	143	145	154	129	82	75	57	61	82	107	107
Critical		130	135	161	171	180	174	117	96	91	91	106	122	131

Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1924	Critical	0	3	3	0	18	0	6	4	0	-1	1	3	3
1925	Dry	1	-1	2	-8	-3	27	3	0	-1	-1	0	-1	2
1926	Dry	-1	0	0	0	0	-3	0	0	-5	-1	-3	2	-1
1927	Wet	2	-7	-7	-3	0	-2	0	0	0	0	0	0	-1
1928	Above Normal	0	0	1	0	0	0	0	0	-1	-1	0	2	0
1929	Critical	1	1	0	-2	-4	-1	-13	-5	-11	-9	-5	2	-4
1930	Dry	0	-5	-2	2	0	-8	-1	0	-2	-3	1	8	-1
1931	Critical	3	-3	-2	-2	-7	-2	-4	-3	-2	0	2	0	-2
1932	Dry	0	-1	0	0	25	-1	0	0	0	0	0	0	2
1933	Critical	0	0	5	3	10	0	-1	0	0	0	0	0	1
1934	Critical	0	0	0	-1	0	0	0	0	0	2	1	0	0
1935	Below Normal	0	0	0	0	0	5	2	0	1	4	0	3	1
1936	Below Normal	1	1	-3	-7	0	0	0	0	0	4	-1	2	0
1937	Below Normal	0	-2	-1	12	1	0	0	0	0	-1	0	0	1
1938	Wet	-1	1	1	1	0	0	0	0	0	0	0	0	0
1939	Dry	0	1	2	1	0	1	0	0	0	-1	-4	6	0
1940	Above Normal	2	1	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	-1	0	0	0
1944	Dry	0	1	-1	-2	21	3	0	0	-2	-3	-1	-6	1
1945	Below Normal	0	7	2	1	1	-1	-1	0	0	0	-1	1	1
1946	Below Normal	-1	13	7	0	2	-1	0	0	-1	0	0	0	2
1947	Dry	-2	0	2	0	0	-2	0	0	-1	1	7	-2	0
1948	Below Normal	-3	-1	0	-2	-1	0	0	0	1	1	5	10	1
1949	Dry	20	13	2	-10	28	10	0	0	1	-2	-3	2	5
1950	Below Normal	5	4	4	-5	-2	0	0	0	0	-7	1	2	0
1951	Above Normal	-1	1	0	0	-2	-1	1	0	0	1	0	0	0
1952	Wet	-1	-7	-9	0	0	0	0	0	0	0	0	0	-1
1953	Wet	0	0	0	0	0	0	0	0	0	0	1	2	0
1954	Above Normal	1	-4	-14	-12	-1	-1	0	1	-1	-2	0	2	-3
1955	Dry	-1	-1	4	4	1	0	0	0	-1	-1	3	-6	0
1956	Wet	-5	-2	0	0	0	0	0	0	0	0	0	1	-1
1957	Above Normal	0	0	0	-1	-1	0	0	0	0	-1	0	1	0
1958	Wet	2	4	2	0	-1	0	0	0	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	0	0	-2	0	0	4	0
1960	Dry	14	15	7	-20	-11	-2	0	0	2	-2	3	-1	0
1961	Dry	0	0	0	1	3	23	4	2	0	0	0	-1	3
1962	Below Normal	0	0	0	3	1	0	0	0	2	0	1	1	1
1963	Wet	-3	-1	-4	0	1	0	0	0	0	0	0	0	0
1964	Dry	1	0	0	0	3	1	-1	0	-1	0	2	0	0
1965	Wet	-1	0	0	0	-1	-1	0	1	0	-1	0	0	0
1966	Below Normal	0	2	1	0	-1	-1	0	0	0	-1	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	-2	-1	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	1	0	1	0
1971	Wet	1	-3	-3	0	0	0	0	0	0	0	-1	-1	-1
1972	Below Normal	1	1	0	0	0	1	0	0	1	-1	0	2	0
1973	Above Normal	-2	2	5	1	-1	-1	0	0	0	-1	-1	0	0
1974	Wet	0	0	0	0	-1	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-3	-1	-2	1	1	-4	-1
1977	Critical	1	5	8	6	-42	-4	9	4	2	0	1	-9	-2
1978	Above Normal	-3	5	-1	12	0	10	1	1	0	0	0	1	2
1979	Below Normal	2	1	0	0	0	0	1	0	0	0	0	0	0
1980	Above Normal	0	8	12	1	0	0	0	0	0	0	0	0	2
1981	Dry	0	0	0	0	-1	-4	-1	0	0	0	0	-1	-1
1982	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	5	0	0	0	0	0	0	-1	-1	1	-1	0
1986	Wet	0	-1	-2	-2	0	0	1	0	0	-26	-4	-1	-3
1987	Dry	4	2	4	6	-8	-6	-4	-2	-1	0	-2	2	0
1988	Critical	-1	0	0	-1	-14	-1	-1	0	-4	-2	0	3	-2
1989	Dry	1	-1	3	-9	-2	-1	0	0	-1	-2	2	-2	-1
1990	Critical	-3	-1	0	-1	0	0	0	0	0	1	0	0	0
1991	Critical	0	0	0	-1	0	1	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	1	1	-2	0	0
1993	Above Normal	3	-9	-2	2	0	0	0	1	1	-1	-2	2	0
1994	Critical	3	2	-1	-1	7	2	0	0	-1	-1	4	-4	1
Average		1	1	0	0	0	1	0	0	0	-1	0	0	0
Wet		0	-1	-1	0	0	0	0	0	0	-1	0	0	0
Above Normal		0	1	0	0	-1	1	0	0	0	-1	0	1	0
Below Normal		0	2	1	0	0	0	0	0	0	0	0	2	0
Dry		2	2	1	-2	3	2	0	0	-1	-1	0	0	1
Critical		0	0	1	0	-3	0	-1	0	-1	-1	0	-1	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
1924	Critical	0%	2%	2%	0%	10%	0%	4%	3%	0%	-1%	1%	2%	2%
1925	Dry	0%	0%	1%	-4%	-2%	21%	4%	0%	-1%	-1%	-1%	-1%	1%
1926	Dry	-1%	0%	0%	0%	0%	-2%	0%	-1%	-8%	-2%	-3%	2%	-1%
1927	Wet	1%	-7%	-9%	-3%	0%	-1%	0%	0%	0%	0%	0%	0%	-2%
1928	Above Normal	0%	1%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	3%	0%
1929	Critical	1%	0%	0%	-1%	-2%	0%	-10%	-5%	-12%	-11%	-5%	2%	-4%
1930	Dry	0%	-3%	-1%	1%	0%	-7%	-1%	0%	-3%	-5%	1%	7%	-1%
1931	Critical	2%	-3%	-1%	-1%	-4%	-1%	-3%	-2%	-2%	0%	1%	0%	-1%
1932	Dry	0%	-1%	0%	0%	19%	0%	0%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	3%	2%	6%	0%	-1%	0%	0%	0%	0%	0%	1%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	4%	3%	0%	2%	6%	0%	3%	2%
1936	Below Normal	1%	1%	-2%	-5%	0%	0%	0%	0%	0%	8%	-1%	2%	0%
1937	Below Normal	0%	-1%	-1%	7%	1%	0%	0%	1%	0%	-1%	0%	1%	1%
1938	Wet	-1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1939	Dry	0%	2%	2%	1%	0%	1%	0%	-1%	-1%	-2%	-5%	5%	0%
1940	Above Normal	1%	1%	0%	0%	0%	1%	0%	0%	0%	-1%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1944	Dry	0%	1%	-1%	-1%	14%	3%	0%	0%	-3%	-5%	-1%	-6%	0%
1945	Below Normal	0%	6%	2%	1%	1%	-1%	-1%	0%	-1%	0%	-2%	1%	0%
1946	Below Normal	-1%	14%	9%	0%	2%	-1%	0%	0%	-1%	0%	-1%	0%	2%
1947	Dry	-2%	0%	2%	0%	0%	-1%	0%	0%	-2%	2%	8%	-2%	0%
1948	Below Normal	-2%	-1%	0%	-1%	-1%	0%	0%	0%	2%	2%	11%	11%	2%
1949	Dry	18%	11%	1%	-6%	16%	8%	0%	0%	1%	-4%	-4%	2%	4%
1950	Below Normal	4%	3%	2%	-3%	-2%	0%	1%	0%	0%	-15%	2%	2%	0%
1951	Above Normal	0%	1%	0%	0%	-5%	-1%	2%	0%	0%	1%	-1%	0%	0%
1952	Wet	-1%	-6%	-6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	-5%	-12%	-8%	-1%	-1%	0%	1%	-2%	-5%	1%	2%	-2%
1955	Dry	0%	-1%	3%	3%	1%	0%	0%	0%	-2%	-2%	4%	-6%	0%
1956	Wet	-4%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%
1957	Above Normal	0%	0%	0%	0%	-1%	0%	0%	0%	0%	-2%	1%	1%	0%
1958	Wet	2%	6%	2%	0%	-1%	0%	2%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-4%	1%	1%	4%	0%
1960	Dry	11%	12%	4%	-11%	-6%	-2%	-1%	0%	4%	-3%	3%	-1%	1%
1961	Dry	0%	0%	0%	0%	2%	20%	5%	2%	0%	-1%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	2%	0%	0%	0%	0%	3%	1%	2%	1%	1%
1963	Wet	-2%	-2%	-4%	0%	1%	0%	0%	0%	1%	1%	1%	0%	0%
1964	Dry	0%	0%	0%	0%	2%	1%	-1%	0%	-2%	0%	2%	0%	0%
1965	Wet	-1%	0%	0%	0%	-1%	-1%	0%	1%	0%	-1%	0%	1%	0%
1966	Below Normal	0%	2%	1%	0%	-1%	-1%	0%	0%	-1%	-2%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1969	Wet	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	1%	0%	-1%	2%	0%	1%	0%
1971	Wet	1%	-3%	-3%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	-1%
1972	Below Normal	1%	1%	0%	0%	0%	1%	0%	0%	2%	-1%	0%	2%	0%
1973	Above Normal	-2%	2%	6%	1%	-1%	-1%	0%	0%	-1%	-2%	-1%	0%	0%
1974	Wet	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-2%	-1%	-1%	1%	1%	-3%	0%
1977	Critical	1%	4%	5%	3%	-19%	-2%	7%	4%	2%	0%	1%	-7%	0%
1978	Above Normal	-2%	3%	-1%	9%	0%	7%	1%	1%	0%	0%	0%	1%	2%
1979	Below Normal	3%	1%	0%	0%	0%	0%	1%	0%	-1%	-1%	0%	0%	0%
1980	Above Normal	0%	7%	12%	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	-1%	-4%	-1%	0%	1%	1%	0%	-1%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	6%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1986	Wet	0%	-1%	-1%	-1%	0%	-1%	2%	0%	1%	-28%	-7%	-1%	-3%
1987	Dry	5%	2%	3%	4%	-5%	-4%	-5%	-2%	-1%	0%	-2%	2%	0%
1988	Critical	0%	0%	0%	0%	-11%	-1%	-1%	0%	-4%	-4%	0%	2%	-2%
1989	Dry	1%	-1%	2%	-5%	-1%	-1%	0%	0%	-2%	-3%	2%	-2%	-1%
1990	Critical	-2%	-1%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	-2%	0%	0%
1993	Above Normal	2%	-5%	-1%	2%	0%	0%	0%	2%	2%	-2%	-3%	3%	0%
1994	Critical	3%	1%	0%	-1%	4%	2%	-1%	0%	-1%	-1%	4%	-3%	1%
Average		1%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	0%	1%	0%	-1%	1%	0%	0%	0%	-1%	0%	1%	0%
Below Normal		0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	1%	2%	1%
Dry		2%	2%	1%	-1%	3%	2%	0%	0%	-1%	-2%	0%	0%	0%
Critical		0%	0%	1%	0%	-1%	0%	-1%	0%	-1%	-1%	0%	-1%	0%

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	178	167	164	133	124	59	64	59	51	54	53	117	102
1923	Below Normal	176	168	170	85	63	55	66	68	42	48	69	129	95
1924	Critical	174	194	213	223	176	135	135	104	151	131	151	174	163
1925	Dry	229	242	231	236	199	58	52	57	47	52	86	156	137
1926	Dry	216	197	224	235	171	59	55	67	56	81	109	156	135
1927	Wet	226	149	61	61	80	49	54	66	37	39	54	122	83
1928	Above Normal	180	145	72	95	62	49	64	64	44	51	59	132	85
1929	Critical	213	219	249	216	243	138	106	90	83	96	134	180	164
1930	Dry	231	230	240	152	74	50	61	61	55	81	107	163	125
1931	Critical	223	190	221	243	194	118	107	110	145	118	153	185	167
1932	Dry	226	236	219	103	106	75	85	94	53	55	87	154	124
1933	Critical	214	179	200	188	132	92	74	75	89	97	126	158	135
1934	Critical	212	247	219	190	99	88	85	82	85	84	124	189	142
1935	Below Normal	236	227	255	176	77	47	47	80	47	42	74	143	121
1936	Below Normal	202	182	224	201	110	67	64	68	44	44	72	135	118
1937	Below Normal	190	185	211	220	202	133	99	69	46	46	65	125	133
1938	Wet	187	191	61	49	171	141	104	75	69	54	54	62	102
1939	Dry	36	45	116	167	152	99	95	87	67	93	115	165	103
1940	Above Normal	229	205	213	223	131	56	50	72	44	42	54	126	121
1941	Wet	184	198	210	99	117	99	84	54	52	56	57	89	108
1942	Wet	60	98	147	143	98	56	61	60	46	51	59	80	80
1943	Wet	48	48	42	113	80	88	95	71	57	49	56	126	73
1944	Dry	203	194	216	245	150	60	64	73	56	72	109	167	134
1945	Below Normal	225	190	154	128	145	68	59	64	45	47	67	131	110
1946	Below Normal	195	141	72	44	55	60	69	76	44	53	80	146	86
1947	Dry	220	195	183	146	141	77	73	64	64	82	124	149	127
1948	Below Normal	215	208	262	203	206	68	47	55	36	40	70	135	129
1949	Dry	168	166	211	242	184	68	67	67	49	74	128	153	131
1950	Below Normal	202	187	205	180	71	39	43	59	42	45	67	133	106
1951	Above Normal	195	123	70	81	72	54	65	67	42	49	54	135	84
1952	Wet	194	192	176	118	66	79	97	54	49	50	45	49	97
1953	Wet	38	64	143	76	56	49	63	59	39	42	57	109	66
1954	Above Normal	81	87	134	201	63	48	63	58	41	50	55	132	85
1955	Dry	206	221	175	71	58	57	74	68	57	67	111	161	111
1956	Wet	206	204	246	167	98	60	65	65	44	49	59	74	111
1957	Above Normal	40	46	121	229	154	54	59	66	42	45	57	137	88
1958	Wet	172	67	89	81	181	200	169	62	47	48	50	55	102
1959	Below Normal	40	72	182	220	91	56	73	68	63	66	76	136	95
1960	Dry	190	196	208	251	228	66	69	65	60	95	118	154	142
1961	Dry	219	225	264	214	191	66	55	55	65	85	122	166	144
1962	Below Normal	224	223	260	207	199	54	46	75	50	58	78	171	137
1963	Wet	189	50	83	99	71	58	62	73	39	41	53	120	78
1964	Dry	176	174	61	115	69	56	82	68	61	94	146	151	104
1965	Wet	207	222	137	67	47	44	59	73	42	42	54	119	93
1966	Below Normal	172	158	58	56	55	48	63	64	52	69	69	139	84
1967	Wet	223	228	192	112	57	82	92	66	51	59	48	44	104
1968	Below Normal	36	49	97	141	59	43	64	72	58	64	67	137	74
1969	Wet	219	205	161	121	169	120	116	74	59	53	57	67	118
1970	Wet	36	47	68	148	99	56	72	62	46	50	55	133	73
1971	Wet	211	158	71	43	47	42	58	62	37	42	63	95	77
1972	Below Normal	64	109	160	78	84	59	69	65	58	67	74	140	86
1973	Above Normal	233	170	70	102	116	67	69	64	45	44	62	129	98
1974	Wet	192	102	50	55	51	52	64	60	46	43	63	79	71
1975	Wet	40	57	121	112	89	71	73	67	42	45	57	73	71
1976	Critical	38	37	82	170	210	128	107	92	149	168	191	209	132
1977	Critical	258	199	258	201	197	136	106	109	168	175	169	205	182
1978	Above Normal	260	258	258	242	107	137	96	69	57	54	61	102	142
1979	Below Normal	117	172	215	174	79	57	65	68	47	46	68	135	104
1980	Above Normal	214	186	99	73	166	130	115	63	59	59	63	121	112
1981	Dry	171	169	214	186	59	40	60	66	70	99	120	157	118
1982	Wet	235	209	44	106	80	118	122	57	47	50	53	50	98
1983	Wet	33	62	112	236	216	211	201	74	61	59	44	35	112
1984	Wet	35	53	102	97	82	53	71	78	49	48	56	129	71
1985	Dry	186	148	45	53	105	71	73	65	60	98	121	178	100
1986	Wet	233	212	228	125	134	153	85	55	52	64	62	108	126
1987	Dry	129	154	211	252	182	81	77	67	70	92	128	160	134
1988	Critical	229	231	237	182	67	72	90	82	82	88	138	197	141
1989	Dry	242	243	242	214	273	117	47	51	53	95	131	161	156
1990	Critical	214	229	246	164	126	75	76	69	122	165	174	188	154
1991	Critical	254	260	250	264	254	168	75	65	116	166	168	175	185
1992	Critical	256	280	257	287	196	79	60	62	84	89	162	234	171
1993	Above Normal	257	272	275	222	116	70	46	56	40	43	54	110	130
1994	Critical	142	181	227	248	185	75	73	59	84	166	191	190	152
Average		175	167	168	156	125	80	77	69	61	70	89	135	114
Wet		151	134	121	106	100	90	89	65	48	49	55	86	91
Above Normal		187	166	148	160	111	73	69	64	46	49	57	124	105
Below Normal		164	162	180	151	107	61	62	68	48	53	71	138	105
Dry		191	190	191	180	146	69	68	67	59	82	116	159	127
Critical		202	204	222	215	173	109	91	83	113	129	157	190	157

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	178	167	164	133	124	59	64	59	51	54	53	117	102
1923	Below Normal	176	168	170	85	63	55	66	68	42	48	68	129	95
1924	Critical	174	198	219	223	256	168	150	108	147	131	152	178	175
1925	Dry	230	238	236	219	192	66	59	58	47	52	85	154	136
1926	Dry	214	197	224	234	171	59	55	66	54	82	111	161	136
1927	Wet	229	135	45	57	80	49	54	67	37	39	54	122	81
1928	Above Normal	180	146	74	96	62	49	64	63	43	51	60	136	85
1929	Critical	215	220	249	211	235	136	104	87	81	97	136	185	163
1930	Dry	230	218	236	156	74	49	61	61	55	80	110	179	126
1931	Critical	228	183	219	240	207	105	97	105	143	121	155	185	166
1932	Dry	225	233	218	103	111	84	87	94	53	55	87	154	125
1933	Critical	214	179	199	188	128	83	71	74	89	97	126	158	134
1934	Critical	211	246	219	187	98	88	85	82	85	84	124	189	142
1935	Below Normal	236	227	255	175	77	48	48	81	48	42	76	148	122
1936	Below Normal	205	183	216	184	110	67	64	68	44	44	73	138	116
1937	Below Normal	190	183	206	251	194	135	99	62	46	46	65	125	133
1938	Wet	185	194	64	50	172	142	105	75	69	54	54	61	102
1939	Dry	36	47	120	169	153	98	95	87	69	97	116	175	105
1940	Above Normal	233	208	215	223	132	57	51	72	44	42	54	126	121
1941	Wet	184	198	210	99	118	99	84	54	52	56	57	89	109
1942	Wet	60	99	147	143	99	56	61	60	46	50	58	79	80
1943	Wet	48	48	42	113	80	88	95	70	57	49	56	127	73
1944	Dry	203	193	218	240	199	67	65	73	56	76	114	156	138
1945	Below Normal	222	205	159	129	149	66	57	64	45	47	68	133	112
1946	Below Normal	194	164	100	44	58	61	68	76	44	54	80	146	91
1947	Dry	216	193	188	147	142	77	73	64	63	88	139	147	128
1948	Below Normal	209	207	262	198	204	69	47	55	37	43	80	151	130
1949	Dry	203	190	216	222	236	111	70	67	49	70	123	155	143
1950	Below Normal	211	194	213	169	66	39	43	59	42	46	70	137	108
1951	Above Normal	194	124	70	80	67	52	66	64	42	49	54	135	83
1952	Wet	193	184	157	118	66	79	97	54	49	50	45	49	95
1953	Wet	38	64	142	76	56	49	63	59	39	42	58	112	67
1954	Above Normal	82	80	105	179	61	48	63	65	41	50	56	136	80
1955	Dry	206	220	183	79	60	57	74	68	56	72	118	149	112
1956	Wet	196	200	245	167	98	60	65	65	44	49	59	75	110
1957	Above Normal	40	46	121	229	152	54	59	66	42	45	57	139	87
1958	Wet	175	74	94	81	181	199	169	61	47	48	51	56	103
1959	Below Normal	40	72	183	220	91	56	73	68	63	66	77	141	96
1960	Dry	212	223	225	208	205	63	68	65	59	90	119	152	141
1961	Dry	220	226	263	215	197	74	58	56	64	84	122	164	145
1962	Below Normal	224	223	259	212	200	55	46	75	51	58	79	173	138
1963	Wet	185	49	76	99	75	58	62	72	39	41	53	120	77
1964	Dry	176	174	60	115	69	56	82	67	59	95	150	151	105
1965	Wet	204	221	137	67	46	43	59	72	42	41	55	120	92
1966	Below Normal	172	163	60	56	55	47	63	64	51	69	70	140	84
1967	Wet	223	228	193	112	57	82	92	66	51	59	48	45	105
1968	Below Normal	36	49	96	141	59	43	64	72	58	64	68	137	74
1969	Wet	219	206	157	118	170	121	117	74	59	53	57	67	118
1970	Wet	36	46	67	148	99	56	72	61	46	50	55	134	73
1971	Wet	213	154	65	43	47	42	58	62	37	42	61	94	76
1972	Below Normal	65	110	160	78	84	59	69	66	59	68	74	143	86
1973	Above Normal	229	173	81	103	115	66	69	64	44	44	61	129	98
1974	Wet	192	103	50	55	50	51	64	60	45	43	63	79	71
1975	Wet	40	57	122	112	89	71	73	67	42	45	57	74	71
1976	Critical	38	37	82	170	211	129	107	90	149	174	195	200	132
1977	Critical	258	207	271	223	216	165	130	115	169	173	166	185	190
1978	Above Normal	257	271	252	272	107	145	112	70	57	54	61	103	147
1979	Below Normal	121	174	216	173	78	57	65	65	46	46	69	136	104
1980	Above Normal	214	197	126	78	168	133	115	64	59	59	63	121	116
1981	Dry	171	169	213	186	59	40	60	66	72	100	120	156	118
1982	Wet	234	210	44	106	80	117	122	57	47	50	53	51	98
1983	Wet	34	62	112	236	216	211	201	74	61	59	44	35	112
1984	Wet	35	53	102	97	82	53	71	78	48	48	56	128	71
1985	Dry	184	158	46	53	106	71	73	65	60	97	124	176	101
1986	Wet	232	211	224	122	133	153	82	54	53	54	56	104	123
1987	Dry	139	160	216	266	172	89	79	67	72	101	132	163	138
1988	Critical	226	232	237	180	65	69	89	82	81	88	140	202	141
1989	Dry	243	240	250	196	261	114	47	51	52	94	134	156	153
1990	Critical	209	227	247	162	125	75	76	69	123	165	174	189	153
1991	Critical	255	259	251	263	256	169	76	65	116	166	168	175	185
1992	Critical	256	280	257	287	195	78	60	62	83	89	159	235	170
1993	Above Normal	262	252	271	229	116	70	46	57	43	55	71	115	130
1994	Critical	147	184	225	247	189	74	72	58	82	164	199	184	152
Average		176	169	169	155	127	82	78	69	61	70	90	135	115
Wet		150	133	119	106	100	90	89	65	48	49	55	87	91
Above Normal		187	166	148	162	110	73	71	64	47	49	57	126	105
Below Normal		164	166	182	151	106	61	62	67	48	53	73	141	106
Dry		194	192	195	176	150	73	69	67	59	83	119	159	128
Critical		203	204	223	215	182	112	93	83	112	129	158	189	159

Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1924	Critical	0	4	6	0	80	33	15	5	-4	0	1	4	12
1925	Dry	1	-4	6	-17	-7	7	6	1	0	0	-1	-2	-1
1926	Dry	-2	0	0	0	0	0	0	-1	-2	1	3	5	0
1927	Wet	2	-14	-15	-5	0	0	0	0	0	0	0	0	-3
1928	Above Normal	1	1	2	1	0	0	0	0	0	0	1	4	1
1929	Critical	2	0	-1	-5	-8	-2	-2	-3	-2	2	2	5	-1
1930	Dry	-1	-11	-4	4	1	0	0	0	0	0	3	16	1
1931	Critical	5	-6	-2	-3	13	-13	-9	-4	-2	3	2	0	-1
1932	Dry	-1	-3	-1	0	5	9	1	0	0	0	0	0	1
1933	Critical	0	0	-1	0	-4	-9	-3	-1	0	0	0	0	-2
1934	Critical	0	0	0	-2	-1	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	1	-1	0	0	1	1	1	0	2	5	1
1936	Below Normal	3	1	-8	-16	0	0	0	0	0	1	4	-1	-1
1937	Below Normal	0	-2	-4	30	-9	1	0	-7	1	0	0	1	1
1938	Wet	-2	2	3	1	0	1	1	0	0	0	0	0	0
1939	Dry	0	2	4	2	1	0	0	0	2	4	1	10	2
1940	Above Normal	4	3	2	0	1	1	0	0	0	0	0	0	1
1941	Wet	0	0	0	0	0	0	1	0	0	0	0	0	0
1942	Wet	0	1	1	0	0	0	0	0	0	-1	-1	0	0
1943	Wet	0	0	0	0	0	0	0	-1	0	0	0	1	0
1944	Dry	0	0	2	-5	49	7	1	0	0	4	5	-11	4
1945	Below Normal	-3	15	5	2	4	-3	-2	0	0	0	1	2	2
1946	Below Normal	-1	23	28	0	2	1	-1	0	0	0	0	0	4
1947	Dry	-4	-2	5	1	1	0	0	0	-1	6	15	-2	2
1948	Below Normal	-6	-1	-1	-5	-2	0	0	0	1	3	10	16	1
1949	Dry	34	23	5	-20	53	42	3	1	0	-4	-5	2	11
1950	Below Normal	9	8	8	-11	-4	0	0	0	0	1	3	4	1
1951	Above Normal	-1	1	0	0	-5	-2	0	-3	0	-1	0	0	-1
1952	Wet	-1	-8	-19	0	0	0	0	0	0	0	0	0	-2
1953	Wet	0	0	-1	0	0	0	0	0	0	0	1	3	0
1954	Above Normal	1	-8	-30	-22	-2	0	0	7	0	0	1	4	-4
1955	Dry	-1	-1	8	8	2	0	0	0	-2	4	8	-11	1
1956	Wet	-10	-4	-1	0	0	-1	0	0	0	0	0	1	-1
1957	Above Normal	0	0	0	-1	-3	0	0	0	0	0	0	2	0
1958	Wet	3	7	5	1	0	-1	1	-1	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	1	5	1
1960	Dry	22	27	18	-43	-23	-3	-1	0	-1	-5	1	-2	-1
1961	Dry	1	1	0	1	6	8	3	1	-2	-1	0	-2	1
1962	Below Normal	0	1	-1	5	2	1	0	0	1	1	1	2	1
1963	Wet	-4	-2	-7	0	3	0	0	0	0	0	0	0	-1
1964	Dry	1	0	0	1	0	0	0	-1	-2	1	4	0	0
1965	Wet	-2	-1	0	0	-1	-1	-1	-1	0	0	1	1	0
1966	Below Normal	0	4	3	1	0	0	0	0	0	-1	0	1	1
1967	Wet	0	1	1	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	1	0
1969	Wet	0	0	-4	-3	1	2	1	0	0	0	0	0	0
1970	Wet	0	0	-1	0	1	0	0	-1	0	0	0	2	0
1971	Wet	2	-4	-6	0	0	0	0	0	0	0	-1	-1	-1
1972	Below Normal	1	1	1	0	0	0	0	0	1	0	0	3	1
1973	Above Normal	-4	3	11	1	-1	-1	0	0	0	0	-1	0	1
1974	Wet	0	0	0	0	-1	-1	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	0	0	0	0	-2	0	7	4	-8	0
1977	Critical	0	7	13	21	19	29	24	6	1	-2	-4	-20	8
1978	Above Normal	-3	13	-6	30	0	8	16	2	1	0	0	1	5
1979	Below Normal	4	2	0	-1	0	0	0	-2	0	0	0	0	0
1980	Above Normal	0	10	27	5	2	3	1	0	0	0	0	0	4
1981	Dry	0	0	0	0	0	0	0	0	1	1	0	-1	0
1982	Wet	-1	1	0	0	-1	-1	-1	0	0	0	0	1	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	-1	0
1985	Dry	-3	10	1	0	0	0	0	0	-1	-1	2	-2	1
1986	Wet	-1	-1	-4	-3	-1	0	-2	0	0	-10	-6	-4	-3
1987	Dry	10	6	5	14	-11	9	2	-1	2	9	4	4	4
1988	Critical	-2	0	-1	-1	-2	-3	-1	0	-1	0	2	5	0
1989	Dry	1	-2	7	-18	-12	-3	0	0	-1	-2	3	-5	-3
1990	Critical	-5	-2	1	-3	-1	0	0	0	0	0	0	1	-1
1991	Critical	0	0	1	-1	3	1	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	-1	0	0	0	-1	-1	-3	1	0
1993	Above Normal	4	-20	-4	7	0	0	0	1	3	0	1	5	0
1994	Critical	5	3	-2	-1	5	-1	-1	0	-2	-2	8	-7	0
Average		1	1	1	-1	2	2	1	0	0	0	1	1	1
Wet		-1	-1	-2	0	0	0	0	0	0	-1	0	0	0
Above Normal		0	0	0	2	-1	1	2	1	0	0	0	2	1
Below Normal		1	4	2	0	-1	0	0	-1	0	0	1	3	1
Dry		4	3	3	-5	4	5	1	0	0	1	3	0	2
Critical		0	0	1	0	9	3	2	0	-1	1	1	-1	1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1924	Critical	0%	2%	3%	0%	46%	25%	11%	4%	-3%	0%	1%	3%	8%
1925	Dry	0%	-2%	2%	-7%	-3%	13%	12%	2%	0%	0%	-1%	-1%	1%
1926	Dry	-1%	0%	0%	0%	0%	0%	1%	-1%	-3%	2%	3%	3%	0%
1927	Wet	1%	-9%	-26%	-7%	0%	-1%	0%	1%	0%	0%	0%	0%	-3%
1928	Above Normal	0%	0%	3%	1%	0%	0%	0%	0%	-1%	1%	2%	3%	1%
1929	Critical	1%	0%	0%	-2%	-3%	-2%	-2%	-3%	-2%	2%	2%	3%	-1%
1930	Dry	0%	-5%	-1%	2%	1%	-1%	0%	0%	-1%	0%	2%	10%	1%
1931	Critical	2%	-3%	-1%	-1%	7%	-11%	-9%	-4%	-2%	3%	1%	0%	-1%
1932	Dry	0%	-1%	-1%	0%	5%	12%	2%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	-1%	0%	-3%	-10%	-4%	-1%	0%	0%	0%	0%	-2%
1934	Critical	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	1%	3%	1%	2%	0%	3%	4%	1%
1936	Below Normal	1%	1%	-3%	-8%	0%	1%	0%	0%	0%	1%	1%	3%	0%
1937	Below Normal	0%	-1%	-2%	14%	-4%	1%	0%	-10%	1%	-1%	1%	1%	0%
1938	Wet	-1%	1%	5%	1%	0%	1%	1%	0%	0%	0%	0%	-1%	1%
1939	Dry	1%	5%	4%	1%	0%	0%	0%	0%	3%	4%	1%	6%	2%
1940	Above Normal	2%	1%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	1%	0%
1944	Dry	0%	0%	1%	-2%	33%	11%	1%	0%	0%	5%	5%	-6%	4%
1945	Below Normal	-1%	8%	3%	1%	3%	-4%	-3%	0%	-1%	0%	2%	1%	1%
1946	Below Normal	-1%	16%	39%	1%	5%	2%	-1%	0%	-1%	1%	0%	0%	5%
1947	Dry	-2%	-1%	3%	1%	1%	0%	0%	0%	-2%	8%	12%	-2%	2%
1948	Below Normal	-3%	-1%	0%	-2%	-1%	0%	0%	0%	2%	8%	15%	12%	3%
1949	Dry	20%	14%	2%	-8%	29%	62%	5%	1%	1%	-6%	-4%	1%	10%
1950	Below Normal	5%	4%	4%	-6%	-6%	-1%	0%	0%	-1%	1%	5%	3%	1%
1951	Above Normal	0%	1%	0%	0%	-7%	-4%	0%	-5%	-1%	-1%	0%	0%	-1%
1952	Wet	-1%	-4%	-11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1954	Above Normal	2%	-9%	-22%	-11%	-3%	0%	0%	12%	0%	0%	2%	3%	-2%
1955	Dry	0%	-1%	5%	11%	3%	1%	0%	0%	-3%	6%	7%	-7%	2%
1956	Wet	-5%	-2%	-1%	0%	0%	-1%	0%	0%	0%	0%	1%	2%	-1%
1957	Above Normal	1%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	1%	2%	0%
1958	Wet	2%	11%	5%	1%	0%	0%	0%	-1%	0%	0%	0%	1%	2%
1959	Below Normal	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	4%	0%
1960	Dry	11%	14%	8%	-17%	-10%	-4%	-1%	0%	-2%	-5%	1%	-1%	0%
1961	Dry	0%	0%	0%	1%	3%	12%	6%	3%	-3%	-1%	0%	-1%	2%
1962	Below Normal	0%	0%	0%	2%	1%	1%	0%	0%	2%	1%	1%	1%	1%
1963	Wet	-2%	-3%	-9%	0%	5%	0%	0%	0%	0%	0%	0%	0%	-1%
1964	Dry	0%	0%	0%	1%	0%	0%	0%	-1%	-4%	1%	3%	0%	0%
1965	Wet	-1%	0%	0%	0%	-2%	-2%	-1%	-1%	0%	-1%	1%	1%	-1%
1966	Below Normal	0%	3%	5%	1%	-1%	-1%	0%	0%	-1%	-1%	0%	0%	1%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1969	Wet	0%	0%	-3%	-2%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	-1%	-1%	0%	1%	0%	0%	-2%	0%	0%	0%	1%	0%
1971	Wet	1%	-3%	-9%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	-1%
1972	Below Normal	2%	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%	2%	1%
1973	Above Normal	-2%	2%	16%	1%	-1%	-2%	0%	0%	-1%	-1%	-1%	0%	1%
1974	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-2%	0%	4%	2%	-4%	0%
1977	Critical	0%	4%	5%	11%	10%	22%	22%	5%	1%	-1%	-2%	-10%	6%
1978	Above Normal	-1%	5%	-2%	12%	0%	6%	17%	2%	2%	0%	0%	1%	4%
1979	Below Normal	3%	1%	0%	-1%	0%	0%	0%	-4%	-1%	0%	0%	0%	0%
1980	Above Normal	0%	6%	28%	6%	1%	2%	0%	1%	0%	0%	0%	0%	4%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	-1%	0%
1982	Wet	0%	1%	1%	0%	-1%	-1%	-1%	0%	0%	0%	1%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	-2%	7%	2%	0%	0%	0%	0%	0%	-1%	-1%	2%	-1%	1%
1986	Wet	-1%	-1%	-2%	-3%	-1%	0%	-3%	-1%	1%	-16%	-10%	-3%	-3%
1987	Dry	7%	4%	2%	6%	-6%	11%	3%	-1%	3%	10%	3%	2%	4%
1988	Critical	-1%	0%	0%	-1%	-4%	-4%	-2%	0%	-2%	0%	1%	3%	-1%
1989	Dry	0%	-1%	3%	-8%	-4%	-2%	0%	0%	-2%	-2%	2%	-3%	-1%
1990	Critical	-2%	-1%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-2%	0%	0%
1993	Above Normal	2%	-7%	-1%	3%	0%	0%	0%	2%	7%	0%	2%	5%	1%
1994	Critical	4%	2%	-1%	0%	3%	-1%	-1%	0%	-2%	-1%	4%	-4%	0%
Average		1%	1%	1%	0%	1%	2%	1%	0%	0%	0%	1%	1%	1%
Wet		0%	0%	-2%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	0%	2%	1%	-1%	0%	2%	1%	1%	0%	1%	1%	1%
Below Normal		1%	2%	3%	0%	0%	0%	0%	-1%	0%	1%	2%	2%	1%
Dry		2%	2%	2%	-1%	3%	7%	2%	0%	-1%	1%	2%	0%	2%
Critical		0%	0%	0%	0%	4%	2%	1%	0%	-1%	0%	1%	-1%	1%

Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	110	112	120	108	106	75	51	44	48	56	45	71	79
1923	Below Normal	111	110	110	78	82	97	57	49	48	37	45	82	75
1924	Critical	109	122	148	162	182	213	132	110	112	92	103	109	133
1925	Dry	143	154	162	174	148	121	61	51	61	57	64	102	108
1926	Dry	135	129	153	166	133	106	66	78	60	61	83	103	106
1927	Wet	143	96	62	65	84	93	49	43	30	28	33	75	67
1928	Above Normal	114	86	69	82	68	58	49	55	38	35	35	81	64
1929	Critical	136	140	166	161	188	177	118	95	86	78	93	117	130
1930	Dry	146	152	164	113	97	95	73	77	50	55	74	101	100
1931	Critical	143	129	161	178	188	171	125	110	115	86	102	117	135
1932	Dry	143	156	142	85	117	160	100	84	67	86	68	101	109
1933	Critical	133	122	151	156	156	154	109	88	86	81	91	107	119
1934	Critical	135	159	156	148	135	190	124	103	91	72	90	119	127
1935	Below Normal	150	153	179	132	129	87	56	65	50	50	48	91	99
1936	Below Normal	127	120	156	142	100	51	49	60	51	38	45	84	85
1937	Below Normal	118	119	148	159	86	68	40	32	64	79	46	79	87
1938	Wet	119	126	73	82	61	47	27	26	26	49	39	37	59
1939	Dry	26	34	88	126	135	135	83	61	51	59	70	107	81
1940	Above Normal	143	129	160	140	105	53	44	54	47	32	31	77	85
1941	Wet	117	128	129	86	77	48	32	31	63	61	44	52	72
1942	Wet	40	64	97	81	48	58	44	36	53	57	43	44	55
1943	Wet	32	40	51	60	40	40	40	59	67	43	39	78	49
1944	Dry	127	120	150	172	132	86	58	54	46	47	69	108	97
1945	Below Normal	141	115	107	106	95	58	58	51	44	37	46	83	78
1946	Below Normal	118	89	71	67	76	74	57	52	43	33	47	92	68
1947	Dry	136	123	128	121	124	106	75	66	45	47	75	96	95
1948	Below Normal	138	137	174	152	177	125	63	59	33	27	40	86	101
1949	Dry	106	111	149	179	165	111	76	86	48	42	76	96	104
1950	Below Normal	126	122	149	130	81	75	45	54	42	40	39	83	82
1951	Above Normal	127	73	60	50	32	60	53	30	31	36	29	83	55
1952	Wet	123	127	130	92	69	68	26	13	36	48	32	29	66
1953	Wet	27	48	91	75	82	86	44	36	26	28	33	62	53
1954	Above Normal	50	59	101	145	71	76	56	61	39	35	30	82	67
1955	Dry	133	146	129	78	99	141	96	77	50	44	66	101	97
1956	Wet	130	140	136	66	62	55	51	50	53	59	46	45	74
1957	Above Normal	29	38	95	160	140	90	46	38	34	27	32	85	68
1958	Wet	98	47	73	68	102	93	15	10	44	48	35	33	55
1959	Below Normal	27	51	122	149	87	97	71	59	46	38	41	86	73
1960	Dry	120	126	153	178	172	77	72	78	44	55	69	99	104
1961	Dry	140	148	179	156	146	99	73	69	50	49	70	103	107
1962	Below Normal	143	147	177	164	132	85	60	59	46	35	43	111	100
1963	Wet	126	42	72	67	80	64	53	41	35	29	32	74	60
1964	Dry	112	105	62	97	110	131	82	71	45	55	88	97	88
1965	Wet	135	149	105	68	50	70	52	44	43	31	37	74	71
1966	Below Normal	107	102	69	71	74	74	57	62	39	42	37	89	69
1967	Wet	144	149	146	101	76	67	33	20	37	41	32	27	73
1968	Below Normal	27	37	77	106	75	90	62	58	41	37	39	88	61
1969	Wet	141	135	116	118	61	65	35	23	23	50	40	39	71
1970	Wet	26	35	64	37	53	52	45	52	41	33	33	80	46
1971	Wet	133	90	75	58	83	64	39	37	24	25	34	53	60
1972	Below Normal	42	77	109	71	88	68	62	67	46	42	42	90	67
1973	Above Normal	150	101	71	94	102	77	61	63	51	31	39	81	77
1974	Wet	124	65	61	69	66	44	48	53	56	39	40	48	59
1975	Wet	29	42	90	93	59	44	50	44	49	47	40	44	53
1976	Critical	29	29	69	126	172	139	99	85	102	114	124	139	102
1977	Critical	160	133	177	164	215	194	130	114	122	119	109	125	147
1978	Above Normal	162	170	179	127	133	130	67	44	63	68	52	63	105
1979	Below Normal	75	111	143	132	64	45	54	43	43	35	45	87	73
1980	Above Normal	135	110	80	69	52	64	58	55	60	63	47	76	72
1981	Dry	104	108	144	149	83	84	67	57	49	60	71	103	90
1982	Wet	154	113	54	84	39	46	18	15	50	56	40	27	58
1983	Wet	14	28	60	54	46	30	36	29	23	19	15	17	31
1984	Wet	26	13	39	48	27	48	50	53	51	34	36	79	42
1985	Dry	111	80	54	61	99	98	77	62	44	58	74	118	78
1986	Wet	147	136	150	106	84	42	25	21	58	88	50	66	81
1987	Dry	80	98	147	172	159	111	80	68	53	59	80	103	101
1988	Critical	149	148	164	145	127	178	100	89	79	61	85	123	121
1989	Dry	154	164	173	161	247	107	46	52	32	53	78	101	114
1990	Critical	137	151	172	124	128	118	86	88	90	108	114	119	120
1991	Critical	159	169	178	203	233	134	101	80	80	108	112	114	139
1992	Critical	159	180	183	208	155	101	71	61	58	57	94	143	123
1993	Above Normal	163	178	191	136	108	96	57	62	58	57	45	68	102
1994	Critical	93	117	156	184	170	98	73	75	57	105	120	121	114
Average		111	108	121	116	107	92	63	58	53	53	57	85	85
Wet		97	86	89	75	64	58	39	35	42	43	37	52	60
Above Normal		118	106	113	111	92	78	54	51	47	44	38	77	77
Below Normal		104	106	128	119	96	78	57	55	45	41	43	88	80
Dry		120	122	136	137	135	111	74	68	50	55	73	102	99
Critical		128	133	157	163	171	155	106	92	90	90	103	121	126

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	110	112	120	108	106	75	51	44	48	56	45	71	79
1923	Below Normal	111	110	110	78	82	97	57	49	48	38	45	82	75
1924	Critical	109	127	152	161	200	215	140	115	112	91	104	113	137
1925	Dry	143	154	164	164	144	150	65	51	60	56	64	101	110
1926	Dry	134	128	153	166	133	102	65	77	55	59	80	106	105
1927	Wet	144	87	53	62	84	89	48	43	30	28	33	75	65
1928	Above Normal	115	86	70	83	68	58	48	55	38	35	35	83	64
1929	Critical	137	141	165	158	183	176	112	90	74	69	89	119	126
1930	Dry	146	146	162	115	97	83	72	77	48	52	74	110	99
1931	Critical	145	124	159	176	180	168	120	107	112	86	104	117	133
1932	Dry	143	155	141	85	134	162	101	84	67	86	69	101	111
1933	Critical	133	122	153	156	160	153	108	88	86	81	91	107	120
1934	Critical	135	158	156	147	135	190	124	103	91	74	90	119	127
1935	Below Normal	150	153	179	131	129	96	59	65	53	55	48	95	101
1936	Below Normal	129	121	152	133	100	51	49	59	52	41	44	86	85
1937	Below Normal	118	116	146	174	84	69	40	33	64	78	46	79	87
1938	Wet	118	128	74	83	61	47	27	26	26	49	40	37	60
1939	Dry	26	35	90	127	135	136	83	60	51	59	69	112	82
1940	Above Normal	146	131	160	139	105	54	44	54	47	32	31	77	85
1941	Wet	117	128	129	86	77	48	32	31	63	61	44	52	72
1942	Wet	40	65	97	81	48	58	44	36	52	56	43	43	55
1943	Wet	32	40	51	60	40	40	40	58	67	42	38	78	49
1944	Dry	127	121	148	169	160	90	58	54	44	46	68	100	99
1945	Below Normal	141	124	109	107	95	58	57	51	44	36	46	84	79
1946	Below Normal	118	105	82	67	79	72	57	52	42	33	47	92	70
1947	Dry	133	123	131	121	124	103	75	66	43	50	83	94	96
1948	Below Normal	134	136	174	149	175	125	63	59	35	27	45	97	102
1949	Dry	129	125	152	166	197	113	75	87	49	40	73	98	109
1950	Below Normal	132	127	153	124	78	76	47	54	41	32	40	85	82
1951	Above Normal	127	74	60	50	34	59	55	29	31	36	29	83	56
1952	Wet	122	118	119	92	69	68	26	13	36	48	32	29	64
1953	Wet	27	47	91	75	82	86	44	36	26	28	34	64	53
1954	Above Normal	51	54	84	131	70	73	55	62	37	33	31	84	64
1955	Dry	132	145	133	83	100	140	96	77	49	44	69	94	97
1956	Wet	124	137	136	66	62	54	51	50	53	59	46	46	74
1957	Above Normal	29	39	95	160	139	90	46	38	33	27	32	87	68
1958	Wet	100	52	76	69	100	92	15	10	44	48	35	33	56
1959	Below Normal	28	51	122	150	87	97	71	59	45	37	41	90	73
1960	Dry	136	144	158	154	157	74	72	78	47	53	71	97	103
1961	Dry	141	149	179	157	150	128	78	71	50	48	70	102	110
1962	Below Normal	143	147	176	167	133	86	60	59	49	36	44	113	101
1963	Wet	123	40	68	67	82	64	53	41	36	29	32	74	59
1964	Dry	112	104	62	98	112	132	81	71	44	55	90	97	88
1965	Wet	133	148	105	68	49	68	52	45	43	30	37	75	71
1966	Below Normal	107	105	71	72	72	73	57	61	39	41	37	90	69
1967	Wet	143	149	146	101	75	67	33	20	37	41	32	27	73
1968	Below Normal	27	37	77	105	75	90	62	58	40	37	39	88	61
1969	Wet	141	135	113	117	61	65	35	23	23	50	40	39	70
1970	Wet	26	35	64	37	53	52	45	52	41	34	33	81	46
1971	Wet	134	87	72	59	83	64	39	37	24	24	34	53	59
1972	Below Normal	43	78	109	71	88	68	62	67	46	41	41	92	67
1973	Above Normal	148	103	77	95	100	77	61	63	50	30	38	81	77
1974	Wet	124	65	61	69	63	44	48	53	56	39	40	48	59
1975	Wet	29	42	90	93	59	44	50	44	49	47	40	44	53
1976	Critical	29	29	69	127	173	139	97	84	101	116	126	133	102
1977	Critical	161	140	184	170	174	191	142	119	124	119	109	115	146
1978	Above Normal	158	176	177	143	133	140	66	46	63	69	52	64	107
1979	Below Normal	77	112	143	132	63	45	55	43	43	35	45	87	73
1980	Above Normal	135	120	96	71	52	64	58	55	60	63	47	76	75
1981	Dry	104	108	144	149	81	76	66	57	49	60	71	102	89
1982	Wet	154	114	55	84	39	46	18	15	50	56	40	27	58
1983	Wet	14	28	60	54	46	30	36	29	23	19	15	17	31
1984	Wet	26	13	39	48	27	48	50	53	51	34	36	79	42
1985	Dry	111	85	55	61	99	99	78	62	43	58	75	116	78
1986	Wet	147	134	148	104	84	42	26	21	58	56	46	65	78
1987	Dry	85	101	151	179	145	92	76	66	51	60	79	104	99
1988	Critical	148	148	164	144	111	175	99	89	76	59	86	127	119
1989	Dry	154	162	176	151	243	105	46	52	31	52	80	99	113
1990	Critical	133	150	173	123	128	118	86	88	90	109	114	120	119
1991	Critical	159	169	179	203	234	135	101	80	80	108	112	114	139
1992	Critical	159	180	183	208	155	101	71	61	60	58	94	144	123
1993	Above Normal	166	168	189	139	109	96	57	65	61	54	43	71	101
1994	Critical	96	118	155	183	177	100	72	75	56	104	125	118	115
Average		112	109	121	116	107	92	63	58	53	53	57	85	85
Wet		96	85	88	75	64	58	39	35	42	42	37	52	59
Above Normal		118	106	113	112	91	79	54	51	47	44	38	78	78
Below Normal		104	109	129	119	96	79	57	55	46	40	43	90	81
Dry		122	124	137	134	138	112	74	68	49	55	74	102	99
Critical		129	134	158	163	167	155	106	91	88	90	103	120	125

Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
Alternative CP3 (2005) - Existing Condition

Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1924	Critical	0	4	4	-1	18	2	7	5	0	-1	1	4	4
1925	Dry	1	-1	3	-10	-5	28	4	0	-1	-1	0	-1	1
1926	Dry	-1	0	0	0	0	-4	-1	-1	-5	-1	-3	3	-1
1927	Wet	2	-9	-9	-3	0	-3	0	0	0	0	0	0	-2
1928	Above Normal	0	1	1	1	0	0	0	0	-1	0	0	3	0
1929	Critical	1	1	-1	-3	-5	-1	-6	-6	-12	-9	-5	2	-4
1930	Dry	0	-5	-2	2	0	-12	-1	0	-2	-3	1	9	-1
1931	Critical	3	-5	-2	-3	-7	-3	-5	-3	-3	0	2	0	-2
1932	Dry	0	-1	-1	0	17	2	1	0	0	0	0	0	1
1933	Critical	0	0	2	0	4	-1	-1	0	0	0	0	0	0
1934	Critical	0	0	0	-1	0	0	0	0	0	2	1	0	0
1935	Below Normal	0	0	0	0	0	9	3	0	2	5	0	3	2
1936	Below Normal	2	1	-4	-9	0	0	0	0	0	4	-1	2	0
1937	Below Normal	0	-2	-2	15	-2	0	0	1	0	-1	0	1	1
1938	Wet	-1	2	2	1	0	0	0	0	0	0	1	0	0
1939	Dry	0	1	2	1	0	1	0	-1	0	0	-1	5	1
1940	Above Normal	3	1	1	0	0	1	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	-1	-1	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	-1	-1	0	0
1944	Dry	0	1	-2	-3	28	4	0	0	-2	-1	-1	-7	1
1945	Below Normal	0	9	2	0	1	-1	-1	0	0	0	0	1	1
1946	Below Normal	0	16	11	0	2	-1	0	0	-1	0	0	0	2
1947	Dry	-3	0	3	1	0	-2	0	0	-2	3	9	-2	1
1948	Below Normal	-4	-1	0	-3	-2	0	0	0	2	0	5	11	1
1949	Dry	23	15	3	-13	32	2	0	0	1	-2	-3	2	5
1950	Below Normal	6	5	4	-6	-3	0	2	0	-1	-8	1	2	0
1951	Above Normal	0	1	0	0	1	-1	2	0	0	0	0	0	0
1952	Wet	-1	-9	-11	0	0	0	0	0	0	0	0	0	-2
1953	Wet	0	0	0	0	0	0	0	0	0	0	1	2	0
1954	Above Normal	1	-5	-17	-14	-2	-3	0	1	-1	-2	0	2	-3
1955	Dry	-1	-1	5	5	1	0	0	0	-1	0	3	-7	0
1956	Wet	-5	-2	0	0	0	0	0	0	0	0	0	1	-1
1957	Above Normal	0	0	0	-1	-1	0	0	0	0	0	0	1	0
1958	Wet	3	4	3	1	-2	-1	0	0	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	0	0	-1	0	0	4	0
1960	Dry	16	18	5	-24	-15	-3	0	0	3	-2	2	-1	0
1961	Dry	0	1	0	1	4	29	5	2	0	0	0	-1	3
1962	Below Normal	0	0	-1	3	1	0	0	0	3	1	1	2	1
1963	Wet	-3	-1	-5	0	2	0	0	0	0	1	0	0	-1
1964	Dry	1	0	0	0	3	1	-1	0	-1	1	3	0	0
1965	Wet	-1	0	0	0	-1	-2	0	1	0	-1	0	1	0
1966	Below Normal	0	3	1	0	-2	-1	0	0	0	-1	0	0	0
1967	Wet	0	0	0	0	-1	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	-3	-1	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	1	0	-1	1	0	1	0
1971	Wet	1	-4	-3	0	0	0	0	0	0	0	-1	-1	-1
1972	Below Normal	1	1	0	0	0	0	0	0	1	0	-1	2	0
1973	Above Normal	-2	3	7	1	-2	-1	0	0	-1	-1	-1	0	0
1974	Wet	0	0	0	0	-3	-1	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-3	-1	-2	2	1	-6	-1
1977	Critical	1	7	8	6	-41	-3	11	5	2	0	0	-9	-1
1978	Above Normal	-4	6	-2	16	0	10	-1	1	0	0	0	1	2
1979	Below Normal	2	1	0	-1	0	0	1	0	-1	-1	0	0	0
1980	Above Normal	0	10	16	2	0	0	0	0	0	0	0	0	2
1981	Dry	0	0	0	0	-2	-8	-1	0	0	0	0	-1	-1
1982	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	6	1	0	0	0	0	0	-1	-1	1	-2	0
1986	Wet	-1	-1	-2	-2	0	0	1	0	0	-32	-4	-2	-4
1987	Dry	5	3	4	7	-14	-20	-4	-2	-2	1	-2	2	-2
1988	Critical	-1	0	0	-1	-16	-3	-1	0	-4	-2	1	3	-2
1989	Dry	1	-1	3	-10	-4	-2	0	0	-1	-2	2	-2	-1
1990	Critical	-3	-1	0	-2	0	0	0	0	0	1	0	1	0
1991	Critical	0	0	0	0	0	1	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	1	1	0	0	0
1993	Above Normal	3	-10	-2	3	0	0	0	3	3	-3	-2	3	0
1994	Critical	3	2	-1	-1	7	2	-1	0	-1	-1	5	-4	1
Average		1	1	0	-1	0	0	0	0	0	-1	0	0	0
Wet		0	-1	-1	0	0	0	0	0	0	-2	0	0	0
Above Normal		0	1	0	1	0	1	0	0	0	-1	0	1	0
Below Normal		0	2	1	0	0	1	0	0	0	0	0	2	1
Dry		2	2	1	-3	3	1	0	0	-1	-1	1	0	1
Critical		0	1	1	0	-3	0	0	0	-1	-1	0	-1	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake
From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
1924	Critical	0%	4%	3%	-1%	10%	1%	5%	4%	0%	-1%	1%	3%	2%
1925	Dry	0%	0%	2%	-6%	-3%	24%	6%	1%	-1%	-1%	-1%	-1%	2%
1926	Dry	-1%	0%	0%	0%	0%	-4%	-2%	-1%	-9%	-2%	-4%	2%	-2%
1927	Wet	1%	-9%	-14%	-5%	0%	-4%	-1%	1%	1%	0%	0%	0%	-3%
1928	Above Normal	0%	1%	2%	1%	0%	0%	-1%	0%	-2%	0%	1%	3%	0%
1929	Critical	1%	0%	0%	-2%	-3%	-1%	-5%	-6%	-14%	-12%	-5%	2%	-4%
1930	Dry	0%	-4%	-1%	2%	0%	-13%	-2%	0%	-4%	-5%	1%	9%	-1%
1931	Critical	2%	-4%	-1%	-1%	-4%	-2%	-4%	-3%	-2%	0%	2%	0%	-1%
1932	Dry	0%	-1%	0%	0%	15%	1%	1%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	1%	0%	2%	-1%	-1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-1%	0%	0%	0%	0%	0%	2%	1%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	11%	6%	0%	5%	10%	-1%	4%	3%
1936	Below Normal	1%	1%	-2%	-7%	0%	0%	0%	-1%	0%	9%	-2%	2%	0%
1937	Below Normal	0%	-2%	-1%	10%	-3%	0%	0%	3%	0%	-1%	0%	1%	1%
1938	Wet	-1%	1%	2%	1%	0%	0%	0%	0%	0%	0%	2%	0%	0%
1939	Dry	-1%	4%	3%	1%	0%	1%	0%	-1%	-1%	0%	-2%	4%	1%
1940	Above Normal	2%	1%	0%	0%	0%	1%	0%	0%	-1%	-1%	-1%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	-1%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	0%	0%
1944	Dry	0%	1%	-1%	-2%	21%	5%	0%	0%	-4%	-3%	-1%	-7%	1%
1945	Below Normal	0%	8%	2%	0%	1%	-1%	-1%	0%	-1%	-1%	-1%	1%	1%
1946	Below Normal	0%	17%	16%	0%	3%	-2%	0%	0%	-2%	-1%	-1%	0%	3%
1947	Dry	-2%	0%	2%	0%	0%	-2%	0%	0%	-4%	6%	12%	-2%	1%
1948	Below Normal	-3%	-1%	0%	-2%	-1%	0%	0%	0%	6%	-1%	14%	13%	2%
1949	Dry	21%	13%	2%	-7%	19%	2%	0%	0%	2%	-5%	-4%	2%	4%
1950	Below Normal	5%	4%	3%	-4%	-3%	1%	3%	0%	-1%	-21%	2%	3%	-1%
1951	Above Normal	0%	1%	0%	0%	4%	-2%	4%	0%	-1%	1%	-1%	0%	1%
1952	Wet	-1%	-7%	-8%	0%	0%	0%	1%	0%	0%	0%	0%	0%	-1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	2%	3%	1%
1954	Above Normal	2%	-8%	-17%	-9%	-2%	-4%	0%	1%	-4%	-6%	1%	3%	-4%
1955	Dry	-1%	-1%	4%	6%	1%	0%	0%	0%	-2%	-1%	5%	-7%	0%
1956	Wet	-4%	-2%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	2%	0%
1957	Above Normal	1%	0%	0%	0%	-1%	0%	0%	0%	-1%	0%	0%	1%	0%
1958	Wet	3%	9%	4%	1%	-1%	-1%	0%	0%	0%	0%	1%	1%	1%
1959	Below Normal	0%	1%	0%	0%	0%	0%	0%	0%	-2%	-1%	1%	5%	0%
1960	Dry	13%	14%	3%	-14%	-9%	-4%	-1%	0%	7%	-4%	3%	-1%	1%
1961	Dry	0%	0%	0%	1%	3%	30%	7%	3%	0%	-1%	0%	-1%	3%
1962	Below Normal	0%	0%	0%	2%	1%	0%	0%	0%	6%	3%	2%	2%	1%
1963	Wet	-3%	-3%	-6%	0%	2%	0%	0%	0%	1%	2%	1%	0%	-1%
1964	Dry	1%	0%	0%	0%	2%	0%	-1%	0%	-2%	1%	3%	0%	0%
1965	Wet	-1%	0%	0%	0%	-2%	-3%	0%	3%	1%	-3%	0%	1%	-1%
1966	Below Normal	0%	3%	2%	1%	-3%	-1%	0%	0%	-1%	-2%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1969	Wet	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	1%	-1%	0%	0%	0%	0%	2%	0%	-1%	3%	0%	1%	0%
1971	Wet	1%	-4%	-4%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	-1%
1972	Below Normal	2%	1%	0%	0%	0%	0%	0%	0%	1%	-1%	-2%	2%	0%
1973	Above Normal	-2%	2%	9%	1%	-2%	-1%	0%	0%	-2%	-4%	-2%	0%	0%
1974	Wet	0%	0%	0%	0%	-4%	-2%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-3%	-1%	-2%	2%	1%	-4%	0%
1977	Critical	1%	5%	4%	4%	-19%	-2%	9%	5%	2%	0%	0%	-7%	0%
1978	Above Normal	-3%	3%	-1%	13%	0%	8%	-1%	3%	0%	0%	1%	2%	2%
1979	Below Normal	3%	1%	0%	0%	0%	0%	2%	-1%	-1%	-2%	-1%	0%	0%
1980	Above Normal	0%	9%	20%	2%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	-2%	-10%	-1%	0%	1%	1%	0%	-1%	-1%
1982	Wet	0%	1%	1%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1985	Dry	0%	7%	1%	0%	0%	0%	0%	0%	-2%	-1%	2%	-1%	1%
1986	Wet	0%	-1%	-1%	-2%	0%	0%	3%	0%	1%	-36%	-9%	-2%	-4%
1987	Dry	6%	3%	3%	4%	-9%	-18%	-5%	-3%	-4%	1%	-2%	2%	-2%
1988	Critical	0%	0%	0%	-1%	-13%	-2%	-1%	-4%	-4%	-3%	1%	3%	-2%
1989	Dry	0%	-1%	2%	-6%	-2%	-2%	0%	0%	-2%	-3%	2%	-2%	-1%
1990	Critical	-2%	-1%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%
1993	Above Normal	2%	-5%	-1%	2%	0%	0%	0%	4%	6%	-5%	-6%	4%	0%
1994	Critical	3%	2%	0%	-1%	4%	2%	-1%	0%	-2%	-1%	4%	-3%	1%
Average		1%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	1%	0%
Wet		0%	-1%	-1%	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%
Above Normal		0%	1%	1%	1%	0%	0%	0%	1%	0%	-1%	-1%	1%	0%
Below Normal		1%	2%	1%	0%	0%	1%	1%	0%	1%	-1%	1%	2%	1%
Dry		2%	2%	1%	-1%	2%	1%	0%	0%	-2%	-1%	1%	0%	0%
Critical		0%	1%	1%	0%	-2%	0%	0%	0%	-2%	-1%	0%	0%	0%

Monthly Average X2 Location (km)

Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	80	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	86	86	70	67	67	74	74	71	71	80	85	85	76
1924	Critical	87	87	86	83	83	77	77	85	85	86	86	86	84
1925	Dry	89	89	84	83	83	65	65	72	72	82	86	86	80
1926	Dry	88	88	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	88	88	76	70	70	59	59	65	65	76	84	84	73
1928	Above Normal	86	86	80	74	74	57	57	69	69	78	84	84	75
1929	Critical	88	88	83	84	84	78	78	81	81	86	87	87	84
1930	Dry	88	88	81	75	75	68	68	76	76	83	86	86	79
1931	Critical	87	87	86	82	82	81	81	85	85	86	87	87	85
1932	Dry	89	89	78	76	76	74	74	75	75	82	86	86	80
1933	Critical	88	88	86	81	81	78	78	81	81	86	86	86	83
1934	Critical	90	90	84	77	77	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	84	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	86	70	70	63	63	69	69	79	85	85	76
1937	Below Normal	87	87	85	83	83	62	62	69	69	79	85	85	78
1938	Wet	87	87	61	63	63	47	47	54	54	72	82	82	67
1939	Dry	77	77	82	82	82	77	77	78	78	83	86	86	80
1940	Above Normal	88	88	86	72	72	53	53	65	65	76	84	84	74
1941	Wet	87	87	69	57	57	51	51	58	58	75	83	83	68
1942	Wet	81	81	65	57	57	61	61	61	61	75	83	83	69
1943	Wet	81	81	70	58	58	54	54	67	67	77	84	84	70
1944	Dry	87	87	86	82	82	72	72	77	77	83	86	86	81
1945	Below Normal	87	87	80	82	82	66	66	74	74	80	85	85	79
1946	Below Normal	87	87	62	60	60	69	69	73	73	80	85	85	74
1947	Dry	88	88	81	82	82	74	74	78	78	83	84	84	81
1948	Below Normal	88	88	85	82	82	76	76	69	69	78	84	84	80
1949	Dry	86	86	84	83	83	67	67	74	74	83	84	84	80
1950	Below Normal	88	88	86	77	77	71	71	72	72	80	85	85	79
1951	Above Normal	87	87	55	55	55	61	61	71	71	76	84	84	71
1952	Wet	86	86	69	58	58	55	55	55	55	70	79	79	67
1953	Wet	80	80	68	56	56	70	70	69	69	76	84	84	72
1954	Above Normal	82	82	84	71	71	61	61	66	66	76	84	84	74
1955	Dry	87	87	76	74	74	79	79	78	78	83	86	86	80
1956	Wet	88	88	62	50	50	58	58	63	63	76	83	83	69
1957	Above Normal	78	78	85	83	83	64	64	71	71	77	84	84	77
1958	Wet	80	80	75	66	66	51	51	56	56	73	80	80	68
1959	Below Normal	80	80	85	72	72	67	67	78	78	79	84	84	77
1960	Dry	87	87	85	84	84	72	72	76	76	83	85	85	81
1961	Dry	87	87	82	82	82	74	74	78	78	82	84	84	81
1962	Below Normal	88	88	82	82	82	69	69	74	74	78	84	84	79
1963	Wet	72	72	73	75	75	65	65	63	63	76	83	83	72
1964	Dry	85	85	82	74	74	78	78	78	78	83	83	83	80
1965	Wet	87	87	63	54	54	67	67	66	66	77	84	84	71
1966	Below Normal	87	87	76	69	69	69	69	75	75	79	84	84	77
1967	Wet	87	87	70	62	62	58	58	58	58	67	79	79	69
1968	Below Normal	78	78	81	71	71	64	64	75	75	79	84	84	75
1969	Wet	88	88	76	58	58	54	54	56	56	73	83	83	69
1970	Wet	78	78	65	49	49	59	59	73	73	77	84	84	69
1971	Wet	87	87	64	61	61	62	62	66	66	77	84	84	72
1972	Below Normal	83	83	77	78	78	68	68	76	76	80	85	85	78
1973	Above Normal	87	87	72	59	59	57	57	71	71	78	84	84	72
1974	Wet	85	85	59	51	51	53	53	64	64	76	83	83	67
1975	Wet	79	79	81	78	78	56	56	65	65	76	83	83	73
1976	Critical	76	76	82	83	83	78	78	85	85	86	87	87	82
1977	Critical	86	86	83	85	85	81	81	85	85	86	87	87	85
1978	Above Normal	89	89	82	64	64	57	57	66	66	77	84	84	73
1979	Below Normal	86	86	84	75	75	65	65	71	71	79	85	85	77
1980	Above Normal	88	88	76	57	57	54	54	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	68	68	78	78	83	85	85	79
1982	Wet	87	87	58	55	55	52	52	57	57	75	81	81	66
1983	Wet	71	71	56	52	52	42	42	52	52	59	67	67	57
1984	Wet	71	71	50	53	53	61	61	73	73	77	84	84	68
1985	Dry	85	85	73	79	79	73	73	76	76	82	86	86	79
1986	Wet	87	87	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	86	86	86	82	82	70	70	78	78	83	85	85	81
1988	Critical	88	88	82	73	73	78	78	81	81	85	87	87	82
1989	Dry	89	89	84	84	84	67	67	74	74	83	84	84	80
1990	Critical	87	87	81	78	78	79	79	83	83	86	87	87	83
1991	Critical	90	90	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	72	72	80	80	85	88	88	83
1993	Above Normal	89	89	83	65	65	62	62	64	64	75	83	83	74
1994	Critical	86	86	84	82	82	75	75	79	79	83	84	84	82
Average		85	85	77	72	72	66	66	71	71	79	84	84	76
Wet		83	83	67	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	78	68	68	59	59	67	67	76	84	84	74
Below Normal		86	86	80	74	74	68	68	72	72	79	85	85	77
Dry		87	87	82	80	80	72	72	76	76	83	85	85	80
Critical		87	87	84	81	81	77	77	82	82	86	87	87	83

Shasta Lake Water Resources Investigation
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Monthly Average X2 Location (km)
Alternative CP3 (2005)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	80	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	86	86	69	67	67	74	74	71	71	80	85	85	76
1924	Critical	87	87	84	84	84	77	77	85	85	86	86	86	84
1925	Dry	89	89	84	83	83	65	65	72	72	82	86	86	80
1926	Dry	88	88	86	80	80	74	74	73	73	83	86	86	81
1927	Wet	87	87	76	69	69	59	59	65	65	76	84	84	73
1928	Above Normal	86	86	80	74	74	57	57	69	69	78	84	84	75
1929	Critical	88	88	83	84	84	78	78	81	81	86	87	87	84
1930	Dry	88	88	81	75	75	68	68	76	76	83	86	86	79
1931	Critical	87	87	86	82	82	81	81	85	85	86	87	87	85
1932	Dry	88	88	78	76	76	74	74	75	75	82	86	86	80
1933	Critical	88	88	86	80	80	77	77	81	81	86	86	86	83
1934	Critical	90	90	84	77	77	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	84	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	85	70	70	63	63	69	69	80	85	85	76
1937	Below Normal	87	87	86	82	82	61	61	69	69	79	85	85	78
1938	Wet	87	87	62	64	64	47	47	54	54	72	82	82	67
1939	Dry	78	78	82	82	82	77	77	78	78	82	85	85	80
1940	Above Normal	88	88	86	72	72	54	54	65	65	76	84	84	74
1941	Wet	87	87	69	57	57	51	51	58	58	75	83	83	68
1942	Wet	81	81	65	57	57	61	61	62	62	75	83	83	69
1943	Wet	81	81	70	58	58	54	54	67	67	77	84	84	70
1944	Dry	87	87	84	83	83	72	72	77	77	83	85	85	81
1945	Below Normal	88	88	80	82	82	66	66	74	74	80	85	85	79
1946	Below Normal	87	87	64	61	61	69	69	73	73	79	85	85	74
1947	Dry	87	87	81	82	82	74	74	78	78	83	83	83	81
1948	Below Normal	87	87	84	81	81	76	76	69	69	79	85	85	80
1949	Dry	87	87	84	84	84	68	68	74	74	83	84	84	80
1950	Below Normal	88	88	85	76	76	71	71	72	72	80	85	85	79
1951	Above Normal	87	87	56	55	55	62	62	71	71	76	84	84	71
1952	Wet	86	86	69	58	58	55	55	55	55	70	79	79	67
1953	Wet	80	80	68	56	56	70	70	69	69	76	84	84	72
1954	Above Normal	82	82	84	71	71	61	61	66	66	76	84	84	74
1955	Dry	87	87	77	74	74	79	79	77	77	83	85	85	80
1956	Wet	88	88	63	51	51	58	58	63	63	76	83	83	69
1957	Above Normal	78	78	85	82	82	64	64	71	71	77	84	84	77
1958	Wet	81	81	75	66	66	51	51	56	56	73	80	80	68
1959	Below Normal	80	80	85	72	72	67	67	78	78	79	84	84	77
1960	Dry	87	87	82	84	84	72	72	76	76	83	85	85	81
1961	Dry	87	87	82	82	82	75	75	78	78	82	84	84	81
1962	Below Normal	88	88	82	82	82	69	69	74	74	78	84	84	79
1963	Wet	72	72	73	76	76	65	65	63	63	76	83	83	72
1964	Dry	85	85	82	74	74	78	78	78	78	83	83	83	80
1965	Wet	87	87	64	54	54	67	67	66	66	77	84	84	71
1966	Below Normal	87	87	76	69	69	69	69	75	75	78	84	84	77
1967	Wet	87	87	70	62	62	58	58	58	58	67	79	79	69
1968	Below Normal	78	78	81	71	71	64	64	75	75	79	84	84	75
1969	Wet	88	88	76	58	58	54	54	56	56	73	83	83	69
1970	Wet	78	78	65	49	49	59	59	73	73	77	84	84	69
1971	Wet	87	87	64	61	61	62	62	66	66	77	84	84	72
1972	Below Normal	83	83	78	78	78	68	68	76	76	79	85	85	78
1973	Above Normal	87	87	72	59	59	57	57	71	71	77	84	84	72
1974	Wet	85	85	59	51	51	53	53	64	64	76	83	83	67
1975	Wet	79	79	81	78	78	56	56	65	65	76	83	83	73
1976	Critical	76	76	82	83	83	78	78	85	85	86	87	87	82
1977	Critical	86	86	83	85	85	82	82	85	85	86	86	86	85
1978	Above Normal	90	90	83	65	65	58	58	66	66	77	84	84	74
1979	Below Normal	86	86	84	75	75	65	65	71	71	79	85	85	77
1980	Above Normal	88	88	76	58	58	54	54	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	69	69	78	78	83	85	85	79
1982	Wet	87	87	58	56	56	52	52	57	57	75	81	81	66
1983	Wet	71	71	56	52	52	42	42	52	52	59	67	67	57
1984	Wet	71	71	50	53	53	61	61	73	73	77	84	84	68
1985	Dry	86	86	73	79	79	73	73	76	76	82	85	85	79
1986	Wet	87	87	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	86	86	86	82	82	71	71	78	78	82	84	84	81
1988	Critical	88	88	82	72	72	78	78	81	81	85	88	88	82
1989	Dry	88	88	84	84	84	67	67	74	74	82	83	83	80
1990	Critical	87	87	81	78	78	79	79	83	83	86	87	87	83
1991	Critical	90	90	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	72	72	80	80	85	88	88	83
1993	Above Normal	88	88	84	65	65	62	62	66	66	76	83	83	74
1994	Critical	86	86	84	82	82	75	75	79	79	84	83	83	82
Average		85	85	77	72	72	66	66	71	71	79	84	84	76
Wet		83	83	67	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	79	68	68	59	59	68	68	76	84	84	74
Below Normal		86	86	80	74	74	68	68	72	72	79	85	85	77
Dry		87	87	82	80	80	72	72	76	76	83	85	85	80
Critical		87	87	84	82	82	77	77	82	82	86	87	87	83

Change in Monthly Average X2 Position (km)
Alternative CP3 (2005) - Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	-1	2	2	1	1	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	-1	0	0	0	0	0	0	0	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	1	1	0
1931	Critical	0	0	0	0	0	-1	-1	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	-1	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	1	-1	-1	0	0	0	0	0	0	0	0
1938	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	-1	-1	-1	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	-1	1	1	0	0	0	0	0	-1	-1	0
1945	Below Normal	1	1	0	0	0	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	1	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	1	1	-1	1	1	1	1	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	1	0	0	0	0	0	0	0	-1	-1	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	1	1	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	-3	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	1	1	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	-1	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1977	Critical	0	0	-1	0	0	1	1	0	0	0	-1	-1	0
1978	Above Normal	1	1	1	0	0	1	1	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	1	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	1	1	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	Dry	0	0	0	0	0	1	1	0	0	-1	-1	-1	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	-1	-1	0	0	0	0	0	1	1	1	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	-1	-1	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
 Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average X2 Position (km)
 From Existing Condition

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	-2%	2%	2%	1%	1%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	-1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1928	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1931	Critical	0%	0%	0%	1%	1%	-1%	-1%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Norma	0%	0%	-1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1937	Below Norma	0%	0%	1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	1%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1940	Above Norm	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	-2%	2%	2%	0%	0%	0%	0%	0%	-1%	-1%	0%
1945	Below Norma	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Norma	0%	0%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1948	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1949	Dry	1%	1%	-1%	1%	1%	2%	2%	0%	0%	0%	0%	0%	1%
1950	Below Norma	0%	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Norm	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1956	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	-4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%
1962	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	1%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1977	Critical	0%	0%	-1%	0%	0%	1%	1%	0%	0%	0%	-1%	-1%	0%
1978	Above Norm	1%	1%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%
1979	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norm	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	-1%	-1%	-1%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norm	-1%	-1%	0%	0%	0%	1%	1%	2%	2%	1%	0%	0%	1%
1994	Critical	0%	0%	0%	1%	1%	0%	0%	0%	0%	1%	-1%	-1%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norm		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1923	Below Normal	5	-674	-82	0	-62	-33	32	52	40	160	235	103	-19
1924	Critical	-10	69	141	-185	822	498	90	10	38	-123	10	41	117
1925	Dry	0	-136	-205	-152	-8	4	1	0	-1	-3	12	-136	-52
1926	Dry	-111	-62	-31	-28	-1	-4	17	-1	33	0	7	-91	-23
1927	Wet	-28	106	62	-8	1	0	0	-3	-9	-121	-162	-49	-18
1928	Above Normal	-27	573	312	168	4	-1	-3	-7	-30	88	102	97	106
1929	Critical	-17	-98	-79	-24	-8	-3	0	-9	1	24	-7	-2	-18
1930	Dry	-14	-16	3	3	-10	-1	-2	16	-32	-9	-101	-263	-36
1931	Critical	-150	-26	-161	-465	932	896	230	81	-67	-118	43	81	106
1932	Dry	12	-7	1	-176	-115	-29	-7	14	-40	-4	-2	3	-29
1933	Critical	4	1	5	18	13	2	0	1	-2	-4	-3	8	4
1934	Critical	-9	37	5	-195	-93	-18	-4	0	1	0	-11	-24	-26
1935	Below Normal	14	-9	30	11	0	-1	0	0	0	2	-2	-7	3
1936	Below Normal	-5	-1	-1	0	0	0	-1	-3	-8	6	-3	-66	-7
1937	Below Normal	-50	-16	-15	-120	-17	0	-2	-1	3	4	5	0	-17
1938	Wet	-24	174	6	0	0	0	0	0	0	0	-3	103	21
1939	Dry	55	20	10	-1	-3	2	0	109	-228	94	-151	-641	-61
1940	Above Normal	-382	-73	-66	-67	1	0	0	-1	-3	-4	-3	-6	-50
1941	Wet	-2	-8	-9	0	0	0	0	0	0	-1	3	5	-1
1942	Wet	170	170	6	0	0	0	0	0	0	0	-6	11	29
1943	Wet	-4	-20	-1	0	1	0	0	0	1	-1	-3	2	-2
1944	Dry	-11	2	-55	-37	0	16	21	1	-52	-127	-124	-145	-43
1945	Below Normal	-93	-85	-75	-36	-3	-1	-2	-10	-20	7	13	-14	-27
1946	Below Normal	-4	359	32	0	0	-9	-10	-6	56	-316	179	409	58
1947	Dry	75	-12	-81	-8	-30	-18	-39	23	13	-225	-192	-205	-58
1948	Below Normal	-262	-60	-86	255	142	19	-4	25	307	300	-123	-128	32
1949	Dry	19	-17	-27	-3	-48	-4	3	1	-3	54	141	77	16
1950	Below Normal	-132	-111	-14	-165	-16	-1	-4	95	107	6	-92	-11	-28
1951	Above Normal	-202	34	0	1	0	0	0	68	285	8	-90	-83	2
1952	Wet	-83	-139	-2	0	0	1	0	0	0	0	6	6	-18
1953	Wet	7	6	0	0	0	0	-1	9	6	3	-23	20	2
1954	Above Normal	18	7	3	0	0	0	0	0	33	16	-6	186	21
1955	Dry	57	-108	-55	-14	-16	276	42	-55	-31	-34	-15	-24	2
1956	Wet	-10	-15	9	0	-1	-1	0	0	0	0	2	-1	-1
1957	Above Normal	2	3	1	55	10	0	0	0	2	-84	-64	-429	-42
1958	Wet	431	161	-61	6	0	0	0	0	0	0	8	8	46
1959	Below Normal	8	7	3	1	0	0	3	-14	-47	-24	-14	-10	-7
1960	Dry	18	-302	-779	-298	26	-5	-8	-108	-190	-111	105	118	-128
1961	Dry	-46	-146	25	76	177	191	121	-28	-5	-149	706	186	92
1962	Below Normal	-73	-189	-184	-67	-29	-2	-2	54	753	104	-114	-56	16
1963	Wet	-50	146	134	51	8	-2	0	0	-1	140	182	91	58
1964	Dry	82	-183	-176	-29	-4	4	-133	-186	-332	-278	-594	-55	-157
1965	Wet	28	-139	2	0	1	-3	0	-3	180	39	-131	-105	-11
1966	Below Normal	-7	219	57	-13	-2	21	38	6	-8	-29	-18	-86	15
1967	Wet	-3	-37	42	0	0	0	0	0	0	0	7	6	1
1968	Below Normal	5	3	-6	-1	0	0	0	1	-37	-57	-15	12	-8
1969	Wet	-62	-108	102	3	0	0	0	0	0	0	0	13	-4
1970	Wet	9	4	0	0	0	0	0	0	-31	-5	7	7	-1
1971	Wet	-139	-55	0	0	-1	0	0	0	0	1	0	20	-14
1972	Below Normal	19	7	3	4	5	1	4	2	189	-76	-170	-64	-7
1973	Above Normal	353	179	-22	0	0	0	0	0	0	-5	-10	-3	41
1974	Wet	-9	1	0	0	0	0	0	0	0	0	0	7	0
1975	Wet	8	6	2	0	0	0	0	0	0	0	-1	4	2
1976	Critical	2	2	-1	80	-1,982	-662	-152	-67	189	68	-45	-16	-215
1977	Critical	118	209	-760	-474	-3,211	-1,968	-422	-181	36	95	273	253	-503
1978	Above Normal	153	-38	62	5	2	-1	1	-3	34	36	2	48	25
1979	Below Normal	36	6	-53	385	18	0	-2	-15	-3	-12	20	44	35
1980	Above Normal	2	478	216	2	-1	-1	0	0	0	0	0	0	58
1981	Dry	1	0	0	0	0	24	43	12	-88	-40	-65	-36	-12
1982	Wet	-51	19	0	0	0	0	0	0	0	0	2	1	-2
1983	Wet	0	0	0	0	0	0	0	0	0	0	1	0	0
1984	Wet	1	0	0	0	0	0	0	0	-1	0	1	-3	0
1985	Dry	61	21	-68	-89	-13	-184	-136	-10	2	-3	103	89	-19
1986	Wet	65	21	-15	38	1	0	1	-32	-128	-36	28	-295	-29
1987	Dry	-329	-139	-31	65	39	4	-3	0	-37	-4	-88	-207	-61
1988	Critical	-61	-95	-37	-3	-3	0	-1	1	-9	22	-9	-8	-17
1989	Dry	-6	32	-432	-167	-190	8	-22	-11	233	32	198	-136	-39
1990	Critical	-208	-31	209	109	21	9	3	-4	-8	-3	3	3	9
1991	Critical	-1	3	-17	-30	-42	-7	0	1	0	0	0	0	-8
1992	Critical	0	1	0	-1	-1	-1	-1	-5	4	5	83	139	19
1993	Above Normal	-7	69	-100	-20	0	0	0	16	11	-3	-5	21	-1
1994	Critical	11	5	-10	54	72	27	15	17	-233	288	-147	-458	-30
Average		-11	0	-32	-20	-50	-13	-4	-2	12	-6	-2	-22	-12
Wet		12	14	13	4	0	0	0	-1	1	1	-4	-7	3
Above Normal		-9	123	41	15	2	0	0	7	33	5	-8	-17	16
Below Normal		-38	-39	-28	18	3	0	4	13	95	5	-7	9	3
Dry		-9	-66	-119	-54	-12	18	-6	-14	-48	-51	-4	-92	-38
Critical		-27	6	-59	-93	-290	-102	-20	-13	-4	21	16	1	-47

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-10%	-11%	0%	-13%	-3%	7%	11%	2%	7%	5%	2%	0%
1924	Critical	0%	1%	2%	-3%	47%	41%	3%	0%	1%	-2%	0%	0%	7%
1925	Dry	0%	-1%	-3%	-2%	-2%	2%	0%	0%	0%	0%	0%	-2%	-1%
1926	Dry	-1%	-1%	0%	-1%	0%	-1%	3%	0%	1%	0%	0%	-1%	0%
1927	Wet	0%	3%	4%	-2%	0%	0%	0%	-1%	-1%	-8%	-4%	-1%	-1%
1928	Above Normal	0%	14%	10%	15%	1%	0%	-2%	-2%	-2%	3%	2%	1%	3%
1929	Critical	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	-1%	-1%	0%	1%	-1%	0%	-2%	-3%	-1%
1931	Critical	-2%	0%	-2%	-7%	33%	28%	5%	1%	-1%	-2%	1%	1%	5%
1932	Dry	0%	0%	0%	-16%	-16%	-3%	0%	1%	-2%	0%	0%	0%	-3%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-6%	-7%	-1%	0%	0%	0%	0%	0%	0%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	-1%	0%
1937	Below Normal	-1%	0%	0%	-2%	-3%	0%	-1%	0%	0%	0%	0%	0%	-1%
1938	Wet	0%	10%	3%	0%	0%	0%	0%	0%	0%	0%	0%	4%	1%
1939	Dry	2%	0%	0%	0%	0%	0%	0%	5%	-5%	2%	-3%	-8%	0%
1940	Above Normal	-5%	-1%	-1%	-5%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	4%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	-1%	-1%	0%	4%	2%	0%	-2%	-3%	-2%	-2%	0%
1945	Below Normal	-1%	-1%	-2%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%	-1%
1946	Below Normal	0%	6%	9%	0%	0%	-2%	-1%	-1%	3%	-12%	4%	6%	1%
1947	Dry	1%	0%	-1%	0%	-1%	-2%	-3%	1%	0%	-5%	-3%	-3%	-1%
1948	Below Normal	-3%	-1%	-1%	4%	5%	1%	-1%	9%	55%	15%	-3%	-2%	7%
1949	Dry	0%	0%	0%	0%	-3%	-2%	0%	0%	0%	1%	2%	1%	0%
1950	Below Normal	-1%	-1%	0%	-5%	-5%	0%	-1%	13%	6%	0%	-2%	0%	0%
1951	Above Normal	-2%	6%	0%	0%	0%	0%	0%	12%	17%	1%	-2%	-1%	2%
1952	Wet	-1%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	-1%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	3%	1%
1955	Dry	1%	-1%	-2%	-1%	-1%	12%	2%	-3%	-1%	-1%	0%	0%	0%
1956	Wet	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-5%	-2%	-6%	-1%
1958	Wet	8%	4%	-3%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	0%	0%	0%
1960	Dry	0%	-3%	-9%	-4%	2%	-1%	-1%	-5%	-5%	-2%	2%	2%	-2%
1961	Dry	-1%	-2%	0%	1%	15%	27%	8%	-1%	0%	-3%	16%	3%	5%
1962	Below Normal	-1%	-2%	-3%	-1%	-4%	-1%	0%	5%	37%	5%	-3%	-1%	3%
1963	Wet	-5%	9%	17%	4%	3%	-1%	0%	0%	0%	11%	5%	1%	4%
1964	Dry	1%	-8%	-6%	-2%	0%	0%	-6%	-8%	-9%	-6%	-11%	-1%	-5%
1965	Wet	0%	-2%	0%	0%	1%	-1%	0%	-1%	16%	2%	-3%	-1%	1%
1966	Below Normal	0%	13%	4%	-3%	-1%	7%	5%	0%	0%	-1%	0%	-1%	2%
1967	Wet	0%	-1%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	0%	0%
1969	Wet	-1%	-1%	4%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1971	Wet	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	6%	-3%	-4%	-1%	0%
1973	Above Normal	4%	5%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	-46%	-33%	-5%	-1%	3%	1%	-1%	0%	-7%
1977	Critical	1%	2%	-10%	-7%	-52%	-38%	-8%	-3%	1%	1%	3%	3%	-9%
1978	Above Normal	2%	0%	1%	1%	1%	0%	1%	-1%	5%	2%	0%	1%	1%
1979	Below Normal	0%	0%	-1%	20%	8%	0%	-1%	-2%	0%	0%	0%	1%	2%
1980	Above Normal	0%	8%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	10%	5%	1%	-2%	-1%	-1%	-1%	1%
1982	Wet	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	1%	2%	-10%	-4%	-1%	-11%	-7%	-1%	0%	0%	2%	2%	-2%
1986	Wet	1%	0%	0%	2%	0%	0%	0%	-5%	-10%	-2%	1%	-5%	-1%
1987	Dry	-4%	-2%	0%	1%	2%	1%	0%	0%	-1%	0%	-1%	-3%	-1%
1988	Critical	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	-5%	-2%	-3%	2%	-6%	-1%	8%	1%	4%	-2%	0%
1990	Critical	-3%	0%	3%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1993	Above Normal	0%	1%	-1%	-4%	0%	0%	0%	8%	4%	0%	0%	0%	1%
1994	Critical	0%	0%	0%	1%	4%	2%	1%	1%	-4%	6%	-3%	-6%	0%
Average		0%	1%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	3%	1%	1%	0%	0%	0%	2%	3%	0%	0%	0%	1%
Below Normal		0%	0%	0%	1%	-1%	0%	1%	2%	7%	1%	0%	0%	1%
Dry		0%	-1%	-2%	-2%	-1%	2%	0%	-1%	-1%	-1%	0%	-1%	-1%
Critical		0%	0%	-1%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	1	0	0	0	0	0	0	-1	0	0
1923	Below Normal	6	-743	-122	2	-159	-78	83	137	79	217	270	123	-15
1924	Critical	13	50	155	-213	1,598	985	176	14	13	-101	7	37	228
1925	Dry	5	-123	-231	-174	-22	3	-1	-2	0	-1	12	-106	-53
1926	Dry	-111	-66	-33	-36	3	-4	40	3	35	2	6	-60	-19
1927	Wet	-27	160	111	-33	1	0	0	-13	-19	-199	-207	-63	-24
1928	Above Normal	-32	740	466	359	-9	-3	-18	-17	-40	122	123	86	148
1929	Critical	3	-95	-82	-29	-12	-4	0	-9	3	20	-5	-1	-18
1930	Dry	-13	-15	4	5	-20	-5	1	23	-26	49	-142	-292	-36
1931	Critical	-146	-36	-114	-556	1,444	1,291	333	114	-98	-146	38	79	184
1932	Dry	15	-4	2	-387	-263	-70	-15	27	-51	-4	-3	3	-62
1933	Critical	3	1	5	23	18	4	1	1	-1	-4	-2	6	5
1934	Critical	-8	30	2	-314	-172	-33	-8	0	1	0	-15	-24	-45
1935	Below Normal	12	-9	33	17	0	-4	0	0	0	1	-2	-6	4
1936	Below Normal	-5	-2	-1	1	0	0	-3	-4	-12	4	-1	-61	-7
1937	Below Normal	-53	-19	-14	-144	-26	0	-7	-5	4	5	3	0	-21
1938	Wet	-20	360	16	-4	0	0	0	0	0	0	-3	161	43
1939	Dry	95	28	14	-1	-3	4	1	161	-251	84	-150	-639	-55
1940	Above Normal	-413	-108	-77	-139	1	0	0	-3	-6	-7	-4	-6	-64
1941	Wet	-2	-8	-20	0	0	0	0	0	0	0	3	5	-2
1942	Wet	196	194	9	0	0	0	0	2	2	1	-4	15	35
1943	Wet	-4	-28	-1	0	1	0	0	1	3	0	-2	2	-2
1944	Dry	-7	1	-51	-44	1	45	41	3	-69	-144	-137	-156	-43
1945	Below Normal	-102	-99	-102	-52	-3	-1	-2	-19	-31	9	15	-12	-33
1946	Below Normal	-8	397	58	-1	-1	-28	-22	-18	66	-422	168	446	53
1947	Dry	124	-19	-94	-27	-46	-39	-62	33	13	-248	-208	-203	-65
1948	Below Normal	-236	-74	-92	262	196	36	-11	84	656	502	-111	-144	89
1949	Dry	-7	-18	-28	-4	-104	-7	8	2	-3	40	141	96	10
1950	Below Normal	-124	-132	-32	-258	-43	-4	-8	200	175	26	-103	-27	-28
1951	Above Normal	-137	68	1	1	0	0	0	139	432	2	-129	-93	24
1952	Wet	-80	-134	6	0	0	1	0	0	0	0	8	10	-16
1953	Wet	10	7	1	0	0	0	-1	36	18	6	-15	24	7
1954	Above Normal	22	8	4	1	0	0	0	0	49	25	-7	176	23
1955	Dry	100	-114	-79	-26	-23	381	72	-94	-36	-29	-16	-23	9
1956	Wet	-10	-14	14	0	-1	-1	0	0	0	0	1	-2	-1
1957	Above Normal	3	3	1	75	19	0	0	0	2	-130	-96	-408	-44
1958	Wet	509	241	-84	34	0	0	0	0	0	0	10	13	60
1959	Below Normal	12	8	3	2	0	0	4	-21	-61	-35	-15	-10	-9
1960	Dry	18	-186	-841	-351	0	-20	-14	-156	-227	-122	101	127	-139
1961	Dry	-11	-146	49	99	404	413	221	-22	-10	-167	768	330	161
1962	Below Normal	-48	-97	-227	-112	-65	-9	-5	101	1,023	138	-170	-56	39
1963	Wet	-113	196	287	108	17	-11	0	0	-2	241	238	108	89
1964	Dry	88	-356	-282	-51	-7	5	-199	-297	-429	-315	-642	-167	-221
1965	Wet	30	-153	3	0	18	-4	-1	-7	302	59	-162	-110	-2
1966	Below Normal	-37	431	129	-44	-11	76	82	12	-10	-43	-27	-83	40
1967	Wet	-27	-27	112	1	0	0	0	0	0	1	9	10	7
1968	Below Normal	7	5	-7	-2	0	0	0	1	-49	-80	-30	3	-13
1969	Wet	-43	-115	177	6	0	0	0	0	0	0	0	22	4
1970	Wet	15	6	0	0	0	0	0	0	-42	-8	9	7	-1
1971	Wet	-131	-69	1	0	-1	2	2	0	0	1	1	27	-14
1972	Below Normal	23	9	4	7	7	3	7	5	216	-98	-191	-72	-7
1973	Above Normal	327	221	-53	-1	0	0	0	0	0	-8	-11	-4	39
1974	Wet	-8	1	0	0	0	0	0	0	0	0	0	12	1
1975	Wet	12	8	2	0	0	0	0	1	1	0	-1	7	3
1976	Critical	3	2	-1	80	-2,738	-1,206	-247	-92	151	111	-37	-36	-334
1977	Critical	129	203	-749	-567	-4,120	-2,793	-644	-245	18	90	292	289	-675
1978	Above Normal	113	-39	70	9	4	-1	8	-14	64	69	15	47	29
1979	Below Normal	38	9	-50	696	47	-1	-3	-35	-6	-9	13	40	62
1980	Above Normal	6	541	308	4	-1	-1	1	0	0	0	0	0	71
1981	Dry	1	0	0	0	0	96	99	23	-98	-47	-67	-45	-3
1982	Wet	-39	49	0	0	0	0	0	0	0	0	2	2	1
1983	Wet	1	0	0	0	0	0	0	0	0	0	2	1	0
1984	Wet	3	0	0	0	0	0	0	-1	-1	0	1	-2	0
1985	Dry	54	46	-147	-150	-25	-311	-223	-24	-2	-7	124	108	-46
1986	Wet	63	25	-16	70	2	-1	4	-66	-226	-63	46	-317	-40
1987	Dry	-346	-148	-50	75	70	10	-5	-2	-33	-6	-88	-174	-58
1988	Critical	-94	-99	-48	-7	-4	0	-2	1	-7	16	-7	-7	-21
1989	Dry	-5	29	-400	-211	-201	42	-64	-39	297	53	210	-97	-32
1990	Critical	-216	-51	208	151	34	15	5	-4	-8	-3	3	3	11
1991	Critical	-1	3	-16	-26	-43	-10	-1	1	1	0	1	0	-8
1992	Critical	1	1	0	-1	-1	-1	-2	-5	5	4	96	138	20
1993	Above Normal	-7	67	-121	-31	0	1	3	84	44	-4	-2	19	4
1994	Critical	14	5	-11	57	136	57	25	27	-244	323	-142	-480	-19
Average		-8	11	-28	-25	-56	-16	-5	0	22	-3	-3	-19	-11
Wet		16	33	29	9	2	-1	0	-2	2	2	-3	-3	7
Above Normal		-12	150	60	28	1	0	-1	19	55	7	-11	-18	23
Below Normal		-37	-23	-30	27	-4	-1	8	31	146	15	-13	10	11
Dry		0	-68	-136	-80	-15	34	-6	-22	-56	-54	-6	-81	-41
Critical		-25	1	-54	-117	-322	-141	-30	-16	-14	26	19	0	-56

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-7%	-8%	1%	-13%	-3%	7%	12%	2%	4%	3%	1%	0%
1924	Critical	0%	0%	1%	-2%	44%	34%	3%	0%	-1%	0%	0%	0%	7%
1925	Dry	0%	-1%	-2%	-2%	-3%	1%	0%	0%	0%	0%	0%	-1%	-1%
1926	Dry	-1%	-1%	0%	0%	0%	0%	3%	0%	1%	0%	0%	0%	0%
1927	Wet	0%	3%	3%	-3%	0%	0%	0%	-3%	-1%	-6%	-3%	-1%	-1%
1928	Above Normal	0%	10%	8%	13%	-1%	-1%	-6%	-2%	-1%	2%	2%	1%	2%
1929	Critical	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	-1%	-1%	0%	1%	0%	1%	-1%	-2%	0%
1931	Critical	-1%	0%	-1%	-5%	27%	22%	4%	1%	-1%	-1%	0%	1%	4%
1932	Dry	0%	0%	0%	-14%	-15%	-3%	0%	1%	-1%	0%	0%	0%	-3%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-5%	-5%	-1%	0%	0%	0%	0%	0%	0%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%
1937	Below Normal	0%	0%	0%	-1%	-2%	0%	-2%	0%	0%	0%	0%	0%	-1%
1938	Wet	0%	10%	7%	-2%	0%	0%	0%	0%	0%	0%	0%	3%	2%
1939	Dry	2%	0%	0%	0%	0%	0%	0%	4%	-4%	1%	-2%	-6%	0%
1940	Above Normal	-3%	-1%	-1%	-6%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	2%	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	4%	1%	0%	-1%	-2%	-2%	-2%	0%
1945	Below Normal	-1%	-1%	-1%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%
1946	Below Normal	0%	4%	10%	0%	0%	-3%	-1%	-1%	2%	-8%	2%	4%	1%
1947	Dry	1%	0%	-1%	0%	-1%	-2%	-2%	1%	0%	-3%	-2%	-2%	-1%
1948	Below Normal	-2%	-1%	-1%	3%	3%	1%	-1%	13%	44%	12%	-1%	-2%	6%
1949	Dry	0%	0%	0%	0%	-3%	-2%	0%	0%	0%	1%	1%	1%	0%
1950	Below Normal	-1%	-1%	0%	-4%	-6%	0%	-1%	10%	5%	0%	-1%	0%	0%
1951	Above Normal	-1%	7%	0%	1%	0%	0%	0%	9%	12%	0%	-2%	-1%	2%
1952	Wet	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	5%	2%	0%	0%	0%	1%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%	2%	0%
1955	Dry	1%	-1%	-1%	-1%	-1%	8%	1%	-2%	-1%	0%	0%	0%	0%
1956	Wet	0%	0%	2%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-3%	-1%	-4%	0%
1958	Wet	6%	3%	-2%	8%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1960	Dry	0%	-1%	-7%	-3%	0%	-2%	-1%	-4%	-3%	-1%	1%	1%	-2%
1961	Dry	0%	-1%	0%	1%	15%	22%	7%	0%	0%	-2%	10%	3%	5%
1962	Below Normal	0%	-1%	-2%	-1%	-5%	-2%	0%	4%	24%	3%	-2%	-1%	1%
1963	Wet	-5%	6%	14%	3%	5%	-3%	0%	0%	0%	8%	4%	1%	3%
1964	Dry	1%	-8%	-5%	-1%	0%	0%	-4%	-6%	-7%	-4%	-7%	-2%	-4%
1965	Wet	0%	-1%	0%	0%	8%	-1%	0%	-2%	12%	1%	-2%	-1%	1%
1966	Below Normal	0%	12%	5%	-5%	-2%	10%	4%	0%	0%	-1%	0%	-1%	2%
1967	Wet	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	0%	0%
1969	Wet	0%	-1%	4%	3%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1971	Wet	-1%	-1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	4%	-2%	-2%	-1%	0%
1973	Above Normal	3%	3%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	-36%	-27%	-4%	-1%	1%	1%	0%	0%	-6%
1977	Critical	1%	2%	-6%	-5%	-42%	-32%	-8%	-2%	0%	1%	2%	2%	-7%
1978	Above Normal	1%	0%	1%	2%	2%	0%	3%	-2%	4%	2%	0%	0%	1%
1979	Below Normal	0%	0%	0%	18%	14%	0%	0%	-2%	0%	0%	0%	0%	2%
1980	Above Normal	0%	6%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	17%	5%	1%	-1%	-1%	-1%	0%	2%
1982	Wet	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	2%	-9%	-3%	-1%	-8%	-5%	-1%	0%	0%	2%	1%	-2%
1986	Wet	1%	0%	0%	2%	1%	0%	1%	-4%	-8%	-1%	1%	-3%	-1%
1987	Dry	-3%	-1%	0%	1%	2%	1%	0%	0%	0%	0%	-1%	-1%	0%
1988	Critical	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	-3%	-2%	-2%	5%	-8%	-2%	6%	1%	2%	-1%	0%
1990	Critical	-2%	0%	2%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1993	Above Normal	0%	1%	-1%	-5%	0%	0%	1%	28%	7%	0%	0%	0%	3%
1994	Critical	0%	0%	0%	1%	4%	2%	1%	0%	-3%	4%	-2%	-4%	0%
Average		0%	1%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%
Wet		0%	1%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	3%	1%	1%	0%	0%	0%	3%	2%	0%	0%	0%	1%
Below Normal		0%	0%	0%	1%	-1%	0%	0%	2%	5%	1%	0%	0%	1%
Dry		0%	-1%	-2%	-2%	-1%	3%	0%	-1%	-1%	-1%	0%	-1%	0%
Critical		0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	-2	-247	-14	0	-6	-2	2	4	3	33	90	26	-9
1924	Critical	-30	80	47	-55	83	50	6	30	119	-137	2	27	19
1925	Dry	0	-76	-76	-60	-1	2	1	0	-3	-10	-2	-135	-30
1926	Dry	-55	-30	-17	-7	1	-1	1	-2	7	-7	0	-155	-22
1927	Wet	-17	21	10	0	0	0	0	0	-1	-18	-56	-8	-6
1928	Above Normal	-11	163	76	24	2	0	0	-1	-7	24	33	65	31
1929	Critical	-57	-50	-36	-7	-1	-1	0	-6	-15	27	-6	-1	-13
1930	Dry	-8	-10	0	1	-1	0	-1	2	-24	-108	25	-104	-19
1931	Critical	-133	-15	-151	-126	134	206	58	22	24	-34	31	46	5
1932	Dry	7	-5	0	-16	-11	-1	-1	1	-8	-1	0	2	-3
1933	Critical	2	1	-1	6	3	1	0	0	-1	-2	-2	6	1
1934	Critical	-3	41	2	-34	-15	-3	-1	0	0	0	2	-15	-2
1935	Below Normal	8	-4	8	3	0	0	0	0	0	1	-2	-3	1
1936	Below Normal	-2	0	0	0	0	0	0	0	-1	3	-5	-42	-4
1937	Below Normal	-23	-7	-11	-38	-2	0	0	0	1	4	9	-1	-6
1938	Wet	-19	28	1	0	0	0	0	0	0	0	-1	18	2
1939	Dry	7	6	3	0	-1	0	0	19	-106	53	-86	-345	-38
1940	Above Normal	-166	3	-42	-12	1	0	0	0	-1	-1	-1	-3	-18
1941	Wet	-1	-4	-2	0	0	0	0	0	0	-1	2	2	0
1942	Wet	66	68	1	0	0	0	0	0	0	-1	-7	3	11
1943	Wet	-2	-4	0	0	0	0	0	0	0	-1	-4	2	-1
1944	Dry	-14	2	-29	-11	0	1	3	0	-15	-42	-42	-61	-17
1945	Below Normal	-39	-30	-18	-10	-1	0	0	-1	-3	2	5	-10	-9
1946	Below Normal	8	132	4	0	0	0	-1	1	12	-64	84	177	29
1947	Dry	-11	22	-37	4	-9	-2	-5	3	9	-73	-75	-107	-23
1948	Below Normal	-212	-17	-42	94	31	3	0	1	25	52	-55	-46	-14
1949	Dry	39	-14	-11	-1	-7	0	0	0	-1	22	73	13	9
1950	Below Normal	-65	-23	4	-37	-3	0	0	6	18	-4	-37	9	-11
1951	Above Normal	-223	5	0	0	0	0	0	5	55	5	-23	-35	-18
1952	Wet	-52	-66	1	0	0	0	0	0	0	0	2	1	-9
1953	Wet	2	2	0	0	0	0	0	0	0	0	-20	8	-1
1954	Above Normal	7	2	1	0	0	0	0	0	7	3	-2	109	11
1955	Dry	-29	-31	-16	-2	-3	68	2	-7	-23	-36	-10	-16	-9
1956	Wet	-5	-10	1	0	0	0	0	0	0	0	2	-1	-1
1957	Above Normal	0	1	0	15	2	0	0	0	0	-15	-14	-283	-24
1958	Wet	163	34	-11	1	0	0	0	0	0	0	3	2	16
1959	Below Normal	2	2	1	0	0	0	1	-3	-13	-3	-5	-4	-2
1960	Dry	-1	-374	-277	-130	8	0	-2	-21	-63	-51	56	48	-67
1961	Dry	-124	-71	1	28	23	19	16	-12	0	-47	265	-83	1
1962	Below Normal	-41	-247	-21	-14	-7	0	0	5	190	19	-30	-32	-15
1963	Wet	-8	33	20	8	1	0	0	0	0	19	61	29	13
1964	Dry	36	-31	-35	-6	-1	1	-25	-30	-102	-97	-222	113	-33
1965	Wet	-45	-59	1	0	0	-1	0	-1	25	10	-43	-54	-14
1966	Below Normal	61	23	7	-1	0	1	4	1	-2	-5	-4	-55	2
1967	Wet	35	-29	9	0	0	0	0	0	0	0	2	1	1
1968	Below Normal	1	1	-2	0	0	0	0	0	-9	-11	1	17	0
1969	Wet	-68	-45	16	0	0	0	0	0	0	0	0	2	-8
1970	Wet	2	1	0	0	0	0	0	0	-8	-1	2	3	0
1971	Wet	-84	-14	0	0	-1	0	0	0	0	0	0	6	-8
1972	Below Normal	6	3	1	1	0	0	0	0	81	-23	-61	-19	-1
1973	Above Normal	249	54	-1	0	0	0	0	0	0	-1	-4	0	25
1974	Wet	-7	0	0	0	0	0	0	0	0	0	0	1	0
1975	Wet	2	2	1	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	30	-383	-85	-39	-16	200	-76	-40	59	-29
1977	Critical	18	119	-380	-149	-1,019	-507	-101	-68	31	61	91	0	-159
1978	Above Normal	361	28	24	1	1	0	2	1	6	-1	-15	30	37
1979	Below Normal	17	1	-25	63	1	0	0	-1	0	-5	29	26	9
1980	Above Normal	-4	179	55	0	0	0	0	0	0	0	0	0	19
1981	Dry	1	0	0	0	0	1	4	1	-34	-13	-28	-10	-7
1982	Wet	-66	3	0	0	0	0	0	0	0	0	2	0	-5
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	-2	0
1985	Dry	40	2	-5	-16	-3	-28	-22	-1	2	0	33	31	3
1986	Wet	45	4	-5	6	0	0	0	-4	-23	-19	-13	-130	-12
1987	Dry	-183	-82	2	18	8	1	-1	0	-23	2	-52	-160	-39
1988	Critical	65	-52	-12	-1	-2	0	0	0	-11	25	-7	-6	0
1989	Dry	-4	19	-275	-40	-149	1	-1	0	67	4	84	-112	-34
1990	Critical	-85	2	95	27	5	2	1	-1	-4	2	0	2	3
1991	Critical	-1	1	-9	-32	-23	-1	0	0	0	0	0	0	-5
1992	Critical	0	0	0	-1	0	0	0	-4	-1	3	-3	76	6
1993	Above Normal	16	42	-32	-4	0	0	0	1	0	-1	-9	12	2
1994	Critical	3	3	-4	21	11	3	3	3	-121	97	-66	-221	-22
Average		-9	-7	-16	-6	-18	-4	-1	-1	4	-6	-1	-18	-7
Wet		-3	-2	2	1	0	0	0	0	0	-1	-3	-5	-1
Above Normal		23	48	8	3	1	0	0	1	6	1	-4	-11	6
Below Normal		-20	-30	-8	4	1	0	0	1	22	0	1	3	-2
Dry		-19	-42	-48	-15	-9	4	-2	-3	-20	-25	1	-68	-20
Critical		-18	11	-37	-27	-101	-28	-6	-3	18	-3	0	-2	-16

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-16%	-5%	0%	-3%	-1%	1%	2%	1%	8%	9%	2%	0%
1924	Critical	-1%	3%	2%	-3%	19%	16%	1%	2%	6%	-6%	0%	1%	3%
1925	Dry	0%	-2%	-5%	-4%	-1%	1%	0%	0%	-1%	-1%	0%	-5%	-1%
1926	Dry	-2%	-1%	-1%	-1%	0%	0%	1%	-1%	1%	0%	0%	-5%	-1%
1927	Wet	-1%	4%	3%	0%	0%	0%	0%	0%	0%	-6%	-6%	0%	-1%
1928	Above Normal	0%	19%	12%	8%	1%	0%	0%	-1%	-2%	5%	4%	3%	4%
1929	Critical	-2%	-2%	-2%	0%	0%	0%	0%	-1%	-1%	1%	0%	0%	-1%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	1%	-3%	-8%	1%	-4%	-1%
1931	Critical	-4%	-1%	-6%	-8%	20%	31%	6%	1%	1%	-2%	1%	1%	3%
1932	Dry	0%	0%	0%	-6%	-5%	0%	0%	0%	-2%	0%	0%	0%	-1%
1933	Critical	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	1%	0%	-6%	-5%	-1%	0%	0%	0%	0%	0%	0%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-2%	0%
1937	Below Normal	-1%	0%	0%	-3%	-1%	0%	0%	0%	0%	1%	1%	0%	0%
1938	Wet	-1%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	4%	1%
1939	Dry	2%	1%	0%	0%	0%	0%	0%	5%	-11%	5%	-6%	-14%	-2%
1940	Above Normal	-6%	0%	-2%	-3%	1%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	6%	4%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	1%
1943	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	-1%	0%	-1%	-1%	0%	1%	1%	0%	-2%	-5%	-4%	-4%	-1%
1945	Below Normal	-1%	-2%	-2%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%	-1%
1946	Below Normal	0%	9%	2%	0%	0%	0%	0%	0%	3%	-13%	9%	10%	2%
1947	Dry	0%	1%	-3%	0%	-2%	-1%	-2%	1%	1%	-8%	-5%	-5%	-2%
1948	Below Normal	-7%	-1%	-2%	7%	5%	1%	0%	1%	13%	14%	-6%	-3%	2%
1949	Dry	2%	-1%	-1%	0%	-2%	0%	0%	0%	0%	3%	4%	0%	0%
1950	Below Normal	-2%	-1%	0%	-6%	-1%	0%	0%	3%	5%	-1%	-3%	1%	0%
1951	Above Normal	-8%	2%	0%	0%	0%	0%	0%	3%	16%	1%	-3%	-2%	1%
1952	Wet	-2%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	1%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	6%	1%
1955	Dry	-1%	-2%	-3%	-1%	-1%	17%	0%	-2%	-3%	-3%	-1%	-1%	0%
1956	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	1%	0%	0%	0%	0%	-4%	-2%	-12%	-1%
1958	Wet	14%	4%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	0%	0%	0%
1960	Dry	0%	-14%	-12%	-7%	2%	0%	-1%	-5%	-7%	-4%	4%	2%	-3%
1961	Dry	-4%	-3%	0%	2%	7%	9%	5%	-2%	0%	-5%	27%	-4%	3%
1962	Below Normal	-1%	-9%	-2%	-1%	-3%	0%	0%	2%	50%	5%	-3%	-2%	3%
1963	Wet	-2%	9%	8%	2%	1%	0%	0%	0%	0%	7%	8%	2%	3%
1964	Dry	2%	-6%	-6%	-2%	0%	0%	-6%	-7%	-13%	-9%	-16%	6%	-5%
1965	Wet	-2%	-3%	0%	0%	0%	0%	0%	0%	9%	2%	-3%	-3%	0%
1966	Below Normal	2%	6%	2%	0%	0%	0%	2%	0%	0%	-1%	0%	-3%	1%
1967	Wet	1%	-2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	0%	1%	0%
1969	Wet	-3%	-2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%
1971	Wet	-4%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	11%	-4%	-6%	-1%	0%
1973	Above Normal	8%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	2%	-43%	-23%	-6%	-1%	10%	-3%	-1%	2%	-5%
1977	Critical	1%	4%	-18%	-7%	-62%	-41%	-9%	-3%	2%	3%	3%	0%	-11%
1978	Above Normal	9%	1%	1%	0%	1%	0%	1%	0%	3%	0%	-1%	2%	1%
1979	Below Normal	1%	0%	-1%	14%	1%	0%	0%	0%	0%	-1%	2%	1%	1%
1980	Above Normal	0%	12%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	1%	2%	0%	-4%	-1%	-2%	-1%	0%
1982	Wet	-2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	2%	1%	-2%	-4%	-1%	-8%	-6%	0%	0%	0%	3%	2%	-1%
1986	Wet	2%	0%	0%	1%	0%	0%	0%	-2%	-7%	-4%	-1%	-8%	-2%
1987	Dry	-7%	-3%	0%	1%	2%	0%	0%	0%	-2%	0%	-3%	-6%	-2%
1988	Critical	2%	-2%	-1%	0%	-1%	0%	0%	0%	-1%	2%	0%	0%	0%
1989	Dry	0%	1%	-12%	-3%	-9%	1%	-1%	0%	12%	0%	7%	-6%	-1%
1990	Critical	-4%	0%	5%	4%	1%	0%	0%	0%	0%	0%	0%	0%	1%
1991	Critical	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
1993	Above Normal	0%	1%	-2%	-2%	0%	0%	0%	1%	0%	0%	-1%	1%	0%
1994	Critical	0%	0%	0%	1%	3%	1%	1%	1%	-9%	9%	-5%	-10%	-1%
Average		0%	0%	-1%	0%	-1%	0%	0%	0%	1%	0%	0%	-1%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	4%	2%	1%	0%	0%	0%	0%	2%	0%	0%	0%	1%
Below Normal		-1%	-1%	-1%	1%	0%	0%	0%	0%	6%	0%	0%	0%	0%
Dry		-1%	-2%	-3%	-1%	-1%	1%	0%	-1%	-2%	-2%	1%	-3%	-1%
Critical		-1%	0%	-2%	-2%	-6%	-1%	-1%	0%	1%	0%	0%	0%	-1%

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922 Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1923 Below Norma	22	-289	-103	-2	-3	-5	2	2	2	3	-1	-11	14	-31
1924 Critical	56	-55	75	-138	148	3	-12	-31	-94	3	24	24	0	0
1925 Dry	0	-78	-147	-64	-51	11	4	1	0	8	11	80	-19	-19
1926 Dry	-25	-30	-10	-12	7	1	6	5	31	32	22	119	12	12
1927 Wet	35	36	24	3	1	0	0	0	0	-1	10	4	9	9
1928 Above Norm	-14	188	145	58	17	0	0	-3	-5	6	-6	-54	28	28
1929 Critical	54	-25	-12	2	-3	0	0	2	11	-1	-3	-1	2	2
1930 Dry	-8	-9	2	2	0	0	-1	-7	11	254	-155	-295	-17	-17
1931 Critical	-31	20	180	-161	159	140	48	22	-160	-187	-17	40	4	4
1932 Dry	5	-5	0	-59	-26	2	0	-3	-4	-1	-3	2	-8	-8
1933 Critical	3	1	13	13	7	1	0	0	0	-2	-2	3	3	3
1934 Critical	-7	8	-6	-91	-42	-5	-1	0	0	0	-22	-19	-15	-15
1935 Below Norma	9	-13	17	14	1	0	0	0	0	-3	1	0	2	2
1936 Below Norma	-2	0	0	0	0	0	0	-1	0	-11	4	-6	-1	-1
1937 Below Norma	-21	-7	7	-69	-15	0	0	0	0	-4	-15	-8	-11	-11
1938 Wet	-2	66	10	1	1	0	0	0	0	0	-1	16	8	8
1939 Dry	9	4	4	-2	-2	0	0	28	-8	15	-20	-218	-16	-16
1940 Above Norm	-174	-61	-15	-31	0	1	0	0	0	0	-1	-1	-24	-24
1941 Wet	3	-1	-8	-1	-1	0	0	0	0	0	0	2	0	0
1942 Wet	63	94	12	0	0	0	0	0	0	0	9	7	15	15
1943 Wet	0	-6	-2	1	1	0	0	0	0	3	9	6	1	1
1944 Dry	18	7	3	-11	-3	1	2	0	-6	11	17	-24	1	1
1945 Below Norma	-37	-38	-34	-18	-1	-1	-1	-3	0	-1	-2	-11	-11	-11
1946 Below Norma	-25	146	39	0	2	1	-1	4	11	6	60	227	39	39
1947 Dry	185	-77	-85	-58	-22	-6	-10	-1	-4	15	23	-3	-4	-4
1948 Below Norma	63	18	-33	47	60	9	1	1	24	33	-3	-68	13	13
1949 Dry	-95	-30	-13	4	-25	-2	0	0	-1	-63	-3	92	-11	-11
1950 Below Norma	-65	-144	-93	-78	-18	-1	-2	7	21	40	-5	-35	-31	-31
1951 Above Norm	181	40	2	3	1	0	0	6	47	3	-40	-26	18	18
1952 Wet	18	4	1	1	0	3	1	0	0	0	2	2	3	3
1953 Wet	2	3	1	0	0	0	0	0	0	1	34	25	6	6
1954 Above Norm	9	3	2	0	0	0	0	0	3	2	-3	23	3	3
1955 Dry	186	-48	-48	-6	8	22	28	-4	16	57	34	5	21	21
1956 Wet	-2	-6	1	0	-3	-2	0	0	0	0	-3	-2	-1	-1
1957 Above Norm	0	1	1	43	17	1	0	1	0	-1	-21	-75	-3	-3
1958 Wet	133	108	-31	0	0	0	0	0	0	0	2	2	18	18
1959 Below Norma	2	3	2	1	0	0	1	-1	0	2	7	1	1	1
1960 Dry	39	412	-403	-114	43	1	0	-35	-95	-8	14	68	-7	-7
1961 Dry	130	-54	68	60	60	30	17	5	4	6	112	435	73	73
1962 Below Norma	98	325	-13	-100	-33	-2	0	4	86	-4	-80	4	24	24
1963 Wet	-26	41	85	18	7	0	0	0	0	4	-15	5	10	10
1964 Dry	28	-60	-52	-18	-2	0	0	-39	-83	43	16	-264	-36	-36
1965 Wet	30	-51	-8	0	-2	-2	0	-2	21	8	-41	-37	-7	-7
1966 Below Norma	-149	10	13	-2	0	5	5	1	-1	-3	-8	-18	-12	-12
1967 Wet	-106	16	26	2	0	0	0	0	0	0	2	1	-5	-5
1968 Below Norma	1	2	-4	-2	0	0	0	1	-5	0	-26	-28	-5	-5
1969 Wet	65	-32	18	4	0	1	0	0	0	0	0	2	5	5
1970 Wet	2	2	0	0	0	0	0	0	-2	-1	1	3	0	0
1971 Wet	-9	-20	0	0	-1	-1	0	0	0	0	0	7	-2	-2
1972 Below Norma	9	3	1	1	0	0	0	0	-10	0	14	-8	1	1
1973 Above Norm	180	113	-1	-1	0	0	0	0	0	0	3	1	25	25
1974 Wet	-1	1	0	0	0	0	0	0	0	0	0	2	0	0
1975 Wet	2	2	1	0	0	0	0	0	0	0	0	1	0	0
1976 Critical	1	0	0	41	-92	-256	-49	-31	-80	117	-5	-119	-39	-39
1977 Critical	147	138	-51	-137	-572	-368	-106	-44	11	22	238	342	-32	-32
1978 Above Norm	-44	8	49	11	2	-5	-2	3	3	13	44	31	9	9
1979 Below Norma	14	5	-24	88	10	0	0	1	1	20	-15	-9	8	8
1980 Above Norm	-5	205	129	5	-2	-2	-1	0	0	0	0	0	27	27
1981 Dry	-1	-1	0	0	0	2	3	-4	-25	-2	2	-21	-4	-4
1982 Wet	37	25	1	0	0	0	0	0	0	0	-3	-1	5	5
1983 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1984 Wet	0	0	0	0	0	0	0	0	0	0	-1	-2	0	0
1985 Dry	-14	4	-10	-33	-11	-6	-20	1	5	-1	39	52	0	0
1986 Wet	-20	-7	-7	9	2	-1	0	-1	-5	-3	53	-98	-7	-7
1987 Dry	-99	-2	-30	39	35	4	0	-7	14	11	5	95	5	5
1988 Critical	-136	-73	-21	-4	0	-1	0	0	6	-22	-16	-6	-23	-23
1989 Dry	-4	23	-36	-66	-3	7	0	-1	39	9	8	73	4	4
1990 Critical	-61	-61	65	65	9	2	0	-1	-3	-2	4	3	2	2
1991 Critical	-1	2	-10	-4	-9	-6	0	0	0	0	0	0	-2	-2
1992 Critical	0	0	1	-1	0	0	0	2	7	3	103	92	17	17
1993 Above Norm	-37	52	-91	-34	0	0	0	2	1	2	14	13	-7	-7
1994 Critical	13	4	-9	12	33	9	3	3	-67	58	-34	-235	-17	-17
Average	9	12	-6	-10	-4	-6	-1	-2	-4	7	5	3	0	0
Wet	11	13	6	2	0	0	0	0	1	1	3	-3	3	3
Above Norm	10	55	22	5	4	0	0	1	5	2	-1	-9	8	8
Below Norma	-6	1	-16	-8	0	0	0	1	9	5	-6	5	-1	-1
Dry	22	3	-47	-21	0	4	2	-4	-7	24	8	12	0	0
Critical	3	-3	19	-33	-30	-40	-10	-6	-31	-1	22	10	-8	-8

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	1%	-12%	-14%	-1%	-1%	-2%	1%	1%	1%	0%	-1%	1%	-2%
1924	Critical	2%	-2%	3%	-7%	22%	1%	-2%	-3%	-6%	0%	2%	1%	1%
1925	Dry	0%	-3%	-6%	-3%	-9%	5%	2%	0%	0%	2%	1%	4%	-1%
1926	Dry	-1%	-1%	0%	-1%	1%	0%	2%	2%	5%	3%	1%	5%	1%
1927	Wet	1%	3%	4%	1%	0%	0%	0%	0%	0%	0%	1%	0%	1%
1928	Above Normal	-1%	14%	15%	11%	6%	0%	0%	-1%	-2%	1%	0%	-2%	3%
1929	Critical	2%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	-2%	2%	28%	-10%	-11%	0%
1931	Critical	-1%	1%	7%	-7%	19%	27%	7%	2%	-11%	-10%	-1%	2%	3%
1932	Dry	0%	0%	0%	-14%	-9%	1%	0%	-1%	-2%	0%	0%	0%	-2%
1933	Critical	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-8%	-9%	-2%	0%	0%	0%	0%	-1%	-1%	-2%
1935	Below Normal	0%	0%	1%	2%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%
1937	Below Normal	-1%	0%	0%	-3%	-3%	0%	0%	0%	0%	-1%	-2%	0%	-1%
1938	Wet	0%	5%	4%	1%	0%	0%	0%	0%	0%	0%	0%	3%	1%
1939	Dry	3%	0%	0%	0%	0%	0%	0%	8%	-1%	1%	-1%	-8%	0%
1940	Above Normal	-7%	-3%	-1%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	5%	4%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
1943	Wet	0%	-1%	-1%	0%	1%	0%	0%	0%	0%	1%	1%	0%	0%
1944	Dry	1%	0%	0%	-1%	0%	0%	1%	0%	-1%	1%	1%	-1%	0%
1945	Below Normal	-2%	-2%	-2%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%	-1%
1946	Below Normal	-1%	7%	9%	0%	1%	0%	0%	2%	4%	1%	5%	10%	3%
1947	Dry	8%	-3%	-4%	-4%	-2%	-1%	-4%	0%	-1%	1%	1%	0%	-1%
1948	Below Normal	2%	1%	-1%	2%	5%	2%	0%	1%	12%	6%	0%	-3%	2%
1949	Dry	-4%	-1%	0%	0%	-3%	-1%	0%	0%	0%	-5%	0%	4%	-1%
1950	Below Normal	-3%	-6%	-4%	-6%	-5%	-1%	-1%	3%	7%	7%	0%	-2%	-1%
1951	Above Normal	7%	9%	1%	1%	0%	0%	0%	3%	17%	1%	-4%	-1%	3%
1952	Wet	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	2%	1%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	0%
1955	Dry	7%	-2%	-4%	-1%	2%	6%	7%	-1%	3%	7%	2%	0%	2%
1956	Wet	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	2%	3%	0%	0%	0%	0%	0%	-2%	-3%	0%
1958	Wet	7%	8%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1960	Dry	2%	19%	-16%	-5%	4%	0%	0%	-9%	-10%	-1%	1%	3%	-1%
1961	Dry	6%	-2%	3%	3%	5%	10%	6%	1%	1%	1%	7%	21%	5%
1962	Below Normal	4%	13%	-1%	-5%	-5%	-1%	0%	1%	23%	-1%	-6%	0%	2%
1963	Wet	-2%	8%	14%	4%	3%	0%	0%	0%	0%	2%	-2%	0%	2%
1964	Dry	1%	-4%	-7%	-3%	-1%	0%	0%	-9%	-11%	3%	1%	-11%	-3%
1965	Wet	1%	-2%	-2%	0%	-1%	-1%	0%	-1%	9%	2%	-5%	-2%	0%
1966	Below Normal	-6%	1%	4%	-1%	0%	2%	2%	0%	0%	0%	-1%	-1%	0%
1967	Wet	-4%	1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-2%	-1%	0%
1969	Wet	3%	-1%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	1%	0%	0%
1973	Above Normal	6%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	2%	-6%	-34%	-9%	-3%	-5%	6%	0%	-4%	-4%
1977	Critical	6%	5%	-2%	-7%	-42%	-43%	-13%	-4%	1%	1%	13%	14%	-6%
1978	Above Normal	-2%	0%	2%	2%	1%	-2%	-1%	1%	1%	4%	5%	2%	1%
1979	Below Normal	1%	0%	-1%	11%	4%	0%	0%	0%	0%	3%	-1%	0%	1%
1980	Above Normal	0%	10%	12%	2%	-1%	-1%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	1%	1%	-1%	-3%	0%	0%	-1%	0%
1982	Wet	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	-1%	0%	-4%	-5%	-1%	-2%	-6%	0%	1%	0%	2%	3%	-1%
1986	Wet	-1%	0%	0%	1%	1%	0%	0%	-1%	-2%	-1%	7%	-5%	0%
1987	Dry	-5%	0%	-1%	2%	4%	2%	0%	-1%	1%	1%	0%	4%	0%
1988	Critical	-5%	-3%	-1%	0%	0%	0%	0%	0%	1%	-2%	-1%	0%	-1%
1989	Dry	0%	1%	-2%	-3%	0%	2%	0%	0%	7%	1%	0%	4%	1%
1990	Critical	-3%	-2%	3%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	6%	4%	1%
1993	Above Normal	-1%	2%	-4%	-6%	0%	0%	0%	1%	1%	1%	2%	1%	0%
1994	Critical	1%	0%	0%	1%	3%	2%	1%	1%	-6%	3%	-2%	-8%	0%
Average		0%	1%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Wet		1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	4%	3%	1%	1%	0%	0%	0%	2%	1%	0%	0%	1%
Below Normal		0%	0%	-1%	0%	0%	0%	0%	1%	3%	1%	0%	0%	0%
Dry		1%	0%	-3%	-2%	-1%	1%	1%	-1%	-1%	3%	0%	1%	0%
Critical		0%	0%	1%	-2%	-1%	-4%	-1%	-1%	-2%	0%	1%	1%	-1%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)

No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	641	609	730	764	632	504	342	330	323	495	465	495	527
1923	Below Normal	522	537	659	552	507	665	352	352	513	597	474	471	517
1924	Critical	493	541	735	768	944	1,012	671	642	707	678	639	598	702
1925	Dry	625	609	764	835	848	861	404	386	600	635	583	556	642
1926	Dry	579	588	763	802	944	1,002	510	505	674	654	599	562	682
1927	Wet	602	568	760	803	728	724	371	359	593	627	558	530	602
1928	Above Normal	508	506	727	738	836	573	388	415	619	633	579	551	590
1929	Critical	560	575	758	770	928	1,001	595	563	648	649	611	573	686
1930	Dry	619	617	799	841	991	984	588	568	686	664	609	566	711
1931	Critical	616	609	795	844	990	1,011	729	678	710	684	653	598	743
1932	Dry	640	637	714	792	706	817	525	471	622	631	583	552	641
1933	Critical	569	580	775	821	990	1,003	599	558	647	657	609	577	699
1934	Critical	607	630	774	823	992	1,006	686	635	683	676	652	598	730
1935	Below Normal	636	632	790	772	929	806	381	378	589	589	564	542	634
1936	Below Normal	551	576	781	795	550	303	325	389	550	596	483	499	533
1937	Below Normal	504	547	739	725	433	354	255	251	535	579	482	499	492
1938	Wet	522	518	513	552	368	314	252	244	242	362	318	331	378
1939	Dry	399	479	691	718	815	758	465	462	658	644	588	542	602
1940	Above Normal	560	594	779	702	689	311	311	349	492	598	518	501	534
1941	Wet	518	542	622	631	414	292	243	250	395	457	434	480	440
1942	Wet	472	491	629	433	282	380	294	263	386	434	333	342	395
1943	Wet	460	469	631	369	255	290	276	351	429	570	464	491	421
1944	Dry	498	499	680	707	754	752	388	426	588	617	573	559	587
1945	Below Normal	550	554	736	734	490	334	360	346	471	550	454	486	505
1946	Below Normal	465	516	490	549	428	455	366	351	497	610	548	521	483
1947	Dry	486	522	677	707	780	989	553	514	638	654	605	573	641
1948	Below Normal	576	598	771	787	988	1,002	528	498	584	598	576	563	672
1949	Dry	575	592	762	802	945	871	592	571	604	637	592	575	677
1950	Below Normal	599	587	752	800	915	890	476	409	546	624	586	558	645
1951	Above Normal	575	595	390	316	237	405	364	233	472	614	578	561	445
1952	Wet	552	572	720	546	603	404	212	194	277	362	315	343	425
1953	Wet	504	512	689	607	609	817	340	318	477	576	561	546	546
1954	Above Normal	547	577	738	751	848	894	479	457	607	631	586	573	641
1955	Dry	581	593	732	728	930	983	581	568	648	660	610	581	683
1956	Wet	618	615	695	372	344	330	357	350	388	459	427	355	442
1957	Above Normal	476	534	714	727	861	847	350	324	512	604	564	542	588
1958	Wet	530	576	732	743	695	456	204	177	317	404	324	344	458
1959	Below Normal	490	532	681	706	713	785	431	442	637	646	595	541	600
1960	Dry	579	617	766	776	873	997	586	560	669	658	627	605	693
1961	Dry	652	638	781	846	990	1,002	674	640	693	693	660	628	741
1962	Below Normal	668	646	775	867	702	669	460	441	629	616	573	560	634
1963	Wet	594	633	781	805	793	847	413	380	544	592	551	532	622
1964	Dry	549	568	773	773	947	1,001	592	555	640	641	606	581	685
1965	Wet	604	620	718	428	359	466	328	321	431	529	410	460	473
1966	Below Normal	511	440	602	628	564	798	427	431	632	644	605	591	573
1967	Wet	592	633	720	740	842	513	261	212	279	286	305	330	476
1968	Below Normal	466	544	697	717	700	901	420	416	625	643	581	569	607
1969	Wet	576	600	751	649	368	386	279	233	233	365	325	350	426
1970	Wet	389	473	619	276	317	328	331	367	429	597	556	528	434
1971	Wet	516	574	748	722	854	842	348	340	498	577	559	545	594
1972	Below Normal	522	591	755	760	842	995	546	509	647	643	592	586	666
1973	Above Normal	595	592	759	803	664	557	412	384	489	587	473	487	567
1974	Wet	471	499	603	509	571	289	341	365	419	540	449	425	457
1975	Wet	407	457	676	701	333	286	351	343	405	529	438	483	451
1976	Critical	405	482	723	727	853	999	582	555	673	669	592	589	654
1977	Critical	615	625	767	816	988	1,010	653	601	697	688	690	683	736
1978	Above Normal	699	697	811	735	722	653	371	300	418	511	442	426	566
1979	Below Normal	542	488	710	635	337	305	360	287	409	602	471	508	471
1980	Above Normal	487	524	732	420	333	383	335	337	361	436	415	461	435
1981	Dry	440	472	692	716	840	801	458	419	639	626	593	573	606
1982	Wet	550	592	752	698	281	297	219	197	347	392	309	239	406
1983	Wet	191	262	373	342	318	252	290	255	233	218	169	224	261
1984	Wet	332	200	299	328	209	330	342	338	490	591	495	442	366
1985	Dry	409	468	738	730	771	805	486	469	629	667	572	538	607
1986	Wet	545	551	731	771	447	305	231	211	368	554	444	422	465
1987	Dry	413	414	679	724	902	837	566	541	677	663	623	598	636
1988	Critical	606	617	768	812	988	1,010	642	616	695	679	670	631	728
1989	Dry	685	650	780	861	992	1,004	644	604	664	645	630	562	727
1990	Critical	639	643	783	871	993	1,007	678	622	696	658	647	628	739
1991	Critical	649	636	794	898	1,050	902	655	627	699	685	669	661	744
1992	Critical	677	672	821	923	908	997	693	670	688	672	689	683	758
1993	Above Normal	729	729	845	679	715	767	521	517	490	528	485	488	625
1994	Critical	538	575	806	884	995	1,012	630	608	707	627	498	642	710
Average		543	560	713	699	702	695	442	423	540	584	530	520	579
Wet		502	522	655	573	476	436	299	289	390	477	416	416	454
Above Normal		582	596	722	664	654	590	387	365	478	564	511	509	552
Below Normal		543	556	710	716	650	662	406	393	562	610	542	535	574
Dry		546	560	737	772	877	904	538	516	645	649	603	572	660
Critical		581	599	775	830	968	998	651	615	688	668	635	622	719

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	641	609	730	764	632	504	342	330	323	495	465	495	527
1923	Below Normal	522	537	659	552	507	665	352	352	513	597	473	470	517
1924	Critical	493	541	735	768	944	1,012	671	642	707	678	639	598	702
1925	Dry	625	609	764	835	848	861	404	386	600	635	583	556	642
1926	Dry	579	588	763	802	944	1,002	510	505	674	655	599	562	682
1927	Wet	602	568	760	803	728	724	371	359	593	627	558	530	602
1928	Above Normal	508	506	727	738	836	573	388	415	619	633	579	551	590
1929	Critical	560	575	758	770	928	1,001	595	563	648	649	612	573	686
1930	Dry	619	617	799	841	991	984	588	568	686	664	609	567	711
1931	Critical	616	609	795	844	990	1,011	729	678	710	684	653	598	743
1932	Dry	640	637	714	792	706	817	525	471	622	631	583	552	641
1933	Critical	570	580	775	821	990	1,003	599	558	647	657	609	577	699
1934	Critical	607	630	774	823	992	1,006	686	635	683	676	652	598	730
1935	Below Normal	636	632	790	772	929	806	381	378	589	589	564	542	634
1936	Below Normal	551	576	781	795	550	303	325	389	550	596	483	499	533
1937	Below Normal	504	547	739	724	433	354	255	251	535	579	482	499	492
1938	Wet	522	518	513	552	368	314	252	244	242	362	318	331	378
1939	Dry	399	479	691	718	815	758	466	462	658	644	588	542	602
1940	Above Normal	560	594	779	702	689	311	311	349	492	598	518	501	534
1941	Wet	518	542	622	631	414	292	243	250	395	457	434	480	440
1942	Wet	472	491	629	433	282	380	294	263	386	434	333	342	395
1943	Wet	460	469	631	369	255	290	276	351	429	570	464	491	421
1944	Dry	498	499	680	707	754	752	388	426	588	617	573	559	587
1945	Below Normal	550	554	736	734	491	334	360	346	471	550	453	486	505
1946	Below Normal	465	516	490	549	428	455	366	351	497	610	548	521	483
1947	Dry	486	522	677	707	780	989	553	514	638	654	605	573	641
1948	Below Normal	576	598	771	787	988	1,002	528	498	584	598	576	563	672
1949	Dry	575	592	762	803	945	871	592	571	604	637	592	575	677
1950	Below Normal	599	587	752	800	915	890	476	409	546	624	586	558	645
1951	Above Normal	575	595	390	316	237	405	364	233	472	614	578	561	445
1952	Wet	552	572	720	546	603	404	212	194	277	362	315	343	425
1953	Wet	504	512	689	607	609	817	340	318	477	576	561	546	546
1954	Above Normal	547	577	738	751	848	894	479	457	607	631	586	573	641
1955	Dry	581	593	732	728	930	983	581	568	648	660	611	581	683
1956	Wet	618	615	696	372	344	330	357	350	388	459	427	355	443
1957	Above Normal	476	534	714	727	861	847	350	324	512	604	564	542	588
1958	Wet	530	576	732	743	695	456	204	177	317	404	324	344	458
1959	Below Normal	490	532	681	706	713	785	431	442	637	646	595	541	600
1960	Dry	579	617	766	776	873	997	586	560	669	658	627	605	693
1961	Dry	652	638	781	846	990	1,002	674	640	693	686	658	628	741
1962	Below Normal	668	646	775	867	702	669	460	441	629	616	573	560	634
1963	Wet	594	633	781	805	793	847	413	380	544	592	551	532	622
1964	Dry	549	568	773	773	947	1,001	592	555	640	641	606	581	685
1965	Wet	604	620	718	428	359	466	328	321	431	529	410	460	473
1966	Below Normal	511	440	602	628	564	798	427	431	632	644	605	591	573
1967	Wet	592	633	720	740	842	513	261	212	279	286	305	330	476
1968	Below Normal	466	544	697	717	700	901	420	416	625	643	581	569	607
1969	Wet	576	600	751	649	368	386	279	233	233	365	325	350	426
1970	Wet	389	473	619	276	317	328	331	367	429	597	556	528	434
1971	Wet	516	574	748	722	854	842	348	340	498	577	559	545	594
1972	Below Normal	522	591	755	760	842	995	545	509	647	643	592	586	666
1973	Above Normal	595	592	759	803	664	557	412	384	489	587	473	487	567
1974	Wet	471	499	603	509	571	289	341	365	419	540	449	425	457
1975	Wet	407	457	676	701	333	286	351	343	405	529	438	483	451
1976	Critical	405	482	723	727	853	999	582	555	673	669	592	589	654
1977	Critical	615	625	766	816	989	1,010	653	601	697	688	690	683	736
1978	Above Normal	699	697	811	735	722	653	371	300	418	511	442	426	566
1979	Below Normal	542	488	710	635	337	305	360	287	410	602	471	508	471
1980	Above Normal	487	524	732	420	333	383	335	337	361	436	415	461	435
1981	Dry	440	472	692	716	840	801	458	419	639	626	593	573	606
1982	Wet	550	592	752	698	281	297	219	197	347	392	309	239	406
1983	Wet	191	262	373	342	318	252	290	255	233	218	169	224	261
1984	Wet	332	200	299	328	209	330	342	338	490	591	495	442	366
1985	Dry	409	468	738	730	771	805	486	469	629	667	572	538	607
1986	Wet	545	551	730	771	447	305	231	211	368	554	444	422	465
1987	Dry	413	414	679	724	902	837	566	541	677	662	622	597	636
1988	Critical	606	617	768	812	988	1,010	642	616	695	677	670	631	728
1989	Dry	685	650	780	861	992	1,004	644	604	664	645	630	562	727
1990	Critical	639	643	783	871	993	1,007	681	625	702	664	656	633	741
1991	Critical	650	637	794	899	1,088	904	655	627	700	685	669	661	747
1992	Critical	677	672	821	922	908	997	693	670	688	672	689	683	758
1993	Above Normal	729	729	845	679	715	767	521	517	490	528	488	488	625
1994	Critical	538	575	806	883	995	1,012	630	608	707	630	499	642	711
Average		543	560	713	699	703	695	442	423	540	584	530	520	579
Wet		502	522	655	573	476	436	299	289	390	477	416	416	454
Above Normal		582	596	722	664	654	589	387	365	478	564	511	509	552
Below Normal		543	556	710	716	650	662	406	393	562	610	542	535	574
Dry		546	560	737	772	877	904	538	516	646	649	603	572	660
Critical		581	599	775	830	971	998	651	615	688	669	636	622	720

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
 Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	0	0	0	-7	-2	0	-1
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	Above Normal	0	0	0	0	0	-1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	-2	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	3	3	5	6	9	4	3
1991	Critical	1	0	0	0	38	3	0	0	0	0	0	0	4
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	3	0	0	0
Average		0	0	0	0	1	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	3	0	0	0	0	1	1	0	1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	0%
1991	Critical	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	647	606	732	756	620	499	333	327	318	493	458	492	523
1923	Below Normal	522	535	660	545	505	667	339	349	509	594	461	467	513
1924	Critical	492	542	744	765	954	1,009	629	639	698	666	630	591	697
1925	Dry	625	607	768	836	843	860	380	389	597	630	573	551	638
1926	Dry	579	588	773	800	953	1,001	478	506	667	643	588	556	678
1927	Wet	603	565	771	800	720	722	354	357	592	622	547	524	598
1928	Above Normal	506	505	733	735	841	560	374	413	616	626	568	545	585
1929	Critical	558	574	767	765	937	1,000	555	566	634	639	601	566	680
1930	Dry	620	616	812	834	1,000	981	551	574	674	655	598	560	706
1931	Critical	617	607	806	840	1,000	1,006	687	675	698	673	645	589	737
1932	Dry	641	636	713	794	695	819	500	471	616	626	573	545	636
1933	Critical	568	578	784	814	1,000	1,000	557	563	633	650	597	570	693
1934	Critical	607	629	781	822	1,000	1,001	640	636	665	667	644	589	723
1935	Below Normal	636	629	796	766	937	797	363	376	586	580	556	536	630
1936	Below Normal	550	576	792	791	541	296	321	388	545	591	469	496	530
1937	Below Normal	503	548	747	717	423	347	250	248	534	574	470	496	488
1938	Wet	522	517	512	551	360	312	250	242	239	360	310	328	375
1939	Dry	400	481	699	715	817	738	437	463	652	633	576	534	595
1940	Above Normal	559	595	788	688	673	296	309	346	483	595	506	497	528
1941	Wet	518	543	622	625	404	288	241	247	393	454	426	477	436
1942	Wet	471	491	632	422	277	381	290	260	384	430	323	338	392
1943	Wet	462	468	636	360	251	289	274	349	423	568	450	488	418
1944	Dry	496	498	686	705	751	750	365	427	581	610	562	553	582
1945	Below Normal	548	552	743	731	480	330	354	343	461	546	440	483	501
1946	Below Normal	463	517	488	549	423	454	355	347	490	608	536	516	479
1947	Dry	483	521	682	705	781	999	510	516	623	648	593	566	636
1948	Below Normal	575	598	780	785	1,000	1,000	495	501	572	590	567	558	668
1949	Dry	574	592	771	799	953	864	562	574	588	632	581	570	672
1950	Below Normal	598	586	761	792	921	886	444	407	536	620	576	552	640
1951	Above Normal	575	594	381	311	232	408	357	225	468	613	567	555	441
1952	Wet	550	572	720	527	603	398	207	191	275	359	307	340	421
1953	Wet	507	512	693	601	609	821	311	315	468	571	552	541	542
1954	Above Normal	545	578	746	747	853	891	451	454	601	624	576	568	636
1955	Dry	579	592	736	717	940	983	550	573	633	654	599	575	678
1956	Wet	618	614	695	357	343	326	353	347	383	457	418	348	438
1957	Above Normal	479	536	723	723	867	843	321	325	503	600	553	537	584
1958	Wet	529	578	739	735	673	440	197	175	316	401	315	340	453
1959	Below Normal	493	533	687	703	707	783	401	442	631	637	583	537	595
1960	Dry	578	619	775	771	875	999	546	563	651	644	616	599	686
1961	Dry	653	636	790	841	1,000	1,000	635	638	676	675	654	621	735
1962	Below Normal	668	643	782	869	686	667	439	443	621	606	563	556	629
1963	Wet	594	634	789	802	789	846	389	381	535	587	541	528	618
1964	Dry	549	567	786	767	955	1,000	553	557	627	632	595	575	680
1965	Wet	604	620	719	415	356	467	323	315	421	525	398	458	469
1966	Below Normal	512	435	606	627	560	804	396	430	627	637	595	586	568
1967	Wet	590	633	723	713	848	497	252	209	278	283	299	327	471
1968	Below Normal	469	546	704	710	697	909	387	415	619	695	573	563	602
1969	Wet	575	600	755	638	358	386	276	231	231	363	317	347	423
1970	Wet	389	475	623	264	317	326	322	363	412	597	544	522	430
1971	Wet	515	570	743	718	860	840	321	339	487	571	549	539	587
1972	Below Normal	520	593	765	755	846	998	504	511	633	635	580	583	660
1973	Above Normal	595	586	766	763	642	551	400	379	481	584	460	483	558
1974	Wet	469	498	604	503	572	280	341	362	413	538	436	418	453
1975	Wet	405	458	684	700	316	284	349	337	399	526	427	481	447
1976	Critical	401	484	733	722	857	999	542	558	658	661	581	586	648
1977	Critical	615	624	775	815	1,000	1,000	596	605	679	674	687	678	729
1978	Above Normal	699	695	816	721	719	646	363	297	415	508	431	422	561
1979	Below Normal	544	484	718	626	325	303	358	282	398	602	458	505	467
1980	Above Normal	485	524	741	407	328	384	331	333	358	434	408	458	433
1981	Dry	437	472	701	711	845	796	433	416	635	615	583	567	601
1982	Wet	549	592	756	684	269	292	217	194	346	389	301	236	402
1983	Wet	189	260	375	334	315	247	290	254	231	216	164	223	258
1984	Wet	334	196	298	328	205	331	335	333	484	588	483	435	362
1985	Dry	408	467	746	727	772	804	458	467	620	665	559	533	602
1986	Wet	544	550	739	766	430	300	228	207	367	551	430	418	461
1987	Dry	410	412	689	723	911	824	528	546	662	652	612	591	630
1988	Critical	605	616	778	807	1,000	1,005	601	617	680	654	665	623	721
1989	Dry	687	647	786	863	1,000	1,001	598	603	629	617	622	555	717
1990	Critical	643	642	793	872	1,000	1,000	614	625	679	629	637	622	730
1991	Critical	648	633	804	904	1,061	887	621	625	686	669	660	655	738
1992	Critical	677	671	831	927	900	1,000	651	665	654	653	690	676	750
1993	Above Normal	732	728	850	650	691	759	500	526	476	524	476	484	616
1994	Critical	539	576	818	883	1,000	1,009	579	614	690	699	665	643	726
Average		543	559	719	692	701	692	419	422	531	578	523	515	574
Wet		502	521	658	564	470	432	291	286	385	474	407	412	450
Above Normal		582	595	728	650	647	584	374	362	472	560	500	504	546
Below Normal		543	555	716	712	647	660	386	391	554	604	530	531	569
Dry		545	559	745	769	881	901	505	518	633	639	593	566	654
Critical		581	598	785	828	976	993	606	615	671	661	642	616	714

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	647	606	732	756	620	499	333	327	318	493	458	492	523
1923	Below Normal	522	535	660	545	505	667	339	349	509	594	461	467	513
1924	Critical	492	542	744	765	954	1,009	629	639	698	666	630	591	697
1925	Dry	625	607	768	836	843	860	380	389	597	630	573	551	638
1926	Dry	579	588	773	800	953	1,001	478	506	667	644	588	556	678
1927	Wet	603	565	771	800	720	722	354	357	592	622	547	524	598
1928	Above Normal	506	505	733	735	841	560	374	413	616	626	568	545	585
1929	Critical	558	574	767	765	937	1,000	555	566	634	640	601	566	680
1930	Dry	620	616	812	834	1,000	981	551	574	674	655	598	560	706
1931	Critical	617	607	806	840	1,000	1,006	687	675	698	673	645	589	737
1932	Dry	641	636	713	794	695	819	500	471	616	626	573	545	636
1933	Critical	568	578	784	814	1,000	1,000	557	563	633	650	597	570	693
1934	Critical	607	629	781	822	1,000	1,001	640	636	665	667	644	589	723
1935	Below Normal	636	629	796	766	937	797	363	376	586	580	556	536	630
1936	Below Normal	550	576	792	791	541	296	321	388	545	591	469	496	530
1937	Below Normal	503	548	747	717	423	348	250	248	534	573	470	496	488
1938	Wet	522	517	512	551	360	312	250	242	239	360	310	328	375
1939	Dry	400	481	699	715	817	738	437	463	652	633	576	535	595
1940	Above Normal	559	595	788	688	673	296	309	346	483	595	506	497	528
1941	Wet	518	543	622	625	404	288	241	247	393	454	426	477	436
1942	Wet	471	491	632	422	277	381	290	260	384	430	323	338	392
1943	Wet	462	468	636	360	251	289	274	349	423	568	450	488	418
1944	Dry	496	498	686	705	751	750	365	427	581	610	562	553	582
1945	Below Normal	548	552	743	731	481	330	354	343	460	546	440	483	501
1946	Below Normal	463	517	488	549	423	454	355	348	490	608	536	516	479
1947	Dry	483	521	682	705	781	999	510	516	623	647	593	566	636
1948	Below Normal	575	598	780	785	1,000	1,000	495	501	572	590	567	558	668
1949	Dry	574	592	771	799	953	864	562	574	588	632	581	570	672
1950	Below Normal	598	586	761	792	921	886	444	407	536	620	576	553	640
1951	Above Normal	575	594	382	311	232	408	357	225	468	613	567	555	441
1952	Wet	550	572	720	527	603	398	207	191	275	359	307	340	421
1953	Wet	507	512	693	601	609	821	311	315	468	571	552	541	542
1954	Above Normal	545	578	746	747	853	891	451	454	601	624	576	568	636
1955	Dry	579	592	736	717	940	983	550	573	633	654	599	575	678
1956	Wet	618	614	695	357	343	326	353	347	383	457	418	348	438
1957	Above Normal	479	536	723	723	867	843	321	325	503	600	553	537	584
1958	Wet	529	578	739	735	673	440	197	175	316	401	315	340	453
1959	Below Normal	493	533	687	703	707	783	401	442	631	637	583	537	595
1960	Dry	578	619	775	771	875	999	546	563	651	645	617	599	686
1961	Dry	653	636	790	841	1,000	1,000	635	638	677	675	654	622	735
1962	Below Normal	668	643	782	869	686	667	439	443	621	606	563	556	629
1963	Wet	594	634	789	802	789	846	389	381	535	587	541	528	618
1964	Dry	549	567	786	767	955	1,000	553	557	627	632	595	575	680
1965	Wet	604	620	719	415	356	467	323	316	421	525	398	458	469
1966	Below Normal	512	435	606	627	560	804	396	430	627	637	595	586	568
1967	Wet	590	633	723	713	848	497	252	209	278	283	299	327	471
1968	Below Normal	469	546	704	710	697	909	387	415	619	635	573	563	602
1969	Wet	575	600	755	638	358	386	276	231	231	363	317	347	423
1970	Wet	389	475	623	264	317	326	322	364	413	598	544	522	430
1971	Wet	515	570	743	718	860	840	321	339	487	571	549	539	587
1972	Below Normal	520	593	765	755	846	998	504	511	633	635	580	583	660
1973	Above Normal	595	586	766	763	642	551	400	379	481	584	460	483	558
1974	Wet	469	498	604	503	572	280	341	362	413	538	436	418	453
1975	Wet	405	458	684	700	316	284	349	337	399	526	427	481	447
1976	Critical	401	484	733	722	857	999	542	557	658	661	581	586	648
1977	Critical	615	624	775	815	1,000	1,000	596	605	679	674	687	678	729
1978	Above Normal	699	695	816	721	719	645	363	297	415	508	431	422	561
1979	Below Normal	544	484	718	626	325	303	358	282	398	602	458	505	467
1980	Above Normal	485	524	741	407	328	384	331	333	358	434	408	458	433
1981	Dry	437	472	701	711	845	796	433	416	635	615	583	567	601
1982	Wet	549	592	756	684	269	292	217	194	346	389	301	236	402
1983	Wet	189	260	375	334	315	247	290	254	231	216	164	223	258
1984	Wet	334	196	298	328	205	331	335	333	484	588	483	435	362
1985	Dry	408	467	746	727	772	804	458	467	620	665	560	533	602
1986	Wet	544	549	739	766	430	300	228	207	367	552	430	418	461
1987	Dry	410	412	689	723	911	824	528	546	662	652	612	591	630
1988	Critical	605	616	778	807	1,000	1,005	601	617	680	654	665	623	721
1989	Dry	687	647	786	863	1,000	1,001	598	603	629	618	622	555	717
1990	Critical	643	642	793	872	1,000	1,000	618	628	687	636	648	625	733
1991	Critical	648	634	804	904	1,102	887	621	625	687	669	660	655	741
1992	Critical	677	671	830	926	900	1,000	651	664	654	653	690	676	749
1993	Above Normal	732	727	850	650	691	759	500	526	476	524	476	484	616
1994	Critical	539	576	818	883	1,000	1,009	579	613	690	699	665	643	726
Average		543	559	719	692	702	692	420	422	531	578	523	515	574
Wet		502	521	658	564	470	432	291	286	385	474	407	412	450
Above Normal		582	595	728	650	647	584	374	362	472	560	500	504	546
Below Normal		543	555	716	712	647	660	386	391	554	604	530	531	569
Dry		545	559	745	769	881	901	505	518	633	640	593	566	655
Critical		581	598	785	828	979	993	606	616	672	662	643	616	715

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
 Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	Above Normal	0	0	0	0	0	-1	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	1	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	4	3	7	8	11	4	3
1991	Critical	0	0	0	0	42	0	0	0	0	0	0	0	4
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	1	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	3	0	0	0	1	1	1	0	1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	2%	1%	0%
1991	Critical	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	606	608	620	639	679	517	392	362	329	497	373	451	506
1923	Below Normal	594	605	656	574	523	489	407	391	414	365	395	519	494
1924	Critical	564	599	673	746	898	1,002	737	612	650	576	579	570	684
1925	Dry	671	710	731	804	781	639	461	346	450	418	485	531	585
1926	Dry	658	625	691	773	697	704	476	461	476	456	496	560	589
1927	Wet	678	543	351	404	499	435	357	370	364	353	348	478	432
1928	Above Normal	600	533	404	460	386	577	425	395	392	400	374	551	458
1929	Critical	675	631	731	787	882	911	689	548	570	509	528	590	669
1930	Dry	698	701	762	616	526	539	429	454	476	499	467	572	562
1931	Critical	703	651	708	804	924	892	680	602	628	545	596	603	695
1932	Dry	682	706	720	477	748	761	598	515	491	465	457	553	598
1933	Critical	665	616	678	773	775	826	622	523	564	511	542	550	637
1934	Critical	645	716	708	704	745	938	685	576	599	501	525	596	661
1935	Below Normal	684	704	816	671	647	493	394	413	403	381	399	549	546
1936	Below Normal	665	613	684	686	557	317	357	381	449	366	394	514	499
1937	Below Normal	641	605	658	794	457	399	381	334	476	417	394	479	503
1938	Wet	630	651	519	571	391	324	263	247	246	367	325	336	406
1939	Dry	292	309	509	788	780	797	573	454	432	453	463	587	536
1940	Above Normal	711	621	683	765	736	335	330	378	414	359	346	501	515
1941	Wet	617	624	628	661	461	305	307	256	400	462	394	417	461
1942	Wet	387	463	631	483	297	386	339	328	394	439	342	346	403
1943	Wet	316	336	348	379	275	294	313	365	437	414	370	471	360
1944	Dry	638	610	672	760	818	503	437	413	414	415	477	531	557
1945	Below Normal	648	606	590	556	503	347	446	391	401	378	398	523	482
1946	Below Normal	614	552	495	562	446	464	438	404	415	361	400	521	473
1947	Dry	629	607	713	662	650	552	471	486	442	419	475	586	558
1948	Below Normal	717	646	758	743	891	627	439	427	378	338	402	519	574
1949	Dry	613	598	672	826	781	514	454	472	442	402	507	580	572
1950	Below Normal	684	612	697	743	468	411	419	394	372	371	380	477	502
1951	Above Normal	604	477	402	355	268	412	381	350	347	350	338	532	401
1952	Wet	620	627	724	644	621	414	220	199	280	368	323	348	449
1953	Wet	301	388	620	624	622	568	407	345	342	331	358	434	445
1954	Above Normal	415	478	590	791	402	425	403	425	383	364	342	510	461
1955	Dry	657	675	703	556	457	490	491	486	447	403	475	554	533
1956	Wet	658	678	716	441	363	339	377	379	396	463	406	383	467
1957	Above Normal	291	304	438	678	666	455	405	342	363	356	349	533	432
1958	Wet	606	398	486	449	677	552	217	181	320	408	333	348	415
1959	Below Normal	306	352	568	765	492	516	504	430	419	388	385	537	472
1960	Dry	657	639	684	825	808	505	425	477	436	454	459	558	577
1961	Dry	686	669	824	800	747	563	453	475	444	419	466	530	590
1962	Below Normal	623	630	726	780	755	507	422	405	401	363	389	583	549
1963	Wet	647	343	397	424	460	465	441	363	375	335	338	473	422
1964	Dry	609	622	376	461	471	532	508	483	421	420	517	543	497
1965	Wet	648	657	651	454	374	472	363	391	403	369	370	450	467
1966	Below Normal	588	577	604	644	583	432	417	408	397	374	382	566	498
1967	Wet	731	705	757	783	425	521	276	217	283	290	311	334	470
1968	Below Normal	298	336	536	649	452	407	427	424	402	378	369	537	435
1969	Wet	642	640	626	712	402	391	283	236	236	370	333	354	436
1970	Wet	294	320	447	297	334	336	383	378	380	371	349	508	366
1971	Wet	668	567	540	366	390	406	377	352	341	327	336	468	428
1972	Below Normal	430	507	620	581	619	491	419	446	419	391	384	573	490
1973	Above Normal	749	626	465	725	774	585	437	422	429	355	364	513	537
1974	Wet	650	476	605	535	584	303	316	376	426	407	377	429	457
1975	Wet	304	316	479	513	351	296	345	386	413	410	364	424	384
1976	Critical	301	287	392	664	838	771	534	519	593	603	600	639	562
1977	Critical	743	664	776	702	891	971	762	631	632	526	551	599	704
1978	Above Normal	733	765	793	753	741	675	380	306	423	515	405	459	579
1979	Below Normal	584	625	695	667	371	316	366	381	387	355	404	526	473
1980	Above Normal	670	588	520	440	355	390	403	390	371	440	396	462	452
1981	Dry	575	557	662	791	439	430	440	424	429	451	479	583	522
1982	Wet	653	600	370	615	299	317	222	202	351	398	317	243	382
1983	Wet	216	277	376	391	335	276	298	257	236	221	177	226	274
1984	Wet	258	204	306	338	226	336	400	413	421	357	354	503	343
1985	Dry	582	521	354	346	495	533	514	456	402	413	528	521	472
1986	Wet	575	588	707	605	487	313	241	217	372	555	433	429	460
1987	Dry	512	536	646	802	723	615	494	472	446	456	511	572	565
1988	Critical	709	668	739	749	726	901	591	526	523	442	544	618	645
1989	Dry	722	745	776	728	954	606	399	435	377	404	503	527	598
1990	Critical	589	641	758	675	733	626	542	486	553	569	597	609	615
1991	Critical	737	764	774	846	934	713	540	494	531	585	609	565	674
1992	Critical	708	811	789	919	775	589	426	455	473	427	526	598	625
1993	Above Normal	723	781	853	794	765	584	379	385	486	532	382	463	594
1994	Critical	585	653	712	812	867	579	448	451	469	577	602	714	622
Average		586	571	618	640	593	524	430	405	423	421	424	506	512
Wet		529	495	537	509	423	383	321	308	353	382	346	400	415
Above Normal		610	578	577	640	577	496	394	375	394	417	367	498	493
Below Normal		577	569	650	672	555	444	417	402	410	373	391	530	499
Dry		618	614	656	688	680	580	476	457	439	434	485	556	557
Critical		635	642	703	765	833	810	603	535	565	531	567	604	649

Shasta Lake Water Resources Investigation

Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm) Alternative CP1 (2030)

SVI														Average
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	606	609	620	639	679	517	392	362	329	497	374	450	506
1923	Below Normal	596	587	611	573	523	489	408	392	414	365	394	514	489
1924	Critical	569	602	668	760	735	945	688	605	658	574	575	566	662
1925	Dry	675	704	707	770	857	766	483	348	440	408	476	534	597
1926	Dry	661	619	686	770	692	655	465	455	463	457	498	570	583
1927	Wet	689	548	356	408	503	446	360	370	365	350	345	482	435
1928	Above Normal	599	546	437	481	397	578	424	394	391	390	375	542	463
1929	Critical	669	631	721	789	882	910	669	546	554	497	529	590	666
1930	Dry	697	700	761	617	518	528	429	455	468	433	494	530	552
1931	Critical	667	643	714	835	774	828	674	604	641	531	579	606	675
1932	Dry	686	706	719	498	749	763	599	510	493	464	456	552	599
1933	Critical	665	616	673	774	774	825	621	522	564	509	541	547	636
1934	Critical	644	717	710	720	745	966	682	575	599	499	523	592	662
1935	Below Normal	682	705	813	675	648	488	394	413	404	382	398	549	546
1936	Below Normal	665	613	684	686	557	317	358	380	450	367	394	515	499
1937	Below Normal	638	602	657	790	457	399	381	334	478	420	396	478	502
1938	Wet	629	663	519	570	391	324	262	247	246	367	325	336	407
1939	Dry	293	310	510	789	779	795	572	455	431	444	472	557	534
1940	Above Normal	667	602	679	759	736	335	330	378	415	360	346	501	509
1941	Wet	618	625	628	661	461	305	307	256	400	462	394	417	461
1942	Wet	391	480	632	483	297	386	339	328	394	439	342	346	405
1943	Wet	316	335	348	379	274	294	312	365	437	414	370	472	360
1944	Dry	640	611	672	761	816	506	439	413	411	411	480	533	558
1945	Below Normal	642	600	583	550	503	347	447	391	401	378	398	523	480
1946	Below Normal	612	561	495	562	445	464	437	408	413	360	401	558	476
1947	Dry	664	620	683	651	637	596	475	485	450	421	479	596	563
1948	Below Normal	713	648	758	740	905	635	440	428	373	345	396	513	575
1949	Dry	603	586	667	823	781	492	448	471	441	398	490	589	566
1950	Below Normal	692	596	670	723	455	408	419	387	370	368	383	471	495
1951	Above Normal	622	493	402	355	268	411	381	348	344	358	336	525	404
1952	Wet	616	631	729	643	621	415	220	199	280	368	323	348	449
1953	Wet	301	389	621	624	622	568	407	345	343	331	359	439	446
1954	Above Normal	417	479	591	791	402	425	403	425	384	368	342	510	462
1955	Dry	678	691	679	552	453	607	516	488	431	395	460	554	542
1956	Wet	656	676	716	441	363	339	377	379	396	463	406	383	466
1957	Above Normal	290	303	437	682	676	456	405	342	362	353	347	528	432
1958	Wet	600	430	484	448	677	552	217	181	320	408	333	348	416
1959	Below Normal	306	352	569	765	491	515	504	430	417	387	386	539	472
1960	Dry	659	653	727	723	824	509	426	477	430	446	459	567	575
1961	Dry	699	669	810	833	767	600	469	479	441	420	470	586	604
1962	Below Normal	672	649	790	751	754	506	422	402	411	377	373	580	557
1963	Wet	639	340	423	435	459	457	441	363	376	339	341	467	423
1964	Dry	612	615	365	453	469	533	507	485	434	424	536	527	497
1965	Wet	623	650	642	454	374	472	364	387	393	362	369	444	461
1966	Below Normal	575	571	604	645	583	412	410	408	395	372	380	564	493
1967	Wet	719	696	774	785	425	521	276	217	283	290	311	334	469
1968	Below Normal	298	336	536	648	450	407	426	424	401	377	367	530	433
1969	Wet	640	644	621	712	402	391	283	236	236	370	333	354	435
1970	Wet	294	321	448	297	334	336	383	378	379	370	349	508	366
1971	Wet	667	563	539	366	372	398	377	352	341	327	336	469	425
1972	Below Normal	432	508	620	582	620	491	419	446	442	394	384	584	494
1973	Above Normal	765	664	471	725	774	585	437	422	429	355	364	514	542
1974	Wet	650	476	605	535	584	303	316	376	426	407	377	429	457
1975	Wet	304	317	479	513	351	296	345	386	413	410	364	424	384
1976	Critical	301	287	392	668	851	741	508	512	599	610	604	623	558
1977	Critical	742	689	785	675	893	966	717	604	624	531	581	652	705
1978	Above Normal	746	782	800	761	741	675	380	306	423	515	402	464	583
1979	Below Normal	588	626	695	667	371	316	365	383	386	355	406	525	473
1980	Above Normal	670	603	565	440	355	391	402	390	371	440	396	462	457
1981	Dry	575	557	661	791	439	426	438	424	427	447	481	581	521
1982	Wet	655	605	372	615	299	318	222	202	351	398	317	243	383
1983	Wet	216	277	376	391	335	276	298	257	236	221	177	226	274
1984	Wet	258	204	306	338	226	336	400	413	421	357	354	503	343
1985	Dry	581	521	355	343	488	502	52	455	403	414	531	532	469
1986	Wet	579	586	706	604	488	313	244	217	373	536	417	428	458
1987	Dry	488	525	645	804	729	616	495	471	444	459	507	576	563
1988	Critical	717	654	730	746	700	896	590	525	514	436	541	616	639
1989	Dry	721	746	773	707	942	593	397	434	382	412	497	541	595
1990	Critical	583	632	750	695	748	630	543	488	555	570	599	610	617
1991	Critical	738	764	774	843	942	714	540	494	531	585	609	565	675
1992	Critical	708	811	789	919	775	535	417	454	470	427	528	615	621
1993	Above Normal	733	785	863	794	765	584	380	387	486	532	381	465	596
1994	Critical	587	654	712	810	874	584	450	452	493	575	621	663	623
Average		586	573	618	638	590	523	428	404	423	419	424	506	511
Wet		527	498	539	510	422	383	321	307	353	380	345	400	415
Above Normal		612	587	586	643	579	496	393	375	393	417	366	496	495
Below Normal		579	568	649	668	554	442	416	402	411	375	390	532	499
Dry		621	615	651	680	684	593	479	456	437	428	487	558	557
Critical		632	642	701	769	808	793	592	532	567	529	569	604	645

Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Norma	1	-18	-45	0	0	0	1	0	0	0	-1	-4	-5
1924	Critical	4	3	-5	14	-164	-57	-49	-8	8	-3	-4	-4	-22
1925	Dry	4	-6	-24	-33	77	126	22	1	-10	-9	-9	3	12
1926	Dry	4	-6	-5	-3	-5	-49	-11	-7	-13	0	2	10	-7
1927	Wet	10	4	5	3	3	11	3	0	2	-2	-3	4	3
1928	Above Norm	-1	14	34	21	12	0	-1	-2	0	-10	1	-9	5
1929	Critical	-7	0	-10	2	1	0	-1	-2	-16	-13	0	0	-4
1930	Dry	-1	-2	-1	1	-9	-11	-1	1	-8	-65	27	-42	-9
1931	Critical	-36	-8	6	31	-150	-64	-6	2	13	-14	-17	2	-20
1932	Dry	4	0	-1	21	1	2	1	-5	2	-1	-1	-1	2
1933	Critical	0	0	-5	1	-1	0	0	0	0	-2	-2	-3	-1
1934	Critical	-1	1	2	16	0	-2	-3	-1	0	-2	-1	-4	0
1935	Below Norma	-2	1	-3	4	0	-5	0	0	1	1	0	0	0
1936	Below Norma	0	0	0	0	0	0	0	-1	1	1	-1	0	0
1937	Below Norma	-3	-2	-1	-4	0	0	0	0	2	3	1	-1	0
1938	Wet	-1	12	1	0	0	0	-1	0	0	0	0	0	1
1939	Dry	1	1	1	1	-1	-2	0	0	-1	-9	9	-30	-3
1940	Above Norm	-44	-20	-4	-6	0	0	-1	0	0	1	0	0	-6
1941	Wet	0	1	0	1	0	0	0	0	0	0	0	0	0
1942	Wet	4	17	1	0	0	0	0	0	0	0	0	0	2
1943	Wet	0	0	-1	0	0	0	0	0	0	-1	0	1	0
1944	Dry	1	2	0	1	-1	3	2	0	-3	-4	3	2	1
1945	Below Norma	-5	-5	-7	-6	0	0	1	-1	0	0	0	-1	-2
1946	Below Norma	-2	8	1	0	-1	0	-1	3	-2	-2	1	37	4
1947	Dry	35	13	-30	-11	-14	44	4	-1	9	2	4	9	5
1948	Below Norma	-4	2	0	-2	15	8	1	1	-6	8	-5	-6	1
1949	Dry	-10	-12	-5	-3	1	-21	-7	-1	0	-4	-17	9	-6
1950	Below Norma	8	-16	-27	-19	-12	-3	0	-7	-2	-3	2	-6	-7
1951	Above Norm	18	16	0	0	0	0	0	-3	-3	8	-3	-6	-2
1952	Wet	-3	3	5	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	6	1
1954	Above Norm	2	1	1	0	0	0	0	0	1	4	1	0	1
1955	Dry	20	15	-24	-4	-3	117	25	2	-17	-8	-15	0	9
1956	Wet	-2	-2	0	0	0	0	0	0	0	0	0	-1	0
1957	Above Norm	0	0	0	4	10	1	0	0	-1	-3	-2	-6	0
1958	Wet	-6	32	-2	-1	0	0	0	0	0	0	0	0	2
1959	Below Norma	0	0	0	0	-1	-1	0	0	-2	-1	1	2	0
1960	Dry	2	14	43	-102	16	4	1	0	-5	-8	0	10	-2
1961	Dry	13	0	-14	33	21	38	16	4	-3	1	4	56	14
1962	Below Norma	48	19	64	-29	-1	-2	0	-4	10	14	-17	-3	8
1963	Wet	-8	-3	26	11	0	-8	-1	1	1	4	4	-6	2
1964	Dry	3	-7	-11	-9	-2	1	-1	1	12	4	19	-16	0
1965	Wet	-25	-7	-9	0	-1	0	0	-4	-10	-7	-1	-6	-6
1966	Below Norma	-13	-6	0	0	0	-21	-7	0	-1	-2	-1	-2	-4
1967	Wet	-12	-9	17	1	-1	0	0	0	0	0	0	0	0
1968	Below Norma	0	0	0	-1	-1	0	-1	0	-1	-1	-2	-7	-1
1969	Wet	-1	4	-5	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	-1	-1	0	0	0
1971	Wet	0	-4	-1	0	-19	-8	0	0	0	0	0	1	-3
1972	Below Norma	2	1	0	0	2	1	0	0	23	3	1	12	4
1973	Above Norm	17	38	6	-1	0	0	0	0	0	0	0	1	5
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	3	13	-30	-26	-7	6	8	4	-16	-4
1977	Critical	-1	25	9	-27	2	-4	-44	-27	-8	5	30	53	1
1978	Above Norm	13	18	7	8	0	-1	0	0	0	0	-3	4	4
1979	Below Norma	4	1	-1	0	0	0	-1	2	-1	0	2	-2	0
1980	Above Norm	0	15	45	1	-1	1	-1	0	0	0	0	0	5
1981	Dry	0	0	0	0	0	-5	-2	-1	-2	-4	2	-2	-1
1982	Wet	1	5	2	0	0	1	0	0	0	0	0	0	1
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	-1	1	0	-4	-7	-32	-12	-1	1	0	3	11	-3
1986	Wet	4	-2	-1	0	0	0	3	0	0	-19	-16	-1	-3
1987	Dry	-24	-11	-1	2	6	1	1	-1	-2	4	-4	4	-2
1988	Critical	8	-14	-9	-3	-26	-5	-1	0	-9	-6	-3	-2	-6
1989	Dry	-1	1	-3	-22	-11	-13	-3	-1	5	8	-6	14	-3
1990	Critical	-6	-9	-8	20	15	5	1	2	2	0	2	1	2
1991	Critical	1	0	0	-3	8	1	0	0	0	0	0	0	1
1992	Critical	0	0	0	0	0	-53	-9	-1	-2	-1	3	17	-4
1993	Above Norm	11	4	10	0	0	0	0	2	0	0	-1	2	2
1994	Critical	2	2	0	-1	7	5	2	1	24	-2	19	-51	1
Average		0	2	0	-1	-3	0	-1	-1	0	-2	0	0	0
Wet		-2	2	2	1	-1	0	0	0	0	-1	-1	0	0
Above Norm		1	8	10	3	2	0	0	0	0	0	-1	-1	2
Below Norma		2	-1	-1	-4	0	-2	0	0	2	2	-1	1	0
Dry		3	0	-5	-8	4	13	2	0	-2	-6	1	2	0
Critical		-3	0	-2	4	-25	-17	-11	-3	1	-2	2	0	-5

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-3%	-7%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%
1924	Critical	1%	0%	-1%	2%	-18%	-6%	-7%	-1%	1%	-1%	-1%	-1%	-3%
1925	Dry	1%	-1%	-3%	-4%	10%	20%	5%	0%	-2%	-2%	-2%	1%	2%
1926	Dry	1%	-1%	-1%	0%	-1%	-7%	-2%	-1%	-3%	0%	0%	2%	-1%
1927	Wet	2%	1%	2%	1%	1%	2%	1%	0%	1%	-1%	-1%	1%	1%
1928	Above Normal	0%	3%	8%	5%	3%	0%	0%	0%	0%	-2%	0%	-2%	1%
1929	Critical	-1%	0%	-1%	0%	0%	0%	0%	0%	-3%	-2%	0%	0%	-1%
1930	Dry	0%	0%	0%	0%	-2%	-2%	0%	0%	-2%	-13%	6%	-7%	-2%
1931	Critical	-5%	-1%	1%	4%	-16%	-7%	-1%	0%	2%	-3%	-3%	0%	-2%
1932	Dry	1%	0%	0%	4%	0%	0%	0%	-1%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1934	Critical	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1935	Below Normal	0%	0%	0%	1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	-1%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1938	Wet	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	2%	-5%	0%
1940	Above Normal	-6%	-3%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	1%	0%	0%	-1%	-1%	1%	0%	0%
1945	Below Normal	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	7%	1%
1947	Dry	6%	2%	-4%	-2%	-2%	8%	1%	0%	2%	1%	1%	2%	1%
1948	Below Normal	-1%	0%	0%	0%	2%	1%	0%	0%	-2%	2%	-1%	-1%	0%
1949	Dry	-2%	-2%	-1%	0%	0%	-4%	-1%	0%	0%	-1%	-3%	2%	-1%
1950	Below Normal	1%	-3%	-4%	-3%	-3%	-1%	0%	-2%	-1%	-1%	1%	-1%	-1%
1951	Above Normal	3%	3%	0%	0%	0%	0%	0%	-1%	-1%	2%	-1%	-1%	0%
1952	Wet	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%
1955	Dry	3%	2%	-3%	-1%	-1%	24%	5%	0%	-4%	-2%	-3%	0%	2%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	1%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1958	Wet	-1%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	2%	6%	-12%	2%	1%	0%	0%	-1%	-2%	0%	2%	0%
1961	Dry	2%	0%	-2%	4%	3%	7%	4%	1%	-1%	0%	1%	11%	2%
1962	Below Normal	8%	3%	9%	-4%	0%	0%	0%	-1%	3%	4%	-4%	-1%	1%
1963	Wet	-1%	-1%	7%	2%	0%	-2%	0%	0%	0%	1%	1%	-1%	1%
1964	Dry	0%	-1%	-3%	-2%	0%	0%	0%	0%	3%	1%	4%	-3%	0%
1965	Wet	-4%	-1%	-1%	0%	0%	0%	0%	-1%	-3%	-2%	0%	-1%	-1%
1966	Below Normal	-2%	-1%	0%	0%	0%	-5%	-2%	0%	0%	0%	0%	0%	-1%
1967	Wet	-2%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1969	Wet	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-5%	-2%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	5%	1%	0%	2%	1%
1973	Above Normal	2%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	2%	-4%	-5%	-1%	1%	1%	1%	-3%	-1%
1977	Critical	0%	4%	1%	-4%	0%	0%	-6%	-4%	-1%	1%	5%	9%	0%
1978	Above Normal	2%	2%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	1%	1%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	3%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	-1%	0%	0%	0%	-1%	0%	0%	0%
1982	Wet	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-6%	-2%	0%	0%	0%	1%	2%	-1%
1986	Wet	1%	0%	0%	0%	0%	0%	1%	0%	0%	-3%	-4%	0%	0%
1987	Dry	-5%	-2%	0%	0%	1%	0%	0%	0%	0%	1%	-1%	1%	0%
1988	Critical	1%	-2%	-1%	0%	-4%	-1%	0%	0%	-2%	-1%	-1%	0%	-1%
1989	Dry	0%	0%	0%	-3%	-1%	-2%	-1%	0%	1%	2%	-1%	3%	0%
1990	Critical	-1%	-1%	-1%	3%	2%	1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	-9%	-2%	0%	-1%	0%	0%	3%	-1%
1993	Above Normal	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	1%	1%	0%	0%	5%	0%	3%	-7%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	1%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	-1%	-1%	0%	2%	0%	0%	0%	-1%	0%	0%	0%
Critical		0%	0%	0%	1%	-3%	-2%	-2%	-1%	0%	0%	0%	0%	-1%

Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	451	486	730	661	632	505	398	342	324	495	363	360	479
1923	Below Normal	437	461	660	553	509	667	427	362	515	365	337	471	480
1924	Critical	428	451	542	677	794	832	711	608	574	476	435	436	580
1925	Dry	496	559	608	718	848	668	495	334	459	439	386	416	536
1926	Dry	486	497	529	670	659	545	477	444	461	414	375	427	499
1927	Wet	497	445	414	466	727	725	411	343	371	360	313	367	453
1928	Above Normal	442	426	424	540	838	573	413	370	409	390	317	410	463
1929	Critical	491	479	569	695	790	705	614	524	509	458	399	449	557
1930	Dry	525	554	596	580	535	512	423	458	428	402	364	425	483
1931	Critical	512	513	568	700	789	780	631	587	546	443	450	467	582
1932	Dry	521	557	715	570	705	818	622	471	525	488	423	431	570
1933	Critical	501	505	563	690	695	639	556	496	537	494	433	443	546
1934	Critical	497	559	573	665	607	692	626	576	548	463	384	454	554
1935	Below Normal	529	531	649	661	576	802	465	362	422	373	339	409	510
1936	Below Normal	483	479	535	656	548	304	354	362	552	375	351	392	449
1937	Below Normal	461	470	524	726	433	355	333	291	537	404	378	382	441
1938	Wet	459	504	513	553	368	315	252	244	242	362	318	332	372
1939	Dry	315	346	472	712	818	759	595	412	429	389	364	428	503
1940	Above Normal	507	498	563	700	690	312	337	359	494	358	306	377	458
1941	Wet	450	462	622	632	415	292	294	250	396	458	434	480	432
1942	Wet	357	388	629	434	282	381	363	307	388	434	333	342	387
1943	Wet	323	347	632	370	256	291	314	347	431	571	463	372	393
1944	Dry	454	458	681	690	755	753	470	361	403	370	379	398	514
1945	Below Normal	477	467	522	594	490	335	417	362	472	551	453	487	469
1946	Below Normal	445	424	490	550	429	457	428	363	499	346	333	395	430
1947	Dry	456	450	678	709	782	558	465	441	465	386	370	430	516
1948	Below Normal	514	495	602	658	796	640	444	399	388	332	331	392	499
1949	Dry	463	478	540	709	730	604	472	481	488	371	400	433	514
1950	Below Normal	510	492	564	689	555	495	410	357	379	343	320	370	457
1951	Above Normal	455	417	389	317	238	407	407	297	324	329	289	393	355
1952	Wet	463	465	720	547	604	404	212	194	277	362	316	344	409
1953	Wet	314	364	504	607	611	549	402	303	339	328	315	347	415
1954	Above Normal	371	404	528	708	492	476	406	408	395	346	287	383	434
1955	Dry	480	490	579	639	560	544	531	475	474	411	357	420	497
1956	Wet	500	511	696	372	345	331	373	357	389	460	427	355	426
1957	Above Normal	316	361	495	627	653	511	416	307	362	328	299	396	423
1958	Wet	453	371	435	510	694	456	204	177	317	405	325	344	391
1959	Below Normal	314	362	457	691	713	786	540	388	414	327	308	402	475
1960	Dry	482	503	554	707	782	539	419	468	414	380	354	409	501
1961	Dry	505	502	627	693	704	523	446	499	475	349	344	402	506
1962	Below Normal	475	500	574	684	701	670	468	365	404	338	318	423	493
1963	Wet	508	370	400	458	792	565	473	336	546	337	302	364	454
1964	Dry	448	482	396	488	522	569	501	472	398	381	396	410	455
1965	Wet	487	495	719	429	360	467	394	353	433	365	409	461	448
1966	Below Normal	439	447	603	629	565	800	449	370	392	327	308	419	479
1967	Wet	520	515	721	741	845	513	261	212	280	286	305	331	461
1968	Below Normal	318	342	472	624	700	512	454	388	396	344	306	410	439
1969	Wet	483	488	528	646	368	386	279	234	233	366	326	350	391
1970	Wet	314	338	620	276	318	329	364	342	386	355	307	382	361
1971	Wet	476	442	476	723	590	843	407	310	354	331	286	362	467
1972	Below Normal	372	423	520	566	610	532	402	413	406	338	312	423	443
1973	Above Normal	521	481	430	678	663	558	452	397	491	361	322	487	487
1974	Wet	457	413	603	511	572	290	338	363	421	541	447	425	448
1975	Wet	326	342	677	611	332	287	344	347	406	529	437	484	427
1976	Critical	331	328	455	613	731	697	500	491	511	501	468	475	508
1977	Critical	533	512	619	644	721	787	690	591	600	478	416	441	586
1978	Above Normal	533	588	628	734	723	654	371	300	419	512	442	427	528
1979	Below Normal	433	452	539	636	337	306	379	347	411	345	349	395	411
1980	Above Normal	467	444	465	417	333	384	383	372	362	436	415	461	412
1981	Dry	424	434	527	709	564	798	490	388	439	376	372	426	496
1982	Wet	483	477	384	698	281	299	219	197	347	393	310	239	361
1983	Wet	229	262	374	343	319	253	290	256	234	219	170	224	264
1984	Wet	289	200	299	328	209	332	388	361	493	343	317	442	333
1985	Dry	420	427	395	451	771	807	551	427	400	364	408	398	485
1986	Wet	445	458	580	582	446	305	231	211	369	555	443	422	421
1987	Dry	399	409	495	718	685	835	514	457	415	364	382	430	509
1988	Critical	513	513	580	692	567	651	570	525	547	460	386	458	538
1989	Dry	543	565	618	665	839	618	384	442	353	331	376	407	512
1990	Critical	453	494	590	610	675	601	470	486	582	511	451	460	532
1991	Critical	541	584	648	744	792	693	492	501	537	523	474	431	580
1992	Critical	516	616	648	785	736	509	429	458	472	381	383	435	531
1993	Above Normal	531	607	642	678	713	767	424	371	488	529	363	488	550
1994	Critical	441	483	557	697	774	583	435	461	447	450	449	501	523
Average		449	458	554	609	597	548	430	384	429	403	365	409	470
Wet		421	412	550	516	464	410	325	288	364	398	348	370	405
Above Normal		459	471	530	606	597	515	401	352	407	408	340	418	459
Below Normal		443	453	551	637	569	547	426	366	442	365	339	412	463
Dry		464	482	563	652	704	653	491	439	439	388	378	418	506
Critical		480	503	576	684	723	681	560	525	534	470	427	454	551

Shasta Lake Water Resources Investigation
 Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
 Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	451	486	730	662	632	505	398	342	324	495	363	360	479
1923	Below Normal	438	455	660	553	509	667	428	362	515	365	341	470	480
1924	Critical	429	454	542	684	708	743	656	603	605	468	430	437	563
1925	Dry	496	559	597	701	848	722	508	334	456	428	380	414	537
1926	Dry	487	495	526	668	654	541	471	443	451	404	377	429	496
1927	Wet	500	447	417	468	727	725	412	343	373	355	307	368	454
1928	Above Normal	442	430	438	552	838	573	408	369	410	398	320	406	465
1929	Critical	487	478	566	697	791	705	613	524	504	455	401	449	556
1930	Dry	525	554	595	581	527	510	424	459	421	353	372	410	478
1931	Critical	493	508	568	720	713	705	616	588	564	440	431	465	568
1932	Dry	522	556	715	586	705	818	623	466	526	486	421	430	571
1933	Critical	500	504	559	690	696	639	555	496	537	492	429	439	545
1934	Critical	496	560	573	665	600	687	623	575	547	460	382	451	551
1935	Below Normal	528	532	647	663	577	802	465	362	422	374	339	409	510
1936	Below Normal	483	480	535	657	548	304	354	362	552	377	351	392	449
1937	Below Normal	460	469	524	725	433	355	333	291	537	407	381	382	442
1938	Wet	458	510	513	553	368	315	252	244	242	362	318	332	372
1939	Dry	315	346	472	713	818	759	595	412	423	383	370	412	502
1940	Above Normal	489	491	561	700	690	312	337	359	494	359	307	378	456
1941	Wet	450	462	622	632	415	292	294	250	396	458	434	480	432
1942	Wet	359	394	629	434	282	381	362	307	388	434	333	342	387
1943	Wet	323	348	632	370	256	291	315	347	431	571	463	373	393
1944	Dry	455	459	681	690	755	753	472	361	401	367	380	399	514
1945	Below Normal	475	465	519	591	490	335	417	362	472	551	453	487	468
1946	Below Normal	445	427	490	550	429	457	427	365	499	344	334	414	432
1947	Dry	470	457	678	709	782	560	469	441	467	386	373	435	519
1948	Below Normal	510	495	603	657	801	647	445	400	386	333	327	389	499
1949	Dry	459	474	537	708	731	595	465	480	488	368	388	437	511
1950	Below Normal	516	489	552	678	548	494	411	353	375	340	320	367	454
1951	Above Normal	456	424	389	317	238	407	407	297	321	333	289	389	355
1952	Wet	461	465	720	547	604	404	212	194	277	362	316	344	409
1953	Wet	314	365	504	607	611	549	402	303	339	328	313	349	415
1954	Above Normal	372	404	528	708	492	476	406	408	395	348	287	383	434
1955	Dry	487	498	567	637	558	548	539	476	460	388	357	420	495
1956	Wet	497	509	696	372	345	331	373	357	389	460	427	355	426
1957	Above Normal	316	361	495	628	658	511	416	307	360	324	296	392	422
1958	Wet	448	384	435	509	694	456	204	177	317	405	325	344	392
1959	Below Normal	314	361	457	691	713	786	540	388	412	326	308	403	475
1960	Dry	481	495	583	649	785	542	420	470	415	375	354	414	498
1961	Dry	509	501	615	715	719	541	461	503	471	349	346	425	513
1962	Below Normal	501	498	609	669	700	670	468	365	414	347	309	419	497
1963	Wet	504	368	417	465	792	562	473	337	546	339	309	362	456
1964	Dry	449	479	391	483	520	569	497	473	398	381	406	406	454
1965	Wet	473	490	719	429	360	467	394	349	433	358	409	461	445
1966	Below Normal	434	445	603	629	565	800	441	370	389	325	306	417	477
1967	Wet	515	509	721	741	845	513	261	212	280	286	305	331	460
1968	Below Normal	317	341	472	623	700	511	453	387	394	341	305	406	438
1969	Wet	481	489	525	646	368	386	279	234	233	366	326	350	390
1970	Wet	314	338	620	276	318	329	364	342	385	355	307	382	361
1971	Wet	476	440	476	723	580	843	407	310	354	330	286	362	466
1972	Below Normal	373	424	521	566	614	532	402	413	421	341	310	431	446
1973	Above Normal	527	499	434	677	663	558	452	397	491	361	322	487	489
1974	Wet	457	413	603	511	572	290	338	363	421	541	447	425	448
1975	Wet	326	342	677	611	332	287	345	347	406	529	437	484	427
1976	Critical	331	328	455	614	745	664	478	487	526	487	469	471	505
1977	Critical	529	521	622	625	728	767	656	575	597	482	421	467	582
1978	Above Normal	572	612	632	735	723	653	371	300	419	512	442	427	533
1979	Below Normal	434	452	538	636	337	306	379	348	411	346	351	396	411
1980	Above Normal	467	448	485	417	333	384	382	372	362	436	415	461	414
1981	Dry	424	434	527	709	564	798	488	387	439	374	373	426	495
1982	Wet	483	479	385	698	281	299	219	197	347	393	310	239	361
1983	Wet	229	262	374	343	319	253	290	256	234	219	170	224	264
1984	Wet	289	200	299	328	209	332	388	361	493	343	317	442	333
1985	Dry	420	427	395	450	771	807	543	426	403	364	409	404	485
1986	Wet	448	458	579	582	446	305	231	211	369	555	443	422	421
1987	Dry	391	405	495	715	690	836	514	457	415	366	383	430	508
1988	Critical	520	510	575	690	563	647	568	525	543	464	384	457	537
1989	Dry	543	565	611	652	827	609	381	441	356	335	371	411	509
1990	Critical	451	490	584	622	686	605	471	489	585	513	450	460	534
1991	Critical	542	584	648	741	790	693	492	501	537	523	474	431	580
1992	Critical	516	616	648	785	736	507	429	458	470	380	382	445	531
1993	Above Normal	540	605	648	678	713	767	424	373	488	529	360	488	551
1994	Critical	442	484	557	696	778	587	436	462	453	443	463	469	522
Average		450	459	555	608	595	546	428	384	430	401	365	409	469
Wet		419	413	551	517	463	410	325	288	364	398	348	370	405
Above Normal		463	476	534	607	598	515	400	352	406	409	340	417	460
Below Normal		445	452	552	635	569	548	426	366	443	365	338	413	463
Dry		465	481	562	648	704	657	492	439	437	382	379	419	505
Critical		478	503	575	686	711	662	549	523	539	467	426	453	548

Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
 Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Norm	0	0	0	0	0	0	0	0	0	0	1	0	0
1923	Below Norma	0	-6	0	0	0	0	0	0	0	0	4	0	0
1924	Critical	0	3	0	7	-86	-89	-55	-5	32	-8	-6	1	-17
1925	Dry	-1	0	-11	-17	0	54	13	0	-4	-11	-6	-2	1
1926	Dry	1	-2	-3	-2	-5	-5	-6	-1	-10	-10	1	2	-3
1927	Wet	3	2	3	2	0	0	1	0	2	-6	-6	1	0
1928	Above Norm	0	4	14	12	0	0	-4	-2	0	8	3	-4	3
1929	Critical	-4	0	-4	1	1	0	-1	0	-5	-3	1	0	-1
1930	Dry	0	-1	0	1	-7	-2	1	2	-7	-49	7	-15	-6
1931	Critical	-20	-5	0	19	-76	-75	-15	1	18	-3	-19	-1	-15
1932	Dry	1	-1	0	16	0	0	1	-4	1	-2	-2	-1	1
1933	Critical	0	-1	-4	0	0	0	-1	0	0	-3	-3	-3	-1
1934	Critical	-1	0	0	0	-7	-6	-3	-1	-1	-3	-3	-3	-2
1935	Below Norma	-1	0	-2	2	1	0	0	0	0	1	0	0	0
1936	Below Norma	0	0	0	1	0	0	0	-1	0	2	0	0	0
1937	Below Norma	-1	-1	0	0	0	0	0	0	0	3	3	0	0
1938	Wet	-1	6	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	1	0	-6	-6	6	-16	-2
1940	Above Norm	-19	-7	-2	0	0	0	-1	0	0	1	1	1	-2
1941	Wet	1	1	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	2	6	0	0	0	0	0	0	0	0	0	0	1
1943	Wet	1	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	1	0	1	0	0	2	0	-1	-3	2	1	0
1945	Below Norma	-2	-2	-3	-3	0	0	0	0	0	0	0	0	-1
1946	Below Norma	0	3	0	0	0	0	-1	2	0	-2	1	19	2
1947	Dry	14	7	0	0	0	3	4	0	2	0	3	5	3
1948	Below Norma	-3	0	1	0	5	6	1	1	-2	1	-3	-3	0
1949	Dry	-4	-4	-2	-2	1	-9	-7	-1	0	-2	-12	4	-3
1950	Below Norma	6	-3	-12	-11	-7	-1	1	-4	-4	-3	0	-3	-3
1951	Above Norm	1	6	0	0	0	0	0	0	-3	4	-1	-4	0
1952	Wet	-2	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	1	0	-1	2	0
1954	Above Norm	1	1	0	0	0	0	0	0	1	1	0	0	0
1955	Dry	7	8	-13	-2	-2	5	8	1	-14	-24	-1	0	-2
1956	Wet	-3	-2	0	0	0	0	0	0	0	0	0	0	0
1957	Above Norm	-1	-1	-1	1	5	0	0	0	-2	-4	-2	-4	-1
1958	Wet	-5	12	0	0	0	0	0	0	0	0	0	0	1
1959	Below Norma	-1	-1	0	0	0	0	0	0	-2	-1	0	1	0
1960	Dry	-1	-9	30	-58	3	3	1	2	1	-5	-1	5	-2
1961	Dry	4	-1	-11	22	15	19	15	3	-4	0	2	24	7
1962	Below Norma	26	-1	34	-15	0	0	0	0	10	9	-9	-3	4
1963	Wet	-5	-2	16	8	0	-3	0	1	0	3	7	-2	2
1964	Dry	1	-3	-6	-5	-1	0	-3	1	0	-1	11	-4	-1
1965	Wet	-14	-5	0	0	0	0	1	-4	0	-7	0	0	-2
1966	Below Norma	-4	-2	0	0	0	0	-7	0	-3	-2	-2	-2	-2
1967	Wet	-6	-6	0	0	0	0	0	0	0	0	0	0	-1
1968	Below Norma	-1	-1	0	-1	0	0	-1	0	-2	-3	-1	-4	-1
1969	Wet	-2	1	-3	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	-1	-1	0	0	0
1971	Wet	0	-2	0	0	-10	0	0	0	0	0	0	0	-1
1972	Below Norma	1	0	0	0	3	0	0	0	15	3	-2	8	2
1973	Above Norm	7	18	4	-1	0	0	0	0	0	0	0	0	2
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	1	13	-33	-22	-4	15	-14	2	-4	-4
1977	Critical	-4	8	3	-20	7	-20	-34	-16	-4	5	5	26	-4
1978	Above Norm	39	24	4	0	0	-1	0	0	0	0	0	0	6
1979	Below Norma	1	0	0	0	0	0	1	1	0	1	2	0	0
1980	Above Norm	0	5	20	0	0	0	0	0	0	0	0	0	2
1981	Dry	0	0	0	0	0	0	-2	-1	0	-2	1	0	0
1982	Wet	0	3	2	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-1	0	0	-9	0	3	0	2	6	0
1986	Wet	3	0	-1	0	0	0	0	0	0	0	0	0	0
1987	Dry	-8	-4	0	-3	6	0	0	-1	0	2	1	0	-1
1988	Critical	8	-3	-5	-2	-4	-4	-2	0	-4	4	-2	-1	-1
1989	Dry	-1	0	-8	-12	-12	-9	-3	-1	4	5	-5	4	-3
1990	Critical	-2	-4	-6	12	11	4	2	2	3	2	0	1	2
1991	Critical	1	0	1	-3	-3	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	-2	0	0	-2	-1	-1	10	0
1993	Above Norm	9	-2	6	0	0	0	0	1	0	0	-3	0	1
1994	Critical	1	1	0	-1	4	4	1	0	5	-7	13	-31	-1
Average		0	1	1	-1	-2	-2	-2	0	0	-2	0	0	-1
Wet		-1	1	1	0	0	0	0	0	0	-1	0	0	0
Above Norm		4	5	5	1	1	0	-1	0	0	1	0	-1	1
Below Norma		2	-1	1	-2	0	0	0	0	1	1	-1	1	0
Dry		1	0	-2	-4	0	4	1	0	-2	-7	1	1	-1
Critical		-2	0	-1	1	-12	-18	-11	-2	5	-3	-1	-1	-4

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1924	Critical	0%	1%	0%	1%	-11%	-11%	-8%	-1%	-2%	-1%	0%	0%	-2%
1925	Dry	0%	0%	-2%	-2%	0%	8%	3%	0%	-1%	-2%	-2%	-1%	0%
1926	Dry	0%	0%	-1%	0%	-1%	-1%	-1%	0%	-2%	-2%	0%	0%	-1%
1927	Wet	1%	0%	1%	0%	0%	0%	0%	0%	1%	-2%	-2%	0%	0%
1928	Above Normal	0%	1%	3%	2%	0%	0%	-1%	0%	0%	2%	1%	-1%	1%
1929	Critical	-1%	0%	-1%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	-1%	0%	0%	0%	-2%	-12%	2%	-4%	-1%
1931	Critical	-4%	-1%	0%	3%	-10%	-10%	-2%	0%	3%	-1%	-4%	0%	-2%
1932	Dry	0%	0%	0%	3%	0%	0%	0%	-1%	0%	0%	-1%	0%	0%
1933	Critical	0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1934	Critical	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	-1%	-1%	-1%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1938	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	2%	-4%	0%
1940	Above Normal	-4%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1945	Below Normal	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	1%	0%	0%	0%	0%	1%	0%	0%	-1%	0%	5%	0%
1947	Dry	3%	2%	0%	0%	0%	0%	1%	0%	0%	0%	1%	1%	1%
1948	Below Normal	-1%	0%	0%	0%	1%	1%	0%	0%	-1%	0%	-1%	-1%	0%
1949	Dry	-1%	-1%	0%	0%	0%	-1%	-2%	0%	0%	-1%	-3%	1%	-1%
1950	Below Normal	1%	-1%	-2%	-2%	-1%	0%	0%	-1%	-1%	-1%	0%	-1%	-1%
1951	Above Normal	0%	2%	0%	0%	0%	0%	0%	0%	-1%	1%	0%	-1%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	1%	2%	-2%	0%	0%	1%	1%	0%	-3%	-6%	0%	0%	-1%
1956	Wet	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	1%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1958	Wet	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	-2%	5%	-8%	0%	1%	0%	0%	0%	-1%	0%	1%	0%
1961	Dry	1%	0%	-2%	3%	2%	4%	3%	1%	-1%	0%	1%	6%	1%
1962	Below Normal	5%	0%	6%	-2%	0%	0%	0%	0%	3%	3%	-3%	-1%	1%
1963	Wet	-1%	-1%	4%	2%	0%	-1%	0%	0%	0%	1%	2%	0%	1%
1964	Dry	0%	-1%	-1%	-1%	0%	0%	-1%	0%	0%	0%	3%	-1%	0%
1965	Wet	-3%	-1%	0%	0%	0%	0%	0%	-1%	0%	-2%	0%	0%	-1%
1966	Below Normal	-1%	0%	0%	0%	0%	0%	-2%	0%	-1%	-1%	-1%	0%	0%
1967	Wet	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	-1%	0%
1969	Wet	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	1%	0%	0%	0%	4%	1%	-1%	2%	1%
1973	Above Normal	1%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	2%	-5%	-4%	-1%	3%	-3%	0%	-1%	-1%
1977	Critical	-1%	2%	1%	-3%	1%	-3%	-5%	-3%	-1%	1%	1%	6%	0%
1978	Above Normal	7%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	1%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	-2%	0%	1%	0%	0%	1%	0%
1986	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	-2%	-1%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%
1988	Critical	1%	-1%	-1%	0%	-1%	-1%	0%	0%	-1%	1%	0%	0%	0%
1989	Dry	0%	0%	-1%	-2%	-1%	-1%	-1%	0%	1%	1%	-1%	1%	0%
1990	Critical	-1%	-1%	-1%	2%	2%	1%	0%	1%	1%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
1993	Above Normal	2%	0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%
1994	Critical	0%	0%	0%	0%	1%	1%	0%	0%	1%	-2%	3%	-6%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	-1%	0%	1%	0%	0%	0%	-2%	0%	0%	0%
Critical		0%	0%	0%	0%	-1%	-2%	-2%	0%	1%	-1%	0%	0%	-1%

Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	693	661	620	504	463	321	284	277	304	279	281	483	431
1923	Below Normal	682	668	562	342	334	317	296	300	268	273	366	575	415
1924	Critical	627	684	754	794	864	808	556	526	614	539	557	613	661
1925	Dry	802	848	806	882	613	413	323	280	323	319	376	587	548
1926	Dry	757	697	800	863	599	356	329	354	313	371	459	632	544
1927	Wet	798	521	306	337	332	289	270	277	247	245	284	520	369
1928	Above Normal	689	544	393	402	295	277	279	296	268	290	334	623	391
1929	Critical	759	707	828	871	883	585	456	453	436	422	513	676	632
1930	Dry	801	810	830	558	416	309	301	351	328	356	436	668	514
1931	Critical	808	716	796	844	857	619	521	532	580	526	616	675	674
1932	Dry	777	811	687	378	417	465	461	395	370	343	397	626	510
1933	Critical	744	666	745	684	532	445	419	406	433	426	492	586	548
1934	Critical	749	826	778	675	439	482	490	470	447	385	499	693	578
1935	Below Normal	811	824	880	592	387	318	309	327	280	266	373	619	499
1936	Below Normal	747	678	776	614	476	334	276	295	297	266	360	576	475
1937	Below Normal	727	674	736	825	723	535	305	255	272	278	325	519	515
1938	Wet	728	698	333	316	408	327	330	268	291	291	286	290	380
1939	Dry	238	305	628	848	764	511	426	346	328	405	457	687	495
1940	Above Normal	798	686	717	663	417	305	267	289	270	250	286	561	459
1941	Wet	703	725	644	367	458	380	262	253	294	301	289	394	423
1942	Wet	395	538	524	367	324	268	276	262	266	310	301	325	346
1943	Wet	281	311	291	360	317	311	281	296	341	275	287	523	323
1944	Dry	729	688	767	846	736	364	311	308	306	363	468	589	540
1945	Below Normal	729	661	605	566	535	509	349	306	266	269	355	589	478
1946	Below Normal	696	612	421	288	400	327	300	306	275	280	382	581	406
1947	Dry	701	712	794	658	617	391	335	384	338	372	482	673	538
1948	Below Normal	815	724	864	841	890	450	326	310	253	253	383	576	557
1949	Dry	681	664	777	882	730	353	315	372	333	358	518	664	554
1950	Below Normal	765	676	803	685	375	268	280	294	259	269	330	527	461
1951	Above Normal	708	410	336	408	315	264	295	263	243	250	298	595	365
1952	Wet	693	733	656	399	292	336	306	253	271	276	258	268	395
1953	Wet	251	435	588	308	312	277	278	255	234	236	300	427	325
1954	Above Normal	409	530	695	790	298	254	275	307	261	256	291	569	411
1955	Dry	741	792	701	385	359	350	373	371	330	322	419	624	481
1956	Wet	742	790	624	606	396	298	279	291	278	304	300	324	436
1957	Above Normal	248	288	496	740	555	281	300	270	250	252	307	622	384
1958	Wet	646	423	471	336	381	478	309	255	258	278	281	295	367
1959	Below Normal	252	377	696	754	337	345	346	324	318	308	362	630	421
1960	Dry	753	710	763	905	744	335	318	363	346	410	448	633	561
1961	Dry	776	776	928	799	726	361	331	373	340	370	478	581	570
1962	Below Normal	700	711	829	823	593	338	301	321	278	291	372	675	519
1963	Wet	672	303	383	335	325	278	319	279	236	234	272	530	347
1964	Dry	696	660	341	407	354	341	361	368	330	395	534	602	449
1965	Wet	736	781	494	318	281	289	288	300	276	262	289	486	400
1966	Below Normal	672	601	311	303	296	266	289	308	284	302	362	654	387
1967	Wet	836	808	743	409	300	288	388	306	276	298	258	255	430
1968	Below Normal	238	360	608	594	308	258	323	323	297	299	360	601	381
1969	Wet	732	725	598	471	416	408	323	243	242	286	290	303	420
1970	Wet	238	341	408	484	353	275	269	284	274	268	287	570	338
1971	Wet	764	545	344	259	300	270	261	260	234	233	294	475	353
1972	Below Normal	445	574	676	605	582	306	290	335	308	310	366	665	455
1973	Above Normal	889	602	393	366	367	299	301	320	281	250	322	564	413
1974	Wet	775	417	269	300	270	277	270	291	292	258	314	374	342
1975	Wet	253	326	505	530	463	291	275	284	261	264	296	379	344
1976	Critical	265	256	438	730	850	514	403	431	568	617	665	771	542
1977	Critical	860	768	900	716	776	707	615	559	605	504	581	683	689
1978	Above Normal	869	889	886	590	413	472	470	367	322	297	299	490	530
1979	Below Normal	660	729	784	565	355	309	302	289	254	258	366	590	455
1980	Above Normal	783	645	504	397	417	457	324	309	339	320	308	501	442
1981	Dry	644	629	789	767	338	277	306	322	334	416	480	655	497
1982	Wet	751	598	263	350	344	386	232	252	269	305	301	284	361
1983	Wet	201	245	406	396	335	272	310	263	241	249	220	202	278
1984	Wet	222	248	309	397	314	251	294	307	282	258	300	559	312
1985	Dry	665	505	271	306	457	397	365	337	296	398	552	563	426
1986	Wet	632	664	789	547	515	328	327	264	294	404	322	447	461
1987	Dry	561	596	784	854	641	370	349	359	355	424	503	645	537
1988	Critical	812	752	835	707	440	470	421	435	410	383	536	709	576
1989	Dry	834	850	857	822	990	452	275	316	270	375	528	586	596
1990	Critical	665	732	852	715	630	413	399	405	476	586	624	688	599
1991	Critical	867	869	865	891	914	592	393	381	455	606	600	609	670
1992	Critical	861	919	894	1,021	654	358	327	366	389	381	518	685	614
1993	Above Normal	859	915	931	619	397	319	279	297	270	263	290	495	494
1994	Critical	672	738	817	899	824	403	333	364	380	634	660	847	631
Average		655	629	637	586	495	372	333	328	321	335	390	553	469
Wet		574	532	474	390	354	313	293	274	269	278	287	392	369
Above Normal		694	617	597	548	394	325	307	299	281	271	302	550	432
Below Normal		638	633	682	600	471	348	307	307	279	280	362	598	459
Dry		697	691	720	698	594	378	342	350	327	375	471	626	522
Critical		724	719	792	796	722	533	444	444	483	501	572	686	618

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	693	661	620	504	463	321	284	277	304	280	282	483	431
1923	Below Normal	685	625	505	340	325	313	296	300	268	272	363	571	405
1924	Critical	634	687	752	799	662	597	512	524	615	536	554	620	624
1925	Dry	803	840	764	847	697	504	335	281	318	312	374	593	556
1926	Dry	759	689	794	860	596	353	327	349	307	376	464	647	544
1927	Wet	806	528	313	340	336	292	270	278	249	243	284	526	372
1928	Above Normal	687	570	441	426	306	284	276	292	267	291	333	609	399
1929	Critical	752	706	817	875	882	584	455	451	429	420	513	676	630
1930	Dry	800	808	829	559	416	308	301	352	324	370	445	596	509
1931	Critical	768	711	818	862	740	555	524	537	581	480	589	682	654
1932	Dry	782	810	686	379	419	474	462	391	372	341	395	626	511
1933	Critical	745	666	747	687	535	445	419	406	433	424	489	585	548
1934	Critical	748	826	779	664	417	473	486	469	447	383	495	687	573
1935	Below Normal	810	823	877	598	389	319	309	327	280	266	373	619	499
1936	Below Normal	747	678	776	615	479	335	276	294	299	266	359	576	475
1937	Below Normal	722	671	736	816	710	534	305	255	274	280	325	517	512
1938	Wet	726	719	343	321	408	326	330	268	291	291	286	291	383
1939	Dry	240	305	629	848	762	511	426	344	330	395	467	635	491
1940	Above Normal	741	664	709	652	417	306	266	289	270	250	286	561	451
1941	Wet	703	726	642	367	457	379	262	253	293	300	289	394	422
1942	Wet	403	563	534	368	324	268	276	262	267	309	301	326	350
1943	Wet	281	310	290	363	327	312	282	296	340	275	287	525	324
1944	Dry	732	690	768	846	735	366	312	308	305	364	476	591	541
1945	Below Normal	721	653	594	559	527	504	349	306	266	269	355	588	474
1946	Below Normal	694	632	445	288	411	328	300	309	274	284	390	640	416
1947	Dry	747	718	753	644	600	387	335	381	340	378	491	683	538
1948	Below Normal	809	729	862	838	914	458	327	311	248	260	375	566	558
1949	Dry	666	649	772	880	733	347	312	371	333	343	500	682	549
1950	Below Normal	771	648	767	658	363	266	280	286	260	271	334	519	452
1951	Above Normal	736	427	343	432	320	264	295	261	243	256	291	587	371
1952	Wet	691	738	663	399	292	344	309	253	271	276	258	268	397
1953	Wet	251	436	588	308	312	278	278	255	235	236	303	435	326
1954	Above Normal	412	531	695	790	298	254	275	307	262	257	291	571	412
1955	Dry	774	802	672	381	354	355	383	372	320	320	426	625	482
1956	Wet	740	788	623	606	373	294	279	291	278	303	299	323	433
1957	Above Normal	247	288	496	749	567	282	300	270	249	250	303	609	384
1958	Wet	648	460	466	335	381	478	309	255	258	278	281	295	370
1959	Below Normal	251	377	696	755	336	344	346	324	316	308	364	633	421
1960	Dry	757	735	804	771	772	337	317	366	330	401	449	649	557
1961	Dry	789	770	922	840	752	386	343	372	338	373	485	672	587
1962	Below Normal	749	747	889	783	574	336	301	317	292	300	345	672	526
1963	Wet	661	303	419	345	326	278	319	279	237	236	273	523	350
1964	Dry	702	647	327	397	352	340	359	374	316	402	561	571	446
1965	Wet	710	770	485	318	269	282	288	295	258	262	285	477	392
1966	Below Normal	652	597	317	303	296	262	287	308	282	301	361	650	385
1967	Wet	817	800	765	411	299	289	388	306	276	298	258	255	430
1968	Below Normal	238	360	607	592	307	257	323	324	296	298	356	592	379
1969	Wet	734	726	595	475	415	405	322	243	242	286	291	303	420
1970	Wet	238	341	408	484	353	274	269	284	273	267	287	571	337
1971	Wet	762	540	343	259	294	266	261	260	234	233	294	476	352
1972	Below Normal	447	575	677	605	583	306	290	335	317	310	372	676	458
1973	Above Normal	923	650	398	364	367	299	300	320	281	250	322	565	420
1974	Wet	775	417	269	300	270	278	270	291	292	259	314	374	342
1975	Wet	254	326	505	530	463	292	275	284	261	265	296	380	344
1976	Critical	265	256	438	738	865	452	371	422	558	627	672	749	534
1977	Critical	865	806	889	677	764	634	546	532	596	512	613	775	684
1978	Above Normal	878	915	898	599	418	456	458	372	325	292	299	498	534
1979	Below Normal	665	730	781	578	364	310	302	291	253	260	369	587	457
1980	Above Normal	782	676	558	404	447	467	323	309	339	320	308	501	453
1981	Dry	644	629	789	767	338	276	306	321	330	413	483	652	496
1982	Wet	752	604	264	350	343	390	232	252	269	305	301	283	362
1983	Wet	201	245	405	396	335	272	310	263	241	249	220	202	278
1984	Wet	222	248	309	397	314	251	294	307	282	258	300	559	312
1985	Dry	664	506	270	299	449	388	357	337	297	398	559	579	425
1986	Wet	635	661	787	548	516	329	325	263	295	366	313	440	457
1987	Dry	526	584	782	852	658	374	347	358	352	429	504	656	535
1988	Critical	820	731	825	704	434	465	420	434	407	382	530	706	571
1989	Dry	833	853	849	795	989	444	275	315	275	382	519	606	595
1990	Critical	653	719	850	743	645	416	400	407	477	585	624	689	601
1991	Critical	867	869	864	888	911	590	393	381	455	606	600	609	669
1992	Critical	861	919	894	1,021	654	358	327	365	388	381	533	712	618
1993	Above Normal	867	914	934	596	396	319	279	299	273	261	290	498	494
1994	Critical	676	740	816	899	835	409	335	364	372	628	675	770	627
Average		655	631	638	583	492	367	331	328	320	334	391	554	469
Wet		572	536	477	392	353	313	293	273	269	276	287	392	369
Above Normal		697	630	609	552	400	325	306	300	281	271	301	548	435
Below Normal		640	632	681	595	470	348	306	306	280	282	360	600	458
Dry		701	690	713	685	601	384	344	350	324	375	475	629	523
Critical		721	720	791	796	695	498	432	441	480	497	574	688	611

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922 Above Norm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1923 Below Norma	3	-42	-57	-2	-9	-5	0	1	0	-1	-3	-5	-10	-10
1924 Critical	7	3	-1	4	-202	91	-45	-2	0	-3	-3	6	-37	-37
1925 Dry	2	-8	-41	-35	84	11	1	-5	-7	6	5	15	-1	8
1926 Dry	2	-8	-6	-3	-3	-2	-5	-5	6	5	15	-1	3	-1
1927 Wet	8	6	7	4	4	3	1	1	1	-2	0	6	3	3
1928 Above Norm	-2	26	47	25	11	6	-3	-4	-1	0	-14	8	8	8
1929 Critical	-6	-1	-11	4	0	-1	-1	-2	-7	-2	1	0	-2	-2
1930 Dry	-1	-3	-1	1	0	-1	0	1	-4	14	9	-72	-5	-5
1931 Critical	-40	-6	22	18	-117	-64	3	5	1	-46	-28	8	-20	-20
1932 Dry	5	-1	-1	1	1	9	1	-4	2	-1	-1	0	1	1
1933 Critical	1	0	2	3	3	1	0	0	0	-2	-2	-1	0	0
1934 Critical	-1	0	1	-11	-22	-10	-3	-1	-1	-2	-4	-6	-5	-5
1935 Below Norma	-1	0	-4	6	1	1	0	0	0	0	0	0	0	0
1936 Below Norma	0	0	0	0	3	1	0	-1	2	0	-1	0	0	0
1937 Below Norma	-5	-3	0	-9	-13	-2	0	0	2	2	0	-2	-3	-3
1938 Wet	-2	20	9	5	0	0	0	0	0	0	0	1	3	3
1939 Dry	1	1	1	0	-2	0	1	-2	2	-11	10	-52	-4	-4
1940 Above Norm	-57	-22	-8	-11	-1	1	0	0	1	1	0	0	-8	-8
1941 Wet	0	1	-3	0	-1	-1	0	0	-1	-2	0	0	0	0
1942 Wet	8	24	11	0	0	0	0	0	1	-1	0	2	4	4
1943 Wet	0	-1	-1	3	9	1	0	0	0	-1	1	2	1	1
1944 Dry	2	2	1	0	-2	2	1	0	-1	1	8	2	1	1
1945 Below Norma	-8	-8	-11	-7	-8	-5	0	0	0	0	0	-1	-4	-4
1946 Below Norma	-3	20	23	1	11	1	-1	3	-1	4	8	59	11	11
1947 Dry	46	6	-41	-15	-17	-4	0	-3	2	6	9	11	0	0
1948 Below Norma	-6	5	-2	-2	24	8	1	1	-4	7	-8	-11	1	1
1949 Dry	-16	-15	-5	-2	3	-6	-3	0	0	-15	-18	18	-5	-5
1950 Below Norma	6	-27	-36	-26	-13	-1	0	-8	1	2	4	-8	-9	-9
1951 Above Norm	28	18	7	24	4	0	0	-2	0	6	-7	-9	6	6
1952 Wet	-2	5	6	1	0	8	3	0	0	0	0	0	2	2
1953 Wet	0	1	0	0	0	0	0	0	0	0	3	8	1	1
1954 Above Norm	3	1	1	0	0	0	0	0	1	1	-1	2	1	1
1955 Dry	34	10	-30	-4	-5	5	10	1	-9	-2	7	2	2	2
1956 Wet	-2	-2	-1	0	-23	-5	0	0	-1	0	-1	-1	-3	-3
1957 Above Norm	0	0	0	9	12	1	0	0	-1	-2	-4	-13	0	0
1958 Wet	2	37	-6	-1	0	0	0	0	0	0	0	0	3	3
1959 Below Norma	0	0	1	0	-1	0	0	1	-2	0	2	3	0	0
1960 Dry	4	25	41	-134	28	2	-1	3	-16	-9	1	15	-3	-3
1961 Dry	14	-6	-6	41	26	25	12	0	-2	3	7	92	17	17
1962 Below Norma	49	37	60	-40	-19	-2	0	-4	14	9	-27	-2	6	6
1963 Wet	-11	0	36	10	1	-1	0	0	1	2	1	-8	3	3
1964 Dry	5	-14	-13	-10	-2	0	-2	6	-15	7	26	-31	-4	-4
1965 Wet	-26	-11	-9	0	-11	-6	0	-5	-17	0	-4	-9	-8	-8
1966 Below Norma	-21	-4	5	0	0	-4	-2	0	-1	-1	-2	-4	-3	-3
1967 Wet	-18	-8	22	2	-1	1	1	0	0	0	0	0	0	0
1968 Below Norma	0	0	0	-2	-1	0	0	0	-1	-1	-4	-10	-2	-2
1969 Wet	3	1	-3	4	0	-2	0	0	0	0	0	0	0	0
1970 Wet	0	0	0	0	0	-1	0	0	-1	-1	0	1	0	0
1971 Wet	-2	-5	-1	0	-7	-4	0	0	0	0	0	1	-2	-2
1972 Below Norma	2	1	0	0	0	0	0	0	9	0	6	12	3	3
1973 Above Norm	34	48	5	-1	0	0	0	0	0	0	1	1	7	7
1974 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1975 Wet	0	0	0	0	0	1	0	0	0	0	0	0	0	0
1976 Critical	0	0	0	8	14	-62	-32	-9	-9	11	7	-22	-8	-8
1977 Critical	4	38	-11	-39	-12	-73	-69	-27	-9	31	92	-5	-5	-5
1978 Above Norm	9	25	13	9	5	-16	-12	5	3	-5	0	8	4	4
1979 Below Norma	5	1	-3	12	9	1	-1	1	-1	1	3	-3	2	2
1980 Above Norm	-1	32	54	7	31	10	-1	0	0	0	0	0	11	11
1981 Dry	0	0	0	0	0	-1	-1	-1	-4	-3	3	-4	-1	-1
1982 Wet	1	6	1	1	-1	5	0	0	0	0	0	0	1	1
1983 Wet	0	0	-1	0	0	0	0	0	0	0	0	0	0	0
1984 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1985 Dry	-1	1	0	-7	-8	-9	-8	0	1	0	7	15	-1	-1
1986 Wet	3	-3	-2	1	1	0	-2	-1	1	-38	-8	-7	-5	-5
1987 Dry	-35	-12	-2	-2	17	4	-2	-1	-2	5	1	10	-2	-2
1988 Critical	8	-21	-10	-3	-6	-5	-1	0	-3	-2	-6	-3	-4	-4
1989 Dry	-1	3	-8	-26	0	-8	-1	-1	4	7	-9	20	-2	-2
1990 Critical	-12	-13	-2	28	15	4	1	1	1	-1	0	1	2	2
1991 Critical	1	0	-1	-3	-3	-2	0	0	0	0	0	0	-1	-1
1992 Critical	0	0	0	0	0	0	0	-1	-1	0	15	28	3	3
1993 Above Norm	8	-1	3	-23	-1	0	0	3	3	-1	0	3	-1	-1
1994 Critical	3	2	-1	0	11	6	2	1	-8	-6	15	-76	-4	-4
Average	0	2	1	-3	-2	-4	-2	-1	-1	-1	1	1	-1	-1
Wet	-2	3	3	1	-1	0	0	0	-1	-2	0	0	0	0
Above Norm	2	13	12	4	6	0	-2	0	1	0	-1	-2	3	3
Below Norma	1	-1	-2	-5	-1	-1	0	0	1	2	-2	2	0	0
Dry	4	-1	-7	-12	8	7	1	0	-3	0	4	3	0	0
Critical	-3	0	-1	1	-27	-35	-12	-3	-3	-4	2	2	-7	-7

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake)
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-6%	-10%	-1%	-3%	-1%	0%	0%	0%	0%	-1%	-1%	-2%
1924	Critical	1%	0%	0%	1%	-23%	-26%	-8%	0%	0%	0%	-1%	1%	-5%
1925	Dry	0%	-1%	-5%	-4%	14%	22%	4%	0%	-2%	-2%	-1%	1%	2%
1926	Dry	0%	-1%	-1%	0%	0%	-1%	-1%	-1%	-2%	2%	1%	2%	0%
1927	Wet	1%	1%	2%	1%	1%	1%	0%	0%	1%	-1%	0%	1%	1%
1928	Above Normal	0%	5%	12%	6%	4%	2%	-1%	-1%	0%	0%	0%	-2%	2%
1929	Critical	-1%	0%	-1%	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	4%	2%	-11%	-1%
1931	Critical	-5%	-1%	3%	2%	-14%	-10%	0%	1%	0%	-9%	-4%	1%	-3%
1932	Dry	1%	0%	0%	0%	0%	2%	0%	-1%	1%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-2%	-5%	-2%	-1%	0%	0%	-1%	-1%	-1%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%
1937	Below Normal	-1%	0%	0%	-1%	-2%	0%	0%	0%	1%	1%	0%	0%	0%
1938	Wet	0%	3%	3%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1939	Dry	1%	0%	0%	0%	0%	0%	0%	0%	1%	-3%	2%	-8%	-1%
1940	Above Normal	-7%	-3%	-1%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	2%	4%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	1%	3%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
1945	Below Normal	-1%	-1%	-2%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	3%	5%	0%	3%	0%	0%	1%	0%	2%	2%	10%	2%
1947	Dry	7%	1%	-5%	-2%	-3%	-1%	0%	-1%	1%	2%	2%	2%	0%
1948	Below Normal	-1%	1%	0%	0%	3%	2%	0%	0%	-2%	3%	-2%	-2%	0%
1949	Dry	-2%	-2%	-1%	0%	0%	-2%	-1%	0%	0%	-4%	-3%	-3%	-1%
1950	Below Normal	1%	-4%	-4%	-4%	-3%	-1%	0%	-3%	0%	1%	1%	-1%	-1%
1951	Above Normal	4%	4%	2%	6%	1%	0%	0%	-1%	0%	2%	-2%	-1%	1%
1952	Wet	0%	1%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	5%	1%	-4%	-1%	-1%	1%	3%	0%	-3%	-1%	2%	0%	0%
1956	Wet	0%	0%	0%	0%	-6%	-2%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-1%	-1%	-2%	0%
1958	Wet	0%	9%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	1%	0%	0%
1960	Dry	1%	4%	5%	-15%	4%	0%	0%	1%	-5%	-2%	0%	2%	0%
1961	Dry	2%	-1%	-1%	5%	4%	7%	4%	0%	-1%	1%	2%	16%	3%
1962	Below Normal	7%	5%	7%	-5%	-3%	-1%	0%	-1%	5%	3%	-7%	0%	1%
1963	Wet	-2%	0%	9%	3%	0%	0%	0%	0%	0%	1%	0%	-1%	1%
1964	Dry	1%	-2%	-4%	-3%	-1%	0%	0%	2%	-4%	2%	5%	-5%	-1%
1965	Wet	-3%	-1%	-2%	0%	-4%	-2%	0%	-2%	-6%	0%	-1%	-2%	-2%
1966	Below Normal	-3%	-1%	2%	0%	0%	-2%	-1%	0%	0%	0%	0%	-1%	-1%
1967	Wet	-2%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%
1969	Wet	0%	0%	-1%	1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	2%	2%	1%
1973	Above Normal	4%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	2%	-12%	-8%	-2%	-2%	2%	1%	-3%	-2%
1977	Critical	1%	5%	-1%	-5%	-2%	-10%	-11%	-5%	-1%	2%	5%	13%	-1%
1978	Above Normal	1%	3%	1%	2%	1%	-3%	-3%	1%	1%	-2%	0%	2%	0%
1979	Below Normal	1%	0%	0%	2%	3%	0%	0%	0%	0%	1%	1%	0%	1%
1980	Above Normal	0%	5%	11%	2%	7%	2%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1982	Wet	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-2%	-2%	-2%	-2%	0%	0%	1%	3%	3%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-9%	-3%	-2%	-1%
1987	Dry	-6%	-2%	0%	0%	3%	1%	-1%	0%	-1%	1%	0%	2%	0%
1988	Critical	1%	-3%	-1%	0%	-1%	-1%	0%	0%	-1%	0%	-1%	0%	-1%
1989	Dry	0%	0%	-1%	-3%	0%	-2%	0%	0%	2%	2%	-2%	3%	0%
1990	Critical	-2%	-2%	0%	4%	2%	1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	4%	1%
1993	Above Normal	1%	0%	0%	-4%	0%	0%	0%	1%	1%	0%	0%	1%	0%
1994	Critical	0%	0%	0%	0%	1%	1%	1%	0%	-2%	-1%	2%	-9%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	2%	3%	1%	2%	0%	0%	0%	0%	0%	0%	0%	1%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Dry		0%	0%	-1%	-2%	1%	2%	0%	0%	-1%	0%	1%	1%	0%
Critical		0%	0%	0%	0%	-3%	-5%	-2%	-1%	-1%	-1%	0%	1%	-1%

Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	798	737	670	494	394	261	246	246	260	231	261	553	429
1923	Below Normal	790	753	553	267	260	241	250	266	221	257	391	671	410
1924	Critical	715	790	862	874	779	554	379	474	657	598	630	722	669
1925	Dry	960	985	915	986	549	283	248	252	246	265	390	684	564
1926	Dry	880	791	939	962	568	273	259	298	270	388	513	744	574
1927	Wet	931	528	293	314	257	224	223	245	204	211	284	599	359
1928	Above Normal	797	574	410	380	252	222	230	258	224	257	357	726	391
1929	Critical	871	806	954	973	918	475	341	387	382	432	582	817	661
1930	Dry	947	958	921	561	375	248	230	286	298	362	483	790	538
1931	Critical	937	805	912	925	840	450	401	481	607	589	705	798	704
1932	Dry	911	957	716	334	325	326	331	331	277	269	401	732	492
1933	Critical	848	740	852	694	482	376	319	340	388	429	549	678	558
1934	Critical	883	968	875	689	380	339	323	350	377	374	581	842	582
1935	Below Normal	949	958	967	575	304	240	256	285	227	232	404	721	510
1936	Below Normal	855	763	899	601	393	295	244	261	232	238	377	672	486
1937	Below Normal	840	763	850	907	658	412	280	238	231	231	313	598	527
1938	Wet	847	761	274	242	436	343	334	289	299	252	269	287	386
1939	Dry	211	303	736	934	779	417	324	305	308	431	509	816	506
1940	Above Normal	912	769	813	654	314	251	238	256	224	220	290	653	466
1941	Wet	812	843	665	279	366	314	241	229	248	244	275	435	412
1942	Wet	418	621	520	290	278	228	247	243	226	248	288	334	328
1943	Wet	269	298	270	298	273	320	264	266	275	237	289	613	306
1944	Dry	847	785	889	951	735	296	250	274	274	382	514	682	573
1945	Below Normal	833	740	658	594	503	410	303	275	228	260	387	698	491
1946	Below Normal	802	685	388	223	307	263	250	275	231	272	415	672	399
1947	Dry	800	831	897	691	625	343	259	319	290	396	540	790	565
1948	Below Normal	934	824	1,000	952	879	355	264	263	204	238	417	666	583
1949	Dry	770	743	896	966	703	274	237	293	258	383	574	779	573
1950	Below Normal	868	759	924	703	334	216	229	257	219	251	347	605	476
1951	Above Normal	822	375	294	338	272	223	248	244	213	226	317	691	355
1952	Wet	787	855	669	306	232	289	266	222	242	238	241	262	384
1953	Wet	231	486	608	240	235	215	230	231	200	217	306	464	305
1954	Above Normal	430	590	797	818	245	203	218	255	214	232	307	662	414
1955	Dry	851	924	744	340	292	263	289	305	272	309	466	731	482
1956	Wet	849	923	576	468	325	251	238	257	228	241	285	331	414
1957	Above Normal	222	266	559	819	519	222	239	244	212	227	326	740	383
1958	Wet	704	449	491	295	287	371	363	229	230	233	275	293	352
1959	Below Normal	230	402	830	775	265	245	258	289	298	311	398	742	420
1960	Dry	873	799	878	1,015	740	283	243	298	342	446	499	744	597
1961	Dry	891	903	1,052	856	742	302	246	276	305	405	544	668	599
1962	Below Normal	804	815	945	889	522	258	240	278	234	290	411	792	540
1963	Wet	717	273	391	298	261	213	253	245	200	205	271	615	329
1964	Dry	800	720	335	402	285	255	292	306	309	433	598	696	453
1965	Wet	841	912	454	265	236	230	248	265	224	222	278	571	396
1966	Below Normal	777	647	271	251	230	210	231	269	251	204	400	769	384
1967	Wet	965	931	772	316	236	225	322	261	246	269	242	245	419
1968	Below Normal	209	388	698	590	242	203	251	284	273	298	393	698	377
1969	Wet	839	825	624	387	460	431	368	262	254	253	280	304	441
1970	Wet	211	361	401	405	293	232	232	254	235	243	293	668	319
1971	Wet	882	573	311	211	227	206	218	235	201	214	311	524	342
1972	Below Normal	478	649	759	649	579	262	233	287	277	305	405	784	472
1973	Above Normal	1,048	621	380	279	278	234	245	279	228	220	336	662	401
1974	Wet	916	390	215	236	211	237	240	257	235	216	335	388	323
1975	Wet	227	334	561	564	431	252	242	253	214	216	303	405	334
1976	Critical	240	233	492	820	901	470	338	403	622	713	765	923	577
1977	Critical	996	900	1,010	764	822	599	509	516	638	551	692	842	737
1978	Above Normal	1,056	1,058	1,003	519	299	368	390	315	268	241	293	571	532
1979	Below Normal	762	854	903	545	303	272	267	268	222	246	386	692	477
1980	Above Normal	915	719	530	348	462	430	289	279	289	264	304	590	452
1981	Dry	742	718	917	787	281	216	238	286	320	450	537	761	521
1982	Wet	867	624	224	264	290	311	246	236	234	254	299	282	344
1983	Wet	192	225	345	458	353	280	326	278	253	266	210	190	281
1984	Wet	195	221	316	360	272	218	248	276	239	233	306	661	295
1985	Dry	766	520	238	290	448	319	287	290	270	440	616	637	427
1986	Wet	709	761	887	538	421	348	297	236	255	311	300	512	465
1987	Dry	635	680	929	928	632	296	255	301	350	465	565	752	566
1988	Critical	939	859	952	715	335	317	324	357	370	415	634	864	590
1989	Dry	1,003	981	961	923	1,099	378	218	243	256	419	601	666	646
1990	Critical	755	840	964	776	574	321	319	328	502	685	715	830	634
1991	Critical	1,042	1,021	1,012	1,008	994	554	296	296	495	707	685	730	737
1992	Critical	1,063	1,082	1,066	1,150	618	291	253	286	362	414	631	831	670
1993	Above Normal	1,045	1,095	1,053	542	290	236	222	251	211	211	275	575	501
1994	Critical	779	849	942	1,009	832	338	271	292	391	733	759	1,004	683
Average		747	705	697	590	454	303	275	286	289	328	421	640	478
Wet		638	581	470	335	304	273	269	251	235	239	283	428	359
Above Normal		805	681	651	519	333	265	256	263	234	233	307	642	432
Below Normal		724	714	760	609	413	277	254	271	239	267	389	698	468
Dry		805	787	810	745	574	298	263	292	290	390	522	730	542
Critical		839	824	908	866	706	424	339	376	483	553	661	823	650

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

**Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
Alternative CP1 (2030)**

SVI														
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	798	737	670	494	394	261	246	246	260	232	261	553	429
1923	Below Normal	795	690	487	266	253	236	250	267	221	254	386	666	398
1924	Critical	725	792	865	867	620	423	356	469	656	586	628	733	643
1925	Dry	962	972	860	947	610	330	255	253	243	263	391	692	565
1926	Dry	881	780	932	958	566	272	259	295	271	396	519	759	574
1927	Wet	939	537	302	317	260	226	223	246	205	211	286	607	363
1928	Above Normal	794	612	468	408	264	226	228	255	223	258	355	709	400
1929	Critical	864	803	942	977	917	474	341	386	379	432	582	816	660
1930	Dry	945	954	921	562	375	248	230	286	295	394	490	694	533
1931	Critical	888	801	942	933	732	438	422	491	598	526	679	812	688
1932	Dry	917	955	715	325	316	333	332	329	278	268	400	732	492
1933	Critical	849	740	855	699	486	377	319	341	388	429	548	679	559
1934	Critical	883	971	876	670	353	332	321	349	376	374	578	834	576
1935	Below Normal	948	957	964	583	305	240	256	285	227	232	404	721	510
1936	Below Normal	854	763	899	601	394	296	244	261	233	237	375	671	486
1937	Below Normal	833	759	850	892	642	411	280	238	232	232	311	595	523
1938	Wet	845	789	284	246	437	342	334	289	299	252	269	289	390
1939	Dry	213	304	737	933	777	417	324	305	313	420	519	744	500
1940	Above Normal	841	744	803	640	314	252	237	256	224	220	290	652	456
1941	Wet	812	844	661	278	365	313	241	229	247	242	275	435	412
1942	Wet	430	653	532	290	277	228	247	243	227	247	288	336	333
1943	Wet	269	297	269	300	278	322	264	266	275	236	290	615	307
1944	Dry	850	788	890	950	734	297	251	274	272	385	524	684	575
1945	Below Normal	822	730	645	586	495	407	303	275	228	259	387	697	486
1946	Below Normal	799	715	415	223	318	264	250	276	231	281	428	750	412
1947	Dry	857	832	846	671	605	339	259	316	291	405	551	802	565
1948	Below Normal	926	831	995	951	912	363	265	264	203	246	407	651	584
1949	Dry	750	725	890	965	703	270	236	293	258	360	557	804	568
1950	Below Normal	872	720	882	671	320	215	229	251	222	257	351	595	465
1951	Above Normal	862	395	298	352	274	223	248	243	216	232	306	681	361
1952	Wet	785	863	676	307	232	294	268	222	242	238	241	262	386
1953	Wet	232	487	608	241	235	215	230	232	200	217	311	474	307
1954	Above Normal	434	591	797	819	245	203	218	255	214	233	306	666	415
1955	Dry	896	929	710	336	290	269	300	305	269	314	476	733	486
1956	Wet	847	921	575	468	311	247	238	257	227	241	284	330	412
1957	Above Normal	222	266	559	832	533	223	239	244	212	226	322	719	383
1958	Wet	714	494	482	295	287	372	362	229	230	233	276	294	356
1959	Below Normal	230	403	831	776	265	245	258	289	297	312	401	745	421
1960	Dry	879	840	907	862	776	284	243	299	318	436	502	764	592
1961	Dry	905	892	1,052	903	772	323	254	277	305	410	556	788	620
1962	Below Normal	855	867	1,007	838	501	256	239	276	247	295	378	791	546
1963	Wet	703	276	434	308	263	213	254	246	201	206	270	606	332
1964	Dry	807	701	318	391	283	254	292	308	289	448	628	652	447
1965	Wet	813	897	446	265	225	226	249	262	217	226	271	559	388
1966	Below Normal	750	645	277	251	230	209	232	270	250	303	399	764	382
1967	Wet	941	925	798	318	236	225	323	261	246	269	242	245	419
1968	Below Normal	210	388	697	589	241	203	251	285	272	297	387	687	376
1969	Wet	845	824	622	391	459	428	367	262	254	253	281	304	441
1970	Wet	211	361	402	406	293	232	232	254	234	242	293	669	319
1971	Wet	878	567	310	211	222	203	217	235	201	214	311	525	341
1972	Below Normal	481	651	760	649	579	262	233	287	280	304	415	796	475
1973	Above Normal	1,099	678	384	278	278	234	245	279	228	221	337	664	411
1974	Wet	916	390	215	236	211	237	240	257	235	216	335	388	323
1975	Wet	228	334	562	564	431	253	242	253	214	216	303	406	334
1976	Critical	240	234	492	831	919	398	304	392	613	723	772	896	568
1977	Critical	1,006	952	985	718	728	445	424	489	630	563	732	946	718
1978	Above Normal	1,101	1,091	1,019	529	303	352	379	331	271	239	298	583	541
1979	Below Normal	768	855	898	564	313	272	265	269	222	249	389	688	479
1980	Above Normal	914	766	594	354	481	430	287	279	289	264	304	590	463
1981	Dry	742	718	917	787	281	215	239	286	314	447	540	755	520
1982	Wet	868	632	225	265	289	313	246	236	234	254	298	281	345
1983	Wet	192	225	344	458	353	280	326	278	253	266	210	190	281
1984	Wet	195	221	316	360	272	218	248	276	239	233	306	661	295
1985	Dry	765	522	237	281	439	312	280	290	271	440	626	656	427
1986	Wet	711	756	885	539	422	350	296	235	256	290	300	499	462
1987	Dry	589	667	926	929	652	300	254	299	349	471	566	767	564
1988	Critical	946	831	940	711	332	314	323	356	368	412	626	860	585
1989	Dry	1,001	986	943	892	1,091	371	218	242	262	426	591	691	643
1990	Critical	739	823	967	809	588	324	320	328	501	684	715	831	636
1991	Critical	1,042	1,021	1,011	1,002	991	551	296	296	495	707	685	730	735
1992	Critical	1,063	1,082	1,066	1,150	617	291	253	286	363	415	647	866	675
1993	Above Normal	1,055	1,096	1,050	515	290	236	222	253	213	211	277	580	500
1994	Critical	783	851	940	1,009	846	344	272	292	379	730	771	908	677
Average		748	708	697	586	451	299	273	285	288	328	422	641	477
Wet		637	585	474	336	303	273	269	251	235	238	283	427	359
Above Normal		812	698	664	522	338	264	255	264	235	234	306	640	436
Below Normal		724	713	757	603	412	277	254	271	241	268	387	701	467
Dry		810	785	800	731	579	302	264	291	287	393	527	732	542
Critical		836	825	907	865	677	393	329	373	479	548	664	826	643

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922 Above Norm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1923 Below Norma	4	-63	-66	-2	-7	-4	0	1	1	-3	-5	-5	-5	-12
1924 Critical	10	2	3	-6	-159	-130	-23	-5	-1	-11	-2	12	-26	-26
1925 Dry	3	-13	-54	-39	61	46	7	1	-3	-2	1	8	1	1
1926 Dry	1	-11	-7	-4	-2	0	1	-3	1	9	7	15	0	0
1927 Wet	9	8	8	4	2	2	0	1	1	-1	2	8	4	4
1928 Above Norm	-3	38	59	28	12	4	-2	-3	-1	1	-2	-17	9	9
1929 Critical	-7	-2	-12	4	-1	-1	0	-1	-3	0	0	0	-2	-2
1930 Dry	-1	-4	0	1	0	0	0	0	-3	32	6	-96	-5	-5
1931 Critical	-49	-4	29	9	-108	-12	20	9	-9	-63	-26	14	-16	-16
1932 Dry	7	-2	-1	-9	-9	6	1	-2	1	-1	-1	0	-1	-1
1933 Critical	1	0	3	5	4	1	0	0	0	-1	-1	1	1	1
1934 Critical	0	3	1	-18	-27	-7	-2	-1	0	-1	-4	-8	-5	-5
1935 Below Norma	-1	-1	-3	8	1	0	0	0	0	0	0	0	0	0
1936 Below Norma	0	0	0	0	1	1	0	-1	1	-1	-2	-1	0	0
1937 Below Norma	-7	-3	0	-15	-16	0	0	0	1	1	-1	-3	-4	-4
1938 Wet	-3	27	9	4	1	0	0	0	0	0	0	2	3	3
1939 Dry	2	1	1	0	-2	0	0	-1	5	-11	9	-72	-6	-6
1940 Above Norm	-71	-26	-10	-14	0	1	0	0	0	0	0	0	-10	-10
1941 Wet	0	0	-3	-1	-1	0	0	0	-1	-1	0	0	-1	-1
1942 Wet	12	32	11	0	0	0	0	0	0	-1	0	2	5	5
1943 Wet	0	-1	-1	2	5	1	0	0	-1	0	1	2	1	1
1944 Dry	3	3	1	-1	-2	1	1	0	-1	3	10	2	2	2
1945 Below Norma	-11	-11	-13	-9	-8	-4	1	0	0	0	0	-1	-5	-5
1946 Below Norma	-4	30	27	0	11	1	0	2	0	9	13	77	14	14
1947 Dry	57	1	-50	-19	-20	-3	-1	-3	1	9	12	11	-1	-1
1948 Below Norma	-8	7	-5	-1	33	8	1	1	-1	8	-10	-14	2	2
1949 Dry	-20	-18	-6	-1	1	-4	-1	0	0	-23	-17	25	-5	-5
1950 Below Norma	3	-39	-43	-32	-14	-1	0	-6	3	6	5	-9	-11	-11
1951 Above Norm	39	20	4	14	2	0	0	-1	3	6	-10	-10	6	6
1952 Wet	-2	7	7	1	0	5	2	0	0	0	0	0	2	2
1953 Wet	0	1	1	0	0	0	0	0	0	0	5	10	1	1
1954 Above Norm	3	1	1	0	0	0	0	0	0	1	-1	4	1	1
1955 Dry	45	6	-34	-4	-2	5	11	1	-3	6	10	2	4	4
1956 Wet	-2	-2	-1	0	-14	-3	0	0	0	0	0	-1	-2	-2
1957 Above Norm	0	0	0	13	14	1	0	1	0	-1	-4	-21	0	0
1958 Wet	10	45	-8	0	0	1	0	0	0	0	0	1	4	4
1959 Below Norma	0	1	1	0	0	0	0	1	-1	1	3	3	1	1
1960 Dry	6	41	28	-153	36	1	-1	1	-24	-10	3	20	-4	-4
1961 Dry	14	-11	1	47	30	21	8	0	0	5	12	119	21	21
1962 Below Norma	51	52	61	-50	-21	-2	0	-2	13	4	-33	-1	6	6
1963 Wet	-14	3	43	10	2	0	1	0	0	1	-1	-9	3	3
1964 Dry	7	-20	-16	-12	-2	0	0	2	-20	15	30	-44	-5	-5
1965 Wet	-28	-15	-9	0	-10	-4	0	-3	-7	4	-7	-12	-8	-8
1966 Below Norma	-27	-2	6	0	0	-1	1	0	-1	0	-2	-5	-3	-3
1967 Wet	-24	-7	26	2	0	0	1	0	0	0	0	0	0	0
1968 Below Norma	0	0	-1	-2	0	0	0	1	-1	0	-6	-11	-2	-2
1969 Wet	6	-1	-2	4	0	-2	-1	0	0	0	0	0	0	0
1970 Wet	0	0	0	0	0	0	0	0	-1	-1	0	1	0	0
1971 Wet	-4	-6	-1	0	-4	-2	0	0	0	0	0	1	-1	-1
1972 Below Norma	3	1	1	0	0	0	0	0	3	-1	10	12	2	2
1973 Above Norm	51	57	4	-1	0	0	0	0	0	0	1	1	9	9
1974 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1975 Wet	0	1	0	0	0	1	0	0	0	0	0	0	0	0
1976 Critical	0	0	0	12	18	-72	-34	-10	-9	10	6	-26	-9	-9
1977 Critical	10	52	-25	-47	-94	-154	-85	-27	-8	12	39	104	-18	-18
1978 Above Norm	45	33	16	10	4	-15	-11	16	3	-1	5	12	10	10
1979 Below Norma	7	2	-5	19	10	1	-2	1	0	3	3	-4	3	3
1980 Above Norm	-1	47	64	7	18	0	-1	0	0	0	0	0	11	11
1981 Dry	0	0	0	0	0	0	0	-1	-6	-3	4	-6	-1	-1
1982 Wet	1	8	1	0	-1	2	1	0	0	0	0	0	1	1
1983 Wet	0	0	-2	0	0	0	0	0	0	0	0	0	0	0
1984 Wet	0	0	0	0	0	0	0	0	0	0	0	-1	0	0
1985 Dry	-1	2	-1	-9	-9	-7	-7	-1	2	0	9	19	0	0
1986 Wet	2	-4	-2	1	1	3	-1	-1	0	-21	0	-13	-3	-3
1987 Dry	-46	-14	-3	1	21	4	-1	-1	-1	6	1	15	-2	-2
1988 Critical	8	-28	-12	-3	-3	-3	-1	0	-1	-2	-8	-4	-5	-5
1989 Dry	-2	5	-18	-32	-8	-6	0	0	5	7	-10	25	-3	-3
1990 Critical	-17	-17	3	33	13	2	1	1	-1	-1	0	1	2	2
1991 Critical	0	0	-1	-6	-4	-3	0	0	0	0	0	0	-1	-1
1992 Critical	0	0	0	0	0	0	0	0	1	1	17	35	4	4
1993 Above Norm	10	1	-4	-27	-1	0	0	2	2	-1	1	4	-1	-1
1994 Critical	4	2	-2	0	14	6	2	1	-12	-2	12	-96	-6	-6
Average	1	3	0	-4	-3	-4	-2	0	-1	0	1	1	-1	-1
Wet	-2	5	4	1	-1	0	0	0	0	-1	0	0	0	0
Above Norm	7	17	13	3	5	-1	-1	1	1	1	-1	-3	4	4
Below Norma	1	-2	-3	-6	-1	0	0	0	1	2	-2	3	-1	-1
Dry	5	-2	-10	-15	6	4	1	0	-3	3	5	3	0	0
Critical	-3	1	-1	-1	-29	-31	-10	-3	-4	-5	3	3	-7	-7

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	1%	-8%	-12%	-1%	-3%	-2%	0%	0%	0%	-1%	-1%	-1%	-2%
1924	Critical	1%	0%	0%	-1%	-20%	-24%	-6%	-1%	0%	-2%	0%	2%	-4%
1925	Dry	0%	-1%	-6%	-4%	11%	16%	3%	0%	-1%	-1%	0%	1%	2%
1926	Dry	0%	-1%	-1%	0%	0%	0%	0%	-1%	0%	2%	1%	2%	0%
1927	Wet	1%	2%	3%	1%	1%	1%	0%	0%	0%	0%	1%	1%	1%
1928	Above Normal	0%	7%	14%	7%	5%	2%	-1%	-1%	0%	0%	-1%	-2%	2%
1929	Critical	-1%	0%	-1%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	9%	1%	-12%	0%
1931	Critical	-5%	-1%	3%	1%	-13%	-3%	5%	2%	-1%	-11%	-4%	2%	-2%
1932	Dry	1%	0%	0%	-3%	-3%	2%	0%	-1%	1%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-3%	-7%	-2%	-1%	0%	0%	0%	-1%	-1%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	-1%	0%	0%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	4%	3%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1939	Dry	1%	0%	0%	0%	0%	0%	0%	0%	2%	-2%	2%	-9%	-1%
1940	Above Normal	-8%	-3%	-1%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1942	Wet	3%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	0%	0%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	0%
1945	Below Normal	-1%	-1%	-2%	-1%	-2%	-1%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	4%	7%	0%	4%	0%	0%	1%	0%	3%	3%	11%	3%
1947	Dry	7%	0%	-6%	-3%	-3%	-1%	0%	-1%	0%	2%	2%	1%	0%
1948	Below Normal	-1%	1%	0%	0%	4%	2%	0%	1%	0%	3%	-2%	-2%	0%
1949	Dry	-3%	-2%	-1%	0%	0%	-2%	0%	0%	0%	-6%	-3%	3%	-1%
1950	Below Normal	0%	-5%	-5%	-5%	-4%	-1%	0%	-2%	1%	2%	1%	-2%	-1%
1951	Above Normal	5%	5%	1%	4%	1%	0%	0%	0%	2%	3%	-3%	-1%	1%
1952	Wet	0%	1%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1955	Dry	5%	1%	-5%	-1%	-1%	2%	4%	0%	-1%	2%	2%	0%	1%
1956	Wet	0%	0%	0%	0%	-4%	-1%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	2%	3%	0%	0%	0%	0%	0%	-1%	-3%	0%
1958	Wet	1%	10%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1960	Dry	1%	5%	3%	-15%	5%	0%	0%	0%	-7%	-2%	1%	3%	-1%
1961	Dry	2%	-1%	0%	5%	4%	7%	3%	0%	0%	1%	2%	18%	3%
1962	Below Normal	6%	6%	7%	-6%	-4%	-1%	0%	-1%	6%	1%	-8%	0%	1%
1963	Wet	-2%	1%	11%	3%	1%	0%	0%	0%	0%	1%	0%	-2%	1%
1964	Dry	1%	-3%	-5%	-3%	-1%	0%	0%	1%	-7%	3%	5%	-6%	-1%
1965	Wet	-3%	-2%	-2%	0%	-4%	-2%	0%	-1%	-3%	2%	-3%	-2%	-2%
1966	Below Normal	-4%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1967	Wet	-2%	-1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	0%
1969	Wet	1%	0%	0%	1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	3%	2%	0%
1973	Above Normal	5%	9%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	2%	-15%	-10%	-3%	-2%	1%	1%	-3%	-2%
1977	Critical	1%	6%	-2%	-6%	-11%	-26%	-17%	-5%	-1%	2%	6%	12%	-3%
1978	Above Normal	4%	3%	2%	2%	1%	-4%	-3%	5%	1%	-1%	2%	2%	1%
1979	Below Normal	1%	0%	-1%	3%	3%	0%	-1%	0%	0%	1%	1%	-1%	1%
1980	Above Normal	0%	7%	12%	2%	4%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	1%	-1%	0%
1982	Wet	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-3%	-2%	-2%	0%	1%	0%	2%	3%	0%	0%
1986	Wet	0%	-1%	0%	0%	0%	1%	0%	0%	0%	-7%	0%	-2%	-1%
1987	Dry	-7%	-2%	0%	0%	3%	1%	0%	0%	0%	1%	0%	2%	0%
1988	Critical	1%	-3%	-1%	0%	-1%	-1%	0%	0%	-1%	-1%	0%	0%	-1%
1989	Dry	0%	0%	-2%	-3%	-1%	-2%	0%	0%	2%	2%	-2%	4%	0%
1990	Critical	-2%	-2%	0%	4%	2%	1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	4%	1%
1993	Above Normal	1%	0%	0%	-5%	0%	0%	0%	1%	1%	0%	1%	1%	0%
1994	Critical	1%	0%	0%	0%	2%	2%	1%	0%	-3%	0%	2%	-10%	-1%
Average		0%	1%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		1%	3%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	1%	1%	0%	0%	0%
Dry		0%	0%	-1%	-2%	1%	1%	0%	0%	-1%	1%	1%	1%	0%
Critical		0%	0%	0%	0%	-4%	-6%	-2%	-1%	-1%	-1%	0%	1%	-1%

**Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
No Action Alternative (2030)**

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	602	597	625	601	591	463	329	307	335	388	320	439	466
1923	Below Normal	584	585	600	490	467	523	352	330	388	310	364	496	457
1924	Critical	546	591	685	741	902	969	663	569	615	543	546	553	660
1925	Dry	670	712	725	807	719	638	407	311	401	388	436	522	561
1926	Dry	648	619	709	782	709	656	399	401	401	408	466	550	562
1927	Wet	672	505	436	482	532	536	325	307	315	304	314	467	433
1928	Above Normal	589	504	486	522	483	451	330	326	334	360	345	542	439
1929	Critical	654	618	728	785	865	821	572	498	514	465	498	582	633
1930	Dry	689	701	750	624	616	629	369	400	413	432	448	570	553
1931	Critical	689	640	728	791	920	821	603	567	594	515	575	593	670
1932	Dry	675	702	673	524	710	706	544	456	445	426	433	546	570
1933	Critical	647	604	703	756	790	754	521	464	504	470	504	537	604
1934	Critical	644	707	717	733	721	867	596	533	540	452	495	591	633
1935	Below Normal	686	704	793	656	675	586	377	360	355	343	386	540	538
1936	Below Normal	641	603	705	665	560	332	306	326	411	325	371	503	479
1937	Below Normal	619	595	671	754	488	449	333	272	407	360	367	466	482
1938	Wet	617	621	454	525	427	338	265	254	259	350	313	310	394
1939	Dry	276	325	588	758	775	684	500	387	380	415	444	581	509
1940	Above Normal	685	615	696	682	599	338	292	317	369	320	309	491	476
1941	Wet	602	619	615	532	463	321	281	262	382	402	346	402	436
1942	Wet	384	478	559	452	312	354	306	284	360	401	328	329	379
1943	Wet	305	334	415	382	287	308	295	315	413	367	338	461	352
1944	Dry	617	595	674	744	740	527	381	342	368	388	459	520	530
1945	Below Normal	630	585	607	604	512	352	377	335	359	350	371	505	465
1946	Below Normal	590	540	471	454	443	421	351	338	375	322	375	510	433
1947	Dry	602	603	695	658	667	642	397	425	398	386	461	580	543
1948	Below Normal	694	636	758	762	880	672	386	358	324	290	380	511	554
1949	Dry	599	594	697	808	787	617	387	420	403	363	485	573	561
1950	Below Normal	667	605	714	701	553	561	336	330	317	332	343	475	495
1951	Above Normal	603	435	394	379	283	367	339	291	290	308	315	523	377
1952	Wet	605	625	658	546	455	407	233	207	288	344	295	303	414
1953	Wet	287	410	595	469	478	606	340	280	287	272	324	411	397
1954	Above Normal	403	487	643	751	509	561	335	352	334	329	311	505	460
1955	Dry	641	673	670	535	539	574	453	427	404	367	439	547	522
1956	Wet	649	679	684	446	364	343	315	325	369	404	352	334	439
1957	Above Normal	285	323	521	697	715	575	355	299	302	299	322	533	436
1958	Wet	576	413	528	495	583	536	232	190	317	364	309	316	405
1959	Below Normal	288	375	616	718	518	552	432	357	363	328	363	540	454
1960	Dry	643	633	705	808	782	521	368	408	385	419	445	554	556
1961	Dry	673	670	799	769	769	641	393	426	399	378	446	527	574
1962	Below Normal	617	630	738	781	688	503	364	350	341	316	365	578	523
1963	Wet	614	344	477	481	538	574	385	313	355	293	302	471	429
1964	Dry	601	593	459	522	568	568	427	416	388	398	502	533	498
1965	Wet	640	669	581	419	351	417	330	327	354	310	338	440	431
1966	Below Normal	576	539	459	476	463	533	352	343	350	330	360	565	446
1967	Wet	712	691	708	602	507	423	294	228	291	297	288	294	445
1968	Below Normal	280	361	576	643	529	568	382	360	348	324	363	529	439
1969	Wet	633	634	617	644	421	391	292	245	249	351	315	321	426
1970	Wet	277	344	485	314	335	327	304	309	322	331	311	499	347
1971	Wet	647	515	504	438	501	470	316	290	283	274	310	444	416
1972	Below Normal	424	518	643	614	656	567	349	376	373	346	364	571	483
1973	Above Normal	738	569	504	604	587	460	353	357	393	295	331	492	474
1974	Wet	638	426	443	457	432	304	294	321	391	366	349	383	400
1975	Wet	290	337	524	569	396	300	301	311	371	371	341	395	376
1976	Critical	297	295	489	681	816	751	466	460	560	582	591	636	552
1977	Critical	727	665	778	719	868	875	684	598	603	489	535	598	678
1978	Above Normal	732	760	790	677	637	638	394	311	405	397	350	434	544
1979	Below Normal	570	614	689	608	368	321	331	311	329	289	367	513	442
1980	Above Normal	652	567	549	435	377	389	350	338	372	405	350	448	436
1981	Dry	550	548	682	732	524	552	381	355	373	407	450	571	510
1982	Wet	642	561	430	533	301	333	229	210	340	376	314	258	377
1983	Wet	206	267	378	413	355	300	303	264	250	229	196	221	282
1984	Wet	255	208	323	337	241	318	329	341	385	308	319	474	320
1985	Dry	556	477	421	452	564	595	446	379	349	390	505	506	470
1986	Wet	561	582	705	610	494	338	248	230	365	517	374	412	453
1987	Dry	489	514	667	762	765	650	418	406	399	420	490	566	545
1988	Critical	694	659	739	718	709	813	512	481	478	394	516	611	610
1989	Dry	717	736	768	764	954	611	323	362	324	372	491	524	579
1990	Critical	588	641	759	703	766	624	469	453	504	547	577	600	603
1991	Critical	731	750	774	846	928	692	469	437	485	563	582	556	651
1992	Critical	713	798	793	918	754	624	387	407	423	389	490	596	608
1993	Above Normal	724	782	830	709	618	541	332	342	418	382	327	456	538
1994	Critical	579	639	731	823	863	632	390	411	421	571	589	712	613
Average		573	563	623	622	590	535	378	356	384	378	397	494	491
Wet		515	489	529	483	418	393	296	277	331	344	318	378	398
Above Normal		601	564	604	606	540	478	341	324	355	348	328	486	465
Below Normal		562	563	646	638	557	496	359	339	360	326	367	521	478
Dry		603	606	668	691	699	613	412	395	389	397	463	548	540
Critical		626	634	719	768	825	770	528	490	520	498	542	597	626

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	602	597	625	601	591	463	329	307	335	389	320	439	467
1923	Below Normal	586	559	572	489	463	525	352	330	388	313	365	493	453
1924	Critical	550	594	685	748	761	911	611	564	625	541	541	554	640
1925	Dry	676	708	702	789	807	715	420	312	395	377	430	525	571
1926	Dry	650	614	705	781	704	641	394	394	393	411	469	561	560
1927	Wet	679	509	440	484	546	547	326	309	316	292	311	471	436
1928	Above Normal	588	519	511	536	508	463	326	323	334	356	345	532	445
1929	Critical	648	617	722	787	865	821	571	497	500	459	499	581	631
1930	Dry	688	699	749	625	589	626	370	402	408	403	459	527	545
1931	Critical	657	634	737	807	799	768	596	570	603	491	554	596	651
1932	Dry	679	702	673	575	723	710	546	450	447	425	432	545	575
1933	Critical	647	604	700	758	790	754	521	464	504	468	502	534	604
1934	Critical	644	708	718	742	714	864	593	531	539	450	492	587	632
1935	Below Normal	685	704	790	659	676	577	377	360	356	344	386	540	538
1936	Below Normal	641	603	705	666	562	333	306	325	412	330	369	503	479
1937	Below Normal	615	592	671	751	486	448	333	272	408	362	368	465	481
1938	Wet	616	634	458	538	428	338	264	254	259	350	313	310	397
1939	Dry	277	325	589	758	774	678	500	384	379	405	452	548	506
1940	Above Normal	644	598	693	677	598	338	291	317	370	321	309	491	471
1941	Wet	602	620	614	532	463	321	281	262	381	402	346	402	435
1942	Wet	390	494	565	452	312	354	306	284	360	401	328	330	381
1943	Wet	306	334	415	383	288	308	294	315	413	367	338	462	352
1944	Dry	619	596	675	744	739	529	382	343	363	382	460	522	530
1945	Below Normal	625	579	601	600	510	352	377	335	359	350	371	504	464
1946	Below Normal	588	552	479	455	444	418	351	341	374	311	380	549	437
1947	Dry	634	611	674	650	657	674	400	423	406	388	466	588	548
1948	Below Normal	689	639	758	761	894	678	387	359	319	296	372	504	555
1949	Dry	589	584	694	806	788	589	382	420	403	355	470	584	555
1950	Below Normal	674	589	693	685	546	557	336	318	316	331	346	469	488
1951	Above Normal	624	448	397	389	283	367	339	285	285	320	311	517	380
1952	Wet	602	629	662	547	456	409	234	207	288	344	295	303	414
1953	Wet	287	411	595	470	478	606	340	280	287	272	325	417	397
1954	Above Normal	405	488	643	751	509	561	335	352	334	333	311	506	461
1955	Dry	664	682	652	533	537	642	465	429	386	354	439	548	527
1956	Wet	647	678	683	446	361	342	315	325	369	404	351	334	438
1957	Above Normal	285	323	521	700	720	576	355	299	301	300	320	526	435
1958	Wet	575	440	526	494	583	535	232	190	317	364	309	316	407
1959	Below Normal	288	375	616	717	517	552	431	357	361	328	364	541	454
1960	Dry	645	645	732	724	798	523	368	412	379	411	446	565	554
1961	Dry	684	667	795	796	789	659	407	428	396	379	453	584	586
1962	Below Normal	659	650	778	758	680	502	364	345	354	334	347	576	529
1963	Wet	606	343	498	488	527	565	385	314	355	294	305	466	429
1964	Dry	604	585	451	516	567	569	424	423	396	390	517	517	497
1965	Wet	619	661	576	419	338	415	330	322	343	307	337	435	425
1966	Below Normal	562	535	462	476	455	488	346	343	349	328	359	563	439
1967	Wet	699	685	721	603	507	428	294	228	291	297	288	294	445
1968	Below Normal	280	361	576	642	528	568	382	360	347	321	360	522	437
1969	Wet	633	636	614	645	421	392	292	245	249	351	315	322	426
1970	Wet	277	344	485	314	335	327	304	309	322	330	311	499	346
1971	Wet	646	511	503	438	479	467	316	290	283	274	310	445	413
1972	Below Normal	426	519	643	614	666	567	349	376	390	349	367	581	487
1973	Above Normal	759	604	508	603	587	459	352	357	393	295	332	493	478
1974	Wet	638	426	443	457	432	304	294	321	391	366	349	383	400
1975	Wet	290	337	524	569	396	301	302	311	371	371	341	395	376
1976	Critical	297	295	489	685	822	724	437	452	559	587	596	622	547
1977	Critical	729	690	780	697	892	858	629	571	595	496	558	653	679
1978	Above Normal	748	780	796	682	640	626	392	311	407	393	347	438	547
1979	Below Normal	573	614	687	612	371	322	330	312	329	290	369	511	443
1980	Above Normal	652	587	580	437	371	390	349	338	372	405	350	448	440
1981	Dry	549	548	682	732	524	551	379	354	370	404	452	568	510
1982	Wet	643	565	431	534	301	334	229	210	340	376	314	258	378
1983	Wet	206	267	378	413	355	300	303	264	250	229	196	221	282
1984	Wet	255	208	323	337	241	318	329	341	385	308	319	473	320
1985	Dry	555	478	421	449	559	552	436	378	356	390	510	516	467
1986	Wet	565	580	704	610	495	337	250	230	366	483	365	409	449
1987	Dry	466	505	666	764	768	651	417	405	399	428	489	572	544
1988	Critical	701	646	732	716	693	809	511	480	472	389	513	609	606
1989	Dry	716	737	765	746	942	604	321	361	332	382	487	537	578
1990	Critical	581	631	755	721	777	628	470	455	506	547	579	601	604
1991	Critical	732	750	774	844	937	692	469	437	485	563	582	556	652
1992	Critical	713	798	793	918	754	599	386	407	421	388	498	614	607
1993	Above Normal	733	784	835	700	618	541	332	344	420	381	325	457	539
1994	Critical	581	641	731	823	868	636	391	412	434	565	603	658	612
Average		574	564	624	621	588	533	376	355	384	377	397	494	491
Wet		513	491	531	484	416	393	296	277	330	342	317	378	397
Above Normal		604	573	611	608	542	478	340	323	355	349	327	485	466
Below Normal		564	562	645	635	557	492	359	338	361	328	366	523	477
Dry		606	605	664	687	704	620	413	395	388	393	465	550	541
Critical		623	634	718	770	806	755	515	487	520	495	543	597	622

Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922 Above Norm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1923 Below Norma	2	-26	-28	-1	-4	2	0	0	0	0	3	1	-3	-4
1924 Critical	4	3	0	6	-141	-59	-52	13	-5	9	-2	-4	0	-20
1925 Dry	6	-4	-23	-18	88	77	13	1	-7	-10	-6	3	10	10
1926 Dry	2	-6	-4	-2	-6	-16	-5	-7	-8	2	3	11	-3	-3
1927 Wet	8	4	4	2	15	12	1	2	2	-12	-3	4	3	3
1928 Above Norm	-1	16	25	14	25	12	-4	-3	0	-4	1	-10	6	6
1929 Critical	-5	0	-6	2	0	0	-1	-2	-14	-6	1	0	-3	-3
1930 Dry	-1	-2	-1	1	-27	-3	0	2	-4	-28	11	-43	-8	-8
1931 Critical	-33	-6	9	16	-121	-53	-6	3	9	-24	-21	3	-19	-19
1932 Dry	3	-1	-1	51	14	4	1	-6	2	-1	-1	-1	5	5
1933 Critical	0	0	-2	2	0	0	0	0	0	-2	-2	-3	-1	-1
1934 Critical	-1	1	1	9	-8	-3	-3	-1	-1	-2	-3	-4	-1	-1
1935 Below Norma	-1	0	-2	3	1	-9	0	0	1	0	0	0	-1	-1
1936 Below Norma	0	0	0	0	2	0	1	-1	1	4	-2	0	0	0
1937 Below Norma	-3	-2	0	-3	-2	-1	0	0	1	2	1	-1	-1	-1
1938 Wet	-1	14	4	13	0	0	0	0	0	0	0	1	3	3
1939 Dry	1	1	1	0	-1	-6	0	-3	-1	-10	8	-32	-4	-4
1940 Above Norm	-41	-17	-3	-5	0	0	-1	0	1	1	0	0	-5	-5
1941 Wet	0	1	-1	0	0	0	0	0	-1	-1	0	0	0	0
1942 Wet	5	16	5	0	0	0	0	0	0	-1	0	1	2	2
1943 Wet	0	0	0	1	1	0	-1	0	0	0	0	1	0	0
1944 Dry	1	2	1	0	-1	2	1	0	-6	-6	2	2	0	0
1945 Below Norma	-5	-5	-6	-4	-2	0	1	0	0	0	0	0	-2	-2
1946 Below Norma	-2	12	8	0	1	-2	-1	3	-1	-10	5	39	4	4
1947 Dry	32	7	-22	-8	-9	32	3	-2	7	2	5	9	5	5
1948 Below Norma	-5	3	0	-1	14	6	1	1	-6	6	-8	-7	0	0
1949 Dry	-11	-10	-3	-2	1	-28	-5	-1	0	-9	-15	11	-6	-6
1950 Below Norma	7	-17	-22	-15	-8	-4	0	-12	-1	0	2	-6	-6	-6
1951 Above Norm	21	13	3	11	0	0	0	-6	-4	11	-4	-6	3	3
1952 Wet	-2	3	4	0	0	2	1	0	0	0	0	0	1	1
1953 Wet	0	0	0	0	0	0	0	0	0	0	1	5	1	1
1954 Above Norm	2	1	0	0	0	0	0	0	1	4	0	0	1	1
1955 Dry	22	10	-18	-2	-2	68	13	2	-18	-14	0	1	5	5
1956 Wet	-2	-2	0	0	-3	-1	0	0	0	0	-1	0	-1	-1
1957 Above Norm	0	0	0	3	5	0	0	0	-1	1	-3	-7	0	0
1958 Wet	-2	27	-2	-1	0	0	0	0	0	0	0	0	2	2
1959 Below Norma	0	0	0	0	-1	-1	0	0	-2	-1	1	2	0	0
1960 Dry	2	12	27	-84	16	2	0	5	-6	-7	1	10	-2	-2
1961 Dry	11	-3	-5	27	20	19	14	2	-3	1	7	57	12	12
1962 Below Norma	42	20	40	-24	-8	-1	0	-5	12	18	-19	-2	6	6
1963 Wet	-8	-1	22	7	-10	-10	0	1	0	0	3	-5	0	0
1964 Dry	3	-8	-8	-6	-2	1	-3	7	8	-8	14	-17	-1	-1
1965 Wet	-21	-8	-5	0	-12	-2	0	-5	-11	-3	-1	-5	-6	-6
1966 Below Norma	-14	-4	2	0	-8	-45	-5	0	-2	-2	-2	-2	-7	-7
1967 Wet	-13	-6	13	1	-1	4	0	0	0	0	0	0	0	0
1968 Below Norma	0	0	0	-1	-1	0	-1	0	-2	-3	-3	-7	-1	-1
1969 Wet	1	1	-3	1	0	0	0	0	0	0	0	0	0	0
1970 Wet	0	0	0	0	0	0	0	0	-1	-1	0	0	0	0
1971 Wet	-1	-4	0	0	-22	-4	0	0	0	0	0	1	-3	-3
1972 Below Norma	1	1	0	0	10	0	0	0	18	3	3	10	4	4
1973 Above Norm	20	35	4	-1	0	-1	0	0	0	0	0	1	5	5
1974 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1975 Wet	0	0	0	0	0	0	1	0	0	-1	0	0	0	0
1976 Critical	0	0	0	4	7	-27	-29	-8	0	5	5	-14	-5	-5
1977 Critical	2	24	2	-22	24	-17	-55	-27	-8	7	23	55	1	1
1978 Above Norm	17	20	6	5	2	-12	-1	0	1	-4	-2	4	3	3
1979 Below Norma	3	1	-1	5	3	0	-1	1	0	0	2	-2	1	1
1980 Above Norm	0	20	31	2	-6	-1	-1	0	0	0	0	0	4	4
1981 Dry	0	0	0	0	0	-1	-2	-1	-3	-3	2	-2	-1	-1
1982 Wet	1	5	1	0	0	2	0	0	0	0	0	0	1	1
1983 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1984 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1985 Dry	0	1	0	-3	-5	-43	-10	-1	7	0	4	11	-3	-3
1986 Wet	3	-2	-1	0	0	-1	1	0	1	-35	-10	-3	-4	-4
1987 Dry	-23	-9	-1	1	3	1	-1	-1	0	8	-1	6	-1	-1
1988 Critical	7	-13	-7	-2	-15	-3	-1	0	-6	-5	-4	-2	-4	-4
1989 Dry	-1	1	-3	-18	-12	-7	-2	-1	8	10	-4	13	-1	-1
1990 Critical	-7	-9	-4	18	11	3	2	2	2	0	2	2	2	2
1991 Critical	1	0	0	-2	8	0	0	0	0	0	0	0	1	1
1992 Critical	0	0	0	0	0	-25	-1	-1	-2	0	8	17	0	0
1993 Above Norm	9	2	5	-10	0	0	0	2	2	-1	-1	2	1	1
1994 Critical	2	2	-1	-1	5	4	2	1	14	-6	14	-54	-2	-2
Average	1	2	0	0	-2	-2	-2	-1	0	-2	0	1	0	0
Wet	-1	2	2	1	-2	0	0	0	0	-3	0	0	0	0
Above Norm	3	9	7	2	3	0	-1	-1	0	1	-1	-2	2	2
Below Norma	2	-1	-1	-3	0	-4	0	-1	1	2	-1	1	0	0
Dry	3	-1	-4	-4	5	6	1	0	-1	-5	2	2	0	0
Critical	-2	0	-1	3	-19	-15	-12	-3	0	-3	2	0	-4	-4

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-4%	-5%	0%	-1%	0%	0%	0%	0%	1%	0%	-1%	-1%
1924	Critical	1%	0%	0%	1%	-16%	-6%	-8%	-1%	1%	0%	-1%	0%	-2%
1925	Dry	1%	-1%	-3%	-2%	12%	12%	3%	0%	-2%	-3%	-1%	1%	1%
1926	Dry	0%	-1%	-1%	0%	-1%	-2%	-1%	-2%	-2%	1%	1%	2%	-1%
1927	Wet	1%	1%	1%	0%	3%	2%	0%	1%	1%	-4%	-1%	1%	0%
1928	Above Normal	0%	3%	5%	3%	5%	3%	-1%	-1%	0%	-1%	0%	-2%	1%
1929	Critical	-1%	0%	-1%	0%	0%	0%	0%	0%	-3%	-1%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	-4%	0%	0%	0%	-1%	-7%	3%	-8%	-1%
1931	Critical	-5%	-1%	1%	2%	-13%	-6%	-1%	0%	2%	-5%	-4%	1%	-2%
1932	Dry	1%	0%	0%	10%	2%	1%	0%	-1%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1934	Critical	0%	0%	0%	1%	-1%	0%	-1%	0%	0%	0%	-1%	-1%	0%
1935	Below Normal	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%	0%
1937	Below Normal	-1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1938	Wet	0%	2%	1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	-1%	0%	-1%	0%	-2%	2%	-6%	-1%
1940	Above Normal	-6%	-3%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	0%	0%
1945	Below Normal	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	2%	2%	0%	0%	-1%	0%	1%	0%	-3%	1%	8%	1%
1947	Dry	5%	1%	-3%	-1%	-1%	5%	1%	-1%	2%	0%	1%	1%	1%
1948	Below Normal	-1%	0%	0%	0%	2%	1%	0%	0%	-2%	2%	-2%	-1%	0%
1949	Dry	-2%	-2%	0%	0%	0%	-5%	-1%	0%	0%	-2%	-3%	2%	-1%
1950	Below Normal	1%	-3%	-3%	-2%	-1%	-1%	0%	-4%	0%	0%	1%	-1%	-1%
1951	Above Normal	3%	3%	1%	3%	0%	0%	0%	-2%	-2%	4%	-1%	-1%	1%
1952	Wet	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1955	Dry	3%	1%	-3%	0%	0%	12%	3%	0%	-4%	-4%	0%	0%	1%
1956	Wet	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	-1%	0%
1958	Wet	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1960	Dry	0%	2%	4%	-10%	2%	0%	0%	1%	-2%	-2%	0%	2%	0%
1961	Dry	2%	-1%	-1%	4%	3%	3%	4%	0%	-1%	0%	2%	11%	2%
1962	Below Normal	7%	3%	5%	-3%	-1%	0%	0%	-1%	4%	6%	-5%	0%	1%
1963	Wet	-1%	0%	5%	1%	-2%	-2%	0%	0%	0%	0%	1%	-1%	0%
1964	Dry	1%	-1%	-2%	-1%	0%	0%	-1%	2%	2%	-2%	3%	-3%	0%
1965	Wet	-3%	-1%	-1%	0%	-4%	-1%	0%	-1%	-3%	-1%	0%	-1%	-1%
1966	Below Normal	-2%	-1%	1%	0%	-2%	-8%	-2%	0%	-1%	-1%	0%	0%	-1%
1967	Wet	-2%	-1%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-4%	-1%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	0%	0%	0%	0%	2%	0%	0%	0%	5%	1%	1%	2%	1%
1973	Above Normal	3%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	1%	-4%	-6%	-2%	0%	1%	1%	-2%	-1%
1977	Critical	0%	4%	0%	-3%	3%	-2%	-8%	-5%	-1%	1%	4%	9%	0%
1978	Above Normal	2%	3%	1%	1%	0%	-2%	0%	0%	0%	-1%	-1%	1%	0%
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	0%	0%
1980	Above Normal	0%	3%	6%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-7%	-2%	0%	2%	0%	1%	2%	-1%
1986	Wet	1%	0%	0%	0%	0%	0%	1%	0%	0%	-7%	-3%	-1%	-1%
1987	Dry	-5%	-2%	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%
1988	Critical	1%	-2%	-1%	0%	-2%	0%	0%	0%	-1%	-1%	-1%	0%	-1%
1989	Dry	0%	0%	0%	-2%	-1%	-1%	-1%	0%	3%	3%	-1%	3%	0%
1990	Critical	-1%	-1%	0%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	-4%	0%	0%	0%	0%	2%	3%	0%
1993	Above Normal	1%	0%	1%	-1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	1%	1%	0%	0%	3%	-1%	2%	-8%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	-1%	0%	0%	0%	1%	0%	0%	0%
Dry		0%	0%	-1%	0%	1%	1%	0%	0%	0%	-1%	0%	1%	0%
Critical		0%	0%	0%	0%	-2%	-2%	-2%	-1%	0%	-1%	0%	0%	-1%

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	801	741	741	668	808	339	340	289	287	255	272	541	507
1923	Below Normal	788	765	736	380	312	294	346	307	249	276	393	669	460
1924	Critical	720	781	862	907	930	745	542	492	674	606	642	712	718
1925	Dry	945	1,000	913	990	711	326	271	273	266	283	393	662	586
1926	Dry	889	788	923	991	715	325	279	330	301	404	515	732	599
1927	Wet	929	602	315	368	453	286	248	285	239	231	291	588	403
1928	Above Normal	791	647	420	522	316	265	330	302	246	282	356	715	433
1929	Critical	885	802	953	1,008	1,055	593	441	424	404	443	585	796	699
1930	Dry	952	936	967	647	436	293	258	313	322	375	482	768	563
1931	Critical	950	807	905	964	901	531	440	491	625	590	714	788	725
1932	Dry	918	936	863	425	485	378	362	371	312	286	405	710	538
1933	Critical	866	745	841	782	555	413	356	364	409	442	558	670	583
1934	Critical	870	975	885	769	444	390	371	381	404	389	576	823	606
1935	Below Normal	964	933	1,023	668	350	288	276	319	254	251	404	709	537
1936	Below Normal	867	764	884	1,054	1,140	404	275	295	265	256	383	657	604
1937	Below Normal	850	767	837	998	928	680	339	262	257	259	326	580	590
1938	Wet	847	809	360	329	520	635	395	362	344	276	283	315	456
1939	Dry	226	287	657	1,013	944	599	469	345	329	447	513	788	551
1940	Above Normal	946	782	811	924	715	331	271	281	260	244	297	642	542
1941	Wet	814	829	855	583	746	428	374	268	269	274	287	447	515
1942	Wet	425	579	773	612	389	277	305	280	262	274	302	362	403
1943	Wet	279	322	324	510	364	400	432	304	309	259	301	593	366
1944	Dry	855	789	878	969	1,039	371	344	309	293	392	526	669	619
1945	Below Normal	851	758	704	646	668	473	359	313	253	279	392	684	532
1946	Below Normal	811	700	513	272	343	323	347	315	265	290	420	661	438
1947	Dry	819	799	932	786	702	402	369	357	319	408	544	771	601
1948	Below Normal	956	817	1,010	929	995	428	291	293	234	252	423	654	607
1949	Dry	783	746	869	1,025	827	365	351	329	290	384	583	760	609
1950	Below Normal	900	751	912	817	405	261	262	300	242	269	357	598	506
1951	Above Normal	803	467	374	613	667	285	327	288	246	248	317	683	443
1952	Wet	801	821	879	708	322	343	401	268	271	269	260	287	469
1953	Wet	244	449	864	376	286	270	333	274	234	243	316	477	364
1954	Above Normal	437	581	761	1,039	337	262	329	300	246	260	309	650	459
1955	Dry	857	894	868	496	374	308	364	338	301	327	470	718	526
1956	Wet	864	874	906	822	432	313	265	296	263	260	296	356	496
1957	Above Normal	240	268	515	844	774	286	317	281	236	253	327	714	421
1958	Wet	770	441	551	392	661	835	754	294	258	262	288	323	486
1959	Below Normal	246	376	757	1,007	413	295	375	329	318	335	400	725	465
1960	Dry	879	817	848	1,048	1,056	359	351	331	363	459	509	722	645
1961	Dry	912	864	1,075	934	830	358	278	305	333	413	550	662	626
1962	Below Normal	811	798	952	927	764	322	276	317	269	305	409	780	577
1963	Wet	770	295	415	484	357	265	493	291	224	232	282	601	392
1964	Dry	804	785	364	469	346	299	409	342	330	437	611	679	490
1965	Wet	853	878	641	375	286	257	292	308	258	242	287	556	436
1966	Below Normal	780	710	377	304	289	259	330	311	280	324	400	748	426
1967	Wet	976	923	930	668	317	340	363	326	275	297	266	269	496
1968	Below Normal	227	355	697	780	315	244	324	328	304	321	390	687	414
1969	Wet	839	821	727	754	858	579	538	360	310	274	295	333	557
1970	Wet	224	331	517	635	431	282	345	299	267	272	301	650	380
1971	Wet	894	638	419	273	270	255	310	272	237	241	316	540	389
1972	Below Normal	484	630	774	742	720	345	353	330	305	323	402	765	514
1973	Above Normal	1,034	784	461	610	536	313	341	326	254	243	339	651	491
1974	Wet	913	492	324	295	267	271	323	298	270	244	338	426	372
1975	Wet	246	319	570	579	557	337	357	299	249	243	312	431	375
1976	Critical	260	240	438	807	1,032	604	449	425	630	714	767	900	605
1977	Critical	1,017	868	1,068	785	864	665	553	523	656	559	692	822	756
1978	Above Normal	1,052	1,051	1,023	767	470	532	424	368	299	262	302	562	593
1979	Below Normal	764	835	922	699	401	316	310	307	248	263	394	673	511
1980	Above Normal	921	747	596	469	805	558	386	313	317	285	312	578	524
1981	Dry	752	715	891	1,034	378	257	328	322	345	461	540	751	565
1982	Wet	869	735	268	578	352	442	477	286	263	273	310	311	430
1983	Wet	206	300	485	956	837	789	738	365	317	303	240	209	479
1984	Wet	212	255	454	427	349	268	348	323	274	261	311	647	344
1985	Dry	779	619	294	311	500	368	389	331	290	439	628	636	466
1986	Wet	723	736	909	690	810	690	366	280	286	342	319	505	555
1987	Dry	644	679	877	1,063	804	423	387	337	370	474	572	734	614
1988	Critical	945	853	960	809	390	366	352	382	395	422	632	847	613
1989	Dry	998	977	991	913	1,135	496	257	279	282	421	606	663	668
1990	Critical	758	819	973	809	660	371	357	339	503	685	725	814	651
1991	Critical	1,039	1,023	1,014	1,019	1,027	643	337	318	491	707	701	718	753
1992	Critical	1,038	1,102	1,032	1,197	769	379	284	314	386	420	627	816	697
1993	Above Normal	1,032	1,089	1,083	812	675	454	260	281	242	232	284	565	584
1994	Critical	775	848	926	1,019	1,004	420	355	309	400	731	758	982	711
Average		756	713	746	725	615	399	364	324	316	346	428	633	530
Wet		652	593	595	544	470	408	403	302	270	265	295	439	436
Above Normal		806	716	679	727	610	362	332	303	263	256	312	630	500
Below Normal		736	711	793	730	574	352	319	309	267	286	392	685	513
Dry		813	789	826	820	705	370	342	326	315	401	528	714	579
Critical		844	822	905	906	802	510	403	397	498	559	665	807	676

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	801	741	741	668	808	339	340	289	287	256	272	541	507
1923	Below Normal	791	719	656	378	307	289	344	308	250	273	388	663	447
1924	Critical	729	786	858	919	814	546	494	488	671	597	640	723	689
1925	Dry	948	991	865	947	770	380	282	274	263	280	394	669	589
1926	Dry	894	777	915	988	712	325	279	328	300	412	521	746	600
1927	Wet	939	610	323	372	454	288	248	286	240	231	292	596	407
1928	Above Normal	788	674	479	554	330	269	335	298	245	283	355	698	442
1929	Critical	875	803	938	1,013	1,055	592	440	423	401	443	585	796	697
1930	Dry	951	932	966	649	437	293	258	313	320	403	498	676	558
1931	Critical	896	801	924	991	801	491	460	500	620	532	683	801	708
1932	Dry	926	935	862	420	473	386	363	368	313	286	404	710	537
1933	Critical	867	745	843	787	559	415	356	364	409	441	557	670	584
1934	Critical	870	977	888	755	416	382	369	380	404	388	572	816	601
1935	Below Normal	962	933	1,018	676	352	289	276	319	254	251	404	709	537
1936	Below Normal	867	764	883	1,054	1,140	405	276	294	267	255	382	656	604
1937	Below Normal	843	763	836	994	902	678	339	262	258	260	325	577	586
1938	Wet	844	832	374	329	512	634	395	361	344	276	283	317	458
1939	Dry	228	288	658	1,013	942	598	469	344	335	434	526	723	547
1940	Above Normal	871	752	800	914	713	332	271	281	260	244	297	641	531
1941	Wet	814	830	853	583	745	427	374	268	269	273	287	447	514
1942	Wet	435	610	792	612	388	277	305	280	263	273	302	364	408
1943	Wet	280	321	323	511	369	406	434	304	309	259	302	596	368
1944	Dry	858	792	879	971	1,036	372	345	309	292	394	536	671	621
1945	Below Normal	841	749	692	636	660	468	359	313	253	278	392	683	527
1946	Below Normal	808	722	548	272	352	326	345	316	265	298	429	735	452
1947	Dry	878	813	879	766	680	398	368	354	319	416	555	784	601
1948	Below Normal	947	823	1,008	924	1,028	437	292	294	234	261	412	642	609
1949	Dry	763	726	863	1,022	828	361	348	329	290	364	565	782	604
1950	Below Normal	911	716	868	786	389	259	262	294	244	275	362	587	496
1951	Above Normal	838	491	378	620	681	285	324	288	248	255	308	672	449
1952	Wet	798	827	886	708	323	347	411	268	271	269	261	288	471
1953	Wet	244	449	864	376	286	270	333	274	234	243	320	488	365
1954	Above Normal	440	583	762	1,039	337	262	329	300	246	261	309	651	460
1955	Dry	897	916	829	490	372	312	373	339	298	332	480	720	530
1956	Wet	863	872	905	822	418	309	265	296	262	260	295	355	494
1957	Above Normal	240	288	515	853	792	288	317	282	236	253	324	698	422
1958	Wet	766	493	545	391	661	835	754	294	257	262	288	324	489
1959	Below Normal	246	376	758	1,008	413	295	375	330	317	336	403	729	466
1960	Dry	884	839	931	859	1,086	361	351	332	341	449	511	741	640
1961	Dry	926	862	1,064	982	858	381	286	306	333	417	558	774	646
1962	Below Normal	868	837	1,034	876	742	319	276	315	279	312	375	778	584
1963	Wet	757	294	457	496	360	264	493	292	225	233	282	590	395
1964	Dry	810	773	347	455	343	299	410	345	311	446	644	643	486
1965	Wet	816	867	628	375	277	252	292	305	251	245	281	544	428
1966	Below Normal	754	702	386	305	288	258	329	312	279	324	398	744	423
1967	Wet	954	910	956	671	317	340	364	326	275	297	266	269	495
1968	Below Normal	227	355	697	778	315	244	324	329	303	320	385	676	413
1969	Wet	841	827	720	760	858	580	536	360	310	274	295	334	558
1970	Wet	224	332	517	635	431	282	345	299	267	272	301	651	380
1971	Wet	892	631	418	273	267	251	310	272	236	241	316	541	387
1972	Below Normal	487	632	775	742	720	345	353	330	309	323	410	779	517
1973	Above Normal	1,069	846	468	609	536	312	342	326	254	243	340	653	500
1974	Wet	912	492	324	295	268	271	323	298	270	244	338	426	372
1975	Wet	246	319	571	579	557	338	358	299	249	243	312	431	375
1976	Critical	260	240	438	812	1,068	541	407	414	619	722	776	875	598
1977	Critical	1,021	918	1,057	737	786	527	462	494	646	571	725	925	739
1978	Above Normal	1,099	1,084	1,037	779	473	523	411	386	301	261	307	574	603
1979	Below Normal	771	837	919	711	414	317	307	308	248	266	397	669	514
1980	Above Normal	920	780	667	482	808	561	379	313	317	285	312	578	534
1981	Dry	752	715	891	1,034	378	257	327	322	340	457	544	746	564
1982	Wet	869	742	270	578	351	443	482	286	263	273	310	311	431
1983	Wet	206	300	484	955	837	789	738	365	317	303	240	209	479
1984	Wet	212	255	454	427	349	268	348	323	274	261	311	647	344
1985	Dry	778	620	294	304	490	362	383	330	291	439	636	655	465
1986	Wet	728	732	907	689	812	699	367	279	286	318	316	497	552
1987	Dry	597	662	877	1,053	825	429	388	335	368	480	573	745	611
1988	Critical	959	824	947	805	387	363	352	381	394	420	624	843	608
1989	Dry	996	980	979	881	1,139	483	258	278	286	430	594	690	666
1990	Critical	744	804	969	843	675	374	358	339	503	684	725	815	653
1991	Critical	1,039	1,023	1,013	1,014	1,024	639	337	318	491	707	700	717	752
1992	Critical	1,038	1,102	1,032	1,197	768	379	284	314	387	421	641	851	701
1993	Above Normal	1,045	1,085	1,092	783	675	454	260	283	244	231	285	569	584
1994	Critical	779	851	925	1,017	1,016	427	357	309	390	723	778	890	705
Average		757	716	747	721	613	394	362	324	315	346	429	635	530
Wet		650	597	599	545	469	408	404	302	270	264	295	439	437
Above Normal		811	730	694	730	615	362	331	305	264	257	311	627	503
Below Normal		737	709	791	724	573	352	318	309	268	288	390	688	512
Dry		818	789	819	802	711	375	343	325	313	402	534	717	579
Critical		840	823	903	908	781	473	390	394	495	554	667	810	670

Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922 Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1923 Below Norma	3	-46	-81	-3	-5	-5	-2	1	1	-2	-5	-6	-12	-12
1924 Critical	9	5	-5	13	-116	-198	-48	-4	-4	-9	-3	11	-29	-29
1925 Dry	3	-9	-48	-43	58	54	10	1	-3	-2	1	7	3	3
1926 Dry	4	-11	-8	-4	-3	0	1	-2	-1	8	7	14	0	0
1927 Wet	10	8	9	4	1	2	0	1	1	-1	1	8	4	4
1928 Above Norm	-2	27	59	33	14	4	5	-3	-1	1	-1	-16	10	10
1929 Critical	-10	1	-14	6	0	-1	-1	-1	-3	0	0	-1	-2	-2
1930 Dry	-1	-4	-1	1	0	0	0	0	-3	28	16	-93	-5	-5
1931 Critical	-54	-6	19	27	-99	-40	20	9	-6	-58	-30	13	-17	-17
1932 Dry	8	-1	-1	-5	-11	7	1	-3	2	-1	-1	0	0	0
1933 Critical	1	0	2	4	4	1	0	0	0	-1	-1	1	1	1
1934 Critical	0	2	3	-14	-29	-8	-2	-1	0	-1	-3	-8	-5	-5
1935 Below Norma	-2	0	-5	8	1	0	0	0	0	0	0	0	0	0
1936 Below Norma	0	0	0	0	0	1	0	-1	1	-1	-2	0	0	0
1937 Below Norma	-7	-4	-1	-4	-26	-1	0	0	1	1	-1	-3	-4	-4
1938 Wet	-2	23	14	0	-8	-2	0	0	0	0	0	2	2	2
1939 Dry	2	1	1	1	-2	-1	0	-1	7	-13	13	-65	-5	-5
1940 Above Norm	-75	-30	-11	-10	-2	1	0	0	0	0	0	0	-11	-11
1941 Wet	0	1	-3	-1	-1	-1	0	0	-1	-1	0	0	0	0
1942 Wet	10	31	19	0	0	0	0	0	0	-1	0	2	5	5
1943 Wet	0	-1	-1	1	5	6	2	0	-1	0	1	2	1	1
1944 Dry	3	3	1	2	-3	1	1	0	-1	2	10	3	2	2
1945 Below Norma	-10	-9	-13	-10	-8	-5	1	0	0	0	0	-1	-5	-5
1946 Below Norma	-3	21	35	1	9	4	-1	2	0	8	9	74	13	13
1947 Dry	58	15	-53	-19	-22	-4	-1	-3	1	8	11	14	0	0
1948 Below Norma	-9	6	-2	-6	33	9	1	1	-1	8	-10	-13	2	2
1949 Dry	-19	-20	-6	-3	2	-4	-3	0	0	-20	-20	-22	-6	-6
1950 Below Norma	11	-35	-44	-31	-16	-2	0	-6	3	5	6	-10	-10	-10
1951 Above Norm	35	25	4	7	14	0	-3	-1	2	6	-9	-10	6	6
1952 Wet	-3	6	8	1	0	3	10	0	0	0	0	1	2	2
1953 Wet	0	1	1	0	0	0	0	0	0	0	4	10	1	1
1954 Above Norm	4	1	1	0	0	0	0	0	0	1	-1	2	1	1
1955 Dry	41	22	-39	-6	-2	4	9	1	-3	5	10	2	4	4
1956 Wet	-1	-2	-1	0	-14	-5	0	0	0	0	0	-1	-2	-2
1957 Above Norm	0	0	0	9	18	1	0	1	0	-1	-4	-16	1	1
1958 Wet	-4	52	-6	-1	0	1	0	0	0	0	0	1	4	4
1959 Below Norma	0	1	1	1	0	0	0	1	-1	1	3	3	1	1
1960 Dry	5	22	82	-189	30	2	0	1	-22	-10	2	19	-5	-5
1961 Dry	14	-2	-11	48	28	23	8	1	0	4	8	112	19	19
1962 Below Norma	58	39	81	-51	-22	-3	0	-2	10	7	-33	-2	7	7
1963 Wet	-13	0	42	11	3	0	0	1	0	1	0	-10	3	3
1964 Dry	6	-12	-17	-14	-3	0	1	3	-19	10	33	-37	-4	-4
1965 Wet	-37	-11	-13	0	-9	-5	0	-3	-7	3	-6	-12	-8	-8
1966 Below Norma	-25	-8	9	0	0	-1	0	1	0	-1	-2	-4	-3	-3
1967 Wet	-22	-13	27	3	0	0	1	0	0	0	0	0	0	0
1968 Below Norma	0	0	0	-2	0	0	0	1	-1	0	-5	-11	-2	-2
1969 Wet	2	6	-7	6	0	1	-2	0	0	0	0	0	0	0
1970 Wet	0	0	0	0	0	0	0	0	0	-1	0	1	0	0
1971 Wet	-2	-7	-1	0	-3	-4	0	0	0	0	0	1	-1	-1
1972 Below Norma	3	2	1	0	1	0	0	0	3	-1	8	14	3	3
1973 Above Norm	34	62	7	-1	0	0	1	0	0	0	1	1	9	9
1974 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1975 Wet	0	0	0	0	0	1	1	0	0	0	0	0	0	0
1976 Critical	0	0	0	5	36	-62	-42	-11	-11	7	9	-25	-8	-8
1977 Critical	4	50	-11	-47	-78	-138	-91	-29	-9	12	33	103	-17	-17
1978 Above Norm	47	34	14	11	3	-8	-13	18	3	-1	4	12	10	10
1979 Below Norma	7	2	-4	12	13	1	-3	1	0	3	3	-4	3	3
1980 Above Norm	-1	33	71	13	2	3	-7	0	0	0	0	0	10	10
1981 Dry	0	0	0	0	0	0	0	-1	-5	-4	4	-5	-1	-1
1982 Wet	0	7	2	0	-1	2	5	0	0	0	0	0	1	1
1983 Wet	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0
1984 Wet	0	0	0	0	0	0	0	0	0	0	0	-1	0	0
1985 Dry	-1	1	0	-8	-11	-6	-6	-1	1	0	8	19	0	0
1986 Wet	4	-4	-2	-1	2	9	1	-1	0	-24	-3	-8	-2	-2
1987 Dry	-47	-16	0	-9	21	6	1	-2	-2	6	1	11	-2	-2
1988 Critical	14	-29	-13	-4	-4	-3	-1	0	-1	-2	-8	-4	-5	-5
1989 Dry	-2	3	-12	-32	5	-13	1	0	4	8	-12	27	-2	-2
1990 Critical	-15	-16	-4	34	16	3	1	1	0	-1	0	1	2	2
1991 Critical	0	0	-1	-5	-3	-3	-1	0	0	0	0	0	-1	-1
1992 Critical	0	0	0	0	0	0	0	0	1	1	14	35	4	4
1993 Above Norm	13	-4	9	-28	-1	0	0	2	2	0	1	4	0	0
1994 Critical	4	3	-1	-2	12	7	2	1	-9	-8	20	-92	-5	-5
Average	1	3	1	-4	-2	-5	-2	0	-1	0	1	1	-1	-1
Wet	-3	5	4	1	-1	0	1	0	0	-1	0	0	0	0
Above Norm	5	15	15	3	5	0	-2	2	1	1	-1	-2	3	3
Below Norma	2	-2	-2	-6	-1	0	0	0	1	2	-2	3	-1	-1
Dry	5	-1	-7	-17	6	4	1	0	-3	2	6	3	0	0
Critical	-4	1	-2	1	-22	-37	-14	-3	-4	-5	3	3	-7	-7

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-6%	-11%	-1%	-2%	-2%	-1%	0%	0%	-1%	-1%	-1%	-2%
1924	Critical	1%	1%	-1%	1%	-12%	-27%	-9%	-1%	-1%	-1%	0%	2%	-4%
1925	Dry	0%	-1%	-5%	-4%	8%	17%	4%	0%	-1%	-1%	0%	1%	2%
1926	Dry	0%	-1%	-1%	0%	0%	0%	0%	-1%	0%	2%	1%	2%	0%
1927	Wet	1%	1%	3%	1%	0%	1%	0%	0%	0%	0%	0%	1%	1%
1928	Above Normal	0%	4%	14%	6%	4%	2%	2%	-1%	0%	0%	0%	-2%	2%
1929	Critical	-1%	0%	-2%	1%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	7%	3%	-12%	0%
1931	Critical	-6%	-1%	2%	3%	-11%	-7%	5%	2%	-1%	-10%	-4%	2%	-2%
1932	Dry	1%	0%	0%	-1%	-2%	2%	0%	-1%	1%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-2%	-6%	-2%	-1%	0%	0%	0%	-1%	-1%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	-1%	0%	0%	0%	-3%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	3%	4%	0%	-2%	0%	0%	0%	0%	0%	0%	1%	0%
1939	Dry	1%	0%	0%	0%	0%	0%	0%	0%	2%	-3%	3%	-8%	0%
1940	Above Normal	-8%	-4%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	2%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	0%
1945	Below Normal	-1%	-1%	-2%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	3%	7%	0%	3%	1%	0%	1%	0%	3%	2%	11%	2%
1947	Dry	7%	2%	-6%	-2%	-3%	-1%	0%	-1%	0%	2%	2%	2%	0%
1948	Below Normal	-1%	1%	0%	-1%	3%	2%	0%	0%	0%	3%	-2%	-2%	0%
1949	Dry	-2%	-3%	-1%	0%	0%	-1%	-1%	0%	0%	-5%	-3%	-3%	-1%
1950	Below Normal	1%	-5%	-5%	-4%	-4%	-1%	0%	-2%	1%	2%	2%	-2%	-1%
1951	Above Normal	4%	5%	1%	1%	2%	0%	-1%	0%	1%	3%	-3%	-2%	1%
1952	Wet	0%	1%	1%	0%	0%	1%	3%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	5%	2%	-4%	-1%	0%	1%	3%	0%	-1%	1%	2%	0%	1%
1956	Wet	0%	0%	0%	0%	-3%	-1%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	0%	-1%	-2%	0%
1958	Wet	-1%	12%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1960	Dry	1%	3%	10%	-18%	3%	0%	0%	0%	-6%	-2%	0%	3%	-1%
1961	Dry	2%	0%	-1%	5%	3%	6%	3%	0%	0%	1%	2%	17%	3%
1962	Below Normal	7%	5%	9%	-6%	-3%	-1%	0%	-1%	4%	2%	-8%	0%	1%
1963	Wet	-2%	0%	10%	2%	1%	0%	0%	0%	0%	0%	0%	-2%	1%
1964	Dry	1%	-2%	-5%	-3%	-1%	0%	0%	1%	-6%	2%	5%	-5%	-1%
1965	Wet	-4%	-1%	-2%	0%	-3%	-2%	0%	-1%	-3%	1%	-2%	-2%	-2%
1966	Below Normal	-3%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1967	Wet	-2%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%
1969	Wet	0%	1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	2%	2%	0%
1973	Above Normal	3%	8%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	3%	-10%	-9%	-3%	-2%	1%	1%	-3%	-2%
1977	Critical	0%	6%	-1%	-6%	-9%	-21%	-17%	-6%	-1%	2%	5%	13%	-3%
1978	Above Normal	4%	3%	1%	1%	1%	-2%	-3%	5%	1%	0%	1%	2%	1%
1979	Below Normal	1%	0%	0%	2%	3%	0%	-1%	0%	0%	1%	1%	-1%	1%
1980	Above Normal	0%	4%	12%	3%	0%	1%	-2%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1982	Wet	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-2%	-2%	-2%	0%	0%	0%	0%	1%	3%	0%
1986	Wet	1%	-1%	0%	0%	0%	1%	0%	0%	0%	-7%	-1%	-2%	-1%
1987	Dry	-7%	-2%	0%	-1%	3%	1%	0%	0%	0%	1%	0%	2%	0%
1988	Critical	2%	-3%	-1%	0%	-1%	-1%	0%	0%	0%	-1%	0%	-1%	0%
1989	Dry	0%	0%	-1%	-3%	0%	-3%	0%	0%	2%	2%	-2%	4%	0%
1990	Critical	-2%	-2%	0%	4%	2%	1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	4%	1%
1993	Above Normal	1%	0%	1%	-4%	0%	0%	0%	1%	1%	0%	0%	1%	0%
1994	Critical	1%	0%	0%	0%	1%	2%	1%	0%	-2%	-1%	3%	-9%	0%
Average		0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		1%	2%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Dry		0%	0%	-1%	-2%	1%	1%	0%	0%	-1%	0%	1%	1%	0%
Critical		0%	0%	0%	0%	-3%	-6%	-3%	-1%	-1%	-1%	0%	1%	-1%

Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	599	591	574	497	525	417	312	296	324	338	300	434	434
1923	Below Normal	590	589	553	427	433	420	337	320	331	283	349	503	428
1924	Critical	551	591	670	719	905	960	634	558	606	525	538	552	651
1925	Dry	691	732	713	794	638	585	383	301	382	355	424	513	543
1926	Dry	654	617	696	773	599	581	381	389	371	377	446	556	537
1927	Wet	692	490	311	348	394	390	310	299	280	268	286	462	377
1928	Above Normal	596	498	384	405	335	388	317	318	303	329	319	541	394
1929	Critical	654	620	720	783	833	784	542	486	505	442	490	590	621
1930	Dry	703	714	734	538	476	481	346	392	388	408	423	575	515
1931	Critical	704	643	720	766	918	774	580	560	581	497	570	597	659
1932	Dry	685	715	642	396	597	693	525	442	428	404	415	540	540
1933	Critical	650	603	689	744	709	705	494	450	495	447	495	534	585
1934	Critical	651	723	699	678	683	838	570	524	528	423	482	598	616
1935	Below Normal	698	714	795	587	583	450	357	353	322	307	357	542	505
1936	Below Normal	653	600	687	594	536	333	298	316	372	286	350	503	461
1937	Below Normal	627	592	647	754	474	394	318	264	387	325	342	463	466
1938	Wet	625	629	410	465	381	319	255	245	244	332	303	291	375
1939	Dry	258	311	550	767	745	607	478	370	346	384	420	590	485
1940	Above Normal	692	620	681	647	489	339	287	309	321	274	284	491	453
1941	Wet	610	627	610	455	439	321	273	255	367	367	305	363	416
1942	Wet	374	480	522	424	310	330	299	273	338	378	315	315	363
1943	Wet	288	318	310	375	294	293	287	309	402	305	289	457	327
1944	Dry	627	599	665	756	714	421	364	331	337	353	436	517	510
1945	Below Normal	633	587	552	537	512	354	371	325	313	275	334	505	441
1946	Below Normal	599	542	449	382	435	392	342	328	326	285	357	512	412
1947	Dry	611	612	699	625	605	497	378	415	370	353	439	582	516
1948	Below Normal	706	636	763	754	849	560	372	346	294	262	356	509	534
1949	Dry	601	589	680	797	727	459	369	412	379	341	467	569	533
1950	Below Normal	659	602	701	645	391	387	320	316	289	297	316	467	449
1951	Above Normal	614	409	379	339	268	338	332	277	267	270	287	522	358
1952	Wet	605	633	623	484	367	391	240	200	277	323	277	277	391
1953	Wet	265	404	556	398	411	450	320	270	259	248	296	394	356
1954	Above Normal	390	482	614	742	336	379	320	343	298	284	282	501	414
1955	Dry	645	683	641	409	403	447	431	415	375	330	419	542	478
1956	Wet	647	682	655	405	366	330	311	316	348	375	317	315	422
1957	Above Normal	264	308	454	679	614	384	341	289	277	268	296	531	392
1958	Wet	577	400	446	358	463	486	213	187	304	334	292	296	363
1959	Below Normal	267	363	595	709	393	456	408	345	332	300	336	541	420
1960	Dry	657	633	692	814	719	370	347	399	353	388	413	550	528
1961	Dry	680	676	815	736	690	485	370	416	364	339	423	512	542
1962	Below Normal	622	632	730	750	639	407	349	339	309	288	345	585	500
1963	Wet	614	318	374	345	388	395	367	300	290	253	274	467	365
1964	Dry	608	594	340	404	437	419	411	406	354	367	487	527	446
1965	Wet	644	678	504	386	331	394	321	319	329	289	306	426	411
1966	Below Normal	578	544	389	387	396	378	333	332	316	297	335	562	404
1967	Wet	719	702	695	478	347	369	273	225	280	292	273	270	410
1968	Below Normal	259	347	533	597	421	387	364	348	316	296	336	522	394
1969	Wet	635	636	559	580	378	388	281	235	234	334	303	303	406
1970	Wet	258	333	416	293	336	316	296	299	304	294	285	497	327
1971	Wet	659	503	372	299	379	325	302	280	257	244	283	432	361
1972	Below Normal	415	513	604	558	570	366	327	365	340	309	339	569	440
1973	Above Normal	745	557	404	434	495	383	342	345	348	269	314	486	427
1974	Wet	655	409	351	392	339	299	290	312	365	296	304	355	364
1975	Wet	270	325	463	500	433	302	298	302	332	305	296	355	348
1976	Critical	278	275	405	658	794	610	439	450	546	573	593	657	523
1977	Critical	749	667	785	688	854	851	655	587	597	473	525	596	669
1978	Above Normal	748	777	791	613	564	604	390	308	390	355	309	432	523
1979	Below Normal	573	628	677	573	373	317	327	302	287	265	351	515	432
1980	Above Normal	666	570	471	423	342	386	340	328	362	376	315	437	418
1981	Dry	557	551	684	729	369	389	362	344	343	386	433	573	477
1982	Wet	656	553	289	408	298	322	223	201	323	359	308	268	351
1983	Wet	205	258	374	355	326	267	291	257	235	220	201	213	267
1984	Wet	242	209	301	335	251	300	325	328	345	274	298	483	308
1985	Dry	573	472	292	324	467	504	427	368	316	368	496	503	426
1986	Wet	561	585	697	533	460	313	246	225	354	520	342	400	436
1987	Dry	491	520	669	777	679	513	395	395	369	391	471	563	519
1988	Critical	692	655	734	679	657	791	485	471	452	367	503	616	592
1989	Dry	730	748	772	736	953	483	310	357	284	342	473	519	559
1990	Critical	586	637	758	653	705	521	448	446	495	539	572	603	580
1991	Critical	748	765	776	841	912	601	444	425	476	555	575	546	639
1992	Critical	733	811	796	923	663	511	364	400	410	374	486	595	589
1993	Above Normal	738	797	828	661	489	381	318	332	372	329	304	439	499
1994	Critical	584	639	712	804	794	487	369	402	388	556	578	722	586
Average		576	563	587	570	526	456	362	347	358	348	376	489	463
Wet		514	484	468	410	366	348	287	268	308	315	293	364	369
Above Normal		605	561	558	544	446	400	330	314	326	309	301	481	431
Below Normal		563	564	620	590	501	400	344	329	324	291	343	521	449
Dry		611	610	643	648	614	496	392	385	360	368	443	546	510
Critical		632	636	705	745	786	703	502	480	507	481	534	601	609

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	599	591	574	497	525	417	312	296	324	340	300	434	434
1923	Below Normal	592	559	508	425	424	424	337	321	331	283	348	499	421
1924	Critical	556	595	673	727	697	889	581	555	619	521	534	551	625
1925	Dry	689	726	681	768	790	682	395	302	374	344	415	519	557
1926	Dry	656	611	691	770	593	551	377	383	360	380	449	568	532
1927	Wet	698	495	317	352	411	404	311	299	282	265	284	466	382
1928	Above Normal	595	516	420	426	348	409	313	314	302	324	320	529	402
1929	Critical	650	619	711	786	833	784	541	485	486	435	490	590	618
1930	Dry	702	712	733	539	443	475	346	394	381	370	447	526	506
1931	Critical	670	636	732	786	752	717	575	564	593	470	548	601	637
1932	Dry	689	714	641	452	606	697	526	436	430	402	413	539	546
1933	Critical	650	603	687	744	706	705	494	450	495	445	493	530	583
1934	Critical	650	723	700	681	673	835	566	522	528	421	480	594	614
1935	Below Normal	697	714	792	592	583	440	357	353	323	308	357	542	505
1936	Below Normal	652	600	686	594	537	334	298	315	373	289	348	503	461
1937	Below Normal	623	590	646	750	472	394	318	264	391	328	343	462	465
1938	Wet	624	644	416	475	381	319	255	245	244	332	303	292	378
1939	Dry	259	312	551	767	744	601	479	368	344	374	429	551	481
1940	Above Normal	650	603	675	639	489	339	286	309	322	275	285	491	447
1941	Wet	611	627	609	456	439	321	273	255	366	365	305	363	416
1942	Wet	380	498	529	424	310	330	299	273	338	377	315	316	366
1943	Wet	288	318	310	377	293	293	287	309	401	304	288	458	327
1944	Dry	629	601	666	756	712	424	366	332	332	350	440	520	511
1945	Below Normal	627	581	544	531	512	353	371	325	314	275	334	505	439
1946	Below Normal	595	556	462	382	436	388	342	332	324	285	363	557	419
1947	Dry	647	618	667	614	591	525	380	413	378	356	445	592	519
1948	Below Normal	703	639	762	754	866	567	373	348	285	270	350	501	535
1949	Dry	589	578	676	796	730	419	364	411	379	331	451	582	526
1950	Below Normal	668	584	674	623	380	382	320	307	288	294	319	460	442
1951	Above Normal	631	423	382	342	270	338	332	273	263	281	282	515	361
1952	Wet	604	637	629	484	367	395	241	200	277	323	277	277	393
1953	Wet	266	404	556	398	411	451	320	270	260	248	298	401	357
1954	Above Normal	392	483	615	743	336	379	320	343	299	287	281	500	415
1955	Dry	671	693	616	406	398	553	442	417	355	321	415	543	486
1956	Wet	645	680	654	405	359	328	311	316	348	374	316	314	421
1957	Above Normal	264	308	454	684	623	384	341	289	276	265	293	526	392
1958	Wet	577	429	442	357	463	486	213	187	304	333	292	296	365
1959	Below Normal	266	363	596	709	392	456	408	345	329	300	337	542	420
1960	Dry	660	645	729	698	742	372	347	401	344	379	414	562	524
1961	Dry	690	671	807	771	713	521	384	417	361	342	428	581	557
1962	Below Normal	666	650	784	722	627	405	349	334	323	300	324	583	505
1963	Wet	605	318	403	354	382	385	367	301	292	256	277	461	367
1964	Dry	612	585	330	395	435	421	409	410	358	368	504	508	444
1965	Wet	621	669	497	386	314	390	322	314	308	285	305	419	402
1966	Below Normal	560	541	393	387	382	315	329	332	314	295	334	560	395
1967	Wet	703	693	713	479	346	373	273	225	280	292	272	270	410
1968	Below Normal	258	347	533	596	420	386	363	349	314	294	333	515	392
1969	Wet	637	637	556	582	378	388	281	235	234	334	303	304	406
1970	Wet	258	333	416	293	336	315	296	299	303	293	285	497	327
1971	Wet	658	499	371	299	343	320	302	280	257	244	283	432	357
1972	Below Normal	417	514	604	559	579	366	327	365	362	310	343	580	444
1973	Above Normal	767	594	409	433	495	381	342	345	347	268	315	487	432
1974	Wet	655	409	351	392	339	299	290	312	365	296	304	355	364
1975	Wet	270	325	463	500	433	303	298	302	332	306	296	355	349
1976	Critical	278	275	405	663	805	568	409	443	549	578	598	639	518
1977	Critical	744	694	786	659	887	827	597	561	589	481	556	662	670
1978	Above Normal	761	799	800	620	568	582	390	305	392	347	305	437	526
1979	Below Normal	577	629	674	581	378	317	327	303	286	265	353	513	434
1980	Above Normal	665	593	515	426	342	386	339	328	362	376	315	437	424
1981	Dry	557	551	684	729	369	385	361	343	340	383	436	570	476
1982	Wet	652	558	290	408	297	321	223	201	323	359	308	267	351
1983	Wet	205	258	374	355	326	267	291	257	235	220	201	213	267
1984	Wet	242	209	301	335	251	300	325	328	345	274	298	483	308
1985	Dry	573	473	291	320	460	456	418	368	320	368	501	515	422
1986	Wet	563	583	695	533	461	312	247	225	355	476	328	396	431
1987	Dry	467	511	667	776	689	515	394	394	367	400	470	570	518
1988	Critical	708	641	725	676	635	787	483	471	444	364	499	613	587
1989	Dry	728	749	762	714	938	474	308	356	293	350	467	535	556
1990	Critical	578	627	753	676	718	525	449	448	497	539	573	604	582
1991	Critical	749	765	776	838	917	600	444	425	476	555	575	546	639
1992	Critical	733	811	796	923	663	473	363	400	408	373	492	616	587
1993	Above Normal	747	799	835	646	489	381	318	334	374	327	303	441	500
1994	Critical	587	641	712	803	803	492	370	403	398	549	593	662	584
Average		577	564	587	569	523	453	360	346	357	346	376	490	462
Wet		512	487	471	412	364	348	287	268	307	312	292	364	369
Above Normal		607	571	568	546	448	400	329	314	326	309	300	480	433
Below Normal		565	562	619	586	499	395	344	328	325	292	342	523	448
Dry		613	609	637	642	622	504	394	384	357	364	445	549	510
Critical		629	636	705	747	758	684	489	477	507	478	536	601	604

Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922 Above Norm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1923 Below Norma	2	-30	-44	-1	-9	4	0	0	0	0	1	-1	-4	-7
1924 Critical	5	4	4	7	-208	-71	-53	12	1	-8	-11	-8	-1	-26
1925 Dry	-2	-6	-32	-26	152	97	12	1	-8	-11	-8	6	15	15
1926 Dry	2	-6	-5	-3	-6	-30	-4	-6	-11	2	4	12	-4	-4
1927 Wet	6	5	5	3	17	14	1	1	2	-3	-2	4	4	4
1928 Above Norm	-1	18	37	21	13	21	-4	-4	0	-5	1	-12	7	7
1929 Critical	-4	-1	-9	3	0	0	-1	-2	-18	-6	1	0	-3	-3
1930 Dry	-1	-2	-1	1	-33	-6	0	2	-7	-38	23	-49	-9	-9
1931 Critical	-34	-7	12	20	-166	-57	-5	3	12	-28	-22	4	-22	-22
1932 Dry	4	-1	-1	56	10	4	1	-6	2	-2	-1	-1	6	6
1933 Critical	0	0	-2	0	-3	0	0	0	0	-2	-2	-4	-1	-1
1934 Critical	-1	1	1	3	-9	-3	-3	-1	-1	-2	-3	-5	-2	-2
1935 Below Norma	-1	0	-3	5	1	-10	0	0	1	1	0	0	-1	-1
1936 Below Norma	0	0	-1	1	1	1	0	-1	1	3	-2	0	0	0
1937 Below Norma	-4	-2	0	-4	-2	0	0	0	3	3	1	-1	0	0
1938 Wet	-1	15	6	10	0	0	0	0	0	0	0	1	3	3
1939 Dry	1	1	1	0	-1	-6	1	-1	-2	-10	9	-40	-4	-4
1940 Above Norm	-42	-17	-5	-8	-1	0	0	0	1	1	0	0	-6	-6
1941 Wet	1	1	-2	0	0	0	0	0	-1	-1	0	0	0	0
1942 Wet	6	18	8	0	0	0	0	0	0	-1	0	1	3	3
1943 Wet	1	0	0	1	-1	0	0	0	0	-1	0	1	0	0
1944 Dry	2	2	1	0	-1	3	1	0	-5	-3	4	3	1	1
1945 Below Norma	-6	-6	-8	-6	0	0	0	0	0	0	0	-1	-2	-2
1946 Below Norma	-4	14	13	0	1	-5	-1	4	-2	0	6	46	6	6
1947 Dry	36	5	-32	-11	-14	28	2	-3	8	3	6	10	3	3
1948 Below Norma	-3	3	-1	0	17	7	1	2	-8	7	-6	-8	1	1
1949 Dry	-12	-11	-4	-2	3	-40	-5	-1	0	-10	-16	13	-7	-7
1950 Below Norma	9	-19	-27	-22	-11	-5	0	-10	-1	-2	3	-6	-8	-8
1951 Above Norm	17	14	3	4	2	0	0	-4	-4	12	-5	-7	3	3
1952 Wet	-2	4	6	1	0	3	1	0	0	0	0	0	1	1
1953 Wet	0	1	0	0	0	0	0	0	0	0	1	6	1	1
1954 Above Norm	2	1	1	0	0	0	0	0	1	3	0	0	1	1
1955 Dry	26	10	-25	-4	-5	105	10	2	-20	-10	-4	1	7	7
1956 Wet	-2	-2	0	0	-7	-2	0	0	0	0	-1	-1	-1	-1
1957 Above Norm	0	0	0	5	9	0	0	0	-1	-3	-3	-6	0	0
1958 Wet	0	29	-4	-1	0	0	0	0	0	0	0	0	2	2
1959 Below Norma	0	0	0	0	-2	-1	0	0	-3	-1	1	2	0	0
1960 Dry	2	12	36	-116	23	2	0	2	-9	-9	1	12	-4	-4
1961 Dry	10	-5	-8	35	24	36	14	1	-3	2	4	69	15	15
1962 Below Norma	44	17	54	-29	-13	-2	0	-5	14	12	-21	-2	6	6
1963 Wet	-9	0	30	9	-6	-10	0	1	1	3	3	-6	1	1
1964 Dry	4	-10	-11	-9	-2	1	-2	5	4	1	17	-19	-2	-2
1965 Wet	-23	-9	-8	0	-17	-4	0	-5	-20	-4	-2	-7	-8	-8
1966 Below Norma	-18	-4	3	0	-13	-64	-4	0	-2	-2	-2	-2	-9	-9
1967 Wet	-16	-8	18	2	-1	4	0	0	0	0	0	0	0	0
1968 Below Norma	0	0	0	-1	-1	0	-1	0	-2	-2	-3	-7	-2	-2
1969 Wet	2	1	-3	2	0	0	0	0	0	0	0	0	0	0
1970 Wet	0	0	0	0	0	0	0	0	-1	-1	0	0	0	0
1971 Wet	-1	-4	-1	0	-36	-5	0	0	0	0	0	1	-4	-4
1972 Below Norma	2	1	0	0	9	0	0	0	22	1	4	11	4	4
1973 Above Norm	22	38	5	-1	0	-2	0	0	0	0	0	1	5	5
1974 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1975 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1976 Critical	0	0	0	6	11	-42	-30	7	3	5	5	-18	-6	-6
1977 Critical	-4	27	1	-28	33	-23	-59	-26	-8	8	31	65	1	1
1978 Above Norm	13	22	9	8	4	-21	-1	-2	2	-8	-4	5	2	2
1979 Below Norma	4	1	-2	7	5	0	0	1	-1	0	2	-2	1	1
1980 Above Norm	-1	23	44	3	0	1	-1	0	0	0	0	0	6	6
1981 Dry	0	0	0	0	0	-4	-2	-1	-3	-3	3	-3	-1	-1
1982 Wet	-4	5	1	1	0	-2	0	0	0	0	0	0	0	0
1983 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1984 Wet	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1985 Dry	-1	1	0	-5	-7	-48	-9	0	4	0	5	12	-4	-4
1986 Wet	3	-2	-1	0	0	-1	1	0	1	-44	-14	-5	-5	-5
1987 Dry	-24	-9	-2	-1	10	2	-1	-1	-1	9	-1	7	-1	-1
1988 Critical	16	-14	-9	-3	-22	-3	-1	0	-8	-3	-4	-2	-5	-5
1989 Dry	-1	1	-10	-22	-15	-9	-2	-1	8	8	-6	16	-3	-3
1990 Critical	-9	-10	-5	23	14	4	2	2	2	0	1	1	2	2
1991 Critical	1	0	0	-3	5	-1	0	0	0	0	0	0	0	0
1992 Critical	0	0	0	0	0	-39	-1	-1	-2	0	6	21	-1	-1
1993 Above Norm	9	2	6	-15	-1	0	0	2	2	-2	-1	2	0	0
1994 Critical	3	2	-1	-1	9	5	2	1	10	-7	15	-61	-2	-2
Average	0	2	1	-1	-3	-2	-2	-1	-1	-2	0	1	-1	-1
Wet	-2	3	3	1	-2	0	0	0	-1	-2	-1	0	0	0
Above Norm	2	10	10	2	3	0	-1	-1	0	0	-1	-2	2	2
Below Norma	2	-2	-1	-4	-1	-5	0	-1	2	2	-1	2	-1	-1
Dry	3	-1	-6	-7	9	8	1	0	-3	-4	2	3	0	0
Critical	-2	0	-1	2	-28	-19	-13	-3	0	-3	2	0	-5	-5

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-5%	-8%	0%	-2%	1%	0%	0%	0%	0%	0%	-1%	-1%
1924	Critical	1%	1%	1%	1%	-23%	-7%	-8%	-1%	2%	-1%	-1%	0%	-3%
1925	Dry	0%	-1%	-4%	-3%	24%	17%	3%	0%	-2%	-3%	-2%	1%	2%
1926	Dry	0%	-1%	-1%	0%	-1%	-5%	-1%	-2%	-3%	1%	1%	2%	-1%
1927	Wet	1%	1%	2%	1%	4%	4%	0%	0%	1%	-1%	-1%	1%	1%
1928	Above Normal	0%	4%	10%	5%	4%	6%	-1%	-1%	0%	-1%	0%	-2%	2%
1929	Critical	-1%	0%	-1%	0%	0%	0%	0%	0%	-4%	-1%	0%	0%	-1%
1930	Dry	0%	0%	0%	0%	-7%	-1%	0%	0%	-2%	-9%	5%	-8%	-2%
1931	Critical	-5%	-1%	2%	3%	-18%	-7%	-1%	1%	2%	-6%	-4%	1%	-3%
1932	Dry	1%	0%	0%	14%	2%	1%	0%	-1%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-1%	0%
1934	Critical	0%	0%	0%	0%	-1%	0%	-1%	0%	0%	-1%	-1%	-1%	0%
1935	Below Normal	0%	0%	0%	1%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%	0%
1937	Below Normal	-1%	0%	0%	-1%	0%	0%	0%	0%	1%	1%	0%	0%	0%
1938	Wet	0%	2%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1939	Dry	0%	0%	0%	0%	0%	-1%	0%	0%	-1%	-3%	2%	-7%	-1%
1940	Above Normal	-6%	-3%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	2%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	1%	0%	0%	-1%	-1%	1%	0%	0%
1945	Below Normal	-1%	-1%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	-1%	3%	3%	0%	0%	-1%	0%	1%	-1%	0%	2%	9%	1%
1947	Dry	6%	1%	-5%	-2%	-2%	6%	1%	-1%	2%	1%	1%	2%	1%
1948	Below Normal	0%	1%	0%	0%	2%	1%	0%	0%	-3%	3%	-2%	-2%	0%
1949	Dry	-2%	-2%	-1%	0%	0%	-9%	-1%	0%	0%	-3%	-3%	2%	-2%
1950	Below Normal	1%	-3%	-4%	-3%	-3%	-1%	0%	-3%	0%	-1%	1%	-1%	-1%
1951	Above Normal	3%	3%	1%	1%	1%	0%	0%	-2%	-1%	4%	-2%	-1%	1%
1952	Wet	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1955	Dry	4%	1%	-4%	-1%	-1%	23%	2%	0%	-5%	-3%	-1%	0%	1%
1956	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	1%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1958	Wet	0%	7%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1960	Dry	0%	2%	5%	-14%	3%	1%	0%	0%	-3%	-2%	0%	2%	0%
1961	Dry	1%	-1%	-1%	5%	3%	7%	4%	0%	-1%	1%	1%	13%	3%
1962	Below Normal	7%	3%	7%	-4%	-2%	0%	0%	-1%	4%	4%	-6%	0%	1%
1963	Wet	-1%	0%	8%	3%	-2%	-3%	0%	0%	0%	1%	1%	-1%	1%
1964	Dry	1%	-2%	-3%	-2%	0%	0%	-1%	1%	1%	0%	4%	-4%	0%
1965	Wet	-4%	-1%	-2%	0%	-5%	-1%	0%	-2%	-6%	-1%	-1%	-2%	-2%
1966	Below Normal	-3%	-1%	1%	0%	-3%	-17%	-1%	0%	-1%	-1%	-1%	0%	-2%
1967	Wet	-2%	-1%	3%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	-1%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-10%	-2%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	0%	0%	0%	0%	2%	0%	0%	0%	6%	0%	1%	2%	1%
1973	Above Normal	3%	7%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	1%	-7%	-7%	-2%	0%	1%	1%	-3%	-1%
1977	Critical	-1%	4%	0%	-4%	4%	-3%	-9%	-4%	-1%	2%	6%	11%	0%
1978	Above Normal	2%	3%	1%	1%	1%	-4%	0%	-1%	0%	-2%	-1%	1%	0%
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	0%	0%
1980	Above Normal	0%	4%	9%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	-1%	0%	0%	-1%	-1%	1%	0%	0%
1982	Wet	-1%	1%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-2%	-1%	-10%	-2%	0%	1%	0%	1%	2%	-1%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-8%	-4%	-1%	-1%
1987	Dry	-5%	-2%	0%	0%	1%	0%	0%	0%	0%	2%	0%	1%	0%
1988	Critical	2%	-2%	-1%	0%	-3%	0%	0%	0%	-2%	-1%	-1%	0%	-1%
1989	Dry	0%	0%	-1%	-3%	-2%	-2%	-1%	0%	3%	2%	-1%	3%	0%
1990	Critical	-1%	-2%	-1%	4%	2%	1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	-8%	0%	0%	-1%	0%	1%	3%	0%
1993	Above Normal	1%	0%	1%	-2%	0%	0%	0%	1%	1%	-1%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	1%	1%	0%	0%	2%	-1%	3%	-8%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	1%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	-1%	0%	-1%	0%	0%	0%	1%	0%	0%	0%
Dry		0%	0%	-1%	-1%	1%	2%	0%	0%	-1%	-1%	1%	1%	0%
Critical		0%	0%	0%	0%	-3%	-3%	-2%	-1%	0%	-1%	0%	0%	-1%

Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	443	471	475	474	540	425	359	320	345	358	328	347	407
1923	Below Normal	427	438	509	472	471	474	389	339	351	301	317	371	405
1924	Critical	409	441	497	583	734	773	692	587	525	428	416	423	542
1925	Dry	491	547	541	629	628	513	466	323	415	386	368	406	476
1926	Dry	478	484	506	599	562	447	454	420	378	329	354	418	452
1927	Wet	487	422	315	363	449	422	366	318	326	302	288	357	368
1928	Above Normal	432	406	346	399	375	393	375	345	343	323	293	402	369
1929	Critical	478	464	528	617	712	626	592	499	464	396	380	441	516
1930	Dry	516	542	555	480	456	414	406	438	366	331	347	420	439
1931	Critical	504	500	543	619	720	713	609	575	503	394	433	455	547
1932	Dry	512	548	538	414	563	646	590	447	455	424	401	421	497
1933	Critical	489	492	523	584	567	544	533	473	464	412	408	430	493
1934	Critical	487	549	533	554	503	562	604	561	487	378	365	446	502
1935	Below Normal	520	519	615	549	489	480	416	343	368	327	317	400	445
1936	Below Normal	472	464	502	537	548	351	329	343	390	311	327	380	413
1937	Below Normal	449	456	492	613	509	451	299	262	325	353	353	368	411
1938	Wet	447	492	423	469	482	333	268	256	260	342	317	275	364
1939	Dry	294	329	410	610	678	642	552	376	356	336	342	420	445
1940	Above Normal	494	486	524	591	540	383	313	334	341	295	283	369	413
1941	Wet	437	447	496	471	477	346	270	264	355	398	322	302	382
1942	Wet	333	377	443	460	350	335	328	284	337	402	327	283	355
1943	Wet	302	330	334	411	330	311	290	324	406	333	288	349	334
1944	Dry	442	443	500	584	648	480	423	337	359	319	354	387	440
1945	Below Normal	464	445	443	478	522	413	389	340	324	278	295	370	397
1946	Below Normal	428	408	426	419	466	431	394	341	347	287	312	384	387
1947	Dry	441	440	525	547	564	454	442	417	395	313	350	421	442
1948	Below Normal	504	479	578	590	747	569	427	378	345	279	309	383	466
1949	Dry	451	464	511	644	661	481	446	461	426	310	384	425	472
1950	Below Normal	499	476	536	553	412	366	381	328	327	294	294	359	402
1951	Above Normal	448	394	387	380	304	334	380	266	284	283	268	387	343
1952	Wet	452	456	522	492	389	404	272	212	283	335	288	264	364
1953	Wet	293	354	460	413	468	399	373	279	294	268	292	333	352
1954	Above Normal	356	392	471	634	361	348	385	385	345	287	266	376	384
1955	Dry	468	481	508	433	461	480	516	456	400	331	336	411	440
1956	Wet	489	500	600	456	383	349	353	339	368	402	334	290	405
1957	Above Normal	295	347	391	539	539	384	397	290	313	288	277	391	371
1958	Wet	438	358	381	387	513	528	243	202	301	353	294	274	356
1959	Below Normal	295	347	420	606	444	515	493	357	341	281	288	399	399
1960	Dry	472	491	516	636	644	406	399	443	343	321	329	400	450
1961	Dry	495	491	596	607	609	438	425	481	380	287	323	391	460
1962	Below Normal	465	488	539	624	643	489	419	339	352	282	297	417	446
1963	Wet	496	346	351	353	438	408	429	313	295	281	276	356	362
1964	Dry	439	466	330	386	441	479	472	445	359	312	377	399	409
1965	Wet	479	486	465	398	351	396	362	328	341	325	324	332	382
1966	Below Normal	421	431	378	413	433	392	394	343	336	282	287	412	377
1967	Wet	509	506	593	527	410	403	318	247	288	305	279	263	387
1968	Below Normal	297	328	393	522	425	367	435	360	332	284	294	402	370
1969	Wet	473	475	465	578	435	400	295	249	248	341	308	276	379
1970	Wet	293	324	382	342	347	331	333	312	339	300	278	373	330
1971	Wet	464	418	373	354	393	410	347	289	292	261	264	349	351
1972	Below Normal	359	412	466	466	527	360	379	383	352	298	292	419	393
1973	Above Normal	516	455	384	462	505	420	406	369	365	295	302	370	404
1974	Wet	441	381	370	433	391	334	321	339	388	334	283	309	360
1975	Wet	300	327	385	439	442	323	327	316	348	353	289	303	346
1976	Critical	302	313	345	527	668	544	477	459	460	462	455	469	457
1977	Critical	523	501	591	576	645	707	665	579	539	403	397	431	546
1978	Above Normal	527	580	586	606	600	647	439	326	393	389	318	334	479
1979	Below Normal	417	437	481	528	423	344	356	314	296	273	328	383	382
1980	Above Normal	456	426	396	444	388	397	356	348	375	402	319	330	386
1981	Dry	402	418	490	631	413	413	440	361	350	332	350	416	418
1982	Wet	473	460	318	451	336	374	234	212	319	380	308	254	343
1983	Wet	209	266	381	488	338	274	300	268	243	233	212	215	286
1984	Wet	276	225	305	357	285	301	362	329	344	295	295	365	312
1985	Dry	403	402	315	340	471	548	505	395	335	314	391	387	400
1986	Wet	432	446	525	487	502	334	275	242	340	461	354	321	393
1987	Dry	378	393	476	628	584	493	457	426	349	331	364	419	441
1988	Critical	503	501	543	608	491	549	552	507	440	317	364	450	485
1989	Dry	535	551	592	583	796	519	353	412	283	281	357	398	472
1990	Critical	442	482	568	530	612	532	447	476	467	440	431	449	490
1991	Critical	532	574	622	700	747	599	468	478	444	447	450	416	540
1992	Critical	514	609	632	738	628	447	405	437	401	327	364	424	494
1993	Above Normal	526	600	620	651	546	458	374	354	388	359	327	341	462
1994	Critical	423	472	524	627	697	479	411	449	368	409	422	493	481
Average		436	445	474	516	509	450	408	366	363	335	330	375	417
Wet		406	400	423	435	405	367	317	282	320	334	296	307	358
Above Normal		449	456	458	518	470	419	378	334	349	328	298	365	402
Below Normal		430	438	484	527	504	429	393	340	342	295	308	389	407
Dry		451	468	494	547	574	491	459	415	372	329	358	409	447
Critical		467	491	537	605	644	589	538	507	464	401	407	444	508

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	443	471	475	475	540	425	359	320	345	359	329	347	407
1923	Below Normal	428	430	487	471	462	471	389	339	351	302	320	369	402
1924	Critical	409	444	494	594	618	623	640	585	550	428	411	424	518
1925	Dry	491	547	526	606	706	598	476	323	412	376	362	404	486
1926	Dry	479	481	503	597	557	443	448	418	366	329	356	420	450
1927	Wet	490	424	318	366	455	427	367	318	328	296	283	359	369
1928	Above Normal	432	411	363	413	382	403	370	343	343	324	295	398	373
1929	Critical	474	463	523	619	713	625	591	498	459	393	382	441	515
1930	Dry	516	542	555	481	455	412	407	440	363	317	355	402	437
1931	Critical	485	495	540	639	659	627	594	576	522	384	414	455	533
1932	Dry	513	547	537	432	573	653	591	442	457	421	398	420	499
1933	Critical	488	491	522	585	567	543	532	473	464	408	404	426	492
1934	Critical	486	550	533	555	494	554	601	559	485	373	362	444	500
1935	Below Normal	519	520	612	552	490	481	416	343	369	328	317	400	445
1936	Below Normal	472	464	502	538	549	352	329	342	392	313	327	380	413
1937	Below Normal	448	455	492	613	507	451	299	262	327	356	356	368	411
1938	Wet	447	499	429	476	483	332	268	256	260	342	317	276	365
1939	Dry	294	329	410	611	677	642	553	376	350	329	348	402	443
1940	Above Normal	475	480	520	587	541	384	312	334	343	296	284	370	410
1941	Wet	438	448	495	472	477	346	270	264	354	397	323	303	382
1942	Wet	335	383	448	460	349	335	328	283	338	402	327	283	356
1943	Wet	303	330	334	412	331	311	290	324	406	332	287	349	334
1944	Dry	442	443	500	584	648	483	425	337	358	316	356	389	440
1945	Below Normal	462	442	439	475	519	412	389	340	324	277	295	369	395
1946	Below Normal	428	412	433	419	470	430	393	343	344	285	313	404	389
1947	Dry	455	446	509	544	556	450	446	416	397	313	352	426	442
1948	Below Normal	500	480	579	590	754	575	427	379	336	282	305	380	466
1949	Dry	448	460	509	642	663	470	439	460	426	308	372	430	469
1950	Below Normal	505	473	523	541	405	365	382	322	323	290	295	356	398
1951	Above Normal	450	400	391	383	306	334	380	265	281	288	267	383	344
1952	Wet	449	457	527	493	389	408	273	212	283	335	288	264	365
1953	Wet	293	354	460	413	468	399	373	279	294	268	290	335	352
1954	Above Normal	357	392	471	634	361	348	385	385	346	288	266	376	384
1955	Dry	476	488	493	430	455	477	524	456	389	317	336	410	438
1956	Wet	486	498	599	456	376	348	353	339	367	402	333	290	404
1957	Above Normal	295	346	390	540	545	384	396	290	311	283	274	386	370
1958	Wet	434	370	380	386	512	528	243	202	301	353	293	274	356
1959	Below Normal	294	347	420	605	441	514	493	357	337	279	288	400	398
1960	Dry	471	481	549	566	655	408	400	445	342	313	329	405	447
1961	Dry	498	489	587	632	626	464	440	484	376	287	325	418	469
1962	Below Normal	490	487	576	607	633	488	419	339	364	293	287	415	450
1963	Wet	491	344	370	360	435	406	429	313	296	285	283	354	364
1964	Dry	441	463	324	381	440	479	468	448	355	308	387	394	407
1965	Wet	465	481	460	398	340	389	362	323	320	317	325	328	376
1966	Below Normal	416	429	379	413	433	377	386	343	332	279	286	410	374
1967	Wet	503	501	605	528	409	405	318	247	288	305	278	263	387
1968	Below Normal	297	327	393	521	422	366	434	359	329	281	293	398	368
1969	Wet	470	476	462	579	435	400	295	249	248	341	309	277	378
1970	Wet	293	324	382	342	347	331	333	312	338	300	278	373	329
1971	Wet	463	416	372	354	393	404	347	289	292	261	264	349	350
1972	Below Normal	360	412	466	466	527	360	379	383	364	299	292	426	395
1973	Above Normal	524	473	387	460	505	420	406	369	364	295	302	370	406
1974	Wet	441	381	370	433	391	335	321	339	388	334	283	309	360
1975	Wet	300	327	385	439	442	324	327	316	347	354	289	303	346
1976	Critical	303	313	345	529	672	501	456	455	470	457	457	464	452
1977	Critical	519	510	589	555	636	681	628	563	533	408	402	460	540
1978	Above Normal	567	602	590	611	605	635	438	321	394	380	308	335	482
1979	Below Normal	418	437	480	530	427	344	357	314	295	271	330	383	382
1980	Above Normal	456	432	419	447	385	397	356	348	375	402	319	330	389
1981	Dry	402	418	490	631	413	410	437	360	349	330	351	416	417
1982	Wet	473	462	320	452	335	374	234	212	319	380	308	254	344
1983	Wet	209	266	381	488	338	274	300	268	243	233	212	215	286
1984	Wet	276	225	305	357	285	301	362	329	344	295	296	365	312
1985	Dry	403	403	315	338	467	535	496	395	335	314	393	393	399
1986	Wet	435	445	524	487	502	337	275	242	341	425	337	320	389
1987	Dry	369	389	476	624	592	496	457	426	346	333	364	420	441
1988	Critical	511	497	538	605	489	544	551	507	436	317	362	448	484
1989	Dry	534	552	585	569	789	510	350	411	286	286	352	403	469
1990	Critical	439	478	564	544	624	536	449	478	469	440	431	450	492
1991	Critical	533	575	622	697	744	599	467	478	444	447	450	416	539
1992	Critical	514	609	632	738	628	446	405	437	398	326	364	435	494
1993	Above Normal	534	598	625	641	545	458	374	356	392	356	324	342	462
1994	Critical	424	473	524	626	702	483	412	449	364	403	435	459	480
Average		437	445	474	516	508	446	406	366	363	334	330	376	417
Wet		405	401	425	436	404	367	318	282	319	331	295	307	357
Above Normal		453	461	463	519	471	419	378	333	349	327	297	364	403
Below Normal		431	437	484	524	503	428	392	340	342	296	307	390	406
Dry		452	467	492	542	579	496	460	415	369	325	359	410	447
Critical		465	491	536	607	629	564	527	505	466	399	406	443	503

Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Norm	0	0	0	1	0	0	0	0	0	1	1	0	0
1923	Below Norma	0	-8	-21	-1	-9	-3	0	0	-1	1	2	-2	-3
1924	Critical	0	3	-3	11	-116	-150	-52	-3	25	0	-5	1	-24
1925	Dry	-1	0	-15	-23	78	85	11	0	-4	-10	-6	-2	10
1926	Dry	1	-3	-3	-2	-5	-5	-6	-1	-12	0	2	1	-3
1927	Wet	3	2	3	2	6	6	1	1	2	-6	-6	1	1
1928	Above Norm	0	5	17	13	7	10	-4	-1	0	1	2	-4	4
1929	Critical	-4	0	-5	2	1	0	-1	-1	-6	-3	1	0	-1
1930	Dry	0	-1	0	1	0	-2	2	2	-3	-14	9	-18	-2
1931	Critical	-19	-5	-2	20	-61	-86	-14	1	19	-10	-19	-1	-15
1932	Dry	1	-1	-1	18	10	8	1	-5	1	-3	-2	-1	2
1933	Critical	0	-1	-1	0	0	-1	-1	0	-1	-4	-4	-3	-1
1934	Critical	-1	1	0	1	-9	-8	-3	-1	-1	-4	-3	-3	-3
1935	Below Norma	-1	0	-3	3	1	1	0	0	1	1	0	0	0
1936	Below Norma	0	0	0	1	1	1	0	-1	2	2	0	0	1
1937	Below Norma	-1	-1	0	0	-2	0	0	0	2	3	3	0	0
1938	Wet	-1	7	6	7	1	0	0	0	0	0	0	0	2
1939	Dry	0	0	0	0	-1	0	1	0	-6	-7	6	-17	-2
1940	Above Norm	-19	-6	-4	-5	1	0	-1	0	2	2	1	1	-2
1941	Wet	1	1	-1	1	0	0	0	0	0	-1	1	0	0
1942	Wet	2	6	5	0	0	0	-1	0	1	0	-1	1	1
1943	Wet	1	0	0	1	1	0	0	0	0	-1	-1	0	0
1944	Dry	0	1	0	1	-1	3	2	0	-1	-2	2	1	1
1945	Below Norma	-2	-2	-4	-4	-3	0	0	0	0	0	0	0	-1
1946	Below Norma	0	4	7	0	4	-1	-1	2	-3	-2	1	20	3
1947	Dry	14	6	-17	-4	-8	-3	4	-1	3	0	2	5	0
1948	Below Norma	-4	0	1	0	7	6	0	1	-9	3	-4	-3	0
1949	Dry	-4	-4	-3	-2	2	-11	-7	-1	0	-2	-12	4	-3
1950	Below Norma	6	-3	-13	-13	-8	-1	1	-5	-4	-4	0	-3	-4
1951	Above Norm	2	6	4	2	2	0	0	-1	-3	5	-1	-4	1
1952	Wet	-2	1	4	0	0	4	1	0	0	0	0	0	1
1953	Wet	0	0	0	0	0	0	0	0	1	0	-2	2	0
1954	Above Norm	1	0	0	0	0	0	0	0	1	1	0	0	0
1955	Dry	8	7	-15	-2	-6	-2	8	1	-11	-14	0	0	-2
1956	Wet	-3	-2	-1	0	-6	-1	0	0	-1	0	-1	-1	-1
1957	Above Norm	-1	-1	-1	2	6	0	0	0	-2	-4	-2	-5	-1
1958	Wet	-4	12	-1	-1	-1	0	0	0	0	0	-1	0	0
1959	Below Norma	-1	-1	0	-1	-3	-1	0	0	-4	-2	0	1	-1
1960	Dry	-1	-9	33	-69	11	2	1	2	-1	-7	0	6	-3
1961	Dry	3	-2	-8	24	17	26	15	2	-5	0	3	27	8
1962	Below Norma	25	-2	37	-18	-10	-1	0	0	12	11	-10	-2	4
1963	Wet	-5	-2	19	7	-3	-2	0	0	1	4	6	-2	2
1964	Dry	1	-3	-6	-5	-1	0	-4	3	-3	-5	10	-5	-1
1965	Wet	-14	-5	-5	0	-12	-7	1	-5	-21	-8	1	-4	-7
1966	Below Norma	-5	-2	1	-1	0	-15	-8	0	-4	-3	-2	-2	-3
1967	Wet	-6	-5	12	0	-1	1	0	0	0	0	-1	0	0
1968	Below Norma	-1	0	0	-1	-3	0	-1	0	-3	-3	-1	-4	-2
1969	Wet	-3	1	-3	2	0	0	0	0	0	0	1	1	0
1970	Wet	0	0	0	0	0	0	0	0	-1	-1	0	0	0
1971	Wet	0	-2	0	0	0	-7	0	0	0	0	0	0	-1
1972	Below Norma	1	0	0	0	0	0	0	0	13	2	0	8	2
1973	Above Norm	8	18	4	-2	0	0	0	0	0	0	0	0	2
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	1	0	0	0	0	0	0	0
1976	Critical	0	0	0	2	3	-43	-21	-4	10	-4	2	-5	-5
1977	Critical	-3	9	-3	-21	-9	-25	-36	-16	-5	5	6	29	-6
1978	Above Norm	40	22	5	5	5	-12	-1	-5	1	-10	-10	1	3
1979	Below Norma	1	0	-1	2	4	0	1	1	-1	-2	2	0	1
1980	Above Norm	0	6	23	4	-3	0	0	0	0	0	0	0	2
1981	Dry	0	0	0	0	0	-3	-2	-1	-1	-3	1	-1	-1
1982	Wet	0	3	1	1	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-2	-4	-12	-9	0	0	0	2	6	-2
1986	Wet	3	0	-1	0	0	3	0	0	1	-36	-17	-1	-4
1987	Dry	-8	-4	0	-4	7	2	0	-1	-3	2	0	1	-1
1988	Critical	8	-4	-5	-2	-2	-5	-1	0	-4	0	-2	-1	-2
1989	Dry	-1	0	-7	-14	-7	-9	-3	-1	3	5	-5	5	-3
1990	Critical	-3	-4	-4	14	11	4	2	3	2	0	0	1	2
1991	Critical	1	0	0	-3	-3	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	-1	0	0	-3	-1	0	10	0
1993	Above Norm	9	-2	5	-10	0	0	0	2	4	-3	-3	1	0
1994	Critical	1	1	0	-1	5	4	1	0	-4	-6	13	-34	-2
Average		0	1	0	-1	-1	-3	-2	0	0	-2	-1	0	-1
Wet		-1	1	2	1	-1	0	0	0	-1	-2	-1	0	0
Above Norm		4	5	5	1	2	0	-1	0	0	-1	-1	-1	1
Below Norma		1	-1	0	-2	-1	-1	0	0	0	1	-1	1	0
Dry		1	-1	-3	-5	6	5	1	0	-3	-4	1	1	0
Critical		-2	0	-2	2	-15	-26	-11	-2	3	-2	-1	-1	-5

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-2%	-4%	0%	-2%	-1%	0%	0%	0%	0%	1%	-1%	-1%
1924	Critical	0%	1%	-1%	2%	-16%	-19%	-8%	0%	5%	0%	-1%	0%	-3%
1925	Dry	0%	0%	-3%	-4%	12%	17%	2%	0%	-1%	-3%	-2%	-1%	2%
1926	Dry	0%	-1%	-1%	0%	-1%	-1%	-1%	0%	-3%	0%	0%	0%	-1%
1927	Wet	1%	0%	1%	1%	1%	1%	0%	0%	1%	-2%	-2%	0%	0%
1928	Above Normal	0%	1%	5%	3%	2%	3%	-1%	0%	0%	0%	1%	-1%	1%
1929	Critical	-1%	0%	-1%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-4%	3%	-4%	-1%
1931	Critical	-4%	-1%	0%	3%	-9%	-12%	-2%	0%	4%	-3%	-4%	0%	-2%
1932	Dry	0%	0%	0%	4%	2%	1%	0%	-1%	0%	-1%	-1%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1934	Critical	0%	0%	0%	0%	-2%	-1%	-1%	0%	0%	-1%	-1%	-1%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%
1938	Wet	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	2%	-4%	-1%
1940	Above Normal	-4%	-1%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	1%	0%	0%	0%	-1%	0%	0%	0%
1945	Below Normal	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	1%	2%	0%	1%	0%	0%	1%	-1%	-1%	0%	5%	1%
1947	Dry	3%	1%	-3%	-1%	-1%	-1%	1%	0%	1%	0%	1%	1%	0%
1948	Below Normal	-1%	0%	0%	0%	1%	1%	0%	0%	-3%	1%	-1%	-1%	0%
1949	Dry	-1%	-1%	-1%	0%	0%	-2%	0%	0%	-1%	-3%	-1%	-1%	-1%
1950	Below Normal	1%	-1%	-2%	-2%	-2%	0%	0%	-2%	-1%	-1%	0%	-1%	-1%
1951	Above Normal	0%	1%	1%	1%	1%	0%	0%	0%	-1%	2%	0%	-1%	0%
1952	Wet	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	2%	1%	-3%	-1%	-1%	0%	1%	0%	-3%	-4%	0%	0%	-1%
1956	Wet	-1%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	1%	0%	0%	0%	-1%	-2%	-1%	-1%	0%
1958	Wet	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%
1960	Dry	0%	-2%	6%	-11%	2%	0%	0%	1%	0%	-2%	0%	1%	0%
1961	Dry	1%	0%	-1%	4%	3%	6%	4%	1%	-1%	0%	1%	7%	2%
1962	Below Normal	5%	0%	7%	-3%	-2%	0%	0%	0%	4%	4%	-4%	-1%	1%
1963	Wet	-1%	0%	5%	2%	-1%	-1%	0%	0%	0%	2%	2%	-1%	1%
1964	Dry	0%	-1%	-2%	-1%	0%	0%	-1%	1%	-1%	-2%	3%	-1%	0%
1965	Wet	-3%	-1%	-1%	0%	-3%	-2%	0%	-2%	-6%	-2%	0%	-1%	-2%
1966	Below Normal	-1%	0%	0%	0%	0%	-4%	-2%	0%	-1%	-1%	-1%	0%	-1%
1967	Wet	-1%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	-1%	-1%	-1%	-1%	0%
1969	Wet	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	4%	1%	0%	2%	1%
1973	Above Normal	2%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-8%	-4%	-1%	2%	-1%	0%	-1%	-1%
1977	Critical	-1%	2%	0%	-4%	-1%	-4%	-5%	-3%	-1%	1%	1%	7%	-1%
1978	Above Normal	8%	4%	1%	1%	1%	-2%	0%	-1%	0%	-2%	-3%	0%	0%
1979	Below Normal	0%	0%	0%	0%	1%	0%	0%	0%	0%	-1%	1%	0%	0%
1980	Above Normal	0%	1%	6%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	-1%	0%	0%	0%
1982	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-2%	-2%	0%	0%	0%	1%	2%	0%
1986	Wet	1%	0%	0%	0%	0%	1%	0%	0%	0%	-8%	-5%	0%	-1%
1987	Dry	-2%	-1%	0%	-1%	1%	0%	0%	0%	-1%	0%	0%	0%	0%
1988	Critical	2%	-1%	-1%	0%	0%	-1%	0%	0%	-1%	0%	-1%	0%	0%
1989	Dry	0%	0%	-1%	-2%	-1%	-2%	-1%	0%	1%	2%	-1%	1%	0%
1990	Critical	-1%	-1%	-1%	3%	2%	1%	0%	1%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	2%	0%
1993	Above Normal	2%	0%	1%	-2%	0%	0%	0%	1%	1%	-1%	-1%	0%	0%
1994	Critical	0%	0%	0%	0%	1%	1%	0%	0%	-1%	-2%	3%	-7%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	-1%	-1%	1%	1%	0%	0%	-1%	-1%	0%	0%	0%
Critical		0%	0%	0%	0%	-2%	-4%	-2%	0%	0%	-1%	0%	0%	-1%

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	120	119	127	120	117	82	46	40	48	62	43	76	83
1923	Below Normal	116	116	120	90	84	99	52	46	62	41	55	92	81
1924	Critical	105	118	143	158	202	221	137	111	124	104	105	107	136
1925	Dry	139	150	154	176	152	130	67	41	66	62	75	99	109
1926	Dry	133	125	150	170	150	135	65	66	66	68	83	106	110
1927	Wet	140	94	75	88	101	102	45	40	42	39	42	84	74
1928	Above Normal	117	94	89	98	88	79	46	45	47	54	50	104	76
1929	Critical	135	125	155	170	192	180	112	92	96	83	92	115	129
1930	Dry	144	148	161	126	124	128	57	65	69	74	78	112	107
1931	Critical	144	131	155	172	207	180	121	111	118	97	113	118	139
1932	Dry	140	148	140	99	150	149	105	81	78	72	74	105	112
1933	Critical	133	121	148	163	172	162	98	83	94	84	94	103	121
1934	Critical	132	149	152	156	153	193	119	102	103	79	91	118	129
1935	Below Normal	143	148	172	135	140	116	59	54	53	50	62	103	103
1936	Below Normal	131	121	148	138	109	47	40	45	68	45	57	93	87
1937	Below Normal	125	118	139	162	89	79	47	30	67	54	56	83	88
1938	Wet	125	126	80	99	73	48	28	26	27	52	42	41	64
1939	Dry	32	45	117	163	168	143	93	62	60	69	77	115	95
1940	Above Normal	143	124	146	142	120	48	36	43	57	43	40	90	86
1941	Wet	120	125	124	101	83	44	33	28	60	66	51	66	75
1942	Wet	61	87	109	79	41	53	40	34	54	66	46	46	60
1943	Wet	39	47	69	61	35	40	37	42	69	56	48	82	52
1944	Dry	125	118	140	159	158	100	60	50	57	62	81	98	101
1945	Below Normal	128	116	122	121	96	52	59	47	54	52	57	94	83
1946	Below Normal	117	103	85	80	77	71	52	48	59	44	58	95	74
1947	Dry	120	121	146	136	138	131	65	72	65	62	82	114	104
1948	Below Normal	146	130	163	164	196	140	61	54	45	35	60	96	107
1949	Dry	120	118	146	177	171	125	62	71	66	55	89	113	109
1950	Below Normal	138	121	151	147	107	109	48	46	43	47	50	86	91
1951	Above Normal	121	75	64	59	33	56	49	36	35	40	42	99	59
1952	Wet	121	127	136	105	80	67	20	13	35	50	37	39	69
1953	Wet	34	68	119	84	87	122	49	33	34	30	45	68	64
1954	Above Normal	66	89	132	161	95	109	47	52	47	46	41	94	82
1955	Dry	131	140	139	102	103	113	80	73	66	56	76	105	99
1956	Wet	133	142	143	78	55	50	42	45	57	66	52	47	76
1957	Above Normal	34	44	98	146	151	113	53	38	39	38	44	102	75
1958	Wet	113	69	100	91	115	102	19	8	43	56	41	42	67
1959	Below Normal	35	58	124	152	98	107	74	53	55	46	55	103	80
1960	Dry	132	129	149	177	170	98	57	67	61	70	78	107	108
1961	Dry	140	139	174	166	166	131	63	72	65	59	78	100	113
1962	Below Normal	124	128	158	169	144	94	55	52	49	42	56	114	99
1963	Wet	124	50	86	87	103	113	61	42	53	36	38	85	73
1964	Dry	120	118	81	99	111	111	73	70	62	65	93	102	92
1965	Wet	131	139	115	71	52	70	46	45	53	41	48	76	74
1966	Below Normal	113	103	82	86	82	102	52	50	52	46	54	110	78
1967	Wet	151	145	149	120	95	72	36	18	35	37	35	36	77
1968	Below Normal	33	55	113	132	100	111	60	54	51	45	55	101	76
1969	Wet	129	129	124	132	71	63	36	23	24	52	42	44	72
1970	Wet	32	50	89	42	48	45	39	40	44	46	41	92	51
1971	Wet	133	97	94	76	93	85	42	35	33	31	41	77	70
1972	Below Normal	72	98	132	124	135	111	51	59	58	50	55	112	88
1973	Above Normal	158	112	94	121	116	82	52	54	63	37	47	91	85
1974	Wet	130	73	77	81	74	39	36	44	63	56	51	61	65
1975	Wet	35	48	99	111	64	38	38	41	57	57	49	64	59
1976	Critical	37	37	89	142	179	161	83	82	109	115	117	130	107
1977	Critical	155	138	169	152	193	195	143	119	121	90	102	119	141
1978	Above Normal	156	164	172	141	130	130	64	41	67	64	52	75	105
1979	Below Normal	112	124	144	122	57	44	46	41	46	35	56	96	77
1980	Above Normal	134	111	106	75	59	62	52	48	58	67	52	78	75
1981	Dry	106	106	142	156	99	107	60	53	58	67	79	112	95
1982	Wet	131	109	74	102	38	47	19	13	49	59	42	27	59
1983	Wet	12	29	59	69	53	38	39	28	24	19	10	16	33
1984	Wet	26	13	44	48	22	43	46	49	61	40	43	85	43
1985	Dry	108	86	71	80	110	118	78	59	51	63	94	94	84
1986	Wet	109	115	148	123	91	48	24	19	56	97	58	68	80
1987	Dry	89	96	138	164	165	134	70	67	65	71	90	111	105
1988	Critical	146	136	158	152	150	178	96	87	87	64	97	123	123
1989	Dry	152	157	166	165	217	123	44	55	44	58	90	99	114
1990	Critical	117	131	163	148	165	127	84	80	94	105	114	120	121
1991	Critical	156	161	167	187	210	145	84	75	89	110	115	108	134
1992	Critical	151	174	173	207	162	126	62	67	72	62	90	119	122
1993	Above Normal	154	170	183	150	125	104	47	49	70	60	45	81	103
1994	Critical	114	131	156	181	192	129	63	68	71	112	117	151	124
Average		113	110	126	126	117	102	59	53	61	59	65	91	90
Wet		97	90	101	88	70	63	37	32	46	50	43	59	65
Above Normal		120	121	121	121	103	87	49	45	53	51	46	89	83
Below Normal		109	110	132	130	108	91	54	49	54	45	56	98	87
Dry		121	122	138	145	147	124	69	64	62	65	82	106	104
Critical		127	129	152	166	181	166	100	90	98	92	104	119	127

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	121	119	127	120	117	83	46	40	48	62	44	76	83
1923	Below Normal	116	109	112	90	82	100	52	46	62	42	56	91	80
1924	Critical	106	118	143	160	164	205	123	110	127	104	104	107	131
1925	Dry	141	149	148	171	176	151	71	41	64	59	74	99	112
1926	Dry	134	124	149	169	148	131	64	64	63	68	84	109	109
1927	Wet	142	95	76	88	105	106	45	40	42	36	41	85	75
1928	Above Normal	117	98	96	102	95	83	45	44	47	53	50	101	78
1929	Critical	133	125	153	171	192	180	112	92	93	81	92	115	128
1930	Dry	144	147	161	127	117	127	57	66	68	66	82	100	105
1931	Critical	135	129	157	177	174	166	119	112	121	90	107	119	134
1932	Dry	141	148	140	113	154	150	105	79	78	72	74	105	113
1933	Critical	133	121	147	163	172	162	98	83	94	84	93	102	121
1934	Critical	132	149	152	159	151	192	118	101	103	79	90	116	129
1935	Below Normal	143	148	172	136	141	114	59	54	53	50	61	104	103
1936	Below Normal	131	121	148	138	109	47	40	45	69	46	57	93	87
1937	Below Normal	124	118	139	161	89	78	47	30	68	55	56	83	87
1938	Wet	124	129	81	103	73	48	28	26	27	52	42	41	64
1939	Dry	32	45	117	163	168	141	93	61	60	67	79	106	94
1940	Above Normal	132	119	145	141	119	48	36	43	57	44	40	90	85
1941	Wet	120	125	124	101	82	44	33	28	60	66	51	66	75
1942	Wet	62	91	110	79	41	53	40	34	54	66	46	46	60
1943	Wet	40	47	69	61	35	40	36	42	69	56	48	82	52
1944	Dry	125	119	140	159	158	100	60	50	55	60	82	99	101
1945	Below Normal	127	114	120	120	95	52	59	47	54	52	57	94	83
1946	Below Normal	117	107	87	80	77	70	52	49	58	41	60	106	75
1947	Dry	129	123	140	134	136	140	65	72	67	62	83	117	106
1948	Below Normal	144	130	163	164	200	141	62	54	43	37	58	94	108
1949	Dry	117	115	146	176	171	117	60	71	66	53	84	116	108
1950	Below Normal	140	117	145	143	105	108	48	43	42	47	50	84	89
1951	Above Normal	126	78	64	62	33	56	49	34	34	43	41	97	60
1952	Wet	121	128	137	105	80	68	20	13	35	50	37	39	69
1953	Wet	34	68	119	84	87	122	49	33	35	30	45	70	65
1954	Above Normal	67	89	132	161	95	109	47	52	47	41	94	82	85
1955	Dry	137	142	134	102	103	131	83	73	62	53	76	106	100
1956	Wet	133	141	143	78	55	50	42	45	57	66	52	47	76
1957	Above Normal	34	44	98	147	153	113	53	38	38	38	43	100	75
1958	Wet	113	76	100	91	115	102	19	8	43	56	40	42	67
1959	Below Normal	35	58	124	152	97	107	74	54	55	46	55	104	80
1960	Dry	132	132	156	154	174	99	57	69	60	68	78	110	107
1961	Dry	143	138	173	173	172	136	67	73	64	60	80	116	116
1962	Below Normal	136	134	169	163	142	93	55	50	53	47	51	113	100
1963	Wet	122	50	92	89	100	110	61	42	53	36	39	83	73
1964	Dry	121	116	79	97	111	112	72	71	64	63	97	97	92
1965	Wet	125	136	113	71	48	69	46	44	50	40	48	75	72
1966	Below Normal	109	102	82	86	80	89	51	50	51	46	54	110	76
1967	Wet	147	143	153	121	94	73	36	18	35	37	35	36	77
1968	Below Normal	32	55	113	131	100	111	60	54	51	44	54	99	75
1969	Wet	129	130	124	132	71	63	36	23	24	52	42	44	72
1970	Wet	32	50	89	42	48	45	39	40	44	46	41	92	51
1971	Wet	132	96	94	76	87	83	42	35	33	31	41	77	69
1972	Below Normal	72	98	132	124	138	111	51	59	63	51	56	115	89
1973	Above Normal	163	121	95	121	116	81	52	54	63	37	47	91	87
1974	Wet	130	73	77	81	74	39	36	44	63	56	51	61	65
1975	Wet	35	48	99	111	64	38	38	41	57	57	49	64	59
1976	Critical	37	37	89	143	181	154	75	79	109	116	119	126	105
1977	Critical	155	144	169	146	200	190	128	112	118	92	109	134	141
1978	Above Normal	160	169	173	142	131	127	63	41	67	63	51	76	105
1979	Below Normal	113	124	144	123	57	44	46	41	46	35	57	96	77
1980	Above Normal	134	116	114	75	58	63	51	48	58	67	52	78	76
1981	Dry	106	106	142	156	99	107	60	53	57	66	80	111	95
1982	Wet	132	110	74	102	38	47	19	13	49	59	42	27	59
1983	Wet	12	29	59	69	53	38	39	28	24	19	10	16	33
1984	Wet	26	13	44	48	22	43	46	49	61	40	43	85	43
1985	Dry	108	87	71	79	109	107	75	59	53	63	95	97	83
1986	Wet	110	115	148	123	91	48	24	19	56	88	56	68	79
1987	Dry	83	94	138	165	166	134	70	67	65	73	90	112	105
1988	Critical	148	132	156	152	145	177	95	87	85	62	96	122	122
1989	Dry	152	157	165	160	213	121	44	55	47	60	89	103	114
1990	Critical	115	128	162	153	168	127	85	80	94	105	114	120	121
1991	Critical	156	161	168	186	212	145	84	75	89	110	115	108	134
1992	Critical	151	174	173	207	162	120	61	67	71	62	92	124	122
1993	Above Normal	156	170	184	147	125	104	47	50	71	60	45	81	103
1994	Critical	115	131	156	181	193	130	63	68	75	110	121	136	123
Average		113	110	126	126	117	102	59	53	61	59	65	91	90
Wet		96	90	101	88	70	63	37	32	46	49	43	59	65
Above Normal		121	112	123	122	104	87	49	44	53	51	45	88	83
Below Normal		110	110	132	129	108	90	54	48	55	46	56	99	86
Dry		122	121	137	144	148	125	69	64	62	63	83	106	104
Critical		126	129	152	166	176	162	97	89	98	91	104	119	126

Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Norma	0	-7	-8	0	-1	1	0	0	0	1	0	-1	-1
1924	Critical	1	1	0	2	-38	-16	-14	-1	3	0	-1	0	-5
1925	Dry	2	-1	-6	-5	24	21	3	0	-2	-3	-2	1	3
1926	Dry	1	-2	-1	-1	-2	-4	-1	-2	2	1	1	3	-1
1927	Wet	2	1	1	1	4	3	0	1	0	-3	-1	1	1
1928	Above Norm	0	4	7	4	7	3	-1	-1	0	-1	0	-3	2
1929	Critical	-1	0	-2	1	0	0	0	0	-4	-2	0	0	-1
1930	Dry	0	0	0	0	-7	-1	0	0	-1	-8	3	-12	-2
1931	Critical	-9	-2	3	4	-33	-14	-2	1	2	-7	-6	1	-5
1932	Dry	1	0	0	14	4	1	0	-2	1	0	0	0	1
1933	Critical	0	0	-1	0	0	0	0	0	0	-1	-1	-1	0
1934	Critical	0	0	0	3	-2	-1	-1	0	0	-1	-1	-1	0
1935	Below Norma	0	0	-1	1	0	-2	0	0	0	0	0	0	0
1936	Below Norma	0	0	0	0	0	0	0	0	0	1	-1	0	0
1937	Below Norma	-1	-1	0	-1	0	0	0	0	0	1	0	0	0
1938	Wet	0	4	1	4	0	0	0	0	0	0	0	0	1
1939	Dry	0	0	0	0	0	-2	0	-1	0	-3	2	-9	-1
1940	Above Norm	-11	-5	-1	-1	0	0	0	0	0	0	0	0	-1
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	1	4	1	0	0	0	0	0	0	0	0	0	1
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	-2	0	0	0	0
1945	Below Norma	-1	-1	-2	-1	-1	0	0	0	0	0	0	0	-1
1946	Below Norma	-1	3	2	0	0	-1	0	1	0	-3	1	11	1
1947	Dry	9	2	-6	-2	-3	9	1	-1	2	0	1	2	1
1948	Below Norma	-1	1	0	0	4	2	0	0	-2	2	-2	-2	0
1949	Dry	-3	-3	-1	0	0	-8	-1	0	0	-2	-4	3	-2
1950	Below Norma	2	-5	-6	-4	-2	-1	0	-3	0	0	1	-2	-2
1951	Above Norm	6	4	1	3	0	0	0	-2	-1	3	-1	-2	1
1952	Wet	-1	1	1	0	0	1	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1954	Above Norm	1	0	0	0	0	0	0	0	0	1	0	0	0
1955	Dry	6	3	-5	-1	-1	18	3	0	-5	-4	0	0	1
1956	Wet	-1	0	0	0	-1	0	0	0	0	0	0	0	0
1957	Above Norm	0	0	0	1	1	0	0	0	0	0	-1	-2	0
1958	Wet	0	7	-1	0	0	0	0	0	0	0	0	0	0
1959	Below Norma	0	0	0	0	0	0	0	0	-1	0	0	0	0
1960	Dry	1	3	7	-23	4	0	0	1	-2	-2	0	3	-1
1961	Dry	3	-1	-1	7	5	5	4	0	-1	0	2	16	3
1962	Below Norma	11	6	11	-6	-2	0	0	-1	3	5	-5	-1	2
1963	Wet	-2	0	6	2	-3	-3	0	0	0	0	1	-1	0
1964	Dry	1	-2	-2	-2	0	0	-1	2	2	-2	4	-5	0
1965	Wet	-6	-2	-1	0	-3	-1	0	-1	-3	-1	0	-1	-2
1966	Below Norma	-4	-1	1	0	-2	-12	-1	0	0	0	0	-1	-2
1967	Wet	-3	-2	3	0	0	1	0	0	0	0	0	0	0
1968	Below Norma	0	0	0	0	0	0	0	0	0	-1	-1	-2	0
1969	Wet	0	0	-1	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	-1	0	0	-6	-1	0	0	0	0	0	0	-1
1972	Below Norma	0	0	0	0	3	0	0	0	5	1	1	3	1
1973	Above Norm	5	10	1	0	0	0	0	0	0	0	0	0	1
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	1	2	-7	-8	-2	0	1	1	-4	-1
1977	Critical	1	7	0	-6	7	-5	-15	-7	-2	2	6	15	0
1978	Above Norm	5	5	2	1	1	-3	0	0	0	-1	-1	1	1
1979	Below Norma	1	0	0	1	1	0	0	0	0	0	1	0	0
1980	Above Norm	0	5	8	1	-2	0	0	0	0	0	0	0	1
1981	Dry	0	0	0	0	0	0	0	0	-1	-1	1	-1	0
1982	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-1	-1	-12	-3	0	2	0	1	3	-1
1986	Wet	1	-1	0	0	0	0	0	0	0	-9	-3	-1	-1
1987	Dry	-6	-2	0	0	1	0	0	0	0	2	0	2	0
1988	Critical	2	-4	-2	-1	-4	-1	0	0	-2	-1	-1	-1	-1
1989	Dry	0	0	-1	-5	-3	-2	-1	0	2	3	-1	4	0
1990	Critical	-2	-3	-1	5	3	1	0	0	0	0	0	0	0
1991	Critical	0	0	0	-1	2	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	-7	0	0	-1	0	2	5	0
1993	Above Norm	2	0	1	-3	0	0	0	1	0	0	0	0	0
1994	Critical	1	0	0	0	1	1	0	0	4	-2	4	-15	0
Average		0	0	0	0	-1	0	-1	0	0	0	0	0	0
Wet		0	1	1	0	0	0	0	0	0	-1	0	0	0
Above Norm		1	2	2	1	1	0	0	0	0	0	0	0	0
Below Norma		0	0	0	-1	0	-1	0	0	0	0	0	0	0
Dry		1	0	-1	-1	1	2	0	0	0	-1	1	1	0
Critical		-1	0	0	1	-5	-4	-3	-1	0	-1	0	0	-1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-6%	-6%	0%	-1%	1%	0%	0%	0%	2%	0%	-1%	-1%
1924	Critical	1%	1%	0%	1%	-19%	-7%	-10%	-1%	2%	0%	-1%	0%	-3%
1925	Dry	1%	-1%	-4%	-3%	16%	16%	5%	1%	-3%	-5%	-2%	1%	2%
1926	Dry	0%	-1%	-1%	0%	-1%	-3%	-2%	-3%	-3%	1%	1%	3%	-1%
1927	Wet	2%	1%	1%	1%	4%	3%	1%	1%	1%	-8%	-2%	1%	1%
1928	Above Normal	0%	5%	8%	4%	8%	4%	-2%	-2%	0%	-2%	0%	-3%	2%
1929	Critical	-1%	0%	-1%	0%	0%	0%	0%	-1%	-4%	-2%	0%	0%	-1%
1930	Dry	0%	0%	0%	0%	-6%	-1%	0%	1%	-2%	-10%	4%	-10%	-2%
1931	Critical	-6%	-1%	2%	3%	-16%	-8%	-1%	1%	2%	-7%	-5%	1%	-3%
1932	Dry	1%	0%	0%	14%	3%	1%	0%	-2%	1%	-1%	-1%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1934	Critical	0%	0%	0%	2%	-1%	0%	-1%	0%	0%	-1%	-1%	-1%	0%
1935	Below Normal	0%	0%	0%	1%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	-1%	0%	0%
1937	Below Normal	-1%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%
1938	Wet	0%	3%	1%	4%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1939	Dry	1%	0%	0%	0%	0%	-1%	0%	-1%	0%	-4%	3%	-8%	-1%
1940	Above Normal	-8%	-4%	-1%	-1%	0%	0%	-1%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	2%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	1%	0%	-3%	-3%	1%	1%	0%
1945	Below Normal	-1%	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	-1%	3%	3%	0%	0%	-1%	0%	2%	-1%	-6%	2%	11%	1%
1947	Dry	7%	2%	-4%	-2%	-2%	7%	1%	-1%	3%	1%	2%	2%	1%
1948	Below Normal	-1%	1%	0%	0%	2%	1%	0%	1%	-4%	5%	-4%	-2%	0%
1949	Dry	-2%	-2%	-1%	0%	0%	-6%	-2%	0%	0%	-4%	-5%	-3%	-2%
1950	Below Normal	1%	-4%	-4%	-3%	-2%	-1%	0%	-7%	-1%	0%	1%	-2%	-2%
1951	Above Normal	5%	5%	1%	5%	0%	0%	0%	-4%	-3%	8%	-3%	-2%	1%
1952	Wet	-1%	1%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
1955	Dry	5%	2%	-3%	-1%	-1%	16%	4%	1%	-7%	-7%	0%	0%	1%
1956	Wet	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	1%	0%	0%	0%	-1%	0%	-2%	-2%	0%
1958	Wet	0%	11%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	1%	0%	0%
1960	Dry	0%	2%	5%	-13%	3%	0%	0%	2%	-3%	-3%	0%	3%	0%
1961	Dry	2%	-1%	-1%	4%	3%	4%	6%	1%	-1%	1%	2%	16%	3%
1962	Below Normal	9%	4%	7%	-4%	-2%	0%	0%	-3%	7%	12%	-9%	-1%	2%
1963	Wet	-2%	0%	7%	2%	-3%	-2%	0%	0%	0%	0%	2%	-2%	0%
1964	Dry	1%	-2%	-3%	-2%	0%	0%	-1%	3%	3%	-3%	4%	-4%	0%
1965	Wet	-4%	-2%	-1%	0%	-6%	-1%	0%	-3%	-6%	-2%	-1%	-2%	-2%
1966	Below Normal	-3%	-1%	1%	0%	-3%	-12%	-3%	0%	-1%	-1%	-1%	-1%	-2%
1967	Wet	-2%	-1%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	-2%	-1%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-7%	-1%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	1%	0%	0%	0%	2%	0%	0%	0%	8%	2%	2%	2%	1%
1973	Above Normal	3%	9%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	1%	-5%	-9%	-3%	0%	1%	1%	-3%	-1%
1977	Critical	0%	5%	0%	-4%	3%	-2%	-10%	-6%	-2%	2%	6%	13%	0%
1978	Above Normal	3%	3%	1%	1%	0%	-2%	-1%	0%	1%	-2%	-1%	1%	0%
1979	Below Normal	1%	0%	0%	1%	1%	0%	-1%	1%	0%	0%	1%	0%	0%
1980	Above Normal	0%	5%	8%	1%	-3%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	0%	-1%	0%	-1%	-1%	1%	-1%	0%
1982	Wet	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-10%	-4%	0%	4%	0%	1%	3%	-1%
1986	Wet	1%	0%	0%	0%	0%	-1%	2%	0%	0%	-10%	-5%	-1%	-1%
1987	Dry	-7%	-2%	0%	0%	1%	0%	0%	0%	0%	3%	0%	1%	0%
1988	Critical	1%	-3%	-1%	0%	-3%	0%	0%	0%	-2%	-2%	-1%	0%	-1%
1989	Dry	0%	0%	0%	-3%	-2%	-2%	-1%	-1%	5%	5%	-1%	4%	0%
1990	Critical	-2%	-2%	-1%	3%	2%	1%	0%	1%	1%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	-5%	0%	0%	-1%	0%	2%	4%	0%
1993	Above Normal	2%	0%	1%	-2%	0%	0%	0%	1%	1%	0%	-1%	1%	0%
1994	Critical	1%	0%	0%	0%	1%	1%	1%	0%	5%	-1%	3%	-10%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	1%	1%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		1%	2%	2%	1%	1%	0%	0%	-1%	0%	1%	-1%	0%	0%
Below Normal		0%	0%	0%	0%	0%	-1%	0%	0%	1%	1%	-1%	0%	0%
Dry		1%	0%	-1%	0%	1%	1%	0%	0%	0%	-2%	1%	1%	0%
Critical		0%	0%	0%	0%	-3%	-2%	-3%	-1%	0%	-1%	0%	0%	-1%

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	191	175	175	155	192	67	67	54	53	44	49	121	112
1923	Below Normal	187	181	173	78	60	55	69	58	43	50	81	155	99
1924	Critical	169	185	207	219	225	176	121	108	157	138	148	167	168
1925	Dry	229	244	221	241	167	63	49	49	47	52	81	153	133
1926	Dry	214	187	223	242	168	63	51	64	57	84	114	172	137
1927	Wet	225	137	60	75	97	53	42	52	40	38	54	134	84
1928	Above Normal	188	149	89	116	61	47	64	57	42	52	71	168	92
1929	Critical	213	191	231	246	259	135	94	90	84	95	133	189	163
1930	Dry	231	227	235	149	93	55	45	60	62	77	105	182	127
1931	Critical	231	192	219	234	217	118	94	108	144	134	167	187	170
1932	Dry	222	227	207	90	106	77	73	75	59	53	85	166	120
1933	Critical	208	176	201	186	125	87	71	74	86	95	126	155	132
1934	Critical	209	237	213	182	95	81	75	78	84	80	130	197	139
1935	Below Normal	234	226	250	155	70	53	50	62	44	43	84	166	120
1936	Below Normal	208	181	213	258	282	84	50	55	47	45	79	152	138
1937	Below Normal	204	181	200	243	225	158	67	46	45	45	63	131	134
1938	Wet	203	193	72	64	115	146	82	73	68	50	52	60	98
1939	Dry	36	53	152	247	229	136	102	69	64	96	114	187	124
1940	Above Normal	230	186	193	224	168	65	49	51	46	41	56	148	121
1941	Wet	194	198	205	132	176	91	76	48	48	49	53	96	114
1942	Wet	90	131	183	140	80	50	58	51	46	49	57	73	84
1943	Wet	51	62	63	113	74	83	92	57	59	45	57	135	74
1944	Dry	205	187	211	236	254	75	68	59	55	81	117	155	142
1945	Below Normal	204	179	165	149	155	103	72	60	44	51	81	159	118
1946	Below Normal	193	164	113	49	68	63	69	60	47	54	88	153	93
1947	Dry	196	190	226	187	164	84	75	72	61	85	122	183	137
1948	Below Normal	232	195	247	225	243	91	54	55	39	44	89	151	139
1949	Dry	186	176	209	251	198	74	70	64	54	79	133	180	139
1950	Below Normal	217	177	220	195	85	46	46	56	41	48	72	136	112
1951	Above Normal	191	101	76	140	155	52	64	53	42	43	61	159	95
1952	Wet	191	196	211	166	62	68	83	48	49	48	46	53	102
1953	Wet	41	96	207	77	53	48	65	49	39	41	61	104	73
1954	Above Normal	93	132	180	254	66	46	64	56	42	46	59	150	99
1955	Dry	206	216	209	109	76	58	74	67	57	64	102	168	117
1956	Wet	208	210	219	196	92	60	47	55	46	46	55	71	109
1957	Above Normal	40	48	114	202	183	53	61	51	39	44	64	167	89
1958	Wet	182	94	124	81	153	200	178	55	45	46	53	63	106
1959	Below Normal	42	77	179	246	87	55	77	64	61	66	83	170	101
1960	Dry	212	195	203	257	259	72	70	65	73	99	112	170	149
1961	Dry	220	208	264	226	198	72	50	58	65	87	123	153	144
1962	Below Normal	193	190	231	225	181	62	50	61	48	58	85	185	131
1963	Wet	182	55	87	106	72	47	108	54	36	38	51	137	81
1964	Dry	191	186	74	102	69	56	85	68	64	93	140	158	107
1965	Wet	205	211	148	77	53	45	54	59	45	41	53	125	93
1966	Below Normal	185	166	77	58	53	45	64	59	51	63	83	176	90
1967	Wet	238	223	225	155	61	67	73	63	50	56	47	48	109
1968	Below Normal	37	71	163	185	60	41	63	64	57	62	80	160	87
1969	Wet	201	196	171	178	206	131	120	72	59	49	55	65	125
1970	Wet	36	65	114	146	92	52	69	56	48	49	57	150	78
1971	Wet	216	147	88	49	48	44	59	49	39	41	61	121	80
1972	Below Normal	106	145	183	175	169	68	70	65	58	63	84	181	114
1973	Above Normal	253	186	99	139	120	60	67	63	44	41	67	151	108
1974	Wet	221	108	63	55	48	49	63	56	48	42	67	90	76
1975	Wet	42	61	129	131	125	66	72	56	43	41	60	92	76
1976	Critical	46	40	93	192	253	138	96	90	145	167	182	217	138
1977	Critical	249	209	262	186	208	154	124	116	152	126	162	196	179
1978	Above Normal	258	258	250	182	102	118	90	75	56	46	57	127	135
1979	Below Normal	181	200	223	163	83	61	59	58	42	47	82	156	113
1980	Above Normal	223	176	136	102	192	126	79	60	61	52	60	131	116
1981	Dry	178	168	215	253	77	45	64	62	68	100	121	177	127
1982	Wet	209	173	48	131	70	94	104	53	47	49	59	59	91
1983	Wet	31	56	106	232	200	187	174	74	61	57	40	32	104
1984	Wet	33	44	98	90	69	48	69	62	50	46	59	149	68
1985	Dry	185	142	55	59	110	75	80	65	54	94	144	147	101
1986	Wet	170	173	220	161	193	161	74	51	53	68	62	111	125
1987	Dry	149	158	211	261	191	89	80	66	75	103	129	173	140
1988	Critical	229	204	233	193	81	74	70	78	82	89	145	203	140
1989	Dry	243	238	242	221	280	109	45	51	52	89	138	154	155
1990	Critical	179	196	237	193	153	75	72	67	111	160	170	194	151
1991	Critical	254	250	248	249	251	148	66	61	107	166	164	168	178
1992	Critical	254	271	253	297	172	78	52	60	80	88	144	195	163
1993	Above Normal	252	268	266	194	157	98	46	51	41	38	52	127	133
1994	Critical	184	203	224	249	245	89	71	59	83	172	179	239	166
Average		179	167	176	170	141	83	73	63	61	69	91	146	118
Wet		151	135	135	122	102	85	84	57	48	47	55	94	93
Above Normal		192	168	158	171	140	73	65	57	47	45	60	145	110
Below Normal		173	167	188	172	130	70	61	59	48	53	81	160	113
Dry		194	188	197	196	165	75	68	63	61	83	118	167	131
Critical		202	196	218	219	191	113	84	82	110	126	154	192	157

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	191	175	175	155	192	67	67	54	53	45	49	121	112
1923	Below Normal	188	169	152	77	58	53	68	59	43	49	80	154	96
1924	Critical	171	187	206	222	194	122	108	107	156	136	147	170	161
1925	Dry	230	241	208	230	182	78	52	49	47	51	82	155	134
1926	Dry	216	184	221	241	167	63	51	64	56	86	116	176	137
1927	Wet	228	139	63	76	98	53	42	53	40	38	54	136	85
1928	Above Normal	187	157	105	125	64	48	66	56	42	52	71	163	95
1929	Critical	211	191	228	248	259	135	94	89	83	95	133	189	163
1930	Dry	231	226	235	150	93	54	45	60	62	84	109	157	126
1931	Critical	216	191	224	242	191	108	99	110	142	119	159	191	166
1932	Dry	224	227	207	89	103	79	73	75	60	53	84	166	120
1933	Critical	208	176	202	187	126	87	71	74	86	94	125	156	133
1934	Critical	209	238	214	178	87	78	75	78	84	80	129	195	137
1935	Below Normal	234	226	249	157	70	53	50	62	44	43	84	166	120
1936	Below Normal	208	181	213	258	282	85	50	55	47	44	78	152	138
1937	Below Normal	202	180	200	242	218	158	67	46	45	46	63	131	133
1938	Wet	202	199	76	64	113	146	82	73	68	50	52	61	99
1939	Dry	37	53	152	248	228	136	102	68	66	92	117	170	122
1940	Above Normal	209	177	190	221	167	65	49	51	46	41	56	148	118
1941	Wet	194	198	205	132	176	90	76	48	48	49	53	96	114
1942	Wet	93	140	188	140	80	50	58	51	46	49	57	74	85
1943	Wet	51	62	63	113	75	85	92	57	59	45	57	136	75
1944	Dry	206	188	212	236	254	76	68	59	54	81	120	156	142
1945	Below Normal	201	177	161	146	153	101	72	60	44	51	81	159	117
1946	Below Normal	193	169	123	49	70	63	69	61	47	56	91	173	97
1947	Dry	211	194	212	181	158	83	75	71	62	87	125	186	137
1948	Below Normal	230	197	246	224	252	93	54	55	39	46	87	148	139
1949	Dry	181	171	207	250	198	73	69	64	54	74	128	186	138
1950	Below Normal	220	168	209	187	80	45	46	55	42	50	73	133	109
1951	Above Normal	201	108	77	142	159	52	63	53	43	44	59	156	96
1952	Wet	190	198	214	166	62	69	86	48	49	48	46	53	102
1953	Wet	41	96	208	77	53	48	65	50	39	41	62	107	74
1954	Above Normal	94	132	180	254	66	46	64	56	42	46	59	151	99
1955	Dry	216	221	198	107	76	60	76	67	56	65	105	169	118
1956	Wet	207	210	218	196	88	59	47	55	46	46	55	71	108
1957	Above Normal	40	48	114	205	188	53	61	52	39	44	63	163	89
1958	Wet	181	108	122	81	153	200	178	55	45	46	53	63	107
1959	Below Normal	42	77	179	246	87	55	77	64	61	66	84	171	101
1960	Dry	213	201	225	206	267	73	70	65	67	96	113	175	148
1961	Dry	224	207	261	239	206	78	53	58	65	88	126	184	149
1962	Below Normal	209	200	253	211	175	62	50	61	51	60	77	184	133
1963	Wet	179	55	98	109	72	47	108	54	36	38	51	134	82
1964	Dry	193	183	69	98	68	56	86	68	59	96	148	148	106
1965	Wet	195	208	144	77	50	44	54	58	43	42	51	122	91
1966	Below Normal	178	164	80	58	53	45	64	59	51	63	83	175	89
1967	Wet	232	220	232	156	61	67	74	63	50	56	47	48	109
1968	Below Normal	37	71	163	184	60	41	63	64	57	62	79	157	87
1969	Wet	201	198	169	180	206	131	120	72	59	49	55	65	125
1970	Wet	36	65	115	146	92	52	68	56	48	49	57	150	78
1971	Wet	215	145	88	49	48	43	59	49	39	41	61	121	80
1972	Below Normal	106	145	184	175	169	68	71	65	59	62	86	185	115
1973	Above Normal	262	203	101	139	120	60	68	63	44	41	67	151	110
1974	Wet	221	108	63	55	48	49	63	56	48	42	67	90	76
1975	Wet	42	61	129	131	125	67	72	56	43	41	60	92	77
1976	Critical	46	40	93	194	262	121	85	87	142	169	184	210	136
1977	Critical	250	222	259	174	187	117	100	108	149	129	170	224	174
1978	Above Normal	271	267	254	185	103	116	86	80	57	46	58	130	138
1979	Below Normal	183	200	222	167	87	61	58	59	42	47	82	155	114
1980	Above Normal	223	185	155	105	193	126	78	60	61	52	60	131	119
1981	Dry	178	168	215	253	77	45	64	62	67	99	122	176	127
1982	Wet	209	175	48	131	70	95	105	53	47	49	59	59	92
1983	Wet	31	56	106	232	200	187	174	74	61	57	40	32	104
1984	Wet	33	44	98	90	69	48	69	62	50	46	59	149	68
1985	Dry	185	142	55	57	107	73	79	64	54	94	147	152	101
1986	Wet	171	172	219	161	194	163	74	51	53	61	61	109	124
1987	Dry	136	154	211	258	197	91	80	66	75	105	130	176	140
1988	Critical	233	197	230	192	80	73	70	78	82	89	143	202	139
1989	Dry	243	239	238	212	281	105	45	51	53	91	135	161	155
1990	Critical	175	191	236	202	157	76	72	67	111	159	170	195	151
1991	Critical	255	250	247	248	250	147	66	61	108	166	164	168	178
1992	Critical	254	271	253	297	182	78	52	60	80	89	148	204	164
1993	Above Normal	256	267	269	186	157	98	46	52	41	38	52	129	132
1994	Critical	185	204	224	249	248	90	72	59	81	170	185	215	165
Average		179	168	176	169	140	82	73	63	60	69	91	146	118
Wet		150	136	136	122	102	85	84	57	48	47	55	94	93
Above Normal		193	172	162	172	141	73	65	58	47	45	59	144	111
Below Normal		174	166	188	170	130	70	61	59	48	53	81	160	113
Dry		195	187	195	191	166	76	68	63	60	84	119	168	131
Critical		201	196	218	219	185	103	80	82	109	124	155	193	155

Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Norma	1	-12	-22	-1	-1	-1	-1	0	0	-1	-1	-2	-3
1924	Critical	3	1	-1	3	-31	-53	-13	-1	-2	-1	-1	3	-8
1925	Dry	1	-2	-13	-12	16	15	3	0	-1	-1	0	2	1
1926	Dry	1	-3	-2	-1	-1	0	0	-1	0	2	2	4	0
1927	Wet	3	2	2	1	0	1	0	0	0	0	0	2	1
1928	Above Norm	-1	7	16	9	4	1	1	-1	0	0	0	-4	3
1929	Critical	-3	0	-4	1	0	0	0	0	-1	0	0	0	-1
1930	Dry	0	-1	0	0	0	0	0	0	-1	7	4	-25	-1
1931	Critical	-15	-2	5	7	-27	-11	5	3	-1	-16	-8	3	-5
1932	Dry	2	0	0	-1	-3	2	0	-1	0	0	0	0	0
1933	Critical	0	0	1	1	1	0	0	0	0	0	0	0	0
1934	Critical	0	0	1	-4	-8	-2	-1	0	0	0	-1	-2	-1
1935	Below Norma	0	0	-1	2	0	0	0	0	0	0	0	0	0
1936	Below Norma	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Norma	-2	-1	0	-1	-7	0	0	0	0	0	0	-1	-1
1938	Wet	-1	6	4	0	-2	0	0	0	0	0	0	1	1
1939	Dry	1	0	0	0	0	0	0	0	2	-4	3	-17	-1
1940	Above Norm	-20	-8	-3	-3	0	0	0	0	0	0	0	0	-3
1941	Wet	0	0	-1	0	0	0	0	0	0	0	0	0	0
1942	Wet	3	8	5	0	0	0	0	0	0	0	0	1	1
1943	Wet	0	0	0	0	1	2	0	0	0	0	0	1	0
1944	Dry	1	1	0	0	-1	0	0	0	0	1	3	1	0
1945	Below Norma	-3	-3	-3	-3	-2	-1	0	0	0	0	0	0	-1
1946	Below Norma	-1	6	9	0	2	1	0	0	0	2	3	20	4
1947	Dry	16	4	-14	-5	-6	-1	0	-1	0	2	3	4	0
1948	Below Norma	-2	2	-1	-2	9	3	0	0	0	2	-3	-3	0
1949	Dry	-5	-5	-2	-1	1	-1	-1	0	0	-5	-5	6	-2
1950	Below Norma	3	-9	-12	-8	-4	0	0	-1	1	1	2	-3	-3
1951	Above Norm	9	7	1	2	4	0	-1	0	1	2	-2	-3	2
1952	Wet	-1	2	2	0	0	1	3	0	0	0	0	0	1
1953	Wet	0	0	0	0	0	0	0	0	0	0	1	3	0
1954	Above Norm	1	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	11	6	-10	-2	0	1	3	0	-1	1	3	1	1
1956	Wet	0	0	0	0	-4	-1	0	0	0	0	0	0	-1
1957	Above Norm	0	0	0	2	5	0	0	0	0	0	-1	-4	0
1958	Wet	-1	14	-2	0	0	0	0	0	0	0	0	0	1
1959	Below Norma	0	0	0	0	0	0	0	0	0	0	1	1	0
1960	Dry	1	6	22	-51	8	0	0	0	-6	-3	1	5	-1
1961	Dry	4	0	-3	13	8	6	2	0	0	1	2	30	5
1962	Below Norma	15	10	22	-14	-6	-1	0	0	3	2	-9	-1	2
1963	Wet	-4	0	11	3	1	0	0	0	0	0	0	-3	1
1964	Dry	2	-3	-5	-4	-1	0	0	1	-5	3	9	-10	-1
1965	Wet	-10	-3	-4	0	-2	-1	0	-1	-2	1	-2	-3	-2
1966	Below Norma	-7	-2	2	0	0	0	0	0	0	0	0	-1	-1
1967	Wet	-6	-3	7	1	0	0	0	0	0	0	0	0	0
1968	Below Norma	0	0	0	0	0	0	0	0	0	0	-1	-3	0
1969	Wet	1	2	-2	2	0	0	-1	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	-1	-2	0	0	-1	-1	0	0	0	0	0	0	0
1972	Below Norma	1	0	0	0	0	0	0	0	1	0	2	4	1
1973	Above Norm	9	17	2	0	0	0	0	0	0	0	0	0	2
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	1	10	-17	-11	-3	-3	2	2	-7	-2
1977	Critical	1	14	-3	-13	-21	-37	-24	-8	-3	3	9	28	-5
1978	Above Norm	13	9	4	3	1	-2	-4	5	1	0	1	3	3
1979	Below Norma	2	1	-1	3	4	0	-1	0	0	1	1	-1	1
1980	Above Norm	0	9	19	3	1	1	-2	0	0	0	0	0	3
1981	Dry	0	0	0	0	0	0	0	0	-1	-1	1	-1	0
1982	Wet	0	2	0	0	0	0	1	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-2	-3	-2	-2	0	0	0	2	5	0
1986	Wet	1	-1	0	0	0	2	0	0	0	-6	-1	-2	-1
1987	Dry	-13	-4	0	-2	6	2	0	0	0	2	0	3	-1
1988	Critical	4	-8	-4	-1	-1	-1	0	0	0	0	-2	-1	-1
1989	Dry	0	1	-3	-9	1	-4	0	0	1	2	-3	7	-1
1990	Critical	-4	-4	-1	9	4	1	0	0	0	0	0	0	0
1991	Critical	0	0	0	-1	-1	-1	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	4	9	1
1993	Above Norm	4	-1	2	-8	0	0	0	1	1	0	0	1	0
1994	Critical	1	1	0	-1	3	2	1	0	-2	-2	5	-25	-1
Average		0	1	0	-1	-1	-1	-1	0	0	0	0	0	0
Wet		-1	1	1	0	0	0	0	0	0	0	0	0	0
Above Norm		1	4	4	1	1	0	0	0	0	0	0	-1	1
Below Norma		0	-1	0	-2	0	0	0	0	0	1	-1	1	0
Dry		1	0	-2	-5	1	1	0	0	-1	0	2	1	0
Critical		-1	0	-1	0	-6	-10	-4	-1	-1	-1	1	1	-2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-7%	-12%	-1%	-2%	-3%	-1%	0%	1%	-1%	-2%	-1%	-2%
1924	Critical	1%	1%	-1%	2%	-14%	-30%	-11%	-1%	-1%	-2%	-1%	2%	-4%
1925	Dry	0%	-1%	-6%	-5%	9%	23%	6%	1%	-1%	-1%	0%	1%	2%
1926	Dry	1%	-2%	-1%	0%	0%	0%	0%	-1%	0%	3%	2%	2%	0%
1927	Wet	1%	1%	4%	2%	0%	1%	0%	0%	1%	0%	1%	2%	1%
1928	Above Normal	0%	5%	18%	8%	6%	2%	2%	-2%	-1%	0%	0%	-3%	3%
1929	Critical	-1%	0%	-2%	1%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	10%	4%	-14%	0%
1931	Critical	-6%	-1%	2%	3%	-12%	-9%	6%	2%	-1%	-12%	-5%	2%	-3%
1932	Dry	1%	0%	0%	-1%	-3%	3%	0%	-1%	1%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-2%	-8%	-3%	-1%	0%	0%	0%	-1%	-1%	-1%
1935	Below Normal	0%	0%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	0%	0%
1937	Below Normal	-1%	-1%	0%	0%	-3%	0%	0%	0%	1%	0%	0%	0%	0%
1938	Wet	0%	3%	5%	0%	-2%	0%	0%	0%	0%	0%	0%	1%	1%
1939	Dry	1%	1%	0%	0%	0%	0%	0%	0%	3%	-4%	3%	-9%	0%
1940	Above Normal	-9%	-4%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1942	Wet	3%	6%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	0%	0%	0%	0%	2%	2%	1%	0%	0%	0%	1%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	0%
1945	Below Normal	-1%	-1%	-2%	-2%	-1%	-1%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	4%	8%	0%	4%	2%	-1%	1%	0%	4%	3%	13%	3%
1947	Dry	8%	2%	-6%	-3%	-4%	-1%	0%	-1%	0%	2%	2%	2%	0%
1948	Below Normal	-1%	1%	0%	-1%	4%	3%	1%	1%	0%	5%	-3%	-2%	0%
1949	Dry	-3%	-3%	-1%	0%	0%	-2%	-1%	0%	0%	-7%	-4%	3%	-1%
1950	Below Normal	1%	-5%	-5%	-4%	-5%	-1%	0%	-3%	2%	3%	2%	-2%	-1%
1951	Above Normal	5%	7%	1%	1%	2%	0%	-1%	0%	2%	4%	-4%	-2%	1%
1952	Wet	0%	1%	1%	0%	0%	1%	3%	0%	0%	0%	0%	0%	1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1955	Dry	5%	3%	-5%	-1%	-1%	2%	3%	1%	-2%	2%	3%	0%	1%
1956	Wet	0%	0%	0%	0%	-4%	-2%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	1%	3%	1%	0%	0%	0%	0%	-2%	-3%	0%
1958	Wet	-1%	15%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1960	Dry	1%	3%	11%	-20%	3%	1%	0%	0%	-8%	-3%	0%	3%	-1%
1961	Dry	2%	0%	-1%	6%	4%	9%	4%	0%	0%	1%	2%	20%	4%
1962	Below Normal	8%	6%	9%	-6%	-3%	-1%	0%	-1%	6%	3%	-10%	0%	1%
1963	Wet	-2%	0%	13%	3%	1%	0%	0%	0%	0%	1%	0%	-2%	1%
1964	Dry	1%	-2%	-6%	-4%	-1%	0%	0%	1%	-8%	3%	6%	-6%	-1%
1965	Wet	-5%	-1%	-2%	0%	-5%	-3%	0%	-2%	-4%	2%	-3%	-2%	-2%
1966	Below Normal	-4%	-1%	3%	0%	0%	-1%	0%	0%	0%	0%	-1%	-1%	0%
1967	Wet	-2%	-2%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	0%
1969	Wet	0%	1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	3%	2%	1%
1973	Above Normal	4%	9%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	4%	-12%	-12%	-3%	-2%	1%	1%	-3%	-2%
1977	Critical	0%	6%	-1%	-7%	-10%	-24%	-20%	-7%	-2%	2%	5%	14%	-3%
1978	Above Normal	5%	4%	1%	2%	1%	-2%	-4%	6%	1%	-1%	2%	2%	2%
1979	Below Normal	1%	0%	0%	2%	4%	0%	-1%	1%	0%	1%	1%	-1%	1%
1980	Above Normal	0%	5%	14%	3%	0%	1%	-2%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	1%	-1%	0%
1982	Wet	0%	1%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-3%	-3%	-2%	-2%	0%	1%	0%	1%	3%	0%
1986	Wet	1%	-1%	0%	0%	0%	1%	0%	-1%	0%	-10%	-1%	-2%	-1%
1987	Dry	-8%	-3%	0%	-1%	3%	2%	0%	-1%	-1%	2%	0%	2%	0%
1988	Critical	2%	-4%	-2%	-1%	-1%	-1%	0%	0%	0%	-1%	-1%	-1%	-1%
1989	Dry	0%	0%	-1%	-4%	0%	-3%	0%	0%	2%	3%	-2%	5%	0%
1990	Critical	-2%	-2%	0%	5%	3%	1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	5%	1%
1993	Above Normal	1%	0%	1%	-4%	0%	0%	0%	1%	1%	0%	1%	1%	0%
1994	Critical	1%	0%	0%	0%	1%	2%	1%	0%	-3%	-1%	3%	-10%	-1%
Average		0%	1%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		1%	2%	4%	1%	1%	0%	0%	1%	0%	0%	0%	0%	1%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	1%	1%	-1%	0%	0%
Dry		1%	0%	-1%	-2%	1%	2%	1%	0%	-1%	1%	1%	1%	0%
Critical		0%	0%	0%	0%	-3%	-6%	-3%	-1%	-1%	-1%	0%	1%	-1%

Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
 No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	120	117	113	92	100	70	41	37	45	48	38	75	75
1923	Below Normal	117	117	107	73	74	71	48	44	47	33	51	93	73
1924	Critical	106	117	139	153	203	218	129	108	122	99	103	107	134
1925	Dry	145	156	151	173	130	116	61	38	60	53	72	96	104
1926	Dry	135	125	146	167	120	115	60	62	57	59	78	108	103
1927	Wet	145	90	41	51	64	63	41	38	33	29	34	82	59
1928	Above Normal	119	92	61	67	47	62	43	43	39	46	43	104	64
1929	Critical	135	125	153	170	183	170	104	89	94	77	90	117	126
1930	Dry	148	151	156	103	86	87	51	63	62	67	72	113	97
1931	Critical	148	132	153	165	207	167	114	109	115	92	112	119	136
1932	Dry	143	151	131	64	119	145	99	77	73	66	69	104	104
1933	Critical	133	121	144	159	150	149	91	79	91	78	91	102	116
1934	Critical	134	153	147	141	142	185	112	99	100	72	88	119	124
1935	Below Normal	147	151	173	116	115	79	54	53	44	40	54	104	94
1936	Below Normal	134	120	144	118	102	47	37	42	58	34	52	93	82
1937	Below Normal	127	118	133	162	85	64	43	28	62	45	49	82	83
1938	Wet	127	128	68	83	60	43	26	23	23	47	39	36	58
1939	Dry	26	41	106	165	160	122	87	57	50	61	71	117	89
1940	Above Normal	145	125	142	133	90	49	34	40	44	31	34	90	80
1941	Wet	123	127	123	80	76	44	31	26	56	56	39	55	70
1942	Wet	58	87	98	72	41	46	38	31	48	59	42	42	55
1943	Wet	35	43	41	59	36	36	34	41	66	39	35	81	45
1944	Dry	127	120	138	162	151	71	56	47	48	53	75	97	95
1945	Below Normal	129	116	107	103	96	53	57	45	42	31	47	94	77
1946	Below Normal	120	104	79	60	75	63	50	46	45	34	54	96	69
1947	Dry	123	123	147	127	121	92	59	69	57	52	76	115	97
1948	Below Normal	149	130	164	162	188	109	58	51	36	28	53	95	102
1949	Dry	120	117	142	174	155	81	57	69	60	49	84	111	101
1950	Below Normal	136	121	148	132	63	62	43	42	35	37	42	84	79
1951	Above Normal	124	68	60	49	29	48	47	32	29	30	34	99	54
1952	Wet	121	129	126	88	56	63	22	11	32	44	32	32	63
1953	Wet	29	66	108	65	68	79	43	30	27	24	37	64	53
1954	Above Normal	63	88	124	159	48	60	43	50	38	34	33	93	69
1955	Dry	132	143	131	68	66	78	74	69	58	46	71	104	87
1956	Wet	133	142	135	67	56	46	41	42	51	58	43	42	71
1957	Above Normal	28	40	80	141	124	61	49	35	32	29	37	101	63
1958	Wet	114	65	78	54	83	89	14	7	39	47	36	37	55
1959	Below Normal	29	55	119	150	63	81	67	50	47	38	48	104	71
1960	Dry	136	129	145	178	152	57	51	65	52	62	69	106	100
1961	Dry	142	141	179	157	144	88	57	70	56	49	72	96	104
1962	Below Normal	126	129	155	161	131	67	51	49	41	35	50	116	92
1963	Wet	124	43	58	50	62	64	56	38	35	25	31	83	56
1964	Dry	122	118	49	66	75	71	68	67	53	56	89	100	78
1965	Wet	132	141	94	62	46	64	44	43	46	35	40	72	68
1966	Below Normal	114	105	62	62	64	59	47	47	42	37	48	110	66
1967	Wet	152	148	146	87	51	57	31	18	33	36	31	30	68
1968	Below Normal	27	51	102	119	71	62	55	51	42	37	48	99	64
1969	Wet	129	130	109	115	59	62	33	20	20	47	39	39	67
1970	Wet	26	47	70	36	48	42	37	38	39	36	34	92	45
1971	Wet	136	93	58	38	60	45	38	33	26	23	33	74	55
1972	Below Normal	69	96	121	109	112	56	45	56	49	40	49	111	76
1973	Above Normal	160	108	67	75	91	61	49	50	51	29	42	89	73
1974	Wet	135	68	52	63	49	38	35	41	56	37	39	53	55
1975	Wet	30	45	82	93	74	39	37	38	47	39	37	53	51
1976	Critical	32	31	67	136	173	123	76	79	105	113	118	135	99
1977	Critical	160	138	170	144	189	188	135	116	119	85	99	119	139
1978	Above Normal	160	168	172	123	110	121	63	40	63	53	40	74	99
1979	Below Normal	113	127	141	113	58	43	45	38	34	28	52	97	74
1980	Above Normal	138	112	85	72	50	61	49	46	55	59	42	75	70
1981	Dry	108	106	143	155	57	62	55	50	50	61	74	112	86
1982	Wet	135	107	35	67	37	44	17	11	44	54	40	29	52
1983	Wet	12	27	58	53	45	29	36	26	20	16	11	14	29
1984	Wet	22	13	38	48	25	38	45	46	50	31	38	88	40
1985	Dry	113	85	36	45	84	94	73	57	42	56	92	93	72
1986	Wet	109	116	146	102	82	42	23	18	53	98	49	65	75
1987	Dry	90	98	139	168	142	96	64	64	57	63	85	110	98
1988	Critical	145	135	157	141	136	172	88	85	79	56	93	124	118
1989	Dry	155	160	167	157	216	88	41	54	34	49	85	98	109
1990	Critical	116	130	163	134	149	98	78	78	91	103	112	121	115
1991	Critical	160	165	168	186	205	120	77	72	86	108	113	105	130
1992	Critical	156	178	173	208	137	96	56	65	68	58	89	119	117
1993	Above Normal	158	174	182	137	90	60	43	47	58	46	39	76	92
1994	Critical	116	131	151	176	173	89	57	66	62	108	114	153	116
Average		113	110	116	112	100	81	55	51	54	51	59	90	83
Wet		96	88	84	68	56	51	34	29	40	42	36	55	57
Above Normal		121	109	108	105	78	65	46	42	45	41	38	88	74
Below Normal		110	110	125	117	93	65	50	46	45	36	50	98	79
Dry		123	123	132	133	124	91	63	61	54	57	77	105	95
Critical		129	130	149	159	171	148	93	87	94	87	102	120	122

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)

Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	120	118	113	92	99	70	41	37	45	49	38	75	75
1923	Below Normal	118	109	95	72	72	72	48	44	46	33	51	92	71
1924	Critical	108	118	140	154	146	199	115	107	125	98	102	107	127
1925	Dry	144	154	142	166	172	142	64	38	58	50	70	98	108
1926	Dry	135	123	145	166	118	107	59	61	54	60	79	111	101
1927	Wet	147	91	43	52	68	66	41	38	33	28	34	83	60
1928	Above Normal	119	97	71	72	51	68	42	42	39	45	43	100	66
1929	Critical	134	125	150	171	184	170	104	88	89	75	90	117	125
1930	Dry	148	150	156	103	77	86	51	64	60	57	78	100	94
1931	Critical	139	130	156	171	162	152	113	110	118	84	106	120	130
1932	Dry	144	151	131	79	122	146	100	75	74	66	69	103	105
1933	Critical	134	121	144	159	149	149	91	79	91	77	91	101	115
1934	Critical	134	154	147	142	140	184	111	99	100	71	87	118	124
1935	Below Normal	146	151	172	118	115	76	54	53	44	40	53	104	94
1936	Below Normal	134	120	143	118	103	47	37	42	58	35	51	94	82
1937	Below Normal	126	117	133	161	85	64	43	28	63	46	50	82	83
1938	Wet	126	132	70	86	60	43	26	23	23	47	39	36	59
1939	Dry	27	41	106	165	159	120	87	57	50	58	73	106	88
1940	Above Normal	133	121	141	131	89	49	34	40	44	31	34	90	78
1941	Wet	123	127	122	80	76	44	31	26	56	56	39	55	70
1942	Wet	60	92	101	72	41	46	38	31	48	59	42	42	56
1943	Wet	35	43	41	59	36	36	35	41	66	39	35	81	45
1944	Dry	128	120	138	163	151	72	56	47	52	76	98	96	96
1945	Below Normal	127	115	105	101	96	53	57	45	42	31	47	94	76
1946	Below Normal	119	108	82	60	75	62	49	47	45	34	55	108	70
1947	Dry	133	125	138	124	117	99	60	69	59	53	78	118	98
1948	Below Normal	148	131	164	162	193	111	58	51	34	30	52	93	102
1949	Dry	117	114	141	173	156	71	56	68	60	46	79	115	100
1950	Below Normal	138	115	140	126	60	60	44	40	35	36	43	82	77
1951	Above Normal	128	72	60	50	30	48	47	31	28	33	33	97	55
1952	Wet	121	130	128	88	56	64	22	11	32	44	32	32	63
1953	Wet	29	66	108	65	68	79	43	30	27	24	37	65	53
1954	Above Normal	63	88	124	159	48	60	43	50	38	35	33	93	69
1955	Dry	139	145	124	67	65	107	77	70	53	44	69	104	89
1956	Wet	132	142	135	67	54	46	41	42	51	58	42	42	71
1957	Above Normal	28	40	80	143	126	61	49	35	31	28	36	100	63
1958	Wet	113	73	77	53	83	89	14	7	39	47	36	37	56
1959	Below Normal	29	55	119	150	63	81	68	50	46	38	48	104	71
1960	Dry	136	132	155	147	159	58	51	66	50	60	69	109	99
1961	Dry	144	139	176	167	151	98	61	70	55	49	73	115	108
1962	Below Normal	138	133	170	153	127	67	51	47	44	38	44	115	94
1963	Wet	121	43	66	53	60	61	56	38	36	26	32	82	56
1964	Dry	123	116	46	64	75	71	68	68	54	57	94	95	77
1965	Wet	126	139	92	62	42	63	44	42	40	34	39	71	66
1966	Below Normal	109	104	63	62	60	42	46	47	42	37	47	109	64
1967	Wet	148	145	151	87	51	58	31	18	33	36	30	30	68
1968	Below Normal	27	51	102	119	71	62	55	51	42	36	47	97	63
1969	Wet	130	130	108	115	59	62	33	20	20	47	39	39	67
1970	Wet	26	47	70	36	48	42	37	38	39	36	34	92	45
1971	Wet	136	92	57	38	50	43	38	33	26	23	33	74	54
1972	Below Normal	70	96	121	109	114	56	45	56	55	41	50	114	77
1973	Above Normal	165	118	68	74	91	60	49	50	51	29	42	89	74
1974	Wet	135	68	52	63	49	38	35	41	56	37	39	53	55
1975	Wet	30	45	83	93	74	39	37	38	47	40	37	53	51
1976	Critical	32	31	67	137	176	111	68	77	106	114	119	131	97
1977	Critical	159	146	171	136	198	182	119	109	117	87	108	137	139
1978	Above Normal	164	174	174	125	111	115	62	39	63	51	39	75	100
1979	Below Normal	114	128	140	115	59	43	45	39	34	28	53	96	74
1980	Above Normal	138	118	97	72	49	62	49	46	55	59	42	75	72
1981	Dry	108	106	143	155	57	61	55	50	49	61	75	112	86
1982	Wet	134	109	35	68	37	44	17	11	44	54	40	29	52
1983	Wet	12	27	58	53	45	29	36	26	20	16	11	14	29
1984	Wet	22	13	38	48	25	38	45	46	50	31	38	88	40
1985	Dry	112	85	36	43	82	81	70	57	43	56	93	97	71
1986	Wet	110	115	146	102	82	41	23	18	53	86	46	64	74
1987	Dry	84	96	138	168	144	97	64	64	56	65	84	112	98
1988	Critical	149	131	154	141	130	171	88	85	77	55	92	124	116
1989	Dry	155	161	164	151	212	86	40	53	36	52	84	102	108
1990	Critical	114	127	162	141	152	100	79	78	92	103	113	121	115
1991	Critical	161	165	168	185	206	120	77	72	86	108	113	105	130
1992	Critical	156	178	173	208	137	85	55	65	67	58	90	124	116
1993	Above Normal	160	174	184	133	89	60	43	47	58	45	39	76	92
1994	Critical	116	131	150	175	175	90	57	66	65	106	118	137	116
Average		114	110	116	111	99	80	54	50	54	51	59	90	82
Wet		96	89	85	69	55	51	34	29	40	41	36	55	57
Above Normal		122	112	111	105	79	65	46	42	45	41	38	87	74
Below Normal		110	109	125	116	92	64	50	46	45	36	49	99	78
Dry		124	122	130	131	126	94	64	61	54	55	78	106	95
Critical		128	130	148	160	163	143	90	86	94	87	102	120	121

Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normæ	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Norma	1	-8	-12	0	-3	1	0	0	0	0	0	-1	-2
1924	Critical	1	1	1	2	-57	-19	-14	-1	3	-1	-1	0	-7
1925	Dry	-1	-2	-9	-7	41	26	3	0	-2	-3	-2	2	4
1926	Dry	1	-2	-1	-1	-2	-8	-1	-2	-3	1	1	3	-1
1927	Wet	2	1	2	1	5	4	0	0	0	-1	-1	1	1
1928	Above Normæ	0	5	10	6	4	6	-1	-1	0	-1	0	-3	2
1929	Critical	-1	0	-2	1	0	0	0	-1	-5	-2	0	0	-1
1930	Dry	0	-1	0	0	-9	-2	0	0	-2	-10	6	-13	-2
1931	Critical	-9	-2	3	5	-45	-16	-1	1	3	-8	-6	1	-6
1932	Dry	1	0	0	15	3	1	0	-2	1	0	0	0	2
1933	Critical	0	0	-1	0	-1	0	0	0	0	-1	-1	-1	0
1934	Critical	0	0	0	1	-3	-1	-1	0	0	-1	-1	-1	-1
1935	Below Norma	0	0	-1	1	0	-3	0	0	0	0	0	0	0
1936	Below Norma	0	0	0	0	0	0	0	0	0	1	-1	0	0
1937	Below Norma	-1	-1	0	-1	-1	0	0	0	1	1	0	0	0
1938	Wet	0	4	2	3	0	0	0	0	0	0	0	0	1
1939	Dry	0	0	0	0	0	-2	0	0	0	-3	2	-11	-1
1940	Above Normæ	-12	-5	-1	-2	0	0	0	0	0	0	0	0	-2
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	2	5	2	0	0	0	0	0	0	0	0	0	1
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	1	0	0	0	0	1	0	0	-1	-1	1	1	0
1945	Below Norma	-2	-2	-2	-2	0	0	0	0	0	0	0	0	-1
1946	Below Norma	-1	4	4	0	0	-1	0	1	0	0	2	12	2
1947	Dry	10	1	-9	-3	-4	8	1	-1	2	1	2	3	1
1948	Below Norma	-1	1	0	0	5	2	0	0	-2	2	-2	-2	0
1949	Dry	-3	-3	-1	0	1	-11	-1	0	0	-3	-4	4	-2
1950	Below Norma	2	-5	-7	-6	-3	-1	0	-3	0	-1	1	-2	-2
1951	Above Normæ	5	4	1	1	1	0	0	-1	-1	3	-1	-2	1
1952	Wet	0	1	2	0	0	1	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	2	0
1954	Above Normæ	1	0	0	0	0	0	0	0	0	1	0	0	0
1955	Dry	7	3	-7	-1	-1	29	3	0	-6	-3	-1	0	2
1956	Wet	-1	0	0	0	-2	0	0	0	0	0	0	0	0
1957	Above Normæ	0	0	0	1	3	0	0	0	0	-1	-1	-2	0
1958	Wet	0	8	-1	0	0	0	0	0	0	0	0	0	1
1959	Below Norma	0	0	0	0	0	0	0	0	-1	0	0	1	0
1960	Dry	1	3	10	-32	6	1	0	1	-2	-2	0	3	-1
1961	Dry	3	-1	-2	10	6	10	4	0	-1	1	1	19	4
1962	Below Norma	12	5	15	-8	-3	-1	0	-1	4	3	-6	-1	2
1963	Wet	-2	0	8	3	-2	-3	0	0	0	1	1	-2	0
1964	Dry	1	-3	-3	-2	-1	0	-1	1	1	0	5	-5	0
1965	Wet	-6	-2	-2	0	-5	-1	0	-1	-6	-1	0	-2	-2
1966	Below Norma	-5	-1	1	0	-4	-17	-1	0	-1	0	0	-1	-2
1967	Wet	-4	-2	5	0	0	1	0	0	0	0	0	0	0
1968	Below Norma	0	0	0	0	0	0	0	0	0	-1	-1	-2	0
1969	Wet	0	0	-1	1	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	-1	0	0	-10	-1	0	0	0	0	0	0	-1
1972	Below Norma	0	0	0	0	2	0	0	0	6	0	1	3	1
1973	Above Normæ	6	10	1	0	0	0	0	0	0	0	0	0	1
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	2	3	-11	-8	-2	1	1	1	-5	-2
1977	Critical	-1	7	0	-8	9	-6	-16	-7	-2	2	8	18	0
1978	Above Normæ	3	6	2	2	1	-6	0	-1	1	-2	-1	1	1
1979	Below Norma	1	0	-1	2	1	0	0	0	0	0	1	-1	0
1980	Above Normæ	0	6	12	1	0	0	0	0	0	0	0	0	2
1981	Dry	0	0	0	0	0	-1	0	0	-1	-1	1	-1	0
1982	Wet	-1	1	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-1	-2	-13	-2	0	1	0	1	3	-1
1986	Wet	1	-1	0	0	0	0	0	0	0	-12	-4	-1	-1
1987	Dry	-7	-2	0	0	3	1	0	0	0	2	0	2	0
1988	Critical	4	-4	-2	-1	-6	-1	0	0	-2	-1	-1	-1	-1
1989	Dry	0	0	-3	-6	-4	-2	0	0	2	2	-2	4	-1
1990	Critical	-2	-3	-1	6	4	1	0	0	0	0	0	0	1
1991	Critical	0	0	0	-1	1	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	-11	0	0	-1	0	2	6	0
1993	Above Normæ	2	1	2	-4	0	0	0	1	1	-1	0	1	0
1994	Critical	1	0	0	0	2	1	0	0	3	-2	4	-17	-1
Average		0	0	0	0	-1	-1	-1	0	0	-1	0	0	0
Wet		-1	1	1	0	-1	0	0	0	0	-1	0	0	0
Above Normæ		0	3	3	0	1	0	0	0	0	0	0	0	0
Below Norma		0	0	0	-1	0	-1	0	0	0	0	0	0	0
Dry		1	0	-2	-2	2	2	0	0	-1	-1	1	1	0
Critical		-1	0	0	1	-8	-5	-3	-1	0	-1	1	0	-1

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1923	Below Normal	1%	-7%	-11%	-1%	-3%	2%	0%	0%	0%	1%	0%	-1%	-2%
1924	Critical	1%	1%	1%	1%	-28%	-9%	-11%	-1%	3%	-1%	-1%	0%	-4%
1925	Dry	0%	-1%	-6%	-4%	32%	23%	5%	1%	-4%	-6%	-3%	2%	3%
1926	Dry	0%	-1%	-1%	0%	-1%	-7%	-2%	-3%	-5%	1%	1%	3%	-1%
1927	Wet	1%	1%	4%	2%	7%	6%	1%	0%	1%	-3%	-1%	1%	2%
1928	Above Normal	0%	5%	16%	9%	8%	9%	-2%	-2%	0%	-3%	0%	-3%	3%
1929	Critical	-1%	0%	-2%	1%	0%	0%	0%	-1%	-5%	-2%	0%	0%	-1%
1930	Dry	0%	0%	0%	0%	-10%	-2%	0%	1%	-3%	-15%	9%	-12%	-3%
1931	Critical	-6%	-1%	2%	3%	-22%	-9%	-1%	1%	3%	-8%	-5%	1%	-4%
1932	Dry	1%	0%	0%	24%	2%	1%	0%	-2%	1%	-1%	-1%	0%	2%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1934	Critical	0%	0%	0%	1%	-2%	0%	-1%	0%	0%	-1%	-1%	-1%	0%
1935	Below Normal	0%	0%	0%	1%	0%	-4%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	-1%	1%	2%	-1%	0%	0%
1937	Below Normal	-1%	-1%	0%	-1%	0%	0%	0%	0%	1%	2%	1%	0%	0%
1938	Wet	0%	3%	3%	3%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1939	Dry	1%	0%	0%	0%	0%	-1%	0%	-1%	-1%	-5%	3%	-9%	-1%
1940	Above Normal	-8%	-4%	-1%	-2%	0%	0%	0%	0%	0%	1%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1942	Wet	3%	6%	2%	0%	0%	0%	0%	0%	0%	-1%	0%	1%	1%
1943	Wet	0%	0%	0%	1%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	1%	1%	0%	-3%	-2%	1%	1%	0%
1945	Below Normal	-1%	-1%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	-1%	4%	5%	0%	0%	-2%	0%	2%	-1%	0%	3%	13%	2%
1947	Dry	8%	1%	-6%	-2%	-3%	8%	1%	-1%	4%	2%	2%	2%	1%
1948	Below Normal	-1%	1%	0%	0%	2%	2%	0%	1%	-6%	7%	-3%	-2%	0%
1949	Dry	-3%	-3%	-1%	0%	1%	-13%	0%	0%	0%	-6%	-5%	-3%	-2%
1950	Below Normal	2%	-4%	-5%	-4%	-5%	-2%	0%	-6%	-1%	-2%	2%	-2%	-2%
1951	Above Normal	4%	6%	2%	2%	2%	0%	0%	-4%	-4%	11%	-4%	-2%	1%
1952	Wet	0%	1%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	1%	3%	0%	0%	0%
1955	Dry	5%	2%	-5%	-1%	-2%	37%	4%	1%	-9%	-6%	-2%	0%	2%
1956	Wet	0%	0%	0%	0%	-3%	-1%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	-1%	-3%	-2%	-2%	0%
1958	Wet	0%	12%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	-2%	0%	1%	0%	0%
1960	Dry	0%	3%	7%	-18%	4%	1%	0%	1%	-5%	-4%	1%	3%	-1%
1961	Dry	2%	-1%	-1%	6%	4%	11%	7%	0%	-2%	1%	2%	20%	4%
1962	Below Normal	10%	4%	10%	-5%	-3%	-1%	0%	-3%	9%	9%	-11%	0%	2%
1963	Wet	-2%	0%	14%	5%	-3%	-4%	0%	0%	1%	4%	3%	-2%	1%
1964	Dry	1%	-2%	-6%	-4%	-1%	1%	-1%	2%	2%	1%	5%	-5%	-1%
1965	Wet	-5%	-2%	-2%	0%	-10%	-2%	0%	-3%	-12%	-3%	-1%	-2%	-3%
1966	Below Normal	-4%	-1%	1%	0%	-6%	-29%	-3%	0%	-1%	-1%	-1%	-1%	-4%
1967	Wet	-3%	-2%	3%	1%	0%	2%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	-1%	-1%	-2%	-2%	-1%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-17%	-3%	0%	0%	0%	0%	0%	0%	-2%
1972	Below Normal	1%	0%	0%	0%	2%	0%	0%	0%	12%	1%	2%	3%	2%
1973	Above Normal	4%	10%	2%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	1%	2%	-9%	-11%	-3%	1%	1%	1%	-4%	-2%
1977	Critical	-1%	5%	0%	-5%	5%	-3%	-12%	-6%	-2%	3%	9%	15%	1%
1978	Above Normal	2%	4%	1%	2%	1%	-5%	0%	-2%	1%	-4%	-3%	2%	0%
1979	Below Normal	1%	0%	0%	2%	2%	0%	0%	1%	-1%	0%	1%	-1%	0%
1980	Above Normal	0%	6%	14%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	-2%	-1%	-1%	-2%	-1%	1%	-1%	0%
1982	Wet	-1%	1%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-3%	-2%	-14%	-3%	0%	3%	0%	1%	4%	-1%
1986	Wet	1%	-1%	0%	0%	0%	-1%	1%	0%	1%	-12%	-8%	-2%	-2%
1987	Dry	-7%	-2%	0%	0%	2%	1%	0%	0%	-1%	4%	0%	2%	0%
1988	Critical	3%	-3%	-2%	-1%	-4%	-1%	0%	0%	-3%	-2%	-1%	-1%	-1%
1989	Dry	0%	0%	-2%	-4%	-2%	-3%	-1%	-1%	7%	5%	-2%	4%	0%
1990	Critical	-2%	-2%	-1%	5%	3%	1%	1%	1%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	-11%	-1%	0%	-1%	0%	2%	5%	-1%
1993	Above Normal	2%	0%	1%	-3%	0%	0%	0%	1%	1%	-1%	-1%	1%	0%
1994	Critical	1%	0%	0%	0%	1%	2%	1%	0%	4%	-2%	4%	-11%	0%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	1%	1%	1%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	3%	4%	1%	1%	0%	0%	-1%	0%	0%	-1%	0%	1%
Below Normal		0%	0%	0%	-1%	-1%	-2%	0%	0%	1%	1%	-1%	0%	0%
Dry		1%	0%	-1%	0%	1%	3%	0%	0%	-1%	-2%	1%	1%	0%
Critical		0%	0%	0%	0%	-4%	-3%	-3%	-1%	0%	-1%	1%	0%	-1%

Monthly Average X2 Location (km)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	79	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	87	87	70	67	67	74	74	71	71	78	84	84	76
1924	Critical	87	87	86	83	83	76	76	85	85	86	86	86	84
1925	Dry	90	90	84	83	83	65	65	72	72	82	86	86	80
1926	Dry	87	87	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	88	88	77	70	70	59	59	65	65	75	83	83	73
1928	Above Normal	87	87	80	75	75	58	58	69	69	78	84	84	75
1929	Critical	88	88	84	84	84	78	78	81	81	85	87	87	84
1930	Dry	88	88	81	77	77	68	68	77	77	83	85	85	80
1931	Critical	88	88	86	82	82	81	81	85	85	86	87	87	85
1932	Dry	88	88	78	75	75	74	74	76	76	82	86	86	80
1933	Critical	88	88	86	80	80	78	78	81	81	86	86	86	83
1934	Critical	90	90	83	77	77	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	83	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	85	70	70	63	63	69	69	79	85	85	76
1937	Below Normal	88	88	85	82	82	61	61	69	69	79	84	84	78
1938	Wet	88	88	62	63	63	47	47	54	54	72	82	82	67
1939	Dry	78	78	84	83	83	76	76	78	78	83	85	85	81
1940	Above Normal	88	88	86	72	72	54	54	65	65	75	83	83	74
1941	Wet	87	87	70	57	57	51	51	58	58	75	83	83	68
1942	Wet	83	83	65	57	57	62	62	62	62	75	83	83	69
1943	Wet	82	82	71	59	59	54	54	67	67	77	84	84	70
1944	Dry	88	88	84	83	83	72	72	77	77	83	83	83	81
1945	Below Normal	87	87	80	82	82	66	66	74	74	79	84	84	79
1946	Below Normal	87	87	64	61	61	69	69	73	73	78	84	84	74
1947	Dry	87	87	82	82	82	82	73	77	77	82	85	85	81
1948	Below Normal	88	88	85	83	83	76	76	69	69	78	83	83	80
1949	Dry	87	87	84	83	83	67	67	75	75	82	84	84	80
1950	Below Normal	88	88	86	78	78	71	71	73	73	80	84	84	80
1951	Above Normal	87	87	56	55	55	62	62	71	71	75	83	83	71
1952	Wet	87	87	69	58	58	55	55	55	55	71	80	80	68
1953	Wet	82	82	69	57	57	70	70	69	69	77	84	84	72
1954	Above Normal	85	85	85	72	72	61	61	66	66	75	83	83	75
1955	Dry	87	87	77	75	75	79	79	77	77	83	86	86	81
1956	Wet	88	88	62	51	51	59	59	63	63	76	83	83	69
1957	Above Normal	78	78	85	82	82	64	64	71	71	76	84	84	77
1958	Wet	82	82	76	67	67	51	51	56	56	73	82	82	69
1959	Below Normal	80	80	85	72	72	67	67	78	78	78	84	84	77
1960	Dry	87	87	85	83	83	72	72	77	77	82	84	84	81
1961	Dry	87	87	82	82	82	74	74	78	78	82	84	84	81
1962	Below Normal	87	87	82	83	83	69	69	74	74	77	84	84	79
1963	Wet	73	73	73	76	76	65	65	63	63	74	83	83	72
1964	Dry	86	86	82	75	75	78	78	78	78	82	83	83	80
1965	Wet	87	87	63	54	54	67	67	66	66	76	84	84	71
1966	Below Normal	87	87	76	70	70	69	69	75	75	78	84	84	77
1967	Wet	88	88	72	63	63	58	58	58	58	68	80	80	69
1968	Below Normal	79	79	82	71	71	64	64	75	75	78	84	84	76
1969	Wet	88	88	77	58	58	54	54	56	56	73	83	83	69
1970	Wet	79	79	66	50	50	59	59	73	73	76	83	83	69
1971	Wet	87	87	65	62	62	63	63	66	66	74	83	83	72
1972	Below Normal	84	84	81	80	80	68	68	76	76	79	84	84	79
1973	Above Normal	88	88	73	59	59	57	57	71	71	76	84	84	72
1974	Wet	87	87	59	51	51	53	53	64	64	76	84	84	68
1975	Wet	79	79	81	80	80	56	56	65	65	76	83	83	74
1976	Critical	77	77	82	83	83	77	77	85	85	86	87	87	82
1977	Critical	87	87	84	85	85	82	82	85	85	86	87	87	85
1978	Above Normal	89	89	82	65	65	57	57	66	66	77	84	84	73
1979	Below Normal	87	87	84	74	74	64	64	71	71	79	85	85	77
1980	Above Normal	87	87	78	58	58	55	55	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	68	68	77	77	81	85	85	79
1982	Wet	87	87	59	56	56	52	52	57	57	75	83	83	67
1983	Wet	71	71	56	52	52	42	42	52	52	60	67	67	57
1984	Wet	73	73	50	54	54	62	62	73	73	76	83	83	68
1985	Dry	86	86	73	79	79	75	75	76	76	82	83	83	79
1986	Wet	86	86	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	87	87	86	82	82	69	69	78	78	83	85	85	81
1988	Critical	88	88	82	73	73	78	78	81	81	85	87	87	82
1989	Dry	89	89	84	84	84	67	67	74	74	82	84	84	80
1990	Critical	87	87	85	79	79	79	79	82	82	86	87	87	83
1991	Critical	89	89	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	73	73	80	80	85	87	87	83
1993	Above Normal	89	89	83	65	65	62	62	64	64	75	83	83	74
1994	Critical	87	87	84	83	83	75	75	79	79	82	85	85	82
Average		86	86	78	72	72	66	66	71	71	79	84	84	76
Wet		83	83	68	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	79	68	68	59	59	67	67	76	83	83	74
Below Normal		86	86	81	75	75	68	68	72	72	79	84	84	77
Dry		87	87	82	80	80	72	72	76	76	82	85	85	80
Critical		87	87	85	82	82	77	77	82	82	85	87	87	83

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average X2 Location (km)

Alternative CP1 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	79	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	87	87	69	67	67	74	74	71	71	79	84	84	76
1924	Critical	87	87	86	83	83	77	77	85	85	86	86	86	84
1925	Dry	90	90	83	83	83	65	65	72	72	82	85	85	80
1926	Dry	87	87	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	88	88	77	70	70	59	59	65	65	75	83	83	73
1928	Above Normal	87	87	81	75	75	57	57	69	69	78	84	84	75
1929	Critical	88	88	84	84	84	78	78	81	81	85	87	87	84
1930	Dry	88	88	81	77	77	68	68	77	77	83	85	85	80
1931	Critical	88	88	86	82	82	81	81	85	85	86	87	87	85
1932	Dry	88	88	78	74	74	74	74	76	76	82	86	86	80
1933	Critical	88	88	86	80	80	78	78	81	81	86	86	86	83
1934	Critical	90	90	83	78	78	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	83	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	85	70	70	63	63	69	69	79	85	85	76
1937	Below Normal	88	88	85	82	82	61	61	69	69	79	84	84	78
1938	Wet	88	88	62	63	63	47	47	54	54	72	82	82	67
1939	Dry	78	78	84	83	83	77	77	78	78	83	84	84	81
1940	Above Normal	87	87	86	72	72	54	54	65	65	75	83	83	74
1941	Wet	87	87	69	57	57	51	51	58	58	75	83	83	68
1942	Wet	84	84	65	57	57	62	62	62	62	75	83	83	70
1943	Wet	82	82	71	59	59	54	54	67	67	77	84	84	70
1944	Dry	88	88	84	83	83	72	72	77	77	82	83	83	81
1945	Below Normal	87	87	80	82	82	66	66	74	74	79	84	84	79
1946	Below Normal	87	87	64	62	62	69	69	73	73	78	84	84	74
1947	Dry	87	87	82	82	82	73	73	77	77	82	85	85	81
1948	Below Normal	87	87	85	83	83	76	76	69	69	79	83	83	80
1949	Dry	87	87	84	83	83	67	67	75	75	82	86	86	80
1950	Below Normal	87	87	86	77	77	71	71	73	73	80	83	83	79
1951	Above Normal	87	87	56	55	55	62	62	71	71	75	83	83	71
1952	Wet	87	87	69	58	58	55	55	55	55	71	80	80	68
1953	Wet	82	82	69	57	57	70	70	69	69	77	84	84	72
1954	Above Normal	85	85	85	72	72	61	61	66	66	75	83	83	75
1955	Dry	87	87	77	75	75	79	79	77	77	83	86	86	81
1956	Wet	88	88	63	51	51	59	59	63	63	76	83	83	69
1957	Above Normal	78	78	85	82	82	64	64	71	71	76	83	83	76
1958	Wet	83	83	76	67	67	51	51	56	56	73	82	82	69
1959	Below Normal	80	80	85	72	72	67	67	78	78	78	84	84	77
1960	Dry	87	87	84	84	84	72	72	77	77	83	84	84	81
1961	Dry	87	87	82	82	82	74	74	78	78	81	84	84	81
1962	Below Normal	87	87	82	82	82	69	69	74	74	77	84	84	79
1963	Wet	73	73	73	76	76	65	65	63	63	74	83	83	72
1964	Dry	86	86	82	75	75	78	78	78	78	83	83	83	80
1965	Wet	87	87	64	54	54	67	67	66	66	77	84	84	71
1966	Below Normal	87	87	76	69	69	69	69	75	75	77	84	84	77
1967	Wet	88	88	72	63	63	58	58	58	58	68	80	80	69
1968	Below Normal	79	79	82	71	71	64	64	75	75	78	84	84	76
1969	Wet	88	88	77	58	58	54	54	56	56	73	83	83	69
1970	Wet	79	79	66	50	50	59	59	73	73	76	83	83	69
1971	Wet	87	87	65	62	62	63	63	66	66	74	83	83	72
1972	Below Normal	84	84	81	80	80	68	68	76	76	78	84	84	79
1973	Above Normal	89	89	73	59	59	57	57	71	71	76	84	84	72
1974	Wet	87	87	59	51	51	53	53	64	64	76	84	84	68
1975	Wet	79	79	81	80	80	56	56	65	65	76	83	83	74
1976	Critical	77	77	82	83	83	76	76	84	84	86	87	87	82
1977	Critical	87	87	83	85	85	81	81	85	85	86	87	87	85
1978	Above Normal	89	89	83	65	65	57	57	66	66	77	84	84	73
1979	Below Normal	87	87	84	75	75	64	64	71	71	79	85	85	77
1980	Above Normal	87	87	77	59	59	55	55	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	69	69	77	77	81	84	84	79
1982	Wet	87	87	59	56	56	52	52	57	57	75	83	83	67
1983	Wet	71	71	56	52	52	42	42	52	52	60	67	67	57
1984	Wet	73	73	50	54	54	62	62	73	73	76	83	83	68
1985	Dry	86	86	73	79	79	75	75	76	76	82	83	83	79
1986	Wet	86	86	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	86	86	86	82	82	69	69	78	78	83	85	85	81
1988	Critical	87	87	82	73	73	78	78	81	81	85	87	87	82
1989	Dry	89	89	84	84	84	67	67	74	74	82	84	84	80
1990	Critical	87	87	84	79	79	79	79	82	82	86	87	87	83
1991	Critical	89	89	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	73	73	80	80	85	87	87	83
1993	Above Normal	89	89	83	65	65	62	62	65	65	75	83	83	74
1994	Critical	87	87	84	83	83	75	75	79	79	83	84	84	82
Average		86	86	78	72	72	66	66	71	71	79	84	84	76
Wet		83	83	68	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	79	68	68	60	60	68	68	76	83	83	74
Below Normal		86	86	81	75	75	68	68	72	72	79	84	84	77
Dry		87	87	82	80	80	72	72	76	76	82	85	85	80
Critical		87	87	85	82	82	77	77	82	82	86	87	87	83

Change in Monthly Average X2 Position (km)
 Alternative CP1 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	1	1	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	-1	-1	1	1	0	0	0	0	0	0
1932	Dry	0	0	0	-1	-1	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	1	1	0	0	0	-1	-1	0
1940	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	1	1	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	-1	0	0	0
1948	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	2	2	0
1950	Below Norm	-1	-1	0	-1	-1	0	0	0	0	0	0	0	0
1951	Above Norm	0	0	0	0	0	0	0	0	0	0	1	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	1	1	0	0	0	0	0	0	0	0	0	0	0
1959	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	-2	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1962	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Norm	1	1	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	-1	-1	0	0	0	0	0	0
1977	Critical	0	0	-1	0	0	-1	-1	0	0	0	1	1	0
1978	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	Below Norm	0	0	0	1	1	0	0	0	0	0	0	0	0
1980	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Norm	0	0	0	0	0	0	0	1	1	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	1	-1	-1	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Norm		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Norm		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average X2 Position (km)
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Norm	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%	0%
1924	Critical	0%	0%	0%	-1%	-1%	1%	1%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	-1%	-1%	1%	1%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	-1%	-1%	0%
1940	Above Norm	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Norm	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1948	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%
1950	Below Norm	-1%	-1%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1962	Below Norm	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%
1963	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Norm	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	-1%	0%	0%	-1%	-1%	0%	0%	1%	1%	1%	0%
1978	Above Norm	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1979	Below Norm	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norm	0%	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norm		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Norm		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville (umhos/cm)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1923	Below Normal	5	-674	-81	0	-62	-32	32	52	39	180	257	111	-15
1924	Critical	-16	69	145	-183	820	496	90	6	81	-106	4	27	119
1925	Dry	13	-156	-183	-116	-7	4	1	0	-1	-3	11	-141	-48
1926	Dry	-114	-62	-33	-30	-1	-4	-4	0	50	0	2	-97	-24
1927	Wet	-59	104	60	-10	1	0	0	-3	-9	-121	-161	-48	-20
1928	Above Normal	-26	574	313	168	3	-1	-3	0	-3	-188	-173	-71	49
1929	Critical	-98	-159	-73	8	-3	-1	1	-5	-8	44	-22	-29	-29
1930	Dry	-2	6	1	1	-11	-2	1	9	-34	-23	-116	-289	-38
1931	Critical	-165	-31	-168	-472	961	924	236	85	-81	-122	41	78	107
1932	Dry	8	-11	0	-182	-115	-27	-7	15	-40	-4	-4	4	-30
1933	Critical	5	1	5	6	0	0	52	-41	-7	-5	-2	10	2
1934	Critical	-9	38	4	-217	-104	-20	-5	1	2	0	-6	-13	-27
1935	Below Normal	9	-7	21	7	0	-14	0	0	0	1	1	5	2
1936	Below Normal	4	2	-2	0	0	0	0	0	-1	1	-3	-27	-2
1937	Below Normal	-20	-6	-19	-33	-1	0	-2	-1	3	4	5	0	-6
1938	Wet	-23	168	7	0	0	0	0	0	0	0	-7	249	33
1939	Dry	131	46	24	-3	-7	7	4	102	-215	-311	-396	-615	-103
1940	Above Normal	-363	-72	-59	-44	4	0	0	-2	-6	0	2	2	-45
1941	Wet	-42	69	3	0	0	0	0	0	0	0	4	8	4
1942	Wet	183	183	6	0	0	0	0	0	0	0	-6	14	32
1943	Wet	1	-17	-1	0	1	0	0	1	1	-1	-3	2	-1
1944	Dry	-9	1	-53	-37	0	14	17	2	-148	-209	-241	-252	-76
1945	Below Normal	-144	-100	-76	-39	-2	-1	-2	-10	-21	22	33	-12	-29
1946	Below Normal	-38	336	40	0	-1	-14	-14	-6	56	-320	176	358	48
1947	Dry	65	-8	-85	-9	-30	-18	-9	0	16	-345	-290	-179	-74
1948	Below Normal	-260	-46	-81	253	140	20	-8	24	440	216	-119	-3	48
1949	Dry	102	3	-33	28	-110	-7	0	1	-6	80	204	149	34
1950	Below Normal	-136	-108	-16	-191	-18	-1	-10	94	105	26	-192	-99	-46
1951	Above Normal	-236	34	0	1	0	0	-3	73	285	8	-90	-83	-1
1952	Wet	-83	-140	-1	0	0	1	0	0	0	0	11	11	-17
1953	Wet	12	10	1	0	0	0	-1	10	6	3	-21	24	4
1954	Above Normal	22	9	4	1	0	0	0	0	36	17	-7	195	23
1955	Dry	58	-114	-59	-14	-16	276	42	-55	-29	-68	18	67	9
1956	Wet	26	-5	12	0	-1	-1	0	0	0	0	3	2	3
1957	Above Normal	6	5	2	55	10	0	0	0	2	-76	-58	-395	-37
1958	Wet	197	257	27	7	0	0	0	0	0	0	14	14	43
1959	Below Normal	13	11	4	1	0	0	3	-15	-36	-22	-16	-9	-5
1960	Dry	-7	-412	-910	-452	40	5	-5	-107	-193	-80	107	69	-162
1961	Dry	-106	-161	29	83	175	270	189	-30	-27	-166	378	-76	46
1962	Below Normal	-253	-211	-177	-102	10	1	-2	55	759	94	-119	-36	2
1963	Wet	-80	113	193	92	9	-2	0	0	-1	147	191	95	63
1964	Dry	83	-159	-154	-25	-3	4	-140	-178	-456	-461	-829	-559	-240
1965	Wet	-257	-305	13	0	1	-3	0	-1	189	41	-131	-101	-46
1966	Below Normal	-9	231	62	-13	-2	19	35	5	-6	-24	-16	-70	18
1967	Wet	6	-44	44	0	0	0	0	0	0	1	12	11	2
1968	Below Normal	8	6	-6	-2	0	0	0	1	-40	235	237	25	39
1969	Wet	-16	-234	3	1	0	0	0	0	0	0	0	20	-19
1970	Wet	15	8	0	0	0	0	0	0	-49	-4	17	12	0
1971	Wet	-159	-71	2	0	-1	0	0	0	0	1	1	35	-16
1972	Below Normal	32	13	5	5	6	1	4	-19	6	-150	-117	-52	-22
1973	Above Normal	406	163	119	3	0	0	0	0	0	-4	-6	-4	56
1974	Wet	44	3	0	0	0	0	0	0	0	0	0	14	5
1975	Wet	14	11	3	0	0	0	0	0	0	0	-1	8	3
1976	Critical	5	4	1	-1	-1	7	-147	-196	60	-55	46	-119	-33
1977	Critical	-372	-434	-1,266	-708	-3,543	-2,047	-429	-185	-156	27	24	90	-750
1978	Above Normal	217	90	27	3	2	4	6	-2	34	36	1	66	40
1979	Below Normal	51	10	-56	383	18	0	-2	-15	-2	-27	28	61	37
1980	Above Normal	-50	429	208	3	-1	-1	0	0	0	0	0	0	49
1981	Dry	1	0	0	0	0	24	43	8	-51	-31	-53	-28	-7
1982	Wet	-61	68	1	0	0	0	0	0	0	0	4	2	1
1983	Wet	1	0	0	0	0	0	0	0	0	0	1	1	0
1984	Wet	2	0	0	0	0	0	0	0	-1	0	1	-3	0
1985	Dry	60	25	-67	-88	-13	-184	-141	-13	12	-4	105	93	-18
1986	Wet	68	22	-15	13	1	0	2	-33	-127	-54	63	-299	-30
1987	Dry	-339	-141	-32	77	64	9	-17	-69	-408	-277	-149	-253	-128
1988	Critical	-126	-162	-61	-6	-6	0	-1	1	-16	98	-80	-131	-41
1989	Dry	42	-4	-324	-75	-206	4	-23	-10	217	-31	159	-123	-31
1990	Critical	-192	-65	96	49	-1	8	5	-2	-2	0	2	3	-8
1991	Critical	-2	3	-18	-30	-40	-7	0	2	0	0	0	1	-8
1992	Critical	0	1	1	-2	-1	0	0	5	-5	-5	-40	-60	-9
1993	Above Normal	107	-64	95	16	0	0	0	33	20	-5	-8	35	19
1994	Critical	20	8	-11	56	119	49	23	18	-236	282	-155	-417	-20
Average		-25	-14	-35	-24	-26	-3	-3	-5	0	-24	-20	-37	-18
Wet		-10	9	17	5	1	0	0	-1	1	1	0	3	2
Above Normal		8	117	71	21	2	0	0	10	37	-21	-34	-26	15
Below Normal		-53	-39	-27	19	6	-2	12	93	17	11	18	5	
Dry		-1	-72	-117	-53	-15	23	-3	-20	-82	-121	-68	-139	-56
Critical		-79	-61	-112	-125	-150	-49	-15	-26	-31	13	-16	-47	-58

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-10%	-11%	0%	-13%	-3%	7%	11%	2%	8%	6%	2%	0%
1924	Critical	0%	1%	2%	-3%	47%	40%	3%	0%	1%	-1%	0%	0%	7%
1925	Dry	0%	-2%	-3%	-2%	-2%	2%	0%	0%	0%	0%	0%	-2%	-1%
1926	Dry	-1%	-1%	0%	-1%	0%	0%	-1%	0%	1%	0%	0%	-1%	0%
1927	Wet	-1%	3%	4%	-2%	1%	0%	0%	-1%	-1%	-8%	-4%	-1%	-1%
1928	Above Normal	0%	14%	10%	15%	1%	0%	-2%	0%	0%	-7%	-4%	-1%	2%
1929	Critical	-1%	-2%	-1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	-1%	-1%	0%	0%	-1%	0%	-2%	-3%	-1%
1931	Critical	-2%	0%	-2%	-8%	34%	29%	5%	1%	-1%	-2%	1%	1%	5%
1932	Dry	0%	0%	0%	-16%	-16%	-3%	0%	1%	-2%	0%	0%	0%	-3%
1933	Critical	0%	0%	0%	0%	0%	0%	2%	-1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-7%	-7%	-2%	0%	0%	0%	0%	0%	0%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	-3%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	-1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	9%	4%	0%	0%	0%	0%	0%	0%	0%	0%	10%	2%
1939	Dry	6%	1%	0%	0%	0%	0%	0%	5%	-5%	-7%	-7%	-8%	-1%
1940	Above Normal	-4%	-1%	-1%	-4%	2%	0%	0%	-1%	0%	0%	0%	0%	-1%
1941	Wet	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	4%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	-1%	-1%	0%	3%	1%	0%	-5%	-5%	-5%	-4%	-1%
1945	Below Normal	-2%	-1%	-2%	-1%	0%	-1%	0%	-1%	-1%	1%	1%	0%	-1%
1946	Below Normal	0%	5%	11%	0%	-1%	-4%	-2%	-1%	3%	-12%	4%	5%	1%
1947	Dry	1%	0%	-2%	0%	-1%	-2%	-1%	0%	0%	-8%	-5%	-2%	-2%
1948	Below Normal	-3%	-1%	-1%	4%	5%	1%	-1%	9%	79%	11%	-3%	0%	8%
1949	Dry	1%	0%	0%	0%	-6%	-3%	0%	0%	0%	2%	3%	2%	0%
1950	Below Normal	-2%	-1%	0%	-6%	-6%	0%	-2%	13%	6%	1%	-4%	-2%	0%
1951	Above Normal	-3%	6%	0%	0%	0%	0%	-1%	12%	17%	0%	-3%	-1%	2%
1952	Wet	-1%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	0%	1%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	0%	3%	1%
1955	Dry	1%	-2%	-2%	-1%	-1%	12%	2%	-3%	-1%	-1%	0%	1%	0%
1956	Wet	0%	0%	-2%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-4%	-2%	-5%	-1%
1958	Wet	4%	6%	1%	3%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%	0%	0%
1960	Dry	0%	-5%	-11%	-6%	3%	1%	0%	-5%	-5%	-2%	2%	1%	-2%
1961	Dry	-1%	-2%	0%	1%	15%	38%	13%	-1%	-1%	-4%	8%	-1%	6%
1962	Below Normal	-3%	-2%	-3%	-2%	1%	0%	0%	5%	37%	4%	-3%	-1%	3%
1963	Wet	-7%	7%	24%	7%	3%	-1%	0%	0%	0%	12%	5%	1%	4%
1964	Dry	1%	-7%	-5%	-2%	0%	0%	-6%	-8%	-12%	-10%	-15%	-8%	-6%
1965	Wet	-3%	-4%	3%	0%	0%	-1%	0%	0%	17%	2%	-3%	-1%	1%
1966	Below Normal	0%	14%	5%	-3%	-1%	6%	4%	0%	0%	-1%	0%	-1%	2%
1967	Wet	0%	-1%	4%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	10%	6%	0%	1%
1969	Wet	0%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1970	Wet	1%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%
1971	Wet	-2%	-2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	-1%	0%	-5%	-3%	-1%	-1%
1973	Above Normal	5%	4%	14%	2%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1974	Wet	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-5%	-4%	1%	-1%	1%	-1%	-1%
1977	Critical	-4%	-4%	-16%	-10%	-57%	-40%	-9%	-3%	-2%	0%	0%	1%	-12%
1978	Above Normal	2%	1%	0%	1%	1%	2%	3%	-1%	5%	2%	0%	1%	1%
1979	Below Normal	1%	0%	-1%	19%	8%	0%	0%	-2%	0%	-1%	1%	1%	2%
1980	Above Normal	-1%	7%	8%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	10%	5%	0%	-1%	-1%	-1%	0%	1%
1982	Wet	-1%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	1%	2%	-10%	-4%	-1%	-11%	-7%	-1%	0%	0%	2%	2%	-2%
1986	Wet	1%	0%	0%	1%	0%	0%	1%	-5%	-10%	-2%	1%	-5%	-2%
1987	Dry	-4%	-2%	0%	1%	4%	3%	-2%	-3%	-10%	-5%	-2%	-3%	-2%
1988	Critical	-1%	-2%	-1%	-1%	-1%	0%	0%	0%	2%	-1%	-1%	-1%	-1%
1989	Dry	0%	0%	-4%	-1%	-3%	1%	-7%	-1%	8%	-1%	3%	-2%	-1%
1990	Critical	-2%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1993	Above Normal	1%	-1%	1%	4%	0%	0%	0%	16%	8%	0%	0%	1%	2%
1994	Critical	0%	0%	0%	1%	7%	4%	1%	1%	-4%	6%	-3%	-5%	1%
Average		0%	0%	0%	0%	0%	1%	0%	1%	2%	0%	0%	0%	0%
Wet		0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Above Normal		0%	3%	3%	2%	0%	0%	0%	3%	3%	-1%	-1%	0%	1%
Below Normal		-1%	0%	0%	1%	0%	0%	0%	2%	9%	1%	0%	0%	1%
Dry		0%	-1%	-2%	-2%	-1%	3%	0%	-1%	-2%	-3%	-1%	-2%	-1%
Critical		-1%	-1%	-1%	-2%	2%	3%	0%	0%	-1%	0%	0%	-1%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island (umhos/cm)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	1	0	0	0	0	0	0	-1	-1	0
1923	Below Normal	6	-743	-120	2	-160	-78	83	136	79	243	295	132	-10
1924	Critical	11	51	158	-210	1,593	981	175	10	49	-82	1	24	230
1925	Dry	16	-141	-203	-131	-21	3	-1	-2	0	0	11	-111	-48
1926	Dry	-113	-65	-34	-39	3	-3	-9	-3	54	3	-2	-68	-23
1927	Wet	-49	157	108	-37	1	0	0	-13	-19	-199	-206	-62	-27
1928	Above Normal	-31	741	467	360	-11	-2	-17	-7	-6	-263	-223	-81	77
1929	Critical	-81	-165	-79	6	-5	-2	0	-4	-5	36	-23	-27	-29
1930	Dry	-3	6	2	1	-21	-7	3	13	-27	39	-161	-319	-40
1931	Critical	-162	-42	-120	-565	1,485	1,328	342	119	-111	-152	35	76	186
1932	Dry	11	-8	1	-398	-262	-67	-15	27	-50	-4	-4	3	-64
1933	Critical	4	1	6	5	-1	0	61	-50	-6	-5	-2	9	2
1934	Critical	-9	30	1	-349	-193	-37	-8	0	2	0	-8	-13	-49
1935	Below Normal	8	-6	23	11	0	-46	-2	0	0	1	0	5	-1
1936	Below Normal	4	2	-2	1	0	0	-1	-1	-1	-1	-1	-25	-2
1937	Below Normal	-21	-7	-18	-37	-1	0	-7	-5	4	5	4	0	-7
1938	Wet	-19	349	20	-3	0	0	0	0	0	0	-7	385	60
1939	Dry	227	65	31	-2	-8	11	6	151	-238	-354	-426	-627	-97
1940	Above Normal	-399	-109	-76	-85	6	0	0	-5	-11	0	3	2	-56
1941	Wet	-38	62	-3	0	0	0	0	0	0	0	4	10	3
1942	Wet	212	208	10	0	0	0	0	2	2	1	-4	18	37
1943	Wet	2	-23	-1	0	1	0	0	1	3	0	-2	1	-1
1944	Dry	-5	1	-50	-44	2	38	34	4	-194	-243	-267	-278	-84
1945	Below Normal	-161	-119	-106	-54	-2	-1	-2	-19	-32	30	37	-8	-36
1946	Below Normal	-30	374	78	0	-4	-42	-31	-19	66	-428	164	398	44
1947	Dry	108	-15	-98	-29	-47	-39	-17	-1	16	-382	-314	-186	-84
1948	Below Normal	-227	-64	-86	260	193	36	-23	82	898	412	-111	-2	114
1949	Dry	72	8	-33	31	-228	-21	-1	2	-7	59	204	166	21
1950	Below Normal	-124	-135	-35	-299	-49	-4	-20	197	172	46	-207	-127	-49
1951	Above Normal	-176	69	0	1	0	0	-7	150	432	1	-129	-93	21
1952	Wet	-80	-136	9	0	0	1	0	0	0	0	14	17	-15
1953	Wet	16	12	1	0	0	1	-1	37	19	6	-14	29	9
1954	Above Normal	26	11	6	1	0	0	0	54	26	-8	185	25	25
1955	Dry	104	-121	-84	-27	-24	381	72	-94	-33	-53	28	56	17
1956	Wet	29	-2	19	0	-1	-1	0	0	0	0	2	3	4
1957	Above Normal	9	7	3	74	20	0	0	0	2	-118	-87	-375	-39
1958	Wet	237	333	49	37	0	0	0	0	1	17	21	58	
1959	Below Normal	19	14	5	3	0	0	3	-21	-46	-34	-19	-10	-7
1960	Dry	4	-259	-1,008	-527	78	12	-7	-154	-229	-88	104	81	-166
1961	Dry	-63	-164	53	108	399	562	338	-22	-35	-186	431	39	122
1962	Below Normal	-216	-145	-222	-145	29	3	-4	101	1,028	124	-178	-38	28
1963	Wet	-194	133	422	192	19	-11	0	0	-2	254	250	113	98
1964	Dry	89	-309	-247	-44	-5	6	-210	-286	-584	-523	-899	-645	-305
1965	Wet	-281	-345	22	0	12	-6	0	-2	313	60	-161	-106	-41
1966	Below Normal	-38	454	138	-43	-11	68	74	11	-8	-35	-23	-67	43
1967	Wet	-17	-34	119	1	0	0	0	0	0	2	16	17	9
1968	Below Normal	12	8	-7	-3	0	0	0	1	-52	320	299	66	54
1969	Wet	9	-229	24	3	0	0	0	0	0	0	0	35	-13
1970	Wet	25	11	0	0	0	0	0	0	-67	-4	23	13	0
1971	Wet	-149	-89	4	0	-1	4	3	0	0	2	1	46	-15
1972	Below Normal	40	16	7	8	11	4	7	-32	-8	-209	-140	-60	-30
1973	Above Normal	375	196	273	8	0	0	-1	0	0	-6	-7	-5	69
1974	Wet	37	5	0	0	0	0	0	1	1	0	0	23	6
1975	Wet	21	14	4	0	0	0	0	2	1	0	-1	11	4
1976	Critical	8	5	1	-1	-1	11	-186	-229	51	-2	33	-81	-33
1977	Critical	-342	-376	-1,305	-866	-4,565	-2,945	-666	-253	-184	-25	35	84	-951
1978	Above Normal	182	86	34	2	4	5	12	-14	65	69	15	63	44
1979	Below Normal	53	14	-54	693	47	1	-1	-34	-5	-21	23	57	64
1980	Above Normal	-45	487	295	5	-2	-1	1	0	0	0	0	0	62
1981	Dry	0	0	0	0	-1	96	99	16	-60	-37	-55	-35	2
1982	Wet	-47	165	1	0	0	0	0	0	0	0	3	3	10
1983	Wet	2	0	0	0	0	0	0	0	0	0	3	2	1
1984	Wet	5	0	0	0	0	0	0	-1	-1	0	1	-2	0
1985	Dry	53	54	-145	-149	-25	-311	-231	-30	10	-8	126	113	-45
1986	Wet	66	26	-17	24	1	-1	11	-66	-225	-82	66	-319	-43
1987	Dry	-355	-150	-50	90	125	24	-13	-108	-459	-308	-166	-217	-132
1988	Critical	-165	-170	-79	-13	-8	-1	-1	1	-14	74	-87	-125	-49
1989	Dry	33	-3	-284	-105	-215	32	-66	-36	278	-18	167	-86	-25
1990	Critical	-200	-70	87	66	4	11	7	-2	-2	0	2	3	-8
1991	Critical	-1	3	-16	-27	-42	-11	-1	2	0	0	0	1	-8
1992	Critical	1	1	1	-2	-1	-1	0	4	-5	-5	-45	-61	-9
1993	Above Normal	89	-61	118	24	0	-1	2	157	77	-8	-5	33	35
1994	Critical	24	9	-14	60	230	102	38	29	-246	316	-151	-443	-4
Average		-22	-2	-27	-30	-23	1	-2	-3	10	-24	-24	-32	-15
Wet		-10	29	38	10	2	-1	1	-2	1	2	0	12	7
Above Normal		3	143	112	39	2	0	-1	28	61	-30	-44	-27	24
Below Normal		-48	-24	-28	28	4	-4	6	28	150	32	10	23	15
Dry		11	-69	-134	-79	-16	45	-1	-33	-98	-131	-77	-132	-59
Critical		-76	-60	-113	-158	-125	-47	-20	-31	-39	13	-18	-46	-60

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-7%	-8%	1%	-13%	-3%	7%	12%	2%	5%	4%	1%	0%
1924	Critical	0%	0%	1%	-2%	44%	34%	3%	0%	-1%	0%	0%	0%	7%
1925	Dry	0%	-1%	-2%	-1%	-3%	1%	0%	0%	0%	0%	0%	-1%	-1%
1926	Dry	-1%	-1%	0%	0%	0%	0%	-1%	0%	1%	0%	0%	-1%	0%
1927	Wet	0%	3%	3%	-3%	1%	0%	0%	-3%	-1%	-6%	-3%	-1%	-1%
1928	Above Normal	0%	10%	8%	13%	-1%	-1%	-5%	-1%	0%	-5%	-3%	-1%	1%
1929	Critical	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	-2%	-3%	0%
1931	Critical	-1%	0%	-1%	-6%	28%	23%	4%	1%	-1%	-1%	0%	1%	4%
1932	Dry	0%	0%	0%	-14%	-15%	-3%	0%	1%	-1%	0%	0%	0%	-3%
1933	Critical	0%	0%	0%	0%	0%	0%	1%	-1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-6%	-6%	-1%	0%	0%	0%	0%	0%	0%	-1%
1935	Below Normal	0%	0%	0%	0%	0%	-4%	-1%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	9%	9%	-1%	0%	0%	0%	0%	0%	0%	0%	8%	2%
1939	Dry	5%	1%	0%	0%	0%	0%	0%	4%	-3%	-4%	-5%	-5%	-1%
1940	Above Normal	-3%	-1%	-1%	-4%	3%	0%	0%	-1%	0%	0%	0%	0%	-1%
1941	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	3%	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	3%	1%	0%	-3%	-3%	-3%	-3%	-1%
1945	Below Normal	-1%	-1%	-1%	-1%	0%	0%	0%	-1%	-1%	1%	0%	0%	0%
1946	Below Normal	0%	4%	14%	0%	-1%	-5%	-2%	-1%	2%	-8%	2%	4%	1%
1947	Dry	1%	0%	-1%	0%	-1%	-2%	-1%	0%	0%	-5%	-3%	-2%	-1%
1948	Below Normal	-2%	-1%	-1%	3%	3%	1%	-2%	13%	60%	10%	-1%	0%	7%
1949	Dry	1%	0%	0%	0%	-6%	-6%	0%	0%	1%	1%	2%	1%	-1%
1950	Below Normal	-1%	-1%	0%	-5%	-6%	0%	-1%	10%	5%	1%	-3%	-1%	0%
1951	Above Normal	-1%	7%	0%	0%	0%	0%	-1%	10%	12%	0%	-2%	-1%	2%
1952	Wet	-1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	5%	2%	0%	0%	0%	1%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%	2%	0%
1955	Dry	1%	-1%	-2%	-1%	-1%	8%	1%	-2%	-1%	-1%	0%	0%	0%
1956	Wet	0%	0%	3%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-3%	-1%	-3%	0%
1958	Wet	3%	4%	1%	8%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1960	Dry	0%	-2%	-8%	-5%	3%	1%	0%	-4%	-3%	-1%	1%	1%	-1%
1961	Dry	-1%	-1%	1%	1%	15%	30%	10%	0%	-1%	-2%	5%	0%	5%
1962	Below Normal	-2%	-1%	-2%	-2%	2%	0%	0%	4%	24%	3%	-2%	0%	2%
1963	Wet	-8%	4%	21%	6%	5%	-3%	0%	0%	0%	8%	4%	1%	3%
1964	Dry	1%	-7%	-5%	-1%	0%	0%	-4%	-6%	-9%	-7%	-10%	-6%	-5%
1965	Wet	-2%	-3%	4%	0%	5%	-1%	0%	0%	12%	1%	-2%	-1%	1%
1966	Below Normal	0%	12%	5%	-5%	-2%	9%	4%	0%	0%	-1%	0%	-1%	2%
1967	Wet	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	6%	4%	1%	1%
1969	Wet	0%	-2%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1970	Wet	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1971	Wet	-1%	-1%	1%	0%	0%	2%	1%	0%	0%	0%	0%	1%	0%
1972	Below Normal	0%	0%	0%	0%	0%	1%	0%	-1%	0%	-4%	-2%	-1%	0%
1973	Above Normal	3%	3%	13%	4%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1974	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-3%	0%	0%	0%	0%	-1%	0%
1977	Critical	-3%	-3%	-11%	-8%	-46%	-34%	-8%	-3%	-2%	0%	0%	1%	-10%
1978	Above Normal	1%	1%	0%	0%	2%	2%	5%	-2%	4%	2%	0%	1%	1%
1979	Below Normal	0%	0%	0%	18%	14%	0%	0%	-2%	0%	0%	0%	1%	3%
1980	Above Normal	0%	5%	5%	2%	-1%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	17%	5%	0%	-1%	0%	-1%	0%	2%
1982	Wet	0%	7%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	2%	-9%	-3%	-1%	-8%	-6%	-1%	0%	0%	2%	1%	-2%
1986	Wet	1%	0%	0%	1%	1%	0%	3%	-4%	-8%	-2%	1%	-3%	-1%
1987	Dry	-3%	-1%	0%	1%	3%	3%	-1%	-2%	-6%	-4%	-2%	-2%	-1%
1988	Critical	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%
1989	Dry	0%	0%	-2%	-1%	-2%	4%	-8%	-1%	5%	0%	2%	-1%	0%
1990	Critical	-2%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	1%	0%	1%	3%	0%	-1%	1%	52%	13%	0%	0%	0%	6%
1994	Critical	0%	0%	0%	1%	6%	4%	1%	1%	-3%	4%	-2%	-4%	1%
Average		0%	0%	1%	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%
Wet		0%	1%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	2%	3%	2%	0%	0%	0%	6%	3%	-1%	-1%	0%	1%
Below Normal		0%	0%	0%	1%	0%	0%	0%	2%	6%	1%	0%	0%	1%
Dry		0%	-1%	-2%	-2%	0%	3%	0%	-1%	-1%	-2%	-1%	-1%	-1%
Critical		-1%	0%	-1%	-2%	2%	2%	0%	0%	0%	0%	0%	0%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton (umhos/cm)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	-2	-247	-14	0	-6	-2	2	4	3	38	97	28	-8
1924	Critical	-37	81	48	-54	82	50	5	28	172	-128	5	20	23
1925	Dry	6	-85	-69	-47	-1	2	1	0	-3	-11	-2	-139	-29
1926	Dry	-57	-30	-18	-8	1	-1	0	-1	15	-9	4	-154	-21
1927	Wet	-58	21	10	0	1	0	0	0	-1	-18	-56	-7	-9
1928	Above Normal	-11	163	76	24	2	0	0	0	-1	-47	-48	-32	11
1929	Critical	-102	-71	-34	7	0	0	0	-4	-22	50	-4	-19	-17
1930	Dry	-2	4	0	0	-1	0	0	1	-26	-119	27	-117	-19
1931	Critical	-145	-17	-155	-128	139	214	60	24	12	-33	31	45	4
1932	Dry	4	-6	0	-17	-11	-1	-1	1	-8	-1	-3	2	-3
1933	Critical	3	1	-1	3	0	0	13	-10	-3	-2	-2	7	1
1934	Critical	-3	42	2	-37	-17	-3	-1	0	1	0	1	-8	-2
1935	Below Normal	5	-4	6	2	0	-1	0	0	0	0	0	3	1
1936	Below Normal	2	1	-1	0	0	0	0	0	0	0	-3	-17	-2
1937	Below Normal	-9	-3	-14	-11	0	0	0	0	1	4	10	-1	-2
1938	Wet	-19	27	1	0	0	0	0	0	0	0	-3	45	4
1939	Dry	18	12	7	-1	-2	1	1	18	-101	-100	-166	-313	-52
1940	Above Normal	-155	4	-24	-9	3	0	0	0	-1	0	0	1	-15
1941	Wet	-27	45	0	0	0	0	0	0	0	-1	2	3	2
1942	Wet	71	74	1	0	0	0	0	0	0	-1	-7	4	12
1943	Wet	-1	-4	0	0	0	0	0	0	0	-1	-3	2	-1
1944	Dry	-11	2	-27	-11	0	1	2	0	-41	-66	-82	-101	-28
1945	Below Normal	-60	-34	-18	-11	-1	0	0	-1	-3	5	13	-11	-10
1946	Below Normal	-36	124	6	0	0	-1	-1	1	12	-65	83	146	22
1947	Dry	-7	22	-38	4	-9	-2	-1	0	10	-109	-111	-83	-27
1948	Below Normal	-228	-4	-42	93	30	3	0	1	41	31	-52	4	-10
1949	Dry	94	-11	-13	10	-14	-1	0	0	-2	33	105	56	21
1950	Below Normal	-69	-7	-2	-42	-3	0	-1	6	18	3	-83	-22	-17
1951	Above Normal	-238	5	0	0	0	0	0	5	55	5	-24	-35	-19
1952	Wet	-52	-67	1	0	0	0	0	0	0	0	4	2	-9
1953	Wet	3	4	0	0	0	0	0	0	0	0	-19	9	0
1954	Above Normal	8	3	2	0	0	0	0	0	8	3	-2	115	11
1955	Dry	-32	-33	-16	-2	-3	68	2	-7	-22	-66	-13	69	-5
1956	Wet	13	-6	2	0	0	0	0	0	0	0	3	0	1
1957	Above Normal	1	1	1	15	2	0	0	0	0	-14	-13	-261	-22
1958	Wet	77	73	7	1	0	0	0	0	0	0	5	3	14
1959	Below Normal	3	4	2	0	0	0	1	-3	-10	-3	-5	-5	-1
1960	Dry	-47	-462	-281	-196	15	1	-1	-21	-65	-37	54	20	-85
1961	Dry	-176	-76	3	31	22	28	25	-12	-7	-53	134	-180	-22
1962	Below Normal	-204	-231	-24	-31	0	0	0	5	194	17	-31	-21	-27
1963	Wet	-13	28	26	13	1	0	0	0	0	20	64	30	14
1964	Dry	36	-27	-30	-5	-1	1	-26	-28	-139	-156	-298	-200	-73
1965	Wet	-161	-121	2	0	0	-1	0	0	26	11	-43	-52	-28
1966	Below Normal	56	25	7	-1	0	1	3	1	-2	-5	-4	-44	3
1967	Wet	36	-31	9	0	0	0	0	0	0	0	4	2	2
1968	Below Normal	1	2	-2	0	0	0	0	0	-10	48	70	-51	5
1969	Wet	-40	-115	-1	0	0	0	0	0	0	0	0	3	-13
1970	Wet	3	2	0	0	0	0	0	0	-13	-1	5	5	0
1971	Wet	-96	-18	0	0	-1	0	0	0	0	0	0	10	-9
1972	Below Normal	10	5	1	1	1	0	0	0	-1	-32	-38	-17	-6
1973	Above Normal	293	52	12	1	0	0	0	0	0	-1	-3	-1	29
1974	Wet	-38	0	0	0	0	0	0	0	0	0	0	3	3
1975	Wet	3	3	1	0	0	0	0	0	0	0	0	2	1
1976	Critical	1	1	0	0	0	1	-48	-82	25	-172	44	-168	-33
1977	Critical	-280	-371	-557	-218	-1,130	-519	-101	-70	-67	147	-25	48	-262
1978	Above Normal	271	84	10	0	2	2	3	1	6	-1	-16	41	34
1979	Below Normal	23	3	-28	62	1	0	0	-1	0	-11	33	35	10
1980	Above Normal	-37	159	52	1	0	0	0	0	0	0	0	0	15
1981	Dry	1	0	0	0	0	1	4	1	-19	-9	-23	-7	-4
1982	Wet	-74	11	0	0	0	0	0	0	0	0	3	0	-5
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	-2	0
1985	Dry	40	3	-5	-16	-3	-28	-23	-1	4	-1	34	33	3
1986	Wet	48	5	-5	2	0	0	0	-4	-23	-37	32	-139	-10
1987	Dry	-189	-84	1	23	12	1	-10	-7	-161	-116	-65	-192	-65
1988	Critical	51	-84	-19	-1	-3	0	0	0	-15	96	-8	-81	-5
1989	Dry	25	0	-234	-3	-156	1	-1	0	62	-16	71	-102	-29
1990	Critical	-79	-33	54	11	-2	2	1	-1	-1	0	0	2	-4
1991	Critical	-1	1	-10	-32	-22	-2	0	1	0	0	0	0	-5
1992	Critical	0	1	0	-1	0	0	0	3	0	-3	3	-30	-2
1993	Above Normal	112	-28	33	3	0	0	0	3	1	-2	-13	20	11
1994	Critical	5	4	-4	21	18	6	4	4	-122	95	-69	-195	-19
Average		-19	-17	-18	-8	-14	-2	-1	-2	-3	-12	-5	-27	-11
Wet		-12	-3	3	1	0	0	0	0	0	-1	0	-4	-1
Above Normal		25	44	16	4	1	0	0	1	7	-6	-12	-15	5
Below Normal		-36	-26	-9	4	2	0	0	1	17	2	7	2	-3
Dry		-18	-48	-45	-15	-9	4	-2	-3	-31	-52	-21	-88	-27
Critical		-49	-37	-56	-36	-78	-21	-6	-9	-2	4	-2	-32	-27

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-16%	-5%	0%	-3%	-1%	1%	2%	1%	9%	9%	2%	0%
1924	Critical	-2%	3%	2%	-3%	19%	16%	1%	2%	8%	-6%	0%	1%	3%
1925	Dry	0%	-2%	-4%	-3%	-1%	1%	0%	0%	-1%	-1%	0%	-5%	-1%
1926	Dry	-2%	-1%	-1%	-1%	0%	0%	0%	0%	2%	-1%	0%	-5%	-1%
1927	Wet	-2%	4%	3%	0%	0%	0%	0%	0%	0%	-6%	-6%	0%	-1%
1928	Above Normal	0%	19%	12%	8%	1%	0%	0%	0%	0%	-9%	-5%	-2%	2%
1929	Critical	-4%	-3%	-2%	0%	0%	0%	0%	0%	-2%	3%	0%	-1%	-1%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-3%	-8%	1%	-4%	-1%
1931	Critical	-5%	-1%	-6%	-9%	21%	32%	6%	1%	1%	-2%	1%	1%	3%
1932	Dry	0%	0%	0%	-6%	-5%	0%	0%	0%	-2%	0%	0%	0%	-1%
1933	Critical	0%	0%	0%	0%	0%	0%	3%	-1%	0%	0%	0%	0%	0%
1934	Critical	0%	1%	0%	-6%	-5%	-1%	0%	0%	0%	0%	0%	0%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1937	Below Normal	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1938	Wet	-1%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	11%	1%
1939	Dry	4%	1%	1%	0%	0%	0%	0%	5%	-10%	-10%	-11%	-13%	-3%
1940	Above Normal	-6%	0%	-1%	-2%	2%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	6%	4%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	1%
1943	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	-1%	-1%	0%	0%	1%	0%	-7%	-7%	-7%	-6%	-2%
1945	Below Normal	-2%	-2%	-2%	-1%	0%	0%	0%	0%	-1%	1%	1%	-1%	-1%
1946	Below Normal	-1%	9%	3%	0%	0%	-1%	-1%	0%	3%	-13%	9%	8%	1%
1947	Dry	0%	1%	-3%	0%	-2%	-1%	0%	0%	1%	-12%	-8%	-4%	-2%
1948	Below Normal	-8%	0%	-2%	7%	5%	1%	0%	1%	21%	8%	-6%	0%	2%
1949	Dry	5%	0%	-1%	1%	-3%	0%	0%	0%	0%	4%	6%	2%	1%
1950	Below Normal	-2%	0%	0%	-6%	-2%	0%	0%	3%	5%	1%	-7%	-1%	-1%
1951	Above Normal	-9%	2%	0%	0%	0%	0%	0%	3%	16%	3%	-3%	-2%	1%
1952	Wet	-2%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1953	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	1%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	3%	0%	1%	0%	6%	1%
1955	Dry	-1%	-2%	-3%	-1%	-1%	17%	0%	-2%	-3%	-6%	-1%	2%	0%
1956	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	1%	0%	0%	0%	0%	-4%	-2%	-11%	-1%
1958	Wet	7%	8%	2%	1%	0%	0%	0%	0%	0%	0%	1%	1%	2%
1959	Below Normal	1%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	-1%	0%	0%
1960	Dry	-2%	-17%	-12%	-11%	4%	1%	0%	-5%	-7%	-3%	4%	1%	-4%
1961	Dry	-6%	-3%	0%	2%	7%	13%	8%	-3%	-1%	-6%	14%	-9%	1%
1962	Below Normal	-7%	-8%	-2%	-2%	0%	0%	0%	2%	51%	4%	-3%	-1%	3%
1963	Wet	-4%	8%	10%	4%	1%	0%	0%	0%	0%	8%	8%	2%	3%
1964	Dry	2%	-5%	-5%	-1%	0%	0%	-6%	-6%	-18%	-15%	-22%	-10%	-7%
1965	Wet	-6%	-7%	1%	0%	0%	0%	0%	0%	10%	3%	-3%	-3%	0%
1966	Below Normal	2%	7%	3%	0%	0%	0%	2%	0%	0%	-1%	0%	-2%	1%
1967	Wet	1%	-2%	3%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-2%	11%	8%	-2%	1%
1969	Wet	-2%	-6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%
1970	Wet	1%	0%	0%	0%	0%	0%	0%	0%	-3%	0%	1%	0%	0%
1971	Wet	-4%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	-6%	-4%	-1%	-1%
1973	Above Normal	10%	7%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1974	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-7%	-6%	1%	-7%	2%	-5%	-2%
1977	Critical	-9%	-11%	-27%	-11%	-69%	-42%	-9%	-3%	-3%	7%	-1%	1%	-15%
1978	Above Normal	7%	2%	1%	0%	1%	1%	2%	1%	3%	0%	-1%	2%	1%
1979	Below Normal	1%	0%	-1%	14%	1%	0%	0%	0%	0%	-2%	2%	2%	1%
1980	Above Normal	-1%	11%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	1%	2%	0%	-2%	-1%	-2%	0%	0%
1982	Wet	-2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	2%	1%	-2%	-4%	-1%	-8%	-6%	0%	1%	0%	3%	2%	-1%
1986	Wet	2%	0%	0%	0%	0%	0%	0%	-2%	-7%	-7%	3%	-8%	-2%
1987	Dry	-8%	-3%	0%	2%	3%	1%	-4%	-1%	-16%	-9%	-4%	-8%	-4%
1988	Critical	2%	-3%	-1%	0%	-1%	0%	0%	0%	-1%	6%	0%	-2%	0%
1989	Dry	1%	0%	-10%	0%	-9%	0%	-1%	0%	11%	-2%	6%	-6%	-1%
1990	Critical	-4%	-1%	3%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1993	Above Normal	3%	-1%	2%	1%	0%	0%	0%	1%	0%	-1%	-1%	1%	1%
1994	Critical	0%	0%	0%	1%	4%	2%	1%	1%	-9%	9%	-5%	-8%	0%
Average		-1%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%	-1%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	4%	3%	1%	0%	0%	0%	0%	2%	-1%	-1%	-1%	1%
Below Normal		-1%	-1%	-1%	1%	0%	0%	0%	0%	5%	1%	1%	0%	1%
Dry		0%	-2%	-3%	-1%	0%	1%	0%	-1%	-3%	-5%	-1%	-4%	-2%
Critical		-2%	-1%	-3%	-2%	-3%	1%	0%	-1%	0%	1%	0%	-1%	-1%

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	2,323	2,135	1,557	943	415	222	204	203	206	230	719	1,998	930
1923	Below Normal	2,500	2,076	659	234	220	238	232	230	269	617	1,269	2,163	892
1924	Critical	2,371	2,384	2,383	1,979	827	322	490	1,101	1,439	1,626	1,590	2,079	1,549
1925	Dry	2,739	2,360	2,306	2,300	530	232	213	226	256	534	1,104	2,352	1,263
1926	Dry	2,340	2,218	2,541	2,084	639	266	298	260	631	1,091	1,599	2,356	1,360
1927	Wet	2,732	1,168	580	374	223	203	193	209	222	305	873	2,055	761
1928	Above Normal	2,512	1,550	1,107	594	292	201	200	222	347	424	1,204	2,314	914
1929	Critical	2,567	2,480	2,394	2,389	1,618	545	493	563	777	1,169	1,722	2,439	1,596
1930	Dry	2,380	2,702	2,118	921	458	245	217	328	712	1,176	1,383	2,260	1,242
1931	Critical	2,398	2,316	2,603	2,098	1,026	667	762	1,225	1,356	1,627	1,879	2,301	1,688
1932	Dry	2,342	2,692	1,233	370	271	262	274	290	266	478	1,235	2,374	1,007
1933	Critical	2,245	2,062	2,243	1,335	821	664	403	523	813	1,185	1,431	1,989	1,309
1934	Critical	2,541	2,398	2,384	989	414	271	279	537	675	1,011	1,775	2,480	1,313
1935	Below Normal	2,301	2,875	2,066	855	278	242	210	224	230	452	1,351	2,391	1,123
1936	Below Normal	2,445	2,241	2,445	822	281	239	206	219	226	539	1,242	2,323	1,102
1937	Below Normal	2,448	2,181	2,360	2,027	528	297	240	214	222	373	922	2,159	1,164
1938	Wet	2,537	1,504	252	208	310	276	221	211	219	233	654	564	599
1939	Dry	381	1,081	2,221	2,050	1,329	536	331	374	830	1,235	1,648	2,568	1,207
1940	Above Normal	2,292	1,976	1,979	952	275	210	198	215	263	316	952	2,154	982
1941	Wet	2,524	2,607	900	235	251	229	207	198	203	256	788	1,363	813
1942	Wet	1,373	2,267	652	224	212	203	211	208	195	237	806	762	612
1943	Wet	746	729	373	225	220	229	221	220	246	370	853	2,228	555
1944	Dry	2,617	2,411	2,437	2,216	1,098	291	257	339	569	1,221	1,531	2,237	1,435
1945	Below Normal	2,254	2,253	1,459	1,439	503	265	249	250	333	608	1,263	2,344	1,102
1946	Below Normal	2,429	2,204	481	198	220	224	219	247	316	695	1,329	2,444	917
1947	Dry	2,618	2,654	2,093	1,434	1,190	422	264	314	579	1,212	1,669	2,629	1,423
1948	Below Normal	2,674	2,598	2,223	2,376	1,170	470	330	219	231	572	1,261	2,164	1,357
1949	Dry	2,160	2,166	2,489	2,164	939	252	217	263	369	1,068	1,610	2,643	1,362
1950	Below Normal	2,092	2,090	2,379	1,264	330	215	241	243	340	604	1,078	2,001	1,073
1951	Above Normal	2,714	471	218	245	219	199	209	232	331	375	1,003	2,134	696
1952	Wet	2,278	2,701	819	241	202	224	205	186	205	219	590	448	693
1953	Wet	569	1,731	860	210	203	213	223	210	196	376	945	1,402	595
1954	Above Normal	1,309	1,812	2,158	1,106	230	195	193	210	285	374	946	2,221	920
1955	Dry	2,778	2,723	1,240	454	367	400	430	339	495	870	1,543	2,269	1,159
1956	Wet	2,220	2,857	520	264	225	205	205	213	195	242	830	697	723
1957	Above Normal	399	747	1,756	1,929	656	212	205	223	294	361	1,029	2,395	850
1958	Wet	1,826	1,534	963	299	223	244	221	189	196	244	787	545	606
1959	Below Normal	548	1,454	2,424	1,074	243	206	252	400	682	713	1,309	2,190	958
1960	Dry	2,538	2,707	2,014	2,160	1,260	296	232	338	862	1,208	1,592	2,577	1,482
1961	Dry	2,450	2,852	2,522	1,999	1,160	341	302	366	696	1,250	1,691	2,404	1,503
1962	Below Normal	2,324	2,720	2,418	1,766	612	236	231	246	453	667	1,231	2,471	1,281
1963	Wet	1,216	536	689	485	272	200	206	211	207	274	834	2,110	603
1964	Dry	2,558	1,390	734	625	302	393	459	389	630	1,398	1,751	2,093	1,060
1965	Wet	2,193	2,630	493	203	203	199	205	220	249	339	771	1,933	803
1966	Below Normal	2,291	1,259	368	282	211	210	233	264	513	693	1,260	2,421	834
1967	Wet	2,705	2,762	1,073	274	217	203	232	202	205	226	487	400	749
1968	Below Normal	392	1,476	1,769	752	219	194	212	328	595	656	1,303	2,255	846
1969	Wet	2,540	2,401	1,172	277	306	291	249	220	220	240	772	568	771
1970	Wet	365	1,288	547	234	216	198	204	238	381	398	916	2,233	601
1971	Wet	2,638	1,346	321	199	197	193	195	208	216	322	1,004	1,441	690
1972	Below Normal	1,521	2,110	1,869	1,372	890	280	223	324	673	681	1,368	2,459	1,147
1973	Above Normal	3,097	1,430	549	251	224	202	207	234	242	375	1,117	2,169	841
1974	Wet	2,744	472	195	194	196	198	198	213	203	285	1,145	825	572
1975	Wet	429	1,140	1,292	1,252	418	210	208	217	194	253	998	1,034	637
1976	Critical	385	604	1,459	2,015	1,663	745	524	918	1,836	2,134	2,127	2,925	1,445
1977	Critical	2,432	2,869	2,197	1,728	935	478	699	1,091	1,328	1,426	1,929	2,464	1,631
1978	Above Normal	2,679	2,649	2,438	535	239	263	270	244	223	308	903	1,999	1,062
1979	Below Normal	2,461	2,817	2,217	862	275	225	221	233	238	630	1,182	2,454	1,151
1980	Above Normal	2,615	2,258	1,180	276	264	265	236	231	234	281	938	2,065	904
1981	Dry	2,175	2,143	2,527	1,064	274	211	226	353	832	1,324	1,648	2,410	1,265
1982	Wet	2,494	1,131	213	224	215	238	213	195	198	252	891	370	553
1983	Wet	186	199	240	306	293	256	236	223	218	212	197	186	229
1984	Wet	200	191	232	245	221	196	211	247	328	415	961	2,204	471
1985	Dry	2,268	935	267	652	792	379	337	321	600	1,314	1,681	2,030	965
1986	Wet	2,086	2,422	1,979	814	274	265	239	214	231	306	800	1,655	941
1987	Dry	1,767	2,069	2,702	1,982	992	296	234	384	804	1,320	1,700	2,624	1,406
1988	Critical	2,430	2,367	2,274	933	304	331	558	598	756	1,258	1,727	2,350	1,324
1989	Dry	2,663	2,599	2,217	2,389	1,594	409	208	258	602	1,274	1,721	2,100	1,503
1990	Critical	2,265	2,604	2,374	1,581	640	513	443	661	1,416	1,848	1,957	2,413	1,560
1991	Critical	2,660	2,560	2,409	2,234	1,840	886	261	581	1,467	1,871	1,593	2,169	1,711
1992	Critical	2,903	2,493	2,800	2,179	958	301	297	532	758	1,209	1,711	2,368	1,542
1993	Above Normal	2,849	2,571	2,607	593	253	215	197	211	195	253	821	1,985	1,062
1994	Critical	2,535	2,490	2,457	2,335	1,268	395	409	446	1,124	2,095	2,137	2,750	1,703
Average		2,090	1,985	1,571	1,046	542	298	275	332	495	743	1,241	1,991	1,051
Wet		1,743	1,601	684	333	243	223	214	212	225	286	805	1,192	647
Above Normal		2,279	1,760	1,555	742	307	218	212	222	262	330	963	2,143	916
Below Normal		2,049	2,168	1,795	1,095	427	253	236	260	380	607	1,241	2,303	1,068
Dry		2,298	2,231	1,979	1,554	819	327	281	321	608	1,123	1,569	2,370	1,290
Critical		2,311	2,302	2,331	1,816	1,026	510	468	731	1,145	1,538	1,798	2,394	1,531

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	22	-289	-102	-2	-3	-5	2	2	3	-2	-13	14	-31
1924	Critical	67	-50	76	-137	146	3	-12	-32	-97	2	15	16	0
1925	Dry	12	-89	-125	-39	-48	11	4	1	1	10	11	78	-14
1926	Dry	-25	-31	-12	-13	6	1	2	5	30	33	5	102	9
1927	Wet	62	46	24	3	1	0	0	0	0	-1	10	4	13
1928	Above Normal	-14	188	145	58	17	0	-1	0	1	-9	-26	-1	30
1929	Critical	91	-50	3	27	2	1	0	2	10	-3	-31	-21	3
1930	Dry	-1	3	1	0	0	0	0	-6	13	275	-167	-312	-16
1931	Critical	-34	20	183	-164	169	147	49	24	-155	-189	-20	37	6
1932	Dry	3	-7	-1	-61	-26	1	0	-3	-4	-1	-1	4	-8
1933	Critical	3	1	11	5	0	0	18	-3	-2	-2	-1	4	3
1934	Critical	-7	8	-6	-101	-46	-5	-1	0	0	0	-12	-10	-15
1935	Below Normal	5	-7	11	9	1	-5	0	0	0	-1	-1	0	1
1936	Below Normal	2	1	-1	0	0	0	0	0	0	-2	4	-2	0
1937	Below Normal	-10	-3	2	-3	0	0	0	0	0	-5	-15	-8	-3
1938	Wet	-2	64	11	1	1	0	0	0	0	0	-2	39	9
1939	Dry	23	10	10	-4	-5	0	0	28	-5	38	29	-164	-3
1940	Above Normal	-162	-59	-31	-28	4	1	0	0	-1	0	1	1	-23
1941	Wet	3	13	2	0	1	0	0	0	0	0	0	3	2
1942	Wet	68	101	13	0	0	0	0	0	0	0	8	7	16
1943	Wet	1	-5	-2	1	1	0	0	0	0	2	7	5	1
1944	Dry	15	6	1	-12	-3	1	2	0	-18	21	26	-64	-2
1945	Below Normal	-61	-46	-35	-15	2	-2	0	-1	-3	0	-3	0	-14
1946	Below Normal	-21	151	46	0	-1	-2	-1	4	11	5	59	220	43
1947	Dry	170	-78	-87	-59	-23	-6	-2	0	-3	23	35	9	-2
1948	Below Normal	105	17	-34	45	59	9	2	1	31	26	5	8	23
1949	Dry	-113	-34	-22	23	-21	-4	0	0	-1	-98	-7	98	-15
1950	Below Normal	-78	-185	-111	-89	-20	-1	-4	7	21	27	-8	-65	-42
1951	Above Normal	163	39	0	2	1	0	0	6	47	3	-40	-26	16
1952	Wet	19	4	2	1	0	3	1	0	0	0	3	3	3
1953	Wet	3	5	1	0	0	0	0	0	0	1	32	26	6
1954	Above Normal	9	4	2	1	0	0	0	0	4	2	-4	24	4
1955	Dry	197	-50	-51	-6	8	22	28	-4	18	87	121	13	32
1956	Wet	3	-1	2	0	-4	-2	0	0	0	0	-6	-2	-1
1957	Above Normal	1	1	1	43	17	1	0	1	0	-1	-19	-67	-2
1958	Wet	48	126	25	3	0	0	0	0	0	0	4	4	18
1959	Below Normal	3	4	3	1	0	0	1	-1	0	1	5	1	2
1960	Dry	91	553	-518	-222	96	7	1	-35	-93	-7	10	57	-5
1961	Dry	145	-52	73	64	60	34	26	3	-4	15	124	331	68
1962	Below Normal	146	280	-18	-103	-14	0	0	3	80	-4	-82	8	25
1963	Wet	-38	32	98	31	9	0	0	0	-1	5	-15	6	11
1964	Dry	27	-51	-46	-16	-2	0	-1	-37	-99	50	42	-212	-29
1965	Wet	-47	-143	-8	0	-1	-1	0	0	22	7	-41	-36	-21
1966	Below Normal	-143	16	14	-2	0	4	4	1	-1	-3	-7	-15	-11
1967	Wet	-94	11	25	2	0	0	0	0	0	0	3	2	-4
1968	Below Normal	1	3	-4	-2	0	0	0	1	-7	-4	40	114	12
1969	Wet	120	-18	-12	2	0	0	0	0	0	0	0	4	8
1970	Wet	3	3	1	0	0	0	0	0	-4	-1	2	5	1
1971	Wet	-10	-26	0	0	-1	0	0	0	0	0	1	12	-2
1972	Below Normal	15	5	2	1	1	0	0	13	42	8	7	-12	7
1973	Above Normal	192	110	28	5	0	0	0	0	0	0	2	0	28
1974	Wet	-4	1	0	0	0	0	0	0	0	0	0	3	0
1975	Wet	3	4	2	0	0	0	0	0	0	0	-1	2	1
1976	Critical	1	1	1	0	0	1	-12	-25	88	243	35	124	38
1977	Critical	-35	136	17	-161	-418	-381	-112	-45	-48	-136	49	67	-89
1978	Above Normal	40	44	11	-12	3	12	7	4	3	13	45	33	17
1979	Below Normal	20	7	-26	87	10	0	0	1	0	40	7	5	13
1980	Above Normal	-28	176	123	4	-6	-1	0	0	0	0	0	0	22
1981	Dry	-1	-1	0	0	0	2	3	1	-9	0	2	-17	-2
1982	Wet	34	46	2	0	0	0	0	0	0	0	-4	-1	6
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	-1	-2	0
1985	Dry	-14	5	-10	-33	-11	-6	-21	1	8	-1	39	54	1
1986	Wet	-22	-7	-7	2	1	-1	0	-1	-5	-5	-6	-135	-16
1987	Dry	-106	-4	-30	48	54	9	4	-72	-133	-2	17	127	-7
1988	Critical	-183	-112	-35	-7	1	-1	-1	0	7	-69	-135	-89	-52
1989	Dry	33	-17	39	-7	-12	4	0	-1	36	7	10	78	14
1990	Critical	-52	-7	24	24	11	3	1	0	-1	0	3	2	1
1991	Critical	-1	2	-10	-4	-8	-6	0	0	0	0	0	0	-2
1992	Critical	0	1	1	-1	-1	0	0	-2	-6	-4	-43	-39	-8
1993	Above Normal	38	-52	96	35	0	0	0	3	3	3	22	19	14
1994	Critical	20	6	-14	16	50	15	5	3	-67	58	-33	-232	-14
Average		11	11	-3	-10	1	-2	0	-2	-4	6	1	3	1
Wet		7	12	9	2	0	0	0	0	1	0	0	-2	2
Above Normal		24	45	38	11	4	1	1	1	6	1	-2	-2	11
Below Normal		3	-3	-18	-5	2	0	0	2	13	6	0	19	2
Dry		29	10	-49	-21	5	5	3	-7	-17	28	19	11	1
Critical		-11	-4	21	-42	-8	-19	-5	-7	-23	-8	-15	-12	-11

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	1%	-12%	-13%	-1%	-1%	-2%	1%	1%	1%	0%	-1%	1%	-2%
1924	Critical	3%	-2%	3%	-6%	22%	1%	-2%	-3%	0%	0%	1%	1%	0%
1925	Dry	0%	-4%	-5%	-2%	-8%	5%	2%	0%	0%	2%	1%	3%	0%
1926	Dry	-1%	-1%	0%	-1%	1%	0%	1%	2%	5%	3%	0%	5%	1%
1927	Wet	2%	4%	4%	1%	1%	0%	0%	0%	0%	0%	1%	0%	1%
1928	Above Normal	-1%	14%	15%	11%	6%	0%	0%	0%	0%	-2%	-2%	0%	3%
1929	Critical	4%	-2%	0%	1%	0%	0%	0%	0%	1%	0%	-2%	-1%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	-2%	2%	31%	-11%	-12%	1%
1931	Critical	-1%	1%	8%	-7%	20%	28%	7%	2%	-10%	-10%	-1%	2%	3%
1932	Dry	0%	0%	0%	-14%	-9%	0%	0%	-1%	-2%	0%	0%	0%	-2%
1933	Critical	0%	0%	1%	0%	0%	0%	5%	-1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-9%	-10%	-2%	0%	0%	0%	0%	-1%	0%	-2%
1935	Below Normal	0%	0%	1%	1%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	0%
1938	Wet	0%	4%	5%	1%	0%	0%	0%	0%	0%	0%	0%	7%	1%
1939	Dry	7%	1%	0%	0%	0%	0%	0%	8%	-1%	3%	2%	-6%	1%
1940	Above Normal	-7%	-3%	-2%	-3%	1%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	5%	5%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
1943	Wet	0%	-1%	0%	0%	1%	0%	0%	0%	0%	1%	1%	0%	0%
1944	Dry	1%	0%	0%	-1%	0%	0%	1%	0%	-3%	2%	2%	-3%	0%
1945	Below Normal	-3%	-2%	-2%	-1%	0%	-1%	0%	-1%	-1%	0%	0%	0%	-1%
1946	Below Normal	1%	7%	11%	0%	0%	-1%	0%	2%	4%	1%	5%	10%	3%
1947	Dry	7%	-3%	-4%	-4%	-2%	-1%	-1%	0%	0%	2%	2%	0%	0%
1948	Below Normal	4%	1%	-2%	2%	5%	2%	0%	1%	16%	5%	0%	0%	3%
1949	Dry	-5%	-2%	-1%	1%	-2%	-1%	0%	0%	0%	-8%	0%	4%	-1%
1950	Below Normal	-4%	-8%	-4%	-7%	-6%	-1%	-2%	3%	7%	5%	-1%	-3%	-2%
1951	Above Normal	6%	9%	0%	1%	0%	0%	0%	3%	17%	1%	-4%	-1%	3%
1952	Wet	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	1%	0%
1953	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	2%	1%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	1%	0%
1955	Dry	8%	-2%	-4%	-1%	2%	6%	7%	-1%	4%	11%	8%	1%	3%
1956	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	-1%	0%	0%
1957	Above Normal	0%	0%	0%	2%	3%	0%	0%	0%	0%	0%	-2%	-3%	0%
1958	Wet	3%	9%	3%	1%	0%	0%	0%	0%	0%	0%	1%	1%	1%
1959	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	4%	26%	-20%	-9%	8%	2%	0%	-9%	-10%	-1%	1%	2%	-1%
1961	Dry	6%	-2%	3%	3%	5%	11%	10%	1%	-1%	1%	8%	16%	5%
1962	Below Normal	7%	11%	-1%	-5%	-2%	0%	0%	1%	22%	-1%	-6%	0%	2%
1963	Wet	-3%	6%	17%	7%	3%	0%	0%	0%	0%	2%	-2%	0%	3%
1964	Dry	1%	-4%	-6%	-3%	-1%	0%	0%	-9%	-14%	4%	2%	-9%	-3%
1965	Wet	-2%	-5%	-2%	0%	-1%	-1%	0%	0%	10%	2%	-5%	-2%	0%
1966	Below Normal	-6%	1%	4%	-1%	0%	2%	2%	0%	0%	0%	-1%	-1%	0%
1967	Wet	-3%	0%	2%	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	3%	5%	1%
1969	Wet	5%	-1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1970	Wet	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1971	Wet	0%	-2%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	4%	7%	1%	1%	0%	1%
1973	Above Normal	7%	8%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-2%	-3%	5%	13%	2%	4%	2%
1977	Critical	-1%	5%	1%	-9%	-31%	-44%	-14%	-4%	-4%	-9%	3%	3%	-9%
1978	Above Normal	2%	2%	0%	-2%	1%	5%	3%	1%	1%	4%	5%	2%	2%
1979	Below Normal	1%	0%	-1%	11%	4%	0%	0%	0%	0%	7%	1%	0%	2%
1980	Above Normal	-1%	8%	12%	2%	-2%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	1%	1%	0%	-1%	0%	0%	-1%	0%
1982	Wet	1%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	-1%	1%	-4%	-5%	-1%	-2%	-6%	0%	1%	0%	2%	3%	-1%
1986	Wet	-1%	0%	0%	0%	0%	0%	0%	-1%	-2%	-2%	-1%	-8%	-1%
1987	Dry	-6%	0%	-1%	2%	6%	3%	2%	-16%	-14%	0%	1%	5%	-1%
1988	Critical	-7%	-5%	-2%	-1%	0%	0%	0%	1%	5%	-7%	-4%	-2%	-2%
1989	Dry	1%	-1%	2%	0%	-1%	1%	0%	0%	6%	1%	1%	4%	1%
1990	Critical	-2%	0%	1%	2%	2%	1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	-2%	-2%	0%
1993	Above Normal	1%	-2%	4%	6%	0%	0%	0%	1%	1%	1%	3%	1%	1%
1994	Critical	1%	0%	-1%	1%	4%	4%	1%	1%	-6%	3%	-2%	-8%	0%
Average		1%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Wet		0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		1%	4%	4%	2%	1%	1%	0%	1%	2%	0%	0%	0%	1%
Below Normal		0%	0%	-1%	0%	0%	0%	0%	1%	4%	1%	0%	1%	0%
Dry		1%	1%	-3%	-2%	0%	2%	1%	-2%	-2%	3%	1%	1%	0%
Critical		0%	0%	1%	-2%	1%	-1%	0%	-1%	-2%	-1%	-1%	0%	-1%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	641	609	730	764	632	504	342	330	323	495	465	495	527
1923	Below Normal	522	537	659	552	507	665	352	352	513	597	474	471	517
1924	Critical	493	541	735	768	944	1,012	671	642	707	678	639	598	702
1925	Dry	625	609	764	835	848	861	404	386	600	635	583	556	642
1926	Dry	579	588	763	802	944	1,002	510	505	674	654	599	562	682
1927	Wet	602	568	760	803	728	724	371	359	593	627	558	530	602
1928	Above Normal	508	506	727	738	836	573	388	415	619	633	579	551	590
1929	Critical	560	575	758	770	928	1,001	595	563	648	649	611	573	686
1930	Dry	619	617	799	841	991	984	588	568	686	664	609	566	711
1931	Critical	616	609	795	844	990	1,011	729	678	710	684	653	598	743
1932	Dry	640	637	714	792	706	817	525	471	622	631	583	552	641
1933	Critical	569	580	775	821	990	1,003	599	558	647	657	609	577	699
1934	Critical	607	630	774	823	992	1,006	686	635	683	676	652	598	730
1935	Below Normal	636	632	790	772	929	806	381	378	589	589	564	542	634
1936	Below Normal	551	576	781	795	550	303	325	389	550	596	483	499	533
1937	Below Normal	504	547	739	725	433	354	255	251	535	579	482	499	492
1938	Wet	522	518	513	552	368	314	252	244	242	362	318	331	378
1939	Dry	399	479	691	718	815	758	465	462	658	644	588	542	602
1940	Above Normal	560	594	779	702	689	311	311	349	492	598	518	501	534
1941	Wet	518	542	622	631	414	292	243	250	395	457	434	480	440
1942	Wet	472	491	629	433	282	380	294	263	386	434	333	342	395
1943	Wet	460	469	631	369	255	290	276	351	429	570	464	491	421
1944	Dry	498	499	680	707	754	752	388	426	588	617	573	559	587
1945	Below Normal	550	554	736	734	490	334	360	346	471	550	454	486	505
1946	Below Normal	465	516	490	549	428	455	366	351	497	610	548	521	483
1947	Dry	486	522	677	707	780	989	553	514	638	654	605	573	641
1948	Below Normal	576	598	771	787	988	1,002	528	498	584	598	576	563	672
1949	Dry	575	592	762	802	945	871	592	571	604	637	592	575	677
1950	Below Normal	599	587	752	800	915	890	476	409	546	624	586	558	645
1951	Above Normal	575	595	390	316	237	405	364	233	472	614	578	561	445
1952	Wet	552	572	720	546	603	404	212	194	277	362	315	343	425
1953	Wet	504	512	689	607	609	817	340	318	477	576	561	546	546
1954	Above Normal	547	577	738	751	848	894	479	457	607	631	586	573	641
1955	Dry	581	593	732	728	930	983	581	568	648	660	610	581	683
1956	Wet	618	615	695	372	344	330	357	350	388	459	427	355	442
1957	Above Normal	476	534	714	727	861	847	350	324	512	604	564	542	588
1958	Wet	530	576	732	743	695	456	204	177	317	404	324	344	458
1959	Below Normal	490	532	681	706	713	785	431	442	637	646	595	541	600
1960	Dry	579	617	766	776	873	997	586	560	669	658	627	605	693
1961	Dry	652	638	781	846	990	1,002	674	640	693	693	660	628	741
1962	Below Normal	668	646	775	867	702	669	460	441	629	616	573	560	634
1963	Wet	594	633	781	805	793	847	413	380	544	592	551	532	622
1964	Dry	549	568	773	773	947	1,001	592	555	640	641	606	581	685
1965	Wet	604	620	718	428	359	466	328	321	431	529	410	460	473
1966	Below Normal	511	440	602	628	564	798	427	431	632	644	605	591	573
1967	Wet	592	633	720	740	842	513	261	212	279	286	305	330	476
1968	Below Normal	466	544	697	717	700	901	420	416	625	643	581	569	607
1969	Wet	576	600	751	649	368	386	279	233	233	365	325	350	426
1970	Wet	389	473	619	276	317	328	331	367	429	597	556	528	434
1971	Wet	516	574	748	722	854	842	348	340	498	577	559	545	594
1972	Below Normal	522	591	755	760	842	995	546	509	647	643	592	586	666
1973	Above Normal	595	592	759	803	664	557	412	384	489	587	473	487	567
1974	Wet	471	499	603	509	571	289	341	365	419	540	449	425	457
1975	Wet	407	457	676	701	333	286	351	343	405	529	438	483	451
1976	Critical	405	482	723	727	853	999	582	555	673	669	592	589	654
1977	Critical	615	625	767	816	988	1,010	653	601	697	688	690	683	736
1978	Above Normal	699	697	811	735	722	653	371	300	418	511	442	426	566
1979	Below Normal	542	488	710	635	337	305	360	287	409	602	471	508	471
1980	Above Normal	487	524	732	420	333	383	335	337	361	436	415	461	435
1981	Dry	440	472	692	716	840	801	458	419	639	626	593	573	606
1982	Wet	550	592	752	698	281	297	219	197	347	392	309	239	406
1983	Wet	191	262	373	342	318	252	290	255	233	218	169	224	261
1984	Wet	332	200	299	328	209	330	342	338	490	591	495	442	366
1985	Dry	409	468	738	730	771	805	486	469	629	667	572	538	607
1986	Wet	545	551	731	771	447	305	231	211	368	554	444	422	465
1987	Dry	413	414	679	724	902	837	566	541	677	663	623	598	636
1988	Critical	606	617	768	812	988	1,010	642	616	695	679	670	631	728
1989	Dry	685	650	780	861	992	1,004	644	604	664	645	630	562	727
1990	Critical	639	643	783	871	993	1,007	678	622	696	658	647	628	739
1991	Critical	649	636	794	898	1,050	902	655	627	699	685	669	661	744
1992	Critical	677	672	821	923	908	997	693	670	688	672	689	683	758
1993	Above Normal	729	729	845	679	715	767	521	517	490	528	485	488	625
1994	Critical	538	575	806	884	995	1,012	630	608	707	627	498	642	710
Average		543	560	713	699	702	695	442	423	540	584	530	520	579
Wet		502	522	655	573	476	436	299	289	390	477	416	416	454
Above Normal		582	596	722	664	654	590	387	365	478	564	511	509	552
Below Normal		543	556	710	716	650	662	406	393	562	610	542	535	574
Dry		546	560	737	772	877	904	538	516	645	649	603	572	660
Critical		581	599	775	830	968	998	651	615	688	668	635	622	719

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	641	609	730	764	632	504	342	330	323	495	465	495	527
1923	Below Normal	522	537	659	552	507	665	352	352	513	597	473	470	517
1924	Critical	493	541	735	768	944	1,012	671	642	707	678	639	598	702
1925	Dry	625	609	764	835	848	861	404	386	600	635	583	556	642
1926	Dry	579	588	763	802	944	1,002	510	505	674	654	599	562	682
1927	Wet	602	568	760	803	728	724	371	359	593	627	558	530	602
1928	Above Normal	508	506	727	738	836	573	388	416	620	634	579	551	590
1929	Critical	560	575	758	770	928	1,001	595	563	648	649	611	573	686
1930	Dry	619	617	799	841	991	984	588	568	686	664	609	567	711
1931	Critical	616	609	795	844	990	1,011	729	678	710	684	653	598	743
1932	Dry	640	637	714	792	706	817	525	471	622	631	583	552	641
1933	Critical	569	580	775	821	990	1,003	599	558	647	657	609	577	699
1934	Critical	607	630	774	823	992	1,006	686	636	683	676	652	598	730
1935	Below Normal	636	632	790	772	929	806	381	378	589	589	564	542	634
1936	Below Normal	551	576	781	795	550	303	325	389	550	596	483	499	533
1937	Below Normal	504	547	739	724	433	354	255	251	535	579	482	499	492
1938	Wet	522	518	513	552	368	314	252	244	242	362	318	331	378
1939	Dry	399	479	691	718	815	758	466	462	659	644	588	542	602
1940	Above Normal	560	594	779	702	689	311	311	349	492	598	518	501	534
1941	Wet	518	542	622	631	414	292	243	250	395	457	434	480	440
1942	Wet	472	491	629	434	282	380	294	263	386	434	333	342	395
1943	Wet	460	469	631	369	255	290	276	351	429	570	464	491	421
1944	Dry	498	499	680	707	754	752	388	426	588	617	573	559	587
1945	Below Normal	550	554	736	734	491	334	360	346	471	550	454	486	505
1946	Below Normal	465	516	490	549	428	455	366	351	497	610	548	521	483
1947	Dry	486	522	677	707	780	989	553	514	638	654	605	573	641
1948	Below Normal	576	598	771	787	988	1,002	528	498	584	598	576	563	672
1949	Dry	575	592	762	803	945	871	592	571	604	637	592	575	677
1950	Below Normal	599	587	752	800	915	890	476	409	546	624	586	558	645
1951	Above Normal	575	595	390	316	237	405	364	233	472	614	578	561	445
1952	Wet	552	572	720	546	603	404	212	194	277	362	315	343	425
1953	Wet	504	512	689	607	609	817	340	318	477	576	561	546	546
1954	Above Normal	547	577	738	751	848	894	479	457	607	631	586	573	641
1955	Dry	581	593	732	728	930	983	581	568	648	660	611	581	683
1956	Wet	618	615	696	372	345	330	357	350	388	459	427	355	443
1957	Above Normal	476	534	714	727	861	847	350	324	512	604	564	542	588
1958	Wet	530	576	732	743	695	456	204	177	317	404	324	344	458
1959	Below Normal	490	532	681	706	713	785	431	442	637	646	595	541	600
1960	Dry	579	617	766	776	873	997	586	560	669	658	627	605	693
1961	Dry	652	638	781	846	990	1,002	674	640	693	685	658	628	741
1962	Below Normal	668	646	775	867	702	669	460	441	629	616	573	560	634
1963	Wet	594	633	781	805	793	847	413	380	544	592	551	532	622
1964	Dry	549	568	773	773	947	1,001	593	555	640	642	606	581	686
1965	Wet	604	620	718	428	359	466	328	321	431	529	410	460	473
1966	Below Normal	511	440	602	628	564	798	427	431	632	644	605	591	573
1967	Wet	592	633	720	740	842	513	261	212	279	286	305	330	476
1968	Below Normal	466	544	697	717	700	901	420	416	625	643	581	569	607
1969	Wet	576	600	751	649	368	386	279	233	233	365	325	350	426
1970	Wet	389	473	619	276	317	328	331	367	429	597	556	528	434
1971	Wet	516	574	748	722	854	842	348	340	498	577	559	545	594
1972	Below Normal	522	591	755	760	842	995	545	509	647	643	592	586	666
1973	Above Normal	595	592	759	803	664	557	412	384	489	587	473	487	567
1974	Wet	471	499	603	509	571	289	341	365	419	540	449	425	457
1975	Wet	407	457	676	701	333	286	351	343	405	529	438	483	451
1976	Critical	405	482	723	727	853	999	582	555	673	670	593	589	654
1977	Critical	615	625	766	816	988	1,010	653	601	697	687	690	683	736
1978	Above Normal	699	697	811	735	722	653	371	300	418	511	442	426	566
1979	Below Normal	542	488	710	635	337	305	360	287	410	602	471	508	471
1980	Above Normal	487	524	732	420	333	383	335	337	361	436	415	461	435
1981	Dry	440	472	692	716	840	801	458	419	639	626	593	573	606
1982	Wet	550	592	752	698	281	297	219	197	347	392	309	239	406
1983	Wet	191	262	373	342	318	252	290	255	233	218	169	224	261
1984	Wet	332	200	299	328	209	330	342	338	490	591	495	442	366
1985	Dry	409	468	738	730	771	805	486	469	629	667	572	538	607
1986	Wet	545	551	730	771	447	305	231	211	369	554	444	422	465
1987	Dry	413	414	679	724	902	837	566	541	677	663	623	598	636
1988	Critical	606	617	768	812	988	1,010	642	616	695	674	670	631	728
1989	Dry	685	650	780	861	992	1,004	644	604	664	646	631	562	727
1990	Critical	639	643	783	871	993	1,007	678	622	696	658	647	628	739
1991	Critical	649	637	794	898	1,050	902	655	627	699	685	669	661	744
1992	Critical	677	672	821	923	908	997	693	670	687	671	689	683	758
1993	Above Normal	729	729	845	679	715	767	521	517	490	528	488	488	625
1994	Critical	538	575	806	884	995	1,012	630	608	707	630	498	642	710
Average		543	560	713	699	702	695	442	423	540	583	530	520	579
Wet		502	522	655	573	476	436	299	289	390	477	416	416	454
Above Normal		582	596	722	664	654	590	387	365	478	564	511	509	552
Below Normal		543	556	710	716	650	662	406	393	562	610	542	535	574
Dry		546	560	737	772	877	904	538	516	646	649	603	572	660
Critical		581	599	775	830	968	998	651	615	688	668	635	622	719

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
 Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	0	0	0	-9	-2	0	-1
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	-1	0	0	0	0	0	0	-1	0	0	0
1978	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	-5	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	3	-1	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	647	606	732	756	620	499	333	327	318	493	458	492	523
1923	Below Normal	522	535	660	545	505	667	339	349	509	594	461	467	513
1924	Critical	492	542	744	765	954	1,009	629	639	698	666	630	591	697
1925	Dry	625	607	768	836	843	860	380	389	597	630	573	551	638
1926	Dry	579	588	773	800	953	1,001	478	506	667	643	588	556	678
1927	Wet	603	565	771	800	720	722	354	357	592	622	547	524	598
1928	Above Normal	506	505	733	735	841	560	374	413	616	626	568	545	585
1929	Critical	558	574	767	765	937	1,000	555	566	634	639	601	566	680
1930	Dry	620	616	812	834	1,000	981	551	574	674	655	598	560	706
1931	Critical	617	607	806	840	1,000	1,006	687	675	698	673	645	589	737
1932	Dry	641	636	713	794	695	819	500	471	616	626	573	545	636
1933	Critical	568	578	784	814	1,000	1,000	557	563	633	650	597	570	693
1934	Critical	607	629	781	822	1,000	1,001	640	636	665	667	644	589	723
1935	Below Normal	636	629	796	766	937	797	363	376	586	580	556	536	630
1936	Below Normal	550	576	792	791	541	296	321	388	545	591	469	496	530
1937	Below Normal	503	548	747	717	423	347	250	248	534	574	470	496	488
1938	Wet	522	517	512	551	360	312	250	242	239	360	310	328	375
1939	Dry	400	481	699	715	817	738	437	463	652	633	576	534	595
1940	Above Normal	559	595	788	688	673	296	309	346	483	595	506	497	528
1941	Wet	518	543	622	625	404	288	241	247	393	454	426	477	436
1942	Wet	471	491	632	422	277	381	290	260	384	430	323	338	392
1943	Wet	462	468	636	360	251	289	274	349	423	568	450	488	418
1944	Dry	496	498	686	705	751	750	365	427	581	610	562	553	582
1945	Below Normal	548	552	743	731	480	330	354	343	461	546	440	483	501
1946	Below Normal	463	517	488	549	423	454	355	347	490	608	536	516	479
1947	Dry	483	521	682	705	781	999	510	516	623	648	593	566	636
1948	Below Normal	575	598	780	785	1,000	1,000	495	501	572	590	567	558	668
1949	Dry	574	592	771	799	953	864	562	574	588	632	581	570	672
1950	Below Normal	598	586	761	792	921	886	444	407	536	620	576	552	640
1951	Above Normal	575	594	381	311	232	408	357	225	468	613	567	555	441
1952	Wet	550	572	720	527	603	398	207	191	275	359	307	340	421
1953	Wet	507	512	693	601	609	821	311	315	468	571	552	541	542
1954	Above Normal	545	578	746	747	853	891	451	454	601	624	576	568	636
1955	Dry	579	592	736	717	940	983	550	573	633	654	599	575	678
1956	Wet	618	614	695	357	343	326	353	347	383	457	418	348	438
1957	Above Normal	479	536	723	723	867	843	321	325	503	600	553	537	584
1958	Wet	529	578	739	735	673	440	197	175	316	401	315	340	453
1959	Below Normal	493	533	687	703	707	783	401	442	631	637	583	537	595
1960	Dry	578	619	775	771	875	999	546	563	651	644	616	599	686
1961	Dry	653	636	790	841	1,000	1,000	635	638	676	675	654	621	735
1962	Below Normal	668	643	782	869	686	667	439	443	621	606	563	556	629
1963	Wet	594	634	789	802	789	846	389	381	535	587	541	528	618
1964	Dry	549	567	786	767	955	1,000	553	557	627	632	595	575	680
1965	Wet	604	620	719	415	356	467	323	315	421	525	398	458	469
1966	Below Normal	512	435	606	627	560	804	396	430	627	637	595	586	568
1967	Wet	590	633	723	713	848	497	252	209	278	283	299	327	471
1968	Below Normal	469	546	704	710	697	909	387	415	619	635	573	563	602
1969	Wet	575	600	755	638	358	386	276	231	231	363	317	347	423
1970	Wet	389	475	623	264	317	326	322	363	412	597	544	522	430
1971	Wet	515	570	743	718	860	840	321	339	487	571	549	539	587
1972	Below Normal	520	593	765	755	846	998	504	511	633	635	580	583	660
1973	Above Normal	595	586	766	763	642	551	400	379	481	584	460	483	558
1974	Wet	469	498	604	503	572	280	341	362	413	538	436	418	453
1975	Wet	405	458	684	700	316	284	349	337	399	526	427	481	447
1976	Critical	401	484	733	722	857	999	542	558	658	661	581	586	648
1977	Critical	615	624	775	815	1,000	1,000	596	605	679	674	687	678	729
1978	Above Normal	699	695	816	721	719	646	363	297	415	508	431	422	561
1979	Below Normal	544	484	718	626	325	303	358	282	398	602	458	505	467
1980	Above Normal	485	524	741	407	328	384	331	333	358	434	408	458	433
1981	Dry	437	472	701	711	845	796	433	416	635	615	583	567	601
1982	Wet	549	592	756	684	269	292	217	194	346	389	301	236	402
1983	Wet	189	260	375	334	315	247	290	254	231	216	164	223	258
1984	Wet	334	196	298	328	205	331	335	333	484	588	483	435	362
1985	Dry	408	467	746	727	772	804	458	467	620	665	559	533	602
1986	Wet	544	550	739	766	430	300	228	207	367	551	430	418	461
1987	Dry	410	412	689	723	911	824	528	546	662	652	612	591	630
1988	Critical	605	616	778	807	1,000	1,005	601	617	680	654	665	623	721
1989	Dry	687	647	786	863	1,000	1,001	598	603	629	617	622	555	717
1990	Critical	643	642	793	872	1,000	1,000	614	625	679	629	637	622	730
1991	Critical	648	633	804	904	1,061	887	621	625	686	669	660	655	738
1992	Critical	677	671	831	927	900	1,000	651	665	654	653	690	676	750
1993	Above Normal	732	728	850	650	691	759	500	526	476	524	476	484	616
1994	Critical	539	576	818	883	1,000	1,009	579	614	690	699	665	643	726
Average		543	559	719	692	701	692	419	422	531	578	523	515	574
Wet		502	521	658	564	470	432	291	286	385	474	407	412	450
Above Normal		582	595	728	650	647	584	374	362	472	560	500	504	546
Below Normal		543	555	716	712	647	660	386	391	554	604	530	531	569
Dry		545	559	745	769	881	901	505	518	633	639	593	566	654
Critical		581	598	785	828	976	993	606	615	671	661	642	616	714

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922 Above Normal	647	606	732	756	620	499	333	327	318	493	458	492	523	
1923 Below Normal	522	535	660	545	505	667	339	349	509	594	461	467	513	
1924 Critical	492	542	744	765	954	1,009	629	639	698	666	630	591	697	
1925 Dry	625	607	768	836	843	860	380	389	597	630	573	551	638	
1926 Dry	579	588	773	800	953	1,001	478	506	667	644	588	556	678	
1927 Wet	603	565	771	800	720	722	354	357	592	622	547	524	598	
1928 Above Normal	506	505	733	735	841	560	374	413	616	627	568	545	585	
1929 Critical	558	574	767	765	937	1,000	555	566	634	639	601	566	680	
1930 Dry	620	616	812	834	1,000	981	551	574	674	655	598	560	706	
1931 Critical	617	607	806	840	1,000	1,006	687	675	698	673	645	589	737	
1932 Dry	641	636	713	794	695	819	500	471	616	626	573	545	636	
1933 Critical	568	578	784	814	1,000	1,000	557	563	633	650	597	570	693	
1934 Critical	607	629	781	822	1,000	1,001	640	636	665	667	644	589	723	
1935 Below Normal	636	629	796	766	937	797	363	376	586	580	556	536	630	
1936 Below Normal	550	576	792	791	541	296	321	388	545	591	469	496	530	
1937 Below Normal	503	548	747	717	423	347	250	248	534	573	470	496	488	
1938 Wet	522	517	512	551	360	312	250	242	239	360	310	328	375	
1939 Dry	400	481	699	715	817	738	437	463	652	633	576	535	595	
1940 Above Normal	559	595	788	688	673	296	309	345	483	595	506	497	528	
1941 Wet	518	543	622	625	403	288	241	247	393	454	426	477	436	
1942 Wet	471	491	632	422	277	381	290	260	384	430	323	338	392	
1943 Wet	462	468	636	360	251	289	274	349	423	568	450	488	418	
1944 Dry	496	498	686	705	751	750	365	427	581	610	562	553	582	
1945 Below Normal	548	552	743	731	481	330	354	343	461	546	440	483	501	
1946 Below Normal	463	517	488	549	423	454	355	348	490	608	536	516	479	
1947 Dry	483	521	682	705	781	999	510	516	623	648	594	566	636	
1948 Below Normal	575	598	780	785	1,000	1,000	495	501	572	590	567	558	668	
1949 Dry	574	592	771	799	953	864	562	574	588	632	581	570	672	
1950 Below Normal	598	586	761	792	921	886	444	407	536	620	576	553	640	
1951 Above Normal	575	594	382	311	232	408	357	225	468	613	567	555	441	
1952 Wet	550	572	720	527	603	398	207	191	275	359	307	340	421	
1953 Wet	507	512	693	601	609	821	311	315	468	571	552	541	542	
1954 Above Normal	545	578	746	747	853	891	451	454	601	624	576	568	636	
1955 Dry	579	592	736	717	940	983	550	574	634	654	599	575	678	
1956 Wet	618	614	695	357	344	326	353	347	383	457	418	348	438	
1957 Above Normal	479	536	723	723	867	843	321	325	503	600	553	537	584	
1958 Wet	529	578	739	735	673	440	197	175	316	401	315	340	453	
1959 Below Normal	493	533	687	703	707	783	401	442	631	637	583	537	595	
1960 Dry	578	619	775	771	875	999	546	563	651	645	617	599	686	
1961 Dry	653	636	790	841	1,000	1,000	635	638	677	675	654	622	735	
1962 Below Normal	668	643	782	869	686	667	439	443	621	606	563	556	629	
1963 Wet	594	634	789	802	789	846	389	381	535	587	541	528	618	
1964 Dry	549	567	786	767	955	1,000	553	557	627	633	596	575	680	
1965 Wet	604	620	719	416	357	467	323	316	421	525	398	458	469	
1966 Below Normal	512	435	606	627	560	804	396	430	627	637	595	586	568	
1967 Wet	590	633	723	713	848	497	252	209	278	283	299	327	471	
1968 Below Normal	469	546	704	710	697	909	387	415	619	635	573	563	602	
1969 Wet	575	600	755	638	358	386	276	231	231	363	317	347	423	
1970 Wet	389	475	623	264	317	326	322	364	413	598	544	522	430	
1971 Wet	515	570	743	718	860	840	321	339	487	571	549	539	587	
1972 Below Normal	520	593	765	755	846	998	504	511	633	635	580	583	660	
1973 Above Normal	595	586	766	763	642	551	400	379	481	584	460	483	558	
1974 Wet	469	498	604	503	572	280	341	362	413	538	436	418	453	
1975 Wet	405	458	684	700	316	284	349	337	399	526	427	481	447	
1976 Critical	401	484	733	722	857	999	542	558	658	662	582	586	649	
1977 Critical	615	624	775	815	1,000	1,000	596	605	679	674	687	678	729	
1978 Above Normal	699	695	816	721	719	646	363	297	415	508	431	422	561	
1979 Below Normal	544	484	718	626	325	303	358	282	399	602	458	505	467	
1980 Above Normal	485	524	741	407	329	384	331	333	358	434	408	458	433	
1981 Dry	437	472	701	711	845	796	433	416	635	615	583	567	601	
1982 Wet	549	592	756	684	269	292	217	194	346	389	301	236	402	
1983 Wet	189	260	375	334	315	247	290	254	231	216	164	223	258	
1984 Wet	334	196	298	328	205	331	335	333	484	588	483	435	362	
1985 Dry	408	467	746	727	772	804	458	467	620	665	560	533	602	
1986 Wet	544	549	739	766	430	300	229	207	368	552	430	418	461	
1987 Dry	411	412	689	723	911	824	528	546	662	652	612	591	630	
1988 Critical	605	616	778	807	1,000	1,005	601	617	680	655	665	623	721	
1989 Dry	687	647	786	863	1,000	1,001	598	603	629	618	622	555	717	
1990 Critical	643	642	793	872	1,000	1,000	614	625	679	629	637	622	730	
1991 Critical	648	633	804	904	1,061	887	621	625	686	669	660	655	738	
1992 Critical	677	671	831	927	900	1,000	651	665	654	653	690	676	749	
1993 Above Normal	732	728	850	650	691	759	500	526	476	524	476	484	616	
1994 Critical	539	576	818	883	1,000	1,009	579	614	690	699	665	643	726	
Average	543	559	719	692	701	692	419	422	531	578	523	515	574	
Wet	502	521	658	564	470	432	291	286	385	474	407	412	450	
Above Normal	582	595	728	650	647	584	374	362	472	560	500	504	546	
Below Normal	543	555	716	712	647	660	386	391	554	604	530	531	569	
Dry	545	559	745	769	881	901	505	518	633	640	593	566	655	
Critical	581	598	785	828	976	993	606	616	671	661	642	616	714	

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
 Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	1	0	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	0	0	0	1	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	1	1	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	1	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	1	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average	
Year	Year Type														
1922	Above Normal	606	608	620	639	679	517	392	362	329	497	373	451	506	
1923	Below Normal	594	605	656	574	523	489	407	391	414	365	395	519	494	
1924	Critical	564	599	673	746	898	1,002	737	612	650	576	579	570	684	
1925	Dry	671	710	731	804	781	639	461	346	450	418	485	531	585	
1926	Dry	658	625	691	773	697	704	476	461	476	456	496	560	589	
1927	Wet	678	543	351	404	499	435	357	370	364	353	348	478	432	
1928	Above Normal	600	533	404	460	386	577	425	395	392	400	374	551	458	
1929	Critical	675	631	731	787	882	911	689	548	570	509	528	590	669	
1930	Dry	698	701	762	616	526	539	429	454	476	499	467	572	562	
1931	Critical	703	651	708	804	924	892	680	602	628	545	596	603	695	
1932	Dry	682	706	720	477	748	761	598	515	491	465	457	553	598	
1933	Critical	665	616	678	773	775	826	622	523	564	511	542	550	637	
1934	Critical	645	716	708	704	745	938	685	576	599	501	525	596	661	
1935	Below Normal	684	704	816	671	647	493	394	413	403	381	399	549	546	
1936	Below Normal	665	613	684	686	557	317	357	381	449	366	394	514	499	
1937	Below Normal	641	605	658	794	457	399	381	334	476	417	394	479	503	
1938	Wet	630	651	519	571	391	324	263	247	246	367	325	336	406	
1939	Dry	292	309	509	788	780	797	573	454	432	453	463	587	536	
1940	Above Normal	711	621	683	765	736	335	330	378	414	359	346	501	515	
1941	Wet	617	624	628	661	461	305	307	256	400	462	394	417	461	
1942	Wet	387	463	631	483	297	386	339	328	394	439	342	346	403	
1943	Wet	316	336	348	379	275	294	313	365	437	414	370	471	360	
1944	Dry	638	610	672	760	818	503	437	413	414	415	477	531	557	
1945	Below Normal	648	606	590	556	503	347	446	391	401	378	398	523	482	
1946	Below Normal	614	552	495	562	446	464	438	404	415	361	400	521	473	
1947	Dry	629	607	713	662	650	552	471	486	442	419	475	586	558	
1948	Below Normal	717	646	758	743	891	627	439	427	378	338	402	519	574	
1949	Dry	613	598	672	826	781	514	454	472	442	402	507	580	572	
1950	Below Normal	684	612	697	743	468	411	419	394	372	371	380	477	502	
1951	Above Normal	604	477	402	355	268	412	381	350	347	350	338	532	401	
1952	Wet	620	627	724	644	621	414	220	199	280	368	323	348	449	
1953	Wet	301	388	620	624	622	568	407	345	342	331	358	434	445	
1954	Above Normal	415	478	590	791	402	425	403	425	383	364	342	510	461	
1955	Dry	657	675	703	556	457	490	491	486	447	403	475	554	533	
1956	Wet	658	678	716	441	363	339	377	379	396	463	406	383	467	
1957	Above Normal	291	304	438	678	666	455	405	342	363	356	349	533	432	
1958	Wet	606	398	486	449	677	552	217	181	320	408	333	348	415	
1959	Below Normal	306	352	568	765	492	516	504	430	419	388	385	537	472	
1960	Dry	657	639	684	825	808	505	425	477	436	454	459	558	577	
1961	Dry	686	669	824	800	747	563	453	475	444	419	466	530	590	
1962	Below Normal	623	630	726	780	755	507	422	405	401	363	389	583	549	
1963	Wet	647	343	397	424	460	465	441	363	375	335	338	473	422	
1964	Dry	609	622	376	461	471	532	508	483	421	420	517	543	497	
1965	Wet	648	657	651	454	374	472	363	391	403	369	370	450	467	
1966	Below Normal	588	577	604	644	583	432	417	408	397	374	382	566	498	
1967	Wet	731	705	757	783	425	521	276	217	283	290	311	334	470	
1968	Below Normal	298	336	536	649	452	407	427	424	402	378	369	537	435	
1969	Wet	642	640	626	712	402	391	283	236	236	370	333	354	436	
1970	Wet	294	320	447	297	334	336	383	378	380	371	349	508	366	
1971	Wet	668	567	540	366	390	406	377	352	341	327	336	468	428	
1972	Below Normal	430	507	620	581	619	491	419	446	419	391	384	573	490	
1973	Above Normal	749	626	465	725	774	585	437	422	429	355	364	513	537	
1974	Wet	650	476	605	535	584	303	316	376	426	407	377	429	457	
1975	Wet	304	316	479	513	351	296	345	386	413	410	364	424	384	
1976	Critical	301	287	392	664	838	771	534	519	593	603	600	639	562	
1977	Critical	743	664	776	702	891	971	762	631	632	526	551	599	704	
1978	Above Normal	733	765	793	753	741	675	380	306	423	515	405	459	579	
1979	Below Normal	584	625	695	667	371	316	366	381	387	355	404	526	473	
1980	Above Normal	670	588	520	440	355	390	403	390	371	440	396	462	452	
1981	Dry	575	557	662	791	439	430	440	424	429	451	479	583	522	
1982	Wet	653	600	370	615	299	317	222	202	351	398	317	243	382	
1983	Wet	216	277	376	391	335	276	298	257	236	221	177	226	274	
1984	Wet	258	204	306	338	226	336	400	413	421	357	354	503	343	
1985	Dry	582	521	354	346	495	533	514	456	402	413	528	521	472	
1986	Wet	575	588	707	605	487	313	241	217	372	555	433	429	460	
1987	Dry	512	536	646	802	723	615	494	472	446	456	511	572	565	
1988	Critical	709	668	739	749	726	901	591	526	523	442	544	618	645	
1989	Dry	722	745	776	728	954	606	399	435	377	404	503	527	598	
1990	Critical	589	641	758	675	733	626	542	486	553	569	597	609	615	
1991	Critical	737	764	774	846	934	713	540	494	531	585	609	565	674	
1992	Critical	708	811	789	919	775	589	426	455	473	427	526	598	625	
1993	Above Normal	723	781	853	794	765	584	379	385	486	532	382	463	594	
1994	Critical	585	653	712	812	867	579	448	451	469	577	602	714	622	
Average		586	571	618	640	593	524	430	405	423	421	424	506	512	
Wet		529	495	537	509	423	383	321	308	353	382	346	400	415	
Above Normal		610	578	577	640	577	496	394	375	394	417	367	498	493	
Below Normal		577	569	650	672	555	444	417	402	410	373	391	530	499	
Dry		618	614	656	688	680	580	476	457	439	434	485	556	557	
Critical		635	642	703	765	833	810	603	535	565	531	567	604	649	

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	606	609	620	639	679	517	392	362	329	497	374	450	506
1923	Below Normal	596	587	611	573	523	490	409	392	414	366	393	514	489
1924	Critical	570	603	668	760	735	945	688	605	659	578	576	565	663
1925	Dry	675	705	706	779	859	766	483	348	438	407	476	534	598
1926	Dry	661	619	686	770	692	644	463	455	467	457	498	567	582
1927	Wet	689	550	356	407	506	448	360	370	366	350	345	482	436
1928	Above Normal	600	547	438	481	397	577	424	394	390	376	364	553	462
1929	Critical	679	633	715	798	888	911	669	547	551	494	529	587	667
1930	Dry	695	701	763	616	521	535	429	454	467	433	496	528	553
1931	Critical	665	642	714	836	772	827	674	604	640	530	579	605	674
1932	Dry	687	707	719	499	749	762	600	510	492	465	456	553	600
1933	Critical	666	617	680	775	776	826	616	524	564	511	542	549	637
1934	Critical	645	718	711	724	746	936	682	575	599	501	525	594	663
1935	Below Normal	682	704	814	674	648	513	400	414	403	381	399	549	548
1936	Below Normal	666	614	684	686	557	317	357	381	449	366	394	515	499
1937	Below Normal	640	604	657	793	457	399	381	334	479	420	396	478	503
1938	Wet	629	662	519	571	391	324	262	247	246	367	325	336	407
1939	Dry	294	310	511	789	778	794	572	455	431	446	474	575	536
1940	Above Normal	674	603	680	758	738	335	330	378	415	360	347	502	510
1941	Wet	618	625	628	660	461	304	307	256	400	462	394	417	461
1942	Wet	392	481	632	483	297	386	339	328	394	439	342	346	405
1943	Wet	316	336	348	379	274	294	312	365	437	414	370	472	360
1944	Dry	640	611	672	760	816	506	438	413	409	409	484	531	557
1945	Below Normal	637	598	582	550	503	347	446	391	401	378	398	522	479
1946	Below Normal	614	564	495	562	445	464	437	408	413	360	401	558	477
1947	Dry	661	619	683	651	637	594	474	486	451	424	481	601	563
1948	Below Normal	717	652	757	740	905	635	440	428	376	347	392	529	576
1949	Dry	612	584	666	821	786	495	449	472	442	397	481	590	566
1950	Below Normal	692	594	662	720	454	406	419	388	370	369	381	468	494
1951	Above Normal	617	492	402	355	268	412	383	346	344	358	336	525	403
1952	Wet	616	631	729	644	621	415	220	199	280	368	323	348	449
1953	Wet	301	389	621	624	621	569	407	345	343	332	359	439	446
1954	Above Normal	417	479	591	791	402	425	403	425	384	369	342	510	462
1955	Dry	679	692	678	551	453	606	517	488	430	396	446	563	542
1956	Wet	660	677	717	441	363	339	377	379	396	463	406	383	467
1957	Above Normal	291	304	438	682	676	456	405	342	362	353	347	529	432
1958	Wet	594	419	500	452	677	552	217	181	320	408	333	348	417
1959	Below Normal	306	353	569	765	492	515	504	430	417	387	386	539	472
1960	Dry	663	660	747	699	814	512	427	477	431	447	460	566	575
1961	Dry	698	669	810	835	768	715	494	481	442	420	476	583	616
1962	Below Normal	662	645	777	752	754	507	422	402	413	378	373	580	555
1963	Wet	635	338	422	438	462	461	442	362	376	339	342	467	424
1964	Dry	612	616	366	454	469	533	507	485	426	427	551	536	499
1965	Wet	620	636	633	454	374	472	363	391	390	361	369	444	459
1966	Below Normal	575	572	604	644	583	413	411	408	395	372	380	564	494
1967	Wet	721	697	773	785	425	521	276	217	283	290	311	334	469
1968	Below Normal	298	336	536	648	450	407	426	424	401	378	372	544	435
1969	Wet	659	648	620	712	402	391	283	236	236	370	333	354	437
1970	Wet	294	321	448	297	334	336	383	378	378	369	349	508	366
1971	Wet	668	562	539	366	369	396	377	352	341	327	336	469	425
1972	Below Normal	433	509	620	582	619	491	419	448	414	389	385	579	491
1973	Above Normal	765	667	473	728	774	585	438	422	429	355	364	513	543
1974	Wet	650	478	605	535	584	303	316	376	426	407	377	429	457
1975	Wet	305	317	480	513	351	296	345	386	413	410	364	424	384
1976	Critical	301	287	392	664	838	766	531	514	588	620	614	656	564
1977	Critical	753	644	826	673	705	897	684	591	621	530	570	611	675
1978	Above Normal	714	784	797	772	742	675	380	306	423	515	403	464	581
1979	Below Normal	589	627	695	667	370	316	365	383	386	355	410	529	474
1980	Above Normal	670	596	562	440	356	390	403	390	371	440	396	462	456
1981	Dry	575	557	662	791	439	426	438	424	428	449	481	581	521
1982	Wet	654	609	374	615	299	317	222	202	351	398	317	243	383
1983	Wet	216	277	376	391	335	276	298	257	236	221	177	226	274
1984	Wet	258	204	306	338	226	336	400	413	421	357	354	503	343
1985	Dry	581	522	355	343	488	501	502	455	403	414	531	533	469
1986	Wet	579	586	706	604	488	313	240	218	373	488	405	421	452
1987	Dry	485	524	645	811	725	613	489	456	433	443	505	580	559
1988	Critical	720	647	724	743	673	891	589	525	512	432	537	598	633
1989	Dry	711	751	763	732	947	593	396	433	381	411	497	543	597
1990	Critical	584	635	761	682	723	621	542	487	553	569	597	609	613
1991	Critical	737	764	774	843	930	710	540	494	531	585	609	565	673
1992	Critical	708	811	789	919	775	597	427	456	475	427	525	592	625
1993	Above Normal	719	788	845	795	765	584	379	388	486	532	380	466	594
1994	Critical	589	655	712	809	878	588	451	452	492	575	621	664	624
Average		586	572	618	639	586	525	429	404	422	418	424	507	511
Wet		527	497	540	510	422	383	321	308	353	378	344	400	415
Above Normal		607	587	584	644	580	496	394	375	393	415	365	497	495
Below Normal		579	568	647	668	554	444	417	402	409	375	390	533	499
Dry		621	615	652	681	684	600	480	456	436	428	487	560	558
Critical		635	638	706	769	787	793	591	531	565	529	569	599	643

Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
 Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	1	-18	-45	0	-1	1	2	0	0	0	-2	-5	-5
1924	Critical	5	4	-5	15	-163	-57	-49	-8	9	2	-3	-4	-21
1925	Dry	4	-5	-25	-24	79	126	22	1	-11	-11	-9	3	12
1926	Dry	4	-6	-5	-3	-5	-60	-13	-7	-9	1	2	7	-8
1927	Wet	10	6	6	3	7	13	3	0	2	-2	-3	4	4
1928	Above Normal	-1	14	34	21	12	0	-1	-2	-1	-24	-9	2	4
1929	Critical	4	2	-16	11	6	0	-1	-1	-19	-15	1	-4	-3
1930	Dry	-3	0	0	0	-6	-5	-1	0	-9	-66	29	-44	-9
1931	Critical	-38	-9	6	32	-152	-65	-5	3	12	-15	-18	2	-21
1932	Dry	5	0	-1	22	1	2	-2	-5	2	0	0	0	2
1933	Critical	1	0	2	2	1	0	-6	1	0	0	0	-1	0
1934	Critical	0	3	3	21	1	-2	-3	-1	0	0	0	-2	2
1935	Below Normal	-2	0	-1	3	0	20	6	0	0	0	0	0	2
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	-1	-1	0	-1	0	0	0	0	2	3	2	-1	0
1938	Wet	-1	11	1	0	0	0	-1	0	0	0	0	0	-1
1939	Dry	2	1	2	1	-2	-3	0	1	-1	-8	11	-12	-1
1940	Above Normal	-37	-18	-4	-7	2	0	-1	0	0	1	0	1	-5
1941	Wet	1	1	0	0	0	-1	0	0	0	0	0	0	0
1942	Wet	5	18	1	0	0	0	0	0	0	0	0	0	2
1943	Wet	1	0	0	0	0	0	0	0	0	-1	0	1	0
1944	Dry	1	1	0	0	-2	2	2	0	-4	-6	8	0	0
1945	Below Normal	-11	-8	-8	-6	1	0	0	-1	0	0	0	-1	-3
1946	Below Normal	0	11	1	0	-1	0	-1	3	-2	-2	1	38	4
1947	Dry	32	12	-30	-11	-14	41	3	0	9	4	7	15	6
1948	Below Normal	0	6	-1	-3	14	8	1	1	-2	9	-10	10	3
1949	Dry	-1	-14	-6	-5	6	-19	-6	-1	0	-5	-26	11	-5
1950	Below Normal	8	-19	-34	-23	-14	-5	1	-7	-2	-2	1	-9	-9
1951	Above Normal	13	15	0	0	0	0	2	-4	-3	8	-3	-6	2
1952	Wet	-3	3	5	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	1	1	0	0	1	0	0	0	0	0	5	1
1954	Above Normal	2	1	1	0	0	0	0	0	1	4	1	0	1
1955	Dry	22	16	-25	-4	-4	116	26	2	-17	-7	-29	9	9
1956	Wet	2	0	0	0	0	0	0	0	0	0	0	-1	0
1957	Above Normal	0	0	0	4	10	1	0	0	-1	-3	-2	-5	0
1958	Wet	-12	21	14	3	0	0	0	0	0	0	0	0	2
1959	Below Normal	0	0	1	0	-1	-1	0	0	-2	-1	0	2	0
1960	Dry	6	21	63	-127	6	7	2	1	-5	-6	1	8	-2
1961	Dry	11	0	-14	35	21	153	41	6	-2	1	10	53	26
1962	Below Normal	39	15	51	-28	-1	0	0	-4	12	15	-16	-3	7
1963	Wet	-12	-5	25	14	2	-4	1	0	1	4	4	-6	2
1964	Dry	3	-6	-10	-8	-2	1	-1	1	5	7	34	-6	2
1965	Wet	-28	-21	-18	0	0	0	0	0	-12	-8	-1	-6	-8
1966	Below Normal	-13	-5	0	0	0	-19	-6	0	-1	-1	-1	-2	-4
1967	Wet	-10	-8	15	1	-1	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	-1	-1	0	-1	0	-1	0	3	7	0
1969	Wet	18	8	-6	0	0	0	0	0	0	0	0	0	2
1970	Wet	0	0	0	0	0	0	0	0	-1	-2	0	0	0
1971	Wet	0	-5	-1	0	-22	-10	0	0	0	0	0	1	-3
1972	Below Normal	3	2	1	0	1	0	0	2	-5	-1	1	6	1
1973	Above Normal	17	40	8	3	0	0	1	0	0	0	0	0	6
1974	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	-5	-3	-6	-5	17	14	16	2
1977	Critical	10	-19	50	-29	-186	-74	-77	-41	-11	5	19	12	-28
1978	Above Normal	-19	19	5	19	0	0	0	0	0	0	-2	5	2
1979	Below Normal	5	2	-1	0	0	0	-1	2	0	0	6	2	1
1980	Above Normal	0	8	41	1	1	1	0	0	0	0	0	0	4
1981	Dry	0	0	0	0	0	-5	-2	0	-1	-2	2	-2	-1
1982	Wet	1	9	4	0	0	0	0	0	0	0	0	0	1
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	-1	1	0	-4	-7	-33	-13	-1	1	1	3	11	-3
1986	Wet	5	-2	-1	-1	0	0	-1	1	1	-68	-28	-7	-8
1987	Dry	-27	-11	-1	9	1	-2	-5	-16	-13	-13	-6	8	-6
1988	Critical	11	-21	-14	-6	-53	-11	-3	-1	-11	-10	-8	-21	-12
1989	Dry	-11	6	-12	4	-6	-13	-3	-1	4	7	-6	16	-1
1990	Critical	-4	-6	3	7	-10	-5	0	0	0	0	0	0	-1
1991	Critical	0	0	0	-3	-4	-3	0	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	8	1	1	2	0	-1	-6	0
1993	Above Normal	-4	7	-8	0	0	0	0	3	0	0	-1	3	0
1994	Critical	4	3	0	-3	11	9	3	1	24	-3	19	-50	1
Average		0	1	1	-1	-7	2	-1	-1	-1	-3	0	1	-1
Wet		-1	2	2	1	-1	0	0	0	0	-4	-1	0	0
Above Normal		-3	9	8	4	2	0	0	0	0	-1	-2	0	1
Below Normal		2	-1	-3	-4	0	0	0	0	0	2	-1	3	0
Dry		3	1	-4	-7	4	19	3	-1	-3	-6	2	5	1
Critical		-1	-4	2	4	-46	-17	-12	-4	0	-2	2	-5	-7

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-3%	-7%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%
1924	Critical	1%	1%	-1%	2%	-18%	-6%	-7%	-1%	1%	0%	-1%	-1%	-2%
1925	Dry	1%	-1%	-3%	-3%	10%	20%	5%	0%	-3%	-3%	-2%	1%	2%
1926	Dry	1%	-1%	-1%	0%	-1%	-9%	-3%	-1%	-2%	0%	0%	1%	-1%
1927	Wet	2%	1%	2%	1%	1%	3%	1%	0%	1%	-1%	-1%	1%	1%
1928	Above Normal	0%	3%	8%	5%	3%	0%	0%	0%	0%	-6%	-3%	0%	1%
1929	Critical	1%	0%	-2%	1%	1%	0%	0%	0%	-3%	-3%	0%	-1%	-1%
1930	Dry	0%	0%	0%	0%	-1%	-1%	0%	0%	-2%	-13%	6%	-8%	-2%
1931	Critical	-5%	-1%	1%	4%	-16%	-7%	-1%	0%	2%	-3%	-3%	0%	-2%
1932	Dry	1%	0%	0%	5%	0%	0%	0%	-1%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	1%	0%	4%	2%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1938	Wet	0%	2%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1939	Dry	1%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	2%	-2%	0%
1940	Above Normal	-5%	-3%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	2%	0%	0%
1945	Below Normal	-2%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	7%	1%
1947	Dry	5%	2%	-4%	-2%	-2%	7%	1%	0%	2%	1%	1%	3%	1%
1948	Below Normal	0%	1%	0%	0%	2%	1%	0%	0%	-1%	3%	-2%	2%	0%
1949	Dry	0%	-2%	-1%	-1%	1%	-4%	-1%	0%	0%	-1%	-5%	2%	-1%
1950	Below Normal	1%	-3%	-5%	-3%	-3%	-1%	0%	-2%	-1%	-1%	0%	-2%	-2%
1951	Above Normal	2%	3%	0%	0%	0%	0%	1%	-1%	-1%	2%	-1%	-1%	0%
1952	Wet	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1955	Dry	3%	2%	-4%	-1%	-1%	24%	5%	0%	-4%	-2%	-6%	2%	2%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	1%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1958	Wet	-2%	5%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	1%	3%	9%	-15%	1%	1%	0%	0%	-1%	-1%	0%	1%	0%
1961	Dry	2%	0%	-2%	4%	3%	27%	9%	1%	-1%	0%	2%	10%	5%
1962	Below Normal	6%	2%	7%	-4%	0%	0%	0%	-1%	3%	4%	-4%	-1%	1%
1963	Wet	-2%	-1%	6%	3%	0%	-1%	0%	0%	0%	1%	1%	-1%	1%
1964	Dry	0%	-1%	-3%	-2%	0%	0%	0%	0%	1%	2%	7%	-1%	0%
1965	Wet	-4%	-3%	-3%	0%	0%	0%	0%	0%	-3%	-2%	0%	-1%	-1%
1966	Below Normal	-2%	-1%	0%	0%	0%	-4%	-1%	0%	0%	0%	0%	0%	-1%
1967	Wet	-1%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1969	Wet	3%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-6%	-2%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	0%
1973	Above Normal	2%	6%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%	3%	2%	3%	0%
1977	Critical	1%	-3%	6%	-4%	-21%	-8%	-10%	-6%	-2%	1%	3%	2%	-3%
1978	Above Normal	-3%	2%	1%	3%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1980	Above Normal	0%	1%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-6%	-2%	0%	0%	0%	1%	2%	-1%
1986	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	-12%	-6%	-2%	-2%
1987	Dry	-5%	-2%	0%	1%	0%	0%	-1%	-3%	-3%	-3%	-1%	1%	-1%
1988	Critical	2%	-3%	-2%	-1%	-7%	-1%	0%	0%	-2%	-2%	-1%	-3%	-2%
1989	Dry	-2%	1%	-2%	1%	-1%	-2%	-1%	0%	1%	2%	-1%	3%	0%
1990	Critical	-1%	-1%	0%	1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	0%
1993	Above Normal	-1%	1%	-1%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
1994	Critical	1%	0%	0%	0%	1%	2%	1%	0%	5%	0%	3%	-7%	0%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	1%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Dry		0%	0%	-1%	-1%	0%	4%	1%	0%	-1%	-1%	0%	1%	0%
Critical		0%	-1%	0%	0%	-5%	-2%	-2%	-1%	0%	0%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	451	486	730	661	632	505	398	342	324	495	363	360	479
1923	Below Normal	437	461	660	553	509	667	427	362	515	365	337	471	480
1924	Critical	428	451	542	677	794	832	711	608	574	476	435	436	580
1925	Dry	496	559	608	718	848	668	495	334	459	439	386	416	536
1926	Dry	486	497	529	670	659	545	477	444	461	414	375	427	499
1927	Wet	497	445	414	466	727	725	411	343	371	360	313	367	453
1928	Above Normal	442	426	424	540	838	573	413	370	409	390	317	410	463
1929	Critical	491	479	569	695	790	705	614	524	509	458	399	449	557
1930	Dry	525	554	596	580	535	512	423	458	428	402	364	425	483
1931	Critical	512	513	568	700	789	780	631	587	546	443	450	467	582
1932	Dry	521	557	715	570	705	818	622	471	525	488	423	431	570
1933	Critical	501	505	563	690	695	639	556	496	537	494	433	443	546
1934	Critical	497	559	573	665	607	692	626	576	548	463	384	454	554
1935	Below Normal	529	531	649	661	576	802	465	362	422	373	339	409	510
1936	Below Normal	483	479	535	656	548	304	354	362	552	375	351	392	449
1937	Below Normal	461	470	524	726	433	355	333	291	537	404	378	382	441
1938	Wet	459	504	513	553	368	315	252	244	242	362	318	332	372
1939	Dry	315	346	472	712	818	759	595	412	429	389	364	428	503
1940	Above Normal	507	498	563	700	690	312	337	359	494	358	306	377	458
1941	Wet	450	462	622	632	415	292	294	250	396	458	434	480	432
1942	Wet	357	388	629	434	282	381	363	307	388	434	333	342	387
1943	Wet	323	347	632	370	256	291	314	347	431	571	463	372	393
1944	Dry	454	458	681	690	755	753	470	361	403	370	379	398	514
1945	Below Normal	477	467	522	594	490	335	417	362	472	551	453	487	469
1946	Below Normal	445	424	490	550	429	457	428	363	499	346	333	395	430
1947	Dry	456	450	678	709	782	558	465	441	465	386	370	430	516
1948	Below Normal	514	495	602	658	796	640	444	399	388	332	331	392	499
1949	Dry	463	478	540	709	730	604	472	481	488	371	400	433	514
1950	Below Normal	510	492	564	689	555	495	410	357	379	343	320	370	457
1951	Above Normal	455	417	389	317	238	407	407	297	324	329	289	393	355
1952	Wet	463	465	720	547	604	404	212	194	277	362	316	344	409
1953	Wet	314	364	504	607	611	549	402	303	339	328	315	347	415
1954	Above Normal	371	404	528	708	492	476	406	408	395	346	287	383	434
1955	Dry	480	490	579	639	560	544	531	475	474	411	357	420	497
1956	Wet	500	511	696	372	345	331	373	357	389	460	427	355	426
1957	Above Normal	316	361	495	627	653	511	416	307	362	328	299	396	423
1958	Wet	453	371	435	510	694	456	204	177	317	405	325	344	391
1959	Below Normal	314	362	457	691	713	786	540	388	414	327	308	402	475
1960	Dry	482	503	554	707	782	539	419	468	414	380	354	409	501
1961	Dry	505	502	627	693	704	523	446	499	475	349	344	402	506
1962	Below Normal	475	500	574	684	701	670	468	365	404	338	318	423	493
1963	Wet	508	370	400	458	792	565	473	336	546	337	302	364	454
1964	Dry	448	482	396	488	522	569	501	472	398	381	396	410	455
1965	Wet	487	495	719	429	360	467	394	353	433	365	409	461	448
1966	Below Normal	439	447	603	629	565	800	449	370	392	327	308	419	479
1967	Wet	520	515	721	741	845	513	261	212	280	286	305	331	461
1968	Below Normal	318	342	472	624	700	512	454	388	396	344	306	410	439
1969	Wet	483	488	528	646	368	386	279	234	233	366	326	350	391
1970	Wet	314	338	620	276	318	329	364	342	386	355	307	382	361
1971	Wet	476	442	476	723	590	843	407	310	354	331	286	362	467
1972	Below Normal	372	423	520	566	610	532	402	413	406	338	312	423	443
1973	Above Normal	521	481	430	678	663	558	452	397	491	361	322	487	487
1974	Wet	457	413	603	511	572	290	338	363	421	541	447	425	448
1975	Wet	326	342	677	611	332	287	344	347	406	529	437	484	427
1976	Critical	331	328	455	613	731	697	500	491	511	501	468	475	508
1977	Critical	533	512	619	644	721	787	690	591	600	478	416	441	586
1978	Above Normal	533	588	628	734	723	654	371	300	419	512	442	427	528
1979	Below Normal	433	452	539	636	337	306	379	347	411	345	349	395	411
1980	Above Normal	467	444	465	417	333	384	383	372	362	436	415	461	412
1981	Dry	424	434	527	709	564	798	490	388	439	376	372	426	496
1982	Wet	483	477	384	698	281	299	219	197	347	393	310	239	361
1983	Wet	229	262	374	343	319	253	290	256	234	219	170	224	264
1984	Wet	289	200	299	328	209	332	388	361	493	343	317	442	333
1985	Dry	420	427	395	451	771	807	551	427	400	364	408	398	485
1986	Wet	445	458	580	582	446	305	231	211	369	555	443	422	421
1987	Dry	399	409	495	718	685	835	514	457	415	364	382	430	509
1988	Critical	513	513	580	692	567	651	570	525	547	460	386	458	538
1989	Dry	543	565	618	665	839	618	384	442	353	331	376	407	512
1990	Critical	453	494	590	610	675	601	470	486	582	511	451	460	532
1991	Critical	541	584	648	744	792	693	492	501	537	523	474	431	580
1992	Critical	516	616	648	785	736	509	429	458	472	381	383	435	531
1993	Above Normal	531	607	642	678	713	767	424	371	488	529	363	488	550
1994	Critical	441	483	557	697	774	583	435	461	447	450	449	501	523
Average		449	458	554	609	597	548	430	384	429	403	365	409	470
Wet		421	412	550	516	464	410	325	288	364	398	348	370	405
Above Normal		459	471	530	606	597	515	401	352	407	408	340	418	459
Below Normal		443	453	551	637	569	547	426	366	442	365	339	412	463
Dry		464	482	563	652	704	653	491	439	439	388	378	418	506
Critical		480	503	576	684	723	681	560	525	534	470	427	454	551

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	451	486	730	662	632	505	398	342	324	495	363	360	479
1923	Below Normal	438	455	660	553	509	667	428	362	515	365	341	470	480
1924	Critical	429	455	543	684	707	743	657	603	610	474	431	437	564
1925	Dry	496	560	597	706	848	722	508	334	455	426	380	414	537
1926	Dry	487	495	526	668	654	541	472	443	452	403	377	428	495
1927	Wet	499	448	417	468	728	725	412	343	373	355	307	368	454
1928	Above Normal	442	430	438	552	838	573	408	370	408	385	312	412	464
1929	Critical	492	479	563	701	794	706	613	524	504	457	402	447	557
1930	Dry	524	554	596	580	530	511	422	459	421	352	373	409	478
1931	Critical	492	507	568	720	712	703	616	588	562	440	431	465	567
1932	Dry	524	557	715	587	705	818	623	467	527	489	423	432	572
1933	Critical	501	505	564	691	696	639	552	497	537	494	432	443	546
1934	Critical	497	560	574	665	600	687	624	576	548	463	384	453	553
1935	Below Normal	528	532	648	663	577	802	469	362	422	374	339	409	510
1936	Below Normal	483	479	535	656	548	304	354	362	552	375	350	392	449
1937	Below Normal	461	469	524	725	433	355	333	291	537	407	381	382	442
1938	Wet	458	510	513	553	368	315	252	244	242	362	318	332	372
1939	Dry	315	346	473	713	818	759	595	412	424	380	368	422	502
1940	Above Normal	493	493	561	700	690	312	337	359	493	359	307	378	457
1941	Wet	450	462	622	632	415	292	294	250	396	458	434	480	432
1942	Wet	359	394	629	434	282	381	362	307	388	434	333	342	387
1943	Wet	323	348	632	370	256	291	315	347	431	571	463	373	393
1944	Dry	454	459	681	690	755	753	472	361	400	364	383	398	514
1945	Below Normal	472	464	519	591	490	335	417	362	472	551	453	487	468
1946	Below Normal	445	428	490	550	429	457	427	365	499	344	334	413	432
1947	Dry	469	457	678	709	782	560	465	441	467	386	374	439	519
1948	Below Normal	512	496	602	657	801	647	444	399	388	335	324	397	500
1949	Dry	464	474	537	706	734	596	466	481	488	368	382	438	511
1950	Below Normal	516	490	549	676	547	493	412	354	375	341	319	365	453
1951	Above Normal	454	423	389	317	238	407	407	296	321	333	289	389	355
1952	Wet	461	465	720	547	604	404	212	194	277	362	316	344	409
1953	Wet	314	365	504	607	611	549	402	303	339	328	313	349	415
1954	Above Normal	372	405	528	708	492	476	406	408	395	348	287	383	434
1955	Dry	488	499	566	636	558	548	538	476	460	381	357	427	495
1956	Wet	500	510	696	372	345	331	373	357	389	460	427	355	426
1957	Above Normal	316	361	495	628	658	511	416	307	360	324	296	392	422
1958	Wet	446	379	443	512	694	456	204	177	317	405	325	344	392
1959	Below Normal	314	361	457	691	713	786	540	388	412	325	308	402	475
1960	Dry	481	495	603	639	775	542	421	470	415	376	354	413	499
1961	Dry	507	500	615	716	720	554	468	504	472	350	350	426	515
1962	Below Normal	493	496	602	669	700	670	468	365	418	349	309	420	497
1963	Wet	502	367	416	467	792	564	474	336	546	340	310	362	456
1964	Dry	449	480	392	484	520	569	497	473	396	385	414	408	456
1965	Wet	472	484	719	429	360	467	394	353	433	358	409	461	445
1966	Below Normal	434	445	603	629	565	800	442	370	389	325	306	417	477
1967	Wet	515	509	721	741	845	513	261	212	280	286	305	331	460
1968	Below Normal	317	342	472	623	700	511	453	387	394	346	308	411	439
1969	Wet	488	490	525	646	368	386	279	234	233	366	326	350	391
1970	Wet	314	338	620	276	318	329	364	342	385	354	307	382	361
1971	Wet	476	440	476	723	577	843	407	310	354	331	286	362	465
1972	Below Normal	374	424	521	566	611	533	402	415	399	336	312	427	443
1973	Above Normal	527	501	436	680	663	558	454	397	491	361	322	487	490
1974	Wet	457	413	603	511	572	290	338	363	421	541	447	425	448
1975	Wet	326	342	677	611	332	287	345	347	406	529	437	484	427
1976	Critical	331	328	455	613	731	697	499	489	507	487	479	480	508
1977	Critical	535	496	627	624	670	706	612	564	595	496	414	444	565
1978	Above Normal	542	604	632	735	723	654	371	300	419	512	442	427	530
1979	Below Normal	436	453	538	636	337	306	379	348	411	347	353	398	412
1980	Above Normal	468	446	483	417	334	384	383	372	362	436	415	461	413
1981	Dry	424	434	527	709	564	798	488	388	439	374	373	425	495
1982	Wet	482	481	387	698	281	299	219	197	347	393	310	239	361
1983	Wet	229	262	374	343	319	253	290	256	234	219	170	224	264
1984	Wet	289	200	299	328	209	332	388	361	493	343	317	442	333
1985	Dry	420	427	395	450	771	807	543	427	403	364	409	404	485
1986	Wet	448	458	579	581	446	305	231	211	370	555	443	422	421
1987	Dry	390	405	495	716	690	835	492	446	416	353	383	432	504
1988	Critical	523	507	572	688	559	643	566	524	542	462	383	446	535
1989	Dry	535	568	605	664	833	609	381	441	356	335	372	413	509
1990	Critical	452	490	592	614	676	598	470	486	581	511	451	460	532
1991	Critical	541	584	648	741	790	691	492	501	537	523	474	431	579
1992	Critical	516	616	648	785	736	510	429	458	474	381	384	432	531
1993	Above Normal	529	615	638	678	713	767	424	374	488	529	359	488	550
1994	Critical	443	484	557	695	780	589	437	462	453	443	463	470	523
Average		449	459	555	608	594	546	427	383	429	401	365	409	469
Wet		419	413	551	517	463	410	325	288	365	398	348	370	405
Above Normal		459	476	533	608	598	515	400	352	406	408	339	418	459
Below Normal		444	452	551	635	569	548	426	367	442	366	338	414	463
Dry		464	482	562	648	704	658	491	439	437	380	380	421	505
Critical		479	501	576	685	704	659	547	523	537	469	427	451	547

Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
 Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	1	0	0
1923	Below Normal	0	-6	0	0	0	0	0	0	0	0	4	0	0
1924	Critical	0	3	0	7	-86	-89	-55	-5	37	-2	-4	1	-16
1925	Dry	-1	1	-11	-12	0	54	13	0	-4	-12	-7	-2	2
1926	Dry	1	-2	-3	-2	-5	-4	-5	-1	-9	-12	1	1	-3
1927	Wet	2	2	3	2	0	0	1	0	2	-6	-6	1	0
1928	Above Normal	0	4	14	12	0	0	-5	-1	-2	-6	-5	1	1
1929	Critical	1	1	-6	6	4	1	-1	0	-6	-1	3	-2	0
1930	Dry	-1	0	0	0	-5	-1	0	1	-7	-49	9	-16	-6
1931	Critical	-21	-6	0	20	-77	-77	-15	1	16	-4	-19	-1	-15
1932	Dry	3	0	0	18	0	0	2	-4	1	0	0	1	2
1933	Critical	1	0	1	1	1	0	-4	0	0	0	0	0	0
1934	Critical	1	1	2	0	-7	-5	-2	0	0	0	0	-1	-1
1935	Below Normal	-1	0	-1	2	1	0	4	0	0	0	0	0	1
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	3	3	0	0
1938	Wet	-1	6	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	1	1	1	1	0	0	1	0	-5	-9	4	-6	-1
1940	Above Normal	-14	-6	-2	0	0	0	-1	0	0	1	1	1	-2
1941	Wet	1	1	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	2	6	0	0	0	0	0	0	0	0	0	0	1
1943	Wet	1	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	2	0	-3	-5	4	0	0
1945	Below Normal	-5	-3	-4	-3	1	0	0	0	0	0	0	0	-1
1946	Below Normal	0	4	0	0	0	0	-1	2	0	-2	0	18	2
1947	Dry	13	7	0	0	0	2	0	0	2	0	4	9	3
1948	Below Normal	-1	2	0	0	5	7	0	1	0	3	-7	5	1
1949	Dry	2	-4	-3	-3	4	-8	-6	0	0	-3	-18	4	-3
1950	Below Normal	7	-2	-15	-13	-8	-2	2	-4	-3	-2	-1	-4	-4
1951	Above Normal	-1	6	0	0	0	0	0	-2	-3	4	-1	-4	0
1952	Wet	-2	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	1	0	-1	2	0
1954	Above Normal	1	1	0	0	0	0	0	0	1	1	0	0	0
1955	Dry	7	9	-14	-3	-2	5	8	1	-14	-30	-1	7	-2
1956	Wet	0	-2	0	0	0	0	0	0	0	0	0	0	0
1957	Above Normal	-1	-1	-1	1	5	0	0	0	-2	-4	-2	-4	-1
1958	Wet	-7	8	8	2	0	0	0	0	0	0	0	0	1
1959	Below Normal	-1	-1	0	0	0	0	0	0	-2	-1	0	1	0
1960	Dry	0	-8	49	-68	-7	3	2	2	1	-4	0	4	-2
1961	Dry	3	-2	-11	23	15	32	22	5	-3	1	6	24	10
1962	Below Normal	18	-3	27	-15	0	0	0	0	14	11	-9	-3	3
1963	Wet	-6	-3	16	10	0	-2	1	0	0	3	7	-2	2
1964	Dry	1	-2	-5	-4	-1	0	-3	1	-2	4	19	-2	0
1965	Wet	-15	-11	0	0	0	0	0	0	0	-7	0	0	-3
1966	Below Normal	-4	-2	0	0	0	0	-7	0	-3	-2	-2	-2	-2
1967	Wet	-5	-6	0	0	0	0	0	0	0	0	0	0	-1
1968	Below Normal	-1	0	0	-1	0	0	-1	0	-2	2	3	1	0
1969	Wet	5	2	-3	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	-1	-1	0	0	0
1971	Wet	0	-2	0	0	-13	0	0	0	0	0	0	0	-1
1972	Below Normal	1	1	0	0	0	1	0	3	-8	-2	-1	4	0
1973	Above Normal	6	20	6	2	0	0	2	0	0	0	0	0	3
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-1	-2	-4	-14	11	5	0
1977	Critical	3	-16	8	-20	-51	-80	-78	-27	-6	19	-1	4	-21
1978	Above Normal	9	16	4	0	0	0	0	0	0	0	0	0	2
1979	Below Normal	2	1	0	0	0	0	1	1	0	2	4	3	1
1980	Above Normal	1	3	18	0	0	0	0	0	0	0	0	0	2
1981	Dry	0	0	0	0	0	0	-2	0	0	-1	1	-1	0
1982	Wet	-2	4	3	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-1	0	0	-9	0	3	0	2	6	0
1986	Wet	3	0	-1	-1	0	0	0	0	1	0	0	0	0
1987	Dry	-9	-4	0	-2	5	0	-22	-11	1	-11	1	3	-4
1988	Critical	11	-5	-8	-4	-7	-8	-3	-1	-5	3	-3	-12	-4
1989	Dry	-8	2	-13	-1	-6	-9	-3	-1	3	5	-4	5	-3
1990	Critical	-2	-3	2	4	1	-4	0	0	0	0	0	0	0
1991	Critical	0	0	1	-3	-3	-2	0	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	0	0	0	2	1	1	-3	0
1993	Above Normal	-2	9	-4	0	0	0	0	2	0	0	-4	0	0
1994	Critical	1	1	0	-2	6	7	2	1	5	-7	13	-31	0
Average		0	0	1	-1	-3	-2	-2	-1	0	-2	0	0	-1
Wet		-1	0	1	1	-1	0	0	0	0	-1	0	0	0
Above Normal		0	5	4	2	1	0	0	0	-1	0	-1	-1	1
Below Normal		1	-1	1	-2	0	0	0	0	0	1	0	2	0
Dry		1	0	-1	-3	0	5	0	0	-2	-8	1	2	-1
Critical		0	-2	0	1	-18	-21	-13	-3	3	-1	0	-3	-5

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1924	Critical	0%	1%	0%	1%	-11%	-11%	-8%	-1%	6%	0%	-1%	0%	-2%
1925	Dry	0%	0%	-2%	-2%	0%	8%	3%	0%	-1%	-3%	-2%	-1%	0%
1926	Dry	0%	0%	-1%	0%	-1%	-1%	-1%	0%	-2%	-3%	0%	0%	-1%
1927	Wet	0%	1%	1%	0%	0%	0%	0%	0%	1%	-2%	-2%	0%	0%
1928	Above Normal	0%	1%	3%	2%	0%	0%	-1%	0%	0%	-1%	-1%	0%	0%
1929	Critical	0%	0%	-1%	1%	0%	0%	0%	0%	-1%	0%	1%	0%	0%
1930	Dry	0%	0%	0%	0%	-1%	0%	0%	0%	-2%	-12%	2%	-4%	-1%
1931	Critical	-4%	-1%	0%	3%	-10%	-10%	-2%	0%	3%	-1%	-4%	0%	-2%
1932	Dry	1%	0%	0%	3%	0%	0%	0%	-1%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1938	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	1%	-1%	0%
1940	Above Normal	-3%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	1%	0%	0%
1945	Below Normal	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	1%	0%	0%	0%	0%	0%	1%	0%	-1%	0%	5%	0%
1947	Dry	3%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	1%
1948	Below Normal	0%	0%	0%	0%	1%	1%	0%	0%	1%	-2%	1%	0%	0%
1949	Dry	0%	-1%	-1%	0%	1%	-1%	-1%	0%	0%	-1%	-4%	1%	-1%
1950	Below Normal	1%	0%	-3%	-2%	-1%	0%	1%	-1%	-1%	-1%	0%	-1%	-1%
1951	Above Normal	0%	1%	0%	0%	0%	0%	0%	-1%	-1%	1%	0%	-1%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	2%	2%	-2%	0%	0%	1%	1%	0%	-3%	-7%	0%	2%	-1%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	1%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1958	Wet	-2%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	-2%	9%	-10%	-1%	1%	0%	0%	0%	-1%	0%	1%	0%
1961	Dry	1%	0%	-2%	3%	2%	6%	5%	1%	-1%	0%	2%	6%	2%
1962	Below Normal	4%	-1%	5%	-2%	0%	0%	0%	0%	3%	3%	-3%	-1%	1%
1963	Wet	-1%	-1%	4%	2%	0%	0%	0%	0%	0%	1%	2%	0%	1%
1964	Dry	0%	0%	-1%	-1%	0%	0%	-1%	0%	-1%	1%	5%	0%	0%
1965	Wet	-3%	-2%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	0%	-1%
1966	Below Normal	-1%	0%	0%	0%	0%	0%	-1%	0%	-1%	-1%	0%	0%	0%
1967	Wet	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1969	Wet	1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	1%	-2%	-1%	0%	1%	0%
1973	Above Normal	1%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-3%	2%	1%	0%
1977	Critical	1%	-3%	1%	-3%	-7%	-10%	-11%	-4%	-1%	4%	0%	1%	-3%
1978	Above Normal	2%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%
1980	Above Normal	0%	1%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	-2%	0%	1%	0%	0%	2%	0%
1986	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	-2%	-1%	0%	0%	1%	0%	-4%	-2%	0%	-3%	0%	1%	-1%
1988	Critical	2%	-1%	-1%	-1%	-1%	-1%	-1%	0%	-1%	1%	-1%	-3%	-1%
1989	Dry	-1%	0%	-2%	0%	-1%	-1%	-1%	0%	1%	1%	-1%	1%	0%
1990	Critical	0%	-1%	0%	1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1993	Above Normal	0%	1%	-1%	0%	0%	0%	0%	1%	0%	0%	-1%	0%	0%
1994	Critical	0%	0%	0%	0%	1%	1%	1%	0%	1%	-2%	3%	-6%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	1%	0%	0%	-1%	-2%	0%	1%	0%
Critical		0%	0%	0%	0%	-2%	-3%	-2%	0%	1%	0%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	693	661	620	504	463	321	284	277	304	279	281	483	431
1923	Below Normal	682	668	562	342	334	317	296	300	268	273	366	575	415
1924	Critical	627	684	754	794	864	808	556	526	614	539	557	613	661
1925	Dry	802	848	806	882	613	413	323	280	323	319	376	587	548
1926	Dry	757	697	800	863	599	356	329	354	313	371	459	632	544
1927	Wet	798	521	306	337	332	289	270	277	247	245	284	520	369
1928	Above Normal	689	544	393	402	295	277	279	296	268	290	334	623	391
1929	Critical	759	707	828	871	883	585	456	453	436	422	513	676	632
1930	Dry	801	810	830	558	416	309	301	351	328	356	436	668	514
1931	Critical	808	716	796	844	857	619	521	532	580	526	616	675	674
1932	Dry	777	811	687	378	417	465	461	395	370	343	397	626	510
1933	Critical	744	666	745	684	532	445	419	406	433	426	492	586	548
1934	Critical	749	826	778	675	439	482	490	470	447	385	499	693	578
1935	Below Normal	811	824	880	592	387	318	309	327	280	266	373	619	499
1936	Below Normal	747	678	776	614	476	334	276	295	297	266	360	576	475
1937	Below Normal	727	674	736	825	723	535	305	255	272	278	325	519	515
1938	Wet	728	698	333	316	408	327	330	268	291	291	286	290	380
1939	Dry	238	305	628	848	764	511	426	346	328	405	457	687	495
1940	Above Normal	798	686	717	663	417	305	267	289	270	250	286	561	459
1941	Wet	703	725	644	367	458	380	262	253	294	301	289	394	423
1942	Wet	395	538	524	367	324	268	276	262	266	310	301	325	346
1943	Wet	281	311	291	360	317	311	281	296	341	275	287	523	323
1944	Dry	729	688	767	846	736	364	311	308	306	363	468	589	540
1945	Below Normal	729	661	605	566	535	509	349	306	266	269	355	589	478
1946	Below Normal	696	612	421	288	400	327	300	306	275	280	382	581	406
1947	Dry	701	712	794	658	617	391	335	384	338	372	482	673	538
1948	Below Normal	815	724	864	841	890	450	326	310	253	253	383	576	557
1949	Dry	681	664	777	882	730	353	315	372	333	358	518	664	554
1950	Below Normal	765	676	803	685	375	268	280	294	259	269	330	527	461
1951	Above Normal	708	410	336	408	315	264	295	263	243	250	298	595	365
1952	Wet	693	733	656	399	292	336	306	253	271	276	258	268	395
1953	Wet	251	435	588	308	312	277	278	255	234	236	300	427	325
1954	Above Normal	409	530	695	790	298	254	275	307	261	256	291	569	411
1955	Dry	741	792	701	385	359	350	373	371	330	322	419	624	481
1956	Wet	742	790	624	606	396	298	279	291	278	304	300	324	436
1957	Above Normal	248	288	496	740	555	281	300	270	250	252	307	622	384
1958	Wet	646	423	471	336	381	478	309	255	258	278	281	295	367
1959	Below Normal	252	377	696	754	337	345	346	324	318	308	362	630	421
1960	Dry	753	710	763	905	744	335	318	363	346	410	448	633	561
1961	Dry	776	776	928	799	726	361	331	373	340	370	478	581	570
1962	Below Normal	700	711	829	823	593	338	301	321	278	291	372	675	519
1963	Wet	672	303	383	335	325	278	319	279	236	234	272	530	347
1964	Dry	696	660	341	407	354	341	361	368	330	395	534	602	449
1965	Wet	736	781	494	318	281	289	288	300	276	262	289	486	400
1966	Below Normal	672	601	311	303	296	266	289	308	284	302	362	654	387
1967	Wet	836	808	743	409	300	288	388	306	276	298	258	255	430
1968	Below Normal	238	360	608	594	308	258	323	323	297	299	360	601	381
1969	Wet	732	725	598	471	416	408	323	243	242	286	290	303	420
1970	Wet	238	341	408	484	353	275	269	284	274	268	287	570	338
1971	Wet	764	545	344	259	300	270	261	260	234	233	294	475	353
1972	Below Normal	445	574	676	605	582	306	290	335	308	310	366	665	455
1973	Above Normal	889	602	393	366	367	299	301	320	281	250	322	564	413
1974	Wet	775	417	269	300	270	277	270	291	292	258	314	374	342
1975	Wet	253	326	505	530	463	291	275	284	261	264	296	379	344
1976	Critical	265	256	438	730	850	514	403	431	568	617	665	771	542
1977	Critical	860	768	900	716	776	707	615	559	605	504	581	683	689
1978	Above Normal	869	889	886	590	413	472	470	367	322	297	299	490	530
1979	Below Normal	660	729	784	565	355	309	302	289	254	258	366	590	455
1980	Above Normal	783	645	504	397	417	457	324	309	339	320	308	501	442
1981	Dry	644	629	789	767	338	277	306	322	334	416	480	655	497
1982	Wet	751	598	263	350	344	386	232	252	269	305	301	284	361
1983	Wet	201	245	406	396	335	272	310	263	241	249	220	202	278
1984	Wet	222	248	309	397	314	251	294	307	282	258	300	559	312
1985	Dry	665	505	271	306	457	397	365	337	296	398	552	563	426
1986	Wet	632	664	789	547	515	328	327	264	294	404	322	447	461
1987	Dry	561	596	784	854	641	370	349	359	355	424	503	645	537
1988	Critical	812	752	835	707	440	470	421	435	410	383	536	709	576
1989	Dry	834	850	857	822	990	452	275	316	270	375	528	586	596
1990	Critical	665	732	852	715	630	413	399	405	476	586	624	688	599
1991	Critical	867	869	865	891	914	592	393	381	455	606	600	609	670
1992	Critical	861	919	894	1,021	654	358	327	366	389	381	518	685	614
1993	Above Normal	859	915	931	619	397	319	279	297	270	263	290	495	494
1994	Critical	672	738	817	899	824	403	333	364	380	634	660	847	631
Average		655	629	637	586	495	372	333	328	321	335	390	553	469
Wet		574	532	474	390	354	313	293	274	269	278	287	392	369
Above Normal		694	617	597	548	394	325	307	299	281	271	302	550	432
Below Normal		638	633	682	600	471	348	307	307	279	280	362	598	459
Dry		697	691	720	698	594	378	342	350	327	375	471	626	522
Critical		724	719	792	796	722	533	444	444	483	501	572	686	618

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average	
Year	Year Type														
1922	Above Normal	693	661	620	504	463	321	284	277	304	280	282	483	431	
1923	Below Normal	685	625	505	340	325	313	296	300	268	271	363	570	405	
1924	Critical	635	688	753	799	662	597	512	524	616	541	554	618	625	
1925	Dry	804	842	766	859	700	505	335	281	318	311	373	593	557	
1926	Dry	759	689	794	859	596	353	327	349	308	376	463	643	543	
1927	Wet	806	530	313	340	338	294	271	278	249	243	284	526	373	
1928	Above Normal	687	570	441	427	306	283	276	294	267	285	329	626	399	
1929	Critical	765	706	813	887	887	585	455	452	427	420	511	670	632	
1930	Dry	798	811	830	558	415	308	300	353	324	373	446	592	509	
1931	Critical	765	710	818	862	738	555	524	537	580	480	588	682	653	
1932	Dry	783	810	686	379	418	472	463	391	372	343	396	627	512	
1933	Critical	746	666	746	687	533	445	417	410	433	426	491	587	549	
1934	Critical	749	827	779	663	415	472	487	470	447	385	498	689	573	
1935	Below Normal	810	824	879	596	388	323	311	328	280	266	373	619	500	
1936	Below Normal	748	678	776	614	477	334	276	295	297	266	360	576	475	
1937	Below Normal	725	673	736	825	724	536	305	255	274	280	325	517	515	
1938	Wet	726	718	343	321	408	326	330	268	291	291	286	293	383	
1939	Dry	242	307	630	849	761	511	427	345	330	400	474	660	495	
1940	Above Normal	749	665	708	651	419	307	266	289	270	250	286	562	452	
1941	Wet	703	728	646	367	464	381	262	253	293	300	289	394	423	
1942	Wet	404	564	535	368	324	268	276	262	267	309	301	326	350	
1943	Wet	281	310	291	363	326	312	282	296	340	275	287	524	324	
1944	Dry	731	689	768	845	735	365	312	308	304	364	484	586	541	
1945	Below Normal	713	650	594	559	523	501	349	306	266	269	355	587	473	
1946	Below Normal	697	635	446	289	394	323	299	309	274	284	390	640	415	
1947	Dry	743	717	753	643	600	387	334	384	341	382	496	692	539	
1948	Below Normal	815	733	860	838	913	458	326	311	251	262	371	589	561	
1949	Dry	674	646	769	880	738	347	313	372	333	336	491	684	549	
1950	Below Normal	770	643	757	654	361	266	280	286	260	271	332	513	449	
1951	Above Normal	730	426	337	428	318	264	296	260	243	256	291	587	370	
1952	Wet	691	738	663	399	292	344	309	253	271	276	258	268	397	
1953	Wet	251	437	589	308	312	278	278	255	235	236	303	435	326	
1954	Above Normal	412	531	696	790	298	254	275	307	262	257	291	571	412	
1955	Dry	776	803	670	381	354	355	383	372	320	320	439	639	484	
1956	Wet	745	789	624	606	367	292	279	291	278	303	299	323	433	
1957	Above Normal	248	288	496	749	568	282	300	270	249	251	304	610	385	
1958	Wet	636	452	486	339	381	478	309	255	258	278	281	295	371	
1959	Below Normal	252	377	696	755	336	344	346	324	316	308	364	632	421	
1960	Dry	761	753	841	729	772	343	319	366	330	401	449	646	559	
1961	Dry	786	770	923	842	752	391	347	375	338	374	497	660	588	
1962	Below Normal	736	739	875	784	580	338	301	316	294	300	346	673	524	
1963	Wet	655	301	420	349	328	278	319	279	237	237	273	523	350	
1964	Dry	702	649	329	398	353	340	359	373	314	407	579	583	449	
1965	Wet	701	747	479	318	273	283	288	300	256	262	285	477	389	
1966	Below Normal	652	599	317	303	296	262	287	308	282	301	361	651	385	
1967	Wet	820	800	764	411	299	288	388	306	276	298	258	256	430	
1968	Below Normal	238	360	608	592	307	257	323	324	296	297	363	612	381	
1969	Wet	757	731	592	473	416	408	323	243	242	286	291	303	422	
1970	Wet	239	341	408	484	353	273	269	284	273	267	288	571	337	
1971	Wet	761	539	343	259	292	265	261	260	234	233	294	477	352	
1972	Below Normal	448	576	677	605	583	306	290	340	311	311	371	670	457	
1973	Above Normal	925	653	404	369	367	302	302	320	281	250	322	564	422	
1974	Wet	775	418	269	300	270	277	270	291	292	259	315	374	343	
1975	Wet	254	326	506	530	463	292	275	284	261	265	296	380	344	
1976	Critical	265	256	438	730	850	514	401	424	575	659	691	786	549	
1977	Critical	856	754	907	680	684	537	512	522	589	493	580	699	651	
1978	Above Normal	875	925	890	608	423	502	483	378	326	292	300	499	542	
1979	Below Normal	667	731	781	578	363	308	302	291	254	262	376	592	459	
1980	Above Normal	779	668	555	403	499	488	325	309	339	320	308	501	458	
1981	Dry	644	629	789	767	338	276	306	322	333	414	483	652	496	
1982	Wet	751	611	266	350	344	392	233	252	269	305	301	283	363	
1983	Wet	201	245	404	396	335	272	310	263	241	249	220	202	278	
1984	Wet	222	248	309	397	314	251	294	307	282	258	300	559	312	
1985	Dry	664	506	270	299	449	388	357	337	297	398	559	579	425	
1986	Wet	635	661	787	546	515	329	322	262	295	344	307	429	453	
1987	Dry	522	584	782	854	662	377	315	354	329	411	510	662	530	
1988	Critical	822	720	818	702	428	460	418	434	406	379	509	677	564	
1989	Dry	825	858	842	826	994	443	274	315	275	383	520	609	597	
1990	Critical	656	726	859	724	631	412	399	405	476	586	625	689	599	
1991	Critical	867	869	864	888	911	589	392	380	455	606	600	609	669	
1992	Critical	861	919	894	1,021	654	358	327	367	390	380	510	674	613	
1993	Above Normal	858	925	931	645	397	319	279	301	275	261	290	499	498	
1994	Critical	677	741	815	898	841	412	336	365	372	628	675	771	628	
Average		655	631	638	584	492	368	331	328	319	334	391	554	469	
Wet		572	535	478	392	353	313	293	273	269	275	287	391	369	
Above Normal		696	631	608	557	406	332	309	301	282	270	300	550	437	
Below Normal		640	632	679	595	469	348	307	307	280	282	360	603	458	
Dry		701	691	715	686	602	385	342	350	323	375	479	632	523	
Critical		722	715	792	795	686	495	432	441	481	499	569	679	609	

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	3	-42	-57	-2	-9	-5	0	1	0	-1	-3	-5	-10
1924	Critical	8	4	-1	5	-202	-210	-45	-2	2	2	-3	5	-36
1925	Dry	2	-6	-40	-23	87	92	11	1	-6	-7	-2	6	10
1926	Dry	2	-9	-7	-4	-3	-3	-2	-5	-4	5	4	10	-1
1927	Wet	9	9	7	3	6	5	1	1	1	-2	0	6	4
1928	Above Normal	-2	26	47	25	11	6	-3	-1	-1	-5	-5	3	8
1929	Critical	6	-1	-15	16	5	0	0	-1	-8	-2	-1	-7	-1
1930	Dry	-3	0	1	0	0	-1	0	2	-4	17	11	-76	-4
1931	Critical	-43	-6	22	18	-119	-64	3	5	0	-46	-28	7	-21
1932	Dry	5	-1	-1	1	0	7	2	-5	2	0	0	1	1
1933	Critical	1	0	1	3	1	0	-2	4	0	0	-1	1	1
1934	Critical	0	1	2	-12	-24	-10	-3	-1	0	0	-2	-3	-4
1935	Below Normal	-1	0	-1	5	1	5	2	0	0	0	0	0	1
1936	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1937	Below Normal	-2	-1	0	0	1	1	0	0	2	2	0	-2	0
1938	Wet	-2	19	10	5	0	0	0	0	0	0	0	4	3
1939	Dry	4	2	2	0	-3	0	1	-1	2	-6	18	-27	-1
1940	Above Normal	-49	-21	-9	-11	2	1	0	0	1	1	0	1	-7
1941	Wet	0	2	2	0	5	1	0	0	-1	-2	0	0	1
1942	Wet	9	26	11	0	0	0	0	0	1	-1	0	2	4
1943	Wet	1	0	-1	3	9	1	0	0	0	0	0	1	1
1944	Dry	2	2	0	-1	-2	1	1	0	-3	1	16	-3	1
1945	Below Normal	-16	-11	-11	-7	-11	-8	0	0	0	0	-1	-1	-5
1946	Below Normal	0	23	25	1	-5	-4	-1	3	-1	4	8	59	9
1947	Dry	42	5	-41	-15	-17	-4	-1	0	2	10	14	19	1
1948	Below Normal	0	9	-5	-3	23	8	1	1	-1	9	-12	13	4
1949	Dry	-8	-17	-7	-2	8	-6	-2	0	0	-22	-27	21	-5
1950	Below Normal	5	-33	-45	-30	-15	-2	1	-8	1	2	2	-13	-11
1951	Above Normal	22	17	1	19	3	0	2	-3	0	6	-7	-8	4
1952	Wet	-2	5	7	1	0	8	3	0	0	0	0	1	2
1953	Wet	0	1	1	0	0	0	0	0	0	0	2	8	1
1954	Above Normal	3	1	1	0	0	0	0	0	1	1	-1	2	1
1955	Dry	36	11	-31	-4	-5	5	10	1	-9	-2	20	15	4
1956	Wet	3	0	0	0	-29	-6	-1	0	-1	0	-1	-1	-3
1957	Above Normal	0	0	0	9	12	1	0	0	-1	-2	-3	-12	0
1958	Wet	-10	29	15	3	0	1	0	0	0	0	0	1	3
1959	Below Normal	0	1	1	1	-1	0	0	0	-2	0	1	2	0
1960	Dry	8	42	78	-176	27	8	0	3	-16	-9	1	12	-2
1961	Dry	10	-6	-5	44	26	30	17	2	-2	5	20	79	18
1962	Below Normal	36	29	46	-39	-13	0	0	-4	16	9	-26	-1	4
1963	Wet	-17	-2	36	14	3	0	0	0	1	2	1	-8	3
1964	Dry	5	-11	-12	-9	-2	0	-2	5	-17	12	45	-19	0
1965	Wet	-35	-34	-15	0	-8	-6	0	-1	-20	0	-4	-9	-11
1966	Below Normal	-20	-2	6	0	0	-4	-2	0	-1	-1	-2	-3	-2
1967	Wet	-16	-8	20	2	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	-2	-1	0	0	0	-1	-2	3	11	1
1969	Wet	26	6	-6	1	0	1	0	0	0	0	0	1	2
1970	Wet	0	1	0	0	0	-1	-1	0	-1	-1	0	1	0
1971	Wet	-2	-6	-1	0	-8	-5	0	0	0	0	0	2	-2
1972	Below Normal	4	2	1	1	1	0	0	5	3	1	5	5	2
1973	Above Normal	36	51	10	3	0	3	1	0	0	0	0	1	9
1974	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	1	1	0	0	1	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-2	-7	8	42	26	15	7
1977	Critical	-4	-14	7	-36	-91	-170	-103	-36	-16	-11	-1	16	-38
1978	Above Normal	6	36	5	17	10	30	13	11	4	-5	1	9	11
1979	Below Normal	7	2	-3	12	8	-1	-1	1	0	3	9	2	3
1980	Above Normal	-3	23	51	7	83	31	1	0	0	0	0	0	16
1981	Dry	0	0	0	0	0	-1	-1	0	-1	-1	3	-3	0
1982	Wet	0	13	3	0	0	6	0	0	0	0	0	0	2
1983	Wet	0	0	-2	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	-1	2	0	-7	-8	-9	-8	0	1	0	6	16	-1
1986	Wet	3	-3	-2	-1	0	1	-5	-2	1	-60	-15	-18	-8
1987	Dry	-39	-12	-2	0	21	7	-34	-4	-26	-14	7	17	-7
1988	Critical	10	-32	-17	-6	-12	-10	-2	-1	-4	-4	-27	-32	-11
1989	Dry	-9	7	-16	5	5	-9	-1	-1	4	8	-7	23	1
1990	Critical	-10	-6	7	9	1	-1	0	0	0	0	0	1	0
1991	Critical	0	0	-1	-3	-3	-3	-1	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	0	0	1	1	0	-7	-11	-1
1993	Above Normal	-1	10	0	26	0	0	0	4	5	-2	0	5	4
1994	Critical	5	3	-2	-1	17	10	3	1	-8	-6	16	-75	-3
Average		0	2	1	-2	-3	-4	-2	0	-1	-1	1	1	-1
Wet		-2	3	4	2	-1	0	0	0	-1	-3	-1	0	0
Above Normal		1	14	11	10	12	7	1	1	1	0	-1	0	5
Below Normal		1	-2	-3	-5	-1	-1	0	0	1	2	-1	5	0
Dry		3	1	-5	-12	8	7	-1	0	-5	0	8	6	1
Critical		-2	-4	0	-1	-36	-38	-13	-3	-2	-2	-2	-7	-9

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake)
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-6%	-10%	-1%	-3%	-1%	0%	0%	0%	0%	-1%	-1%	-2%
1924	Critical	1%	1%	0%	1%	-23%	-26%	-8%	0%	0%	0%	-1%	1%	-5%
1925	Dry	0%	-1%	-5%	-3%	14%	22%	4%	0%	-2%	-2%	-1%	1%	2%
1926	Dry	0%	-1%	-1%	0%	-1%	-1%	-1%	-1%	-1%	1%	1%	2%	0%
1927	Wet	1%	2%	2%	1%	2%	2%	0%	0%	1%	-1%	0%	1%	1%
1928	Above Normal	0%	5%	12%	6%	4%	2%	-1%	-1%	0%	-2%	-2%	1%	2%
1929	Critical	1%	0%	-2%	2%	1%	0%	0%	0%	-2%	-1%	0%	-1%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	1%	-1%	5%	2%	-11%	0%
1931	Critical	-5%	-1%	3%	2%	-14%	-10%	1%	1%	0%	-9%	-5%	1%	-3%
1932	Dry	1%	0%	0%	0%	0%	2%	0%	-1%	1%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-2%	-6%	-2%	-1%	0%	0%	0%	0%	0%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%
1938	Wet	0%	3%	3%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1939	Dry	1%	1%	0%	0%	0%	0%	0%	0%	1%	-1%	4%	-4%	0%
1940	Above Normal	-6%	-3%	-1%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	1%	0%	0%	0%	0%	-1%	0%	0%	0%
1942	Wet	2%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	1%	3%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	3%	0%	0%
1945	Below Normal	-2%	-2%	-2%	-1%	-2%	-2%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	4%	6%	0%	-1%	-1%	0%	1%	0%	2%	2%	10%	2%
1947	Dry	6%	1%	-5%	-2%	-3%	-1%	0%	0%	1%	3%	3%	3%	0%
1948	Below Normal	0%	1%	-1%	0%	3%	2%	0%	0%	-1%	4%	-3%	2%	1%
1949	Dry	-1%	-3%	-1%	0%	1%	-2%	-1%	0%	0%	-6%	-5%	3%	-1%
1950	Below Normal	1%	-5%	-6%	-4%	-4%	-1%	0%	-3%	0%	1%	1%	-3%	-2%
1951	Above Normal	3%	4%	0%	5%	1%	0%	1%	-1%	0%	2%	-2%	-1%	1%
1952	Wet	0%	1%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	5%	1%	-4%	-1%	-1%	1%	3%	0%	-3%	-1%	5%	2%	1%
1956	Wet	0%	0%	0%	0%	-7%	-2%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-1%	-1%	-2%	0%
1958	Wet	-1%	7%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1960	Dry	1%	6%	10%	-19%	4%	2%	0%	1%	-5%	-2%	0%	2%	0%
1961	Dry	1%	-1%	-1%	5%	4%	8%	5%	1%	-1%	1%	4%	14%	3%
1962	Below Normal	5%	4%	6%	-5%	-2%	0%	0%	-1%	6%	3%	-7%	0%	1%
1963	Wet	-3%	-1%	9%	4%	1%	0%	0%	0%	0%	1%	1%	-1%	1%
1964	Dry	1%	-2%	-3%	-2%	-1%	0%	0%	1%	-5%	3%	8%	-3%	0%
1965	Wet	-5%	-4%	-3%	0%	-3%	-2%	0%	0%	-7%	0%	-1%	-2%	-2%
1966	Below Normal	-3%	0%	2%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%
1967	Wet	-2%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	2%	0%
1969	Wet	3%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-3%	-2%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	1%	1%
1973	Above Normal	4%	8%	3%	1%	0%	1%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	-2%	1%	7%	4%	2%	1%
1977	Critical	0%	-2%	1%	-5%	-12%	-24%	-17%	-7%	-3%	-2%	0%	2%	-6%
1978	Above Normal	1%	4%	1%	3%	3%	6%	3%	3%	1%	-2%	0%	2%	2%
1979	Below Normal	1%	0%	0%	2%	2%	0%	0%	0%	0%	1%	3%	0%	1%
1980	Above Normal	0%	4%	10%	2%	20%	7%	0%	0%	0%	0%	0%	0%	3%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%
1982	Wet	0%	2%	1%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-2%	-2%	-2%	-2%	-2%	0%	0%	1%	3%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	-15%	-5%	-4%	-2%
1987	Dry	-7%	-2%	0%	0%	3%	2%	-10%	-1%	-7%	-3%	1%	3%	-2%
1988	Critical	1%	-4%	-2%	-1%	-3%	-2%	-1%	0%	-1%	-1%	-5%	-5%	-2%
1989	Dry	-1%	1%	-2%	1%	0%	-2%	0%	0%	2%	2%	-1%	4%	0%
1990	Critical	-1%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%
1993	Above Normal	0%	1%	0%	4%	0%	0%	0%	0%	2%	-1%	0%	1%	1%
1994	Critical	1%	0%	0%	0%	2%	2%	1%	0%	-2%	-1%	2%	-9%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	2%	2%	3%	2%	0%	0%	0%	0%	0%	0%	1%
Below Normal		0%	0%	0%	-1%	-1%	0%	0%	0%	0%	1%	0%	1%	0%
Dry		0%	0%	-1%	-2%	1%	2%	0%	0%	-1%	0%	2%	1%	0%
Critical		0%	-1%	0%	0%	-5%	-5%	-2%	-1%	0%	-1%	-1%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	798	737	670	494	394	261	246	246	260	231	261	553	429
1923	Below Normal	790	753	553	267	260	241	250	266	221	257	391	671	410
1924	Critical	715	790	862	874	779	554	379	474	657	598	630	722	669
1925	Dry	960	985	915	986	549	283	248	252	246	265	390	684	564
1926	Dry	880	791	939	962	568	273	259	298	270	388	513	744	574
1927	Wet	931	528	293	314	257	224	223	245	204	211	284	599	359
1928	Above Normal	797	574	410	380	252	222	230	258	224	257	357	726	391
1929	Critical	871	806	954	973	918	475	341	387	382	432	582	817	661
1930	Dry	947	958	921	561	375	248	230	286	298	362	483	790	538
1931	Critical	937	805	912	925	840	450	401	481	607	589	705	798	704
1932	Dry	911	957	716	334	325	326	331	331	277	269	401	732	492
1933	Critical	848	740	852	694	482	376	319	340	388	429	549	678	558
1934	Critical	883	968	875	689	380	339	323	350	377	374	581	842	582
1935	Below Normal	949	958	967	575	304	240	256	285	227	232	404	721	510
1936	Below Normal	855	763	899	601	393	295	244	261	232	238	377	672	486
1937	Below Normal	840	763	850	907	658	412	280	238	231	231	313	598	527
1938	Wet	847	761	274	242	436	343	334	289	299	252	269	287	386
1939	Dry	211	303	736	934	779	417	324	305	308	431	509	816	506
1940	Above Normal	912	769	813	654	314	251	238	256	224	220	290	653	466
1941	Wet	812	843	665	279	366	314	241	229	248	244	275	435	412
1942	Wet	418	621	520	290	278	228	247	243	226	248	288	334	328
1943	Wet	269	298	270	298	273	320	264	266	275	237	289	613	306
1944	Dry	847	785	889	951	735	296	250	274	274	382	514	682	573
1945	Below Normal	833	740	658	594	503	410	303	275	228	260	387	698	491
1946	Below Normal	802	685	388	223	307	263	250	275	231	272	415	672	399
1947	Dry	800	831	897	691	625	343	259	319	290	396	540	790	565
1948	Below Normal	934	824	1,000	952	879	355	264	263	204	238	417	666	583
1949	Dry	770	743	896	966	703	274	237	293	258	383	574	779	573
1950	Below Normal	868	759	924	703	334	216	229	257	219	251	347	605	476
1951	Above Normal	822	375	294	338	272	223	248	244	213	226	317	691	355
1952	Wet	787	855	669	306	232	289	266	222	242	238	241	262	384
1953	Wet	231	486	608	240	235	215	230	231	200	217	306	464	305
1954	Above Normal	430	590	797	818	245	203	218	255	214	232	307	662	414
1955	Dry	851	924	744	340	292	263	289	305	272	309	466	731	482
1956	Wet	849	923	576	468	325	251	238	257	228	241	285	331	414
1957	Above Normal	222	266	559	819	519	222	239	244	212	227	326	740	383
1958	Wet	704	449	491	295	287	371	363	229	230	233	275	293	352
1959	Below Normal	230	402	830	775	265	245	258	289	298	311	398	742	420
1960	Dry	873	799	878	1,015	740	283	243	298	342	446	499	744	597
1961	Dry	891	903	1,052	856	742	302	246	276	305	405	544	668	599
1962	Below Normal	804	815	945	889	522	258	240	278	234	290	411	792	540
1963	Wet	717	273	391	298	261	213	253	245	200	205	271	615	329
1964	Dry	800	720	335	402	285	255	292	306	309	433	598	696	453
1965	Wet	841	912	454	265	236	230	248	265	224	222	278	571	396
1966	Below Normal	777	647	271	251	230	210	231	269	251	204	400	769	384
1967	Wet	965	931	772	316	236	225	322	261	246	269	242	245	419
1968	Below Normal	209	388	698	590	242	203	251	284	273	298	393	698	377
1969	Wet	839	825	624	387	460	431	368	262	254	253	280	304	441
1970	Wet	211	361	401	405	293	232	232	254	235	243	293	668	319
1971	Wet	882	573	311	211	227	206	218	235	201	214	311	524	342
1972	Below Normal	478	649	759	649	579	262	233	287	277	305	405	784	472
1973	Above Normal	1,048	621	380	279	278	234	245	279	228	220	336	662	401
1974	Wet	916	390	215	236	211	237	240	257	235	216	335	388	323
1975	Wet	227	334	561	564	431	252	242	253	214	216	303	405	334
1976	Critical	240	233	492	820	901	470	338	403	622	713	765	923	577
1977	Critical	996	900	1,010	764	822	599	509	516	638	551	692	842	737
1978	Above Normal	1,056	1,058	1,003	519	299	368	390	315	268	241	293	571	532
1979	Below Normal	762	854	903	545	303	272	267	268	222	246	386	692	477
1980	Above Normal	915	719	530	348	462	430	289	279	289	264	304	590	452
1981	Dry	742	718	917	787	281	216	238	286	320	450	537	761	521
1982	Wet	867	624	224	264	290	311	246	236	234	254	299	282	344
1983	Wet	192	225	345	458	353	280	326	278	253	266	210	190	281
1984	Wet	195	221	316	360	272	218	248	276	239	233	306	661	295
1985	Dry	766	520	238	290	448	319	287	290	270	440	616	637	427
1986	Wet	709	761	887	538	421	348	297	236	255	311	300	512	465
1987	Dry	635	680	929	928	632	296	255	301	350	465	565	752	566
1988	Critical	939	859	952	715	335	317	324	357	370	415	634	864	590
1989	Dry	1,003	981	961	923	1,099	378	218	243	256	419	601	666	646
1990	Critical	755	840	964	776	574	321	319	328	502	685	715	830	634
1991	Critical	1,042	1,021	1,012	1,008	994	554	296	296	495	707	685	730	737
1992	Critical	1,063	1,082	1,066	1,150	618	291	253	286	362	414	631	831	670
1993	Above Normal	1,045	1,095	1,053	542	290	236	222	251	211	211	275	575	501
1994	Critical	779	849	942	1,009	832	338	271	292	391	733	759	1,004	683
Average		747	705	697	590	454	303	275	286	289	328	421	640	478
Wet		638	581	470	335	304	273	269	251	235	239	283	428	359
Above Normal		805	681	651	519	333	265	256	263	234	233	307	642	432
Below Normal		724	714	760	609	413	277	254	271	239	267	389	698	468
Dry		805	787	810	745	574	298	263	292	290	390	522	730	542
Critical		839	824	908	866	706	424	339	376	483	553	661	823	650

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	798	737	670	494	394	261	246	246	260	232	261	553	429
1923	Below Normal	795	690	487	266	253	236	250	267	221	254	385	665	397
1924	Critical	727	794	865	868	621	423	356	469	659	590	628	730	644
1925	Dry	964	974	864	961	614	330	255	253	242	263	391	691	567
1926	Dry	880	779	931	957	566	272	259	295	271	396	517	754	573
1927	Wet	941	539	302	317	261	227	223	246	205	211	286	607	364
1928	Above Normal	794	612	469	408	264	226	228	257	224	253	352	730	401
1929	Critical	879	802	938	992	922	475	341	386	379	432	579	808	661
1930	Dry	943	959	922	561	375	248	230	287	295	398	491	689	533
1931	Critical	884	800	942	934	731	440	423	491	597	526	678	811	688
1932	Dry	917	955	715	325	315	332	332	329	278	269	401	733	492
1933	Critical	850	740	854	698	483	376	319	344	387	429	549	679	559
1934	Critical	883	971	876	669	351	331	321	350	377	374	579	838	577
1935	Below Normal	949	957	966	580	304	241	257	285	227	232	404	721	510
1936	Below Normal	855	764	899	601	393	295	244	261	232	238	377	672	486
1937	Below Normal	837	761	849	907	659	412	280	238	232	232	311	595	526
1938	Wet	845	788	284	246	437	342	334	289	299	252	269	292	390
1939	Dry	215	305	739	934	775	417	325	305	314	428	530	775	505
1940	Above Normal	849	745	802	640	317	253	237	256	224	220	290	653	457
1941	Wet	811	847	667	279	368	314	241	229	247	242	275	435	413
1942	Wet	431	655	532	290	277	228	247	243	227	247	288	336	333
1943	Wet	270	297	269	300	278	322	264	266	275	236	290	615	307
1944	Dry	849	788	889	949	733	296	251	274	270	386	534	677	575
1945	Below Normal	812	727	644	587	491	404	303	275	228	259	386	696	484
1946	Below Normal	803	719	417	223	301	260	249	276	231	281	428	749	411
1947	Dry	852	831	846	671	605	339	259	319	291	410	558	812	566
1948	Below Normal	935	835	991	950	911	362	265	264	205	247	404	681	588
1949	Dry	757	721	887	966	709	269	236	293	258	349	548	808	567
1950	Below Normal	870	712	870	667	318	214	229	251	222	255	350	588	462
1951	Above Normal	854	394	294	349	274	223	250	242	216	232	306	681	360
1952	Wet	786	863	676	307	232	294	268	222	242	238	241	263	386
1953	Wet	232	488	609	241	235	215	230	232	200	217	310	474	307
1954	Above Normal	434	592	798	819	245	203	218	255	214	233	306	666	415
1955	Dry	899	930	708	336	290	269	300	305	269	317	494	750	489
1956	Wet	853	923	576	468	307	246	238	257	227	241	284	330	412
1957	Above Normal	222	266	559	832	533	223	239	244	212	226	322	721	383
1958	Wet	697	487	507	299	287	372	363	229	230	233	276	294	356
1959	Below Normal	230	403	831	776	265	245	258	289	297	312	401	745	421
1960	Dry	884	866	945	807	784	292	244	299	318	437	501	760	595
1961	Dry	901	892	1,054	906	772	325	257	278	304	412	571	767	620
1962	Below Normal	839	856	992	839	508	258	240	275	247	294	378	792	543
1963	Wet	695	273	436	313	265	213	253	245	201	206	270	606	331
1964	Dry	807	704	320	392	283	254	292	307	286	457	650	665	452
1965	Wet	798	867	440	265	228	226	248	265	216	226	271	559	384
1966	Below Normal	751	647	278	251	230	209	232	270	250	303	399	765	382
1967	Wet	945	924	796	318	236	225	323	261	246	269	242	246	419
1968	Below Normal	210	389	697	589	241	203	251	285	272	294	397	713	378
1969	Wet	872	830	617	389	460	431	368	262	254	253	281	304	443
1970	Wet	211	362	402	406	293	231	232	253	234	242	293	669	319
1971	Wet	878	565	310	211	221	203	217	235	201	214	311	526	341
1972	Below Normal	483	652	760	649	579	262	233	291	286	307	413	789	475
1973	Above Normal	1,103	681	392	282	278	237	246	279	228	220	337	663	412
1974	Wet	917	391	215	236	211	237	240	257	235	216	335	389	323
1975	Wet	228	335	562	564	431	253	242	253	214	216	303	406	334
1976	Critical	240	234	492	820	901	471	336	391	636	759	795	938	584
1977	Critical	982	887	1,005	722	667	381	408	484	618	531	688	864	687
1978	Above Normal	1,085	1,108	1,007	533	306	393	402	335	271	239	298	583	547
1979	Below Normal	770	856	897	563	312	271	265	269	222	253	397	694	481
1980	Above Normal	909	755	590	354	490	451	289	279	289	264	304	590	464
1981	Dry	742	718	917	787	281	215	239	286	318	449	540	756	521
1982	Wet	867	641	226	264	290	313	247	236	234	254	298	281	346
1983	Wet	192	225	342	458	353	280	326	278	253	266	210	190	281
1984	Wet	195	221	316	360	272	218	248	276	239	233	306	661	295
1985	Dry	764	523	237	281	439	312	280	290	272	441	626	657	427
1986	Wet	711	756	885	537	421	351	294	235	256	277	291	484	458
1987	Dry	585	666	926	932	659	304	239	291	311	451	574	776	560
1988	Critical	947	816	933	709	329	312	323	356	368	408	600	823	577
1989	Dry	996	989	940	929	1,090	370	218	242	262	427	593	694	646
1990	Critical	741	834	974	786	576	322	319	328	502	685	715	831	634
1991	Critical	1,042	1,021	1,011	1,002	990	551	296	296	495	707	685	730	735
1992	Critical	1,063	1,082	1,067	1,150	617	291	253	287	362	413	623	817	669
1993	Above Normal	1,052	1,107	1,060	571	291	236	222	255	214	210	277	582	506
1994	Critical	785	852	939	1,009	854	348	273	293	379	730	772	910	679
Average		748	708	698	587	450	300	273	286	287	328	422	641	477
Wet		637	585	475	337	303	273	269	251	235	237	282	427	359
Above Normal		810	700	664	528	339	271	258	265	235	233	305	642	438
Below Normal		724	712	756	603	412	277	254	271	241	269	388	705	468
Dry		810	788	802	731	581	303	263	291	285	393	532	735	543
Critical		835	819	908	863	670	393	331	373	480	549	658	815	641

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	4	-63	-66	-2	-7	-4	0	1	1	-3	-6	-6	-13
1924	Critical	12	4	3	-6	-158	-130	-23	-5	2	-8	-2	9	-25
1925	Dry	4	-11	-51	-25	65	47	7	1	-3	-2	1	8	3
1926	Dry	0	-11	-8	-5	-2	0	0	-3	1	8	4	10	-1
1927	Wet	10	11	9	3	4	3	0	1	1	0	2	7	4
1928	Above Normal	-3	38	59	28	12	4	-2	-1	0	-3	-5	4	11
1929	Critical	8	-4	-16	19	4	0	0	-1	-3	0	-3	-9	0
1930	Dry	-3	1	1	0	0	0	0	1	-3	36	8	-101	-5
1931	Critical	-52	-5	30	9	-109	-10	21	10	-9	-63	-27	13	-16
1932	Dry	6	-2	-1	-9	-9	5	1	-3	2	0	0	0	-1
1933	Critical	2	0	2	4	0	0	0	4	0	-1	-1	2	1
1934	Critical	0	3	1	-20	-30	-8	-2	0	0	0	-2	-4	-5
1935	Below Normal	0	0	-1	5	1	1	1	0	0	0	0	0	1
1936	Below Normal	1	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	-3	-2	0	0	1	0	0	0	1	1	-1	-3	-1
1938	Wet	-2	26	10	4	1	-1	0	0	0	0	0	5	4
1939	Dry	5	3	3	0	-4	0	1	0	6	-3	21	-41	-1
1940	Above Normal	-63	-24	-11	-14	2	1	0	0	0	0	0	0	-9
1941	Wet	0	4	2	0	2	1	0	0	-1	-1	0	0	1
1942	Wet	13	34	12	0	0	0	0	0	0	-1	0	2	5
1943	Wet	0	-1	-1	2	5	1	0	0	0	0	1	2	1
1944	Dry	2	2	0	-2	-2	1	1	0	-3	4	20	-5	2
1945	Below Normal	-20	-14	-14	-8	-11	-6	0	0	0	0	-1	-2	-6
1946	Below Normal	0	34	29	1	-6	-3	-1	1	0	9	12	76	13
1947	Dry	52	1	-51	-20	-20	-3	-1	0	1	14	18	22	1
1948	Below Normal	1	12	-8	-2	33	7	1	1	1	9	-13	16	5
1949	Dry	-13	-22	-9	0	6	-5	-1	0	0	-34	-27	29	-6
1950	Below Normal	2	-47	-55	-36	-16	-1	0	-6	3	4	3	-17	-14
1951	Above Normal	32	19	0	11	2	0	3	-2	3	6	-10	-10	5
1952	Wet	-2	7	7	1	0	5	2	0	0	0	0	1	2
1953	Wet	0	2	1	0	0	0	0	0	0	0	5	10	2
1954	Above Normal	4	2	1	0	0	0	0	0	1	1	-1	4	1
1955	Dry	48	7	-36	-4	-2	6	12	1	-3	8	28	19	7
1956	Wet	4	0	0	0	-18	-4	0	0	0	0	-1	-1	-2
1957	Above Normal	0	0	0	13	14	1	0	1	0	-1	-4	-19	0
1958	Wet	-8	38	17	4	0	1	0	0	0	0	1	1	4
1959	Below Normal	0	1	1	1	0	0	0	1	-1	1	2	3	1
1960	Dry	11	66	67	-208	44	8	0	1	-24	-9	3	16	-2
1961	Dry	10	-11	2	50	30	24	11	2	-2	7	27	99	21
1962	Below Normal	35	41	47	-49	-13	0	0	-3	13	4	-33	0	3
1963	Wet	-22	0	44	15	4	0	0	0	0	1	-1	-9	3
1964	Dry	7	-16	-14	-10	-2	0	0	2	-23	24	52	-31	-1
1965	Wet	-43	-46	-14	0	-8	-4	0	-1	-9	3	-7	-12	-12
1966	Below Normal	-26	0	7	0	0	-1	1	1	0	-1	-2	-4	-2
1967	Wet	-21	-7	24	2	0	0	0	0	0	0	0	1	0
1968	Below Normal	0	1	-1	-2	0	0	0	1	-1	-3	4	15	1
1969	Wet	34	5	-7	2	0	0	0	0	0	0	0	1	3
1970	Wet	0	1	0	0	0	-1	-1	0	-1	-1	1	1	0
1971	Wet	-4	-8	-1	0	-6	-3	0	0	0	0	0	3	-1
1972	Below Normal	5	2	1	1	1	0	0	4	9	3	8	5	3
1973	Above Normal	55	60	11	3	0	2	1	0	0	0	1	1	11
1974	Wet	1	1	0	0	0	0	0	0	0	0	0	1	0
1975	Wet	1	1	1	0	0	1	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-2	-11	14	46	30	16	8
1977	Critical	-14	-13	-4	-43	-155	-218	-102	-32	-20	-19	-4	22	-50
1978	Above Normal	29	49	5	13	7	25	12	20	3	-1	5	13	15
1979	Below Normal	8	3	-6	18	9	-1	-2	1	0	6	11	3	4
1980	Above Normal	-6	36	60	6	28	21	0	0	0	0	0	0	12
1981	Dry	0	0	0	0	0	0	0	0	-1	-1	3	-4	0
1982	Wet	0	17	3	0	0	3	1	0	0	0	-1	-1	2
1983	Wet	0	0	-3	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	-1	0
1985	Dry	-1	2	-1	-9	-9	-7	-7	0	2	0	9	20	0
1986	Wet	2	-4	-2	-1	0	4	-3	-1	0	-34	-9	-27	-6
1987	Dry	-50	-14	-3	4	28	8	-16	-10	-39	-14	9	24	-6
1988	Critical	8	-43	-19	-6	-6	-5	-1	0	-2	-7	-33	-41	-13
1989	Dry	-8	8	-21	6	-9	-8	0	0	5	9	-8	28	0
1990	Critical	-14	-6	10	10	2	0	1	0	0	0	1	1	0
1991	Critical	0	0	-1	-6	-4	-3	-1	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	0	0	0	-1	-1	-8	-14	-2
1993	Above Normal	7	12	7	29	0	0	0	4	3	-1	2	6	6
1994	Critical	6	3	-3	0	22	10	3	1	-12	-3	13	-94	-5
Average		1	2	1	-3	-4	-3	-1	0	-1	0	1	1	-1
Wet		-2	4	5	2	-1	0	0	0	0	-2	0	-1	0
Above Normal		6	19	13	9	6	5	1	2	1	0	-1	0	5
Below Normal		0	-2	-5	-5	-1	0	0	0	2	2	-1	6	0
Dry		4	0	-8	-15	7	5	0	-1	-5	3	11	6	1
Critical		-4	-5	0	-3	-36	-30	-9	-3	-3	-5	-3	-8	-9

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	1%	-8%	-12%	-1%	-3%	-2%	0%	0%	0%	-1%	-2%	-1%	-2%
1924	Critical	2%	0%	0%	-1%	-20%	-24%	-6%	-1%	-1%	0%	1%	1%	-4%
1925	Dry	0%	-1%	-6%	-3%	12%	16%	3%	0%	-1%	-1%	0%	1%	2%
1926	Dry	0%	-1%	-1%	0%	0%	0%	0%	-1%	0%	2%	1%	1%	0%
1927	Wet	1%	2%	3%	1%	2%	1%	0%	0%	0%	0%	1%	1%	1%
1928	Above Normal	0%	7%	14%	7%	5%	2%	-1%	-1%	0%	-1%	-1%	1%	3%
1929	Critical	1%	0%	-2%	2%	0%	0%	0%	0%	-1%	0%	-1%	-1%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	10%	2%	-13%	0%
1931	Critical	-6%	-1%	3%	1%	-13%	-2%	5%	2%	-2%	-11%	-4%	2%	-2%
1932	Dry	1%	0%	0%	-3%	-3%	2%	0%	-1%	1%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-3%	-8%	-2%	-1%	0%	0%	0%	0%	-1%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	3%	4%	2%	0%	0%	0%	0%	0%	0%	0%	2%	1%
1939	Dry	2%	1%	0%	0%	-1%	0%	0%	0%	2%	-1%	4%	-5%	0%
1940	Above Normal	-7%	-3%	-1%	-2%	1%	1%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	1%	0%	0%	0%	0%	-1%	0%	0%	0%
1942	Wet	3%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	0%	0%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	4%	-1%	0%
1945	Below Normal	-2%	-2%	-2%	-1%	-2%	-2%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	5%	8%	0%	-2%	-1%	0%	1%	0%	3%	3%	11%	2%
1947	Dry	7%	0%	-6%	-3%	-3%	-1%	0%	0%	0%	4%	3%	3%	0%
1948	Below Normal	0%	1%	-1%	0%	4%	2%	0%	0%	1%	4%	-3%	2%	1%
1949	Dry	-2%	-3%	-1%	0%	1%	-2%	0%	0%	-9%	-5%	-4%	-1%	-1%
1950	Below Normal	0%	-6%	-6%	-5%	-5%	-1%	0%	-2%	1%	2%	1%	-3%	-2%
1951	Above Normal	4%	5%	0%	3%	1%	0%	1%	-1%	2%	3%	-3%	-1%	1%
1952	Wet	0%	1%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%
1955	Dry	6%	1%	-5%	-1%	-1%	2%	4%	0%	-1%	3%	6%	3%	1%
1956	Wet	1%	0%	0%	0%	-5%	-2%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	2%	3%	0%	0%	0%	0%	0%	-1%	-3%	0%
1958	Wet	-1%	8%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1960	Dry	1%	8%	8%	-21%	6%	3%	0%	0%	-7%	-2%	1%	2%	0%
1961	Dry	1%	-1%	0%	6%	4%	8%	4%	1%	-1%	2%	5%	15%	4%
1962	Below Normal	4%	5%	5%	-6%	-3%	0%	0%	-1%	6%	1%	-8%	0%	0%
1963	Wet	-3%	0%	11%	5%	2%	0%	0%	0%	0%	1%	0%	-2%	1%
1964	Dry	1%	-2%	-4%	-3%	-1%	0%	0%	1%	-7%	5%	9%	-4%	-1%
1965	Wet	-5%	-5%	-3%	0%	-3%	-2%	0%	0%	-4%	2%	-3%	-2%	-2%
1966	Below Normal	-3%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1967	Wet	-2%	-1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	2%	0%
1969	Wet	4%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	1%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	1%	3%	1%	2%	1%	1%
1973	Above Normal	5%	10%	3%	1%	0%	1%	0%	0%	0%	0%	0%	0%	2%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	-3%	2%	6%	4%	2%	1%
1977	Critical	-1%	-1%	0%	-6%	-19%	-36%	-20%	-6%	-3%	-4%	-1%	3%	-8%
1978	Above Normal	3%	5%	0%	3%	2%	7%	3%	6%	1%	-1%	2%	2%	3%
1979	Below Normal	1%	0%	-1%	3%	3%	0%	-1%	0%	0%	3%	3%	0%	1%
1980	Above Normal	-1%	5%	11%	2%	6%	5%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%
1982	Wet	0%	3%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-3%	-2%	-2%	0%	1%	0%	1%	3%	0%	0%
1986	Wet	0%	-1%	0%	0%	0%	1%	-1%	0%	0%	-11%	-3%	-5%	-2%
1987	Dry	-8%	-2%	0%	0%	4%	3%	-6%	-3%	-11%	-3%	2%	3%	-2%
1988	Critical	1%	-5%	-2%	-1%	-2%	-2%	0%	0%	0%	-2%	-5%	-5%	-2%
1989	Dry	-1%	1%	-2%	1%	-1%	-2%	0%	0%	2%	2%	-1%	4%	0%
1990	Critical	-2%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%
1993	Above Normal	1%	1%	1%	5%	0%	0%	0%	1%	1%	0%	1%	1%	1%
1994	Critical	1%	0%	0%	0%	3%	3%	1%	0%	-3%	0%	2%	-9%	0%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		1%	3%	3%	2%	2%	2%	1%	0%	0%	0%	0%	1%	1%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	1%	1%	0%	1%	0%	0%
Dry		1%	0%	-1%	-2%	1%	2%	0%	0%	-2%	1%	2%	1%	0%
Critical		0%	-1%	0%	0%	-5%	-5%	-2%	-1%	-1%	-1%	-1%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
 No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	602	597	625	601	591	463	329	307	335	388	320	439	466
1923	Below Normal	584	585	600	490	467	523	352	330	388	310	364	496	457
1924	Critical	546	591	685	741	902	969	663	569	615	543	546	553	660
1925	Dry	670	712	725	807	719	638	407	311	401	388	436	522	561
1926	Dry	648	619	709	782	709	656	399	401	401	408	466	550	562
1927	Wet	672	505	436	482	532	536	325	307	315	304	314	467	433
1928	Above Normal	589	504	486	522	483	451	330	326	334	360	345	542	439
1929	Critical	654	618	728	785	865	821	572	498	514	465	498	582	633
1930	Dry	689	701	750	624	616	629	369	400	413	432	448	570	553
1931	Critical	689	640	728	791	920	821	603	567	594	515	575	593	670
1932	Dry	675	702	673	524	710	706	544	456	445	426	433	546	570
1933	Critical	647	604	703	756	790	754	521	464	504	470	504	537	604
1934	Critical	644	707	717	733	721	867	596	533	540	452	495	591	633
1935	Below Normal	686	704	793	656	675	586	377	360	355	343	386	540	538
1936	Below Normal	641	603	705	665	560	332	306	326	411	325	371	503	479
1937	Below Normal	619	595	671	754	488	449	333	272	407	360	367	466	482
1938	Wet	617	621	454	525	427	338	265	254	259	350	313	310	394
1939	Dry	276	325	588	758	775	684	500	387	380	415	444	581	509
1940	Above Normal	685	615	696	682	599	338	292	317	369	320	309	491	476
1941	Wet	602	619	615	532	463	321	281	262	382	402	346	402	436
1942	Wet	384	478	559	452	312	354	306	284	360	401	328	329	379
1943	Wet	305	334	415	382	287	308	295	315	413	367	338	461	352
1944	Dry	617	595	674	744	740	527	381	342	368	388	459	520	530
1945	Below Normal	630	585	607	604	512	352	377	335	359	350	371	505	465
1946	Below Normal	590	540	471	454	443	421	351	338	375	322	375	510	433
1947	Dry	602	603	695	658	667	642	397	425	398	386	461	580	543
1948	Below Normal	694	636	758	762	880	672	386	358	324	290	380	511	554
1949	Dry	599	594	697	808	787	617	387	420	403	363	485	573	561
1950	Below Normal	667	605	714	701	553	561	336	330	317	332	343	475	495
1951	Above Normal	603	435	394	379	283	367	339	291	290	308	315	523	377
1952	Wet	605	625	658	546	455	407	233	207	288	344	295	303	414
1953	Wet	287	410	595	469	478	606	340	280	287	272	324	411	397
1954	Above Normal	403	487	643	751	509	561	335	352	334	329	311	505	460
1955	Dry	641	673	670	535	539	574	453	427	404	367	439	547	522
1956	Wet	649	679	684	446	364	343	315	325	369	404	352	334	439
1957	Above Normal	285	323	521	697	715	575	355	299	302	299	322	533	436
1958	Wet	576	413	528	495	583	536	232	190	317	364	309	316	405
1959	Below Normal	288	375	616	718	518	552	432	357	363	328	363	540	454
1960	Dry	643	633	705	808	782	521	368	408	385	419	445	554	556
1961	Dry	673	670	799	769	769	641	393	426	399	378	446	527	574
1962	Below Normal	617	630	738	781	688	503	364	350	341	316	365	578	523
1963	Wet	614	344	477	481	538	574	385	313	355	293	302	471	429
1964	Dry	601	593	459	522	568	568	427	416	388	398	502	533	498
1965	Wet	640	669	581	419	351	417	330	327	354	310	338	440	431
1966	Below Normal	576	539	459	476	463	533	352	343	350	330	360	565	446
1967	Wet	712	691	708	602	507	423	294	228	291	297	288	294	445
1968	Below Normal	280	361	576	643	529	568	382	360	348	324	363	529	439
1969	Wet	633	634	617	644	421	391	292	245	249	351	315	321	426
1970	Wet	277	344	485	314	335	327	304	309	322	331	311	499	347
1971	Wet	647	515	504	438	501	470	316	290	283	274	310	444	416
1972	Below Normal	424	518	643	614	656	567	349	376	373	346	364	571	483
1973	Above Normal	738	569	504	604	587	460	353	357	393	295	331	492	474
1974	Wet	638	426	443	457	432	304	294	321	391	366	349	383	400
1975	Wet	290	337	524	569	396	300	301	311	371	371	341	395	376
1976	Critical	297	295	489	681	816	751	466	460	560	582	591	636	552
1977	Critical	727	665	778	719	868	875	684	598	603	489	535	598	678
1978	Above Normal	732	760	790	677	637	638	394	311	405	397	350	434	544
1979	Below Normal	570	614	689	608	368	321	331	311	329	289	367	513	442
1980	Above Normal	652	567	549	435	377	389	350	338	372	405	350	448	436
1981	Dry	550	548	682	732	524	552	381	355	373	407	450	571	510
1982	Wet	642	561	430	533	301	333	229	210	340	376	314	258	377
1983	Wet	206	267	378	413	355	300	303	264	250	229	196	221	282
1984	Wet	255	208	323	337	241	318	329	341	385	308	319	474	320
1985	Dry	556	477	421	452	564	595	446	379	349	390	505	506	470
1986	Wet	561	582	705	610	494	338	248	230	365	517	374	412	453
1987	Dry	489	514	667	762	765	650	418	406	399	420	490	566	545
1988	Critical	694	659	739	718	709	813	512	481	478	394	516	611	610
1989	Dry	717	736	768	764	954	611	323	362	324	372	491	524	579
1990	Critical	588	641	759	703	766	624	469	453	504	547	577	600	603
1991	Critical	731	750	774	846	928	692	469	437	485	563	582	556	651
1992	Critical	713	798	793	918	754	624	387	407	423	389	490	596	608
1993	Above Normal	724	782	830	709	618	541	332	342	418	382	327	456	538
1994	Critical	579	639	731	823	863	632	390	411	421	571	589	712	613
Average		573	563	623	622	590	535	378	356	384	378	397	494	491
Wet		515	489	529	483	418	393	296	277	331	344	318	378	398
Above Normal		601	564	604	606	540	478	341	324	355	348	328	486	465
Below Normal		562	563	646	638	557	496	359	339	360	326	367	521	478
Dry		603	606	668	691	699	613	412	395	389	397	463	548	540
Critical		626	634	719	768	825	770	528	490	520	498	542	597	626

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	602	597	625	601	591	463	329	307	335	389	320	439	467
1923	Below Normal	586	559	572	489	463	526	352	330	388	314	365	493	453
1924	Critical	551	595	686	748	761	911	611	564	627	546	542	553	641
1925	Dry	676	709	703	796	809	715	420	312	394	376	430	525	572
1926	Dry	650	614	705	780	703	637	394	393	394	411	468	558	559
1927	Wet	680	511	440	484	556	548	327	309	316	292	311	471	437
1928	Above Normal	588	520	511	536	508	462	326	325	333	339	340	544	444
1929	Critical	658	618	719	794	868	821	571	497	498	458	499	578	632
1930	Dry	686	701	750	624	598	628	369	401	408	404	461	525	546
1931	Critical	655	633	737	808	797	768	597	570	602	491	554	596	651
1932	Dry	679	702	673	576	723	709	546	450	447	426	433	547	576
1933	Critical	648	605	704	757	790	754	517	467	505	470	504	536	605
1934	Critical	645	709	718	743	714	864	593	532	540	452	494	589	633
1935	Below Normal	685	704	792	658	676	602	380	360	355	343	386	540	540
1936	Below Normal	641	603	705	665	560	333	306	326	411	327	371	503	479
1937	Below Normal	617	594	671	754	488	449	334	272	408	362	368	465	482
1938	Wet	616	634	458	536	428	338	264	254	259	350	313	311	397
1939	Dry	278	326	590	758	774	675	501	384	380	398	450	566	507
1940	Above Normal	650	599	693	677	599	338	291	317	370	321	309	491	471
1941	Wet	602	621	617	532	466	321	281	262	381	402	346	402	436
1942	Wet	390	495	565	452	312	354	306	284	360	401	328	330	381
1943	Wet	306	334	415	383	288	308	294	315	413	367	338	462	352
1944	Dry	619	596	675	744	739	529	382	343	358	377	463	519	529
1945	Below Normal	619	577	600	600	509	352	377	335	359	350	371	504	463
1946	Below Normal	590	554	480	455	443	415	350	341	374	311	379	549	437
1947	Dry	631	610	674	650	657	673	397	425	406	387	467	594	548
1948	Below Normal	693	642	757	761	894	678	386	359	322	297	369	521	556
1949	Dry	595	582	693	805	792	595	383	420	403	351	462	586	556
1950	Below Normal	673	586	687	683	544	553	337	318	316	331	344	466	487
1951	Above Normal	620	447	394	389	282	368	341	284	285	320	311	517	380
1952	Wet	602	629	662	547	456	409	233	207	288	344	295	303	414
1953	Wet	287	411	596	470	478	607	340	280	287	272	325	417	397
1954	Above Normal	405	488	643	751	509	561	335	352	334	333	311	506	461
1955	Dry	665	683	651	533	537	642	466	429	386	350	432	557	528
1956	Wet	651	679	683	446	359	341	315	325	369	404	351	334	438
1957	Above Normal	285	323	521	700	720	576	355	299	301	300	320	527	435
1958	Wet	568	432	537	496	583	536	232	190	317	364	309	316	407
1959	Below Normal	288	375	617	718	517	552	431	357	361	328	364	541	454
1960	Dry	648	655	751	701	787	526	369	413	380	414	448	562	554
1961	Dry	682	667	795	798	790	693	417	431	396	380	459	577	590
1962	Below Normal	649	645	770	758	682	504	364	345	356	334	347	576	527
1963	Wet	602	342	498	490	529	568	385	313	355	294	305	466	429
1964	Dry	604	586	452	517	567	569	424	422	392	390	526	523	498
1965	Wet	614	645	571	420	343	414	330	326	342	307	337	435	424
1966	Below Normal	562	536	462	476	455	493	347	343	349	328	359	563	439
1967	Wet	701	685	720	603	507	427	294	228	291	297	288	294	445
1968	Below Normal	280	361	576	642	528	568	382	360	347	331	365	536	439
1969	Wet	650	640	613	644	421	391	292	245	249	351	315	322	428
1970	Wet	277	344	485	314	335	327	304	309	321	329	311	499	346
1971	Wet	646	510	503	438	476	466	316	290	283	274	310	445	413
1972	Below Normal	427	519	643	614	657	567	349	381	366	345	366	576	484
1973	Above Normal	759	607	510	605	587	468	354	357	393	295	331	493	480
1974	Wet	639	427	443	457	432	304	294	321	391	366	349	383	400
1975	Wet	290	337	524	569	396	301	302	311	371	371	341	395	376
1976	Critical	297	295	489	681	816	748	463	454	560	603	608	649	555
1977	Critical	731	651	793	696	728	791	591	558	590	496	541	608	648
1978	Above Normal	724	783	793	691	643	654	395	312	407	394	348	438	548
1979	Below Normal	575	615	687	612	371	321	330	312	329	291	373	515	444
1980	Above Normal	651	581	578	437	367	389	350	338	372	405	350	448	439
1981	Dry	550	548	682	732	524	551	379	355	371	406	452	568	510
1982	Wet	642	570	433	533	301	334	229	210	340	376	314	258	378
1983	Wet	206	267	378	413	355	300	303	264	250	229	196	221	282
1984	Wet	255	208	323	337	241	318	329	341	385	308	319	473	320
1985	Dry	555	478	421	449	559	550	436	378	356	390	510	517	467
1986	Wet	565	580	704	609	495	337	249	230	367	448	360	404	445
1987	Dry	463	505	666	768	764	651	390	397	384	411	490	576	539
1988	Critical	704	639	728	714	678	806	509	480	470	386	503	590	601
1989	Dry	707	741	759	767	946	604	321	361	329	381	487	539	578
1990	Critical	582	636	762	709	761	622	469	454	504	547	577	600	602
1991	Critical	732	750	774	844	926	690	469	436	485	563	582	556	651
1992	Critical	713	798	793	918	754	625	387	408	425	389	486	590	607
1993	Above Normal	722	790	827	720	618	541	332	345	421	380	325	458	540
1994	Critical	582	641	730	822	871	639	393	412	434	565	603	659	613
Average		574	564	624	622	585	534	375	355	383	376	397	494	490
Wet		514	490	532	484	417	393	296	277	330	340	317	378	397
Above Normal		601	573	609	611	543	482	341	324	355	347	327	486	467
Below Normal		563	562	644	635	556	494	359	339	360	328	366	525	478
Dry		606	606	665	687	704	622	412	395	387	391	465	552	541
Critical		625	631	719	770	789	753	514	486	520	497	541	592	620

Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	2	-26	-28	-1	-4	3	0	0	0	4	2	-3	-4
1924	Critical	5	4	0	7	-141	-59	-52	-5	12	3	-4	0	-19
1925	Dry	6	-3	-22	-11	90	77	13	1	-7	-12	-6	3	11
1926	Dry	2	-6	-4	-2	-6	-20	-5	-7	-7	2	2	9	-3
1927	Wet	8	6	4	2	24	13	1	2	2	-12	-3	4	4
1928	Above Normal	-1	16	25	14	25	11	-4	-2	-1	-22	-5	3	5
1929	Critical	4	0	-10	9	4	0	-1	-1	-16	-6	1	-4	-2
1930	Dry	-2	0	0	0	-18	-1	0	1	-5	-27	13	-45	-7
1931	Critical	-35	-7	9	17	-123	-53	-6	3	8	-24	-21	3	-19
1932	Dry	4	0	0	53	14	3	2	-6	2	0	0	1	6
1933	Critical	1	0	1	1	1	0	-5	2	0	0	0	-1	0
1934	Critical	0	2	1	11	-8	-3	-3	1	0	0	-1	-2	0
1935	Below Normal	-1	0	-1	3	0	15	4	0	0	0	0	0	2
1936	Below Normal	0	0	0	0	0	0	0	0	0	2	0	0	0
1937	Below Normal	-1	-1	0	0	0	0	0	0	2	2	1	-1	0
1938	Wet	-1	13	4	12	0	0	-1	0	0	0	0	1	2
1939	Dry	2	1	1	0	-2	-9	0	-3	-1	-16	6	-14	-3
1940	Above Normal	-35	-15	-4	-5	1	1	-1	0	0	1	0	1	-5
1941	Wet	0	2	1	0	2	0	0	0	-1	-1	0	0	0
1942	Wet	6	17	6	0	0	0	0	0	0	0	0	1	2
1943	Wet	1	0	0	1	1	0	-1	0	0	0	0	1	0
1944	Dry	1	1	0	0	-1	1	1	0	-10	-11	5	-1	-1
1945	Below Normal	-11	-7	-6	-4	-3	0	0	0	0	0	0	-1	-3
1946	Below Normal	0	14	9	0	-1	-5	-1	3	-1	-10	4	-39	4
1947	Dry	29	7	-22	-8	-9	31	0	0	8	0	6	15	5
1948	Below Normal	-1	6	-1	-1	13	6	1	1	-2	8	-11	9	2
1949	Dry	-4	-12	-5	-3	5	-23	-4	0	0	-12	-23	13	-6
1950	Below Normal	7	-19	-27	-18	-9	-8	1	-12	-1	-1	1	-9	-8
1951	Above Normal	17	12	0	10	-1	0	1	-7	-5	11	-4	-6	2
1952	Wet	-2	3	4	0	0	2	0	0	0	0	0	0	1
1953	Wet	0	1	0	0	0	1	0	0	0	0	1	5	1
1954	Above Normal	2	1	1	0	0	0	0	0	1	4	0	0	1
1955	Dry	24	10	-19	-3	-2	67	13	2	-18	-17	-7	10	5
1956	Wet	2	-1	0	0	-5	-2	0	0	0	0	0	-1	-1
1957	Above Normal	0	0	0	3	5	0	0	0	-1	1	-3	-6	0
1958	Wet	-9	20	9	2	0	0	0	0	0	0	0	0	2
1959	Below Normal	0	0	0	0	-1	-1	0	0	-2	-1	1	2	0
1960	Dry	6	22	46	-107	5	5	1	5	-6	-5	3	8	-1
1961	Dry	8	-4	-4	29	20	52	23	4	-2	2	13	51	16
1962	Below Normal	32	15	31	-23	-6	0	0	-5	15	18	-18	-2	5
1963	Wet	-12	-3	22	9	-9	-7	0	0	1	0	3	-5	0
1964	Dry	3	-7	-7	-5	-1	1	-3	6	4	-8	24	-11	0
1965	Wet	-26	-23	-10	0	-7	-3	0	0	-12	-3	-1	-5	-8
1966	Below Normal	-13	-3	3	0	-8	-40	-5	0	-2	-2	-1	-2	-6
1967	Wet	-11	-6	12	1	0	4	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	-1	-1	0	-1	0	-2	7	2	7	1
1969	Wet	17	5	-4	0	0	0	0	0	0	0	0	0	2
1970	Wet	0	0	0	0	0	-1	-1	0	-1	-1	0	0	0
1971	Wet	-1	-5	-1	0	-26	-5	0	0	0	0	0	1	-3
1972	Below Normal	3	1	1	0	0	0	0	5	-7	-1	3	5	1
1973	Above Normal	21	37	6	2	0	8	2	0	0	0	0	0	6
1974	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	1	0	0	-1	0	0	0
1976	Critical	0	0	0	0	0	-3	-3	-6	0	20	17	13	3
1977	Critical	4	-14	14	-23	-140	-84	-93	-40	-13	7	6	10	-31
1978	Above Normal	-7	23	3	14	6	16	1	0	2	-3	-2	4	5
1979	Below Normal	5	2	-1	5	2	0	-1	1	0	1	6	2	2
1980	Above Normal	-1	14	29	2	-10	1	0	0	0	0	0	0	3
1981	Dry	0	0	0	0	0	-1	-2	0	-1	-1	2	-2	0
1982	Wet	1	9	2	0	0	2	0	0	0	0	0	0	1
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	1	0	-3	-5	-45	-10	-1	8	0	4	11	-3
1986	Wet	3	-2	-1	-1	0	-1	0	0	1	-70	-15	-8	-8
1987	Dry	-25	-9	-1	6	0	1	-28	-9	-15	-9	0	10	-7
1988	Critical	10	-21	-11	-4	-30	-6	-3	-1	-8	-8	-13	-21	-10
1989	Dry	-10	5	-9	3	-8	-8	-2	-1	6	8	-4	15	0
1990	Critical	-5	-5	3	6	-5	-2	0	0	0	0	0	0	-1
1991	Critical	0	0	0	-2	-3	-2	-1	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	1	0	1	2	0	-3	-7	-1
1993	Above Normal	-3	8	-3	11	0	0	0	3	3	-1	-2	2	2
1994	Critical	3	2	-1	-1	8	6	3	1	13	-6	14	-54	-1
Average		0	1	1	0	-5	-1	-2	-1	-1	-3	0	1	-1
Wet		-1	2	2	1	-1	0	0	0	-1	-4	-1	0	0
Above Normal		-1	9	6	5	3	4	0	-1	0	-1	-1	0	2
Below Normal		1	-1	-2	-3	-1	-2	0	0	0	2	-1	3	0
Dry		3	0	-3	-3	5	8	0	0	-3	-7	2	4	1
Critical		-1	-3	1	2	-36	-17	-14	-4	0	-1	0	-5	-7

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-4%	-5%	0%	-1%	1%	0%	0%	0%	1%	0%	-1%	-1%
1924	Critical	1%	1%	0%	1%	-16%	-6%	-8%	-1%	2%	1%	-1%	0%	-2%
1925	Dry	1%	0%	-3%	-1%	12%	12%	3%	0%	-2%	-3%	-1%	1%	2%
1926	Dry	0%	-1%	-1%	0%	-1%	-3%	-1%	-2%	-2%	1%	0%	2%	-1%
1927	Wet	1%	1%	1%	0%	4%	2%	0%	1%	1%	-4%	-1%	1%	1%
1928	Above Normal	0%	3%	5%	3%	5%	2%	-1%	-1%	0%	-6%	-1%	0%	1%
1929	Critical	1%	0%	-1%	1%	0%	0%	0%	0%	-3%	-1%	0%	-1%	0%
1930	Dry	0%	0%	0%	0%	-3%	0%	0%	0%	-1%	-6%	3%	-8%	-1%
1931	Critical	-5%	-1%	1%	2%	-13%	-6%	-1%	1%	1%	-5%	-4%	0%	-2%
1932	Dry	1%	0%	0%	10%	2%	0%	0%	-1%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	3%	1%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1938	Wet	0%	2%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	1%	0%	0%	0%	0%	-1%	0%	-1%	0%	-4%	1%	-2%	0%
1940	Above Normal	-5%	-3%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-3%	-3%	1%	0%	0%
1945	Below Normal	-2%	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	3%	2%	0%	0%	-1%	0%	1%	0%	-3%	1%	8%	1%
1947	Dry	5%	1%	-3%	-1%	-1%	5%	0%	0%	2%	0%	1%	3%	1%
1948	Below Normal	0%	1%	0%	0%	2%	1%	0%	0%	-1%	3%	-3%	2%	0%
1949	Dry	-1%	-2%	-1%	0%	1%	-4%	-1%	0%	0%	-3%	-5%	2%	-1%
1950	Below Normal	1%	-3%	-4%	-3%	-2%	-1%	0%	-4%	0%	0%	0%	-2%	-1%
1951	Above Normal	3%	3%	0%	3%	0%	0%	0%	-3%	-2%	4%	-1%	-1%	0%
1952	Wet	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1955	Dry	4%	2%	-3%	-1%	0%	12%	3%	0%	-5%	-5%	-2%	2%	1%
1956	Wet	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	-1%	0%
1958	Wet	-2%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1960	Dry	1%	3%	6%	-13%	1%	1%	0%	1%	-1%	-1%	1%	1%	0%
1961	Dry	1%	-1%	-1%	4%	3%	8%	6%	1%	-1%	1%	3%	10%	3%
1962	Below Normal	5%	2%	4%	-3%	-1%	0%	0%	-1%	4%	6%	-5%	0%	1%
1963	Wet	-2%	-1%	5%	2%	-2%	-1%	0%	0%	0%	0%	1%	-1%	0%
1964	Dry	1%	-1%	-2%	-1%	0%	0%	-1%	1%	1%	-2%	5%	-2%	0%
1965	Wet	-4%	-4%	-2%	0%	-2%	-1%	0%	0%	-3%	-1%	0%	-1%	-2%
1966	Below Normal	-2%	-1%	1%	0%	-2%	-7%	-1%	0%	0%	0%	0%	0%	-1%
1967	Wet	-2%	-1%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	1%	0%
1969	Wet	3%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-5%	-1%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	1%	-2%	0%	1%	1%	0%
1973	Above Normal	3%	7%	1%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	4%	3%	2%	0%
1977	Critical	1%	-2%	2%	-3%	-16%	-10%	-14%	-7%	-2%	1%	1%	2%	-4%
1978	Above Normal	-1%	3%	0%	2%	1%	3%	0%	0%	0%	-1%	0%	1%	1%
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	2%	0%	0%
1980	Above Normal	0%	2%	5%	0%	-3%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-8%	-2%	0%	2%	0%	1%	2%	-1%
1986	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	-13%	-4%	-2%	-2%
1987	Dry	-5%	-2%	0%	1%	0%	0%	-7%	-2%	-4%	-2%	0%	2%	-2%
1988	Critical	1%	-3%	-1%	-1%	-4%	-1%	-1%	0%	-2%	-2%	-3%	-3%	-2%
1989	Dry	-1%	1%	-1%	0%	-1%	-1%	-1%	0%	2%	2%	-1%	3%	0%
1990	Critical	-1%	-1%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1993	Above Normal	0%	1%	0%	2%	0%	0%	0%	1%	1%	0%	0%	0%	0%
1994	Critical	1%	0%	0%	0%	1%	1%	1%	0%	3%	-1%	2%	-8%	0%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
Dry		0%	0%	0%	0%	1%	1%	0%	0%	-1%	-2%	1%	1%	0%
Critical		0%	0%	0%	0%	-4%	-2%	-2%	-1%	0%	0%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	801	741	741	668	808	339	340	289	287	255	272	541	507
1923	Below Normal	788	765	736	380	312	294	346	307	249	276	393	669	460
1924	Critical	720	781	862	907	930	745	542	492	674	606	642	712	718
1925	Dry	945	1,000	913	990	711	326	271	273	266	283	393	662	586
1926	Dry	889	788	923	991	715	325	279	330	301	404	515	732	599
1927	Wet	929	602	315	368	453	286	248	285	239	231	291	588	403
1928	Above Normal	791	647	420	522	316	265	330	302	246	282	356	715	433
1929	Critical	885	802	953	1,008	1,055	593	441	424	404	443	585	796	699
1930	Dry	952	936	967	647	436	293	258	313	322	375	482	768	563
1931	Critical	950	807	905	964	901	531	440	491	625	590	714	788	725
1932	Dry	918	936	863	425	485	378	362	371	312	286	405	710	538
1933	Critical	866	745	841	782	555	413	356	364	409	442	558	670	583
1934	Critical	870	975	885	769	444	390	371	381	404	389	576	823	606
1935	Below Normal	964	933	1,023	668	350	288	276	319	254	251	404	709	537
1936	Below Normal	867	764	884	1,054	1,140	404	275	295	265	256	383	657	604
1937	Below Normal	850	767	837	998	928	680	339	262	257	259	326	580	590
1938	Wet	847	809	360	329	520	635	395	362	344	276	283	315	456
1939	Dry	226	287	657	1,013	944	599	469	345	329	447	513	788	551
1940	Above Normal	946	782	811	924	715	331	271	281	260	244	297	642	542
1941	Wet	814	829	855	583	746	428	374	268	269	274	287	447	515
1942	Wet	425	579	773	612	389	277	305	280	262	274	302	362	403
1943	Wet	279	322	324	510	364	400	432	304	309	259	301	593	366
1944	Dry	855	789	878	969	1,039	371	344	309	293	392	526	669	619
1945	Below Normal	851	758	704	646	668	473	359	313	253	279	392	684	532
1946	Below Normal	811	700	513	272	343	323	347	315	265	290	420	661	438
1947	Dry	819	799	932	786	702	402	369	357	319	408	544	771	601
1948	Below Normal	956	817	1,010	929	995	428	291	293	234	252	423	654	607
1949	Dry	783	746	869	1,025	827	365	351	329	290	384	583	760	609
1950	Below Normal	900	751	912	817	405	261	262	300	242	269	357	598	506
1951	Above Normal	803	467	374	613	667	285	327	288	246	248	317	683	443
1952	Wet	801	821	879	708	322	343	401	268	271	269	260	287	469
1953	Wet	244	449	864	376	286	270	333	274	234	243	316	477	364
1954	Above Normal	437	581	761	1,039	337	262	329	300	246	260	309	650	459
1955	Dry	857	894	868	496	374	308	364	338	301	327	470	718	526
1956	Wet	864	874	906	822	432	313	265	296	263	260	296	356	496
1957	Above Normal	240	268	515	844	774	286	317	281	236	253	327	714	421
1958	Wet	770	441	551	392	661	835	754	294	258	262	288	323	486
1959	Below Normal	246	376	757	1,007	413	295	375	329	318	335	400	725	465
1960	Dry	879	817	848	1,048	1,056	359	351	331	363	459	509	722	645
1961	Dry	912	864	1,075	934	830	358	278	305	333	413	550	662	626
1962	Below Normal	811	798	952	927	764	322	276	317	269	305	409	780	577
1963	Wet	770	295	415	484	357	265	493	291	224	232	282	601	392
1964	Dry	804	785	364	469	346	299	409	342	330	437	611	679	490
1965	Wet	853	878	641	375	286	257	292	308	258	242	287	556	436
1966	Below Normal	780	710	377	304	289	259	330	311	280	324	400	748	426
1967	Wet	976	923	930	668	317	340	363	326	275	297	266	269	496
1968	Below Normal	227	355	697	780	315	244	324	328	304	321	390	687	414
1969	Wet	839	821	727	754	858	579	538	360	310	274	295	333	557
1970	Wet	224	331	517	635	431	282	345	299	267	272	301	650	380
1971	Wet	894	638	419	273	270	255	310	272	237	241	316	540	389
1972	Below Normal	484	630	774	742	720	345	353	330	305	323	402	765	514
1973	Above Normal	1,034	784	461	610	536	313	341	326	254	243	339	651	491
1974	Wet	913	492	324	295	267	271	323	298	270	244	338	426	372
1975	Wet	246	319	570	579	557	337	357	299	249	243	312	431	375
1976	Critical	260	240	438	807	1,032	604	449	425	630	714	767	900	605
1977	Critical	1,017	868	1,068	785	864	665	553	523	656	559	692	822	756
1978	Above Normal	1,052	1,051	1,023	767	470	532	424	368	299	262	302	562	593
1979	Below Normal	764	835	922	699	401	316	310	307	248	263	394	673	511
1980	Above Normal	921	747	596	469	805	558	386	313	317	285	312	578	524
1981	Dry	752	715	891	1,034	378	257	328	322	345	461	540	751	565
1982	Wet	869	735	268	578	352	442	477	286	263	273	310	311	430
1983	Wet	206	300	485	956	837	789	738	365	317	303	240	209	479
1984	Wet	212	255	454	427	349	268	348	323	274	261	311	647	344
1985	Dry	779	619	294	311	500	368	389	331	290	439	628	636	466
1986	Wet	723	736	909	690	810	690	366	280	286	342	319	505	555
1987	Dry	644	679	877	1,063	804	423	387	337	370	474	572	734	614
1988	Critical	945	853	960	809	390	366	352	382	395	422	632	847	613
1989	Dry	998	977	991	913	1,135	496	257	279	282	421	606	663	668
1990	Critical	758	819	973	809	660	371	357	339	503	685	725	814	651
1991	Critical	1,039	1,023	1,014	1,019	1,027	643	337	318	491	707	701	718	753
1992	Critical	1,038	1,102	1,032	1,197	769	379	284	314	386	420	627	816	697
1993	Above Normal	1,032	1,089	1,083	812	675	454	260	281	242	232	284	565	584
1994	Critical	775	848	926	1,019	1,004	420	355	309	400	731	758	982	711
Average		756	713	746	725	615	399	364	324	316	346	428	633	530
Wet		652	593	595	544	470	408	403	302	270	265	295	439	436
Above Normal		806	716	679	727	610	362	332	303	263	256	312	630	500
Below Normal		736	711	793	730	574	352	319	309	267	286	392	685	513
Dry		813	789	826	820	705	370	342	326	315	401	528	714	579
Critical		844	822	905	906	802	510	403	397	498	559	665	807	676

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	801	741	741	668	808	339	340	289	287	256	272	541	507
1923	Below Normal	791	719	656	378	307	289	344	308	250	273	388	662	447
1924	Critical	731	789	858	920	815	546	494	488	672	601	639	720	689
1925	Dry	949	994	865	962	774	380	282	274	263	280	394	669	590
1926	Dry	893	777	914	987	712	325	279	328	300	412	519	741	599
1927	Wet	939	613	324	372	455	290	248	286	240	231	292	596	407
1928	Above Normal	788	674	480	555	330	269	334	300	246	279	351	719	444
1929	Critical	892	805	931	1,029	1,061	594	441	424	400	443	583	788	699
1930	Dry	948	937	968	648	436	293	258	314	320	406	500	670	558
1931	Critical	892	800	924	992	800	493	462	501	620	532	682	800	708
1932	Dry	926	935	862	420	473	385	363	368	313	286	405	711	537
1933	Critical	867	746	842	786	556	414	356	368	409	442	557	671	584
1934	Critical	870	977	888	753	413	381	369	380	404	389	574	819	601
1935	Below Normal	963	933	1,021	673	351	289	277	319	254	251	404	709	537
1936	Below Normal	868	765	884	1,054	1,140	405	275	295	265	256	383	657	604
1937	Below Normal	847	765	836	999	929	680	339	262	259	260	325	577	590
1938	Wet	845	831	374	329	508	633	395	361	344	276	283	319	458
1939	Dry	230	289	660	1,014	940	598	470	345	336	442	536	755	551
1940	Above Normal	880	754	800	912	715	333	271	281	260	244	298	642	532
1941	Wet	814	832	859	583	746	429	374	268	269	273	287	447	515
1942	Wet	436	612	793	612	388	277	305	280	263	273	302	364	409
1943	Wet	280	321	323	511	369	406	434	304	309	259	302	595	368
1944	Dry	857	791	879	970	1,036	371	345	309	291	394	546	666	621
1945	Below Normal	831	745	691	636	659	464	359	313	253	278	391	683	525
1946	Below Normal	812	726	550	273	338	319	345	316	265	298	429	735	450
1947	Dry	872	813	878	766	680	398	368	357	320	421	561	795	602
1948	Below Normal	955	829	1,004	923	1,028	437	292	294	235	262	408	671	612
1949	Dry	773	722	861	1,020	835	360	349	329	290	355	554	786	603
1950	Below Normal	910	709	855	782	387	259	262	294	244	273	360	581	493
1951	Above Normal	830	490	375	616	685	285	327	287	248	255	308	672	448
1952	Wet	798	827	886	709	323	347	411	268	271	269	261	288	471
1953	Wet	245	450	865	376	286	270	333	274	234	243	319	487	365
1954	Above Normal	441	583	762	1,039	337	262	329	300	246	262	309	651	460
1955	Dry	900	917	827	490	372	312	372	339	298	334	495	738	533
1956	Wet	869	874	905	822	413	307	265	296	262	260	295	355	494
1957	Above Normal	240	268	516	853	792	288	317	282	236	253	324	700	422
1958	Wet	753	477	572	396	662	835	755	294	257	262	288	324	490
1959	Below Normal	246	377	758	1,008	413	295	375	330	317	336	402	729	466
1960	Dry	888	855	986	809	1,074	370	352	332	341	449	511	737	642
1961	Dry	921	863	1,065	984	858	383	289	308	331	419	573	758	646
1962	Below Normal	850	829	1,016	878	747	322	276	315	279	311	376	779	581
1963	Wet	750	291	457	500	362	265	493	291	225	233	282	590	395
1964	Dry	810	775	349	457	343	299	409	345	309	453	665	657	489
1965	Wet	807	840	617	375	279	252	291	308	250	245	281	545	424
1966	Below Normal	755	704	387	305	288	258	329	312	280	324	398	744	424
1967	Wet	957	911	954	671	317	340	364	326	275	297	266	269	496
1968	Below Normal	227	355	697	778	315	244	324	329	303	318	393	699	415
1969	Wet	871	835	717	756	858	579	538	360	310	274	295	334	561
1970	Wet	224	332	517	635	431	281	344	299	267	271	301	651	380
1971	Wet	892	630	418	273	266	251	309	272	237	241	316	542	387
1972	Below Normal	489	633	775	742	720	345	353	334	313	326	409	771	518
1973	Above Normal	1,071	851	472	614	536	315	342	326	254	243	339	652	501
1974	Wet	913	493	324	295	267	271	323	298	270	244	338	426	372
1975	Wet	246	319	571	579	557	338	358	299	249	243	312	432	375
1976	Critical	260	240	438	807	1,032	604	449	415	639	756	800	913	613
1977	Critical	1,010	841	1,080	742	738	440	443	489	637	541	686	843	707
1978	Above Normal	1,077	1,103	1,028	780	477	549	439	393	302	261	307	575	608
1979	Below Normal	773	838	919	711	413	316	307	308	248	269	405	675	515
1980	Above Normal	917	768	663	481	800	591	387	313	317	285	312	578	534
1981	Dry	752	715	891	1,034	378	257	327	322	344	459	544	747	564
1982	Wet	868	749	273	578	352	444	483	286	263	273	310	310	432
1983	Wet	206	300	483	954	837	789	738	365	317	303	240	209	478
1984	Wet	212	255	454	427	349	268	348	323	274	261	311	647	344
1985	Dry	778	621	295	304	490	362	383	330	292	439	636	656	465
1986	Wet	728	732	908	688	810	701	365	278	286	304	307	482	549
1987	Dry	593	661	876	1,055	830	434	388	326	335	458	581	753	607
1988	Critical	962	809	939	802	383	360	351	381	393	416	601	806	600
1989	Dry	986	989	965	920	1,140	481	257	278	286	431	596	693	669
1990	Critical	747	811	982	819	662	371	358	339	503	685	725	815	651
1991	Critical	1,039	1,023	1,013	1,014	1,024	639	337	317	491	707	700	718	752
1992	Critical	1,038	1,102	1,032	1,198	768	379	284	314	386	419	620	802	695
1993	Above Normal	1,035	1,108	1,076	844	676	454	260	284	246	231	286	571	589
1994	Critical	781	852	925	1,015	1,022	432	358	310	391	723	779	892	707
Average		756	716	747	721	612	395	363	324	315	346	429	634	530
Wet		650	596	600	545	468	408	404	302	270	264	295	439	437
Above Normal		808	734	691	736	615	368	335	306	264	257	310	630	505
Below Normal		737	709	789	724	574	351	318	309	269	288	391	691	513
Dry		817	791	821	802	711	375	343	325	311	402	538	721	580
Critical		841	816	904	906	773	471	392	394	495	554	662	799	667

Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	3	-46	-81	-3	-5	-5	-2	1	1	-3	-5	-7	-13
1924	Critical	11	7	-4	13	-115	-198	-48	-4	-2	-5	-3	8	-28
1925	Dry	4	-6	-48	-29	62	54	10	1	-3	-3	1	7	4
1926	Dry	4	-11	-9	-4	-3	0	0	-3	0	8	5	9	0
1927	Wet	10	10	9	4	2	3	0	1	1	-1	1	8	4
1928	Above Normal	-2	27	59	33	14	4	5	-1	0	-3	-5	4	11
1929	Critical	7	3	-21	22	6	0	0	0	-4	-1	-2	-9	0
1930	Dry	-4	1	1	0	0	0	0	1	-3	31	18	-98	-4
1931	Critical	-58	-7	19	28	-100	-38	21	10	-6	-58	-31	12	-17
1932	Dry	7	-2	-1	-5	-12	6	1	-3	2	0	0	0	-1
1933	Critical	2	0	1	4	1	0	0	4	0	-1	-1	1	1
1934	Critical	0	2	3	-15	-32	-9	-2	0	0	0	-2	-4	-5
1935	Below Normal	-1	0	-2	5	1	1	1	0	0	0	0	0	0
1936	Below Normal	1	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	-3	-2	-1	1	2	1	0	0	1	1	-1	-3	0
1938	Wet	-2	23	14	0	-12	-2	0	0	0	0	0	5	2
1939	Dry	5	2	3	2	-4	-1	0	0	7	-5	23	-33	0
1940	Above Normal	-66	-28	-11	-12	1	2	0	0	0	0	0	0	-10
1941	Wet	0	2	4	0	0	1	0	0	-1	-1	0	0	0
1942	Wet	11	33	20	0	0	0	0	0	0	-1	0	2	5
1943	Wet	1	-1	-1	1	5	6	2	0	0	0	1	2	1
1944	Dry	2	3	0	1	-3	1	1	0	-3	2	20	-3	2
1945	Below Normal	-20	-13	-14	-9	-10	-9	0	0	0	0	-1	-2	-6
1946	Below Normal	0	26	37	1	-5	-4	-1	2	0	8	9	74	12
1947	Dry	53	14	-54	-20	-22	-4	-1	0	1	13	16	24	2
1948	Below Normal	-1	12	-6	-6	33	9	1	1	1	10	-15	17	5
1949	Dry	-9	-24	-9	-5	9	-5	-2	0	0	-29	-31	26	-7
1950	Below Normal	10	-41	-57	-35	-18	-2	0	-6	3	4	4	-17	-13
1951	Above Normal	28	23	0	4	18	0	0	-2	2	6	-9	-10	5
1952	Wet	-3	6	8	1	0	3	10	0	0	0	0	1	2
1953	Wet	0	1	1	0	0	0	0	0	0	0	4	10	1
1954	Above Normal	4	2	1	0	0	0	0	0	0	1	-1	2	1
1955	Dry	43	23	-41	-6	-2	4	8	1	-3	7	26	20	7
1956	Wet	5	0	-1	0	-19	-6	0	0	0	0	0	-1	-2
1957	Above Normal	0	0	0	9	18	1	0	1	0	-1	-3	-14	1
1958	Wet	-17	36	21	4	1	0	0	0	0	0	0	1	4
1959	Below Normal	0	1	1	1	0	0	0	1	-1	1	2	3	1
1960	Dry	9	38	137	-239	18	11	1	1	-22	-10	2	15	-3
1961	Dry	9	-1	-11	51	29	25	11	3	-2	6	23	96	20
1962	Below Normal	39	31	63	-49	-16	0	0	-2	10	7	-33	-1	4
1963	Wet	-20	-3	42	15	6	0	0	0	0	1	0	-10	3
1964	Dry	6	-10	-15	-12	-2	0	1	2	-21	16	54	-22	0
1965	Wet	-47	-39	-24	0	-7	-4	-1	0	-8	3	-6	-12	-12
1966	Below Normal	-25	-6	10	1	0	-1	0	1	0	-1	-2	-4	-2
1967	Wet	-19	-12	24	3	0	0	1	0	0	0	0	1	0
1968	Below Normal	0	1	0	-2	0	0	0	1	-1	-3	3	12	1
1969	Wet	32	14	-10	2	0	0	0	0	0	0	0	1	3
1970	Wet	0	1	1	0	0	-1	-1	0	-1	-1	1	1	0
1971	Wet	-2	-9	-1	0	-4	-4	0	0	0	0	0	2	-2
1972	Below Normal	5	3	1	1	1	0	0	4	8	3	7	6	3
1973	Above Normal	37	67	12	4	0	2	1	0	0	0	1	1	10
1974	Wet	0	2	0	0	0	0	0	0	0	0	0	1	0
1975	Wet	1	1	1	0	0	1	1	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	-10	9	42	32	14	7
1977	Critical	-7	-27	12	-42	-126	-224	-110	-35	-19	-19	-7	21	-48
1978	Above Normal	25	53	5	13	6	18	15	25	3	-1	5	12	15
1979	Below Normal	9	3	-4	12	13	0	-3	2	0	5	11	2	4
1980	Above Normal	-3	21	67	12	-6	33	1	0	0	0	0	0	10
1981	Dry	0	0	0	0	0	0	0	0	-1	-2	4	-4	0
1982	Wet	0	14	4	0	0	2	6	0	0	0	0	-1	2
1983	Wet	0	0	-2	-1	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	-1	0
1985	Dry	-1	2	0	-7	-10	-6	-6	-1	2	0	7	20	0
1986	Wet	4	-4	-2	-2	0	11	-1	-2	0	-38	-12	-22	-6
1987	Dry	-51	-17	-1	-8	26	10	1	-11	-35	-16	9	19	-6
1988	Critical	18	-44	-21	-7	-7	-6	-1	0	-2	-6	-32	-41	-12
1989	Dry	-12	12	-26	8	5	-15	0	-1	4	10	-10	30	1
1990	Critical	-12	-8	9	10	3	0	1	0	0	0	1	1	0
1991	Critical	0	0	-1	-6	-4	-4	-1	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	0	0	0	0	-1	-7	-14	-2
1993	Above Normal	3	19	-7	32	0	0	0	3	3	-1	2	6	5
1994	Critical	6	4	-1	-4	19	12	4	1	-9	-8	20	-91	-4
Average		0	2	1	-3	-3	-4	-1	0	-1	0	1	1	-1
Wet		-2	4	5	1	-1	1	1	0	0	-2	-1	-1	0
Above Normal		2	18	13	9	5	6	2	3	1	0	-1	0	5
Below Normal		1	-2	-4	-6	0	-1	0	0	2	2	-1	6	0
Dry		4	1	-4	-17	6	5	2	-1	-5	2	10	7	1
Critical		-3	-6	0	0	-30	-39	-11	-3	-3	-5	-3	-8	-9

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-6%	-11%	-1%	-2%	-2%	-1%	0%	0%	-1%	-1%	-1%	-2%
1924	Critical	2%	1%	0%	1%	-12%	-27%	-9%	-1%	0%	-1%	0%	1%	-4%
1925	Dry	0%	-1%	-5%	-3%	9%	17%	4%	0%	-1%	-1%	0%	1%	2%
1926	Dry	0%	-1%	-1%	0%	0%	0%	0%	-1%	0%	2%	1%	1%	0%
1927	Wet	1%	2%	3%	1%	1%	1%	0%	0%	0%	0%	0%	1%	1%
1928	Above Normal	0%	4%	14%	6%	4%	1%	2%	0%	0%	-1%	-1%	1%	2%
1929	Critical	1%	0%	-2%	2%	1%	0%	0%	0%	-1%	0%	0%	-1%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	8%	4%	-13%	0%
1931	Critical	-6%	-1%	2%	3%	-11%	-7%	5%	2%	-1%	-10%	-4%	1%	-2%
1932	Dry	1%	0%	0%	-1%	-3%	2%	0%	-1%	1%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-2%	-7%	-2%	-1%	0%	0%	0%	0%	-1%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1938	Wet	0%	3%	4%	0%	-2%	0%	0%	0%	0%	0%	0%	1%	0%
1939	Dry	2%	1%	0%	0%	0%	0%	0%	0%	2%	-1%	4%	-4%	0%
1940	Above Normal	-7%	-4%	-1%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	3%	6%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	4%	0%	0%
1945	Below Normal	-2%	-2%	-2%	-1%	-1%	-2%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	4%	7%	0%	-2%	-1%	0%	1%	0%	3%	2%	11%	2%
1947	Dry	6%	2%	-6%	-2%	-3%	-1%	0%	0%	0%	3%	3%	3%	0%
1948	Below Normal	0%	1%	-1%	-1%	3%	2%	0%	0%	4%	-4%	3%	1%	1%
1949	Dry	-1%	-3%	-1%	-1%	1%	-1%	-1%	0%	0%	-8%	-5%	3%	-1%
1950	Below Normal	1%	-6%	-6%	-4%	-4%	-1%	0%	-2%	1%	1%	1%	-3%	-2%
1951	Above Normal	3%	5%	0%	1%	3%	0%	0%	-1%	1%	3%	-3%	-2%	1%
1952	Wet	0%	1%	1%	0%	0%	1%	3%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	5%	3%	-5%	-1%	-1%	1%	2%	0%	-1%	2%	6%	3%	1%
1956	Wet	1%	0%	0%	0%	-4%	-2%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	0%	-1%	-2%	0%
1958	Wet	-2%	8%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	1%	5%	16%	-23%	2%	3%	0%	0%	-6%	-2%	0%	2%	0%
1961	Dry	1%	0%	-1%	5%	3%	7%	4%	1%	-1%	2%	4%	15%	3%
1962	Below Normal	5%	4%	7%	-5%	-2%	0%	0%	-1%	4%	2%	-8%	0%	0%
1963	Wet	-3%	-1%	10%	3%	2%	0%	0%	0%	0%	0%	0%	-2%	1%
1964	Dry	1%	-1%	-4%	-3%	-1%	0%	0%	1%	-6%	4%	9%	-3%	0%
1965	Wet	-5%	-4%	-4%	0%	-2%	-2%	0%	0%	-3%	1%	-2%	-2%	-2%
1966	Below Normal	-3%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	-2%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	2%	0%
1969	Wet	4%	2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-1%	-2%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	1%	3%	1%	2%	1%	1%
1973	Above Normal	4%	9%	3%	1%	0%	1%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-2%	1%	6%	4%	2%	1%
1977	Critical	-1%	-3%	1%	-5%	-15%	-34%	-20%	-7%	-3%	-3%	-1%	3%	-7%
1978	Above Normal	2%	5%	0%	2%	1%	3%	4%	7%	1%	0%	1%	2%	2%
1979	Below Normal	1%	0%	0%	2%	3%	0%	-1%	1%	0%	2%	3%	0%	1%
1980	Above Normal	0%	3%	11%	3%	-1%	6%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%
1982	Wet	0%	2%	2%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-2%	-2%	-2%	-2%	0%	1%	0%	1%	3%	0%
1986	Wet	1%	-1%	0%	0%	0%	2%	0%	-1%	0%	-11%	-4%	-4%	-2%
1987	Dry	-8%	-3%	0%	-1%	3%	2%	0%	-3%	-10%	-3%	2%	3%	-1%
1988	Critical	2%	-5%	-2%	-1%	-2%	-2%	0%	0%	0%	-1%	-5%	-5%	-2%
1989	Dry	-1%	1%	-3%	1%	0%	-3%	0%	0%	1%	2%	-2%	4%	0%
1990	Critical	-2%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%
1993	Above Normal	0%	2%	-1%	4%	0%	0%	0%	1%	1%	0%	1%	1%	1%
1994	Critical	1%	0%	0%	0%	2%	3%	1%	0%	-2%	-1%	3%	-9%	0%
Average		0%	0%	1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	3%	2%	1%	1%	1%	1%	0%	0%	0%	1%	1%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	1%	1%	0%	1%	0%
Dry		0%	0%	-1%	-2%	1%	2%	1%	0%	-1%	0%	2%	1%	0%
Critical		0%	-1%	0%	0%	-4%	-6%	-2%	-1%	-1%	-1%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	599	591	574	497	525	417	312	296	324	338	300	434	434
1923	Below Normal	590	589	553	427	433	420	337	320	331	283	349	503	428
1924	Critical	551	591	670	719	905	960	634	558	606	525	538	552	651
1925	Dry	691	732	713	794	638	585	383	301	382	355	424	513	543
1926	Dry	654	617	696	773	599	581	381	389	371	377	446	556	537
1927	Wet	692	490	311	348	394	390	310	299	280	268	286	462	377
1928	Above Normal	596	498	384	405	335	388	317	318	303	329	319	541	394
1929	Critical	654	620	720	783	833	784	542	486	505	442	490	590	621
1930	Dry	703	714	734	538	476	481	346	392	388	408	423	575	515
1931	Critical	704	643	720	766	918	774	580	560	581	497	570	597	659
1932	Dry	685	715	642	396	597	693	525	442	428	404	415	540	540
1933	Critical	650	603	689	744	709	705	494	450	495	447	495	534	585
1934	Critical	651	723	699	678	683	838	570	524	528	423	482	598	616
1935	Below Normal	698	714	795	587	583	450	357	353	322	307	357	542	505
1936	Below Normal	653	600	687	594	536	333	298	316	372	286	350	503	461
1937	Below Normal	627	592	647	754	474	394	318	264	387	325	342	463	466
1938	Wet	625	629	410	465	381	319	255	245	244	332	303	291	375
1939	Dry	258	311	550	767	745	607	478	370	346	384	420	590	485
1940	Above Normal	692	620	681	647	489	339	287	309	321	274	284	491	453
1941	Wet	610	627	610	455	439	321	273	255	367	367	305	363	416
1942	Wet	374	480	522	424	310	330	299	273	338	378	315	315	363
1943	Wet	288	318	310	375	294	293	287	309	402	305	289	457	327
1944	Dry	627	599	665	756	714	421	364	331	337	353	436	517	510
1945	Below Normal	633	587	552	537	512	354	371	325	313	275	334	505	441
1946	Below Normal	599	542	449	382	435	392	342	328	326	285	357	512	412
1947	Dry	611	612	699	625	605	497	378	415	370	353	439	582	516
1948	Below Normal	706	636	763	754	849	560	372	346	294	262	356	509	534
1949	Dry	601	589	680	797	727	459	369	412	379	341	467	569	533
1950	Below Normal	659	602	701	645	391	387	320	316	289	297	316	467	449
1951	Above Normal	614	409	379	339	268	338	332	277	267	270	287	522	358
1952	Wet	605	633	623	484	367	391	240	200	277	323	277	277	391
1953	Wet	265	404	556	398	411	450	320	270	259	248	296	394	356
1954	Above Normal	390	482	614	742	336	379	320	343	298	284	282	501	414
1955	Dry	645	683	641	409	403	447	431	415	375	330	419	542	478
1956	Wet	647	682	655	405	366	330	311	316	348	375	317	315	422
1957	Above Normal	264	308	454	679	614	384	341	289	277	268	296	531	392
1958	Wet	577	400	446	358	463	486	213	187	304	334	292	296	363
1959	Below Normal	267	363	595	709	393	456	408	345	332	300	336	541	420
1960	Dry	657	633	692	814	719	370	347	399	353	388	413	550	528
1961	Dry	680	676	815	736	690	485	370	416	364	339	423	512	542
1962	Below Normal	622	632	730	750	639	407	349	339	309	288	345	585	500
1963	Wet	614	318	374	345	388	395	367	300	290	253	274	467	365
1964	Dry	608	594	340	404	437	419	411	406	354	367	487	527	446
1965	Wet	644	678	504	386	331	394	321	319	329	289	306	426	411
1966	Below Normal	578	544	389	387	396	378	333	332	316	297	335	562	404
1967	Wet	719	702	695	478	347	369	273	225	280	292	273	270	410
1968	Below Normal	259	347	533	597	421	387	364	348	316	296	336	522	394
1969	Wet	635	636	559	580	378	388	281	235	234	334	303	303	406
1970	Wet	258	333	416	293	336	316	296	299	304	294	285	497	327
1971	Wet	659	503	372	299	379	325	302	280	257	244	283	432	361
1972	Below Normal	415	513	604	558	570	366	327	365	340	309	339	569	440
1973	Above Normal	745	557	404	434	495	383	342	345	348	269	314	486	427
1974	Wet	655	409	351	392	339	299	290	312	365	296	304	355	364
1975	Wet	270	325	463	500	433	302	298	302	332	305	296	355	348
1976	Critical	278	275	405	658	794	610	439	450	546	573	593	657	523
1977	Critical	749	667	785	688	854	851	655	587	597	473	525	596	669
1978	Above Normal	748	777	791	613	564	604	390	308	390	355	309	432	523
1979	Below Normal	573	628	677	573	373	317	327	302	287	265	351	515	432
1980	Above Normal	666	570	471	423	342	386	340	328	362	376	315	437	418
1981	Dry	557	551	684	729	369	389	362	344	343	386	433	573	477
1982	Wet	656	553	289	408	298	322	223	201	323	359	308	268	351
1983	Wet	205	258	374	355	326	267	291	257	235	220	201	213	267
1984	Wet	242	209	301	335	251	300	325	328	345	274	298	483	308
1985	Dry	573	472	292	324	467	504	427	368	316	368	496	503	426
1986	Wet	561	585	697	533	460	313	246	225	354	520	342	400	436
1987	Dry	491	520	669	777	679	513	395	395	369	391	471	563	519
1988	Critical	692	655	734	679	657	791	485	471	452	367	503	616	592
1989	Dry	730	748	772	736	953	483	310	357	284	342	473	519	559
1990	Critical	586	637	758	653	705	521	448	446	495	539	572	603	580
1991	Critical	748	765	776	841	912	601	444	425	476	555	575	546	639
1992	Critical	733	811	796	923	663	511	364	400	410	374	486	595	589
1993	Above Normal	738	797	828	661	489	381	318	332	372	329	304	439	499
1994	Critical	584	639	712	804	794	487	369	402	388	556	578	722	586
Average		576	563	587	570	526	456	362	347	358	348	376	489	463
Wet		514	484	468	410	366	348	287	268	308	315	293	364	369
Above Normal		605	561	558	544	446	400	330	314	326	309	301	481	431
Below Normal		563	564	620	590	501	400	344	329	324	291	343	521	449
Dry		611	610	643	648	614	496	392	385	360	368	443	546	510
Critical		632	636	705	745	786	703	502	480	507	481	534	601	609

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	599	591	574	497	525	417	312	296	324	340	300	434	434
1923	Below Normal	592	559	509	425	424	425	337	321	331	283	348	498	421
1924	Critical	557	596	674	727	697	889	582	555	622	526	535	550	626
1925	Dry	689	727	682	778	792	682	395	302	372	343	415	519	558
1926	Dry	656	611	690	770	593	545	377	383	363	380	449	565	532
1927	Wet	698	497	317	351	426	406	311	299	282	264	284	466	384
1928	Above Normal	595	516	420	426	348	408	313	316	301	303	314	544	401
1929	Critical	661	620	707	796	838	784	542	485	484	435	490	585	619
1930	Dry	700	714	734	538	452	478	346	394	381	370	449	524	507
1931	Critical	668	635	732	787	750	716	575	564	592	470	548	601	636
1932	Dry	690	715	641	454	606	696	527	436	431	404	415	541	546
1933	Critical	651	603	691	746	710	705	489	453	495	447	494	532	585
1934	Critical	651	725	701	684	673	835	567	523	528	423	482	596	616
1935	Below Normal	697	714	794	591	583	469	360	354	322	307	357	541	508
1936	Below Normal	653	600	686	594	536	334	298	316	372	287	349	503	461
1937	Below Normal	625	591	646	755	474	394	318	264	391	328	343	461	466
1938	Wet	624	644	416	474	381	319	255	245	244	332	303	293	378
1939	Dry	260	313	552	767	743	598	479	369	344	373	430	570	483
1940	Above Normal	656	605	676	639	490	340	286	309	322	275	285	492	448
1941	Wet	611	628	612	456	439	321	273	255	366	365	305	363	416
1942	Wet	380	499	530	424	310	330	299	273	338	377	315	316	366
1943	Wet	288	318	310	377	293	293	287	309	402	304	288	458	327
1944	Dry	628	601	666	755	712	424	366	332	328	348	444	517	510
1945	Below Normal	621	579	543	531	512	353	371	325	314	275	333	504	438
1946	Below Normal	600	559	463	382	435	381	341	332	324	285	362	557	418
1947	Dry	644	617	667	614	591	523	378	415	378	359	447	599	519
1948	Below Normal	708	642	760	753	866	567	372	348	290	271	347	519	537
1949	Dry	595	577	674	795	734	427	365	412	379	327	443	583	526
1950	Below Normal	668	580	667	620	379	378	321	307	288	295	317	456	440
1951	Above Normal	627	422	379	342	269	338	333	271	263	281	282	515	360
1952	Wet	604	637	629	485	367	395	240	200	277	323	277	277	393
1953	Wet	266	405	557	398	411	451	320	270	260	248	297	400	357
1954	Above Normal	393	483	615	743	336	379	320	343	299	288	281	500	415
1955	Dry	673	694	615	405	398	552	442	417	354	319	409	557	486
1956	Wet	649	681	655	405	357	327	311	316	348	374	316	314	421
1957	Above Normal	264	308	454	684	623	384	341	289	276	265	293	526	392
1958	Wet	568	422	459	360	463	486	213	187	304	333	292	297	365
1959	Below Normal	266	363	596	710	392	456	408	345	329	300	337	542	420
1960	Dry	658	657	753	667	733	376	349	401	345	381	415	560	525
1961	Dry	687	671	808	773	714	579	391	420	362	343	438	573	563
1962	Below Normal	643	643	772	721	630	407	349	334	326	300	324	583	503
1963	Wet	600	316	403	358	384	392	368	300	292	256	277	461	367
1964	Dry	612	586	331	396	435	421	408	410	353	372	515	515	446
1965	Wet	615	652	490	386	320	388	321	319	306	285	305	419	401
1966	Below Normal	561	542	393	387	382	319	329	332	314	295	334	560	396
1967	Wet	705	694	711	479	346	372	273	225	280	292	273	270	410
1968	Below Normal	258	348	533	596	420	386	363	349	314	296	339	531	394
1969	Wet	654	642	554	581	378	388	281	235	234	334	303	304	407
1970	Wet	258	334	416	293	336	315	296	299	303	292	285	497	327
1971	Wet	658	498	370	299	337	319	302	280	257	244	283	433	357
1972	Below Normal	418	514	604	559	571	366	327	370	334	308	343	574	441
1973	Above Normal	769	597	413	437	495	393	344	345	347	268	314	486	434
1974	Wet	655	410	351	392	339	299	290	312	365	296	304	356	364
1975	Wet	270	325	463	500	433	303	298	302	332	306	296	355	349
1976	Critical	279	275	405	658	794	606	436	444	546	597	611	673	527
1977	Critical	742	650	806	658	663	756	557	549	584	481	537	607	632
1978	Above Normal	741	803	795	637	574	624	393	306	392	348	306	438	530
1979	Below Normal	579	630	674	581	378	316	327	303	287	266	358	518	435
1980	Above Normal	664	586	512	426	343	387	341	328	362	376	315	437	423
1981	Dry	557	551	684	728	369	385	361	344	342	384	435	570	476
1982	Wet	650	563	292	408	298	320	223	201	323	359	308	267	351
1983	Wet	205	258	374	355	326	267	291	257	235	220	201	213	267
1984	Wet	242	209	301	335	251	300	325	328	345	274	298	483	308
1985	Dry	573	473	292	320	460	456	418	368	320	368	501	515	422
1986	Wet	564	583	695	532	461	312	248	225	355	425	324	388	426
1987	Dry	464	510	667	775	688	516	370	387	351	380	472	575	513
1988	Critical	711	633	720	673	616	784	482	470	442	364	490	591	581
1989	Dry	720	755	754	739	942	474	308	356	291	350	468	537	558
1990	Critical	580	632	762	660	696	519	448	446	495	539	572	603	580
1991	Critical	748	764	776	838	909	598	444	424	476	555	575	546	638
1992	Critical	733	811	796	923	663	515	364	401	412	374	485	587	589
1993	Above Normal	736	805	824	679	489	381	318	336	376	326	302	442	501
1994	Critical	588	642	711	803	807	495	371	403	397	549	593	662	585
Average		576	564	588	570	519	455	360	346	356	346	376	490	462
Wet		513	486	472	412	365	348	287	268	307	310	292	363	369
Above Normal		604	572	566	551	449	405	330	314	326	307	299	482	434
Below Normal		564	562	617	586	499	397	344	328	324	293	342	525	448
Dry		613	611	638	642	623	508	392	384	356	363	447	551	511
Critical		631	632	707	746	735	684	488	476	506	480	534	595	601

Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	2	-30	-44	-1	-9	5	0	0	0	1	-1	-4	-7
1924	Critical	6	5	4	7	-208	-71	-53	-3	16	1	-3	-2	-25
1925	Dry	-2	-5	-31	-16	154	97	12	1	-10	-12	-8	6	15
1926	Dry	2	-6	-6	-3	-6	-37	-4	-6	-9	3	3	9	-5
1927	Wet	6	6	6	3	32	16	1	1	2	-3	-2	4	6
1928	Above Normal	-1	18	37	21	13	20	-4	-1	-1	-26	-5	3	6
1929	Critical	7	0	-13	13	5	0	-1	-1	-21	-7	1	-5	-2
1930	Dry	-3	0	0	0	-24	-2	0	2	-7	-37	25	-51	-8
1931	Critical	-36	-8	12	21	-168	-58	-5	3	10	-28	-22	4	-23
1932	Dry	5	0	-1	58	9	3	2	-6	2	0	0	1	6
1933	Critical	1	0	1	2	1	0	-5	3	0	0	0	-2	0
1934	Critical	0	2	2	6	-10	-3	-3	-1	0	0	-1	-3	-1
1935	Below Normal	-1	0	-1	4	0	19	3	0	0	0	0	0	2
1936	Below Normal	0	0	-1	0	0	0	0	0	0	1	0	0	0
1937	Below Normal	-2	-1	0	0	0	0	0	0	3	3	1	-1	0
1938	Wet	-1	15	7	9	0	0	0	0	0	0	0	2	3
1939	Dry	3	1	2	1	-2	-9	1	-1	-1	-10	10	-20	-2
1940	Above Normal	-36	-15	-4	-9	1	1	0	0	1	1	0	1	-5
1941	Wet	1	2	2	0	-1	0	0	0	-1	-1	0	0	0
1942	Wet	7	19	8	0	0	0	0	0	0	-1	0	1	3
1943	Wet	1	0	0	1	-1	0	0	0	0	-1	0	1	0
1944	Dry	2	1	1	0	-2	2	1	0	-9	-6	8	-1	0
1945	Below Normal	-11	-8	-9	-6	0	0	0	0	0	0	0	-1	-3
1946	Below Normal	1	16	14	1	-1	-11	-2	4	-2	0	5	45	6
1947	Dry	33	5	-33	-11	-14	26	0	0	9	6	7	17	4
1948	Below Normal	2	7	-2	-1	17	7	1	1	-4	9	-10	11	3
1949	Dry	-6	-13	-6	-3	7	-32	-4	0	0	-14	-25	14	-7
1950	Below Normal	9	-22	-34	-25	-13	-9	1	-10	-1	-2	1	-10	-10
1951	Above Normal	12	13	0	3	2	0	1	-6	-4	12	-5	-7	2
1952	Wet	-1	4	6	1	0	3	1	0	0	0	0	0	1
1953	Wet	0	1	1	0	0	0	0	0	0	0	1	6	1
1954	Above Normal	2	1	1	0	0	0	0	0	1	3	0	0	1
1955	Dry	28	10	-26	-4	-5	105	10	2	-21	-11	-10	16	8
1956	Wet	2	-1	0	0	-8	-3	0	0	0	0	-1	-1	-1
1957	Above Normal	0	0	0	5	9	0	0	0	-1	-3	-3	-5	0
1958	Wet	-9	22	13	3	0	0	0	0	0	0	0	0	2
1959	Below Normal	0	0	1	0	-1	-1	0	0	-2	-1	1	2	0
1960	Dry	1	24	60	-147	14	6	1	2	-8	-7	3	10	-3
1961	Dry	7	-5	-8	38	24	94	21	4	-3	3	15	62	21
1962	Below Normal	20	11	43	-29	-9	0	0	-5	17	12	-21	-1	3
1963	Wet	-13	-2	30	13	-4	-3	1	0	2	4	3	-6	2
1964	Dry	4	-8	-9	-8	-2	1	-2	4	-1	5	29	-12	0
1965	Wet	-28	-26	-14	0	-11	-6	0	0	-23	-4	-2	-7	-10
1966	Below Normal	-17	-2	4	0	-13	-60	-4	0	-2	-2	-2	-2	-8
1967	Wet	-14	-8	17	2	-1	4	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	-1	-1	0	-1	0	-2	1	3	8	0
1969	Wet	19	6	-5	1	0	0	0	0	0	0	0	1	2
1970	Wet	0	0	0	0	0	-1	-1	0	-1	-2	0	0	0
1971	Wet	-1	-5	-1	0	-43	-6	0	0	0	0	0	1	-5
1972	Below Normal	3	2	1	1	1	0	0	5	-6	-1	4	5	1
1973	Above Normal	23	40	9	3	0	10	2	0	0	0	0	0	7
1974	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	-4	-3	-6	0	24	18	16	4
1977	Critical	-7	-17	21	-30	-191	-94	-98	-38	-13	8	12	11	-36
1978	Above Normal	-7	26	4	25	10	21	2	-2	2	-7	-4	6	6
1979	Below Normal	5	2	-2	7	5	0	0	1	0	2	7	2	2
1980	Above Normal	-2	16	41	3	1	1	0	0	0	0	0	0	5
1981	Dry	0	0	0	0	0	-4	-2	0	-1	-1	2	-3	-1
1982	Wet	-6	10	3	0	0	-2	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	-1	1	0	-5	-7	-48	-9	0	5	0	5	13	-4
1986	Wet	3	-2	-1	-1	0	-1	2	0	1	-95	-17	-12	-10
1987	Dry	-27	-9	-2	-2	8	2	-25	-8	-18	-11	1	12	-6
1988	Critical	20	-22	-14	-5	-42	-7	-3	-1	-10	-3	-13	-25	-10
1989	Dry	-10	7	-18	3	-11	-9	-2	-1	6	8	-5	18	-1
1990	Critical	-7	-4	4	7	-9	-2	0	0	0	0	0	1	-1
1991	Critical	0	0	0	-3	-3	-3	-1	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	4	0	1	2	0	-1	-8	0
1993	Above Normal	-2	8	-4	17	0	0	0	4	4	-3	-2	3	2
1994	Critical	4	2	-2	-2	13	9	3	1	9	-7	15	-60	-1
Average		0	1	1	0	-7	0	-2	-1	-1	-3	0	1	-1
Wet		-2	2	3	1	-2	0	0	0	-1	-5	-1	0	0
Above Normal		-1	11	8	7	4	5	0	-1	0	-2	-2	0	2
Below Normal		1	-2	-2	-4	-2	-3	0	0	0	2	-1	4	-1
Dry		2	0	-5	-6	9	12	0	-1	-4	-5	4	6	1
Critical		-1	-4	1	1	-51	-19	-14	-4	-1	-1	0	-6	-8

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-5%	-8%	0%	-2%	1%	0%	0%	0%	0%	0%	-1%	-1%
1924	Critical	1%	1%	1%	1%	-23%	-7%	-8%	-1%	3%	0%	-1%	0%	-3%
1925	Dry	0%	-1%	-4%	-2%	24%	17%	3%	0%	-3%	-3%	-2%	1%	2%
1926	Dry	0%	-1%	-1%	0%	-1%	-6%	-1%	-2%	-2%	1%	1%	2%	-1%
1927	Wet	1%	1%	2%	1%	8%	4%	0%	0%	1%	-1%	-1%	1%	1%
1928	Above Normal	0%	4%	10%	5%	4%	5%	-1%	0%	0%	-8%	-1%	1%	1%
1929	Critical	1%	0%	-2%	2%	1%	0%	0%	0%	-4%	-2%	0%	-1%	0%
1930	Dry	0%	0%	0%	0%	-5%	0%	0%	0%	-2%	-9%	6%	-9%	-2%
1931	Critical	-5%	-1%	2%	3%	-18%	-7%	-1%	1%	2%	-6%	-4%	1%	-3%
1932	Dry	1%	0%	0%	15%	2%	0%	0%	-1%	1%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-1%	1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	1%	0%	4%	1%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%
1938	Wet	0%	2%	2%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1939	Dry	1%	0%	0%	0%	0%	-2%	0%	0%	0%	-3%	2%	-3%	0%
1940	Above Normal	-5%	-2%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	2%	4%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	1%	0%	0%	-3%	-2%	2%	0%	0%
1945	Below Normal	-2%	-1%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	3%	3%	0%	0%	-3%	0%	1%	-1%	0%	1%	9%	1%
1947	Dry	5%	1%	-5%	-2%	-2%	5%	0%	0%	2%	2%	2%	3%	1%
1948	Below Normal	0%	1%	0%	0%	2%	1%	0%	0%	-1%	3%	-3%	2%	1%
1949	Dry	-1%	-2%	-1%	0%	1%	-7%	-1%	0%	0%	-4%	-5%	3%	-2%
1950	Below Normal	1%	-4%	-5%	-4%	-3%	-2%	0%	-3%	0%	-1%	0%	-2%	-2%
1951	Above Normal	2%	3%	0%	1%	1%	0%	0%	-2%	-1%	4%	-2%	-1%	0%
1952	Wet	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1955	Dry	4%	2%	-4%	-1%	-1%	23%	2%	0%	-6%	-3%	-2%	3%	1%
1956	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1958	Wet	-2%	5%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1960	Dry	0%	4%	9%	-18%	2%	2%	0%	1%	-2%	-2%	1%	2%	0%
1961	Dry	1%	-1%	-1%	5%	3%	19%	6%	1%	-1%	1%	3%	12%	4%
1962	Below Normal	3%	2%	6%	-4%	-1%	0%	0%	-1%	5%	4%	-6%	0%	1%
1963	Wet	-2%	-1%	8%	4%	-1%	-1%	0%	0%	1%	1%	1%	-1%	1%
1964	Dry	1%	-1%	-3%	-2%	0%	0%	-1%	1%	0%	1%	6%	-2%	0%
1965	Wet	-4%	-4%	-3%	0%	-3%	-1%	0%	0%	-7%	-1%	-1%	-2%	-2%
1966	Below Normal	-3%	0%	1%	0%	-3%	-16%	-1%	0%	-1%	-1%	0%	0%	-2%
1967	Wet	-2%	-1%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	1%	2%	0%
1969	Wet	3%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-11%	-2%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	1%	-2%	0%	1%	1%	0%
1973	Above Normal	3%	7%	2%	1%	0%	3%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-1%	-1%	0%	4%	3%	2%	1%	1%
1977	Critical	-1%	-3%	3%	-4%	-22%	-11%	-15%	-7%	-2%	2%	2%	2%	-5%
1978	Above Normal	-1%	3%	0%	4%	2%	3%	1%	-1%	1%	-2%	-1%	1%	1%
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	0%	0%	1%	2%	0%	1%
1980	Above Normal	0%	3%	9%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	1%	0%	0%
1982	Wet	-1%	2%	1%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-2%	-1%	-9%	-2%	0%	2%	0%	1%	3%	-1%
1986	Wet	1%	0%	0%	0%	0%	0%	1%	0%	0%	-18%	-5%	-3%	-2%
1987	Dry	-6%	-2%	0%	0%	1%	0%	-6%	-2%	-5%	-3%	0%	2%	-2%
1988	Critical	3%	-3%	-2%	-1%	-6%	-1%	-1%	0%	-2%	-1%	-3%	-4%	-2%
1989	Dry	-1%	1%	-2%	0%	-1%	-2%	-1%	0%	2%	2%	-1%	3%	0%
1990	Critical	-1%	-1%	1%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%	-1%	0%
1993	Above Normal	0%	1%	-1%	3%	0%	0%	0%	1%	1%	-1%	-1%	1%	0%
1994	Critical	1%	0%	0%	0%	2%	2%	1%	0%	2%	-1%	3%	-8%	0%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	2%	1%	1%	1%	0%	0%	0%	-1%	-1%	0%	0%
Below Normal		0%	0%	0%	-1%	-1%	-1%	0%	0%	0%	1%	0%	1%	0%
Dry		0%	0%	-1%	0%	1%	3%	0%	0%	-1%	-1%	1%	1%	0%
Critical		0%	-1%	0%	0%	-6%	-2%	-2%	-1%	0%	0%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	443	471	475	474	540	425	359	320	345	358	328	347	407
1923	Below Normal	427	438	509	472	471	474	389	339	351	301	317	371	405
1924	Critical	409	441	497	583	734	773	692	587	525	428	416	423	542
1925	Dry	491	547	541	629	628	513	466	323	415	386	368	406	476
1926	Dry	478	484	506	599	562	447	454	420	378	329	354	418	452
1927	Wet	487	422	315	363	449	422	366	318	326	302	288	357	368
1928	Above Normal	432	406	346	399	375	393	375	345	343	323	293	402	369
1929	Critical	478	464	528	617	712	626	592	499	464	396	380	441	516
1930	Dry	516	542	555	480	456	414	406	438	366	331	347	420	439
1931	Critical	504	500	543	619	720	713	609	575	503	394	433	455	547
1932	Dry	512	548	538	414	563	646	590	447	455	424	401	421	497
1933	Critical	489	492	523	584	567	544	533	473	464	412	408	430	493
1934	Critical	487	549	533	554	503	562	604	561	487	378	365	446	502
1935	Below Normal	520	519	615	549	489	480	416	343	368	327	317	400	445
1936	Below Normal	472	464	502	537	548	351	329	343	390	311	327	380	413
1937	Below Normal	449	456	492	613	509	451	299	262	325	353	353	368	411
1938	Wet	447	492	423	469	482	333	268	256	260	342	317	275	364
1939	Dry	294	329	410	610	678	642	552	376	356	336	342	420	445
1940	Above Normal	494	486	524	591	540	383	313	334	341	295	283	369	413
1941	Wet	437	447	496	471	477	346	270	264	355	398	322	302	382
1942	Wet	333	377	443	460	350	335	328	284	337	402	327	283	355
1943	Wet	302	330	334	411	330	311	290	324	406	333	288	349	334
1944	Dry	442	443	500	584	648	480	423	337	359	319	354	387	440
1945	Below Normal	464	445	443	478	522	413	389	340	324	278	295	370	397
1946	Below Normal	428	408	426	419	466	431	394	341	347	287	312	384	387
1947	Dry	441	440	525	547	564	454	442	417	395	313	350	421	442
1948	Below Normal	504	479	578	590	747	569	427	378	345	279	309	383	466
1949	Dry	451	464	511	644	661	481	446	461	426	310	384	425	472
1950	Below Normal	499	476	536	553	412	366	381	328	327	294	294	359	402
1951	Above Normal	448	394	387	380	304	334	380	266	284	283	268	387	343
1952	Wet	452	456	522	492	389	404	272	212	283	335	288	264	364
1953	Wet	293	354	460	413	468	399	373	279	294	268	292	333	352
1954	Above Normal	356	392	471	634	361	348	385	385	345	287	266	376	384
1955	Dry	468	481	508	433	461	480	516	456	400	331	336	411	440
1956	Wet	489	500	600	456	383	349	353	339	368	402	334	290	405
1957	Above Normal	295	347	391	539	539	384	397	290	313	288	277	391	371
1958	Wet	438	358	381	387	513	528	243	202	301	353	294	274	356
1959	Below Normal	295	347	420	606	444	515	493	357	341	281	288	399	399
1960	Dry	472	491	516	636	644	406	399	443	343	321	329	400	450
1961	Dry	495	491	596	607	609	438	425	481	380	287	323	391	460
1962	Below Normal	465	488	539	624	643	489	419	339	352	282	297	417	446
1963	Wet	496	346	351	353	438	408	429	313	295	281	276	356	362
1964	Dry	439	466	330	386	441	479	472	445	359	312	377	399	409
1965	Wet	479	486	465	398	351	396	362	328	341	325	324	332	382
1966	Below Normal	421	431	378	413	433	392	394	343	336	282	287	412	377
1967	Wet	509	506	593	527	410	403	318	247	288	305	279	263	387
1968	Below Normal	297	328	393	522	425	367	435	360	332	284	294	402	370
1969	Wet	473	475	465	578	435	400	295	249	248	341	308	276	379
1970	Wet	293	324	382	342	347	331	333	312	339	300	278	373	330
1971	Wet	464	418	373	354	393	410	347	289	292	261	264	349	351
1972	Below Normal	359	412	466	466	527	360	379	383	352	298	292	419	393
1973	Above Normal	516	455	384	462	505	420	406	369	365	295	302	370	404
1974	Wet	441	381	370	433	391	334	321	339	388	334	283	309	360
1975	Wet	300	327	385	439	442	323	327	316	348	353	289	303	346
1976	Critical	302	313	345	527	668	544	477	459	460	462	455	469	457
1977	Critical	523	501	591	576	645	707	665	579	539	403	397	431	546
1978	Above Normal	527	580	586	606	600	647	439	326	393	389	318	334	479
1979	Below Normal	417	437	481	528	423	344	356	314	296	273	328	383	382
1980	Above Normal	456	426	396	444	388	397	356	348	375	402	319	330	386
1981	Dry	402	418	490	631	413	413	440	361	350	332	350	416	418
1982	Wet	473	460	318	451	336	374	234	212	319	380	308	254	343
1983	Wet	209	266	381	488	338	274	300	268	243	233	212	215	286
1984	Wet	276	225	305	357	285	301	362	329	344	295	295	365	312
1985	Dry	403	402	315	340	471	548	505	395	335	314	391	387	400
1986	Wet	432	446	525	487	502	334	275	242	340	461	354	321	393
1987	Dry	378	393	476	628	584	493	457	426	349	331	364	419	441
1988	Critical	503	501	543	608	491	549	552	507	440	317	364	450	485
1989	Dry	535	551	592	583	796	519	353	412	283	281	357	398	472
1990	Critical	442	482	568	530	612	532	447	476	467	440	431	449	490
1991	Critical	532	574	622	700	747	599	468	478	444	447	450	416	540
1992	Critical	514	609	632	738	628	447	405	437	401	327	364	424	494
1993	Above Normal	526	600	620	651	546	458	374	354	388	359	327	341	462
1994	Critical	423	472	524	627	697	479	411	449	368	409	422	493	481
Average		436	445	474	516	509	450	408	366	363	335	330	375	417
Wet		406	400	423	435	405	367	317	282	320	334	296	307	358
Above Normal		449	456	458	518	470	419	378	334	349	328	298	365	402
Below Normal		430	438	484	527	504	429	393	340	342	295	308	389	407
Dry		451	468	494	547	574	491	459	415	372	329	358	409	447
Critical		467	491	537	605	644	589	538	507	464	401	407	444	508

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	443	471	475	475	540	425	359	320	345	359	329	347	407
1923	Below Normal	428	430	487	471	462	471	389	339	351	303	320	369	402
1924	Critical	409	444	494	594	618	623	640	585	556	435	412	423	519
1925	Dry	490	548	525	613	709	599	476	323	411	375	362	404	486
1926	Dry	478	481	502	597	557	443	449	418	367	329	356	418	450
1927	Wet	490	424	318	365	459	430	367	318	328	296	283	359	370
1928	Above Normal	432	411	364	413	382	402	370	344	341	318	289	404	372
1929	Critical	478	464	521	625	716	626	591	499	458	394	383	439	516
1930	Dry	515	542	556	480	455	413	405	439	362	316	357	401	437
1931	Critical	484	495	540	640	658	625	594	576	521	383	414	455	532
1932	Dry	515	548	538	433	573	652	592	442	458	424	401	422	500
1933	Critical	489	491	523	586	568	544	529	473	465	411	408	430	493
1934	Critical	488	551	534	555	494	555	602	561	487	377	365	445	501
1935	Below Normal	519	520	614	552	489	491	421	343	369	327	317	400	447
1936	Below Normal	472	464	502	536	548	351	329	343	390	311	327	380	413
1937	Below Normal	448	456	492	613	509	451	299	262	327	356	356	368	411
1938	Wet	447	498	429	475	483	332	268	256	260	342	317	276	365
1939	Dry	295	330	410	611	676	642	553	376	350	327	347	413	444
1940	Above Normal	479	481	521	586	542	384	312	334	343	296	284	370	411
1941	Wet	438	448	497	472	477	346	270	264	354	397	323	303	382
1942	Wet	335	383	448	460	349	335	328	283	338	402	327	283	356
1943	Wet	303	330	334	412	331	311	290	324	406	332	287	349	334
1944	Dry	442	443	500	584	647	482	425	337	357	314	358	388	440
1945	Below Normal	460	442	439	475	518	412	389	340	324	278	295	369	395
1946	Below Normal	428	412	433	419	464	428	392	343	344	285	313	404	389
1947	Dry	454	445	509	543	556	450	442	417	398	313	354	430	443
1948	Below Normal	502	481	578	590	754	576	427	379	341	284	302	389	467
1949	Dry	453	460	508	641	666	471	441	461	427	308	366	430	469
1950	Below Normal	505	474	519	538	403	365	383	323	323	292	293	354	398
1951	Above Normal	448	399	388	382	306	334	380	264	281	288	267	383	343
1952	Wet	449	457	527	493	389	408	273	212	283	335	288	264	365
1953	Wet	293	354	460	413	468	399	373	279	294	268	290	335	352
1954	Above Normal	357	392	471	634	361	348	385	385	346	288	266	376	384
1955	Dry	477	488	492	430	455	477	524	456	389	314	337	418	438
1956	Wet	488	499	599	456	374	348	353	339	367	402	333	290	404
1957	Above Normal	295	346	391	541	545	384	396	290	311	284	275	387	370
1958	Wet	432	366	389	389	512	529	243	202	301	353	293	274	357
1959	Below Normal	294	347	420	606	442	514	492	357	337	279	288	399	398
1960	Dry	471	482	573	552	643	409	401	445	342	314	329	404	447
1961	Dry	496	489	588	633	626	470	447	486	377	287	329	417	470
1962	Below Normal	481	485	568	607	635	490	419	338	369	295	287	415	449
1963	Wet	489	344	369	362	437	408	430	313	297	285	283	354	364
1964	Dry	441	464	325	381	440	479	468	448	353	308	396	396	408
1965	Wet	464	474	455	398	343	390	362	328	317	317	325	328	375
1966	Below Normal	416	430	379	413	433	379	387	343	332	279	286	411	374
1967	Wet	504	501	604	528	409	404	318	247	288	305	278	263	387
1968	Below Normal	297	327	393	521	422	366	434	359	329	286	296	404	370
1969	Wet	478	477	462	578	435	400	295	249	248	341	309	277	379
1970	Wet	293	324	382	342	347	331	333	312	338	300	279	373	329
1971	Wet	463	416	372	354	393	402	347	289	292	261	264	349	350
1972	Below Normal	360	413	466	466	528	361	379	388	345	295	292	423	393
1973	Above Normal	524	474	389	464	505	424	408	369	364	295	301	370	407
1974	Wet	441	381	370	433	391	334	321	339	388	334	283	309	360
1975	Wet	300	327	386	439	442	324	327	316	347	354	289	303	346
1976	Critical	303	313	345	527	668	545	475	456	456	463	467	473	458
1977	Critical	524	484	598	555	608	602	584	553	530	419	395	435	524
1978	Above Normal	536	596	589	626	614	665	442	322	394	381	310	336	484
1979	Below Normal	420	438	481	531	426	343	357	314	297	272	332	386	383
1980	Above Normal	457	430	417	447	383	397	356	348	375	402	319	330	388
1981	Dry	402	418	490	631	413	410	437	361	349	331	351	415	417
1982	Wet	472	465	321	451	336	374	234	212	319	380	308	254	344
1983	Wet	209	266	381	488	338	274	300	268	243	233	212	215	286
1984	Wet	276	225	305	357	285	301	362	329	344	295	296	365	312
1985	Dry	403	403	315	338	467	536	496	395	335	315	393	393	399
1986	Wet	435	445	524	487	502	338	275	242	342	405	337	318	388
1987	Dry	368	389	476	624	591	496	431	419	347	318	365	422	437
1988	Critical	514	495	535	604	487	539	549	507	435	322	359	437	482
1989	Dry	527	554	578	584	795	510	350	411	286	286	353	405	470
1990	Critical	440	479	571	535	614	528	447	476	467	440	431	449	490
1991	Critical	532	574	622	696	744	597	467	478	444	447	450	416	539
1992	Critical	514	609	632	738	628	447	405	437	403	328	365	421	494
1993	Above Normal	525	609	616	663	546	458	374	357	395	355	323	342	463
1994	Critical	424	473	524	625	705	486	413	449	364	403	435	459	480
Average		436	445	475	516	507	446	405	366	362	334	330	376	417
Wet		405	400	425	436	405	367	318	282	319	330	295	307	357
Above Normal		450	461	462	523	472	422	378	333	349	327	296	365	403
Below Normal		431	437	484	524	502	428	393	341	341	296	307	391	406
Dry		452	468	493	542	579	496	459	415	369	324	360	411	447
Critical		467	489	537	607	626	560	525	504	465	402	407	440	502

Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	1	0	0	0	0	0	1	1	0	0
1923	Below Normal	0	-8	-21	-1	-9	-3	0	0	-1	1	3	-2	-3
1924	Critical	0	3	-3	11	-116	-150	-52	-2	31	6	-4	0	-23
1925	Dry	-1	1	-15	-17	81	85	11	0	-4	-11	-7	-2	10
1926	Dry	0	-3	-3	-2	-5	-5	-1	-1	-11	0	2	0	-3
1927	Wet	2	3	3	2	10	8	1	1	2	-6	-6	1	2
1928	Above Normal	0	5	18	14	7	9	-4	-1	-2	-5	-4	1	3
1929	Critical	0	0	-7	8	4	0	-1	-1	-6	-2	3	-2	0
1930	Dry	-1	0	0	0	-1	-1	0	1	-4	-15	10	-19	-2
1931	Critical	-20	-5	-2	21	-62	-88	-14	1	18	-11	-19	-1	-15
1932	Dry	3	0	0	19	10	6	2	-5	3	0	0	1	3
1933	Critical	1	0	0	2	1	0	-4	0	0	0	0	0	0
1934	Critical	1	2	1	1	-9	-7	-2	0	0	0	0	-1	-1
1935	Below Normal	-1	0	-1	3	1	11	4	0	0	0	0	0	2
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	2	3	3	0	1
1938	Wet	-1	7	6	6	1	0	0	0	0	0	0	1	2
1939	Dry	1	1	1	1	-2	0	1	0	-6	-10	5	-7	-1
1940	Above Normal	-15	-5	-2	-5	2	1	-1	0	1	2	1	1	-2
1941	Wet	1	1	1	1	0	0	0	0	-1	-1	1	0	0
1942	Wet	2	6	6	0	0	0	-1	0	1	0	-1	1	1
1943	Wet	1	0	0	1	1	0	0	0	0	-1	-1	0	0
1944	Dry	0	0	0	0	-1	2	2	0	-2	-4	4	0	0
1945	Below Normal	-5	-3	-5	-4	-4	-1	0	0	1	0	0	-1	-2
1946	Below Normal	0	5	7	0	-2	-3	-2	2	-3	-2	1	20	2
1947	Dry	13	6	-17	-4	-8	-3	0	0	3	0	4	9	0
1948	Below Normal	-2	2	0	-1	7	7	0	1	-4	5	-7	6	1
1949	Dry	2	-4	-3	-3	6	-10	-5	0	0	-2	-18	5	-3
1950	Below Normal	6	-2	-16	-15	-9	-1	2	-5	-4	-2	-2	-5	-4
1951	Above Normal	0	5	0	2	1	0	-1	-2	-3	5	-1	-4	0
1952	Wet	-2	1	4	1	0	4	1	0	0	0	0	0	1
1953	Wet	0	0	0	0	0	0	0	0	1	0	-2	2	0
1954	Above Normal	1	1	0	0	0	0	0	0	1	1	0	0	0
1955	Dry	9	7	-16	-3	-6	-2	8	1	-11	-17	0	7	-2
1956	Wet	-1	-1	0	0	-9	-1	0	0	-1	0	-1	-1	-1
1957	Above Normal	-1	-1	-1	2	6	0	0	0	-2	-4	-2	-5	-1
1958	Wet	-6	8	8	1	-1	1	0	0	0	0	-1	0	1
1959	Below Normal	-1	0	0	0	-2	-1	0	0	-4	-2	0	1	-1
1960	Dry	-1	-8	57	-84	-1	3	2	3	-2	-7	0	4	-3
1961	Dry	1	-2	-8	26	17	32	22	4	-3	0	7	26	10
1962	Below Normal	16	-3	29	-17	-7	0	0	0	17	13	-10	-2	3
1963	Wet	-7	-3	19	9	-2	0	1	0	2	5	7	-2	2
1964	Dry	1	-3	-5	-4	-1	0	-4	3	-6	-5	19	-3	-1
1965	Wet	-15	-12	-10	0	-8	-5	0	0	-24	-8	1	-4	-7
1966	Below Normal	-5	-1	2	0	0	-14	-7	0	-4	-3	-2	-2	-3
1967	Wet	-5	-5	11	0	-1	1	0	0	0	0	-1	0	0
1968	Below Normal	-1	0	0	-1	-3	0	-1	0	-3	2	2	1	0
1969	Wet	5	2	-3	1	0	0	0	0	0	0	1	1	1
1970	Wet	0	0	0	0	0	-1	0	0	-1	-1	0	0	0
1971	Wet	0	-2	0	0	0	-8	0	0	0	0	0	1	-1
1972	Below Normal	1	1	0	0	1	0	0	4	-6	-2	0	4	0
1973	Above Normal	8	19	6	2	0	4	2	0	0	0	0	0	3
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	1	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-2	-3	-3	1	12	5	1
1977	Critical	1	-17	7	-21	-37	-105	-80	-27	-8	15	-2	4	-22
1978	Above Normal	10	16	3	21	14	18	3	-4	1	-8	-8	2	6
1979	Below Normal	3	1	-1	3	3	0	1	1	1	-1	4	3	1
1980	Above Normal	1	4	22	3	-5	0	0	0	0	0	0	0	2
1981	Dry	0	0	0	0	0	-3	-2	0	-1	-2	1	-1	-1
1982	Wet	-2	5	3	0	0	1	0	0	0	0	0	0	1
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-2	-4	-12	-9	0	0	0	2	6	-2
1986	Wet	3	0	-1	-1	0	4	0	0	1	-55	-16	-3	-6
1987	Dry	-10	-4	0	-4	7	2	-26	-8	-2	-13	1	3	-4
1988	Critical	11	-6	-9	-4	-4	-10	-3	-1	-6	5	-4	-13	-4
1989	Dry	-8	3	-14	2	-1	-9	-3	-1	3	5	-4	6	-2
1990	Critical	-2	-3	3	5	2	-4	0	0	0	0	0	0	0
1991	Critical	0	0	0	-3	-3	-2	0	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	0	0	0	2	1	1	-4	0
1993	Above Normal	-1	9	-4	12	0	0	0	3	7	-4	-4	1	2
1994	Critical	2	1	0	-2	8	7	2	1	-4	-6	13	-34	-1
Average		0	0	1	0	-2	-3	-2	0	-1	-2	0	0	-1
Wet		-1	0	2	1	0	0	0	0	-1	-3	-1	0	0
Above Normal		0	5	4	5	3	3	0	0	0	-1	-2	0	1
Below Normal		1	-1	0	-2	-2	0	0	0	-1	1	0	2	0
Dry		1	0	-1	-5	6	5	-1	0	-3	-5	2	2	0
Critical		-1	-2	-1	1	-18	-30	-13	-3	2	1	0	-4	-6

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-2%	-4%	0%	-2%	-1%	0%	0%	0%	0%	1%	-1%	-1%
1924	Critical	0%	1%	-1%	2%	-16%	-19%	-8%	0%	6%	1%	-1%	0%	-3%
1925	Dry	0%	0%	-3%	-3%	13%	17%	2%	0%	-1%	-3%	-2%	-1%	2%
1926	Dry	0%	-1%	-1%	0%	-1%	-1%	-1%	0%	-3%	0%	0%	0%	-1%
1927	Wet	0%	1%	1%	1%	2%	2%	0%	0%	1%	-2%	-2%	0%	0%
1928	Above Normal	0%	1%	5%	3%	2%	2%	-1%	0%	-1%	-2%	-1%	0%	1%
1929	Critical	0%	0%	-1%	1%	1%	0%	0%	0%	-1%	0%	1%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-4%	3%	-4%	-1%
1931	Critical	-4%	-1%	0%	3%	-9%	-12%	-2%	0%	3%	-3%	-4%	0%	-2%
1932	Dry	1%	0%	0%	5%	2%	1%	0%	-1%	1%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%
1938	Wet	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	1%	-2%	0%
1940	Above Normal	-3%	-1%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	1%	0%	0%
1945	Below Normal	-1%	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	1%	2%	0%	0%	-1%	0%	1%	-1%	-1%	0%	5%	0%
1947	Dry	3%	1%	-3%	-1%	-1%	-1%	0%	0%	1%	0%	1%	2%	0%
1948	Below Normal	0%	0%	0%	0%	1%	1%	0%	0%	-1%	2%	-2%	1%	0%
1949	Dry	0%	-1%	-1%	-1%	1%	-2%	-1%	0%	0%	-1%	-5%	1%	-1%
1950	Below Normal	1%	-1%	-3%	-3%	-2%	0%	1%	-2%	-1%	-1%	-1%	-1%	-1%
1951	Above Normal	0%	1%	0%	0%	0%	0%	0%	-1%	-1%	2%	0%	-1%	0%
1952	Wet	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	2%	1%	-3%	-1%	-1%	0%	1%	0%	-3%	-5%	0%	2%	-1%
1956	Wet	0%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	1%	0%	0%	0%	-1%	-1%	-1%	-1%	0%
1958	Wet	-1%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%
1960	Dry	0%	-2%	11%	-13%	0%	1%	1%	1%	0%	-2%	0%	1%	0%
1961	Dry	0%	-1%	-1%	4%	3%	7%	5%	1%	-1%	0%	2%	7%	2%
1962	Below Normal	4%	-1%	5%	-3%	-1%	0%	0%	0%	5%	5%	-3%	0%	1%
1963	Wet	-1%	-1%	5%	3%	0%	0%	0%	0%	1%	2%	2%	-1%	1%
1964	Dry	0%	-1%	-1%	-1%	0%	0%	-1%	1%	-2%	-1%	5%	-1%	0%
1965	Wet	-3%	-2%	-2%	0%	-2%	-1%	0%	0%	-7%	-2%	0%	-1%	-2%
1966	Below Normal	-1%	0%	0%	0%	0%	-3%	-2%	0%	-1%	-1%	-1%	0%	-1%
1967	Wet	-1%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	-1%	1%	1%	0%	0%
1969	Wet	1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	1%	-2%	-1%	0%	1%	0%
1973	Above Normal	2%	4%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	3%	1%	0%
1977	Critical	0%	-3%	1%	-4%	-6%	-15%	-12%	-5%	-2%	4%	0%	1%	-3%
1978	Above Normal	2%	3%	1%	3%	2%	3%	1%	-1%	0%	-2%	-3%	0%	1%
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	1%	0%
1980	Above Normal	0%	1%	6%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-2%	-2%	0%	0%	0%	1%	2%	0%
1986	Wet	1%	0%	0%	0%	0%	1%	0%	0%	0%	-12%	-5%	-1%	-1%
1987	Dry	-3%	-1%	0%	-1%	1%	0%	-6%	-2%	-1%	-4%	0%	1%	-1%
1988	Critical	2%	-1%	-2%	-1%	-1%	-2%	-1%	0%	-1%	2%	-1%	-3%	-1%
1989	Dry	-1%	0%	-2%	0%	0%	-2%	-1%	0%	1%	2%	-1%	2%	0%
1990	Critical	-1%	-1%	0%	1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	-1%	0%
1993	Above Normal	0%	1%	-1%	2%	0%	0%	0%	1%	2%	-1%	-1%	0%	0%
1994	Critical	0%	0%	0%	0%	1%	2%	1%	0%	-1%	-2%	3%	-7%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	1%	1%	1%	0%	1%	0%	0%	0%	0%	-1%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	-1%	1%	1%	0%	0%	-1%	-1%	0%	1%	0%
Critical		0%	0%	0%	0%	-3%	-4%	-2%	0%	0%	0%	0%	-1%	-1%

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	120	119	127	120	117	82	46	40	48	62	43	76	83
1923	Below Normal	116	116	120	90	84	99	52	46	62	41	55	92	81
1924	Critical	105	118	143	158	202	221	137	111	124	104	105	107	136
1925	Dry	139	150	154	176	152	130	67	41	66	62	75	99	109
1926	Dry	133	125	150	170	150	135	65	66	66	68	83	106	110
1927	Wet	140	94	75	88	101	102	45	40	42	39	42	84	74
1928	Above Normal	117	94	89	98	88	79	46	45	47	54	50	104	76
1929	Critical	135	125	155	170	192	180	112	92	96	83	92	115	129
1930	Dry	144	148	161	126	124	128	57	65	69	74	78	112	107
1931	Critical	144	131	155	172	207	180	121	111	118	97	113	118	139
1932	Dry	140	148	140	99	150	149	105	81	78	72	74	105	112
1933	Critical	133	121	148	163	172	162	98	83	94	84	94	103	121
1934	Critical	132	149	152	156	153	193	119	102	103	79	91	118	129
1935	Below Normal	143	148	172	135	140	116	59	54	53	50	62	103	103
1936	Below Normal	131	121	148	138	109	47	40	45	68	45	57	93	87
1937	Below Normal	125	118	139	162	89	79	47	30	67	54	56	83	88
1938	Wet	125	126	80	99	73	48	28	26	27	52	42	41	64
1939	Dry	32	45	117	163	168	143	93	62	60	69	77	115	95
1940	Above Normal	143	124	146	142	120	48	36	43	57	43	40	90	86
1941	Wet	120	125	124	101	83	44	33	28	60	66	51	66	75
1942	Wet	61	87	109	79	41	53	40	34	54	66	46	46	60
1943	Wet	39	47	69	61	35	40	37	42	69	56	48	82	52
1944	Dry	125	118	140	159	158	100	60	50	57	62	81	98	101
1945	Below Normal	128	116	122	121	96	52	59	47	54	52	57	94	83
1946	Below Normal	117	103	85	80	77	71	52	48	59	44	58	95	74
1947	Dry	120	121	146	136	138	131	65	72	65	62	82	114	104
1948	Below Normal	146	130	163	164	196	140	61	54	45	35	60	96	107
1949	Dry	120	118	146	177	171	125	62	71	66	55	89	113	109
1950	Below Normal	138	121	151	147	107	109	48	46	43	47	50	86	91
1951	Above Normal	121	75	64	59	33	56	49	36	35	40	42	99	59
1952	Wet	121	127	136	105	80	67	20	13	35	50	37	39	69
1953	Wet	34	68	119	84	87	122	49	33	34	30	45	68	64
1954	Above Normal	66	89	132	161	95	109	47	52	47	46	41	94	82
1955	Dry	131	140	139	102	103	113	80	73	66	56	76	105	99
1956	Wet	133	142	143	78	55	50	42	45	57	66	52	47	76
1957	Above Normal	34	44	98	146	151	113	53	38	39	38	44	102	75
1958	Wet	113	69	100	91	115	102	19	8	43	56	41	42	67
1959	Below Normal	35	58	124	152	98	107	74	53	55	46	55	103	80
1960	Dry	132	129	149	177	170	98	57	67	61	70	78	107	108
1961	Dry	140	139	174	166	166	131	63	72	65	59	78	100	113
1962	Below Normal	124	128	158	169	144	94	55	52	49	42	56	114	99
1963	Wet	124	50	86	87	103	113	61	42	53	36	38	85	73
1964	Dry	120	118	81	99	111	111	73	70	62	65	93	102	92
1965	Wet	131	139	115	71	52	70	46	45	53	41	48	76	74
1966	Below Normal	113	103	82	86	82	102	52	50	52	46	54	110	78
1967	Wet	151	145	149	120	95	72	36	18	35	37	35	36	77
1968	Below Normal	33	55	113	132	100	111	60	54	51	45	55	101	76
1969	Wet	129	129	124	132	71	63	36	23	24	52	42	44	72
1970	Wet	32	50	89	42	48	45	39	40	44	46	41	92	51
1971	Wet	133	97	94	76	93	85	42	35	33	31	41	77	70
1972	Below Normal	72	98	132	124	135	111	51	59	58	50	55	112	88
1973	Above Normal	158	112	94	121	116	82	52	54	63	37	47	91	85
1974	Wet	130	73	77	81	74	39	36	44	63	56	51	61	65
1975	Wet	35	48	99	111	64	38	38	41	57	57	49	64	59
1976	Critical	37	37	89	142	179	161	83	82	109	115	117	130	107
1977	Critical	155	138	169	152	193	195	143	119	121	90	102	119	141
1978	Above Normal	156	164	172	141	130	130	64	41	67	64	52	75	105
1979	Below Normal	112	124	144	122	57	44	46	41	46	35	56	96	77
1980	Above Normal	134	111	106	75	59	62	52	48	58	67	52	78	75
1981	Dry	106	106	142	156	99	107	60	53	58	67	79	112	95
1982	Wet	131	109	74	102	38	47	19	13	49	59	42	27	59
1983	Wet	12	29	59	69	53	38	39	28	24	19	10	16	33
1984	Wet	26	13	44	48	22	43	46	49	61	40	43	85	43
1985	Dry	108	86	71	80	110	118	78	59	51	63	94	94	84
1986	Wet	109	115	148	123	91	48	24	19	56	97	58	68	80
1987	Dry	89	96	138	164	165	134	70	67	65	71	90	111	105
1988	Critical	146	136	158	152	150	178	96	87	87	64	97	123	123
1989	Dry	152	157	166	165	217	123	44	55	44	58	90	99	114
1990	Critical	117	131	163	148	165	127	84	80	94	105	114	120	121
1991	Critical	156	161	167	187	210	145	84	75	89	110	115	108	134
1992	Critical	151	174	173	207	162	126	62	67	72	62	90	119	122
1993	Above Normal	154	170	183	150	125	104	47	49	70	60	45	81	103
1994	Critical	114	131	156	181	192	129	63	68	71	112	117	151	124
Average		113	110	126	126	117	102	59	53	61	59	65	91	90
Wet		97	90	101	88	70	63	37	32	46	50	43	59	65
Above Normal		120	121	121	121	103	87	49	45	53	51	46	89	83
Below Normal		109	110	132	130	108	91	54	49	54	45	56	98	87
Dry		121	122	138	145	147	124	69	64	62	65	82	106	104
Critical		127	129	152	166	181	166	100	90	98	92	104	119	127

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	121	119	127	120	117	83	46	40	48	62	44	76	83
1923	Below Normal	116	109	112	90	82	100	52	46	62	42	56	91	80
1924	Critical	107	119	143	160	164	205	123	110	127	105	104	107	131
1925	Dry	141	150	148	173	177	151	71	41	64	59	74	99	112
1926	Dry	134	124	149	169	148	130	64	64	64	68	84	109	109
1927	Wet	142	96	76	88	108	106	45	40	42	36	41	85	75
1928	Above Normal	117	98	96	102	95	82	45	45	47	49	49	105	77
1929	Critical	136	125	152	173	193	180	112	92	92	81	92	114	129
1930	Dry	143	148	161	126	119	128	57	66	67	66	82	99	105
1931	Critical	135	129	157	177	174	166	119	112	120	90	107	119	134
1932	Dry	142	148	140	113	154	150	105	79	78	73	74	105	113
1933	Critical	133	121	148	163	172	162	97	83	94	84	94	102	121
1934	Critical	132	150	152	159	151	192	118	101	103	79	91	117	129
1935	Below Normal	143	148	172	136	141	120	60	54	53	50	62	103	104
1936	Below Normal	131	121	148	138	109	47	40	45	68	45	57	93	87
1937	Below Normal	125	118	139	162	89	79	47	30	68	55	57	83	88
1938	Wet	124	129	81	102	73	48	28	26	27	52	42	41	64
1939	Dry	32	45	117	163	167	140	93	61	60	65	79	111	94
1940	Above Normal	134	120	145	141	120	48	36	43	57	44	41	90	85
1941	Wet	120	126	124	101	83	44	33	28	60	66	51	66	75
1942	Wet	63	91	110	79	41	53	40	34	54	66	46	46	60
1943	Wet	40	47	69	61	35	40	36	42	69	56	48	82	52
1944	Dry	125	119	140	159	158	100	60	50	54	59	83	98	100
1945	Below Normal	125	114	120	120	95	52	59	47	54	52	57	94	82
1946	Below Normal	117	107	87	80	77	70	52	49	58	41	60	106	75
1947	Dry	128	123	140	133	136	140	64	72	67	62	84	118	106
1948	Below Normal	145	131	163	164	200	141	62	54	44	37	57	98	108
1949	Dry	119	115	145	176	172	118	61	71	66	52	82	116	108
1950	Below Normal	140	116	144	143	105	107	48	43	42	46	50	83	89
1951	Above Normal	125	78	64	62	33	56	49	34	34	43	41	97	60
1952	Wet	121	128	137	105	80	68	20	13	35	50	37	39	69
1953	Wet	34	68	119	84	87	122	49	33	35	30	45	70	65
1954	Above Normal	67	89	132	161	95	109	47	52	47	41	94	82	85
1955	Dry	138	143	134	102	103	131	83	73	61	52	74	108	100
1956	Wet	134	141	143	78	54	49	42	45	57	66	52	47	76
1957	Above Normal	34	44	98	147	153	113	53	38	38	38	43	100	75
1958	Wet	111	74	103	92	115	102	19	8	43	56	40	42	67
1959	Below Normal	35	59	124	152	97	107	74	54	55	46	55	104	80
1960	Dry	133	135	161	147	171	100	57	69	60	69	78	110	107
1961	Dry	142	138	173	174	172	145	70	74	64	60	81	114	117
1962	Below Normal	133	132	166	163	142	94	55	50	53	47	51	113	100
1963	Wet	121	49	92	90	100	111	61	42	53	36	39	83	73
1964	Dry	121	116	79	97	111	111	72	71	63	63	100	99	92
1965	Wet	124	132	112	71	50	69	46	45	49	40	48	75	72
1966	Below Normal	110	102	82	86	80	91	51	50	51	46	54	110	76
1967	Wet	148	143	153	121	94	73	36	18	35	37	35	36	77
1968	Below Normal	33	55	113	131	100	111	60	54	51	46	56	102	76
1969	Wet	134	131	123	132	71	63	36	23	24	52	42	44	73
1970	Wet	32	50	89	42	48	45	39	40	44	46	41	92	51
1971	Wet	132	95	94	76	86	83	42	35	33	31	41	78	69
1972	Below Normal	73	98	132	124	135	111	51	60	56	50	56	113	88
1973	Above Normal	163	122	95	121	116	84	53	54	63	37	47	91	87
1974	Wet	130	73	77	81	74	39	36	44	63	56	51	61	65
1975	Wet	35	48	99	111	64	38	38	41	57	57	49	64	59
1976	Critical	37	37	90	142	179	160	82	80	109	121	122	133	108
1977	Critical	156	134	173	146	155	172	117	108	117	91	104	122	133
1978	Above Normal	154	170	173	145	132	135	64	41	67	64	51	76	106
1979	Below Normal	113	124	144	123	57	44	46	41	46	35	58	97	77
1980	Above Normal	134	115	114	75	56	62	52	48	58	67	52	78	76
1981	Dry	106	106	142	156	99	107	60	53	58	67	80	111	95
1982	Wet	131	112	74	102	38	47	19	13	49	59	42	27	59
1983	Wet	12	29	59	69	53	38	39	28	24	19	10	16	33
1984	Wet	26	13	44	48	22	43	46	49	61	40	43	85	43
1985	Dry	108	87	71	79	109	106	75	59	53	63	95	97	83
1986	Wet	110	114	148	122	91	48	24	19	56	78	54	66	78
1987	Dry	83	94	138	166	165	134	62	64	61	68	90	113	103
1988	Critical	148	130	155	151	141	176	95	87	84	61	93	117	120
1989	Dry	149	158	163	165	214	121	44	55	46	60	89	103	114
1990	Critical	115	130	164	150	164	126	84	80	94	105	114	120	120
1991	Critical	156	161	167	186	209	144	84	75	88	110	115	108	134
1992	Critical	151	174	173	207	162	127	62	67	72	62	89	117	122
1993	Above Normal	153	172	182	153	125	104	47	50	71	60	45	81	104
1994	Critical	115	131	155	181	194	131	63	69	75	110	121	136	123
Average		113	110	126	126	116	102	59	53	61	59	65	91	90
Wet		96	90	101	88	70	63	37	32	46	49	43	59	65
Above Normal		120	113	122	123	104	88	49	44	53	51	45	89	83
Below Normal		110	110	132	129	108	91	54	49	54	46	56	99	86
Dry		121	122	138	144	148	126	69	64	62	63	83	107	104
Critical		127	128	153	166	171	162	96	89	98	92	104	118	125

Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
 Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	-7	-8	0	-1	1	0	0	0	1	0	-1	-1
1924	Critical	1	1	0	2	-38	-16	-14	-1	3	1	-1	0	-5
1925	Dry	2	-1	-6	-3	25	21	3	0	-2	-3	-2	1	3
1926	Dry	1	-2	-1	-1	-2	-5	-1	-2	-2	1	1	2	-1
1927	Wet	2	2	1	1	6	4	0	1	0	-3	-1	1	1
1928	Above Normal	0	4	7	4	7	3	-1	0	0	-6	-1	1	1
1929	Critical	1	0	-3	3	1	0	0	0	-4	-2	0	-1	0
1930	Dry	-1	0	0	0	-5	0	0	0	-1	-7	4	-12	-2
1931	Critical	-9	-2	3	5	-34	-15	-2	1	2	-7	-6	1	-5
1932	Dry	1	0	0	14	4	1	1	-2	1	0	0	0	2
1933	Critical	0	0	0	0	0	0	-1	1	0	0	0	0	0
1934	Critical	0	1	0	3	-2	-1	0	0	0	0	0	-1	0
1935	Below Normal	0	0	0	1	0	4	1	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1938	Wet	0	4	1	3	0	0	0	0	0	0	0	0	1
1939	Dry	1	0	0	0	0	-3	0	-1	0	-4	2	-4	-1
1940	Above Normal	-9	-4	-1	-2	0	0	0	0	0	0	0	0	-1
1941	Wet	0	0	0	0	1	0	0	0	0	0	0	0	0
1942	Wet	2	5	2	0	0	0	0	0	0	0	0	0	1
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	-3	-3	1	0	0
1945	Below Normal	-3	-2	-2	-1	-1	0	0	0	0	0	0	0	-1
1946	Below Normal	0	4	2	0	0	-1	0	1	0	-3	1	11	1
1947	Dry	8	2	-6	-2	-3	9	0	0	2	0	2	4	1
1948	Below Normal	0	2	0	0	4	2	0	0	-1	2	-3	3	1
1949	Dry	-1	-3	-1	-1	1	-6	-1	0	0	-3	-6	3	-2
1950	Below Normal	2	-5	-7	-5	-2	-2	0	-3	0	0	0	-3	-2
1951	Above Normal	5	3	0	3	0	0	0	-2	-1	3	-1	-2	1
1952	Wet	-1	1	1	0	0	1	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1954	Above Normal	1	0	0	0	0	0	0	0	0	1	0	0	0
1955	Dry	6	3	-5	-1	-1	18	4	1	-5	-5	-2	3	1
1956	Wet	1	0	0	0	-1	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	1	1	0	0	0	0	0	-1	-2	0
1958	Wet	-2	5	3	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	-1	0	0	0	0
1960	Dry	2	6	13	-29	1	1	0	1	-2	-1	1	2	0
1961	Dry	2	-1	-1	8	6	14	6	1	-1	1	4	14	4
1962	Below Normal	9	4	9	-6	-2	0	0	-1	4	5	-5	0	1
1963	Wet	-3	-1	6	3	-2	-2	0	0	0	0	1	-1	0
1964	Dry	1	-2	-2	-1	0	0	-1	2	1	-2	7	-3	0
1965	Wet	-7	-6	-3	0	-2	-1	0	0	-3	-1	0	-1	-2
1966	Below Normal	-4	-1	1	0	-2	-11	-1	0	0	0	0	-1	-2
1967	Wet	-3	-2	3	0	0	1	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	2	1	2	0
1969	Wet	5	1	-1	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	-1	0	0	-7	-1	0	0	0	0	0	0	-1
1972	Below Normal	1	0	0	0	0	0	0	1	-2	0	1	1	0
1973	Above Normal	6	10	2	1	0	2	0	0	0	0	0	0	2
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	-1	-1	-2	0	6	5	4	1
1977	Critical	1	-4	4	-6	-38	-23	-25	-11	-4	2	2	3	-8
1978	Above Normal	-2	6	1	4	2	4	0	0	0	-1	0	1	1
1979	Below Normal	1	0	0	1	1	0	0	0	0	0	2	1	1
1980	Above Normal	0	4	8	1	-3	0	0	0	0	0	0	0	1
1981	Dry	0	0	0	0	0	0	0	0	0	0	1	-1	0
1982	Wet	0	2	1	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-1	-1	-12	-3	0	2	0	1	3	-1
1986	Wet	1	-1	0	0	0	0	0	0	0	-19	-4	-2	-2
1987	Dry	-7	-2	0	2	0	0	-8	-2	-4	-2	0	3	-2
1988	Critical	3	-6	-3	-1	-8	-2	-1	0	-2	-2	-4	-6	-3
1989	Dry	-3	1	-2	1	-2	-2	-1	0	2	2	-1	4	0
1990	Critical	-1	-1	1	2	-1	-1	0	0	0	0	0	0	0
1991	Critical	0	0	0	-1	-1	-1	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	-1	-2	0
1993	Above Normal	-1	2	-1	3	0	0	0	1	1	0	0	1	0
1994	Critical	1	1	0	0	2	2	1	0	4	-2	4	-15	0
Average		0	0	0	0	-1	0	-1	0	0	-1	0	0	0
Wet		0	0	1	0	0	0	0	0	0	-1	0	0	0
Above Normal		0	3	2	1	1	1	0	0	0	0	0	0	1
Below Normal		0	0	0	-1	0	-1	0	0	0	1	0	1	0
Dry		1	0	-1	-1	1	2	0	0	-1	-2	1	1	0
Critical		0	-1	0	0	-10	-5	-4	-1	0	0	0	-1	-2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-6%	-6%	0%	-1%	1%	0%	0%	0%	3%	1%	-1%	-1%
1924	Critical	1%	1%	0%	1%	-19%	-7%	-10%	-1%	3%	1%	-1%	0%	-3%
1925	Dry	1%	-1%	-4%	-2%	16%	16%	5%	1%	-3%	-5%	-2%	1%	2%
1926	Dry	0%	-1%	-1%	0%	-1%	-4%	-2%	-3%	-3%	1%	1%	2%	-1%
1927	Wet	2%	2%	2%	1%	6%	3%	1%	1%	1%	-8%	-2%	1%	1%
1928	Above Normal	0%	5%	8%	4%	8%	4%	-2%	-1%	-1%	-11%	-3%	1%	1%
1929	Critical	1%	0%	-2%	2%	1%	0%	0%	0%	-5%	-2%	0%	-1%	-1%
1930	Dry	0%	0%	0%	0%	-4%	0%	0%	1%	-2%	-10%	5%	-11%	-2%
1931	Critical	-7%	-1%	2%	3%	-16%	-8%	-1%	1%	2%	-7%	-5%	1%	-3%
1932	Dry	1%	0%	0%	15%	2%	1%	1%	-2%	1%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	-1%	1%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	2%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	1%	0%	4%	2%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%
1938	Wet	0%	3%	1%	3%	0%	0%	-1%	0%	0%	0%	0%	1%	1%
1939	Dry	2%	1%	0%	0%	0%	-2%	0%	-1%	0%	-6%	2%	-3%	-1%
1940	Above Normal	-7%	-3%	-1%	-1%	0%	0%	-1%	0%	0%	1%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	2%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	1%	0%	-5%	-5%	2%	0%	-1%
1945	Below Normal	-2%	-2%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	4%	3%	0%	0%	-2%	-1%	2%	-1%	-6%	2%	11%	1%
1947	Dry	7%	2%	-4%	-2%	-2%	6%	0%	0%	3%	0%	2%	3%	1%
1948	Below Normal	0%	1%	0%	0%	2%	1%	0%	1%	-1%	6%	-5%	3%	1%
1949	Dry	-1%	-3%	-1%	0%	1%	-5%	-2%	0%	0%	-6%	-7%	3%	-2%
1950	Below Normal	1%	-4%	-5%	-3%	-2%	-2%	1%	-7%	-1%	-1%	0%	-3%	-2%
1951	Above Normal	4%	4%	0%	5%	0%	0%	1%	-6%	-4%	8%	-3%	-2%	1%
1952	Wet	-1%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%
1955	Dry	5%	2%	-4%	-1%	-1%	16%	5%	1%	-8%	-8%	-2%	3%	1%
1956	Wet	0%	0%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	1%	0%	0%	0%	-1%	0%	-2%	-2%	0%
1958	Wet	-2%	8%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1960	Dry	1%	5%	8%	-17%	1%	1%	1%	2%	-3%	-2%	1%	2%	0%
1961	Dry	2%	-1%	-1%	5%	3%	11%	10%	2%	-1%	1%	5%	14%	4%
1962	Below Normal	7%	3%	5%	-4%	-1%	0%	0%	-3%	8%	12%	-9%	0%	2%
1963	Wet	-3%	-1%	7%	3%	-2%	-2%	0%	0%	0%	0%	2%	-2%	0%
1964	Dry	1%	-2%	-2%	-1%	0%	0%	-1%	2%	0%	-3%	7%	-3%	0%
1965	Wet	-5%	-5%	-2%	0%	-4%	-1%	0%	0%	-6%	-2%	-1%	-2%	-2%
1966	Below Normal	-3%	-1%	1%	0%	-2%	-11%	-3%	0%	-1%	-1%	-1%	-1%	-2%
1967	Wet	-2%	-1%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	4%	1%	2%	0%
1969	Wet	4%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-8%	-2%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	2%	-3%	0%	1%	1%	0%
1973	Above Normal	4%	9%	2%	0%	0%	3%	1%	0%	0%	0%	0%	0%	2%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-1%	-1%	-2%	0%	5%	4%	3%	1%
1977	Critical	1%	-3%	2%	-4%	-20%	-12%	-18%	-9%	-3%	2%	2%	2%	-5%
1978	Above Normal	-1%	4%	0%	3%	1%	3%	1%	0%	1%	-1%	-1%	2%	1%
1979	Below Normal	1%	0%	0%	1%	1%	0%	-1%	1%	0%	1%	3%	1%	1%
1980	Above Normal	0%	3%	7%	1%	-5%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	0%	-1%	0%	-1%	-1%	1%	-1%	0%
1982	Wet	0%	2%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-10%	-4%	0%	4%	0%	1%	3%	-1%
1986	Wet	1%	0%	0%	0%	0%	-1%	1%	1%	1%	-20%	-7%	-3%	-2%
1987	Dry	-8%	-3%	0%	1%	0%	0%	-11%	-4%	-6%	-3%	0%	3%	-3%
1988	Critical	2%	-4%	-2%	-1%	6%	-1%	-1%	0%	-3%	-4%	-4%	-5%	-2%
1989	Dry	-2%	1%	-1%	0%	-1%	-2%	-1%	-1%	4%	4%	-1%	4%	0%
1990	Critical	-1%	-1%	1%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	-2%	0%
1993	Above Normal	0%	1%	-1%	2%	0%	0%	0%	2%	1%	-1%	-1%	1%	0%
1994	Critical	1%	0%	0%	0%	1%	1%	1%	0%	5%	-1%	3%	-10%	0%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	2%	1%	1%	1%	0%	0%	0%	0%	-1%	0%	0%
Below Normal		0%	0%	0%	0%	0%	-1%	0%	0%	0%	1%	0%	1%	0%
Dry		1%	0%	-1%	0%	1%	2%	0%	0%	-1%	-3%	1%	1%	0%
Critical		0%	-1%	0%	0%	-5%	-2%	-3%	-1%	0%	-1%	0%	-1%	-1%

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	191	175	175	155	192	67	67	54	53	44	49	121	112
1923	Below Normal	187	181	173	78	60	55	69	58	43	50	81	155	99
1924	Critical	169	185	207	219	225	176	121	108	157	138	148	167	168
1925	Dry	229	244	221	241	167	63	49	49	47	52	81	153	133
1926	Dry	214	187	223	242	168	63	51	64	57	84	114	172	137
1927	Wet	225	137	60	75	97	53	42	52	40	38	54	134	84
1928	Above Normal	188	149	89	116	61	47	64	57	42	52	71	168	92
1929	Critical	213	191	231	246	259	135	94	90	84	95	133	189	163
1930	Dry	231	227	235	149	93	55	45	60	62	77	105	182	127
1931	Critical	231	192	219	234	217	118	94	108	144	134	167	187	170
1932	Dry	222	227	207	90	106	77	73	75	59	53	85	166	120
1933	Critical	208	176	201	186	125	87	71	74	86	95	126	155	132
1934	Critical	209	237	213	182	95	81	75	78	84	80	130	197	139
1935	Below Normal	234	226	250	155	70	53	50	62	44	43	84	166	120
1936	Below Normal	208	181	213	258	282	84	50	55	47	45	79	152	138
1937	Below Normal	204	181	200	243	225	158	67	46	45	45	63	131	134
1938	Wet	203	193	72	64	115	146	82	73	68	50	52	60	98
1939	Dry	36	53	152	247	229	136	102	69	64	96	114	187	124
1940	Above Normal	230	186	193	224	168	65	49	51	46	41	56	148	121
1941	Wet	194	198	205	132	176	91	76	48	48	49	53	96	114
1942	Wet	90	131	183	140	80	50	58	51	46	49	57	73	84
1943	Wet	51	62	63	113	74	83	92	57	59	45	57	135	74
1944	Dry	205	187	211	236	254	75	68	59	55	81	117	155	142
1945	Below Normal	204	179	165	149	155	103	72	60	44	51	81	159	118
1946	Below Normal	193	164	113	49	68	63	69	60	47	54	88	153	93
1947	Dry	196	190	226	187	164	84	75	72	61	85	122	183	137
1948	Below Normal	232	195	247	225	243	91	54	55	39	44	89	151	139
1949	Dry	186	176	209	251	198	74	70	64	54	79	133	180	139
1950	Below Normal	217	177	220	195	85	46	46	56	41	48	72	136	112
1951	Above Normal	191	101	76	140	155	52	64	53	42	43	61	159	95
1952	Wet	191	196	211	166	62	68	83	48	49	48	46	53	102
1953	Wet	41	96	207	77	53	48	65	49	39	41	61	104	73
1954	Above Normal	93	132	180	254	66	46	64	56	42	46	59	150	99
1955	Dry	206	216	209	109	76	58	74	67	57	64	102	168	117
1956	Wet	208	210	219	196	92	60	47	55	46	46	55	71	109
1957	Above Normal	40	48	114	202	183	53	61	51	39	44	64	167	89
1958	Wet	182	94	124	81	153	200	178	55	45	46	53	63	106
1959	Below Normal	42	77	179	246	87	55	77	64	61	66	83	170	101
1960	Dry	212	195	203	257	259	72	70	65	73	99	112	170	149
1961	Dry	220	208	264	226	198	72	50	58	65	87	123	153	144
1962	Below Normal	193	190	231	225	181	62	50	61	48	58	85	185	131
1963	Wet	182	55	87	106	72	47	108	54	36	38	51	137	81
1964	Dry	191	186	74	102	69	56	85	68	64	93	140	158	107
1965	Wet	205	211	148	77	53	45	54	59	45	41	53	125	93
1966	Below Normal	185	166	77	58	53	45	64	59	51	63	83	176	90
1967	Wet	238	223	225	155	61	67	73	63	50	56	47	48	109
1968	Below Normal	37	71	163	185	60	41	63	64	57	62	80	160	87
1969	Wet	201	196	171	178	206	131	120	72	59	49	55	65	125
1970	Wet	36	65	114	146	92	52	69	56	48	49	57	150	78
1971	Wet	216	147	88	49	48	44	59	49	39	41	61	121	80
1972	Below Normal	106	145	183	175	169	68	70	65	58	63	84	181	114
1973	Above Normal	253	186	99	139	120	60	67	63	44	41	67	151	108
1974	Wet	221	108	63	55	48	49	63	56	48	42	67	90	76
1975	Wet	42	61	129	131	125	66	72	56	43	41	60	92	76
1976	Critical	46	40	93	192	253	138	96	90	145	167	182	217	138
1977	Critical	249	209	262	186	208	154	124	116	152	126	162	196	179
1978	Above Normal	258	258	250	182	102	118	90	75	56	46	57	127	135
1979	Below Normal	181	200	223	163	83	61	59	58	42	47	82	156	113
1980	Above Normal	223	176	136	102	192	126	79	60	61	52	60	131	116
1981	Dry	178	168	215	253	77	45	64	62	68	100	121	177	127
1982	Wet	209	173	48	131	70	94	104	53	47	49	59	59	91
1983	Wet	31	56	106	232	200	187	174	74	61	57	40	32	104
1984	Wet	33	44	98	90	69	48	69	62	50	46	59	149	68
1985	Dry	185	142	55	59	110	75	80	65	54	94	144	147	101
1986	Wet	170	173	220	161	193	161	74	51	53	68	62	111	125
1987	Dry	149	158	211	261	191	89	80	66	75	103	129	173	140
1988	Critical	229	204	233	193	81	74	70	78	82	89	145	203	140
1989	Dry	243	238	242	221	280	109	45	51	52	89	138	154	155
1990	Critical	179	196	237	193	153	75	72	67	111	160	170	194	151
1991	Critical	254	250	248	249	251	148	66	61	107	166	164	168	178
1992	Critical	254	271	253	297	172	78	52	60	80	88	144	195	163
1993	Above Normal	252	268	266	194	157	98	46	51	41	38	52	127	133
1994	Critical	184	203	224	249	245	89	71	59	83	172	179	239	166
Average		179	167	176	170	141	83	73	63	61	69	91	146	118
Wet		151	135	135	122	102	85	84	57	48	47	55	94	93
Above Normal		192	168	158	171	140	73	65	57	47	45	60	145	110
Below Normal		173	167	188	172	130	70	61	59	48	53	81	160	113
Dry		194	188	197	196	165	75	68	63	61	83	118	167	131
Critical		202	196	218	219	191	113	84	82	110	126	154	192	157

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	191	175	175	155	192	67	67	54	53	45	49	121	112
1923	Below Normal	188	169	152	77	58	53	68	59	43	49	80	153	96
1924	Critical	172	187	206	223	194	122	108	107	156	137	147	169	161
1925	Dry	230	242	208	234	183	78	52	49	46	51	82	155	134
1926	Dry	215	184	221	241	167	63	51	64	57	86	115	175	137
1927	Wet	228	140	63	76	98	54	42	53	40	38	54	136	85
1928	Above Normal	187	157	105	125	64	48	66	56	42	51	70	169	95
1929	Critical	215	192	226	252	260	135	94	90	83	95	132	187	163
1930	Dry	230	227	235	150	93	54	45	60	62	85	110	156	126
1931	Critical	215	190	224	242	191	108	100	110	142	118	159	190	166
1932	Dry	224	227	207	89	103	79	73	75	60	53	84	166	120
1933	Critical	208	176	202	187	125	87	71	75	86	94	125	156	133
1934	Critical	209	238	214	178	87	78	75	78	84	80	130	195	137
1935	Below Normal	234	226	250	156	70	54	50	62	44	43	84	166	120
1936	Below Normal	209	181	213	258	281	84	50	55	47	45	79	152	138
1937	Below Normal	203	181	200	244	225	158	67	46	45	46	63	131	134
1938	Wet	202	199	76	64	112	146	82	73	68	50	52	62	99
1939	Dry	38	54	153	248	228	136	102	68	66	94	120	178	124
1940	Above Normal	212	178	190	220	168	65	49	51	46	41	56	148	119
1941	Wet	194	199	206	132	176	91	76	48	48	49	53	96	114
1942	Wet	93	140	189	140	80	50	58	51	46	49	57	74	86
1943	Wet	51	62	63	113	75	85	92	57	59	45	57	135	75
1944	Dry	206	188	211	236	254	76	68	59	54	82	122	154	142
1945	Below Normal	199	176	161	147	153	100	72	60	44	51	81	159	117
1946	Below Normal	194	171	123	49	67	61	69	61	47	56	91	173	97
1947	Dry	210	194	211	181	158	83	75	72	62	89	126	189	137
1948	Below Normal	232	198	245	223	251	93	54	55	39	46	85	156	140
1949	Dry	183	169	207	249	200	73	69	64	54	71	125	187	138
1950	Below Normal	220	166	205	185	80	45	46	55	42	49	73	132	108
1951	Above Normal	199	107	76	141	160	52	64	53	43	44	59	156	96
1952	Wet	190	198	214	166	62	69	86	48	49	48	46	53	102
1953	Wet	42	97	208	77	53	48	65	50	39	41	62	107	74
1954	Above Normal	94	132	180	255	66	46	64	56	42	46	59	151	99
1955	Dry	217	222	198	107	76	60	76	67	56	66	109	174	119
1956	Wet	209	210	219	196	87	58	47	55	46	46	55	71	108
1957	Above Normal	40	48	114	205	188	53	61	52	39	44	63	164	89
1958	Wet	178	104	129	82	153	200	178	55	45	46	53	63	107
1959	Below Normal	42	77	179	246	87	55	77	64	61	66	84	171	101
1960	Dry	214	205	240	193	264	75	70	65	68	96	113	174	148
1961	Dry	223	207	261	240	206	79	54	58	65	88	129	179	149
1962	Below Normal	204	198	248	211	176	62	50	60	51	59	77	185	132
1963	Wet	177	54	98	110	73	47	108	54	36	38	52	134	82
1964	Dry	193	184	70	98	68	56	86	68	59	97	154	152	107
1965	Wet	192	201	141	77	51	44	54	59	43	42	51	122	90
1966	Below Normal	178	165	80	58	53	45	64	59	51	63	83	175	90
1967	Wet	233	220	232	156	61	67	73	63	50	56	47	48	109
1968	Below Normal	37	71	163	184	60	41	63	64	57	61	81	163	87
1969	Wet	209	200	168	179	206	131	120	72	59	49	55	65	126
1970	Wet	36	65	115	146	92	51	68	56	47	49	57	150	78
1971	Wet	215	145	88	49	47	43	59	49	39	41	61	121	80
1972	Below Normal	107	146	184	175	169	68	71	66	60	63	85	183	115
1973	Above Normal	263	204	103	141	120	60	68	63	44	41	67	151	110
1974	Wet	221	108	63	55	48	49	63	56	48	42	67	90	76
1975	Wet	42	62	129	131	125	67	72	56	43	41	60	92	77
1976	Critical	46	40	93	192	253	138	96	87	147	179	190	221	140
1977	Critical	247	201	265	175	174	94	95	107	147	121	160	202	166
1978	Above Normal	265	272	251	185	104	123	94	81	57	46	58	130	139
1979	Below Normal	183	201	222	166	87	61	58	59	42	48	85	157	114
1980	Above Normal	222	182	154	105	190	134	80	60	61	52	60	131	119
1981	Dry	178	168	215	253	77	45	64	62	68	99	122	176	127
1982	Wet	209	177	49	131	70	95	105	53	47	49	59	59	92
1983	Wet	31	56	105	232	200	187	174	74	61	57	40	32	104
1984	Wet	33	44	98	90	69	48	69	62	50	46	59	149	68
1985	Dry	185	142	55	57	107	73	79	64	54	94	146	152	101
1986	Wet	171	172	219	160	193	164	74	50	53	57	58	105	123
1987	Dry	135	153	211	259	198	92	80	63	66	99	132	178	139
1988	Critical	234	193	228	191	79	72	70	78	81	87	137	192	137
1989	Dry	240	241	235	223	282	105	45	51	53	91	136	162	155
1990	Critical	176	193	239	196	154	75	72	67	111	160	170	195	151
1991	Critical	255	250	247	248	250	147	66	61	107	166	164	168	177
1992	Critical	254	271	253	297	182	78	52	60	79	88	142	191	162
1993	Above Normal	253	273	264	202	157	98	46	52	42	38	53	129	134
1994	Critical	185	204	224	248	250	92	72	59	81	170	185	215	165
Average		179	168	176	169	140	82	73	63	60	69	91	146	118
Wet		150	136	137	122	102	85	84	57	48	47	55	94	93
Above Normal		193	173	161	173	141	75	66	58	47	45	59	145	111
Below Normal		174	166	188	170	130	70	61	59	48	53	81	161	113
Dry		195	188	196	191	166	77	68	63	59	84	120	169	131
Critical		201	195	218	219	183	102	81	82	109	125	153	190	155

Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
 Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	1	-12	-22	-1	-1	-1	-1	0	0	-1	-1	-2	-3
1924	Critical	3	2	-1	4	-31	-53	-13	-1	-1	-1	-1	2	-8
1925	Dry	1	-2	-13	-8	17	15	3	0	-1	-1	0	2	1
1926	Dry	1	-3	-2	-1	-1	0	0	-1	0	2	1	2	0
1927	Wet	3	3	2	1	1	1	0	0	0	0	0	2	1
1928	Above Normal	-1	7	16	9	4	1	1	0	0	-1	-1	1	3
1929	Critical	2	1	-6	6	2	0	0	0	-1	0	-1	-2	0
1930	Dry	-1	0	0	0	0	0	0	0	-1	8	5	-26	-1
1931	Critical	-16	-2	5	7	-27	-10	6	3	-2	-16	-8	3	-5
1932	Dry	2	0	0	-1	-3	2	0	-1	1	0	0	0	0
1933	Critical	0	0	0	1	0	0	0	1	0	0	0	0	0
1934	Critical	0	0	1	-4	-8	-2	-1	0	0	0	0	-1	-1
1935	Below Normal	0	0	-1	1	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	-1	0	0	0	0	0	0	0	0	0	0	-1	0
1938	Wet	-1	6	4	0	-3	0	0	0	0	0	0	1	1
1939	Dry	1	1	1	0	-1	0	0	0	2	-1	6	-9	0
1940	Above Normal	-18	-8	-3	-3	0	1	0	0	0	0	0	0	-3
1941	Wet	0	1	1	0	0	0	0	0	0	0	0	0	0
1942	Wet	3	9	5	0	0	0	0	0	0	0	0	1	1
1943	Wet	0	0	0	0	1	2	0	0	0	0	0	1	0
1944	Dry	1	1	0	0	-1	0	0	0	-1	1	5	-1	0
1945	Below Normal	-5	-4	-4	-2	-3	-2	0	0	0	0	0	0	-2
1946	Below Normal	0	7	10	0	-1	-1	0	0	0	2	2	20	3
1947	Dry	14	4	-14	-5	-6	-1	0	0	0	3	4	6	0
1948	Below Normal	0	3	-2	-2	9	2	0	0	0	3	-4	5	1
1949	Dry	-2	-7	-2	-1	2	-1	-1	0	0	-8	-8	7	-2
1950	Below Normal	3	-11	-15	-9	-5	-1	0	-1	1	1	1	-5	-3
1951	Above Normal	7	6	0	1	5	0	0	0	1	2	-2	-3	1
1952	Wet	-1	2	2	0	0	1	3	0	0	0	0	0	1
1953	Wet	0	0	0	0	0	0	0	0	0	0	1	3	0
1954	Above Normal	1	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	12	6	-11	-2	-1	1	2	0	-1	2	7	5	2
1956	Wet	1	0	0	0	-5	-2	0	0	0	0	0	0	-1
1957	Above Normal	0	0	0	2	5	0	0	0	0	0	-1	-4	0
1958	Wet	-5	10	6	1	0	0	0	0	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	1	1	0
1960	Dry	2	10	37	-64	5	3	0	0	-6	-3	1	4	-1
1961	Dry	3	0	-3	14	8	7	3	1	0	2	6	26	5
1962	Below Normal	11	8	17	-13	-4	0	0	-1	3	2	-9	0	1
1963	Wet	-5	-1	11	4	2	0	0	0	0	0	0	-3	1
1964	Dry	2	-3	-4	-3	-1	0	0	1	-6	4	15	-6	0
1965	Wet	-13	-10	-7	0	-2	-1	0	0	-2	1	-2	-3	-3
1966	Below Normal	-7	-2	3	0	0	0	0	0	0	0	0	-1	-1
1967	Wet	-5	-3	6	1	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	-1	0	0	0	0	0	-1	1	3	0
1969	Wet	9	4	-3	1	0	0	0	0	0	0	0	0	1
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	-1	-2	0	0	-1	0	0	0	0	0	0	1	0
1972	Below Normal	1	1	0	0	0	0	0	1	2	1	2	2	1
1973	Above Normal	10	18	3	1	0	1	0	0	0	0	0	0	3
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	-3	2	11	9	4	2
1977	Critical	-2	-7	3	-11	-34	-60	-29	-9	-5	-5	-2	6	-13
1978	Above Normal	7	14	1	3	2	5	4	7	1	0	1	3	4
1979	Below Normal	2	1	-1	3	3	0	-1	0	0	1	3	1	1
1980	Above Normal	-1	6	18	3	-2	9	0	0	0	0	0	0	3
1981	Dry	0	0	0	0	0	0	0	0	0	0	1	-1	0
1982	Wet	0	4	1	0	0	1	2	0	0	0	0	0	1
1983	Wet	0	0	-1	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-2	-3	-2	-2	0	1	0	2	5	0
1986	Wet	1	-1	0	0	0	3	0	0	0	-10	-3	-6	-2
1987	Dry	-14	-5	0	-2	7	3	0	-3	-10	-4	2	5	-2
1988	Critical	5	-12	-6	-2	-2	-2	0	0	0	-2	-8	-11	-3
1989	Dry	-3	3	-7	2	1	-4	0	0	1	3	-3	8	0
1990	Critical	-3	-2	2	3	1	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	-1	-1	-1	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	-2	-4	0
1993	Above Normal	1	5	-2	9	0	0	0	1	1	0	0	2	1
1994	Critical	2	1	0	-1	5	3	1	0	-2	-2	5	-24	-1
Average		0	1	0	-1	-1	-1	0	0	0	0	0	0	0
Wet		-1	1	1	0	0	0	0	0	0	0	0	0	0
Above Normal		1	5	3	3	1	2	1	1	0	0	0	0	1
Below Normal		0	-1	-1	-2	0	0	0	0	0	1	0	2	0
Dry		1	0	-1	-5	2	1	0	0	-1	0	3	2	0
Critical		-1	-2	0	0	-8	-10	-3	-1	-1	-1	-1	-2	-2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-7%	-12%	-1%	-2%	-3%	-1%	0%	1%	-2%	-2%	-1%	-2%
1924	Critical	2%	1%	-1%	2%	-14%	-30%	-11%	-1%	0%	-1%	-1%	1%	-4%
1925	Dry	0%	-1%	-6%	-3%	10%	23%	6%	1%	-2%	-1%	0%	1%	2%
1926	Dry	0%	-2%	-1%	0%	0%	0%	0%	-1%	0%	2%	1%	1%	0%
1927	Wet	1%	2%	4%	1%	1%	2%	0%	0%	1%	0%	1%	2%	1%
1928	Above Normal	0%	5%	18%	8%	6%	2%	2%	-1%	0%	-1%	-2%	1%	3%
1929	Critical	1%	0%	-2%	2%	1%	0%	0%	0%	-1%	0%	0%	-1%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	11%	5%	-14%	0%
1931	Critical	-7%	-1%	2%	3%	-12%	-9%	6%	2%	-1%	-12%	-5%	2%	-3%
1932	Dry	1%	0%	0%	-1%	-3%	2%	0%	-1%	1%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	1%	0%	0%	0%	2%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-2%	-9%	-3%	-1%	0%	0%	0%	0%	-1%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	-1%	0%
1938	Wet	0%	3%	5%	0%	-3%	0%	0%	0%	0%	0%	0%	2%	1%
1939	Dry	4%	1%	1%	0%	0%	0%	0%	0%	3%	-1%	5%	-5%	1%
1940	Above Normal	-8%	-4%	-2%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1942	Wet	3%	7%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	0%	0%	0%	0%	2%	2%	1%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	5%	-1%	0%
1945	Below Normal	-3%	-2%	-2%	-2%	-2%	-2%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	4%	9%	0%	-2%	-2%	-1%	1%	0%	4%	3%	13%	2%
1947	Dry	7%	2%	-6%	-3%	-4%	-1%	0%	0%	0%	4%	4%	4%	1%
1948	Below Normal	0%	2%	-1%	-1%	4%	3%	1%	0%	1%	6%	-5%	3%	1%
1949	Dry	-1%	-4%	-1%	-1%	1%	-2%	-1%	0%	0%	-10%	-6%	4%	-2%
1950	Below Normal	1%	-6%	-7%	-5%	-6%	-1%	0%	-3%	2%	2%	1%	-3%	-2%
1951	Above Normal	4%	6%	0%	1%	3%	0%	0%	-1%	2%	4%	-4%	-2%	1%
1952	Wet	0%	1%	1%	0%	0%	1%	3%	0%	0%	0%	0%	0%	1%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1955	Dry	6%	3%	-5%	-1%	-1%	2%	3%	1%	-2%	3%	7%	3%	2%
1956	Wet	1%	0%	0%	0%	-5%	-3%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	1%	3%	1%	0%	0%	0%	0%	-1%	-2%	0%
1958	Wet	-2%	10%	5%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1960	Dry	1%	5%	18%	-25%	2%	4%	1%	0%	-8%	-3%	0%	2%	0%
1961	Dry	1%	0%	-1%	6%	4%	9%	6%	1%	-1%	2%	5%	17%	4%
1962	Below Normal	5%	4%	7%	-6%	-2%	0%	0%	-1%	6%	3%	-10%	0%	1%
1963	Wet	-3%	-2%	13%	4%	2%	0%	0%	0%	0%	1%	0%	-2%	1%
1964	Dry	1%	-1%	-5%	-3%	-1%	0%	0%	1%	-9%	5%	10%	-4%	-1%
1965	Wet	-6%	-5%	-4%	0%	-3%	-3%	0%	0%	-5%	2%	-3%	-2%	-3%
1966	Below Normal	-4%	-1%	4%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1967	Wet	-2%	-1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	2%	0%
1969	Wet	4%	2%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1971	Wet	0%	-2%	0%	0%	-2%	-3%	0%	0%	0%	0%	0%	1%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	2%	4%	1%	2%	1%	1%
1973	Above Normal	4%	10%	3%	1%	0%	1%	1%	0%	0%	0%	0%	0%	2%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-3%	2%	7%	5%	2%	1%
1977	Critical	-1%	-3%	1%	-6%	-16%	-39%	-24%	-8%	-3%	-4%	-1%	3%	-8%
1978	Above Normal	3%	5%	1%	2%	2%	4%	5%	9%	2%	-1%	2%	3%	3%
1979	Below Normal	1%	0%	0%	2%	4%	0%	-2%	1%	0%	3%	4%	0%	1%
1980	Above Normal	0%	3%	13%	3%	-1%	7%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	0%
1982	Wet	0%	2%	2%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-3%	-3%	-2%	-2%	0%	1%	0%	1%	4%	0%
1986	Wet	1%	-1%	0%	0%	0%	2%	0%	-1%	0%	-15%	-5%	-5%	-2%
1987	Dry	-9%	-3%	0%	-1%	4%	3%	0%	-4%	-13%	-4%	2%	3%	-2%
1988	Critical	2%	-6%	-2%	-1%	-2%	-2%	-1%	0%	-1%	-2%	-6%	-5%	-2%
1989	Dry	-1%	1%	-3%	1%	1%	-4%	0%	0%	2%	3%	-2%	5%	0%
1990	Critical	-2%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%
1993	Above Normal	0%	2%	-1%	4%	0%	0%	0%	2%	2%	0%	1%	1%	1%
1994	Critical	1%	1%	0%	0%	2%	4%	1%	1%	-3%	-1%	3%	-10%	0%
Average		0%	0%	1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	1%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	3%	3%	2%	1%	2%	1%	1%	0%	0%	0%	0%	1%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	1%	1%	0%	1%	0%
Dry		1%	0%	-1%	-2%	1%	2%	1%	0%	-2%	1%	2%	1%	0%
Critical		0%	-1%	0%	0%	-4%	-7%	-2%	-1%	-1%	-1%	-1%	-1%	-2%

Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	120	117	113	92	100	70	41	37	45	48	38	75	75
1923	Below Normal	117	117	107	73	74	71	48	44	47	33	51	93	73
1924	Critical	106	117	139	153	203	218	129	108	122	99	103	107	134
1925	Dry	145	156	151	173	130	116	61	38	60	53	72	96	104
1926	Dry	135	125	146	167	120	115	60	62	57	59	78	108	103
1927	Wet	145	90	41	51	64	63	41	38	33	29	34	82	59
1928	Above Normal	119	92	61	67	47	62	43	43	39	46	43	104	64
1929	Critical	135	125	153	170	183	170	104	89	94	77	90	117	126
1930	Dry	148	151	156	103	86	87	51	63	62	67	72	113	97
1931	Critical	148	132	153	165	207	167	114	109	115	92	112	119	136
1932	Dry	143	151	131	64	119	145	99	77	73	66	69	104	104
1933	Critical	133	121	144	159	150	149	91	79	91	78	91	102	116
1934	Critical	134	153	147	141	142	185	112	99	100	72	88	119	124
1935	Below Normal	147	151	173	116	115	79	54	53	44	40	54	104	94
1936	Below Normal	134	120	144	118	102	47	37	42	58	34	52	93	82
1937	Below Normal	127	118	133	162	85	64	43	28	62	45	49	82	83
1938	Wet	127	128	68	83	60	43	26	23	23	47	39	36	58
1939	Dry	26	41	106	165	160	122	87	57	50	61	71	117	89
1940	Above Normal	145	125	142	133	90	49	34	40	44	31	34	90	80
1941	Wet	123	127	123	80	76	44	31	26	56	56	39	55	70
1942	Wet	58	87	98	72	41	46	38	31	48	59	42	42	55
1943	Wet	35	43	41	59	36	36	34	41	66	39	35	81	45
1944	Dry	127	120	138	162	151	71	56	47	48	53	75	97	95
1945	Below Normal	129	116	107	103	96	53	57	45	42	31	47	94	77
1946	Below Normal	120	104	79	60	75	63	50	46	45	34	54	96	69
1947	Dry	123	123	147	127	121	92	59	69	57	52	76	115	97
1948	Below Normal	149	130	164	162	188	109	58	51	36	28	53	95	102
1949	Dry	120	117	142	174	155	81	57	69	60	49	84	111	101
1950	Below Normal	136	121	148	132	63	62	43	42	35	37	42	84	79
1951	Above Normal	124	68	60	49	29	48	47	32	29	30	34	99	54
1952	Wet	121	129	126	88	56	63	22	11	32	44	32	32	63
1953	Wet	29	66	108	65	68	79	43	30	27	24	37	64	53
1954	Above Normal	63	88	124	159	48	60	43	50	38	34	33	93	69
1955	Dry	132	143	131	68	66	78	74	69	58	46	71	104	87
1956	Wet	133	142	135	67	56	46	41	42	51	58	43	42	71
1957	Above Normal	28	40	80	141	124	61	49	35	32	29	37	101	63
1958	Wet	114	65	78	54	83	89	14	7	39	47	36	37	55
1959	Below Normal	29	55	119	150	63	81	67	50	47	38	48	104	71
1960	Dry	136	129	145	178	152	57	51	65	52	62	69	106	100
1961	Dry	142	141	179	157	144	88	57	70	56	49	72	96	104
1962	Below Normal	126	129	155	161	131	67	51	49	41	35	50	116	92
1963	Wet	124	43	58	50	62	64	56	38	35	25	31	83	56
1964	Dry	122	118	49	66	75	71	68	67	53	56	89	100	78
1965	Wet	132	141	94	62	46	64	44	43	46	35	40	72	68
1966	Below Normal	114	105	62	62	64	59	47	47	42	37	48	110	66
1967	Wet	152	148	146	87	51	57	31	18	33	36	31	30	68
1968	Below Normal	27	51	102	119	71	62	55	51	42	37	48	99	64
1969	Wet	129	130	109	115	59	62	33	20	20	47	39	39	67
1970	Wet	26	47	70	36	48	42	37	38	39	36	34	92	45
1971	Wet	136	93	58	38	60	45	38	33	26	23	33	74	55
1972	Below Normal	69	96	121	109	112	56	45	56	49	40	49	111	76
1973	Above Normal	160	108	67	75	91	61	49	50	51	29	42	89	73
1974	Wet	135	68	52	63	49	38	35	41	56	37	39	53	55
1975	Wet	30	45	82	93	74	39	37	38	47	39	37	53	51
1976	Critical	32	31	67	136	173	123	76	79	105	113	118	135	99
1977	Critical	160	138	170	144	189	188	135	116	119	85	99	119	139
1978	Above Normal	160	168	172	123	110	121	63	40	63	53	40	74	99
1979	Below Normal	113	127	141	113	58	43	45	38	34	28	52	97	74
1980	Above Normal	138	112	85	72	50	61	49	46	55	59	42	75	70
1981	Dry	108	106	143	155	57	62	55	50	50	61	74	112	86
1982	Wet	135	107	35	67	37	44	17	11	44	54	40	29	52
1983	Wet	12	27	58	53	45	29	36	26	20	16	11	14	29
1984	Wet	22	13	38	48	25	38	45	46	50	31	38	88	40
1985	Dry	113	85	36	45	84	94	73	57	42	56	92	93	72
1986	Wet	109	116	146	102	82	42	23	18	53	98	49	65	75
1987	Dry	90	98	139	168	142	96	64	64	57	63	85	110	98
1988	Critical	145	135	157	141	136	172	88	85	79	56	93	124	118
1989	Dry	155	160	167	157	216	88	41	54	34	49	85	98	109
1990	Critical	116	130	163	134	149	98	78	78	91	103	112	121	115
1991	Critical	160	165	168	186	205	120	77	72	86	108	113	105	130
1992	Critical	156	178	173	208	137	96	56	65	68	58	89	119	117
1993	Above Normal	158	174	182	137	90	60	43	47	58	46	39	76	92
1994	Critical	116	131	151	176	173	89	57	66	62	108	114	153	116
Average		113	110	116	112	100	81	55	51	54	51	59	90	83
Wet		96	88	84	68	56	51	34	29	40	42	36	55	57
Above Normal		121	109	108	105	78	65	46	42	45	41	38	88	74
Below Normal		110	110	125	117	93	65	50	46	45	36	50	98	79
Dry		123	123	132	133	124	91	63	61	54	57	77	105	95
Critical		129	130	149	159	171	148	93	87	94	87	102	120	122

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	120	118	113	92	99	70	41	37	45	49	38	75	75
1923	Below Normal	118	109	95	72	72	72	48	44	46	33	51	92	71
1924	Critical	108	119	140	155	146	199	115	107	126	100	102	106	127
1925	Dry	144	154	142	169	172	142	64	38	58	50	69	98	108
1926	Dry	135	123	145	166	118	105	59	61	55	60	79	110	101
1927	Wet	147	92	43	52	72	67	41	38	33	28	34	83	61
1928	Above Normal	119	97	71	73	51	67	42	42	38	39	42	105	65
1929	Critical	136	125	149	173	185	170	104	89	88	75	90	116	125
1930	Dry	147	151	157	103	80	87	50	64	60	57	79	99	94
1931	Critical	139	130	156	171	161	152	113	110	118	84	106	120	130
1932	Dry	144	151	131	80	122	146	100	75	74	66	69	104	105
1933	Critical	134	121	145	160	150	149	89	80	91	78	91	101	116
1934	Critical	134	154	147	143	140	184	111	99	100	72	88	119	124
1935	Below Normal	147	151	173	117	115	84	54	53	44	40	54	104	95
1936	Below Normal	134	120	143	118	102	47	37	42	58	34	51	94	82
1937	Below Normal	127	117	133	162	85	64	43	28	63	46	50	82	83
1938	Wet	126	132	70	85	60	43	26	23	23	47	39	36	59
1939	Dry	27	42	107	166	159	119	87	57	50	58	73	112	88
1940	Above Normal	135	121	141	130	90	49	34	40	44	31	34	90	78
1941	Wet	123	128	123	81	76	44	31	26	56	56	39	55	70
1942	Wet	60	92	101	72	41	46	38	31	48	59	42	42	56
1943	Wet	35	43	41	59	36	36	35	41	66	39	35	81	45
1944	Dry	128	120	138	162	150	72	56	47	46	51	77	97	95
1945	Below Normal	126	114	104	101	96	53	57	45	42	31	47	94	76
1946	Below Normal	120	109	82	60	75	60	49	47	45	34	55	108	70
1947	Dry	132	125	138	124	117	99	59	69	59	54	78	120	98
1948	Below Normal	149	131	164	162	192	111	58	51	35	30	51	98	103
1949	Dry	119	114	140	173	157	73	56	68	60	45	77	115	100
1950	Below Normal	138	115	138	125	60	59	44	40	35	37	43	81	76
1951	Above Normal	127	71	60	49	30	48	47	30	28	33	33	97	54
1952	Wet	121	130	128	88	56	64	22	11	32	44	32	32	63
1953	Wet	29	67	108	65	68	79	43	30	27	24	37	65	54
1954	Above Normal	63	88	124	159	48	60	43	50	38	35	33	93	69
1955	Dry	140	146	124	67	65	107	77	70	53	43	68	108	89
1956	Wet	133	142	135	67	54	45	41	42	51	58	42	42	71
1957	Above Normal	28	40	80	143	126	61	49	35	31	29	36	100	63
1958	Wet	111	71	81	54	83	89	14	7	39	47	36	37	56
1959	Below Normal	29	55	119	150	63	81	67	50	46	38	48	104	71
1960	Dry	136	136	162	138	156	59	51	66	50	60	70	109	99
1961	Dry	144	139	177	167	151	114	63	71	55	50	76	113	110
1962	Below Normal	132	132	167	153	128	67	51	47	45	38	45	115	93
1963	Wet	120	42	66	54	61	63	56	38	36	26	32	82	56
1964	Dry	123	116	46	64	75	71	68	68	52	58	97	97	78
1965	Wet	124	134	90	62	43	62	44	43	40	34	39	71	65
1966	Below Normal	109	104	63	62	60	43	46	47	42	37	47	109	64
1967	Wet	149	146	150	87	51	58	31	18	33	36	30	30	68
1968	Below Normal	27	51	102	119	71	62	55	51	42	37	49	101	64
1969	Wet	135	131	107	115	59	62	33	20	20	47	39	39	67
1970	Wet	27	47	70	36	48	42	37	38	39	36	34	92	45
1971	Wet	136	92	57	38	48	43	38	33	26	23	33	74	53
1972	Below Normal	70	97	121	109	112	56	45	57	47	40	50	113	76
1973	Above Normal	166	119	69	75	91	63	50	50	51	29	42	89	75
1974	Wet	135	68	52	63	49	38	35	41	56	37	39	53	55
1975	Wet	30	45	83	93	74	39	37	38	47	40	37	53	51
1976	Critical	32	31	67	136	173	122	75	77	105	119	123	140	100
1977	Critical	159	134	176	136	137	163	108	106	115	87	103	122	129
1978	Above Normal	158	175	173	130	113	126	63	40	63	51	40	76	101
1979	Below Normal	114	128	140	115	59	42	45	39	34	29	54	97	75
1980	Above Normal	138	116	96	72	50	62	49	46	55	59	42	75	72
1981	Dry	108	106	143	155	57	61	55	50	49	61	75	112	86
1982	Wet	134	110	36	67	37	44	17	11	44	54	40	29	52
1983	Wet	12	27	58	53	45	29	36	26	20	16	11	14	29
1984	Wet	22	13	38	48	25	38	45	46	50	31	38	88	40
1985	Dry	112	85	36	43	82	81	70	57	44	57	93	97	71
1986	Wet	110	115	146	101	82	41	24	18	53	72	45	62	72
1987	Dry	83	95	138	168	144	97	57	62	52	60	85	113	96
1988	Critical	150	129	153	140	124	170	88	84	77	55	90	117	115
1989	Dry	153	162	162	158	213	85	40	53	35	52	84	103	108
1990	Critical	114	129	164	136	146	98	78	78	91	103	112	121	114
1991	Critical	160	165	168	185	204	119	77	72	86	108	113	105	130
1992	Critical	156	178	173	208	137	97	56	66	69	58	88	116	117
1993	Above Normal	157	176	181	141	90	60	43	48	59	45	39	77	93
1994	Critical	117	131	150	175	176	91	57	66	65	106	118	137	116
Average		113	110	117	112	98	80	54	50	53	50	59	90	82
Wet		96	89	85	69	56	51	34	29	40	41	36	55	57
Above Normal		121	112	111	107	79	67	46	42	45	40	38	88	75
Below Normal		110	109	125	116	92	64	50	46	45	36	50	99	79
Dry		123	123	130	131	126	95	63	61	53	55	78	107	95
Critical		128	129	149	160	157	143	89	86	94	87	102	118	120

Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	1	-8	-12	0	-3	1	0	0	0	0	0	-1	-2
1924	Critical	2	1	1	2	-57	-19	-14	-1	4	0	-1	-1	-7
1925	Dry	-1	-1	-8	-4	42	27	3	0	-3	-3	-2	2	4
1926	Dry	1	-2	-2	-1	-2	-10	-1	-2	-2	1	1	2	-1
1927	Wet	2	2	2	1	9	4	0	0	0	-1	-1	1	2
1928	Above Normal	0	5	10	6	4	5	-1	0	0	-7	-1	1	2
1929	Critical	2	0	-3	4	1	0	0	0	-6	-2	0	-1	0
1930	Dry	-1	0	0	0	-6	-1	0	0	-2	-10	7	-14	-2
1931	Critical	-10	-2	3	6	-46	-16	-1	1	3	-8	-6	1	-6
1932	Dry	1	0	0	16	3	1	1	-2	1	0	0	0	2
1933	Critical	0	0	0	1	0	0	-1	1	0	0	0	-1	0
1934	Critical	0	0	0	2	-3	-1	0	0	0	0	0	-1	0
1935	Below Normal	0	0	0	1	0	5	1	0	0	0	0	0	1
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	1	1	0	0	0
1938	Wet	0	4	2	2	0	0	0	0	0	0	0	1	1
1939	Dry	1	0	1	0	-1	-3	0	0	0	-3	3	-5	-1
1940	Above Normal	-10	-4	-1	-2	0	0	0	0	0	0	0	0	-1
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	2	5	2	0	0	0	0	0	0	0	0	0	1
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	1	0	0	-2	-2	2	0	0
1945	Below Normal	-3	-2	-2	-2	0	0	0	0	0	0	0	0	-1
1946	Below Normal	0	4	4	0	0	-3	0	1	0	0	1	12	2
1947	Dry	9	1	-9	-3	-4	7	0	0	2	2	2	5	1
1948	Below Normal	1	2	-1	0	5	2	0	0	-1	2	-3	3	1
1949	Dry	-2	-3	-2	-1	2	-9	-1	0	0	-4	-7	4	-2
1950	Below Normal	2	-6	-9	-7	-3	-2	0	-3	0	-1	0	-3	-3
1951	Above Normal	3	4	0	1	0	0	0	-2	-1	3	-1	-2	0
1952	Wet	0	1	2	0	0	1	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	2	0
1954	Above Normal	1	0	0	0	0	0	0	0	1	0	0	0	0
1955	Dry	8	3	-7	-1	-1	29	3	0	-6	-3	-3	4	2
1956	Wet	1	0	0	0	-2	-1	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	1	3	0	0	0	0	-1	-1	-1	0
1958	Wet	-2	6	4	1	0	0	0	0	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	0	0	-1	0	0	0	0
1960	Dry	0	7	16	-40	4	2	0	1	-2	-2	1	3	-1
1961	Dry	2	-1	-2	10	7	26	6	1	-1	1	4	17	6
1962	Below Normal	6	3	12	-8	-2	0	0	-1	5	3	-6	0	1
1963	Wet	-4	-1	8	3	-1	-1	0	0	1	1	-2	1	0
1964	Dry	1	-2	-3	-2	-1	0	-1	1	0	1	8	-3	0
1965	Wet	-8	-7	-4	0	-3	-2	0	0	-6	-1	0	-2	-3
1966	Below Normal	-5	-1	1	0	-4	-16	-1	0	-1	0	0	-1	-2
1967	Wet	-4	-2	5	0	0	1	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	-1	0	1	2	0
1969	Wet	5	2	-1	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	-1	0	0	-12	-2	0	0	0	0	0	0	-1
1972	Below Normal	1	0	0	0	0	0	0	1	-2	0	1	1	0
1973	Above Normal	6	11	2	1	0	3	0	0	0	0	0	0	2
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	-1	-1	-2	0	7	5	4	1
1977	Critical	-2	-5	6	-8	-52	-26	-27	-10	-4	2	3	3	-10
1978	Above Normal	-2	7	1	7	3	6	1	0	1	-2	-1	2	2
1979	Below Normal	1	0	-1	2	1	0	0	0	0	0	2	1	1
1980	Above Normal	0	4	11	1	0	0	0	0	0	0	0	0	1
1981	Dry	0	0	0	0	0	-1	0	0	0	0	1	-1	0
1982	Wet	-2	3	1	0	0	-1	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-1	-2	-13	-2	0	1	0	1	3	-1
1986	Wet	1	-1	0	0	0	0	1	0	0	-26	-5	-3	-3
1987	Dry	-7	-3	0	-1	2	1	-7	-2	-5	-3	0	3	-2
1988	Critical	5	-6	-4	-1	-11	-2	-1	0	-3	-1	-4	-7	-3
1989	Dry	-3	2	-5	1	-3	-3	-1	0	2	2	-1	5	0
1990	Critical	-2	-1	1	2	-2	-1	0	0	0	0	0	0	0
1991	Critical	0	0	0	-1	-1	-1	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	1	0	0	1	0	0	-2	0
1993	Above Normal	-1	2	-1	5	0	0	0	1	1	-1	0	1	1
1994	Critical	1	1	0	0	4	2	1	0	3	-2	4	-16	0
Average		0	0	0	0	-2	0	-1	0	0	-1	0	0	0
Wet		0	1	1	0	0	0	0	0	0	-1	0	0	0
Above Normal		0	3	2	2	1	1	0	0	0	-1	0	0	1
Below Normal		0	0	-1	-1	0	-1	0	0	0	0	0	1	0
Dry		1	0	-1	-2	2	3	0	0	-1	-1	1	2	0
Critical		0	-1	0	0	-14	-5	-4	-1	0	0	0	-2	-2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1923	Below Normal	1%	-7%	-11%	0%	-3%	2%	0%	0%	0%	1%	0%	-1%	-2%
1924	Critical	2%	1%	1%	1%	-28%	-9%	-11%	-1%	4%	0%	-1%	-1%	-3%
1925	Dry	0%	-1%	-6%	-3%	32%	23%	5%	1%	-4%	-6%	-3%	2%	3%
1926	Dry	0%	-1%	-1%	-1%	-1%	-9%	-2%	-3%	-4%	1%	1%	2%	-1%
1927	Wet	1%	2%	4%	2%	14%	7%	1%	1%	1%	-3%	-1%	1%	2%
1928	Above Normal	0%	5%	16%	9%	8%	9%	-3%	-1%	-1%	-15%	-3%	1%	2%
1929	Critical	1%	0%	-2%	2%	1%	0%	0%	0%	-6%	-2%	0%	-1%	-1%
1930	Dry	0%	0%	0%	0%	-8%	-1%	0%	1%	-3%	-15%	10%	-12%	-2%
1931	Critical	-7%	-2%	2%	3%	-22%	-9%	-1%	1%	2%	-8%	-5%	1%	-4%
1932	Dry	1%	0%	0%	25%	2%	1%	1%	-2%	1%	0%	0%	0%	2%
1933	Critical	0%	0%	0%	0%	0%	0%	-2%	1%	0%	0%	0%	-1%	0%
1934	Critical	0%	0%	0%	1%	-2%	-1%	-1%	0%	0%	0%	0%	-1%	0%
1935	Below Normal	0%	0%	0%	1%	0%	7%	2%	0%	0%	0%	0%	0%	1%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	1%	0%	0%
1938	Wet	0%	3%	3%	3%	0%	0%	0%	0%	0%	0%	0%	2%	1%
1939	Dry	3%	1%	0%	0%	0%	-2%	0%	0%	-1%	-5%	4%	-5%	0%
1940	Above Normal	-7%	-3%	-1%	-2%	0%	1%	0%	0%	0%	1%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1942	Wet	3%	6%	2%	0%	0%	0%	0%	0%	0%	-1%	0%	1%	1%
1943	Wet	0%	0%	0%	1%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	1%	1%	0%	-5%	-3%	3%	0%	0%
1945	Below Normal	-2%	-2%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	4%	5%	0%	0%	-5%	-1%	2%	-1%	0%	3%	13%	2%
1947	Dry	7%	1%	-6%	-2%	-3%	8%	0%	0%	4%	3%	3%	4%	2%
1948	Below Normal	0%	1%	0%	0%	2%	2%	0%	1%	-3%	9%	-5%	3%	1%
1949	Dry	-1%	-3%	-1%	0%	1%	-11%	-2%	0%	0%	-8%	-2%	4%	-2%
1950	Below Normal	2%	-5%	-6%	-5%	-5%	-4%	1%	-6%	-1%	-1%	1%	-3%	-3%
1951	Above Normal	3%	5%	0%	2%	1%	0%	0%	-5%	-4%	11%	-4%	-2%	1%
1952	Wet	0%	1%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	1%	0%	3%	0%	0%	0%
1955	Dry	6%	2%	-5%	-2%	-2%	37%	4%	1%	-10%	-7%	-4%	4%	2%
1956	Wet	0%	0%	0%	0%	-4%	-2%	0%	0%	0%	0%	0%	-1%	-1%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	-1%	-3%	-2%	-1%	0%
1958	Wet	-2%	9%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	-1%	0%	1%	0%	0%
1960	Dry	0%	5%	11%	-22%	3%	3%	1%	1%	-4%	-3%	1%	2%	0%
1961	Dry	1%	-1%	-1%	7%	5%	29%	10%	1%	-1%	2%	6%	18%	6%
1962	Below Normal	4%	2%	7%	-5%	-2%	0%	0%	-3%	11%	10%	-11%	0%	1%
1963	Wet	-3%	-2%	14%	7%	-2%	-1%	0%	0%	1%	4%	3%	-2%	2%
1964	Dry	1%	-2%	-5%	-3%	-1%	1%	-1%	2%	-1%	3%	9%	-3%	0%
1965	Wet	-6%	-5%	-4%	0%	-6%	-2%	0%	0%	-13%	-3%	-1%	-2%	-4%
1966	Below Normal	-4%	-1%	2%	0%	-6%	-27%	-2%	0%	-1%	-1%	-1%	-1%	-4%
1967	Wet	-2%	-1%	3%	1%	0%	2%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	-1%	1%	1%	2%	0%
1969	Wet	4%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	-1%	0%	0%	-1%	-1%	0%	0%	0%
1971	Wet	0%	-1%	-1%	0%	-19%	-4%	0%	0%	0%	0%	0%	1%	-2%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	2%	-3%	0%	2%	1%	0%
1973	Above Normal	4%	10%	4%	1%	0%	5%	1%	0%	0%	0%	0%	0%	2%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-1%	-1%	-2%	0%	6%	4%	3%	1%
1977	Critical	-1%	-3%	3%	-6%	-28%	-14%	-20%	-9%	-3%	3%	3%	3%	-6%
1978	Above Normal	-1%	4%	1%	5%	2%	5%	1%	-1%	1%	-4%	-2%	2%	1%
1979	Below Normal	1%	0%	0%	2%	2%	0%	0%	1%	0%	2%	4%	1%	1%
1980	Above Normal	0%	4%	13%	1%	1%	0%	0%	0%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	-2%	-1%	0%	-1%	-1%	1%	-1%	0%
1982	Wet	-1%	3%	3%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-3%	-2%	-14%	-3%	0%	3%	0%	1%	4%	-1%
1986	Wet	1%	-1%	0%	0%	0%	-1%	2%	0%	1%	-26%	-10%	-5%	-3%
1987	Dry	-8%	-3%	0%	0%	2%	1%	-11%	-3%	-9%	-5%	0%	3%	-3%
1988	Critical	4%	-4%	-2%	-1%	-8%	-1%	-1%	-3%	-3%	-2%	-4%	-5%	-2%
1989	Dry	-2%	1%	-3%	1%	-1%	-3%	-1%	-1%	5%	4%	-2%	5%	0%
1990	Critical	-2%	-1%	1%	1%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	0%	-2%	0%
1993	Above Normal	0%	1%	-1%	3%	0%	0%	0%	2%	2%	-2%	-1%	1%	0%
1994	Critical	1%	0%	0%	0%	2%	3%	1%	0%	4%	-2%	4%	-11%	0%
Average		0%	0%	1%	0%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%
Wet		0%	1%	1%	1%	-1%	0%	0%	0%	-1%	-1%	0%	0%	0%
Above Normal		0%	3%	3%	2%	1%	2%	0%	0%	0%	-1%	-1%	0%	1%
Below Normal		0%	0%	0%	-1%	-1%	-2%	0%	0%	0%	1%	0%	1%	0%
Dry		0%	0%	-1%	0%	2%	4%	0%	0%	-2%	-2%	1%	2%	0%
Critical		0%	-1%	0%	0%	-7%	-3%	-3%	-1%	0%	0%	0%	-1%	-1%

Monthly Average X2 Location (km)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	79	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	87	87	70	67	67	74	74	71	71	78	84	84	76
1924	Critical	87	87	86	83	83	76	76	85	85	86	86	86	84
1925	Dry	90	90	84	83	83	65	65	72	72	82	86	86	80
1926	Dry	87	87	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	88	88	77	70	70	59	59	65	65	75	83	83	73
1928	Above Normal	87	87	80	75	75	58	58	69	69	78	84	84	75
1929	Critical	88	88	84	84	84	78	78	81	81	85	87	87	84
1930	Dry	88	88	81	77	77	68	68	77	77	83	85	85	80
1931	Critical	88	88	86	82	82	81	81	85	85	86	87	87	85
1932	Dry	88	88	78	75	75	74	74	76	76	82	86	86	80
1933	Critical	88	88	86	80	80	78	78	81	81	86	86	86	83
1934	Critical	90	90	83	77	77	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	83	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	85	70	70	63	63	69	69	79	85	85	76
1937	Below Normal	88	88	85	82	82	61	61	69	69	79	84	84	78
1938	Wet	88	88	62	63	63	47	47	54	54	72	82	82	67
1939	Dry	78	78	84	83	83	76	76	78	78	83	85	85	81
1940	Above Normal	88	88	86	72	72	54	54	65	65	75	83	83	74
1941	Wet	87	87	70	57	57	51	51	58	58	75	83	83	68
1942	Wet	83	83	65	57	57	62	62	62	62	75	83	83	69
1943	Wet	82	82	71	59	59	54	54	67	67	77	84	84	70
1944	Dry	88	88	84	83	83	72	72	77	77	83	83	83	81
1945	Below Normal	87	87	80	82	82	66	66	74	74	79	84	84	79
1946	Below Normal	87	87	64	61	61	69	69	73	73	78	84	84	74
1947	Dry	87	87	82	82	82	82	73	77	77	82	85	85	81
1948	Below Normal	88	88	85	83	83	76	76	69	69	78	83	83	80
1949	Dry	87	87	84	83	83	67	67	75	75	82	84	84	80
1950	Below Normal	88	88	86	78	78	71	71	73	73	80	84	84	80
1951	Above Normal	87	87	56	55	55	62	62	71	71	75	83	83	71
1952	Wet	87	87	69	58	58	55	55	55	55	71	80	80	68
1953	Wet	82	82	69	57	57	70	70	69	69	77	84	84	72
1954	Above Normal	85	85	85	72	72	61	61	66	66	75	83	83	75
1955	Dry	87	87	77	75	75	79	79	77	77	83	86	86	81
1956	Wet	88	88	62	51	51	59	59	63	63	76	83	83	69
1957	Above Normal	78	78	85	82	82	64	64	71	71	76	84	84	77
1958	Wet	82	82	76	67	67	51	51	56	56	73	82	82	69
1959	Below Normal	80	80	85	72	72	67	67	78	78	78	84	84	77
1960	Dry	87	87	85	83	83	72	72	77	77	82	84	84	81
1961	Dry	87	87	82	82	82	74	74	78	78	82	84	84	81
1962	Below Normal	87	87	82	83	83	69	69	74	74	77	84	84	79
1963	Wet	73	73	73	76	76	65	65	63	63	74	83	83	72
1964	Dry	86	86	82	75	75	78	78	78	78	82	83	83	80
1965	Wet	87	87	63	54	54	67	67	66	66	76	84	84	71
1966	Below Normal	87	87	76	70	70	69	69	75	75	78	84	84	77
1967	Wet	88	88	72	63	63	58	58	58	58	68	80	80	69
1968	Below Normal	79	79	82	71	71	64	64	75	75	78	84	84	76
1969	Wet	88	88	77	58	58	54	54	56	56	73	83	83	69
1970	Wet	79	79	66	50	50	59	59	73	73	76	83	83	69
1971	Wet	87	87	65	62	62	63	63	66	66	74	83	83	72
1972	Below Normal	84	84	81	80	80	68	68	76	76	79	84	84	79
1973	Above Normal	88	88	73	59	59	57	57	71	71	76	84	84	72
1974	Wet	87	87	59	51	51	53	53	64	64	76	84	84	68
1975	Wet	79	79	81	80	80	56	56	65	65	76	83	83	74
1976	Critical	77	77	82	83	83	77	77	85	85	86	87	87	82
1977	Critical	87	87	84	85	85	82	82	85	85	86	87	87	85
1978	Above Normal	89	89	82	65	65	57	57	66	66	77	84	84	73
1979	Below Normal	87	87	84	74	74	64	64	71	71	79	85	85	77
1980	Above Normal	87	87	78	58	58	55	55	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	68	68	77	77	81	85	85	79
1982	Wet	87	87	59	56	56	52	52	57	57	75	83	83	67
1983	Wet	71	71	56	52	52	42	42	52	52	60	67	67	57
1984	Wet	73	73	50	54	54	62	62	73	73	76	83	83	68
1985	Dry	86	86	73	79	79	75	75	76	76	82	83	83	79
1986	Wet	86	86	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	87	87	86	82	82	69	69	78	78	83	85	85	81
1988	Critical	88	88	82	73	73	78	78	81	81	85	87	87	82
1989	Dry	89	89	84	84	84	67	67	74	74	82	84	84	80
1990	Critical	87	87	85	79	79	79	79	82	82	86	87	87	83
1991	Critical	89	89	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	73	73	80	80	85	87	87	83
1993	Above Normal	89	89	83	65	65	62	62	64	64	75	83	83	74
1994	Critical	87	87	84	83	83	75	75	79	79	82	85	85	82
Average		86	86	78	72	72	66	66	71	71	79	84	84	76
Wet		83	83	68	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	79	68	68	59	59	67	67	76	83	83	74
Below Normal		86	86	81	75	75	68	68	72	72	79	84	84	77
Dry		87	87	82	80	80	72	72	76	76	82	85	85	80
Critical		87	87	85	82	82	77	77	82	82	85	87	87	83

Shasta Lake Water Resources Investigation
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Monthly Average X2 Location (km)

Alternative CP2 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	83	83	79	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	87	87	69	67	67	74	74	71	71	79	84	84	76
1924	Critical	87	87	86	83	83	77	77	85	85	86	86	86	84
1925	Dry	90	90	83	83	83	65	65	72	72	82	85	85	80
1926	Dry	87	87	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	88	88	77	70	70	59	59	65	65	75	83	83	73
1928	Above Normal	87	87	81	75	75	58	58	69	69	77	84	84	75
1929	Critical	88	88	84	84	84	78	78	81	81	85	87	87	84
1930	Dry	88	88	81	77	77	68	68	77	77	83	85	85	80
1931	Critical	88	88	86	82	82	81	81	85	85	86	87	87	85
1932	Dry	88	88	78	74	74	74	74	76	76	82	86	86	80
1933	Critical	88	88	86	80	80	78	78	81	81	86	86	86	83
1934	Critical	90	90	83	77	77	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	83	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	85	70	70	63	63	69	69	79	85	85	76
1937	Below Normal	88	88	85	82	82	61	61	69	69	79	84	84	78
1938	Wet	88	88	63	64	64	47	47	54	54	72	82	82	67
1939	Dry	79	79	84	83	83	77	77	78	78	82	84	84	80
1940	Above Normal	87	87	86	72	72	54	54	65	65	75	83	83	74
1941	Wet	87	87	69	57	57	51	51	58	58	75	83	83	68
1942	Wet	84	84	65	57	57	62	62	62	62	75	83	83	70
1943	Wet	82	82	71	59	59	54	54	67	67	77	84	84	70
1944	Dry	88	88	84	83	83	72	72	77	77	82	83	83	81
1945	Below Normal	87	87	80	82	82	66	66	74	74	79	85	85	79
1946	Below Normal	87	87	64	62	62	69	69	73	73	78	84	84	74
1947	Dry	87	87	82	82	82	73	73	77	77	82	85	85	81
1948	Below Normal	88	88	85	83	83	76	76	69	69	78	83	83	80
1949	Dry	87	87	84	83	83	66	66	75	75	82	86	86	80
1950	Below Normal	87	87	86	77	77	71	71	73	73	80	83	83	79
1951	Above Normal	87	87	56	55	55	62	62	71	71	75	83	83	71
1952	Wet	87	87	69	58	58	55	55	55	55	71	80	80	68
1953	Wet	82	82	69	57	57	70	70	69	69	77	84	84	72
1954	Above Normal	85	85	85	72	72	61	61	66	66	75	83	83	75
1955	Dry	87	87	77	75	75	79	79	77	77	83	86	86	81
1956	Wet	88	88	63	51	51	59	59	63	63	76	83	83	69
1957	Above Normal	78	78	85	82	82	64	64	71	71	76	83	83	76
1958	Wet	82	82	76	67	67	51	51	56	56	73	82	82	69
1959	Below Normal	80	80	85	72	72	67	67	78	78	78	84	84	77
1960	Dry	87	87	83	83	83	72	72	77	77	83	84	84	81
1961	Dry	87	87	82	82	82	75	75	78	78	81	84	84	81
1962	Below Normal	87	87	82	83	83	69	69	74	74	77	84	84	79
1963	Wet	73	73	74	76	76	65	65	63	63	74	83	83	72
1964	Dry	86	86	82	75	75	78	78	78	78	82	82	82	80
1965	Wet	87	87	64	54	54	67	67	66	66	77	84	84	71
1966	Below Normal	87	87	76	69	69	69	69	75	75	78	84	84	77
1967	Wet	88	88	72	63	63	58	58	58	58	68	80	80	69
1968	Below Normal	79	79	82	71	71	64	64	75	75	79	84	84	76
1969	Wet	88	88	76	58	58	54	54	56	56	73	83	83	69
1970	Wet	79	79	66	50	50	59	59	73	73	76	83	83	69
1971	Wet	87	87	65	62	62	63	63	66	66	74	83	83	72
1972	Below Normal	84	84	81	80	80	68	68	76	76	78	84	84	79
1973	Above Normal	89	89	74	60	60	57	57	71	71	76	84	84	72
1974	Wet	87	87	59	51	51	53	53	64	64	76	84	84	68
1975	Wet	79	79	81	80	80	56	56	65	65	76	83	83	74
1976	Critical	77	77	82	83	83	77	77	84	84	86	87	87	82
1977	Critical	86	86	82	85	85	81	81	85	85	86	87	87	85
1978	Above Normal	90	90	83	64	64	57	57	66	66	77	84	84	73
1979	Below Normal	87	87	84	75	75	64	64	71	71	79	85	85	77
1980	Above Normal	87	87	77	59	59	55	55	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	69	69	77	77	81	84	84	79
1982	Wet	87	87	59	56	56	52	52	57	57	75	83	83	67
1983	Wet	71	71	56	52	52	42	42	52	52	60	67	67	57
1984	Wet	73	73	50	54	54	62	62	73	73	76	83	83	68
1985	Dry	86	86	73	79	79	75	75	76	76	82	83	83	79
1986	Wet	86	86	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	86	86	86	82	82	69	69	78	78	83	85	85	81
1988	Critical	87	87	82	73	73	78	78	81	81	85	87	87	82
1989	Dry	89	89	84	84	84	67	67	74	74	82	84	84	80
1990	Critical	87	87	84	79	79	79	79	82	82	86	87	87	83
1991	Critical	89	89	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	73	73	80	80	85	86	86	83
1993	Above Normal	89	89	84	65	65	62	62	66	66	75	83	83	74
1994	Critical	87	87	84	83	83	75	75	79	79	83	84	84	82
Average		86	86	78	72	72	66	66	71	71	79	84	84	76
Wet		83	83	68	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	79	68	68	60	60	68	68	76	83	83	74
Below Normal		86	86	81	75	75	68	68	72	72	79	84	84	77
Dry		87	87	82	80	80	72	72	76	76	82	85	85	80
Critical		87	87	84	82	82	77	77	82	82	85	87	87	83

Change in Monthly Average X2 Position (km)
Alternative CP2 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	1	1	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	-1	-1	1	1	0	0	0	0	0	0
1932	Dry	0	0	0	-1	-1	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	1	1	0	0	-1	-1	-1	0
1940	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	1	1	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	Below Norm	0	0	1	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	-1	0	0	0
1948	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	2	2	0
1950	Below Norm	-1	-1	0	-1	-1	0	0	0	0	0	0	0	0
1951	Above Norm	0	0	0	0	0	0	0	0	0	0	1	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	-2	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	1	1	0	0	0	-1	-1	0
1962	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	-1	-1	1	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1965	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1966	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Norm	0	0	0	0	0	0	0	0	0	1	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Norm	1	1	1	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	-1	-1	-1	0	0	-1	-1	0	0	0	0	0	-1
1978	Above Norm	0	0	0	0	0	1	1	0	0	0	0	0	0
1979	Below Norm	0	0	0	1	1	0	0	0	0	0	0	0	0
1980	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	-1	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Norm	1	1	1	0	0	0	0	2	2	0	0	0	1
1994	Critical	0	0	0	0	0	0	0	0	0	1	-1	-1	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Norm		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Norm		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
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Percent Change in Monthly Average X2 Position
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Norm	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%	0%
1924	Critical	0%	0%	0%	-1%	-1%	1%	1%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	-1%	-1%	1%	1%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	-1%	-1%	-1%	0%
1940	Above Norm	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Norm	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1948	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%
1950	Below Norm	-1%	-1%	0%	-1%	-1%	0%	0%	0%	0%	0%	-1%	-1%	-1%
1951	Above Norm	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	1%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	-1%	-1%	0%
1962	Below Norm	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%
1963	Wet	-1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1965	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Norm	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	-1%	-1%	-2%	-1%	-1%	-2%	-2%	0%	0%	0%	0%	0%	-1%
1978	Above Norm	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1979	Below Norm	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norm	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norm	1%	1%	1%	0%	0%	0%	0%	3%	3%	0%	0%	0%	1%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norm		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Norm		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922 Above Normal	7,766	7,572	4,040	2,675	422	209	214	186	187	933	3,936	6,729	2,906	
1923 Below Normal	8,364	6,133	645	222	400	950	511	513	1,661	2,587	4,801	6,426	2,768	
1924 Critical	7,742	8,566	7,796	6,319	2,496	1,658	3,611	6,194	6,897	7,186	7,537	8,652	6,221	
1925 Dry	10,413	9,783	6,899	6,225	432	213	270	739	1,713	3,733	6,375	7,993	4,566	
1926 Dry	9,215	9,081	8,799	4,853	448	828	611	890	3,401	5,302	6,907	8,531	4,906	
1927 Wet	9,059	3,203	1,620	459	186	186	181	226	911	1,527	3,897	6,545	2,333	
1928 Above Normal	7,860	4,296	3,218	1,258	461	184	197	373	1,946	2,465	4,034	6,933	2,769	
1929 Critical	8,745	8,148	7,256	6,661	3,647	2,481	3,601	4,001	4,996	6,224	7,551	9,248	6,047	
1930 Dry	9,842	10,335	5,468	2,190	1,022	271	753	1,899	3,967	5,246	6,619	8,311	4,660	
1931 Critical	9,226	8,878	8,312	5,850	3,710	4,029	4,825	6,545	6,192	6,652	7,759	9,027	6,750	
1932 Dry	9,832	10,318	3,523	904	572	913	1,566	1,478	1,733	3,486	6,484	8,353	4,097	
1933 Critical	9,073	8,912	8,519	4,841	3,521	2,882	2,331	3,653	5,095	6,345	7,330	8,531	5,919	
1934 Critical	10,090	9,926	7,020	2,872	1,317	1,201	1,648	3,743	4,407	5,852	7,702	9,336	5,426	
1935 Below Normal	9,680	9,274	7,325	1,127	764	417	191	213	739	2,565	5,052	7,085	3,703	
1936 Below Normal	8,534	8,568	7,987	762	218	213	235	392	1,185	2,692	5,086	7,154	3,586	
1937 Below Normal	8,554	8,651	8,179	5,793	595	234	230	403	1,003	2,675	5,081	7,278	4,056	
1938 Wet	8,276	1,980	207	197	202	190	192	189	196	921	3,906	2,829	1,607	
1939 Dry	2,489	4,809	5,860	5,463	4,313	2,112	2,003	2,064	3,812	4,189	4,940	6,970	4,085	
1940 Above Normal	7,724	8,022	7,753	1,220	220	185	181	322	1,464	1,474	3,514	6,754	3,236	
1941 Wet	7,550	7,738	829	193	192	189	184	185	351	1,562	4,203	4,624	2,317	
1942 Wet	5,013	6,661	516	192	181	206	191	192	234	1,306	4,134	3,275	1,842	
1943 Wet	3,488	2,859	468	192	192	191	201	287	1,201	2,206	4,423	7,345	1,921	
1944 Dry	8,686	8,508	7,399	5,847	1,310	470	1,222	1,846	2,840	3,728	4,671	6,200	4,394	
1945 Below Normal	8,182	6,717	4,010	4,554	556	235	613	1,094	1,893	2,595	4,790	6,930	3,514	
1946 Below Normal	8,460	6,633	414	184	210	330	689	927	1,923	2,411	4,331	6,914	2,786	
1947 Dry	7,916	8,365	5,471	5,045	2,619	843	1,192	1,951	3,699	3,850	5,302	7,305	4,463	
1948 Below Normal	8,735	8,432	8,319	6,450	3,187	1,919	527	298	999	2,203	4,169	5,952	4,266	
1949 Dry	7,624	8,151	6,951	6,409	1,677	223	698	1,349	2,554	3,947	6,360	8,239	4,515	
1950 Below Normal	8,702	8,352	8,326	3,041	311	401	612	842	1,817	3,104	4,665	6,446	3,885	
1951 Above Normal	8,001	595	187	201	190	194	398	659	1,999	1,642	3,497	5,829	1,949	
1952 Wet	7,146	7,059	795	201	184	192	186	180	187	708	3,172	1,933	1,828	
1953 Wet	2,803	5,747	796	184	214	406	668	301	431	1,494	4,335	4,263	1,804	
1954 Above Normal	5,239	5,242	5,550	994	189	183	183	226	1,458	1,677	3,501	6,504	2,579	
1955 Dry	8,122	7,307	2,789	1,382	1,334	2,486	2,660	1,934	3,124	4,509	6,753	8,257	4,221	
1956 Wet	8,262	8,430	490	189	189	187	301	192	343	1,516	4,303	3,022	2,285	
1957 Above Normal	2,030	4,028	5,826	4,795	565	189	273	534	1,503	1,764	3,745	7,031	2,690	
1958 Wet	5,340	4,708	1,869	255	184	194	190	183	187	1,140	3,877	2,264	1,699	
1959 Below Normal	2,923	5,854	6,979	1,071	198	231	1,297	2,308	2,997	2,268	4,126	7,344	3,133	
1960 Dry	8,951	8,316	6,032	6,024	1,263	477	1,042	1,909	4,055	5,204	6,300	7,579	4,763	
1961 Dry	8,864	8,345	5,981	5,687	1,350	997	1,648	2,475	4,000	4,054	4,920	6,874	4,600	
1962 Below Normal	8,471	8,743	5,839	5,762	656	265	951	1,152	2,812	2,157	4,002	6,502	3,943	
1963 Wet	1,027	1,756	1,064	1,508	270	204	184	226	747	1,389	3,740	6,655	1,564	
1964 Dry	7,719	2,084	2,784	1,549	1,154	2,296	2,174	2,204	3,116	4,173	4,475	5,943	3,306	
1965 Wet	7,668	6,531	421	183	195	269	192	227	1,304	2,213	4,643	6,907	2,563	
1966 Below Normal	8,462	1,954	1,345	369	273	315	864	1,290	2,800	2,448	4,004	7,014	2,595	
1967 Wet	8,068	7,074	1,037	217	188	187	201	188	186	367	2,569	1,804	1,841	
1968 Below Normal	2,250	5,327	5,197	906	190	191	507	1,566	2,764	2,348	4,201	7,378	2,736	
1969 Wet	8,120	7,182	2,586	211	203	220	208	196	207	1,018	3,991	2,103	2,187	
1970 Wet	2,136	4,596	398	182	188	186	337	911	2,342	1,864	3,658	6,797	1,966	
1971 Wet	7,433	3,898	302	184	193	185	229	225	748	1,118	3,452	4,155	1,843	
1972 Below Normal	5,518	7,398	5,101	3,794	1,663	270	899	1,830	3,292	2,783	4,491	7,431	3,706	
1973 Above Normal	9,205	3,888	1,029	206	193	186	304	575	1,200	1,891	4,195	7,128	2,500	
1974 Wet	8,605	495	183	180	184	182	182	270	549	1,727	4,432	2,544	1,628	
1975 Wet	2,297	4,578	3,804	3,437	392	186	215	230	331	1,522	4,120	3,417	2,044	
1976 Critical	1,950	2,915	4,406	5,673	4,266	2,011	2,944	5,133	6,993	7,621	8,231	9,309	5,121	
1977 Critical	8,903	9,197	6,423	6,594	2,404	2,926	4,520	6,396	6,501	6,995	7,861	8,879	6,466	
1978 Above Normal	9,798	9,604	6,719	399	202	207	217	271	1,915	4,474	6,812	3,441	4,600	
1979 Below Normal	8,227	8,411	7,380	2,349	258	211	402	696	1,092	2,662	5,285	7,760	3,728	
1980 Above Normal	8,376	6,416	2,966	228	196	207	305	532	812	1,899	4,392	6,848	2,765	
1981 Dry	8,355	8,585	6,338	1,183	351	271	842	1,973	3,912	4,321	5,403	6,779	4,026	
1982 Wet	8,397	1,341	185	196	187	200	184	188	274	1,432	4,391	1,348	1,527	
1983 Wet	371	201	195	220	196	184	197	193	193	206	364	272	233	
1984 Wet	757	203	184	200	197	187	321	870	2,110	1,836	3,834	7,122	1,485	
1985 Dry	7,738	1,132	601	2,312	2,257	1,457	1,840	1,651	2,706	3,976	4,668	5,876	3,018	
1986 Wet	6,984	7,396	4,907	1,778	191	192	250	548	1,159	2,177	4,606	6,388	3,048	
1987 Dry	7,892	8,348	8,436	5,946	1,805	384	987	2,357	3,882	4,937	6,053	7,364	4,866	
1988 Critical	8,967	8,951	5,819	1,180	1,147	2,314	3,201	3,964	4,509	6,055	7,626	9,122	5,238	
1989 Dry	10,382	9,536	7,934	6,623	5,799	481	328	1,059	3,061	4,154	5,380	6,307	5,087	
1990 Critical	7,739	8,228	6,961	3,515	2,085	2,689	2,801	4,286	6,818	7,759	7,949	9,212	5,837	
1991 Critical	10,226	10,195	9,636	9,117	7,573	1,175	911	3,538	6,896	7,648	7,501	8,856	6,939	
1992 Critical	10,618	9,991	10,270	8,155	1,207	668	1,387	3,564	4,526	6,232	7,939	9,074	6,136	
1993 Above Normal	9,936	9,631	7,244	444	207	195	188	236	337	1,442	4,373	6,461	3,391	
1994 Critical	8,103	8,488	7,001	6,096	1,921	1,260	2,195	2,807	5,062	4,963	5,268	7,292	5,038	
Average	7,332	6,559	4,454	2,656	1,091	719	956	1,442	2,373	3,153	5,009	6,489	3,519	
Wet	5,657	4,459	1,088	503	205	206	238	296	676	1,393	3,812	4,077	1,884	
Above Normal	7,593	5,929	4,453	1,242	285	194	246	391	1,158	1,710	3,966	6,703	2,823	
Below Normal	7,504	7,175	5,503	2,599	677	442	609	966	1,927	2,536	4,578	6,972	3,457	
Dry	8,378	7,688	5,704	4,228	1,732	920	1,240	1,736	3,223	4,301	5,726	7,305	4,348	
Critical	8,448	8,533	7,452	5,573	2,941	2,108	2,831	4,485	5,741	6,628	7,521	8,878	5,928	

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	-1	-1	0
1923	Below Normal	4	-679	-82	0	-62	-34	31	53	39	207	285	122	-10
1924	Critical	-32	73	29	-198	735	432	78	9	67	-101	5	29	94
1925	Dry	11	-151	-187	-122	-8	4	0	-1	-1	-1	17	-131	-47
1926	Dry	-108	-61	-31	-23	-1	-4	22	-1	30	2	4	-96	-22
1927	Wet	-33	105	62	-9	1	0	0	2	0	-4	-9	5	10
1928	Above Normal	3	105	59	139	31	0	-3	-9	-22	-220	-192	-81	-16
1929	Critical	-140	-189	-49	-9	-34	-9	1	-54	36	12	-65	-77	-48
1930	Dry	-35	-17	3	2	-11	3	14	12	-30	5	-87	-236	-32
1931	Critical	-158	-27	-151	-448	924	882	226	80	-66	-118	46	86	106
1932	Dry	9	-11	0	-231	-131	-25	-6	1	-5	-2	-1	3	-33
1933	Critical	3	1	3	16	12	2	0	1	-1	-3	-3	6	3
1934	Critical	-8	36	2	-156	-80	-17	-4	0	1	0	-11	-24	-22
1935	Below Normal	1	-17	23	10	0	-16	-1	0	1	-10	20	143	13
1936	Below Normal	110	35	-21	-4	1	0	-1	-3	-6	5	5	-308	-15
1937	Below Normal	-244	-79	3	-238	-39	0	-2	-1	3	5	6	-1	-49
1938	Wet	-23	161	9	0	0	0	0	0	0	0	-10	414	46
1939	Dry	217	74	39	-3	-11	14	-21	69	-404	-421	-790	-878	-176
1940	Above Normal	-484	-120	-80	-9	7	0	0	-3	-9	2	4	6	-57
1941	Wet	-35	90	10	0	0	0	0	0	0	-1	4	12	7
1942	Wet	225	225	8	0	0	0	0	0	0	1	-6	17	39
1943	Wet	5	-14	-1	0	0	0	0	1	1	-1	-3	2	-1
1944	Dry	-10	1	-60	-41	-1	16	20	8	-210	-448	-411	-301	-120
1945	Below Normal	-177	-126	-94	-48	-1	-2	0	-14	-21	32	46	-10	-35
1946	Below Normal	-36	314	53	0	-1	-14	-14	-1	7	-322	176	363	44
1947	Dry	57	-4	-78	-8	-30	-18	-9	0	20	-436	-362	-139	-84
1948	Below Normal	-262	-21	-61	252	136	22	-12	24	440	217	-114	5	52
1949	Dry	110	5	-31	26	-111	-8	-3	1	-6	76	195	139	33
1950	Below Normal	-131	-107	-13	-211	-20	-2	-10	94	106	7	-83	3	-31
1951	Above Normal	-193	37	0	1	0	0	0	68	285	8	-90	-83	3
1952	Wet	-83	-141	0	0	0	1	0	0	0	0	16	15	-16
1953	Wet	16	14	1	0	0	0	-1	10	7	4	-21	27	5
1954	Above Normal	26	12	7	1	0	0	0	0	17	10	-2	92	14
1955	Dry	34	-58	-26	-9	-11	273	40	-54	-23	-113	101	-82	6
1956	Wet	-367	-350	20	0	-1	-1	0	0	0	0	4	5	-58
1957	Above Normal	8	7	3	55	10	0	0	0	2	-79	-60	-408	-38
1958	Wet	216	276	31	8	0	0	0	0	0	0	19	20	47
1959	Below Normal	19	16	6	2	0	0	-9	1	-36	-23	-17	-14	-5
1960	Dry	-20	-355	-2,186	-1,134	-3	-1	-6	-113	-129	289	624	379	-221
1961	Dry	77	-71	54	78	190	280	189	-31	-30	-252	429	6	77
1962	Below Normal	-232	-238	-224	-134	5	0	30	37	769	49	-151	13	-6
1963	Wet	-75	107	252	132	10	-2	0	0	-1	147	191	95	71
1964	Dry	79	-129	-127	-20	-2	4	-140	-168	-548	-444	-1,079	-1,041	-301
1965	Wet	-535	-442	21	0	2	-5	0	-4	176	41	-129	-100	-81
1966	Below Normal	-6	244	66	-13	-2	19	35	6	-9	-30	-19	-92	17
1967	Wet	-6	-36	47	0	0	0	0	0	0	1	16	15	3
1968	Below Normal	11	9	-5	-2	0	0	0	0	-7	-52	-12	10	-4
1969	Wet	-61	-104	104	3	0	0	0	0	0	0	0	28	-2
1970	Wet	20	10	0	0	0	0	0	0	-51	-6	15	11	0
1971	Wet	-164	-79	3	0	-1	0	1	0	0	2	1	50	-16
1972	Below Normal	44	18	7	5	6	1	4	7	-102	-165	-122	-54	-29
1973	Above Normal	406	160	201	3	0	0	0	0	0	-5	-9	-6	63
1974	Wet	51	4	0	0	0	0	0	0	0	0	-1	20	6
1975	Wet	19	14	3	-1	0	0	0	0	0	0	-1	11	4
1976	Critical	7	4	0	-2	-2	9	-144	-217	-47	-188	28	-136	-57
1977	Critical	-492	-519	-1,253	-662	-3,817	-2,217	-466	-194	-160	11	-191	-276	-853
1978	Above Normal	77	-30	111	17	2	7	7	-14	21	35	-1	79	26
1979	Below Normal	63	13	-61	380	18	0	-1	-15	-2	-27	27	61	38
1980	Above Normal	-51	424	205	4	-1	-1	0	4	-14	0	0	0	47
1981	Dry	1	0	-2	-1	0	24	43	11	-82	-37	-58	-31	-11
1982	Wet	-77	139	1	0	0	0	0	0	0	0	5	2	6
1983	Wet	1	0	0	0	0	0	0	0	0	0	1	1	0
1984	Wet	2	0	0	0	0	0	0	0	-1	0	1	-3	0
1985	Dry	60	27	-67	-89	-14	-185	-145	-15	13	-3	105	92	-19
1986	Wet	66	21	-15	-31	1	0	4	-58	-153	-85	84	73	-8
1987	Dry	9	-13	22	141	101	40	-1	-87	-395	-328	-452	-694	-138
1988	Critical	-216	-44	-45	-9	-1	-1	-2	1	-14	101	-86	-143	-38
1989	Dry	50	-9	-317	-81	-175	20	-20	-15	242	43	207	-104	-13
1990	Critical	-178	-175	-290	-141	-47	-4	2	-3	-4	59	100	67	-51
1991	Critical	-22	50	-74	-140	-37	0	0	0	-2	-1	-1	0	-19
1992	Critical	0	1	0	-3	-1	0	0	-9	8	4	57	91	12
1993	Above Normal	15	48	-62	-13	0	0	0	37	84	101	29	79	26
1994	Critical	42	25	-6	52	270	117	42	25	-247	134	-245	-365	-13
Average		-35	-21	-58	-40	-30	-5	-3	-7	-6	-32	-28	-44	-26
Wet		-40	0	27	5	1	0	0	-2	-1	5	9	34	3
Above Normal		-19	64	45	20	5	1	0	8	36	-15	-32	-32	7
Below Normal		-60	-44	-29	0	3	-2	4	13	84	-8	4	17	-1
Dry		34	-48	-187	-95	-14	27	-2	-24	-97	-129	-97	-195	-69
Critical		-100	-64	-153	-141	-173	-67	-22	-30	-36	-8	-30	-62	-74

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Collinsville
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-10%	-11%	0%	-13%	-3%	7%	12%	2%	9%	6%	2%	0%
1924	Critical	0%	1%	0%	-3%	42%	35%	2%	0%	1%	-1%	0%	0%	6%
1925	Dry	0%	-2%	-3%	-2%	-2%	2%	0%	0%	0%	0%	0%	-2%	-1%
1926	Dry	-1%	-1%	0%	0%	0%	0%	4%	0%	1%	0%	0%	-1%	0%
1927	Wet	0%	3%	4%	-2%	1%	0%	0%	1%	0%	0%	0%	0%	1%
1928	Above Normal	0%	2%	2%	12%	7%	0%	-1%	-2%	-1%	-8%	-5%	-1%	0%
1929	Critical	-2%	-2%	-1%	0%	-1%	0%	0%	-1%	1%	0%	-1%	-1%	-1%
1930	Dry	0%	0%	0%	0%	-1%	1%	2%	1%	-1%	0%	-1%	-3%	0%
1931	Critical	-2%	0%	-2%	-7%	33%	28%	5%	1%	-1%	-2%	1%	1%	5%
1932	Dry	0%	0%	0%	-20%	-19%	-3%	0%	0%	0%	0%	0%	0%	-4%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-5%	-6%	-1%	0%	0%	0%	0%	0%	0%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	-4%	0%	0%	0%	0%	0%	2%	0%
1936	Below Normal	1%	0%	0%	-1%	0%	0%	0%	-1%	0%	0%	0%	-4%	0%
1937	Below Normal	-3%	-1%	0%	-4%	-6%	0%	-1%	0%	0%	0%	0%	0%	-1%
1938	Wet	0%	9%	4%	0%	0%	0%	0%	0%	0%	0%	0%	17%	2%
1939	Dry	10%	2%	1%	0%	0%	1%	-1%	3%	-10%	-9%	-14%	-11%	-2%
1940	Above Normal	-6%	-1%	-1%	-1%	3%	0%	0%	-1%	-1%	0%	0%	0%	-1%
1941	Wet	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	5%	3%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	-1%	-1%	0%	3%	2%	0%	-7%	-11%	-8%	-5%	-2%
1945	Below Normal	-2%	-2%	-2%	-1%	0%	-1%	0%	-1%	-1%	1%	1%	0%	-1%
1946	Below Normal	0%	5%	15%	0%	-1%	-4%	-2%	0%	0%	-12%	4%	6%	1%
1947	Dry	1%	0%	-1%	0%	-1%	-2%	-1%	0%	1%	-10%	-6%	-2%	-2%
1948	Below Normal	-3%	0%	-1%	4%	4%	1%	-2%	9%	79%	11%	-3%	0%	8%
1949	Dry	1%	0%	0%	0%	-6%	-3%	0%	0%	0%	2%	3%	2%	0%
1950	Below Normal	-1%	-1%	0%	-6%	-6%	0%	-2%	13%	6%	0%	-2%	0%	0%
1951	Above Normal	-2%	7%	0%	0%	0%	0%	0%	12%	17%	0%	-3%	-1%	2%
1952	Wet	-1%	-2%	0%	0%	0%	1%	0%	0%	0%	0%	1%	1%	0%
1953	Wet	1%	0%	0%	0%	0%	0%	0%	3%	2%	0%	0%	1%	1%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	1%	0%
1955	Dry	0%	-1%	-1%	-1%	-1%	12%	2%	-3%	-1%	-2%	2%	-1%	0%
1956	Wet	-4%	-4%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-4%	-2%	-5%	-1%
1958	Wet	4%	6%	2%	3%	0%	0%	0%	0%	0%	1%	1%	1%	1%
1959	Below Normal	1%	0%	0%	0%	0%	0%	-1%	0%	-1%	-1%	0%	0%	0%
1960	Dry	0%	-4%	-27%	-16%	0%	0%	-1%	-6%	-3%	6%	11%	5%	-3%
1961	Dry	1%	-1%	1%	1%	16%	39%	13%	-1%	-1%	-6%	10%	0%	6%
1962	Below Normal	-3%	-3%	-4%	-2%	1%	0%	3%	3%	38%	2%	-4%	0%	3%
1963	Wet	-7%	6%	31%	10%	4%	-1%	0%	0%	0%	12%	5%	1%	5%
1964	Dry	1%	-6%	-4%	-1%	0%	0%	-6%	-7%	-15%	-10%	-19%	-15%	-7%
1965	Wet	-7%	-6%	5%	0%	1%	-2%	0%	-2%	16%	2%	-3%	-1%	0%
1966	Below Normal	0%	14%	5%	-3%	-1%	6%	4%	0%	0%	-1%	0%	-1%	2%
1967	Wet	0%	-1%	5%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
1968	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%
1969	Wet	-1%	-1%	4%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1970	Wet	1%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%	0%
1971	Wet	-2%	-2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-3%	-6%	-3%	-1%	-1%
1973	Above Normal	5%	4%	24%	1%	0%	0%	0%	0%	0%	0%	0%	0%	3%
1974	Wet	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-5%	-4%	-1%	-2%	0%	-1%	-1%
1977	Critical	-5%	-5%	-16%	-9%	-61%	-43%	-9%	-3%	-2%	0%	-2%	-3%	-13%
1978	Above Normal	1%	0%	2%	5%	1%	3%	3%	-5%	3%	2%	0%	1%	1%
1979	Below Normal	1%	0%	-1%	19%	8%	0%	0%	-2%	0%	-1%	1%	1%	2%
1980	Above Normal	-1%	7%	7%	2%	-1%	0%	1%	-2%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	10%	5%	1%	-2%	-1%	-1%	0%	1%
1982	Wet	-1%	12%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	1%	2%	-10%	-4%	-1%	-11%	-7%	-1%	0%	0%	2%	2%	-2%
1986	Wet	1%	0%	0%	-2%	0%	0%	2%	-10%	-12%	-4%	2%	1%	-2%
1987	Dry	0%	0%	0%	2%	6%	12%	0%	-4%	-9%	-6%	-7%	-9%	-1%
1988	Critical	-2%	0%	-1%	-1%	0%	0%	0%	0%	2%	-1%	-2%	0%	0%
1989	Dry	0%	0%	-4%	-1%	-3%	4%	-6%	-1%	9%	1%	4%	-2%	0%
1990	Critical	-2%	-2%	-4%	-4%	-2%	0%	0%	0%	0%	1%	1%	1%	-1%
1991	Critical	0%	0%	-1%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%
1993	Above Normal	0%	0%	-1%	-3%	0%	0%	0%	18%	33%	8%	1%	1%	5%
1994	Critical	1%	0%	0%	1%	16%	10%	2%	1%	-5%	3%	-4%	-5%	2%
Average		0%	0%	0%	0%	0%	1%	0%	0%	2%	-1%	0%	0%	0%
Wet		0%	1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%
Above Normal		0%	2%	3%	2%	1%	0%	0%	2%	5%	0%	-1%	0%	1%
Below Normal		-1%	0%	0%	0%	-1%	0%	0%	2%	9%	0%	0%	0%	1%
Dry		1%	-1%	-3%	-3%	-1%	4%	0%	-1%	-2%	-3%	-2%	-3%	-1%
Critical		-1%	-1%	-2%	-2%	2%	2%	0%	-1%	-1%	0%	0%	-1%	0%

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	1	0	0	0	0	0	0	-1	0	0
1923	Below Normal	5	-750	-121	2	-161	-81	82	138	79	277	328	146	-4
1924	Critical	2	54	56	-228	1,436	870	155	12	40	-77	3	26	196
1925	Dry	14	-137	-209	-138	-21	3	-5	-4	-1	1	17	-100	-48
1926	Dry	-109	-65	-33	-31	3	-3	53	4	32	2	3	-65	-17
1927	Wet	-31	160	112	-36	1	0	0	0	-5	-7	-9	4	16
1928	Above Normal	3	138	91	301	79	0	-14	-18	-30	-307	-251	-93	-8
1929	Critical	-111	-201	-53	-13	-46	-14	0	-53	44	15	-70	-77	-48
1930	Dry	-37	-19	3	3	-21	17	32	19	-24	59	-124	-264	-30
1931	Critical	-146	-35	-106	-533	1,432	1,274	328	112	-97	-145	41	85	184
1932	Dry	12	-9	1	-513	-296	-61	-13	2	-7	-2	-2	3	-74
1933	Critical	2	1	4	20	16	4	1	1	-1	-3	-2	5	4
1934	Critical	-7	29	-1	-248	-148	-33	-7	0	1	0	-14	-23	-38
1935	Below Normal	0	-17	27	16	0	-54	-4	2	3	-8	13	135	10
1936	Below Normal	116	42	-17	-6	1	0	-4	-4	-9	4	7	-287	-13
1937	Below Normal	-256	-93	-2	-294	-62	0	-8	-5	5	5	4	0	-59
1938	Wet	-19	337	24	-5	0	0	0	0	0	0	-11	632	80
1939	Dry	374	106	51	-2	-13	24	-30	98	-465	-484	-843	-935	-177
1940	Above Normal	-519	-168	-103	-5	13	0	0	-7	-16	3	6	7	-66
1941	Wet	-32	81	13	0	0	0	0	0	0	0	4	14	7
1942	Wet	261	256	12	0	0	0	0	2	2	1	-4	23	46
1943	Wet	9	-19	0	0	0	0	0	1	2	0	-2	2	-1
1944	Dry	-6	1	-56	-49	1	43	39	25	-263	-510	-452	-333	-130
1945	Below Normal	-200	-151	-131	-66	1	-2	0	-26	-32	43	52	-5	-43
1946	Below Normal	-28	354	106	0	-7	-43	-31	-3	9	-430	164	403	41
1947	Dry	101	-12	-90	-27	-46	-39	-18	0	20	-488	-394	-153	-95
1948	Below Normal	-217	-47	-64	260	188	40	-34	81	899	414	-107	7	118
1949	Dry	80	11	-31	29	-229	-25	-8	1	-7	57	195	155	19
1950	Below Normal	-119	-132	-32	-331	-54	-4	-19	197	174	27	-93	-13	-33
1951	Above Normal	-128	75	0	1	0	0	0	139	432	1	-129	-93	25
1952	Wet	-80	-137	11	0	0	1	0	0	0	0	20	24	-13
1953	Wet	22	17	2	0	0	1	-1	38	20	7	-13	34	11
1954	Above Normal	31	15	9	2	0	0	0	25	16	-1	88	15	15
1955	Dry	54	-60	-36	-16	-18	379	70	-93	-26	-87	104	-20	21
1956	Wet	-368	-353	32	0	-1	-1	0	0	0	-1	3	8	-57
1957	Above Normal	14	9	4	74	20	0	0	0	2	-123	-90	-388	-40
1958	Wet	259	356	55	38	0	0	0	0	0	1	23	31	64
1959	Below Normal	28	20	7	4	0	0	-12	1	-47	-35	-19	-14	-6
1960	Dry	-6	-208	-2,259	-1,378	-10	-3	-11	-163	-187	317	650	422	-236
1961	Dry	122	-55	87	104	442	586	339	-24	-38	-283	479	129	157
1962	Below Normal	-186	-154	-282	-186	19	2	32	73	1,037	60	-223	5	16
1963	Wet	-192	121	554	271	22	-12	0	1	-2	252	249	112	115
1964	Dry	86	-251	-203	-36	-4	6	-210	-272	-701	-518	-1,185	-1,160	-371
1965	Wet	-594	-510	37	0	19	-9	1	-9	293	61	-159	-105	-81
1966	Below Normal	-36	477	147	-43	-11	68	75	12	-11	-44	-27	-89	43
1967	Wet	-31	-26	123	1	0	0	0	0	0	3	22	23	10
1968	Below Normal	18	11	-6	-3	0	0	0	-4	-16	-75	-27	2	-8
1969	Wet	-42	-111	180	6	0	0	0	0	0	0	0	48	7
1970	Wet	34	14	0	0	0	0	0	0	-69	-9	20	12	0
1971	Wet	-153	-99	8	0	-2	5	4	0	0	3	2	64	-14
1972	Below Normal	56	22	9	8	12	5	9	12	-120	-226	-146	-62	-35
1973	Above Normal	374	193	386	9	0	0	-1	0	0	-8	-10	-6	78
1974	Wet	43	7	0	0	0	0	0	1	1	0	-1	32	7
1975	Wet	30	18	4	-1	0	0	0	2	1	0	-1	15	6
1976	Critical	11	6	1	-2	-2	15	-183	-247	-55	-135	8	-93	-56
1977	Critical	-455	-470	-1,283	-811	-5,022	-3,229	-727	-267	-190	-41	-216	-278	-1,082
1978	Above Normal	64	-35	141	27	4	7	14	-38	38	68	13	76	32
1979	Below Normal	65	18	-58	688	48	3	2	-35	-6	-22	22	57	65
1980	Above Normal	-45	480	291	6	-2	-1	0	8	-23	0	0	0	60
1981	Dry	1	0	-3	-2	-1	96	98	22	-91	-42	-60	-38	-2
1982	Wet	-62	334	2	0	0	0	0	0	0	-1	3	4	23
1983	Wet	3	0	0	0	0	0	0	0	0	0	4	3	1
1984	Wet	5	0	0	0	0	0	0	-1	-1	0	1	-2	0
1985	Dry	53	60	-143	-149	-26	-312	-237	-35	10	-7	125	111	-46
1986	Wet	64	26	-17	-54	1	-1	19	-114	-275	-116	76	76	-26
1987	Dry	24	-1	17	161	199	149	39	-131	-447	-364	-471	-662	-124
1988	Critical	-270	-66	-62	-18	-3	-1	-3	0	-13	76	-94	-136	-49
1989	Dry	40	-9	-276	-112	-176	73	-56	-45	308	66	221	-63	-2
1990	Critical	-183	-134	-321	-203	-68	-9	2	-3	-4	59	104	69	-58
1991	Critical	-16	48	-67	-136	-40	-1	0	0	-2	-1	0	0	-18
1992	Critical	1	1	0	-3	-2	-1	0	-8	8	3	66	92	13
1993	Above Normal	10	46	-74	-22	0	2	3	174	281	214	63	82	65
1994	Critical	49	24	-7	59	521	245	71	39	-256	157	-242	-396	22
Average		-29	-8	-48	-49	-28	0	-2	-5	3	-32	-33	-37	-22
Wet		-42	22	55	10	2	-1	1	-4	-2	9	11	50	9
Above Normal		-20	75	74	39	11	1	0	26	71	-14	-40	-33	16
Below Normal		-54	-29	-30	4	-2	-5	6	31	140	-1	-4	20	7
Dry		50	-40	-199	-135	-13	58	5	-37	-118	-143	-109	-186	-72
Critical		-94	-62	-153	-176	-161	-73	-30	-35	-44	-8	-35	-61	-78

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Chipps Island
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-7%	-8%	1%	-13%	-3%	7%	12%	2%	6%	4%	1%	0%
1924	Critical	0%	0%	0%	-2%	40%	30%	2%	0%	-1%	0%	0%	0%	6%
1925	Dry	0%	-1%	-2%	-1%	-3%	1%	-1%	0%	0%	0%	0%	-1%	-1%
1926	Dry	-1%	-1%	0%	0%	0%	0%	4%	0%	1%	0%	0%	-1%	0%
1927	Wet	0%	3%	3%	-3%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	2%	1%	11%	7%	0%	-5%	-2%	-1%	-6%	-3%	-1%	0%
1929	Critical	-1%	-2%	0%	0%	-1%	0%	0%	-1%	1%	0%	-1%	-1%	0%
1930	Dry	0%	0%	0%	0%	-1%	3%	2%	0%	0%	1%	-1%	-2%	0%
1931	Critical	-1%	0%	-1%	-5%	27%	22%	4%	1%	-1%	-1%	0%	1%	4%
1932	Dry	0%	0%	0%	-18%	-17%	-3%	0%	0%	0%	0%	0%	0%	-3%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-4%	-4%	-1%	0%	0%	0%	0%	0%	0%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	-5%	-2%	1%	0%	0%	0%	1%	0%
1936	Below Normal	1%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	-3%	0%
1937	Below Normal	-2%	-1%	0%	-3%	-6%	0%	-2%	0%	0%	0%	0%	0%	-1%
1938	Wet	0%	9%	11%	-2%	0%	0%	0%	0%	0%	0%	0%	13%	3%
1939	Dry	8%	1%	1%	0%	0%	1%	-1%	2%	-7%	-6%	-9%	-8%	-2%
1940	Above Normal	-4%	-1%	-1%	0%	6%	0%	0%	-1%	0%	0%	0%	0%	0%
1941	Wet	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	3%	3%	2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	4%	1%	1%	-5%	-7%	-5%	-3%	-1%
1945	Below Normal	-2%	-1%	-2%	-1%	0%	-1%	0%	-1%	-1%	1%	1%	0%	-1%
1946	Below Normal	0%	4%	19%	0%	-2%	-5%	-2%	0%	0%	-8%	2%	4%	1%
1947	Dry	1%	0%	-1%	0%	-1%	-2%	-1%	0%	0%	-6%	-4%	-1%	-1%
1948	Below Normal	-2%	0%	-1%	3%	3%	1%	-2%	13%	60%	10%	-1%	0%	7%
1949	Dry	1%	0%	0%	0%	-6%	-7%	-1%	0%	0%	1%	-1%	1%	-1%
1950	Below Normal	-1%	-1%	0%	-5%	-7%	0%	-1%	10%	5%	0%	-1%	0%	0%
1951	Above Normal	-1%	8%	0%	0%	0%	0%	0%	9%	12%	0%	-2%	-1%	2%
1952	Wet	-1%	-1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	5%	2%	0%	0%	0%	1%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%
1955	Dry	0%	-1%	-1%	-1%	-1%	8%	1%	-2%	0%	-1%	1%	0%	0%
1956	Wet	-3%	-3%	4%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-3%	-1%	-4%	0%
1958	Wet	3%	5%	1%	8%	0%	0%	0%	0%	0%	0%	0%	1%	2%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1960	Dry	0%	-2%	-19%	-13%	0%	0%	0%	-4%	-3%	4%	7%	4%	-2%
1961	Dry	1%	0%	1%	1%	16%	31%	10%	0%	-1%	-4%	6%	1%	5%
1962	Below Normal	-1%	-1%	-3%	-2%	2%	0%	1%	3%	24%	1%	-3%	0%	2%
1963	Wet	-8%	4%	27%	9%	6%	-4%	0%	0%	0%	8%	4%	1%	4%
1964	Dry	1%	-6%	-4%	-1%	0%	0%	-4%	-6%	-11%	-7%	-13%	-11%	-5%
1965	Wet	-5%	-5%	6%	0%	8%	-1%	0%	-2%	11%	1%	-2%	-1%	1%
1966	Below Normal	0%	13%	5%	-4%	-2%	9%	4%	0%	0%	-1%	0%	-1%	2%
1967	Wet	0%	0%	6%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1969	Wet	0%	-1%	4%	3%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1970	Wet	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1971	Wet	-1%	-1%	2%	0%	-1%	2%	1%	0%	0%	0%	0%	1%	0%
1972	Below Normal	1%	0%	0%	0%	0%	1%	0%	0%	-2%	-4%	-2%	-1%	0%
1973	Above Normal	3%	3%	18%	4%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1974	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-3%	-3%	-1%	-1%	0%	-1%	-1%
1977	Critical	-3%	-3%	-11%	-7%	-51%	-37%	-9%	-3%	-2%	0%	-2%	-2%	-11%
1978	Above Normal	0%	0%	1%	5%	2%	4%	6%	-7%	2%	2%	0%	1%	1%
1979	Below Normal	1%	0%	-1%	18%	14%	1%	0%	-2%	0%	0%	0%	1%	3%
1980	Above Normal	0%	5%	5%	2%	-1%	0%	0%	1%	-1%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	17%	5%	1%	-1%	-1%	-1%	0%	2%
1982	Wet	-1%	14%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	2%	-9%	-3%	-1%	-8%	-6%	-1%	0%	0%	2%	1%	-2%
1986	Wet	1%	0%	0%	-1%	0%	0%	5%	-8%	-9%	-3%	1%	1%	-1%
1987	Dry	0%	0%	0%	2%	5%	18%	2%	-3%	-6%	-4%	-5%	-6%	0%
1988	Critical	-2%	-1%	-1%	-1%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%
1989	Dry	0%	0%	-2%	-1%	-2%	8%	-7%	-2%	6%	1%	3%	-1%	0%
1990	Critical	-2%	-1%	-3%	-3%	-2%	0%	0%	0%	0%	1%	1%	1%	-1%
1991	Critical	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1993	Above Normal	0%	0%	-1%	-3%	0%	1%	1%	57%	47%	7%	1%	1%	9%
1994	Critical	0%	0%	0%	1%	15%	9%	2%	1%	-3%	2%	-3%	-3%	2%
Average		0%	1%	1%	0%	0%	1%	0%	1%	2%	0%	0%	0%	0%
Wet		0%	1%	3%	1%	1%	0%	0%	0%	0%	0%	0%	1%	1%
Above Normal		0%	2%	3%	2%	2%	0%	0%	6%	6%	0%	-1%	0%	2%
Below Normal		0%	0%	1%	0%	-1%	0%	0%	2%	6%	0%	0%	0%	1%
Dry		1%	0%	-2%	-2%	-1%	4%	0%	-1%	-2%	-2%	-1%	-2%	-1%
Critical		-1%	0%	-1%	-2%	2%	2%	0%	0%	0%	0%	0%	0%	0%

**Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton (umhos/cm)
No Action Alternative (2030)**

SVI														
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	2,434	2,236	813	544	223	188	184	179	181	260	950	1,909	842
1923	Below Normal	2,514	1,574	276	199	207	230	198	201	341	434	1,056	1,660	741
1924	Critical	2,244	2,550	2,134	1,571	428	312	832	1,799	2,042	2,305	2,410	3,116	1,812
1925	Dry	3,960	3,575	1,656	1,510	212	189	188	220	370	900	2,074	2,644	1,458
1926	Dry	3,236	3,010	2,711	990	234	251	209	244	765	1,386	2,040	3,070	1,512
1927	Wet	3,082	577	319	218	182	182	179	184	231	294	902	1,801	679
1928	Above Normal	2,453	868	628	295	201	180	184	193	407	525	902	2,077	743
1929	Critical	2,857	2,317	1,902	1,634	743	482	793	892	1,330	1,822	2,388	3,516	1,723
1930	Dry	3,661	3,856	1,150	435	267	191	224	358	928	1,405	1,924	2,868	1,439
1931	Critical	3,202	2,713	2,506	1,478	668	676	1,036	1,871	1,648	1,908	2,431	3,250	1,949
1932	Dry	3,583	3,816	693	275	239	249	329	304	353	815	2,008	2,757	1,285
1933	Critical	3,042	2,881	2,557	945	684	496	426	826	1,381	1,900	2,394	3,015	1,712
1934	Critical	3,735	3,545	1,601	599	306	278	322	841	1,088	1,719	2,476	3,552	1,672
1935	Below Normal	3,511	2,790	1,983	324	237	200	183	188	217	522	1,209	1,931	1,108
1936	Below Normal	2,588	2,551	2,238	274	200	191	186	195	276	495	1,240	2,244	1,056
1937	Below Normal	2,755	2,702	2,314	1,343	250	208	195	199	248	550	1,301	2,139	1,184
1938	Wet	2,657	445	182	190	192	182	181	180	184	279	985	424	507
1939	Dry	395	1,052	1,348	1,260	929	384	414	375	995	1,014	1,443	2,388	1,000
1940	Above Normal	2,645	2,686	2,525	352	200	182	178	193	324	284	734	1,964	1,022
1941	Wet	2,261	2,215	286	188	186	182	180	180	195	345	1,004	993	685
1942	Wet	1,107	1,739	217	186	178	186	183	183	331	1,011	601	509	
1943	Wet	717	525	209	186	183	182	187	193	313	410	1,095	2,216	535
1944	Dry	2,661	2,482	1,961	1,321	360	206	280	369	612	885	1,167	1,714	1,168
1945	Below Normal	2,612	1,620	804	995	222	205	228	257	357	480	1,107	1,954	903
1946	Below Normal	2,650	1,388	199	182	190	193	217	235	369	508	891	1,834	738
1947	Dry	2,222	2,365	1,222	1,147	525	241	265	397	841	881	1,413	2,153	1,139
1948	Below Normal	2,940	2,342	2,630	1,382	622	341	204	185	196	372	939	1,500	1,138
1949	Dry	2,076	2,333	1,669	1,571	388	190	226	273	531	785	1,719	2,563	1,193
1950	Below Normal	2,895	2,396	2,453	666	207	192	202	216	331	620	1,106	1,698	1,082
1951	Above Normal	2,723	209	182	188	182	183	196	208	346	304	762	1,523	584
1952	Wet	2,171	1,972	289	192	180	184	179	177	181	228	660	376	566
1953	Wet	556	1,499	292	181	187	191	212	186	187	299	1,072	868	477
1954	Above Normal	1,360	1,159	1,367	345	183	180	179	184	316	316	746	1,769	675
1955	Dry	2,344	1,811	581	306	284	409	481	363	689	1,134	1,960	2,789	1,096
1956	Wet	2,988	2,788	214	183	182	182	189	182	188	351	1,018	586	754
1957	Above Normal	362	923	1,460	1,060	240	181	189	205	297	349	827	2,376	706
1958	Wet	1,135	957	413	205	182	185	181	179	181	300	896	405	435
1959	Below Normal	543	1,507	1,858	329	189	187	306	453	585	429	921	2,434	812
1960	Dry	2,940	2,732	2,312	1,869	356	303	255	394	962	1,171	1,365	2,045	1,384
1961	Dry	2,927	2,263	1,342	1,328	334	221	299	463	920	909	967	2,104	1,173
1962	Below Normal	2,855	2,787	1,339	1,487	254	194	235	257	383	394	943	1,780	1,076
1963	Wet	339	364	256	320	187	188	180	185	217	255	777	1,852	427
1964	Dry	2,095	514	602	350	268	428	415	441	784	1,021	1,361	2,015	858
1965	Wet	2,811	1,798	204	181	185	187	181	189	275	409	1,299	2,062	815
1966	Below Normal	2,600	379	284	203	189	185	223	268	559	460	885	2,148	699
1967	Wet	2,491	1,911	332	208	183	184	190	180	181	208	560	350	581
1968	Below Normal	383	1,234	1,155	299	182	181	205	323	529	446	920	2,399	688
1969	Wet	2,580	1,980	514	190	191	193	187	183	192	290	960	391	654
1970	Wet	418	1,063	206	180	182	182	190	237	466	344	789	1,964	518
1971	Wet	2,229	834	198	182	184	179	183	183	213	243	717	880	519
1972	Below Normal	1,264	2,002	1,088	735	368	191	245	344	725	558	1,050	2,361	911
1973	Above Normal	3,039	760	257	193	187	182	192	209	259	349	960	2,189	731
1974	Wet	2,841	203	181	179	182	180	179	188	201	353	1,024	487	516
1975	Wet	438	1,068	817	691	205	182	186	185	186	335	905	676	490
1976	Critical	341	505	882	1,326	894	376	665	1,417	2,076	2,646	2,717	3,434	1,440
1977	Critical	3,105	3,246	2,063	2,006	1,650	1,245	1,146	2,036	2,007	2,106	2,696	3,466	2,231
1978	Above Normal	3,825	3,713	1,630	220	192	191	192	198	222	388	1,107	1,876	1,146
1979	Below Normal	2,368	2,395	2,037	441	203	191	202	223	248	523	1,396	2,339	1,047
1980	Above Normal	2,756	1,437	558	188	189	188	199	211	248	418	1,045	1,957	783
1981	Dry	2,611	2,595	1,418	350	199	185	227	385	894	948	1,350	1,859	1,085
1982	Wet	2,974	330	179	191	181	191	179	181	187	357	1,068	310	527
1983	Wet	185	183	184	196	186	181	185	181	182	189	191	180	185
1984	Wet	214	178	180	186	186	181	194	247	416	340	870	2,210	450
1985	Dry	2,118	295	213	451	437	332	383	302	518	832	1,008	1,465	696
1986	Wet	2,021	2,063	1,115	411	183	184	199	218	317	512	1,106	1,652	832
1987	Dry	2,444	2,536	2,453	1,342	379	199	256	463	989	1,321	1,807	2,553	1,395
1988	Critical	2,967	2,784	1,294	336	284	474	619	840	1,077	1,589	2,497	3,498	1,522
1989	Dry	3,952	3,085	2,381	1,513	1,712	206	189	236	560	880	1,223	1,773	1,476
1990	Critical	2,259	2,403	1,921	715	436	503	517	1,048	2,246	2,500	2,447	3,415	1,701
1991	Critical	3,893	3,771	3,499	3,219	2,110	330	253	837	2,417	2,472	2,472	3,249	2,377
1992	Critical	4,160	3,720	3,851	2,437	332	228	297	780	1,121	1,893	2,700	3,254	2,065
1993	Above Normal	3,906	3,687	1,986	234	198	185	180	182	181	300	1,108	1,696	1,154
1994	Critical	2,351	2,534	1,761	1,424	410	270	404	544	1,422	1,042	1,322	2,301	1,315
Average		2,350	1,936	1,213	699	349	251	284	395	611	783	1,326	1,985	1,015
Wet		1,725	1,176	323	231	185	184	186	190	232	318	900	1,014	555
Above Normal		2,550	1,768	1,141	362	199	184	187	196	278	349	914	1,934	839
Below Normal		2,320	1,976	1,476	633	251	206	216	253	383	485	1,069	2,030	942
Dry		2,701	2,395	1,482	1,001	445	255	290	349	732	1,018	1,552	2,298	1,210
Critical		2,846	2,747	2,164	1,474	746	473	609	1,144	1,655	1,992	2,413	3,256	1,793

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	2,434	2,236	813	544	223	188	184	179	181	261	950	1,909	842
1923	Below Normal	2,511	1,326	262	199	201	228	200	205	344	477	1,164	1,690	734
1924	Critical	2,187	2,637	2,111	1,516	501	353	836	1,829	2,184	2,180	2,412	3,137	1,824
1925	Dry	3,966	3,492	1,586	1,461	211	192	189	221	369	894	2,075	2,512	1,431
1926	Dry	3,183	2,981	2,694	985	235	249	211	242	772	1,383	2,041	2,911	1,491
1927	Wet	3,057	598	330	218	183	182	179	185	231	293	897	1,806	680
1928	Above Normal	2,454	896	642	314	205	180	183	192	402	469	849	2,042	736
1929	Critical	2,710	2,239	1,875	1,636	735	480	794	859	1,291	1,804	2,365	3,470	1,688
1930	Dry	3,641	3,847	1,151	435	266	192	225	360	907	1,309	1,949	2,778	1,422
1931	Critical	3,042	2,696	2,363	1,357	802	878	1,093	1,892	1,672	1,873	2,462	3,299	1,953
1932	Dry	3,588	3,810	692	254	225	247	328	304	352	815	2,008	2,759	1,282
1933	Critical	3,044	2,882	2,556	950	688	497	426	827	1,380	1,898	2,393	3,019	1,713
1934	Critical	3,732	3,586	1,602	572	294	276	321	841	1,089	1,719	2,477	3,539	1,671
1935	Below Normal	3,512	2,780	1,988	327	237	199	183	188	217	516	1,225	2,012	1,115
1936	Below Normal	2,635	2,566	2,225	273	200	191	186	194	275	497	1,238	2,050	1,044
1937	Below Normal	2,645	2,668	2,313	1,271	244	207	195	199	249	555	1,313	2,137	1,166
1938	Wet	2,639	471	184	190	192	182	182	180	184	279	981	502	514
1939	Dry	424	1,072	1,359	1,259	925	386	409	386	828	882	1,122	1,994	921
1940	Above Normal	2,396	2,673	2,498	350	205	182	178	192	323	285	735	1,967	999
1941	Wet	2,239	2,273	287	188	186	182	180	180	194	343	1,006	997	688
1942	Wet	1,195	1,830	219	186	178	186	183	183	183	331	1,005	605	524
1943	Wet	718	522	209	186	184	182	187	193	313	409	1,092	2,218	534
1944	Dry	2,648	2,484	1,930	1,309	360	207	282	368	552	743	1,031	1,602	1,126
1945	Below Normal	2,539	1,578	782	981	222	204	228	256	353	487	1,124	1,943	891
1946	Below Normal	2,618	1,503	207	181	190	192	215	235	370	442	974	1,983	759
1947	Dry	2,209	2,390	1,186	1,151	516	239	264	397	852	746	1,275	2,100	1,111
1948	Below Normal	2,686	2,362	2,594	1,474	651	345	203	187	237	403	888	1,508	1,128
1949	Dry	2,175	2,323	1,656	1,580	374	189	225	273	530	816	1,818	2,614	1,215
1950	Below Normal	2,829	2,386	2,453	621	204	191	201	222	349	616	1,074	1,712	1,072
1951	Above Normal	2,504	214	182	188	182	183	196	213	400	309	738	1,488	566
1952	Wet	2,119	1,905	290	192	180	185	179	177	181	228	665	379	557
1953	Wet	560	1,504	292	181	187	191	212	186	187	300	1,055	879	478
1954	Above Normal	1,370	1,163	1,369	345	183	180	179	184	320	318	745	1,822	681
1955	Dry	2,334	1,792	574	305	282	476	482	356	669	1,028	2,011	2,613	1,077
1956	Wet	2,812	2,599	217	183	182	182	189	182	188	351	1,023	587	724
1957	Above Normal	363	925	1,461	1,076	242	181	189	205	298	335	814	2,107	683
1958	Wet	1,219	1,036	420	207	182	185	181	179	181	300	904	408	450
1959	Below Normal	547	1,512	1,860	330	189	187	304	452	576	426	916	2,426	810
1960	Dry	2,880	2,300	1,403	1,488	361	203	254	372	957	1,285	1,663	2,189	1,280
1961	Dry	2,887	2,219	1,353	1,357	359	250	324	450	911	829	1,124	1,957	1,168
1962	Below Normal	2,649	2,520	1,307	1,445	253	194	240	260	586	403	906	1,788	1,046
1963	Wet	326	391	289	339	188	188	180	185	217	275	840	1,882	442
1964	Dry	2,129	492	577	346	267	429	389	414	617	874	982	1,594	759
1965	Wet	2,542	1,627	207	181	184	186	181	188	299	420	1,257	2,011	774
1966	Below Normal	2,661	405	292	202	189	185	227	269	557	454	880	2,090	701
1967	Wet	2,526	1,882	341	207	183	184	190	180	181	208	565	352	583
1968	Below Normal	385	1,236	1,154	298	182	181	205	324	529	437	923	2,412	689
1969	Wet	2,515	1,937	531	191	191	193	187	183	192	290	960	395	647
1970	Wet	421	1,066	206	180	182	182	190	237	453	343	793	1,969	518
1971	Wet	2,130	814	198	182	184	179	183	183	213	243	717	895	510
1972	Below Normal	1,278	2,009	1,090	736	369	191	245	345	687	522	1,010	2,343	902
1973	Above Normal	3,333	811	272	193	187	182	192	209	259	348	956	2,187	761
1974	Wet	2,885	203	181	179	182	180	179	188	201	353	1,023	491	520
1975	Wet	442	1,072	818	690	205	182	186	185	186	335	905	679	491
1976	Critical	342	506	883	1,326	893	377	617	1,319	2,034	2,395	2,759	3,241	1,391
1977	Critical	2,742	2,841	1,506	1,806	475	691	1,038	1,963	1,939	2,244	2,683	3,319	1,937
1978	Above Normal	3,871	3,707	1,667	223	193	195	195	198	227	387	1,090	1,926	1,157
1979	Below Normal	2,396	2,398	2,007	503	205	191	201	222	248	512	1,428	2,374	1,057
1980	Above Normal	2,719	1,594	610	188	188	188	199	211	247	418	1,045	1,957	797
1981	Dry	2,612	2,594	1,417	349	199	186	231	386	863	936	1,325	1,850	1,079
1982	Wet	2,889	352	180	191	181	191	179	181	187	356	1,073	310	523
1983	Wet	185	183	184	196	186	181	185	181	182	189	191	180	185
1984	Wet	214	178	180	186	186	181	194	247	416	340	870	2,208	450
1985	Dry	2,158	299	208	435	433	304	360	301	523	831	1,042	1,497	699
1986	Wet	2,066	2,068	1,110	406	183	184	200	211	291	447	1,175	1,682	835
1987	Dry	2,412	2,507	2,475	1,389	396	203	245	449	834	1,183	1,577	2,133	1,317
1988	Critical	2,957	2,769	1,283	335	284	474	618	841	1,065	1,690	2,489	3,410	1,518
1989	Dry	3,982	3,082	2,148	1,509	1,560	209	188	236	629	888	1,311	1,677	1,452
1990	Critical	2,184	2,271	1,825	680	423	503	517	1,047	2,243	2,537	2,496	3,452	1,682
1991	Critical	3,879	3,793	3,466	3,125	2,086	330	253	837	2,416	2,471	2,472	3,248	2,365
1992	Critical	4,160	3,721	3,849	2,435	332	228	297	774	1,120	1,897	2,697	3,302	2,068
1993	Above Normal	3,941	3,718	1,967	231	198	185	180	185	186	308	1,090	1,737	1,161
1994	Critical	2,364	2,553	1,758	1,443	450	284	411	549	1,295	1,086	1,219	2,143	1,296
Average		2,323	1,916	1,183	687	334	248	283	392	605	768	1,320	1,951	1,001
Wet		1,700	1,167	327	231	185	184	186	190	231	316	905	1,021	554
Above Normal		2,539	1,794	1,148	365	201	184	188	197	284	344	901	1,914	838
Below Normal		2,278	1,946	1,467	632	253	206	217	254	398	482	1,076	2,033	937
Dry		2,702	2,355	1,401	976	436	260	288	345	698	965	1,522	2,174	1,177
Critical		2,779	2,708	2,090	1,432	664	448	602	1,131	1,644	1,983	2,410	3,215	1,759

Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	-3	-249	-14	0	-6	-2	2	4	3	44	108	30	-7
1924	Critical	-56	87	-23	-55	74	40	4	30	143	-125	2	21	12
1925	Dry	6	-83	-70	-49	-1	2	1	0	-1	-5	1	-132	-28
1926	Dry	-53	-29	-17	-6	1	-1	2	-2	7	-4	1	-159	-22
1927	Wet	-25	21	10	0	1	0	0	1	0	-1	-5	5	1
1928	Above Normal	0	28	14	18	4	0	0	-1	-5	-56	-52	-36	-7
1929	Critical	-147	-79	-27	2	-8	-3	1	-34	-39	-18	-23	-46	-35
1930	Dry	-20	-9	0	1	-1	0	1	2	-21	-96	25	-90	-17
1931	Critical	-160	-17	-143	-121	134	202	57	21	23	-35	31	49	3
1932	Dry	5	-7	0	-21	-14	-1	-1	0	-1	-1	1	2	-3
1933	Critical	2	1	-1	5	3	1	0	0	-1	-2	-2	5	1
1934	Critical	-3	40	1	-27	-13	-3	-1	0	0	0	2	-13	-1
1935	Below Normal	0	-10	5	3	0	-1	0	0	0	-6	15	80	7
1936	Below Normal	47	15	-13	-1	0	0	0	-1	-1	2	-2	-194	-12
1937	Below Normal	-110	-34	-1	-72	-6	0	0	0	1	5	12	-2	-17
1938	Wet	-19	25	2	0	0	0	0	0	0	0	-4	78	7
1939	Dry	30	20	11	0	-4	2	-5	12	-167	-132	-321	-394	-79
1940	Above Normal	-249	-12	-27	-2	5	0	0	0	-1	0	1	3	-24
1941	Wet	-22	58	1	0	0	0	0	0	0	-2	3	4	3
1942	Wet	88	91	1	0	0	0	0	0	0	-1	-6	4	15
1943	Wet	1	-3	0	0	0	0	0	0	0	-1	-3	2	0
1944	Dry	-13	2	-31	-12	0	1	2	-1	-60	-142	-136	-113	-42
1945	Below Normal	-73	-43	-23	-14	-1	-1	0	-1	-3	8	18	-11	-12
1946	Below Normal	-33	114	8	0	0	-1	-1	0	1	-66	83	149	21
1947	Dry	-13	25	-36	4	-9	-2	-1	0	11	-134	-138	-54	-29
1948	Below Normal	-254	20	-36	92	29	4	0	1	41	31	-51	8	-9
1949	Dry	100	-9	-13	9	-14	-1	0	0	-2	31	100	51	21
1950	Below Normal	-66	-11	0	-45	-3	0	-1	6	18	-4	-33	15	-10
1951	Above Normal	-219	6	0	0	0	0	0	5	55	5	-24	-35	-17
1952	Wet	-52	-67	1	0	0	0	0	0	0	0	5	3	-9
1953	Wet	4	5	0	0	0	0	0	0	0	0	-18	10	0
1954	Above Normal	10	4	2	0	0	0	0	0	4	2	-1	53	6
1955	Dry	-10	-19	-7	-1	-2	67	1	-7	-20	-106	51	-176	-19
1956	Wet	-176	-189	4	0	0	0	0	0	0	0	5	0	-30
1957	Above Normal	1	2	1	15	2	0	0	0	0	-14	-13	-270	-23
1958	Wet	84	79	8	1	0	0	0	0	0	0	7	4	15
1959	Below Normal	4	5	2	0	0	0	-1	-1	-10	-3	-5	-8	-1
1960	Dry	-60	-432	-909	-382	5	0	-1	-22	-5	114	298	144	-104
1961	Dry	-40	-44	11	28	24	29	-25	-12	-9	-79	158	-147	-5
1962	Below Normal	-206	-267	-32	-42	-1	0	5	3	202	9	-38	8	-30
1963	Wet	-13	27	33	19	1	0	0	0	0	20	64	30	15
1964	Dry	34	-22	-25	-4	-1	1	-27	-26	-167	-147	-380	-421	-99
1965	Wet	-269	-170	4	0	0	-1	0	-1	24	11	-42	-51	-41
1966	Below Normal	61	26	8	-1	0	1	3	1	-3	-6	-4	-59	2
1967	Wet	36	-29	10	0	0	0	0	0	0	0	5	3	2
1968	Below Normal	2	3	-1	0	0	0	0	1	0	-9	3	13	1
1969	Wet	-66	-43	16	1	0	0	0	0	0	0	0	4	-7
1970	Wet	3	3	0	0	0	0	0	0	-13	-1	4	5	0
1971	Wet	-99	-20	1	0	-1	0	0	0	0	0	0	15	-9
1972	Below Normal	14	7	2	1	1	0	1	1	-38	-37	-40	-17	-9
1973	Above Normal	294	51	16	0	0	0	0	0	0	-1	-3	-2	30
1974	Wet	44	0	0	0	0	0	0	0	0	0	0	4	4
1975	Wet	4	4	1	0	0	0	0	0	0	0	0	3	1
1976	Critical	1	1	0	-1	-1	1	-48	-98	-43	-251	42	-193	-49
1977	Critical	-363	-405	-557	-201	-1,175	-555	-107	-73	-69	137	-13	-148	-294
1978	Above Normal	46	-6	37	3	1	4	3	0	6	-1	-18	50	10
1979	Below Normal	28	4	-30	62	1	0	0	-1	0	-11	32	36	10
1980	Above Normal	-37	157	52	1	0	0	0	0	-1	0	0	0	14
1981	Dry	1	0	-1	0	0	1	4	0	-31	-12	-25	-8	-6
1982	Wet	-85	21	0	0	0	0	0	0	0	0	4	0	-5
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	40	3	-5	-16	-4	-28	-23	-1	5	0	34	-2	3
1986	Wet	45	5	-5	-5	0	0	0	-7	-27	-65	69	31	3
1987	Dry	-32	-29	22	47	17	4	-11	-15	-154	-138	-229	-421	-78
1988	Critical	-10	-15	-12	-2	0	0	0	0	-12	101	-8	-88	-4
1989	Dry	30	-3	-232	-4	-151	2	-1	0	70	8	87	-96	-24
1990	Critical	-76	-133	-95	-35	-13	0	1	-1	-2	37	50	37	-19
1991	Critical	-14	22	-33	-94	-24	0	0	0	-1	-1	0	0	-12
1992	Critical	0	1	-1	-2	0	0	0	-6	-1	3	-3	48	3
1993	Above Normal	36	31	-20	-3	0	0	0	3	5	8	-18	41	7
1994	Critical	13	19	-3	19	40	14	8	5	-127	44	-102	-158	-19
Average		-28	-20	-30	-12	-15	-3	-2	-3	-6	-15	-6	-34	-14
Wet		-25	-9	4	1	0	0	0	0	-1	-2	4	7	-2
Above Normal		-12	26	7	3	1	0	0	1	6	-6	-13	-20	0
Below Normal		-42	-30	-9	-1	1	0	0	1	15	-3	7	3	-5
Dry		0	-40	-81	-25	-9	5	-2	-5	-34	-53	-30	-124	-33
Critical		-68	-40	-75	-43	-82	-25	-7	-13	-11	-9	-2	-41	-35

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Sacramento River at Emmanton
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-16%	-5%	0%	-3%	-1%	1%	2%	1%	10%	10%	2%	0%
1924	Critical	-2%	3%	-1%	-4%	17%	13%	0%	2%	7%	-5%	0%	1%	3%
1925	Dry	0%	-2%	-4%	-3%	-1%	1%	0%	0%	0%	-1%	0%	-5%	-1%
1926	Dry	-2%	-1%	-1%	-1%	0%	0%	1%	-1%	1%	0%	0%	-5%	-1%
1927	Wet	-1%	4%	3%	0%	1%	0%	0%	0%	0%	0%	-1%	0%	1%
1928	Above Normal	0%	3%	2%	6%	2%	0%	0%	0%	-1%	-11%	-6%	-2%	-1%
1929	Critical	-5%	-3%	-1%	0%	-1%	-1%	0%	-4%	-3%	-1%	-1%	-1%	-2%
1930	Dry	-1%	0%	0%	0%	0%	0%	1%	0%	-2%	-7%	1%	-3%	-1%
1931	Critical	-5%	-1%	-6%	-8%	20%	30%	5%	1%	1%	-2%	1%	2%	3%
1932	Dry	0%	0%	0%	-8%	-6%	-1%	0%	0%	0%	0%	0%	0%	-1%
1933	Critical	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	1%	0%	-5%	-4%	-1%	0%	0%	0%	0%	0%	0%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	1%	4%	0%
1936	Below Normal	2%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-9%	-1%
1937	Below Normal	-4%	-1%	0%	-5%	-2%	0%	0%	0%	1%	1%	1%	0%	-1%
1938	Wet	-1%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	18%	2%
1939	Dry	8%	2%	1%	0%	0%	1%	-1%	3%	-17%	-13%	-22%	-16%	-5%
1940	Above Normal	-9%	0%	-1%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	-1%	3%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1942	Wet	8%	5%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	1%
1943	Wet	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	-2%	-1%	0%	0%	1%	0%	-10%	-16%	-12%	-7%	-4%
1945	Below Normal	-3%	-3%	-3%	-1%	0%	0%	0%	-1%	-1%	2%	2%	-1%	-1%
1946	Below Normal	-1%	8%	4%	0%	0%	-1%	-1%	0%	0%	-13%	9%	8%	1%
1947	Dry	-1%	1%	-3%	0%	-2%	-1%	0%	0%	1%	-15%	-10%	-2%	-3%
1948	Below Normal	-9%	1%	-1%	7%	5%	1%	0%	1%	21%	8%	-5%	1%	2%
1949	Dry	5%	0%	-1%	1%	-4%	0%	0%	0%	0%	4%	6%	2%	1%
1950	Below Normal	-2%	0%	0%	-7%	-2%	0%	0%	3%	5%	-1%	-3%	1%	-1%
1951	Above Normal	-8%	3%	0%	0%	0%	0%	0%	3%	16%	1%	-3%	-2%	1%
1952	Wet	-2%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1953	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	1%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	3%	0%
1955	Dry	0%	-1%	-1%	0%	-1%	16%	0%	-2%	-3%	-9%	3%	-6%	0%
1956	Wet	-6%	-7%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	1%	1%	0%	0%	0%	0%	-4%	-2%	-11%	-1%
1958	Wet	7%	8%	2%	1%	0%	0%	0%	0%	0%	0%	1%	1%	2%
1959	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	-1%	0%	0%
1960	Dry	-2%	-16%	-39%	-20%	1%	0%	0%	-5%	0%	10%	22%	7%	-4%
1961	Dry	-1%	-2%	1%	2%	7%	13%	9%	-3%	-1%	-9%	16%	-7%	2%
1962	Below Normal	-7%	-10%	-2%	-3%	0%	0%	2%	1%	53%	2%	-4%	0%	3%
1963	Wet	-4%	7%	13%	6%	1%	0%	0%	0%	0%	8%	8%	2%	3%
1964	Dry	2%	-4%	-4%	-1%	0%	0%	-6%	-6%	-21%	-14%	-28%	-21%	-9%
1965	Wet	-10%	-9%	2%	0%	0%	-1%	0%	0%	9%	3%	-3%	-2%	-1%
1966	Below Normal	2%	7%	3%	0%	0%	0%	2%	0%	0%	-1%	0%	-3%	1%
1967	Wet	1%	-2%	3%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1968	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	1%	0%
1969	Wet	-3%	-2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1970	Wet	1%	0%	0%	0%	0%	0%	0%	0%	-3%	0%	1%	0%	0%
1971	Wet	-4%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-5%	-7%	-4%	-1%	-1%
1973	Above Normal	10%	7%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%
1974	Wet	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-7%	-7%	-2%	-9%	2%	-6%	-2%
1977	Critical	-12%	-12%	-27%	-10%	-71%	-45%	-9%	-4%	-3%	7%	0%	-4%	-16%
1978	Above Normal	1%	0%	2%	1%	1%	2%	2%	0%	2%	0%	-2%	3%	1%
1979	Below Normal	1%	0%	-1%	14%	1%	0%	0%	0%	0%	-2%	2%	2%	1%
1980	Above Normal	-1%	11%	9%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	1%	2%	0%	-3%	-1%	-2%	0%	0%
1982	Wet	-3%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	2%	1%	-2%	-4%	-1%	-9%	-6%	0%	1%	0%	3%	2%	-1%
1986	Wet	2%	0%	0%	-1%	0%	0%	0%	-3%	-8%	-13%	6%	2%	-1%
1987	Dry	-1%	-1%	1%	3%	5%	2%	-4%	-3%	-16%	-10%	-13%	-16%	-4%
1988	Critical	0%	-1%	-1%	0%	0%	0%	0%	0%	-1%	6%	0%	-3%	0%
1989	Dry	1%	0%	-10%	0%	-9%	1%	-1%	0%	12%	1%	7%	-5%	0%
1990	Critical	-3%	-6%	-5%	-5%	-3%	0%	0%	0%	0%	1%	2%	1%	-1%
1991	Critical	0%	1%	-1%	-3%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	1%	0%
1993	Above Normal	1%	1%	-1%	-1%	0%	0%	0%	2%	3%	3%	-2%	2%	1%
1994	Critical	1%	1%	0%	1%	10%	5%	2%	1%	-9%	4%	-8%	-7%	0%
Average		-1%	0%	-1%	-1%	-1%	0%	0%	0%	0%	-1%	0%	-1%	0%
Wet		-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
Above Normal		-1%	2%	2%	1%	1%	0%	0%	0%	2%	-1%	-1%	-1%	0%
Below Normal		-1%	-1%	0%	0%	0%	0%	0%	0%	5%	0%	1%	0%	0%
Dry		1%	-2%	-4%	-2%	-1%	2%	0%	-1%	-4%	-5%	-2%	-5%	-2%
Critical		-2%	-1%	-4%	-3%	-3%	0%	-1%	-1%	-1%	0%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	2,323	2,135	1,557	943	415	222	204	203	206	230	720	1,998	930
1923	Below Normal	2,478	2,365	761	235	224	243	230	228	266	619	1,282	2,150	923
1924	Critical	2,304	2,434	2,306	2,116	680	319	503	1,133	1,536	1,625	1,575	2,063	1,549
1925	Dry	2,727	2,449	2,431	2,339	579	221	209	226	255	524	1,093	2,274	1,277
1926	Dry	2,365	2,250	2,553	2,097	633	265	296	254	601	1,058	1,594	2,253	1,352
1927	Wet	2,669	1,122	556	372	222	202	193	209	222	306	864	2,051	749
1928	Above Normal	2,526	1,362	962	536	275	201	200	222	346	434	1,229	2,315	884
1929	Critical	2,477	2,530	2,391	2,362	1,615	544	492	561	767	1,171	1,753	2,460	1,594
1930	Dry	2,382	2,699	2,117	921	458	246	217	335	699	901	1,549	2,572	1,258
1931	Critical	2,431	2,296	2,420	2,262	857	520	712	1,201	1,511	1,816	1,899	2,263	1,683
1932	Dry	2,340	2,699	1,234	431	297	261	274	293	270	478	1,236	2,370	1,015
1933	Critical	2,242	2,061	2,231	1,330	820	664	385	526	815	1,187	1,433	1,985	1,307
1934	Critical	2,548	2,390	2,390	1,090	460	276	280	537	674	1,011	1,787	2,491	1,328
1935	Below Normal	2,295	2,882	2,055	846	277	247	209	224	230	453	1,352	2,390	1,122
1936	Below Normal	2,443	2,240	2,446	822	281	239	206	219	226	542	1,238	2,324	1,102
1937	Below Normal	2,458	2,184	2,357	2,030	528	297	241	214	222	378	938	2,167	1,168
1938	Wet	2,539	1,440	241	207	309	276	221	211	219	233	656	525	590
1939	Dry	357	1,071	2,211	2,054	1,237	536	331	346	835	1,196	1,619	2,732	1,210
1940	Above Normal	2,453	2,035	2,010	980	272	209	198	215	264	317	951	2,153	1,005
1941	Wet	2,521	2,595	897	235	251	229	207	198	204	256	788	1,360	812
1942	Wet	1,306	2,166	639	224	212	203	211	208	195	237	798	755	596
1943	Wet	745	733	375	225	219	228	221	220	246	368	846	2,223	554
1944	Dry	2,602	2,405	2,436	2,228	1,101	290	255	339	587	1,200	1,505	2,301	1,437
1945	Below Normal	2,315	2,298	1,494	1,454	501	268	250	251	336	608	1,266	2,344	1,115
1946	Below Normal	2,409	2,053	435	198	221	226	220	243	305	690	1,270	2,224	874
1947	Dry	2,448	2,732	2,180	1,493	1,212	428	266	314	581	1,189	1,633	2,619	1,425
1948	Below Normal	2,570	2,581	2,257	2,330	1,111	462	328	218	200	546	1,255	2,156	1,334
1949	Dry	2,273	2,200	2,512	2,140	960	256	217	263	370	1,166	1,617	2,545	1,377
1950	Below Normal	2,170	2,274	2,490	1,352	350	216	245	236	320	576	1,086	2,066	1,115
1951	Above Normal	2,551	432	218	244	218	199	209	226	284	372	1,044	2,160	680
1952	Wet	2,259	2,697	817	240	202	221	204	186	205	219	587	445	690
1953	Wet	566	1,726	859	210	203	213	223	209	196	375	913	1,376	589
1954	Above Normal	1,299	1,808	2,156	1,105	230	195	193	210	282	371	950	2,196	916
1955	Dry	2,581	2,774	1,291	460	359	378	402	343	477	783	1,422	2,255	1,127
1956	Wet	2,216	2,858	518	264	229	207	205	213	195	242	835	699	724
1957	Above Normal	398	746	1,755	1,886	639	211	205	222	294	362	1,049	2,461	852
1958	Wet	1,778	1,408	938	295	223	244	221	190	196	244	783	541	588
1959	Below Normal	545	1,450	2,421	1,073	243	206	251	401	682	712	1,304	2,189	956
1960	Dry	2,447	2,153	2,532	2,382	1,164	289	232	373	955	1,215	1,583	2,520	1,487
1961	Dry	2,305	2,904	2,449	1,935	1,101	308	276	363	700	1,234	1,568	2,073	1,435
1962	Below Normal	2,178	2,440	2,437	1,869	626	236	232	243	373	672	1,313	2,463	1,257
1963	Wet	1,254	504	590	454	263	200	206	211	207	269	849	2,104	593
1964	Dry	2,530	1,441	780	641	304	392	460	425	729	1,348	1,709	2,305	1,089
1965	Wet	2,241	2,773	501	203	205	201	205	220	227	332	812	1,969	824
1966	Below Normal	2,434	1,242	353	283	212	206	229	264	514	695	1,266	2,436	845
1967	Wet	2,798	2,751	1,048	272	218	203	231	202	205	226	485	398	753
1968	Below Normal	391	1,473	1,773	754	219	194	212	327	601	660	1,263	2,141	834
1969	Wet	2,420	2,419	1,184	275	306	291	249	220	220	240	772	564	763
1970	Wet	362	1,285	546	234	216	199	205	238	385	399	914	2,228	601
1971	Wet	2,648	1,372	321	198	198	194	196	208	217	321	1,004	1,428	692
1972	Below Normal	1,506	2,104	1,867	1,371	889	279	223	310	630	673	1,361	2,471	1,140
1973	Above Normal	2,905	1,319	521	246	224	202	206	234	242	375	1,115	2,170	813
1974	Wet	2,748	471	195	194	196	198	198	213	203	285	1,145	821	572
1975	Wet	426	1,136	1,291	1,252	418	209	208	217	194	253	998	1,032	636
1976	Critical	384	603	1,458	2,016	1,663	744	536	943	1,749	1,891	2,091	2,801	1,407
1977	Critical	2,467	2,733	2,180	1,889	1,353	859	811	1,137	1,376	1,561	1,880	2,397	1,720
1978	Above Normal	2,638	2,605	2,427	547	236	251	262	240	220	295	858	1,966	1,046
1979	Below Normal	2,441	2,810	2,243	775	264	225	221	233	237	591	1,175	2,449	1,139
1980	Above Normal	2,643	2,082	1,057	271	270	266	236	231	234	281	938	2,066	881
1981	Dry	2,176	2,144	2,527	1,064	274	209	223	353	841	1,324	1,646	2,426	1,267
1982	Wet	2,460	1,085	211	224	215	237	213	195	198	252	895	371	546
1983	Wet	186	199	240	306	293	256	236	223	218	212	197	186	229
1984	Dry	200	191	232	245	221	196	211	247	328	415	961	2,206	471
1985	Dry	2,283	930	277	685	803	385	357	320	592	1,315	1,642	1,975	964
1986	Wet	2,108	2,430	1,985	812	273	267	240	215	237	311	806	1,790	956
1987	Dry	1,873	2,072	2,732	1,935	938	287	230	456	937	1,322	1,683	2,497	1,414
1988	Critical	2,613	2,479	2,309	940	303	332	559	598	748	1,327	1,862	2,439	1,376
1989	Dry	2,630	2,615	2,178	2,396	1,606	405	208	258	565	1,267	1,711	2,023	1,489
1990	Critical	2,317	2,611	2,351	1,557	629	511	442	662	1,417	1,847	1,954	2,411	1,559
1991	Critical	2,662	2,558	2,419	2,238	1,848	893	261	581	1,467	1,871	1,593	2,168	1,713
1992	Critical	2,903	2,492	2,800	2,180	959	301	297	534	764	1,212	1,754	2,408	1,550
1993	Above Normal	2,811	2,623	2,511	558	253	215	197	208	192	250	799	1,966	1,049
1994	Critical	2,515	2,485	2,471	2,319	1,217	380	404	443	1,191	2,037	2,171	2,982	1,718
Average		2,080	1,974	1,574	1,057	541	300	275	334	499	737	1,240	1,988	1,050
Wet		1,736	1,589	676	331	242	223	214	212	225	285	805	1,194	644
Above Normal		2,255	1,715	1,517	732	303	217	211	221	256	329	965	2,145	906
Below Normal		2,045	2,171	1,814	1,099	425	253	235	258	367	601	1,241	2,284	1,066
Dry		2,270	2,221	2,027	1,575	814	322	278	329	625	1,095	1,551	2,359	1,289
Critical		2,322	2,306	2,310	1,858	1,034	528	473	738	1,168	1,547	1,813	2,406	1,542

Shasta Lake Water Resources Investigation

Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	2,323	2,135	1,557	943	415	222	204	203	206	230	719	1,998	930
1923	Below Normal	2,501	2,074	658	234	220	238	232	230	269	616	1,267	2,164	892
1924	Critical	2,397	2,398	2,392	2,001	797	316	490	1,103	1,448	1,634	1,594	2,081	1,554
1925	Dry	2,736	2,361	2,302	2,297	530	232	213	226	256	529	1,104	2,356	1,262
1926	Dry	2,341	2,220	2,543	2,087	640	266	303	259	629	1,084	1,608	2,370	1,363
1927	Wet	2,709	1,160	580	375	223	203	193	211	222	306	870	2,055	759
1928	Above Normal	2,526	1,395	988	574	296	202	200	219	341	421	1,197	2,311	889
1929	Critical	2,609	2,459	2,419	2,378	1,595	541	492	576	834	1,242	1,718	2,414	1,606
1930	Dry	2,364	2,691	2,122	923	458	248	217	328	702	1,129	1,402	2,294	1,240
1931	Critical	2,433	2,328	2,597	2,111	1,015	657	759	1,223	1,353	1,633	1,888	2,306	1,692
1932	Dry	2,343	2,691	1,232	356	266	261	274	292	270	478	1,234	2,372	1,006
1933	Critical	2,244	2,062	2,242	1,341	827	665	385	526	815	1,185	1,431	1,988	1,309
1934	Critical	2,543	2,397	2,383	1,019	428	272	279	537	675	1,011	1,766	2,475	1,315
1935	Below Normal	2,297	2,867	2,071	860	278	241	209	224	231	466	1,335	2,397	1,123
1936	Below Normal	2,487	2,256	2,437	817	283	240	206	218	226	532	1,246	2,297	1,104
1937	Below Normal	2,355	2,150	2,387	1,876	493	296	240	214	222	372	919	2,157	1,140
1938	Wet	2,537	1,501	254	208	311	276	221	211	219	233	653	591	601
1939	Dry	397	1,087	2,227	2,048	1,929	536	330	371	792	1,252	1,666	2,435	1,197
1940	Above Normal	2,323	1,979	1,966	963	279	210	198	215	263	316	953	2,155	985
1941	Wet	2,520	2,606	905	235	252	229	207	198	203	256	787	1,364	813
1942	Wet	1,389	2,290	655	224	212	203	211	208	195	237	805	762	616
1943	Wet	747	730	373	225	219	228	221	220	246	370	854	2,229	555
1944	Dry	2,618	2,411	2,438	2,215	1,049	291	257	327	539	1,226	1,562	2,252	1,436
1945	Below Normal	2,244	2,241	1,451	1,438	507	264	249	250	333	607	1,261	2,344	1,099
1946	Below Normal	2,426	2,191	489	198	221	225	219	243	307	693	1,329	2,444	915
1947	Dry	2,619	2,660	2,098	1,435	1,190	422	264	314	580	1,218	1,678	2,643	1,427
1948	Below Normal	2,731	2,590	2,224	2,374	1,167	470	330	219	231	572	1,260	2,165	1,361
1949	Dry	2,159	2,165	2,489	2,161	937	252	216	263	369	1,073	1,610	2,639	1,361
1950	Below Normal	2,097	2,102	2,385	1,258	328	215	241	243	341	615	1,080	2,038	1,078
1951	Above Normal	2,739	473	218	246	219	199	209	232	331	375	1,003	2,133	698
1952	Wet	2,278	2,700	820	241	202	224	205	186	205	219	591	449	693
1953	Wet	570	1,733	861	210	203	213	223	210	196	376	944	1,403	595
1954	Above Normal	1,310	1,814	2,160	1,106	230	195	193	210	283	372	949	2,208	919
1955	Dry	2,666	2,750	1,269	457	362	397	429	339	496	927	1,598	2,533	1,185
1956	Wet	2,082	2,676	513	264	225	205	205	213	195	242	828	697	695
1957	Above Normal	400	748	1,756	1,929	656	212	205	223	294	361	1,028	2,392	850
1958	Wet	1,833	1,543	965	299	223	244	221	189	196	244	788	547	608
1959	Below Normal	549	1,456	2,425	1,074	243	206	249	401	683	714	1,310	2,190	958
1960	Dry	2,547	2,745	2,096	1,934	1,201	291	232	338	755	1,194	1,575	2,648	1,463
1961	Dry	2,422	2,881	2,531	1,991	1,172	344	301	365	695	1,255	1,702	2,451	1,509
1962	Below Normal	2,358	2,790	2,403	1,744	608	236	241	247	443	669	1,221	2,472	1,286
1963	Wet	1,222	535	708	498	274	200	206	211	207	274	834	2,109	606
1964	Dry	2,556	1,401	743	628	303	393	459	390	618	1,400	1,745	1,958	1,049
1965	Wet	2,049	2,537	492	204	203	198	204	218	248	339	771	1,933	783
1966	Below Normal	2,286	1,260	368	282	211	210	233	264	513	693	1,259	2,417	833
1967	Wet	2,687	2,768	1,077	274	218	203	232	202	205	226	488	401	748
1968	Below Normal	393	1,477	1,770	752	219	194	212	332	610	661	1,233	2,115	831
1969	Wet	2,484	2,388	1,203	279	306	292	249	220	220	240	772	569	769
1970	Wet	366	1,289	547	234	216	198	204	238	381	398	917	2,233	602
1971	Wet	2,638	1,343	321	199	197	193	196	208	217	322	1,004	1,446	690
1972	Below Normal	1,527	2,112	1,870	1,372	890	280	223	311	627	673	1,367	2,459	1,143
1973	Above Normal	3,096	1,429	448	246	224	202	207	234	242	375	1,118	2,169	833
1974	Wet	2,743	472	195	194	196	198	198	213	203	285	1,145	826	572
1975	Wet	430	1,141	1,292	1,252	418	209	208	217	194	253	998	1,035	637
1976	Critical	386	604	1,459	2,015	1,662	745	525	928	1,834	2,124	2,129	2,964	1,448
1977	Critical	2,412	2,811	2,243	1,785	923	457	692	1,090	1,327	1,419	1,676	2,241	1,590
1978	Above Normal	2,709	2,571	2,536	578	239	269	272	240	225	309	906	2,003	1,071
1979	Below Normal	2,466	2,819	2,216	861	275	225	220	233	238	631	1,184	2,455	1,152
1980	Above Normal	2,616	2,255	1,178	276	264	265	236	230	235	281	938	2,065	903
1981	Dry	2,175	2,143	2,526	1,064	273	211	226	348	817	1,322	1,648	2,408	1,263
1982	Wet	2,486	1,161	215	224	214	237	213	195	198	252	889	370	555
1983	Wet	186	199	240	306	293	256	236	223	218	212	197	186	229
1984	Wet	200	191	232	245	221	196	211	247	328	415	961	2,204	471
1985	Dry	2,268	936	267	652	792	379	337	322	602	1,315	1,681	2,029	965
1986	Wet	2,089	2,423	1,979	801	274	265	239	213	231	310	766	1,770	947
1987	Dry	1,923	2,126	2,728	1,981	1,012	317	239	394	821	1,314	1,698	2,514	1,422
1988	Critical	2,481	2,458	2,292	933	302	332	559	598	753	1,249	1,715	2,342	1,334
1989	Dry	2,668	2,593	2,224	2,384	1,601	420	209	257	605	1,277	1,719	2,100	1,505
1990	Critical	2,283	2,761	2,264	1,468	630	511	442	661	1,415	1,871	2,006	2,445	1,563
1991	Critical	2,643	2,588	2,378	2,175	1,846	896	261	581	1,466	1,870	1,592	2,168	1,705
1992	Critical	2,902	2,493	2,800	2,179	958	301	297	538	776	1,217	1,824	2,470	1,563
1993	Above Normal	2,786	2,656	2,454	536	252	215	197	211	194	267	871	2,025	1,055
1994	Critical	2,553	2,486	2,455	2,334	1,309	417	415	447	1,124	2,065	2,148	2,770	1,710
Average		2,089	1,985	1,570	1,039	541	298	274	332	493	744	1,240	1,992	1,050
Wet		1,726	1,590	687	333	243	222	214	212	225	286	803	1,199	645
Above Normal		2,283	1,745	1,526	740	308	219	212	222	261	331	968	2,146	913
Below Normal		2,051	2,170	1,797	1,081	424	253	236	259	377	608	1,234	2,294	1,065
Dry		2,300	2,241	1,990	1,538	816	329	282	321	597	1,125	1,577	2,375	1,291
Critical		2,324	2,320	2,327	1,811	1,024	509	466	734	1,152	1,543	1,791	2,389	1,533

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	23	-291	-103	-2	-3	-5	2	2	3	-3	-15	14	-32
1924	Critical	93	-36	85	-114	117	-4	-12	-30	-88	9	19	18	5
1925	Dry	9	-87	-130	-42	-49	11	4	1	0	5	11	82	-15
1926	Dry	-24	-30	-10	-10	7	1	7	5	28	26	14	117	11
1927	Wet	40	38	25	3	2	0	0	2	1	0	7	4	10
1928	Above Normal	1	33	26	38	21	1	-1	-3	-5	-13	-33	-5	5
1929	Critical	132	-71	28	16	-20	-3	0	15	67	71	-35	-46	13
1930	Dry	-18	-8	5	2	0	3	1	-6	3	228	-148	-279	-18
1931	Critical	1	32	177	-152	158	137	47	22	-158	-183	-12	43	9
1932	Dry	3	-7	-2	-74	-32	0	0	0	-1	0	-2	1	-10
1933	Critical	2	1	11	11	6	1	0	0	0	-1	-1	2	3
1934	Critical	-5	7	-7	-71	-32	-4	-1	0	0	0	-21	-16	-13
1935	Below Normal	1	-15	16	14	1	-6	0	0	0	13	-18	7	1
1936	Below Normal	44	17	-9	-5	2	1	0	-1	0	-10	8	-28	2
1937	Below Normal	-102	-34	30	-154	-35	0	0	0	0	-6	-18	-10	-28
1938	Wet	-1	61	13	2	2	0	0	0	0	0	-3	66	12
1939	Dry	40	16	16	-7	-8	0	-1	24	-43	56	48	-298	-13
1940	Above Normal	-130	-56	-44	-17	7	2	0	0	-1	0	2	2	-20
1941	Wet	-1	11	7	0	1	0	0	0	-1	0	-1	4	2
1942	Wet	84	124	16	0	0	0	0	0	0	0	8	7	20
1943	Wet	2	-4	-1	1	0	0	0	0	0	3	8	5	1
1944	Dry	16	6	2	-13	-3	1	2	-12	-48	26	57	-48	-1
1945	Below Normal	-71	-57	-43	-16	6	-4	0	-1	-4	-1	-5	0	-16
1946	Below Normal	18	138	55	1	-1	-1	-1	0	2	3	59	221	41
1947	Dry	171	-72	-82	-58	-22	-6	-2	0	-2	29	45	24	2
1948	Below Normal	161	9	-33	43	56	8	2	1	31	26	5	9	27
1949	Dry	-114	-35	-22	21	-23	-4	-1	0	-1	-93	-7	94	-15
1950	Below Normal	-73	-172	-105	-94	-22	-2	-4	7	21	38	-5	-29	-37
1951	Above Normal	188	41	0	2	1	0	0	6	47	3	-40	-26	19
1952	Wet	19	3	2	1	0	3	1	0	0	0	4	4	3
1953	Wet	4	7	2	0	0	0	0	0	0	1	31	26	6
1954	Above Normal	10	6	3	1	0	0	0	0	2	1	-1	11	3
1955	Dry	85	-24	-22	-3	3	20	27	-4	19	144	176	278	58
1956	Wet	-134	-182	-5	0	-4	-2	0	0	0	0	-7	-2	-28
1957	Above Normal	1	2	2	43	17	1	0	1	0	-1	-20	-69	-2
1958	Wet	55	135	27	4	0	0	0	0	0	0	6	6	19
1959	Below Normal	4	6	3	1	0	0	-2	0	1	2	6	1	2
1960	Dry	100	591	-436	-448	36	2	0	-35	-200	-21	-8	128	-24
1961	Dry	117	-23	82	56	72	36	26	2	-5	20	134	378	75
1962	Below Normal	180	350	-34	-125	-18	0	9	4	70	-3	-92	9	29
1963	Wet	-33	31	117	44	11	0	0	0	-1	5	-15	6	14
1964	Dry	26	-40	-37	-13	-1	1	-1	-35	-111	53	36	-347	-39
1965	Wet	-191	-236	-10	0	-2	-2	-1	-2	21	8	-41	-36	-41
1966	Below Normal	-149	18	15	-1	0	4	4	1	-1	-3	-8	-19	-12
1967	Wet	-112	17	29	2	0	0	0	0	0	0	4	3	-5
1968	Below Normal	2	4	-3	-2	0	0	0	5	9	1	-29	-26	-3
1969	Wet	64	-30	19	4	0	1	0	0	0	0	0	5	5
1970	Wet	3	4	1	0	0	0	0	0	-4	-1	3	5	1
1971	Wet	-10	-29	0	0	-1	-1	0	0	0	0	1	17	-2
1972	Below Normal	21	7	3	2	1	1	0	1	-3	0	6	-12	2
1973	Above Normal	192	110	-73	0	0	0	0	0	0	0	2	0	19
1974	Wet	-5	2	0	0	0	0	0	0	0	0	0	4	0
1975	Wet	4	5	2	0	0	0	0	0	0	0	-1	3	1
1976	Critical	2	1	1	0	0	1	-12	-15	86	232	38	163	41
1977	Critical	-55	78	64	-104	-430	-402	-119	-46	-49	-142	-204	-156	-131
1978	Above Normal	70	-34	109	31	3	18	10	0	5	13	48	37	26
1979	Below Normal	26	9	-28	86	10	-1	-1	1	1	41	9	6	13
1980	Above Normal	-27	173	121	5	-6	-1	0	-1	1	0	0	0	22
1981	Dry	-1	-1	-1	-1	0	2	3	-4	-24	-3	2	-18	-4
1982	Wet	26	77	4	0	0	0	0	0	0	0	-6	-2	8
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	-1	-2	0
1985	Dry	-15	6	-10	-33	-11	-6	-21	1	9	-1	39	54	1
1986	Wet	-19	-7	-6	-11	1	-2	-1	-2	-6	-1	-39	-19	-9
1987	Dry	50	53	-3	47	74	30	8	-62	-116	-8	14	17	9
1988	Critical	-131	-21	-18	-7	-1	0	0	0	4	-77	-147	-98	-41
1989	Dry	38	-22	46	-12	-5	15	1	-1	40	10	8	78	16
1990	Critical	-34	150	-87	-89	1	0	0	-1	-2	23	52	35	4
1991	Critical	-19	30	-40	-62	-2	3	0	0	-1	-1	0	-1	-8
1992	Critical	0	0	1	-1	-1	0	0	4	12	4	70	63	13
1993	Above Normal	-24	34	-57	-22	0	0	0	3	2	17	72	59	7
1994	Critical	38	1	-16	14	92	37	11	4	-67	28	-23	-212	-8
Average		9	11	-4	-17	0	-2	0	-2	-6	8	1	4	0
Wet		-10	1	12	2	0	0	0	0	1	1	-2	5	1
Above Normal		28	31	9	8	4	2	1	1	5	2	3	1	8
Below Normal		6	-1	-17	-18	0	0	1	1	9	7	-7	10	-1
Dry		30	20	-38	-37	2	7	3	-8	-28	29	26	16	2
Critical		2	14	17	-47	-10	-19	-7	-4	-16	-3	-22	-17	-9

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Jersey Point
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	1%	-12%	-14%	-1%	-1%	-2%	1%	1%	1%	0%	-1%	1%	-2%
1924	Critical	4%	-1%	4%	-5%	17%	-1%	-2%	-3%	-6%	1%	1%	1%	1%
1925	Dry	0%	-4%	-5%	-2%	-8%	5%	2%	0%	0%	1%	1%	4%	0%
1926	Dry	-1%	-1%	0%	0%	1%	0%	2%	2%	5%	2%	1%	5%	1%
1927	Wet	1%	3%	4%	1%	1%	0%	0%	1%	0%	0%	1%	0%	1%
1928	Above Normal	0%	2%	3%	7%	8%	0%	0%	-1%	-1%	-3%	-3%	0%	1%
1929	Critical	5%	-3%	1%	1%	-1%	0%	0%	3%	9%	6%	-2%	-2%	1%
1930	Dry	-1%	0%	0%	0%	0%	1%	0%	-2%	0%	25%	-10%	-11%	0%
1931	Critical	0%	1%	7%	-7%	18%	26%	7%	2%	-10%	-10%	-1%	2%	3%
1932	Dry	0%	0%	0%	-17%	-11%	0%	0%	0%	0%	0%	0%	0%	-2%
1933	Critical	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-7%	-7%	-1%	0%	0%	0%	0%	-1%	-1%	-1%
1935	Below Normal	0%	-1%	1%	2%	0%	-2%	0%	0%	0%	3%	-1%	0%	0%
1936	Below Normal	2%	1%	0%	-1%	1%	0%	0%	0%	0%	-2%	1%	-1%	0%
1937	Below Normal	-4%	-2%	1%	-8%	-7%	0%	0%	0%	-1%	-2%	0%	0%	-2%
1938	Wet	0%	4%	5%	1%	1%	0%	0%	0%	0%	0%	0%	13%	2%
1939	Dry	11%	1%	1%	0%	-1%	0%	0%	7%	-5%	5%	3%	-11%	1%
1940	Above Normal	-5%	-3%	-2%	-2%	3%	1%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	6%	6%	2%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%
1944	Dry	1%	0%	0%	-1%	0%	0%	1%	-3%	-8%	2%	4%	-2%	-1%
1945	Below Normal	-3%	-2%	-3%	-1%	1%	-1%	0%	0%	-1%	0%	0%	0%	-1%
1946	Below Normal	1%	7%	13%	0%	0%	-1%	0%	0%	1%	0%	5%	10%	3%
1947	Dry	7%	-3%	-4%	-4%	-2%	-1%	-1%	0%	0%	2%	3%	1%	0%
1948	Below Normal	6%	0%	-1%	2%	5%	2%	1%	0%	16%	5%	0%	0%	3%
1949	Dry	-5%	-2%	-1%	1%	-2%	-2%	0%	0%	-8%	-8%	0%	4%	-1%
1950	Below Normal	-3%	-8%	-4%	-7%	-6%	-1%	-2%	3%	7%	7%	0%	-1%	-1%
1951	Above Normal	7%	10%	0%	1%	0%	0%	0%	3%	17%	1%	-4%	-1%	3%
1952	Wet	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	1%	0%
1953	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	2%	1%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
1955	Dry	3%	-1%	-2%	-1%	1%	5%	7%	-1%	4%	18%	12%	12%	5%
1956	Wet	-6%	-6%	-1%	0%	-2%	-1%	0%	0%	0%	0%	-1%	0%	-1%
1957	Above Normal	0%	0%	0%	2%	3%	0%	0%	0%	0%	0%	-2%	-3%	0%
1958	Wet	3%	10%	3%	1%	0%	0%	0%	0%	0%	0%	1%	1%	2%
1959	Below Normal	1%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1960	Dry	4%	27%	-17%	-19%	3%	1%	0%	-9%	-21%	-2%	0%	5%	-2%
1961	Dry	5%	-1%	3%	3%	7%	12%	9%	1%	-1%	2%	9%	18%	6%
1962	Below Normal	8%	14%	-1%	-7%	-3%	0%	4%	2%	19%	0%	-7%	0%	2%
1963	Wet	-3%	6%	20%	10%	4%	0%	0%	0%	0%	2%	-2%	0%	3%
1964	Dry	1%	-3%	-5%	-2%	0%	0%	0%	-8%	-15%	4%	2%	-15%	-3%
1965	Wet	-9%	-9%	-2%	0%	-1%	-1%	0%	-1%	9%	2%	-5%	-2%	-1%
1966	Below Normal	-6%	1%	4%	0%	0%	2%	2%	0%	0%	0%	-1%	-1%	0%
1967	Wet	-4%	1%	3%	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1968	Below Normal	1%	0%	0%	0%	0%	0%	0%	2%	1%	0%	-2%	-1%	0%
1969	Wet	3%	-1%	2%	2%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1970	Wet	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1971	Wet	0%	-2%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	1%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	7%	8%	-14%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1975	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-2%	-2%	5%	12%	2%	6%	2%
1977	Critical	-2%	3%	3%	-5%	-32%	-47%	-15%	-4%	-4%	-9%	-11%	-7%	-11%
1978	Above Normal	3%	-1%	4%	6%	1%	7%	4%	0%	2%	5%	6%	2%	3%
1979	Below Normal	1%	0%	-1%	11%	4%	0%	0%	0%	0%	7%	1%	0%	2%
1980	Above Normal	-1%	8%	11%	2%	-2%	0%	0%	-1%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	1%	1%	-1%	-3%	0%	0%	-1%	0%
1982	Wet	1%	7%	2%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	1%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	-1%	1%	-3%	-5%	-1%	-2%	-6%	0%	2%	0%	2%	3%	-1%
1986	Wet	-1%	0%	0%	-1%	0%	-1%	0%	-1%	-2%	0%	-5%	-1%	-1%
1987	Dry	3%	3%	0%	2%	8%	11%	4%	-14%	-12%	-1%	1%	1%	0%
1988	Critical	-5%	-1%	-1%	-1%	0%	0%	0%	0%	1%	-6%	-8%	-4%	-2%
1989	Dry	1%	-1%	2%	0%	0%	4%	1%	0%	7%	1%	0%	4%	1%
1990	Critical	-1%	6%	-4%	-6%	0%	0%	0%	0%	0%	1%	3%	1%	0%
1991	Critical	-1%	1%	-2%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	4%	3%	1%
1993	Above Normal	-1%	1%	-2%	-4%	0%	0%	0%	1%	1%	7%	9%	3%	1%
1994	Critical	2%	0%	-1%	1%	8%	10%	3%	1%	-6%	1%	-1%	-7%	1%
Average		1%	1%	0%	-1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Wet		0%	1%	2%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
Above Normal		1%	3%	0%	1%	1%	1%	0%	0%	2%	1%	1%	0%	1%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	1%	3%	1%	-1%	0%	0%
Dry		2%	1%	-2%	-3%	0%	2%	1%	-2%	-3%	3%	2%	1%	0%
Critical		0%	1%	1%	-3%	0%	-1%	-1%	0%	-1%	0%	-1%	-1%	0%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
No Action Alternative (2030)

SVI														
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	641	609	730	764	632	504	342	330	323	495	465	495	527
1923	Below Normal	522	537	659	552	507	665	352	352	513	597	474	471	517
1924	Critical	493	541	735	768	944	1,012	671	642	707	678	639	598	702
1925	Dry	625	609	764	835	848	861	404	386	600	635	583	556	642
1926	Dry	579	588	763	802	944	1,002	510	505	674	654	599	562	682
1927	Wet	602	568	760	803	728	724	371	359	593	627	558	530	602
1928	Above Normal	508	506	727	738	836	573	388	415	619	633	579	551	590
1929	Critical	560	575	758	770	928	1,001	595	563	648	649	611	573	686
1930	Dry	619	617	799	841	991	984	588	568	686	664	609	566	711
1931	Critical	616	609	795	844	990	1,011	729	678	710	684	653	598	743
1932	Dry	640	637	714	792	706	817	525	471	622	631	583	552	641
1933	Critical	569	580	775	821	990	1,003	599	558	647	657	609	577	699
1934	Critical	607	630	774	823	992	1,006	686	635	683	676	652	598	730
1935	Below Normal	636	632	790	772	929	806	381	378	589	589	564	542	634
1936	Below Normal	551	576	781	795	550	303	325	389	550	596	483	499	533
1937	Below Normal	504	547	739	725	433	354	255	251	535	579	482	499	492
1938	Wet	522	518	513	552	368	314	252	244	242	362	318	331	378
1939	Dry	399	479	691	718	815	758	465	462	658	644	588	542	602
1940	Above Normal	560	594	779	702	689	311	311	349	492	598	518	501	534
1941	Wet	518	542	622	631	414	292	243	250	395	457	434	480	440
1942	Wet	472	491	629	433	282	380	294	263	386	434	333	342	395
1943	Wet	460	469	631	369	255	290	276	351	429	570	464	491	421
1944	Dry	498	499	680	707	754	752	388	426	588	617	573	559	587
1945	Below Normal	550	554	736	734	490	334	360	346	471	550	454	486	505
1946	Below Normal	465	516	490	549	428	455	366	351	497	610	548	521	483
1947	Dry	486	522	677	707	780	989	553	514	638	654	605	573	641
1948	Below Normal	576	598	771	787	988	1,002	528	498	584	598	576	563	672
1949	Dry	575	592	762	802	945	871	592	571	604	637	592	575	677
1950	Below Normal	599	587	752	800	915	890	476	409	546	624	586	558	645
1951	Above Normal	575	595	390	316	237	405	364	233	472	614	578	561	445
1952	Wet	552	572	720	546	603	404	212	194	277	362	315	343	425
1953	Wet	504	512	689	607	609	817	340	318	477	576	561	546	546
1954	Above Normal	547	577	738	751	848	894	479	457	607	631	586	573	641
1955	Dry	581	593	732	728	930	983	581	568	648	660	610	581	683
1956	Wet	618	615	695	372	344	330	357	350	388	459	427	355	442
1957	Above Normal	476	534	714	727	861	847	350	324	512	604	564	542	588
1958	Wet	530	576	732	743	695	456	204	177	317	404	324	344	458
1959	Below Normal	490	532	681	706	713	785	431	442	637	646	595	541	600
1960	Dry	579	617	766	776	873	997	586	560	669	658	627	605	693
1961	Dry	652	638	781	846	990	1,002	674	640	693	693	660	628	741
1962	Below Normal	668	646	775	867	702	669	460	441	629	616	573	560	634
1963	Wet	594	633	781	805	793	847	413	380	544	592	551	532	622
1964	Dry	549	568	773	773	947	1,001	592	555	640	641	606	581	685
1965	Wet	604	620	718	428	359	466	328	321	431	529	410	460	473
1966	Below Normal	511	440	602	628	564	798	427	431	632	644	605	591	573
1967	Wet	592	633	720	740	842	513	261	212	279	286	305	330	476
1968	Below Normal	466	544	697	717	700	901	420	416	625	643	581	569	607
1969	Wet	576	600	751	649	368	386	279	233	233	365	325	350	426
1970	Wet	389	473	619	276	317	328	331	367	429	597	556	528	434
1971	Wet	516	574	748	722	854	842	348	340	498	577	559	545	594
1972	Below Normal	522	591	755	760	842	995	546	509	647	643	592	586	666
1973	Above Normal	595	592	759	803	664	557	412	384	489	587	473	487	567
1974	Wet	471	499	603	509	571	289	341	365	419	540	449	425	457
1975	Wet	407	457	676	701	333	286	351	343	405	529	438	483	451
1976	Critical	405	482	723	727	853	999	582	555	673	669	592	589	654
1977	Critical	615	625	767	816	988	1,010	653	601	697	688	690	683	736
1978	Above Normal	699	697	811	735	722	653	371	300	418	511	442	426	566
1979	Below Normal	542	488	710	635	337	305	360	287	409	602	471	508	471
1980	Above Normal	487	524	732	420	333	383	335	337	361	436	415	461	435
1981	Dry	440	472	692	716	840	801	458	419	639	626	593	573	606
1982	Wet	550	592	752	698	281	297	219	197	347	392	309	239	406
1983	Wet	191	262	373	342	318	252	290	255	233	218	169	224	261
1984	Wet	332	200	299	328	209	330	342	338	490	591	495	442	366
1985	Dry	409	468	738	730	771	805	486	469	629	667	572	538	607
1986	Wet	545	551	731	771	447	305	231	211	368	554	444	422	465
1987	Dry	413	414	679	724	902	837	566	541	677	663	623	598	636
1988	Critical	606	617	768	812	988	1,010	642	616	695	679	670	631	728
1989	Dry	685	650	780	861	992	1,004	644	604	664	645	630	562	727
1990	Critical	639	643	783	871	993	1,007	678	622	696	658	647	628	739
1991	Critical	649	636	794	898	1,050	902	655	627	699	685	669	661	744
1992	Critical	677	672	821	923	908	997	693	670	688	672	689	683	758
1993	Above Normal	729	729	845	679	715	767	521	517	490	528	485	488	625
1994	Critical	538	575	806	884	995	1,012	630	608	707	627	498	642	710
Average		543	560	713	699	702	695	442	423	540	584	530	520	579
Wet		502	522	655	573	476	436	299	289	390	477	416	416	454
Above Normal		582	596	722	664	654	590	387	365	478	564	511	509	552
Below Normal		543	556	710	716	650	662	406	393	562	610	542	535	574
Dry		546	560	737	772	877	904	538	516	645	649	603	572	660
Critical		581	599	775	830	968	998	651	615	688	668	635	622	719

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
Alternative CP3 (2030)

SVI																
Year	Year Type	October	November	December	January	February	March	April	May	June	July	August	September	Average		
1922	Above Normal	641	609	730	764	632	504	342	330	323	495	465	495	527		
1923	Below Normal	522	537	659	552	507	665	352	352	513	597	473	470	517		
1924	Critical	493	541	735	768	944	1,012	671	642	707	678	639	598	702		
1925	Dry	625	609	764	835	848	861	404	386	600	635	583	556	642		
1926	Dry	579	588	763	802	944	1,002	510	505	674	655	599	562	682		
1927	Wet	602	568	760	803	728	724	371	359	593	627	558	530	602		
1928	Above Normal	508	506	727	738	836	573	388	416	620	634	580	551	590		
1929	Critical	560	575	758	770	928	1,001	595	563	648	649	612	573	686		
1930	Dry	619	617	799	841	991	984	588	568	686	664	609	566	711		
1931	Critical	616	609	795	844	990	1,011	729	678	710	684	653	598	743		
1932	Dry	640	637	714	792	706	817	525	471	622	631	583	552	641		
1933	Critical	570	580	775	821	990	1,003	599	558	647	657	609	577	699		
1934	Critical	607	630	774	823	992	1,006	686	635	683	676	652	598	730		
1935	Below Normal	636	632	790	772	929	806	381	377	589	588	564	542	634		
1936	Below Normal	551	576	781	795	550	303	325	389	550	596	483	499	533		
1937	Below Normal	504	547	739	724	433	354	254	251	535	579	482	499	492		
1938	Wet	522	518	513	552	368	314	252	244	242	362	318	331	378		
1939	Dry	399	479	691	718	815	758	466	462	659	644	589	542	602		
1940	Above Normal	560	594	779	702	689	311	311	349	491	598	518	501	534		
1941	Wet	518	542	622	631	414	292	243	250	395	457	434	480	440		
1942	Wet	472	491	629	434	282	380	294	263	386	434	333	342	395		
1943	Wet	460	469	631	369	255	290	276	351	429	570	464	491	421		
1944	Dry	498	499	680	707	754	752	388	426	588	617	573	559	587		
1945	Below Normal	550	554	736	734	491	334	360	346	471	550	454	486	505		
1946	Below Normal	465	516	490	549	428	455	366	351	497	610	548	521	483		
1947	Dry	486	522	677	707	780	989	553	514	638	654	605	573	641		
1948	Below Normal	576	598	771	787	988	1,002	528	498	584	598	576	563	672		
1949	Dry	575	592	762	802	945	871	592	571	604	637	592	575	677		
1950	Below Normal	599	587	752	800	915	890	476	409	546	624	586	558	645		
1951	Above Normal	575	595	390	316	237	405	364	233	472	614	578	561	445		
1952	Wet	552	572	720	546	603	404	212	194	277	362	315	343	425		
1953	Wet	504	512	689	607	609	817	340	318	477	576	561	546	546		
1954	Above Normal	547	577	738	751	848	894	479	457	607	631	586	573	641		
1955	Dry	581	593	732	728	930	983	582	569	648	660	611	581	683		
1956	Wet	618	615	696	372	345	330	357	350	388	459	427	355	443		
1957	Above Normal	476	534	714	727	861	847	350	324	512	604	564	542	588		
1958	Wet	530	576	732	743	695	456	204	177	317	404	324	344	458		
1959	Below Normal	490	532	681	706	713	785	431	442	637	646	595	541	600		
1960	Dry	579	617	766	776	873	997	586	560	669	658	627	605	693		
1961	Dry	652	638	781	846	990	1,002	674	640	693	680	657	628	740		
1962	Below Normal	668	646	775	867	702	669	460	441	629	616	573	560	634		
1963	Wet	594	633	781	805	793	847	413	380	544	592	551	532	622		
1964	Dry	549	568	773	773	947	1,001	593	555	640	642	606	581	686		
1965	Wet	604	620	718	428	359	466	328	321	431	529	410	460	473		
1966	Below Normal	511	440	602	628	564	798	427	431	632	644	605	591	573		
1967	Wet	592	633	720	740	842	513	261	212	279	286	305	330	476		
1968	Below Normal	466	544	697	717	700	901	420	416	625	643	581	569	607		
1969	Wet	576	600	751	649	368	386	279	233	233	365	325	350	426		
1970	Wet	389	473	619	276	317	328	331	367	429	597	556	528	434		
1971	Wet	516	574	748	722	854	842	348	340	498	577	559	545	594		
1972	Below Normal	522	591	755	760	842	995	545	509	647	643	592	586	666		
1973	Above Normal	595	592	759	803	664	557	412	384	489	587	473	487	567		
1974	Wet	471	499	603	509	571	289	341	365	419	540	449	425	457		
1975	Wet	407	457	676	701	333	286	351	343	405	529	438	483	451		
1976	Critical	405	482	723	727	853	999	582	555	673	670	593	589	654		
1977	Critical	615	625	766	816	988	1,010	653	601	697	687	690	683	736		
1978	Above Normal	699	697	811	735	722	653	371	300	418	511	442	426	566		
1979	Below Normal	542	488	710	635	337	305	360	287	410	602	471	508	471		
1980	Above Normal	487	524	732	420	333	383	335	337	361	436	415	461	435		
1981	Dry	440	472	692	716	840	801	458	419	639	626	593	573	606		
1982	Wet	550	592	752	698	281	297	219	197	347	392	309	239	406		
1983	Wet	191	262	373	342	318	252	290	255	233	218	169	224	261		
1984	Wet	332	200	299	328	209	330	342	338	490	591	495	442	366		
1985	Dry	409	468	738	730	771	805	486	469	629	667	572	538	607		
1986	Wet	545	551	730	771	447	305	231	211	370	554	444	422	465		
1987	Dry	413	414	679	724	902	837	566	541	677	663	623	598	636		
1988	Critical	606	617	768	812	988	1,010	642	616	695	674	670	631	728		
1989	Dry	685	650	780	861	992	1,004	644	604	664	645	631	562	727		
1990	Critical	639	643	783	871	993	1,007	678	622	696	658	647	628	739		
1991	Critical	649	637	794	898	1,050	902	655	627	699	684	669	661	744		
1992	Critical	677	672	821	923	908	997	693	670	688	672	689	683	758		
1993	Above Normal	729	729	845	679	715	767	521	517	490	528	488	488	625		
1994	Critical	538	575	806	884	995	1,012	630	608	707	626	490	642	709		
Average		543	560	713	699	702	695	442	423	540	583	530	520	579		
Wet		502	522	655	573	476	436	299	289	390	477	416	416	454		
Above Normal		582	596	722	664	654	590	387	365	478	564	511	509	552		
Below Normal		543	556	710	716	650	662	406	393	562	610	542	535	574		
Dry		546	560	737	772	877	904	538	516	646	649	603	572	660		
Critical		581	599	775	830	968	998	651	615	688	668	634	622	719		

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge (umhos/cm)
 Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	1	1	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	1	0	0	0	0	0
1956	Wet	0	0	0	0	1	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	0	0	0	-14	-3	0	-1
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	1	0	1	1	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	1	0	0	0
1977	Critical	0	0	-1	0	0	0	0	0	0	-1	0	0	0
1978	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	1	1	2	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	-5	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	1	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	-1	-8	0	-1
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	-1	0	0	0
Critical		0	0	0	0	0	0	0	0	0	-1	-1	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Brandt Bridge
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
 No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	647	606	732	756	620	499	333	327	318	493	458	492	523
1923	Below Normal	522	535	660	545	505	667	339	349	509	594	461	467	513
1924	Critical	492	542	744	765	954	1,009	629	639	698	666	630	591	697
1925	Dry	625	607	768	836	843	860	380	389	597	630	573	551	638
1926	Dry	579	588	773	800	953	1,001	478	506	667	643	588	556	678
1927	Wet	603	565	771	800	720	722	354	357	592	622	547	524	598
1928	Above Normal	506	505	733	735	841	560	374	413	616	626	568	545	585
1929	Critical	558	574	767	765	937	1,000	555	566	634	639	601	566	680
1930	Dry	620	616	812	834	1,000	981	551	574	674	655	598	560	706
1931	Critical	617	607	806	840	1,000	1,006	687	675	698	673	645	589	737
1932	Dry	641	636	713	794	695	819	500	471	616	626	573	545	636
1933	Critical	568	578	784	814	1,000	1,000	557	563	633	650	597	570	693
1934	Critical	607	629	781	822	1,000	1,001	640	636	665	667	644	589	723
1935	Below Normal	636	629	796	766	937	797	363	376	586	580	556	536	630
1936	Below Normal	550	576	792	791	541	296	321	388	545	591	469	496	530
1937	Below Normal	503	548	747	717	423	347	250	248	534	574	470	496	488
1938	Wet	522	517	512	551	360	312	250	242	239	360	310	328	375
1939	Dry	400	481	699	715	817	738	437	463	652	633	576	534	595
1940	Above Normal	559	595	788	688	673	296	309	346	483	595	506	497	528
1941	Wet	518	543	622	625	404	288	241	247	393	454	426	477	436
1942	Wet	471	491	632	422	277	381	290	260	384	430	323	338	392
1943	Wet	462	468	636	360	251	289	274	349	423	568	450	488	418
1944	Dry	496	498	686	705	751	750	365	427	581	610	562	553	582
1945	Below Normal	548	552	743	731	480	330	354	343	461	546	440	483	501
1946	Below Normal	463	517	488	549	423	454	355	347	490	608	536	516	479
1947	Dry	483	521	682	705	781	999	510	516	623	648	593	566	636
1948	Below Normal	575	598	780	785	1,000	1,000	495	501	572	590	567	558	668
1949	Dry	574	592	771	799	953	864	562	574	588	632	581	570	672
1950	Below Normal	598	586	761	792	921	886	444	407	536	620	576	552	640
1951	Above Normal	575	594	381	311	232	408	357	225	468	613	567	555	441
1952	Wet	550	572	720	527	603	398	207	191	275	359	307	340	421
1953	Wet	507	512	693	601	609	821	311	315	468	571	552	541	542
1954	Above Normal	545	578	746	747	853	891	451	454	601	624	576	568	636
1955	Dry	579	592	736	717	940	983	550	573	633	654	599	575	678
1956	Wet	618	614	695	357	343	326	353	347	383	457	418	348	438
1957	Above Normal	479	536	723	723	867	843	321	325	503	600	553	537	584
1958	Wet	529	578	739	735	673	440	197	175	316	401	315	340	453
1959	Below Normal	493	533	687	703	707	783	401	442	631	637	583	537	595
1960	Dry	578	619	775	771	875	999	546	563	651	644	616	599	686
1961	Dry	653	636	790	841	1,000	1,000	635	638	676	675	654	621	735
1962	Below Normal	668	643	782	869	686	667	439	443	621	606	563	556	629
1963	Wet	594	634	789	802	789	846	389	381	535	587	541	528	618
1964	Dry	549	567	786	767	955	1,000	553	557	627	632	595	575	680
1965	Wet	604	620	719	415	356	467	323	315	421	525	398	458	469
1966	Below Normal	512	435	606	627	560	804	396	430	627	637	595	586	568
1967	Wet	590	633	723	713	848	497	252	209	278	283	299	327	471
1968	Below Normal	469	546	704	710	697	909	387	415	619	635	573	563	602
1969	Wet	575	600	755	638	358	386	276	231	231	363	317	347	423
1970	Wet	389	475	623	264	317	326	322	363	412	597	544	522	430
1971	Wet	515	570	743	718	860	840	321	339	487	571	549	539	587
1972	Below Normal	520	593	765	755	846	998	504	511	633	635	580	583	660
1973	Above Normal	595	586	766	763	642	551	400	379	481	584	460	483	558
1974	Wet	469	498	604	503	572	280	341	362	413	538	436	418	453
1975	Wet	405	458	684	700	316	284	349	337	399	526	427	481	447
1976	Critical	401	484	733	722	857	999	542	558	658	661	581	586	648
1977	Critical	615	624	775	815	1,000	1,000	596	605	679	674	687	678	729
1978	Above Normal	699	695	816	721	719	646	363	297	415	508	431	422	561
1979	Below Normal	544	484	718	626	325	303	358	282	398	602	458	505	467
1980	Above Normal	485	524	741	407	328	384	331	333	358	434	408	458	433
1981	Dry	437	472	701	711	845	796	433	416	635	615	583	567	601
1982	Wet	549	592	756	684	269	292	217	194	346	389	301	236	402
1983	Wet	189	260	375	334	315	247	290	254	231	216	164	223	258
1984	Wet	334	196	298	328	205	331	335	333	484	588	483	435	362
1985	Dry	408	467	746	727	772	804	458	467	620	665	559	533	602
1986	Wet	544	550	739	766	430	300	228	207	367	551	430	418	461
1987	Dry	410	412	689	723	911	824	528	546	662	652	612	591	630
1988	Critical	605	616	778	807	1,000	1,005	601	617	680	654	665	623	721
1989	Dry	687	647	786	863	1,000	1,001	598	603	629	617	622	555	717
1990	Critical	643	642	793	872	1,000	1,000	614	625	679	629	637	622	730
1991	Critical	648	633	804	904	1,061	887	621	625	686	669	660	655	738
1992	Critical	677	671	831	927	900	1,000	651	665	654	653	690	676	750
1993	Above Normal	732	728	850	650	691	759	500	526	476	524	476	484	616
1994	Critical	539	576	818	883	1,000	1,009	579	614	690	699	665	643	726
Average		543	559	719	692	701	692	419	422	531	578	523	515	574
Wet		502	521	658	564	470	432	291	286	385	474	407	412	450
Above Normal		582	595	728	650	647	584	374	362	472	560	500	504	546
Below Normal		543	555	716	712	647	660	386	391	554	604	530	531	569
Dry		545	559	745	769	881	901	505	518	633	639	593	566	654
Critical		581	598	785	828	976	993	606	615	671	661	642	616	714

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	647	606	732	756	620	499	333	327	318	493	458	492	523
1923	Below Normal	522	535	660	545	505	667	339	349	509	594	461	467	513
1924	Critical	492	542	744	765	954	1,009	629	639	698	666	630	591	697
1925	Dry	625	607	768	836	843	860	380	389	597	630	573	551	638
1926	Dry	579	588	773	800	953	1,001	478	506	667	644	588	556	678
1927	Wet	603	565	771	800	720	722	354	357	592	622	547	524	598
1928	Above Normal	506	505	733	735	841	560	374	413	616	627	569	545	585
1929	Critical	558	574	767	765	937	1,000	555	566	634	640	601	566	680
1930	Dry	620	616	812	834	1,000	981	551	573	674	655	598	560	706
1931	Critical	617	607	806	840	1,000	1,006	687	675	698	673	645	589	737
1932	Dry	641	636	713	794	695	819	500	471	616	626	573	545	636
1933	Critical	568	578	784	814	1,000	1,000	557	563	633	650	597	570	693
1934	Critical	607	629	781	822	1,000	1,001	640	636	665	667	644	589	723
1935	Below Normal	636	629	796	766	937	797	363	376	586	580	556	536	630
1936	Below Normal	550	576	792	791	541	296	321	388	544	591	469	496	530
1937	Below Normal	503	548	747	716	423	348	250	248	534	573	470	496	488
1938	Wet	522	517	512	551	360	312	250	242	239	360	310	328	375
1939	Dry	400	481	699	715	817	738	437	463	652	634	577	535	596
1940	Above Normal	559	595	788	688	674	296	309	345	483	595	506	497	528
1941	Wet	518	543	622	625	403	288	241	247	393	454	426	477	436
1942	Wet	471	491	632	422	277	381	290	260	384	430	323	338	392
1943	Wet	462	468	636	360	251	289	274	349	423	568	450	488	418
1944	Dry	496	498	686	705	751	750	365	427	581	610	562	553	582
1945	Below Normal	548	552	743	731	482	330	354	343	461	546	440	483	501
1946	Below Normal	463	517	488	549	423	454	355	348	490	608	536	516	479
1947	Dry	483	521	682	705	781	999	510	516	623	648	594	566	636
1948	Below Normal	575	598	780	785	1,000	1,000	495	501	572	590	567	558	668
1949	Dry	574	592	771	799	953	864	562	574	588	632	581	570	672
1950	Below Normal	598	586	761	792	921	886	444	407	536	620	576	553	640
1951	Above Normal	575	594	381	311	232	408	357	225	468	613	567	555	441
1952	Wet	550	572	720	527	603	398	207	191	275	359	307	340	421
1953	Wet	507	512	693	601	609	821	311	315	468	571	552	541	542
1954	Above Normal	545	578	746	747	853	891	451	454	601	624	576	568	636
1955	Dry	579	592	736	717	940	983	550	574	634	654	600	575	678
1956	Wet	618	614	696	357	344	326	353	347	383	457	418	348	438
1957	Above Normal	479	536	723	723	867	843	321	325	503	600	553	537	584
1958	Wet	529	578	739	735	673	440	197	175	316	401	315	340	453
1959	Below Normal	493	533	687	703	707	783	401	442	631	637	583	537	595
1960	Dry	578	619	775	771	875	999	546	563	651	645	617	599	686
1961	Dry	653	636	790	841	1,000	1,000	635	638	677	675	654	622	735
1962	Below Normal	668	643	782	869	686	667	439	443	621	606	563	556	629
1963	Wet	594	634	789	802	789	846	389	381	535	587	541	528	618
1964	Dry	549	567	786	767	955	1,000	553	558	627	633	596	575	681
1965	Wet	605	620	719	416	357	467	323	316	421	525	398	458	469
1966	Below Normal	512	435	606	627	560	804	396	430	627	637	595	586	568
1967	Wet	590	633	723	713	848	497	252	209	278	283	299	327	471
1968	Below Normal	469	546	704	710	697	909	387	415	619	635	573	563	602
1969	Wet	575	600	755	638	358	386	276	231	231	363	317	347	423
1970	Wet	389	475	623	264	317	326	322	364	413	598	544	522	430
1971	Wet	515	570	743	718	860	840	321	339	487	571	549	539	587
1972	Below Normal	520	593	765	755	846	998	504	511	633	635	580	583	660
1973	Above Normal	595	586	766	763	642	551	400	379	481	584	460	483	558
1974	Wet	469	498	604	503	572	280	341	362	413	538	436	418	453
1975	Wet	405	458	684	700	316	284	349	337	399	526	427	481	447
1976	Critical	401	484	733	722	857	999	542	558	658	662	582	586	649
1977	Critical	615	624	775	815	1,000	1,000	596	605	679	674	687	678	729
1978	Above Normal	699	695	816	721	719	646	363	297	415	508	431	422	561
1979	Below Normal	544	484	718	626	325	303	358	282	399	602	458	505	467
1980	Above Normal	485	524	741	407	329	384	331	333	358	434	408	458	433
1981	Dry	437	472	701	711	845	796	433	416	635	615	583	567	601
1982	Wet	549	592	756	684	269	292	217	194	346	389	301	236	402
1983	Wet	189	260	375	334	315	247	290	254	231	216	164	223	258
1984	Wet	334	196	298	328	205	331	335	333	484	588	483	435	362
1985	Dry	408	467	746	727	772	804	458	467	620	665	560	533	602
1986	Wet	544	549	739	766	430	300	229	207	368	552	431	418	461
1987	Dry	411	412	689	723	911	824	528	546	662	653	612	591	630
1988	Critical	605	616	778	807	1,000	1,005	601	617	680	654	665	623	721
1989	Dry	687	647	786	863	1,000	1,001	598	603	629	618	622	555	717
1990	Critical	643	642	793	872	1,000	1,000	614	625	679	629	637	622	730
1991	Critical	648	633	804	904	1,061	887	621	625	686	669	660	655	738
1992	Critical	677	671	831	927	900	1,000	651	665	654	653	690	676	750
1993	Above Normal	732	728	850	650	691	759	500	526	476	524	476	484	616
1994	Critical	539	576	818	883	1,000	1,009	579	614	690	699	665	643	726
Average		543	559	719	692	701	692	419	422	531	578	523	515	574
Wet		502	521	658	564	470	432	292	286	385	474	407	412	450
Above Normal		582	595	728	650	647	584	374	362	472	560	500	504	546
Below Normal		543	555	716	712	647	660	386	391	554	604	530	531	569
Dry		545	559	745	769	881	901	505	518	633	640	593	566	655
Critical		581	598	785	828	976	993	606	616	671	661	642	616	714

Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis (umhos/cm)
 Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1924	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	1	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	0	0	0	0	1	1	0	0
1940	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	Below Normal	0	0	0	0	1	0	0	0	0	0	0	0	0
1946	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	1	0	1	0	0	0
1956	Wet	0	0	0	0	1	0	0	0	0	0	0	0	0
1957	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	1	0	1	1	0	0
1965	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	1	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	1	0	0	0
1977	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	Below Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	1	1	2	0	0	0	0
1987	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	1	0	0	0
1990	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at San Joaquin River at Vernalis
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1940	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1945	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1948	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1950	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1961	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1962	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1963	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1965	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1978	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	606	608	620	639	679	517	392	362	329	497	373	451	506
1923	Below Normal	594	605	656	574	523	489	407	391	414	365	395	519	494
1924	Critical	564	599	673	746	898	1,002	737	612	650	576	579	570	684
1925	Dry	671	710	731	804	781	639	461	346	450	418	485	531	585
1926	Dry	658	625	691	773	697	704	476	461	476	456	496	560	589
1927	Wet	678	543	351	404	499	435	357	370	364	353	348	478	432
1928	Above Normal	600	533	404	460	386	577	425	395	392	400	374	551	458
1929	Critical	675	631	731	787	882	911	689	548	570	509	528	590	669
1930	Dry	698	701	762	616	526	539	429	454	476	499	467	572	562
1931	Critical	703	651	708	804	924	892	680	602	628	545	596	603	695
1932	Dry	682	706	720	477	748	761	598	515	491	465	457	553	598
1933	Critical	665	616	678	773	775	826	622	523	564	511	542	550	637
1934	Critical	645	716	708	704	745	938	685	576	599	501	525	596	661
1935	Below Normal	684	704	816	671	647	493	394	413	403	381	399	549	546
1936	Below Normal	665	613	684	686	557	317	357	381	449	366	394	514	499
1937	Below Normal	641	605	658	794	457	399	381	334	476	417	394	479	503
1938	Wet	630	651	519	571	391	324	263	247	246	367	325	336	406
1939	Dry	292	309	509	788	780	797	573	454	432	453	463	587	536
1940	Above Normal	711	621	683	765	736	335	330	378	414	359	346	501	515
1941	Wet	617	624	628	661	461	305	307	256	400	462	394	417	461
1942	Wet	387	463	631	483	297	386	339	328	394	439	342	346	403
1943	Wet	316	336	348	379	275	294	313	365	437	414	370	471	360
1944	Dry	638	610	672	760	818	503	437	413	414	415	477	531	557
1945	Below Normal	648	606	590	556	503	347	446	391	401	378	398	523	482
1946	Below Normal	614	552	495	562	446	464	438	404	415	361	400	521	473
1947	Dry	629	607	713	662	650	552	471	486	442	419	475	586	558
1948	Below Normal	717	646	758	743	891	627	439	427	378	338	402	519	574
1949	Dry	613	598	672	826	781	514	454	472	442	402	507	580	572
1950	Below Normal	684	612	697	743	468	411	419	394	372	371	380	477	502
1951	Above Normal	604	477	402	355	268	412	381	350	347	350	338	532	401
1952	Wet	620	627	724	644	621	414	220	199	280	368	323	348	449
1953	Wet	301	388	620	624	622	568	407	345	342	331	358	434	445
1954	Above Normal	415	478	590	791	402	425	403	425	383	364	342	510	461
1955	Dry	657	675	703	556	457	490	491	486	447	403	475	554	533
1956	Wet	658	678	716	441	363	339	377	379	396	463	406	383	467
1957	Above Normal	291	304	438	678	666	455	405	342	363	356	349	533	432
1958	Wet	606	398	486	449	677	552	217	181	320	408	333	348	415
1959	Below Normal	306	352	568	765	492	516	504	430	419	388	385	537	472
1960	Dry	657	639	684	825	808	505	425	477	436	454	459	558	577
1961	Dry	686	669	824	800	747	563	453	475	444	419	466	530	590
1962	Below Normal	623	630	726	780	755	507	422	405	401	363	389	583	549
1963	Wet	647	343	397	424	460	465	441	363	375	335	338	473	422
1964	Dry	609	622	376	461	471	532	508	483	421	420	517	543	497
1965	Wet	648	657	651	454	374	472	363	391	403	369	370	450	467
1966	Below Normal	588	577	604	644	583	432	417	408	397	374	382	566	498
1967	Wet	731	705	757	783	425	521	276	217	283	290	311	334	470
1968	Below Normal	298	336	536	649	452	407	427	424	402	378	369	537	435
1969	Wet	642	640	626	712	402	391	283	236	236	370	333	354	436
1970	Wet	294	320	447	297	334	336	383	378	380	371	349	508	366
1971	Wet	668	567	540	366	390	406	377	352	341	327	336	468	428
1972	Below Normal	430	507	620	581	619	491	419	446	419	391	384	573	490
1973	Above Normal	749	626	465	725	774	585	437	422	429	355	364	513	537
1974	Wet	650	476	605	535	584	303	316	376	426	407	377	429	457
1975	Wet	304	316	479	513	351	296	345	386	413	410	364	424	384
1976	Critical	301	287	392	664	838	771	534	519	593	603	600	639	562
1977	Critical	743	664	776	702	891	971	762	631	632	526	551	599	704
1978	Above Normal	733	765	793	753	741	675	380	306	423	515	405	459	579
1979	Below Normal	584	625	695	667	371	316	366	381	387	355	404	526	473
1980	Above Normal	670	588	520	440	355	390	403	390	371	440	396	462	452
1981	Dry	575	557	662	791	439	430	440	424	429	451	479	583	522
1982	Wet	653	600	370	615	299	317	222	202	351	398	317	243	382
1983	Wet	216	277	376	391	335	276	298	257	236	221	177	226	274
1984	Wet	258	204	306	338	226	336	400	413	421	357	354	503	343
1985	Dry	582	521	354	346	495	533	514	456	402	413	528	521	472
1986	Wet	575	588	707	605	487	313	241	217	372	555	433	429	460
1987	Dry	512	536	646	802	723	615	494	472	446	456	511	572	565
1988	Critical	709	668	739	749	726	901	591	526	523	442	544	618	645
1989	Dry	722	745	776	728	954	606	399	435	377	404	503	527	598
1990	Critical	589	641	758	675	733	626	542	486	553	569	597	609	615
1991	Critical	737	764	774	846	934	713	540	494	531	585	609	565	674
1992	Critical	708	811	789	919	775	589	426	455	473	427	526	598	625
1993	Above Normal	723	781	853	794	765	584	379	385	486	532	382	463	594
1994	Critical	585	653	712	812	867	579	448	451	469	577	602	714	622
Average		586	571	618	640	593	524	430	405	423	421	424	506	512
Wet		529	495	537	509	423	383	321	308	353	382	346	400	415
Above Normal		610	578	577	640	577	496	394	375	394	417	367	498	493
Below Normal		577	569	650	672	555	444	417	402	410	373	391	530	499
Dry		618	614	656	688	680	580	476	457	439	434	485	556	557
Critical		635	642	703	765	833	810	603	535	565	531	567	604	649

Shasta Lake Water Resources Investigation
 Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
 Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average	
Year	Year Type														
1922	Above Normal	606	609	620	639	679	517	392	362	329	497	374	450	506	
1923	Below Normal	596	587	610	573	523	490	409	392	414	365	393	513	489	
1924	Critical	571	606	669	765	760	951	692	605	659	576	576	565	666	
1925	Dry	675	704	706	777	859	770	484	348	444	411	477	534	599	
1926	Dry	662	619	686	770	692	687	471	455	464	456	498	569	586	
1927	Wet	689	548	356	408	503	446	360	374	363	353	348	479	436	
1928	Above Normal	601	535	409	467	394	577	421	394	393	379	364	552	457	
1929	Critical	680	635	710	807	879	909	668	541	509	467	528	583	680	
1930	Dry	691	699	761	617	518	464	412	453	473	436	491	532	546	
1931	Critical	671	645	715	835	778	829	674	604	641	531	579	607	676	
1932	Dry	688	707	719	512	749	762	599	515	491	465	457	553	601	
1933	Critical	666	617	674	774	774	825	622	523	564	511	542	549	637	
1934	Critical	645	716	710	711	743	937	683	575	599	501	525	595	662	
1935	Below Normal	684	704	812	675	647	540	404	414	403	378	399	545	550	
1936	Below Normal	672	618	685	684	557	317	358	380	449	367	394	513	500	
1937	Below Normal	625	594	655	790	456	399	381	334	479	421	396	478	501	
1938	Wet	629	662	519	571	391	324	260	247	246	366	325	336	406	
1939	Dry	296	311	512	790	776	793	572	455	428	442	484	564	535	
1940	Above Normal	662	602	679	759	741	335	330	378	415	360	347	502	509	
1941	Wet	618	625	628	661	461	305	307	256	400	462	394	417	461	
1942	Wet	393	486	632	483	297	386	339	328	394	439	342	346	405	
1943	Wet	316	336	348	379	274	294	313	365	437	414	370	472	360	
1944	Dry	640	611	672	760	816	506	439	411	408	409	490	545	559	
1945	Below Normal	638	596	580	549	504	347	445	391	401	378	398	522	479	
1946	Below Normal	614	563	495	562	445	464	437	404	415	359	401	558	476	
1947	Dry	661	619	684	651	637	591	474	486	451	425	483	606	564	
1948	Below Normal	723	657	753	739	903	635	440	428	376	347	392	529	577	
1949	Dry	612	584	666	821	785	499	450	472	442	397	483	590	567	
1950	Below Normal	692	594	664	720	453	407	419	388	370	368	382	472	494	
1951	Above Normal	618	494	402	355	268	411	381	348	344	358	336	525	403	
1952	Wet	616	631	729	644	621	415	220	199	280	368	323	348	449	
1953	Wet	301	389	621	624	622	569	407	345	343	331	359	439	446	
1954	Above Normal	418	479	591	791	402	425	402	425	384	366	342	510	461	
1955	Dry	666	682	692	554	455	607	517	488	430	398	450	588	544	
1956	Wet	673	636	715	441	363	339	377	379	396	463	406	383	464	
1957	Above Normal	291	304	438	682	676	456	405	342	362	353	347	528	432	
1958	Wet	594	421	501	452	677	552	217	181	320	408	333	348	417	
1959	Below Normal	306	353	569	765	492	515	507	430	417	387	386	539	472	
1960	Dry	663	663	753	688	775	505	425	477	463	454	493	569	577	
1961	Dry	707	672	821	832	770	717	494	482	442	421	477	591	619	
1962	Below Normal	669	651	791	743	753	507	419	404	415	378	372	578	557	
1963	Wet	637	338	425	442	463	466	443	362	376	339	342	467	425	
1964	Dry	612	618	368	455	469	533	507	484	421	424	556	524	498	
1965	Wet	591	615	624	454	374	472	362	387	393	362	369	444	454	
1966	Below Normal	575	572	604	645	583	413	411	408	395	372	380	564	494	
1967	Wet	719	696	776	785	424	521	276	217	283	290	311	334	469	
1968	Below Normal	298	336	536	648	450	407	426	426	402	378	367	529	434	
1969	Wet	640	644	621	713	402	391	283	236	236	370	333	354	435	
1970	Wet	294	321	448	297	334	336	383	378	378	369	349	508	366	
1971	Wet	668	561	539	366	369	396	377	352	341	327	336	470	425	
1972	Below Normal	434	510	621	582	619	491	419	446	413	386	384	579	490	
1973	Above Normal	765	666	430	715	774	585	439	422	429	355	364	513	538	
1974	Wet	649	478	605	535	584	303	316	376	426	407	377	429	457	
1975	Wet	305	317	480	513	351	296	345	386	413	410	364	424	384	
1976	Critical	301	287	392	664	838	763	530	513	585	614	612	661	563	
1977	Critical	756	634	820	683	713	896	680	588	620	530	562	578	672	
1978	Above Normal	695	766	785	788	742	675	380	306	423	515	403	464	578	
1979	Below Normal	590	628	695	667	371	316	365	383	386	355	410	529	475	
1980	Above Normal	670	596	561	440	356	390	403	388	371	440	397	462	456	
1981	Dry	575	557	662	791	440	426	439	423	428	448	481	581	521	
1982	Wet	654	615	378	615	299	317	222	202	351	398	317	243	384	
1983	Wet	216	277	376	389	334	277	299	257	236	221	177	226	274	
1984	Wet	258	204	306	338	226	336	400	413	421	357	354	503	343	
1985	Dry	581	522	355	343	487	501	501	455	403	414	531	533	469	
1986	Wet	579	586	706	602	488	313	241	218	374	433	388	426	446	
1987	Dry	514	540	653	818	720	553	467	451	430	443	498	568	555	
1988	Critical	704	663	736	745	737	903	592	526	515	433	537	596	640	
1989	Dry	710	751	762	734	945	593	397	434	382	412	496	541	596	
1990	Critical	586	644	796	649	685	609	540	486	553	570	602	617	611	
1991	Critical	741	761	776	839	922	709	540	494	531	585	608	565	673	
1992	Critical	707	811	789	919	775	592	427	454	469	426	525	609	625	
1993	Above Normal	730	786	860	794	765	584	380	388	486	532	380	472	596	
1994	Critical	594	657	710	809	884	597	454	454	462	565	621	676	624	
Average		586	572	619	638	586	524	428	404	422	417	424	507	511	
Wet		526	495	540	510	422	383	321	308	353	376	344	400	415	
Above Normal		605	584	578	643	580	496	393	375	394	415	365	498	494	
Below Normal		580	569	648	667	554	446	417	402	410	374	390	532	499	
Dry		622	616	654	682	681	594	478	455	438	428	490	562	558	
Critical		635	640	708	767	791	793	592	530	559	526	568	600	642	

Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	2	-18	-45	0	0	1	2	0	0	0	-2	-6	-6
1924	Critical	7	7	-4	19	-138	-51	-45	-7	9	-1	-3	-4	-18
1925	Dry	4	-6	-25	-26	78	131	23	1	-6	-6	-8	3	14
1926	Dry	4	-6	-5	-2	-4	-18	-5	-6	-13	0	2	9	-4
1927	Wet	10	5	5	3	4	10	3	3	0	0	0	1	4
1928	Above Normal	0	3	6	7	8	0	-4	-2	2	-20	-10	1	-1
1929	Critical	5	4	-21	20	-3	-2	-2	-7	-61	-42	-1	-8	-10
1930	Dry	-7	-3	-1	1	-8	-75	-17	-1	-3	-63	24	-40	-16
1931	Critical	-32	-6	7	30	-146	-63	-6	2	13	-14	-17	3	-19
1932	Dry	5	0	0	35	1	1	1	0	1	0	1	1	4
1933	Critical	1	0	-4	1	-1	0	0	0	0	0	0	-1	0
1934	Critical	0	0	2	7	-2	-1	-1	0	0	0	0	-1	0
1935	Below Normal	0	0	-3	4	0	46	10	0	-1	-3	1	-3	4
1936	Below Normal	7	5	2	-2	0	0	1	-1	0	1	0	-1	1
1937	Below Normal	-17	-11	-3	-3	-1	0	0	0	3	4	2	-1	-2
1938	Wet	-1	11	1	0	0	0	-3	0	-1	0	0	0	0
1939	Dry	4	2	3	2	-3	-4	-1	0	-4	-11	21	-23	-1
1940	Above Normal	-49	-19	-4	-6	4	0	-1	0	0	1	0	1	-6
1941	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	6	22	1	0	0	0	0	0	0	0	0	0	2
1943	Wet	1	0	0	0	0	0	0	0	0	-1	0	1	0
1944	Dry	1	2	0	1	-2	3	2	-2	-6	-6	13	14	2
1945	Below Normal	-10	-9	-10	-8	1	0	-1	0	0	0	0	-2	-3
1946	Below Normal	-1	10	1	0	-1	0	-1	0	0	-2	1	38	4
1947	Dry	33	12	-29	-10	-13	39	3	0	9	6	9	20	6
1948	Below Normal	6	11	-5	-3	12	8	1	1	-2	9	-10	10	3
1949	Dry	-1	-14	-6	-5	5	-15	-4	0	0	-5	-25	10	-5
1950	Below Normal	8	-18	-32	-22	-15	-4	1	-7	-2	-3	2	-6	-8
1951	Above Normal	14	16	0	0	0	0	0	-3	-3	8	-3	-6	2
1952	Wet	-3	3	5	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	1	1	0	0	1	0	0	1	0	0	5	1
1954	Above Normal	3	1	1	0	0	0	0	0	0	2	0	0	1
1955	Dry	9	7	-11	-2	-2	117	26	2	-17	-5	-25	34	11
1956	Wet	15	-42	-1	0	1	0	0	0	0	0	0	-1	-2
1957	Above Normal	0	0	0	4	10	1	0	0	-1	-3	-2	-5	0
1958	Wet	-12	22	16	3	0	0	0	0	0	0	0	0	2
1959	Below Normal	0	0	1	1	-1	-1	3	-1	-2	-1	0	2	0
1960	Dry	6	24	69	-137	-32	0	0	1	28	0	34	11	0
1961	Dry	20	2	-3	32	23	154	41	7	-2	2	11	61	29
1962	Below Normal	46	21	65	-37	-1	0	-3	-1	14	15	-17	-5	8
1963	Wet	-10	-5	28	18	4	1	2	0	1	4	4	-6	3
1964	Dry	3	-4	-8	-6	-2	1	-1	1	0	4	39	-18	1
1965	Wet	-57	-42	-27	0	0	0	-1	-4	-10	-7	-1	-5	-13
1966	Below Normal	-13	-5	0	0	0	-19	-6	0	-1	-2	-1	-2	-4
1967	Wet	-12	-9	18	2	-1	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	-1	-1	0	-1	1	0	-1	-2	-8	-1
1969	Wet	-1	4	-5	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	1	0	0	0	0	0	-1	-2	0	0	0
1971	Wet	0	-5	-1	0	-22	-10	0	0	0	0	0	1	-3
1972	Below Normal	4	2	1	1	1	0	0	0	-6	-4	1	6	0
1973	Above Normal	17	40	-35	-10	0	0	2	0	-1	0	0	1	1
1974	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	1	1	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	-8	-4	-7	-7	11	12	22	2
1977	Critical	13	-30	44	-19	-178	-75	-81	-43	-12	4	11	-22	-32
1978	Above Normal	-38	1	-8	36	0	0	0	0	0	0	-2	5	-1
1979	Below Normal	6	3	0	0	0	0	-1	2	0	0	6	3	2
1980	Above Normal	0	8	41	1	1	1	0	-1	0	0	1	0	4
1981	Dry	0	0	0	0	1	-4	-2	-1	-1	-2	2	-2	-1
1982	Wet	1	15	8	0	0	0	0	0	0	0	0	0	2
1983	Wet	0	0	0	-1	-1	1	1	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	-1	1	0	-4	-7	-33	-13	-1	1	1	3	11	-3
1986	Wet	5	-2	-1	-2	0	0	0	1	2	-122	-45	-3	-14
1987	Dry	1	4	7	16	-3	-62	-27	-21	-16	-12	-13	-4	-11
1988	Critical	-5	-6	-3	-4	10	2	1	0	-8	-10	-8	-22	-4
1989	Dry	-12	6	-14	6	-9	-13	-2	-1	5	8	-7	14	-1
1990	Critical	-3	2	38	-26	-48	-17	-2	-1	0	1	5	8	-3
1991	Critical	4	-3	2	-7	-11	-4	0	0	0	0	0	0	-2
1992	Critical	0	0	0	0	0	4	1	-1	-4	-1	-1	11	1
1993	Above Normal	7	5	6	0	0	0	0	3	0	0	-2	9	2
1994	Critical	9	5	-2	-3	17	18	6	2	-7	-12	19	-38	1
Average		0	0	1	-1	-7	1	-1	-1	-2	-4	0	1	-1
Wet		-3	-1	2	1	-1	0	0	0	0	-6	-2	0	-1
Above Normal		-5	6	1	3	2	0	0	0	0	-1	-2	1	0
Below Normal		3	-1	-2	-5	-1	2	0	0	0	1	-1	2	0
Dry		4	2	-1	-6	1	14	2	-1	-1	-6	5	6	2
Critical		0	-2	5	2	-42	-16	-11	-5	-7	-5	1	-4	-7

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River near Tracy Road Bridge
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-3%	-7%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%
1924	Critical	1%	1%	-1%	3%	-15%	-5%	-6%	-1%	1%	0%	-1%	-1%	-2%
1925	Dry	1%	-1%	-3%	-3%	10%	20%	5%	0%	-1%	-1%	-2%	1%	2%
1926	Dry	1%	-1%	-1%	0%	-1%	-2%	-1%	-1%	-3%	0%	0%	2%	-1%
1927	Wet	1%	1%	2%	1%	1%	2%	1%	1%	0%	0%	0%	0%	1%
1928	Above Normal	0%	0%	1%	1%	2%	0%	-1%	0%	0%	-5%	-3%	0%	0%
1929	Critical	1%	1%	-3%	3%	0%	0%	0%	-1%	-11%	-8%	0%	-1%	-2%
1930	Dry	-1%	0%	0%	0%	-2%	-14%	-4%	0%	-1%	-13%	5%	-7%	-3%
1931	Critical	-5%	-1%	1%	4%	-16%	-7%	-1%	0%	2%	-3%	-3%	1%	-2%
1932	Dry	1%	0%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	1%	0%	9%	3%	0%	0%	-1%	0%	-1%	1%
1936	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Normal	-3%	-2%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%
1938	Wet	0%	2%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%
1939	Dry	1%	1%	1%	0%	0%	0%	0%	0%	-1%	-2%	4%	-4%	0%
1940	Above Normal	-7%	-3%	-1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	1%	0%	0%	-1%	-2%	3%	3%	0%
1945	Below Normal	-2%	-2%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	2%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	7%	1%
1947	Dry	5%	2%	-4%	-2%	-2%	7%	1%	0%	2%	1%	2%	3%	1%
1948	Below Normal	1%	2%	-1%	0%	1%	1%	0%	0%	-1%	3%	-2%	2%	0%
1949	Dry	0%	-2%	-1%	-1%	1%	-3%	-1%	0%	0%	-1%	-5%	2%	-1%
1950	Below Normal	1%	-3%	-5%	-3%	-3%	-1%	0%	-2%	-1%	-1%	1%	-1%	-1%
1951	Above Normal	2%	3%	0%	0%	0%	0%	0%	-1%	-1%	2%	-1%	-1%	0%
1952	Wet	-1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	1%	1%	-2%	0%	0%	24%	5%	0%	-4%	-1%	-5%	6%	2%
1956	Wet	2%	-6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	1%	1%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1958	Wet	-2%	6%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1960	Dry	1%	4%	10%	-17%	-4%	0%	0%	0%	6%	0%	7%	2%	1%
1961	Dry	3%	0%	0%	4%	3%	27%	9%	1%	0%	0%	2%	11%	5%
1962	Below Normal	7%	3%	9%	-5%	0%	0%	-1%	0%	3%	4%	-4%	-1%	1%
1963	Wet	-2%	-1%	7%	4%	1%	0%	0%	0%	0%	1%	1%	-1%	1%
1964	Dry	0%	-1%	-2%	-1%	0%	0%	0%	0%	0%	1%	8%	-3%	0%
1965	Wet	-9%	-6%	-4%	0%	0%	0%	0%	-1%	-3%	-2%	0%	-1%	-2%
1966	Below Normal	-2%	-1%	0%	0%	0%	-4%	-1%	0%	0%	0%	0%	0%	-1%
1967	Wet	-2%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%
1969	Wet	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-6%	-2%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	0%	1%	0%
1973	Above Normal	2%	6%	-7%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-1%	-1%	-1%	2%	2%	3%	0%	0%
1977	Critical	2%	-5%	6%	-3%	-20%	-8%	-11%	-7%	-2%	1%	2%	-4%	-4%
1978	Above Normal	-5%	0%	-1%	5%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	2%	0%	0%
1980	Above Normal	0%	1%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	-1%	0%	0%	0%	-1%	0%	0%	0%
1982	Wet	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-6%	-2%	0%	0%	0%	1%	2%	-1%
1986	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	-22%	-10%	-1%	-3%
1987	Dry	0%	1%	1%	2%	0%	-10%	-6%	-5%	-4%	-3%	-3%	-1%	-2%
1988	Critical	-1%	-1%	0%	-1%	1%	0%	0%	-2%	-2%	-3%	-1%	-4%	-1%
1989	Dry	-2%	1%	-2%	1%	-1%	-2%	-1%	0%	1%	2%	-1%	3%	0%
1990	Critical	-1%	0%	5%	-4%	-6%	-3%	0%	0%	0%	0%	1%	1%	-1%
1991	Critical	1%	0%	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	1%	0%	0%	-1%	0%	0%	2%	0%
1993	Above Normal	1%	1%	1%	0%	0%	0%	0%	1%	0%	0%	-1%	2%	0%
1994	Critical	1%	1%	0%	0%	2%	3%	1%	1%	-2%	-2%	3%	-5%	0%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		1%	0%	0%	-1%	0%	3%	0%	0%	0%	-1%	1%	1%	0%
Critical		0%	0%	1%	0%	-5%	-2%	-1%	-1%	-1%	-1%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	451	486	730	661	632	505	398	342	324	495	363	360	479
1923	Below Normal	437	461	660	553	509	667	427	362	515	365	337	471	480
1924	Critical	428	451	542	677	794	832	711	608	574	476	435	436	580
1925	Dry	496	559	608	718	848	668	495	334	459	439	386	416	536
1926	Dry	486	497	529	670	659	545	477	444	461	414	375	427	499
1927	Wet	497	445	414	466	727	725	411	343	371	360	313	367	453
1928	Above Normal	442	426	424	540	838	573	413	370	409	390	317	410	463
1929	Critical	491	479	569	695	790	705	614	524	509	458	399	449	557
1930	Dry	525	554	596	580	535	512	423	458	428	402	364	425	483
1931	Critical	512	513	568	700	789	780	631	587	546	443	450	467	582
1932	Dry	521	557	715	570	705	818	622	471	525	488	423	431	570
1933	Critical	501	505	563	690	695	639	556	496	537	494	433	443	546
1934	Critical	497	559	573	665	607	692	626	576	548	463	384	454	554
1935	Below Normal	529	531	649	661	576	802	465	362	422	373	339	409	510
1936	Below Normal	483	479	535	656	548	304	354	362	552	375	351	392	449
1937	Below Normal	461	470	524	726	433	355	333	291	537	404	378	382	441
1938	Wet	459	504	513	553	368	315	252	244	242	362	318	332	372
1939	Dry	315	346	472	712	818	759	595	412	429	389	364	428	503
1940	Above Normal	507	498	563	700	690	312	337	359	494	358	306	377	458
1941	Wet	450	462	622	632	415	292	294	250	396	458	434	480	432
1942	Wet	357	388	629	434	282	381	363	307	388	434	333	342	387
1943	Wet	323	347	632	370	256	291	314	347	431	571	463	372	393
1944	Dry	454	458	681	690	755	753	470	361	403	370	379	398	514
1945	Below Normal	477	467	522	594	490	335	417	362	472	551	453	487	469
1946	Below Normal	445	424	490	550	429	457	428	363	499	346	333	395	430
1947	Dry	456	450	678	709	782	558	465	441	465	386	370	430	516
1948	Below Normal	514	495	602	658	796	640	444	399	388	332	331	392	499
1949	Dry	463	478	540	709	730	604	472	481	488	371	400	433	514
1950	Below Normal	510	492	564	689	555	495	410	357	379	343	320	370	457
1951	Above Normal	455	417	389	317	238	407	407	297	324	329	289	393	355
1952	Wet	463	465	720	547	604	404	212	194	277	362	316	344	409
1953	Wet	314	364	504	607	611	549	402	303	339	328	315	347	415
1954	Above Normal	371	404	528	708	492	476	406	408	395	346	287	383	434
1955	Dry	480	490	579	639	560	544	531	475	474	411	357	420	497
1956	Wet	500	511	696	372	345	331	373	357	389	460	427	355	426
1957	Above Normal	316	361	495	627	653	511	416	307	362	328	299	396	423
1958	Wet	453	371	435	510	694	456	204	177	317	405	325	344	391
1959	Below Normal	314	362	457	691	713	786	540	388	414	327	308	402	475
1960	Dry	482	503	554	707	782	539	419	468	414	380	354	409	501
1961	Dry	505	502	627	693	704	523	446	499	475	349	344	402	506
1962	Below Normal	475	500	574	684	701	670	468	365	404	338	318	423	493
1963	Wet	508	370	400	458	792	565	473	336	546	337	302	364	454
1964	Dry	448	482	396	488	522	569	501	472	398	381	396	410	455
1965	Wet	487	495	719	429	360	467	394	353	433	365	409	461	448
1966	Below Normal	439	447	603	629	565	800	449	370	392	327	308	419	479
1967	Wet	520	515	721	741	845	513	261	212	280	286	305	331	461
1968	Below Normal	318	342	472	624	700	512	454	388	396	344	306	410	439
1969	Wet	483	488	528	646	368	386	279	234	233	366	326	350	391
1970	Wet	314	338	620	276	318	329	364	342	386	355	307	382	361
1971	Wet	476	442	476	723	590	843	407	310	354	331	286	362	467
1972	Below Normal	372	423	520	566	610	532	402	413	406	338	312	423	443
1973	Above Normal	521	481	430	678	663	558	452	397	491	361	322	487	487
1974	Wet	457	413	603	511	572	290	338	363	421	541	447	425	448
1975	Wet	326	342	677	611	332	287	344	347	406	529	437	484	427
1976	Critical	331	328	455	613	731	697	500	491	511	501	468	475	508
1977	Critical	533	512	619	644	721	787	690	591	600	478	416	441	586
1978	Above Normal	533	588	628	734	723	654	371	300	419	512	442	427	528
1979	Below Normal	433	452	539	636	337	306	379	347	411	345	349	395	411
1980	Above Normal	467	444	465	417	333	384	383	372	362	436	415	461	412
1981	Dry	424	434	527	709	564	798	490	388	439	376	372	426	496
1982	Wet	483	477	384	698	281	299	219	197	347	393	310	239	361
1983	Wet	229	262	374	343	319	253	290	256	234	219	170	224	264
1984	Wet	289	200	299	328	209	332	388	361	493	343	317	442	333
1985	Dry	420	427	395	451	771	807	551	427	400	364	408	398	485
1986	Wet	445	458	580	582	446	305	231	211	369	555	443	422	421
1987	Dry	399	409	495	718	685	835	514	457	415	364	382	430	509
1988	Critical	513	513	580	692	567	651	570	525	547	460	386	458	538
1989	Dry	543	565	618	665	839	618	384	442	353	331	376	407	512
1990	Critical	453	494	590	610	675	601	470	486	582	511	451	460	532
1991	Critical	541	584	648	744	792	693	492	501	537	523	474	431	580
1992	Critical	516	616	648	785	736	509	429	458	472	381	383	435	531
1993	Above Normal	531	607	642	678	713	767	424	371	488	529	363	488	550
1994	Critical	441	483	557	697	774	583	435	461	447	450	449	501	523
Average		449	458	554	609	597	548	430	384	429	403	365	409	470
Wet		421	412	550	516	464	410	325	288	364	398	348	370	405
Above Normal		459	471	530	606	597	515	401	352	407	408	340	418	459
Below Normal		443	453	551	637	569	547	426	366	442	365	339	412	463
Dry		464	482	563	652	704	653	491	439	439	388	378	418	506
Critical		480	503	576	684	723	681	560	525	534	470	427	454	551

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	451	486	730	662	632	505	398	342	324	495	363	360	479
1923	Below Normal	438	455	660	553	509	667	428	362	515	366	342	470	480
1924	Critical	429	456	543	686	714	753	662	604	607	470	431	437	566
1925	Dry	495	559	597	705	848	723	510	334	457	432	382	414	538
1926	Dry	487	495	526	668	654	540	471	443	452	407	377	429	496
1927	Wet	500	447	417	468	727	725	412	345	370	360	313	368	454
1928	Above Normal	442	427	426	544	838	573	404	369	412	381	312	411	462
1929	Critical	492	480	561	706	789	703	612	522	487	430	399	446	552
1930	Dry	522	553	596	581	528	500	414	458	423	354	370	410	476
1931	Critical	494	508	569	719	715	706	616	588	564	440	432	466	568
1932	Dry	524	557	715	593	705	818	623	470	526	488	424	432	573
1933	Critical	501	505	560	691	696	640	557	496	537	494	432	443	546
1934	Critical	497	561	574	664	602	688	624	576	548	463	384	452	553
1935	Below Normal	527	531	646	663	577	802	469	362	421	371	340	409	510
1936	Below Normal	486	481	536	656	548	304	354	362	552	377	351	390	450
1937	Below Normal	456	466	524	725	433	355	333	291	537	408	382	382	441
1938	Wet	458	510	513	553	368	315	252	244	242	362	318	332	372
1939	Dry	316	347	473	713	818	759	595	412	422	376	371	418	502
1940	Above Normal	486	491	561	700	690	312	337	359	493	359	307	378	456
1941	Wet	450	462	622	632	415	292	294	250	396	458	434	480	432
1942	Wet	359	396	629	434	282	381	362	307	388	434	333	342	388
1943	Wet	323	348	632	370	256	291	315	347	431	571	463	373	393
1944	Dry	454	459	681	690	755	753	472	360	401	363	385	406	515
1945	Below Normal	473	463	518	590	490	335	416	362	472	551	453	487	468
1946	Below Normal	445	428	490	550	429	457	427	363	499	344	334	413	432
1947	Dry	469	457	678	709	782	560	465	441	467	386	375	442	519
1948	Below Normal	514	499	600	657	799	647	444	399	388	335	324	397	500
1949	Dry	464	474	537	706	734	598	467	481	488	368	383	438	511
1950	Below Normal	516	490	550	677	546	493	412	354	375	340	320	367	453
1951	Above Normal	456	424	389	317	238	407	407	297	321	333	289	389	355
1952	Wet	461	465	720	547	604	404	212	194	277	362	316	344	409
1953	Wet	314	365	504	607	611	549	402	303	339	328	313	349	416
1954	Above Normal	372	404	528	708	492	476	405	408	395	347	287	383	434
1955	Dry	484	494	574	638	559	552	539	476	460	359	361	434	494
1956	Wet	510	495	696	372	346	331	373	357	389	460	427	355	426
1957	Above Normal	316	361	495	628	658	511	416	307	360	324	296	392	422
1958	Wet	446	380	444	512	694	456	204	177	317	405	325	344	392
1959	Below Normal	314	362	457	692	713	786	543	387	412	326	308	402	475
1960	Dry	481	497	582	631	753	537	419	470	441	375	361	414	497
1961	Dry	513	502	622	714	719	556	469	505	472	351	351	430	517
1962	Below Normal	497	498	610	664	700	670	463	367	423	350	309	419	497
1963	Wet	502	367	418	470	792	565	475	336	546	340	310	362	457
1964	Dry	449	480	392	484	520	568	497	473	395	383	416	401	455
1965	Wet	460	475	719	429	360	468	393	349	433	358	409	461	443
1966	Below Normal	434	446	603	629	565	800	442	370	389	325	306	417	477
1967	Wet	514	509	721	741	845	513	261	212	280	286	305	331	460
1968	Below Normal	317	342	472	623	700	511	453	388	394	342	305	405	438
1969	Wet	481	489	525	646	368	386	279	234	233	366	326	350	390
1970	Wet	314	338	620	276	318	329	364	342	385	354	307	382	361
1971	Wet	476	440	476	723	577	843	407	310	354	331	286	363	465
1972	Below Normal	374	424	521	566	611	533	402	413	401	334	311	427	443
1973	Above Normal	527	501	402	666	663	558	454	397	491	361	322	487	486
1974	Wet	457	413	603	511	572	290	338	363	421	541	447	425	448
1975	Wet	326	343	677	611	332	287	344	347	406	529	437	484	427
1976	Critical	331	328	455	613	731	696	499	489	505	482	477	481	507
1977	Critical	536	492	621	629	675	703	608	563	594	496	421	427	564
1978	Above Normal	520	595	626	735	723	654	371	300	419	512	442	427	527
1979	Below Normal	436	453	538	636	337	306	379	348	411	347	353	398	412
1980	Above Normal	468	446	483	417	334	384	383	371	362	436	415	461	413
1981	Dry	424	434	528	710	565	798	488	387	441	375	374	425	496
1982	Wet	483	485	390	698	281	299	219	197	347	393	310	239	362
1983	Wet	229	262	374	343	319	253	290	256	234	219	170	224	264
1984	Wet	289	200	299	328	209	332	388	361	493	343	317	442	333
1985	Dry	420	428	395	450	771	807	543	427	403	364	409	404	485
1986	Wet	448	458	579	580	446	305	232	212	370	555	443	422	421
1987	Dry	398	408	498	719	688	835	474	442	411	354	381	425	503
1988	Critical	513	511	578	689	567	652	570	525	544	464	383	445	537
1989	Dry	534	568	604	665	830	609	381	441	357	335	371	412	509
1990	Critical	452	491	616	596	656	587	467	486	581	512	455	466	530
1991	Critical	544	582	653	740	782	690	492	501	537	523	474	431	579
1992	Critical	516	616	648	785	735	509	429	458	469	380	383	442	531
1993	Above Normal	537	607	646	678	713	767	424	374	488	529	354	488	550
1994	Critical	445	485	556	695	784	597	440	463	443	443	463	478	524
Average		449	458	555	608	594	546	427	383	429	400	365	409	469
Wet		419	412	551	517	463	410	325	288	364	398	348	370	405
Above Normal		457	474	529	605	598	515	400	352	407	408	339	418	458
Below Normal		445	453	552	634	568	548	426	366	442	365	338	413	463
Dry		465	482	562	648	702	657	489	439	438	379	381	421	505
Critical		479	501	578	684	704	660	548	522	535	466	428	451	546

Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	1	0	0
1923	Below Normal	0	-6	0	0	0	0	0	0	0	1	5	0	0
1924	Critical	0	4	1	9	-79	-79	-49	-4	33	-6	-4	1	-15
1925	Dry	-1	1	-11	-13	0	54	15	0	-3	-7	-4	-2	2
1926	Dry	1	-2	-3	-2	-4	-5	-6	-1	-10	-7	1	1	-3
1927	Wet	3	2	3	2	0	0	1	2	-1	0	0	0	1
1928	Above Normal	0	1	2	4	0	0	-9	-1	3	-9	-5	1	-1
1929	Critical	1	2	-8	11	-1	-2	-2	-2	-23	-28	0	-3	-5
1930	Dry	-3	-1	0	1	-6	-12	-8	0	-5	-48	6	-15	-8
1931	Critical	-19	-5	1	19	-74	-73	-15	1	17	-4	-18	-1	-14
1932	Dry	3	0	0	24	0	0	1	0	0	0	1	1	3
1933	Critical	1	0	-3	1	1	1	0	0	0	0	0	0	0
1934	Critical	1	1	2	-1	-5	-4	-2	0	0	0	0	-2	-1
1935	Below Normal	-1	0	-3	2	1	0	4	0	0	-3	1	-1	0
1936	Below Normal	3	2	1	-1	0	0	0	-1	0	2	0	-2	0
1937	Below Normal	-6	-4	-1	0	0	0	0	0	0	3	3	0	0
1938	Wet	-1	5	0	0	0	0	0	0	0	0	0	0	0
1939	Dry	1	1	1	1	0	0	1	0	-7	-13	7	-10	-2
1940	Above Normal	-22	-7	-2	0	0	0	-1	0	0	1	1	1	-2
1941	Wet	1	1	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	2	8	0	0	0	0	0	0	0	0	0	0	1
1943	Wet	1	1	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	1	0	0	2	-1	-2	-7	6	8	1
1945	Below Normal	-4	-4	-5	-4	1	0	0	0	0	0	0	0	-1
1946	Below Normal	0	3	0	0	0	0	-1	0	0	-2	0	18	2
1947	Dry	13	7	0	0	0	2	0	0	2	1	5	12	3
1948	Below Normal	1	4	-2	-1	4	6	0	1	0	3	-7	5	1
1949	Dry	2	-4	-3	-3	4	-6	-4	0	0	-3	-17	4	-3
1950	Below Normal	6	-2	-14	-12	-9	-2	2	-4	-3	-3	0	-2	-4
1951	Above Normal	1	6	0	0	0	0	0	0	-3	4	-1	-4	0
1952	Wet	-2	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	1	0	-1	2	0
1954	Above Normal	1	1	0	0	0	0	0	0	0	1	0	0	0
1955	Dry	3	4	-6	-1	-1	9	9	1	-14	-52	3	14	-3
1956	Wet	10	-16	0	0	1	0	0	0	0	0	0	0	0
1957	Above Normal	-1	-1	0	1	5	0	0	0	-2	-4	-2	-4	-1
1958	Wet	-7	8	8	2	0	0	0	0	0	0	0	0	1
1959	Below Normal	-1	0	0	0	0	0	3	-1	-2	-1	0	1	0
1960	Dry	-1	-7	28	-76	-29	-2	0	2	26	-5	6	6	-4
1961	Dry	9	0	-5	21	15	33	23	6	-3	2	7	28	11
1962	Below Normal	22	-2	35	-20	0	0	-5	2	19	12	-9	-4	4
1963	Wet	-6	-3	18	13	0	0	2	0	0	3	7	-2	3
1964	Dry	1	-1	-4	-3	-1	0	-3	1	-4	2	21	-9	0
1965	Wet	-27	-20	0	0	0	0	0	-4	0	-7	0	0	-5
1966	Below Normal	-4	-2	0	0	0	0	-7	0	-3	-2	-2	-2	-2
1967	Wet	-6	-6	0	0	0	0	0	0	0	0	0	0	-1
1968	Below Normal	-1	0	0	-1	0	0	-1	1	-2	-2	-1	-5	-1
1969	Wet	-2	1	-2	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	-1	-1	0	0	0
1971	Wet	0	-2	0	0	-13	0	0	0	0	0	0	1	-1
1972	Below Normal	2	1	1	1	0	1	0	0	-6	-4	-1	4	0
1973	Above Normal	6	20	-28	-13	0	0	2	0	0	0	0	0	-1
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	-1	-1	-3	-6	-19	9	6	-1
1977	Critical	4	-21	3	-15	-46	-84	-82	-28	-6	18	5	-13	-22
1978	Above Normal	-14	7	-3	0	0	0	0	0	0	0	0	0	-1
1979	Below Normal	2	1	0	0	0	0	1	1	0	2	4	3	1
1980	Above Normal	1	3	18	0	0	0	0	-1	0	0	0	0	2
1981	Dry	1	0	1	0	1	0	-2	-1	1	0	2	-1	0
1982	Wet	-1	8	6	0	0	0	0	0	0	0	0	0	1
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-1	0	0	-9	0	3	1	2	6	0
1986	Wet	3	0	-1	-1	0	0	1	1	2	0	0	0	0
1987	Dry	-1	0	3	1	3	0	-40	-15	-4	-9	-1	-5	-6
1988	Critical	0	-1	-1	-3	0	1	1	0	-3	4	-3	-13	-2
1989	Dry	-9	3	-14	0	-10	-9	-3	-1	4	5	-5	4	-3
1990	Critical	-1	-2	25	-14	-19	-14	-2	0	0	1	4	6	-1
1991	Critical	3	-2	6	-4	-11	-3	0	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	0	0	0	-3	-1	0	6	0
1993	Above Normal	6	0	4	0	0	0	0	3	0	0	-9	0	0
1994	Critical	3	2	-1	-2	10	14	5	2	-4	-7	14	-23	1
Average		0	0	1	-1	-4	-2	-3	-1	0	-3	0	0	-1
Wet		-2	-1	2	1	-1	0	0	0	0	0	0	0	0
Above Normal		-2	3	-1	-1	1	0	-1	0	0	-1	-2	-1	0
Below Normal		1	-1	1	-3	0	0	0	0	0	0	0	1	0
Dry		1	0	-1	-3	-2	4	-2	-1	-1	-9	2	3	-1
Critical		-1	-2	2	0	-19	-20	-12	-3	0	-4	1	-3	-5

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old River at Middle River
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1924	Critical	0%	1%	0%	1%	-10%	-10%	-7%	-1%	6%	-1%	-1%	0%	-2%
1925	Dry	0%	0%	-2%	-2%	0%	8%	3%	0%	-1%	-2%	-1%	0%	0%
1926	Dry	0%	0%	-1%	0%	-1%	-1%	-1%	0%	-2%	-2%	0%	0%	-1%
1927	Wet	1%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%
1928	Above Normal	0%	0%	1%	1%	0%	0%	-2%	0%	1%	-2%	-2%	0%	0%
1929	Critical	0%	0%	-1%	2%	0%	0%	0%	0%	-4%	-6%	0%	-1%	-1%
1930	Dry	-1%	0%	0%	0%	-1%	-2%	-2%	0%	-1%	-12%	2%	-4%	-2%
1931	Critical	-4%	-1%	0%	3%	-9%	-9%	-2%	0%	3%	-1%	-4%	0%	-2%
1932	Dry	1%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	0%	1%	0%	0%	-1%	0%	0%	0%
1936	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1937	Below Normal	-1%	-1%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%
1938	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-3%	2%	-2%	0%
1940	Above Normal	-4%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	2%	2%	0%
1945	Below Normal	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	5%	0%
1947	Dry	3%	2%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	1%
1948	Below Normal	0%	1%	0%	0%	0%	1%	0%	0%	1%	-2%	1%	0%	0%
1949	Dry	0%	-1%	-1%	0%	0%	-1%	-1%	0%	0%	-1%	-4%	1%	-1%
1950	Below Normal	1%	0%	-2%	-2%	-2%	0%	0%	-1%	-1%	-1%	0%	-1%	-1%
1951	Above Normal	0%	2%	0%	0%	0%	0%	0%	0%	-1%	1%	0%	-1%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	1%	1%	-1%	0%	0%	2%	2%	0%	-3%	-13%	1%	3%	-1%
1956	Wet	2%	-3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	1%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1958	Wet	-2%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	-1%	5%	-11%	-4%	0%	0%	0%	6%	-1%	2%	1%	0%
1961	Dry	2%	0%	-1%	3%	2%	6%	5%	1%	-1%	0%	2%	7%	2%
1962	Below Normal	5%	0%	6%	-3%	0%	0%	-1%	0%	5%	3%	-3%	-1%	1%
1963	Wet	-1%	-1%	4%	3%	0%	0%	0%	0%	1%	1%	2%	0%	1%
1964	Dry	0%	0%	-1%	-1%	0%	0%	-1%	0%	-1%	1%	5%	-2%	0%
1965	Wet	-6%	-4%	0%	0%	0%	0%	0%	-1%	0%	-2%	0%	0%	-1%
1966	Below Normal	-1%	0%	0%	0%	0%	0%	-1%	0%	-1%	-1%	0%	0%	0%
1967	Wet	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	-1%	0%
1969	Wet	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	1%	0%
1973	Above Normal	1%	4%	-7%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-4%	2%	1%	0%
1977	Critical	1%	-4%	0%	-2%	-6%	-11%	-12%	-5%	-1%	4%	1%	-3%	-3%
1978	Above Normal	-3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1979	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%
1980	Above Normal	0%	1%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	0%	0%	0%	-2%	0%	1%	0%	0%	2%	0%
1986	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1987	Dry	0%	0%	1%	0%	0%	0%	-8%	-3%	-1%	-3%	0%	-1%	-1%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	-1%	-3%	0%
1989	Dry	-2%	0%	-2%	0%	-1%	-1%	-1%	0%	1%	1%	-1%	1%	0%
1990	Critical	0%	0%	4%	-2%	-3%	-2%	-1%	0%	0%	0%	1%	1%	0%
1991	Critical	1%	0%	1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	1%	0%
1993	Above Normal	1%	0%	1%	0%	0%	0%	0%	1%	0%	0%	-2%	0%	0%
1994	Critical	1%	0%	0%	0%	1%	2%	1%	0%	-1%	-2%	3%	-5%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Normal		0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	1%	0%	0%	0%	-2%	1%	1%	0%
Critical		0%	0%	0%	0%	-2%	-3%	-2%	-1%	0%	-1%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	693	661	620	504	463	321	284	277	304	279	281	483	431
1923	Below Normal	682	668	562	342	334	317	296	300	268	273	366	575	415
1924	Critical	627	684	754	794	864	808	556	526	614	539	557	613	661
1925	Dry	802	848	806	882	613	413	323	280	323	319	376	587	548
1926	Dry	757	697	800	863	599	356	329	354	313	371	459	632	544
1927	Wet	798	521	306	337	332	289	270	277	247	245	284	520	369
1928	Above Normal	689	544	393	402	295	277	279	296	268	290	334	623	391
1929	Critical	759	707	828	871	883	585	456	453	436	422	513	676	632
1930	Dry	801	810	830	558	416	309	301	351	328	356	436	668	514
1931	Critical	808	716	796	844	857	619	521	532	580	526	616	675	674
1932	Dry	777	811	687	378	417	465	461	395	370	343	397	626	510
1933	Critical	744	666	745	684	532	445	419	406	433	426	492	586	548
1934	Critical	749	826	778	675	439	482	490	470	447	385	499	693	578
1935	Below Normal	811	824	880	592	387	318	309	327	280	266	373	619	499
1936	Below Normal	747	678	776	614	476	334	276	295	297	266	360	576	475
1937	Below Normal	727	674	736	825	723	535	305	255	272	278	325	519	515
1938	Wet	728	698	333	316	408	327	330	268	291	291	286	290	380
1939	Dry	238	305	628	848	764	511	426	346	328	405	457	687	495
1940	Above Normal	798	686	717	663	417	305	267	289	270	250	286	561	459
1941	Wet	703	725	644	367	458	380	262	253	294	301	289	394	423
1942	Wet	395	538	524	367	324	268	276	262	266	310	301	325	346
1943	Wet	281	311	291	360	317	311	281	296	341	275	287	523	323
1944	Dry	729	688	767	846	736	364	311	308	306	363	468	589	540
1945	Below Normal	729	661	605	566	535	509	349	306	266	269	355	589	478
1946	Below Normal	696	612	421	288	400	327	300	306	275	280	382	581	406
1947	Dry	701	712	794	658	617	391	335	384	338	372	482	673	538
1948	Below Normal	815	724	864	841	890	450	326	310	253	253	383	576	557
1949	Dry	681	664	777	882	730	353	315	372	333	358	518	664	554
1950	Below Normal	765	676	803	685	375	268	280	294	259	269	330	527	461
1951	Above Normal	708	410	336	408	315	264	295	263	243	250	298	595	365
1952	Wet	693	733	656	399	292	336	306	253	271	276	258	268	395
1953	Wet	251	435	588	308	312	277	278	255	234	236	300	427	325
1954	Above Normal	409	530	695	790	298	254	275	307	261	256	291	569	411
1955	Dry	741	792	701	385	359	350	373	371	330	322	419	624	481
1956	Wet	742	790	624	606	396	298	279	291	278	304	300	324	436
1957	Above Normal	248	288	496	740	555	281	300	270	250	252	307	622	384
1958	Wet	646	423	471	336	381	478	309	255	258	278	281	295	367
1959	Below Normal	252	377	696	754	337	345	346	324	318	308	362	630	421
1960	Dry	753	710	763	905	744	335	318	363	346	410	448	633	561
1961	Dry	776	776	928	799	726	361	331	373	340	370	478	581	570
1962	Below Normal	700	711	829	823	593	338	301	321	278	291	372	675	519
1963	Wet	672	303	383	335	325	278	319	279	236	234	272	530	347
1964	Dry	696	660	341	407	354	341	361	368	330	395	534	602	449
1965	Wet	736	781	494	318	281	289	288	300	276	262	289	486	400
1966	Below Normal	672	601	311	303	296	266	289	308	284	302	362	654	387
1967	Wet	836	808	743	409	300	288	388	306	276	298	258	255	430
1968	Below Normal	238	360	608	594	308	258	323	323	297	299	360	601	381
1969	Wet	732	725	598	471	416	408	323	243	242	286	290	303	420
1970	Wet	238	341	408	484	353	275	269	284	274	268	287	570	338
1971	Wet	764	545	344	259	300	270	261	260	234	233	294	475	353
1972	Below Normal	445	574	676	605	582	306	290	335	308	310	366	665	455
1973	Above Normal	889	602	393	366	367	299	301	320	281	250	322	564	413
1974	Wet	775	417	269	300	270	277	270	291	292	258	314	374	342
1975	Wet	253	326	505	530	463	291	275	284	261	264	296	379	344
1976	Critical	265	256	438	730	850	514	403	431	568	617	665	771	542
1977	Critical	860	768	900	716	776	707	615	559	605	504	581	683	689
1978	Above Normal	869	889	886	590	413	472	470	367	322	297	299	490	530
1979	Below Normal	660	729	784	565	355	309	302	289	254	258	366	590	455
1980	Above Normal	783	645	504	397	417	457	324	309	339	320	308	501	442
1981	Dry	644	629	789	767	338	277	306	322	334	416	480	655	497
1982	Wet	751	598	263	350	344	386	232	252	269	305	301	284	361
1983	Wet	201	245	406	396	335	272	310	263	241	249	220	202	278
1984	Wet	222	248	309	397	314	251	294	307	282	258	300	559	312
1985	Dry	665	505	271	306	457	397	365	337	296	398	552	563	426
1986	Wet	632	664	789	547	515	328	327	264	294	404	322	447	461
1987	Dry	561	596	784	854	641	370	349	359	355	424	503	645	537
1988	Critical	812	752	835	707	440	470	421	435	410	383	536	709	576
1989	Dry	834	850	857	822	990	452	275	316	270	375	528	586	596
1990	Critical	665	732	852	715	630	413	399	405	476	586	624	688	599
1991	Critical	867	869	865	891	914	592	393	381	455	606	600	609	670
1992	Critical	861	919	894	1,021	654	358	327	366	389	381	518	685	614
1993	Above Normal	859	915	931	619	397	319	279	297	270	263	290	495	494
1994	Critical	672	738	817	899	824	403	333	364	380	634	660	847	631
Average		655	629	637	586	495	372	333	328	321	335	390	553	469
Wet		574	532	474	390	354	313	293	274	269	278	287	392	369
Above Normal		694	617	597	548	394	325	307	299	281	271	302	550	432
Below Normal		638	633	682	600	471	348	307	307	279	280	362	598	459
Dry		697	691	720	698	594	378	342	350	327	375	471	626	522
Critical		724	719	792	796	722	533	444	444	483	501	572	686	618

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	693	661	620	504	463	321	284	277	304	280	282	483	431
1923	Below Normal	685	625	505	340	325	313	296	300	268	271	362	569	405
1924	Critical	638	693	753	805	678	611	515	525	616	540	555	618	629
1925	Dry	804	841	765	857	700	507	336	282	320	315	374	594	558
1926	Dry	760	689	795	860	597	353	327	350	308	375	463	646	543
1927	Wet	806	528	313	340	336	292	270	282	247	245	285	522	372
1928	Above Normal	689	549	401	412	305	276	274	293	269	284	327	625	392
1929	Critical	767	707	811	895	875	581	454	446	413	419	513	663	629
1930	Dry	793	807	829	559	416	303	298	352	325	367	442	600	508
1931	Critical	773	713	819	862	744	556	524	537	581	481	590	684	655
1932	Dry	783	810	686	381	415	470	462	395	370	343	397	627	511
1933	Critical	745	666	747	687	535	446	419	406	433	426	491	587	549
1934	Critical	749	827	779	665	422	475	487	470	447	385	496	687	574
1935	Below Normal	809	822	877	598	388	324	311	327	279	266	371	616	499
1936	Below Normal	758	684	777	611	486	337	276	294	298	266	359	571	476
1937	Below Normal	702	661	736	809	691	531	305	255	275	281	325	516	507
1938	Wet	726	717	344	324	408	326	330	268	291	291	286	296	384
1939	Dry	245	308	631	849	759	511	426	344	325	397	488	639	494
1940	Above Normal	736	666	706	653	422	308	266	289	270	250	286	562	451
1941	Wet	702	727	648	368	466	382	262	253	293	300	289	395	424
1942	Wet	406	571	538	368	324	268	276	262	267	310	301	326	351
1943	Wet	281	311	291	363	318	311	281	296	340	275	287	525	323
1944	Dry	731	690	768	845	734	365	312	306	300	367	495	604	543
1945	Below Normal	713	648	591	558	518	496	348	306	266	269	354	587	471
1946	Below Normal	696	633	448	289	397	324	299	306	275	284	389	640	415
1947	Dry	743	718	755	644	600	387	334	384	340	385	500	699	541
1948	Below Normal	823	738	853	838	911	457	326	311	251	262	371	589	561
1949	Dry	674	646	769	879	737	348	313	372	333	337	492	683	549
1950	Below Normal	770	645	760	654	359	266	280	286	260	271	333	519	450
1951	Above Normal	731	428	337	428	318	264	295	261	243	256	291	587	370
1952	Wet	691	738	663	399	292	344	309	253	271	276	258	269	397
1953	Wet	251	437	589	308	312	278	278	255	235	236	303	435	326
1954	Above Normal	413	532	696	790	298	254	275	307	261	256	291	570	412
1955	Dry	756	796	688	383	357	356	384	372	320	322	454	673	488
1956	Wet	747	731	612	605	368	292	279	291	278	303	299	323	427
1957	Above Normal	248	288	497	749	568	282	300	270	249	250	304	610	384
1958	Wet	637	454	488	339	381	478	309	255	258	278	281	296	371
1959	Below Normal	252	378	697	755	336	344	347	324	316	308	364	632	421
1960	Dry	761	760	817	714	728	337	318	367	332	386	460	649	553
1961	Dry	800	775	934	837	757	394	348	375	338	377	499	672	592
1962	Below Normal	744	750	887	772	577	338	300	319	297	300	345	672	525
1963	Wet	657	301	424	354	329	279	320	279	237	237	273	522	351
1964	Dry	701	652	331	400	353	340	359	373	312	405	586	561	448
1965	Wet	663	719	472	319	269	279	287	295	258	262	285	477	382
1966	Below Normal	652	599	318	303	296	262	287	308	282	301	361	650	385
1967	Wet	816	799	767	411	299	288	388	306	276	298	258	256	430
1968	Below Normal	238	360	608	592	307	257	323	325	298	299	355	591	379
1969	Wet	735	726	596	475	416	405	322	243	242	286	291	304	420
1970	Wet	239	342	408	484	353	273	269	284	273	267	288	571	337
1971	Wet	761	538	343	259	292	265	261	260	234	233	294	478	352
1972	Below Normal	450	577	678	605	583	306	290	335	305	307	371	670	456
1973	Above Normal	925	653	339	357	367	302	302	320	281	250	322	564	415
1974	Wet	775	419	269	300	270	278	270	291	292	259	314	374	343
1975	Wet	254	326	506	530	463	291	275	284	261	265	296	380	344
1976	Critical	265	256	439	730	850	514	401	423	577	651	689	792	549
1977	Critical	855	738	902	699	692	530	507	520	589	492	549	638	643
1978	Above Normal	854	905	893	630	421	516	490	369	329	292	300	500	542
1979	Below Normal	668	732	781	577	363	307	301	291	254	262	376	593	459
1980	Above Normal	780	667	554	404	499	488	325	307	340	320	309	501	458
1981	Dry	644	629	789	767	338	277	306	321	331	413	483	652	496
1982	Wet	750	621	269	351	343	391	233	252	269	305	301	283	364
1983	Wet	201	245	403	396	335	272	310	263	241	249	220	202	278
1984	Wet	222	248	309	397	314	251	294	307	282	258	300	559	312
1985	Dry	664	507	271	299	449	388	357	338	297	398	559	579	425
1986	Wet	635	662	787	544	513	329	319	264	296	318	299	442	451
1987	Dry	564	603	792	858	663	368	307	345	329	411	507	641	532
1988	Critical	806	746	831	703	441	471	421	435	407	379	506	674	568
1989	Dry	824	858	840	827	991	445	275	316	275	382	518	607	596
1990	Critical	658	750	891	676	602	404	397	405	476	588	637	701	599
1991	Critical	869	868	869	873	899	591	393	380	455	605	600	609	668
1992	Critical	861	919	894	1,021	654	358	327	365	387	381	529	703	617
1993	Above Normal	865	917	933	604	396	319	279	302	285	260	293	510	497
1994	Critical	683	743	813	897	852	423	340	366	373	625	679	788	632
Average		654	630	637	583	491	368	331	327	319	334	392	554	468
Wet		569	531	478	392	352	313	292	274	269	274	286	392	369
Above Normal		693	626	598	553	406	333	309	300	283	270	300	551	435
Below Normal		640	632	679	593	467	347	306	306	280	282	360	601	458
Dry		703	693	716	685	600	384	341	349	322	374	482	633	524
Critical		723	719	795	793	687	497	432	440	480	498	569	679	609

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake) (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	3	-43	-57	-2	-9	-5	0	1	0	-1	-3	-6	-10
1924	Critical	11	9	0	11	-186	-197	-41	-2	1	1	-2	5	-32
1925	Dry	2	-7	-40	-26	87	94	13	1	-3	-4	-1	7	10
1926	Dry	3	-8	-6	-3	-2	-3	-2	-4	-5	5	4	13	-1
1927	Wet	8	7	7	4	4	3	1	5	0	0	1	2	3
1928	Above Normal	0	5	8	10	10	-1	-5	-3	1	-6	-6	2	1
1929	Critical	8	0	-17	23	-7	-4	-2	-7	-23	-4	0	-13	-4
1930	Dry	-8	-4	0	2	0	-6	-3	1	-3	11	6	-68	-6
1931	Critical	-36	-3	23	18	-113	-63	2	5	1	-45	-26	9	-19
1932	Dry	6	-1	-1	3	-3	5	1	-1	1	0	0	0	1
1933	Critical	1	0	2	3	3	1	0	0	0	0	0	0	1
1934	Critical	0	0	1	-10	-17	-7	-2	0	0	0	-3	-5	-4
1935	Below Normal	-2	-1	-4	6	1	6	2	0	0	-1	-2	-3	0
1936	Below Normal	11	6	1	-3	10	3	1	-1	1	0	-1	-5	2
1937	Below Normal	-25	-13	0	-15	-32	-4	0	0	2	3	0	-3	-7
1938	Wet	-2	19	10	8	0	0	0	0	0	0	0	6	3
1939	Dry	6	3	4	1	-5	0	0	-2	-3	-8	32	-48	-2
1940	Above Normal	-63	-20	-10	-9	5	2	0	0	0	1	0	1	-8
1941	Wet	0	2	3	0	8	2	0	0	-1	-2	0	0	1
1942	Wet	11	32	14	0	0	0	0	0	1	-1	0	2	5
1943	Wet	1	0	0	3	0	0	0	0	0	0	0	2	0
1944	Dry	2	2	0	-1	-2	2	1	-2	-7	4	27	15	4
1945	Below Normal	-15	-13	-14	-8	-17	-13	-1	0	0	0	-1	-2	-7
1946	Below Normal	0	21	26	1	-3	-3	-1	0	0	4	8	59	9
1947	Dry	42	6	-39	-14	-17	-4	0	0	2	13	18	27	3
1948	Below Normal	9	14	-11	-3	21	8	1	1	-1	9	-12	13	4
1949	Dry	-8	-18	-8	-2	7	-5	-2	1	0	-21	-26	19	-5
1950	Below Normal	5	-31	-43	-31	-16	-2	0	-8	1	2	4	-8	-10
1951	Above Normal	23	18	1	20	3	0	0	-2	0	6	-7	-8	4
1952	Wet	-2	5	7	1	0	8	3	0	0	0	0	1	2
1953	Wet	0	2	1	0	0	0	0	0	0	0	2	8	1
1954	Above Normal	3	2	1	0	0	0	0	0	0	1	0	1	1
1955	Dry	15	4	-13	-2	-2	6	10	1	-9	0	35	49	8
1956	Wet	5	-59	-12	0	-28	-6	0	0	-1	0	-1	-1	-9
1957	Above Normal	0	0	0	9	12	1	0	0	-1	-2	-3	-12	0
1958	Wet	-9	31	17	3	0	1	0	0	0	0	0	1	4
1959	Below Normal	0	1	1	1	-1	0	1	0	-2	0	2	2	0
1960	Dry	8	49	54	-191	-16	2	0	4	-14	-24	12	16	-8
1961	Dry	24	-2	6	39	31	33	18	3	-2	7	22	91	23
1962	Below Normal	44	39	58	-51	-16	0	-1	-2	18	9	-27	-3	6
1963	Wet	-15	-2	41	19	4	1	1	0	1	2	1	-8	4
1964	Dry	5	-9	-10	-8	-2	0	-2	5	-18	10	52	-41	-2
1965	Wet	-73	-62	-22	0	-12	-10	-2	-5	-17	0	-4	-9	-18
1966	Below Normal	-20	-2	6	0	0	-4	-2	0	-1	-1	-2	-4	-2
1967	Wet	-19	-8	24	2	-1	0	0	0	0	0	0	1	0
1968	Below Normal	0	1	0	-2	-1	0	0	2	1	0	-5	-11	-1
1969	Wet	3	1	-2	4	0	-2	0	0	0	0	0	1	0
1970	Wet	0	1	1	0	0	-1	-1	0	-1	-1	1	1	0
1971	Wet	-2	-7	-1	0	-8	-5	0	0	0	0	0	3	-2
1972	Below Normal	5	3	1	1	1	0	0	0	-3	-3	5	5	1
1973	Above Normal	36	51	-54	-9	0	3	1	0	0	0	0	1	2
1974	Wet	0	1	0	0	0	0	0	0	0	0	0	1	0
1975	Wet	1	1	1	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-2	-8	9	35	24	21	7
1977	Critical	-6	-30	2	-17	-84	-176	-109	-38	-16	-12	-32	-45	-47
1978	Above Normal	-15	16	7	40	8	43	20	2	7	-5	1	10	11
1979	Below Normal	8	3	-3	12	8	-2	-1	1	0	4	10	3	4
1980	Above Normal	-3	23	50	7	83	31	1	-2	2	0	1	0	16
1981	Dry	0	0	0	0	0	-1	-1	-2	-3	-2	3	-3	-1
1982	Wet	-1	23	6	1	-1	6	0	0	0	0	0	-1	3
1983	Wet	0	0	-3	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	-1	2	0	-7	-8	-9	-8	0	2	0	7	16	-1
1986	Wet	3	-3	-2	-3	-1	1	-8	-1	3	-86	-23	-5	-10
1987	Dry	3	7	8	4	22	-2	-42	-14	-25	-13	4	-4	-4
1988	Critical	-7	-7	-5	-5	1	2	0	0	-3	-5	-30	-35	-8
1989	Dry	-10	8	-17	5	1	-7	0	-1	4	7	-10	21	0
1990	Critical	-7	18	39	-39	-28	-9	-2	0	0	2	13	13	0
1991	Critical	2	-1	4	-18	-15	-2	0	0	0	0	0	0	-2
1992	Critical	0	0	0	0	0	0	0	-1	-2	0	11	18	2
1993	Above Normal	5	1	1	-15	-1	0	0	5	15	-3	3	16	2
1994	Critical	11	5	-4	-2	28	21	7	2	-7	-8	19	-58	1
Average		0	1	1	-3	-4	-4	-2	-1	-1	-2	1	1	-1
Wet		-4	-1	4	2	-2	0	0	0	-1	-4	-1	0	-1
Above Normal		-1	9	0	5	12	8	2	0	3	-1	-1	1	3
Below Normal		2	-1	-3	-7	-4	-1	0	0	1	2	-2	3	-1
Dry		6	2	-4	-12	6	6	-1	-1	-5	-1	11	7	1
Critical		-2	-1	4	-3	-35	-36	-12	-4	-3	-3	-2	-8	-9

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Hwy 4 (CCWD Intake)
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-6%	-10%	-1%	-3%	-1%	0%	0%	0%	0%	-1%	-1%	-2%
1924	Critical	2%	1%	0%	1%	-22%	-24%	-7%	0%	0%	0%	0%	1%	-4%
1925	Dry	0%	-1%	-5%	-3%	14%	23%	4%	0%	-1%	-1%	0%	1%	3%
1926	Dry	0%	-1%	-1%	0%	0%	-1%	0%	-1%	-2%	1%	1%	2%	0%
1927	Wet	1%	1%	2%	1%	1%	1%	0%	2%	0%	0%	0%	0%	1%
1928	Above Normal	0%	1%	2%	3%	3%	0%	-2%	-1%	0%	-2%	-2%	0%	0%
1929	Critical	1%	0%	-2%	3%	-1%	-1%	0%	-2%	-5%	-1%	0%	-2%	-1%
1930	Dry	-1%	0%	0%	0%	0%	-2%	-1%	0%	-1%	3%	1%	-10%	-1%
1931	Critical	-4%	0%	3%	2%	-13%	-10%	0%	1%	0%	-9%	-4%	1%	-3%
1932	Dry	1%	0%	0%	1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-1%	-4%	-2%	0%	0%	0%	0%	-1%	-1%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	2%	1%	0%	0%	0%	0%	-1%	0%
1936	Below Normal	1%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	-1%	0%
1937	Below Normal	-3%	-2%	0%	-2%	-4%	-1%	0%	0%	1%	1%	0%	-1%	-1%
1938	Wet	0%	3%	3%	3%	0%	0%	0%	0%	0%	0%	0%	2%	1%
1939	Dry	3%	1%	1%	0%	-1%	0%	0%	-1%	-1%	-2%	7%	-7%	0%
1940	Above Normal	-8%	-3%	-1%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	1%	0%	2%	1%	0%	0%	0%	-1%	0%	0%	0%
1942	Wet	3%	6%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	1%	6%	3%	1%
1945	Below Normal	-2%	-2%	-2%	-1%	-3%	-3%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	3%	6%	0%	-1%	-1%	0%	0%	0%	1%	2%	10%	2%
1947	Dry	6%	1%	-5%	-2%	-3%	-1%	0%	0%	1%	3%	4%	4%	1%
1948	Below Normal	1%	2%	-1%	0%	2%	2%	0%	0%	-1%	4%	-3%	2%	1%
1949	Dry	-1%	-3%	-1%	0%	1%	-1%	-1%	0%	0%	-6%	-5%	3%	-1%
1950	Below Normal	1%	-5%	-5%	-4%	-4%	-1%	0%	-3%	0%	1%	1%	-1%	-2%
1951	Above Normal	3%	4%	0%	5%	1%	0%	0%	-1%	0%	2%	-2%	-1%	1%
1952	Wet	0%	1%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	2%	1%	-2%	0%	-1%	2%	3%	0%	-3%	0%	8%	8%	1%
1956	Wet	1%	-7%	-2%	0%	-7%	-2%	0%	0%	0%	0%	0%	0%	-2%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-1%	-1%	-2%	0%
1958	Wet	-1%	7%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	1%	7%	7%	-21%	-2%	1%	0%	1%	-4%	-6%	3%	2%	-1%
1961	Dry	3%	0%	1%	5%	4%	9%	5%	1%	-1%	2%	5%	16%	4%
1962	Below Normal	6%	6%	7%	-6%	-3%	0%	0%	0%	7%	3%	-7%	0%	1%
1963	Wet	-2%	-1%	11%	6%	1%	1%	0%	0%	0%	1%	1%	-1%	1%
1964	Dry	1%	-1%	-3%	-2%	0%	0%	0%	1%	-6%	3%	10%	-7%	0%
1965	Wet	-10%	-8%	-5%	0%	-4%	-4%	-1%	-2%	-6%	0%	-1%	-2%	-3%
1966	Below Normal	-3%	0%	2%	0%	0%	-2%	-1%	0%	0%	0%	0%	-1%	0%
1967	Wet	-2%	-1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	-1%	-2%	0%
1969	Wet	0%	0%	0%	1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-3%	-2%	0%	0%	0%	0%	0%	1%	0%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	1%	1%	0%
1973	Above Normal	4%	8%	-14%	-2%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	6%	4%	3%	1%
1977	Critical	-1%	-4%	0%	-2%	-11%	-25%	-18%	-7%	-3%	-2%	-6%	-7%	-7%
1978	Above Normal	-2%	2%	1%	7%	2%	9%	4%	0%	2%	-2%	0%	2%	2%
1979	Below Normal	1%	0%	0%	2%	2%	-1%	0%	0%	0%	1%	3%	0%	1%
1980	Above Normal	0%	3%	10%	2%	20%	7%	0%	-1%	0%	0%	0%	0%	3%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	1%	-1%	0%
1982	Wet	0%	4%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-2%	-2%	-2%	-2%	0%	1%	0%	1%	3%	0%
1986	Wet	1%	0%	0%	-1%	0%	0%	-2%	0%	1%	-21%	-7%	-1%	-3%
1987	Dry	1%	1%	1%	0%	3%	-1%	-12%	-4%	-7%	-3%	1%	-1%	-2%
1988	Critical	-1%	-1%	-1%	-1%	0%	0%	0%	-1%	-1%	-1%	-6%	-5%	-1%
1989	Dry	-1%	1%	-2%	1%	0%	-2%	0%	0%	2%	2%	-2%	4%	0%
1990	Critical	-1%	2%	5%	-5%	-4%	-2%	0%	0%	0%	0%	2%	2%	0%
1991	Critical	0%	0%	0%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1993	Above Normal	1%	0%	0%	-2%	0%	0%	0%	2%	5%	-1%	1%	3%	1%
1994	Critical	2%	1%	-1%	0%	3%	5%	2%	1%	-2%	-1%	3%	-7%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		-1%	0%	1%	1%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	0%	1%	3%	2%	0%	0%	1%	0%	0%	0%	1%
Below Normal		0%	0%	0%	-1%	-1%	0%	0%	0%	0%	1%	0%	0%	0%
Dry		1%	0%	-1%	-2%	1%	2%	0%	0%	-2%	0%	2%	1%	0%
Critical		0%	0%	0%	0%	-4%	-5%	-2%	-1%	-1%	-1%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	798	737	670	494	394	261	246	246	260	231	261	553	429
1923	Below Normal	790	753	553	267	260	241	250	266	221	257	391	671	410
1924	Critical	715	790	862	874	779	554	379	474	657	598	630	722	669
1925	Dry	960	985	915	986	549	283	248	252	246	265	390	684	564
1926	Dry	880	791	939	962	568	273	259	298	270	388	513	744	574
1927	Wet	931	528	293	314	257	224	223	245	204	211	284	599	359
1928	Above Normal	797	574	410	380	252	222	230	258	224	257	357	726	391
1929	Critical	871	806	954	973	918	475	341	387	382	432	582	817	661
1930	Dry	947	958	921	561	375	248	230	286	298	362	483	790	538
1931	Critical	937	805	912	925	840	450	401	481	607	589	705	798	704
1932	Dry	911	957	716	334	325	326	331	331	277	269	401	732	492
1933	Critical	848	740	852	694	482	376	319	340	388	429	549	678	558
1934	Critical	883	968	875	689	380	339	323	350	377	374	581	842	582
1935	Below Normal	949	958	967	575	304	240	256	285	227	232	404	721	510
1936	Below Normal	855	763	899	601	393	295	244	261	232	238	377	672	486
1937	Below Normal	840	763	850	907	658	412	280	238	231	231	313	598	527
1938	Wet	847	761	274	242	436	343	334	289	299	252	269	287	386
1939	Dry	211	303	736	934	779	417	324	305	308	431	509	816	506
1940	Above Normal	912	769	813	654	314	251	238	256	224	220	290	653	466
1941	Wet	812	843	665	279	366	314	241	229	248	244	275	435	412
1942	Wet	418	621	520	290	278	228	247	243	226	248	288	334	328
1943	Wet	269	298	270	298	273	320	264	266	275	237	289	613	306
1944	Dry	847	785	889	951	735	296	250	274	274	382	514	682	573
1945	Below Normal	833	740	658	594	503	410	303	275	228	260	387	698	491
1946	Below Normal	802	685	388	223	307	263	250	275	231	272	415	672	399
1947	Dry	800	831	897	691	625	343	259	319	290	396	540	790	565
1948	Below Normal	934	824	1,000	952	879	355	264	263	204	238	417	666	583
1949	Dry	770	743	896	966	703	274	237	293	258	383	574	779	573
1950	Below Normal	868	759	924	703	334	216	229	257	219	251	347	605	476
1951	Above Normal	822	375	294	338	272	223	248	244	213	226	317	691	355
1952	Wet	787	855	669	306	232	289	266	222	242	238	241	262	384
1953	Wet	231	486	608	240	235	215	230	231	200	217	306	464	305
1954	Above Normal	430	590	797	818	245	203	218	255	214	232	307	662	414
1955	Dry	851	924	744	340	292	263	289	305	272	309	466	731	482
1956	Wet	849	923	576	468	325	251	238	257	228	241	285	331	414
1957	Above Normal	222	266	559	819	519	222	239	244	212	227	326	740	383
1958	Wet	704	449	491	295	287	371	363	229	230	233	275	293	352
1959	Below Normal	230	402	830	775	265	245	258	289	298	311	398	742	420
1960	Dry	873	799	878	1,015	740	283	243	298	342	446	499	744	597
1961	Dry	891	903	1,052	856	742	302	246	276	305	405	544	668	599
1962	Below Normal	804	815	945	889	522	258	240	278	234	290	411	792	540
1963	Wet	717	273	391	298	261	213	253	245	200	205	271	615	329
1964	Dry	800	720	335	402	285	255	292	306	309	433	598	696	453
1965	Wet	841	912	454	265	236	230	248	265	224	222	278	571	396
1966	Below Normal	777	647	271	251	230	210	231	269	251	204	400	769	384
1967	Wet	965	931	772	316	236	225	322	261	246	269	242	245	419
1968	Below Normal	209	388	698	590	242	203	251	284	273	298	393	698	377
1969	Wet	839	825	624	387	460	431	368	262	254	253	280	304	441
1970	Wet	211	361	401	405	293	232	232	254	235	243	293	668	319
1971	Wet	882	573	311	211	227	206	218	235	201	214	311	524	342
1972	Below Normal	478	649	759	649	579	262	233	287	277	305	405	784	472
1973	Above Normal	1,048	621	380	279	278	234	245	279	228	220	336	662	401
1974	Wet	916	390	215	236	211	237	240	257	235	216	335	388	323
1975	Wet	227	334	561	564	431	252	242	253	214	216	303	405	334
1976	Critical	240	233	492	820	901	470	338	403	622	713	765	923	577
1977	Critical	996	900	1,010	764	822	599	509	516	638	551	692	842	737
1978	Above Normal	1,056	1,058	1,003	519	299	368	390	315	268	241	293	571	532
1979	Below Normal	762	854	903	545	303	272	267	268	222	246	386	692	477
1980	Above Normal	915	719	530	348	462	430	289	279	289	264	304	590	452
1981	Dry	742	718	917	787	281	216	238	286	320	450	537	761	521
1982	Wet	867	624	224	264	290	311	246	236	234	254	299	282	344
1983	Wet	192	225	345	458	353	280	326	278	253	266	210	190	281
1984	Wet	195	221	316	360	272	218	248	276	239	233	306	661	295
1985	Dry	766	520	238	290	448	319	287	290	270	440	616	637	427
1986	Wet	709	761	887	538	421	348	297	236	255	311	300	512	465
1987	Dry	635	680	929	928	632	296	255	301	350	465	565	752	566
1988	Critical	939	859	952	715	335	317	324	357	370	415	634	864	590
1989	Dry	1,003	981	961	923	1,099	378	218	243	256	419	601	666	646
1990	Critical	755	840	964	776	574	321	319	328	502	685	715	830	634
1991	Critical	1,042	1,021	1,012	1,008	994	554	296	296	495	707	685	730	737
1992	Critical	1,063	1,082	1,066	1,150	618	291	253	286	362	414	631	831	670
1993	Above Normal	1,045	1,095	1,053	542	290	236	222	251	211	211	275	575	501
1994	Critical	779	849	942	1,009	832	338	271	292	391	733	759	1,004	683
Average		747	705	697	590	454	303	275	286	289	328	421	640	478
Wet		638	581	470	335	304	273	269	251	235	239	283	428	359
Above Normal		805	681	651	519	333	265	256	263	234	233	307	642	432
Below Normal		724	714	760	609	413	277	254	271	239	267	389	698	468
Dry		805	787	810	745	574	298	263	292	290	390	522	730	542
Critical		839	824	908	866	706	424	339	376	483	553	661	823	650

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	798	737	670	494	394	261	246	246	260	232	261	553	429
1923	Below Normal	795	690	486	266	253	236	250	267	221	253	384	664	397
1924	Critical	731	800	866	876	633	428	357	469	658	590	629	731	647
1925	Dry	963	973	863	959	613	331	256	253	244	264	392	693	567
1926	Dry	882	780	932	958	567	272	260	295	270	395	518	757	574
1927	Wet	939	537	302	317	260	226	223	248	204	211	285	602	363
1928	Above Normal	797	581	419	393	264	221	226	256	224	252	351	728	393
1929	Critical	883	802	937	998	908	471	340	382	377	443	582	799	660
1930	Dry	936	954	922	563	375	247	230	287	295	389	487	699	532
1931	Critical	893	803	943	934	736	438	421	490	598	527	680	813	690
1932	Dry	917	955	715	324	311	330	332	331	277	269	401	732	491
1933	Critical	849	740	854	698	485	377	319	340	388	429	549	679	559
1934	Critical	883	971	876	673	359	333	321	350	377	374	578	836	578
1935	Below Normal	947	955	964	583	305	241	256	285	227	233	402	718	510
1936	Below Normal	869	771	899	598	398	297	245	260	232	237	376	664	487
1937	Below Normal	806	747	851	879	620	411	280	238	232	232	311	594	517
1938	Wet	845	786	285	249	437	342	334	289	299	252	269	296	390
1939	Dry	219	307	741	934	772	416	324	304	307	427	547	746	504
1940	Above Normal	835	747	800	643	320	254	237	256	224	220	290	654	457
1941	Wet	811	847	668	279	370	315	241	229	247	242	275	435	413
1942	Wet	434	664	535	290	277	228	247	243	227	247	288	336	335
1943	Wet	270	297	269	300	273	320	264	266	275	236	290	615	306
1944	Dry	850	788	890	950	733	296	251	273	264	392	549	698	578
1945	Below Normal	812	723	641	585	485	399	302	276	228	259	385	695	483
1946	Below Normal	803	716	420	224	303	260	249	275	231	280	427	749	411
1947	Dry	852	832	848	672	605	339	259	319	291	415	563	821	568
1948	Below Normal	945	840	983	950	909	362	265	264	205	247	404	681	588
1949	Dry	758	721	887	966	707	269	236	294	258	350	549	806	567
1950	Below Normal	870	715	873	666	317	214	229	251	222	257	351	595	463
1951	Above Normal	854	396	294	349	274	223	248	243	216	232	306	681	360
1952	Wet	786	862	677	307	232	294	268	222	242	238	241	263	386
1953	Wet	232	488	609	241	235	215	230	232	200	217	310	474	307
1954	Above Normal	434	592	798	819	245	203	218	255	214	233	306	664	415
1955	Dry	871	926	728	338	290	268	300	305	269	324	516	792	494
1956	Wet	845	846	564	468	307	246	238	257	227	241	284	330	404
1957	Above Normal	222	267	559	832	533	223	239	244	212	226	322	720	383
1958	Wet	698	490	509	299	287	372	362	229	230	233	276	295	357
1959	Below Normal	230	404	832	776	265	245	259	289	297	312	401	745	421
1960	Dry	884	876	915	783	736	287	244	300	308	419	515	766	586
1961	Dry	919	899	1,065	900	779	328	258	279	303	416	573	783	625
1962	Below Normal	848	870	1,003	824	505	258	240	277	248	294	376	791	545
1963	Wet	697	272	442	319	266	213	253	245	201	206	270	606	333
1964	Dry	806	708	323	394	283	254	292	307	285	455	659	634	450
1965	Wet	749	832	435	265	225	223	247	263	217	226	271	559	376
1966	Below Normal	750	647	278	251	230	209	232	270	250	303	399	764	382
1967	Wet	940	924	800	318	236	225	323	261	246	269	243	246	419
1968	Below Normal	210	389	698	589	241	203	251	286	276	298	386	686	376
1969	Wet	845	824	623	391	460	429	367	262	254	253	280	304	441
1970	Wet	211	362	402	406	293	231	232	253	234	242	294	669	319
1971	Wet	878	565	310	211	221	203	218	235	201	214	311	527	341
1972	Below Normal	485	653	760	649	579	262	233	287	275	303	412	789	474
1973	Above Normal	1,103	681	314	274	278	237	246	279	228	220	377	663	405
1974	Wet	917	391	215	236	211	237	240	257	235	216	335	389	323
1975	Wet	228	335	562	564	431	252	242	253	214	216	303	406	334
1976	Critical	241	234	492	820	901	471	336	391	638	748	794	946	584
1977	Critical	977	866	1,004	747	673	372	402	483	617	530	654	781	676
1978	Above Normal	1,041	1,080	1,019	559	305	403	407	314	275	239	299	585	544
1979	Below Normal	772	857	897	563	312	270	264	269	222	253	397	694	481
1980	Above Normal	910	754	590	354	490	450	288	277	291	264	304	590	464
1981	Dry	742	718	916	787	281	215	239	284	315	447	540	756	520
1982	Wet	864	653	229	265	289	313	247	236	234	254	298	281	347
1983	Wet	192	225	342	458	353	280	326	278	253	266	210	190	281
1984	Wet	195	221	316	360	272	218	248	276	239	233	306	661	295
1985	Dry	764	523	237	281	439	312	280	290	272	441	626	657	427
1986	Wet	712	757	885	534	419	353	292	236	257	262	284	505	458
1987	Dry	641	690	939	935	662	304	239	285	315	451	569	747	565
1988	Critical	929	851	946	709	335	318	324	357	368	406	597	819	580
1989	Dry	996	990	938	929	1,084	373	218	242	262	426	590	692	645
1990	Critical	745	869	999	728	551	317	318	328	501	689	732	845	635
1991	Critical	1,043	1,020	1,018	975	977	554	296	296	495	707	685	729	733
1992	Critical	1,063	1,082	1,066	1,149	617	290	253	286	364	415	643	854	674
1993	Above Normal	1,053	1,098	1,051	525	290	236	222	256	223	212	284	596	504
1994	Critical	792	854	936	1,009	868	360	277	294	380	727	777	930	684
Average		747	707	697	585	449	300	273	285	287	328	423	641	477
Wet		633	580	475	337	303	273	269	251	235	237	282	428	358
Above Normal		805	693	651	524	339	271	258	263	237	233	306	643	435
Below Normal		724	713	756	600	409	276	254	271	241	269	387	702	467
Dry		812	790	804	729	578	303	263	291	284	393	537	736	543
Critical		836	824	912	860	670	394	330	372	480	549	658	814	642

Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	4	-63	-67	-2	-7	-4	0	1	1	-4	-7	-7	-13
1924	Critical	16	10	4	3	-146	-125	-22	-5	1	-7	-1	9	-22
1925	Dry	4	-12	-52	-27	64	48	8	1	-2	-1	1	9	3
1926	Dry	1	-11	-7	-3	-1	0	1	-3	0	7	5	14	0
1927	Wet	9	9	8	4	2	2	0	4	0	0	1	2	3
1928	Above Normal	0	7	10	13	11	-1	-4	-2	0	-4	-6	2	2
1929	Critical	12	-4	-17	25	-10	-4	-1	-5	-5	11	-1	-18	-1
1930	Dry	-10	-4	0	2	0	-1	0	1	-3	27	4	-91	-6
1931	Critical	-44	-1	30	10	-104	-12	20	9	-9	-62	-25	15	-14
1932	Dry	7	-2	-1	-9	-14	3	1	0	0	0	0	0	-1
1933	Critical	1	0	3	4	3	1	0	0	0	0	-1	1	1
1934	Critical	0	3	1	-16	-21	-6	-1	0	0	0	-3	-6	-4
1935	Below Normal	-3	-2	-3	8	1	2	1	0	0	1	-3	-3	0
1936	Below Normal	14	7	0	-3	5	2	1	-1	0	-1	-1	-8	1
1937	Below Normal	-34	-16	2	-28	-38	-1	0	0	1	1	-2	-4	-10
1938	Wet	-2	25	11	7	1	-1	0	0	0	0	0	9	4
1939	Dry	8	4	5	0	-6	-1	0	-1	-1	-3	37	-70	-2
1940	Above Normal	-77	-22	-13	-11	6	2	0	0	0	0	0	1	-10
1941	Wet	-1	3	4	0	4	1	0	0	-1	-2	0	1	1
1942	Wet	16	42	15	0	0	0	0	0	0	-1	0	2	6
1943	Wet	1	0	-1	2	0	0	0	0	0	0	1	2	0
1944	Dry	2	3	1	-2	-2	1	1	-1	-10	10	35	16	4
1945	Below Normal	-21	-17	-17	-9	-17	-11	0	0	0	-1	-2	-2	-8
1946	Below Normal	0	30	32	1	-3	-3	-1	0	0	8	12	76	13
1947	Dry	52	2	-48	-19	-20	-3	-1	0	1	19	23	31	3
1948	Below Normal	11	16	-17	-2	30	7	1	1	1	9	-14	16	5
1949	Dry	-12	-22	-9	0	5	-5	-1	0	0	-32	-26	27	-6
1950	Below Normal	2	-44	-51	-37	-17	-2	0	-6	3	6	4	-10	-13
1951	Above Normal	32	21	0	11	2	0	0	-1	3	6	-10	-10	5
1952	Wet	-2	7	7	1	0	5	2	0	0	0	0	1	2
1953	Wet	1	2	1	0	0	0	0	0	0	0	5	10	2
1954	Above Normal	4	2	2	1	0	0	0	0	0	1	0	2	1
1955	Dry	20	2	-15	-2	-1	5	11	1	-3	15	50	61	12
1956	Wet	-4	-77	-12	0	-17	-4	0	0	0	0	-1	-1	-10
1957	Above Normal	0	0	1	13	14	1	0	1	0	-1	-4	-20	0
1958	Wet	-7	41	18	4	0	1	0	0	0	0	1	2	5
1959	Below Normal	1	2	1	1	0	0	1	0	0	1	2	3	1
1960	Dry	11	76	37	-232	-4	4	0	1	-34	-27	16	22	-11
1961	Dry	28	-4	14	44	37	26	12	2	-2	11	30	115	26
1962	Below Normal	45	55	58	-64	-17	0	0	0	14	4	-35	-2	5
1963	Wet	-20	0	50	21	6	1	0	0	0	1	-1	-10	4
1964	Dry	7	-13	-12	-9	-2	0	0	2	-25	22	61	-62	-3
1965	Wet	-92	-81	-19	0	-11	-7	-1	-3	-7	4	-7	-12	-20
1966	Below Normal	-27	0	7	0	0	-1	1	0	0	-1	-2	-6	-2
1967	Wet	-25	-7	28	2	0	0	0	0	0	0	0	1	0
1968	Below Normal	0	1	0	-2	0	0	0	2	3	1	-7	-12	-1
1969	Wet	6	-1	-1	4	0	-2	-1	0	0	0	0	1	0
1970	Wet	1	1	1	0	0	-1	-1	0	-1	-1	1	1	0
1971	Wet	-4	-9	0	0	-6	-3	0	0	0	0	0	4	-1
1972	Below Normal	7	3	1	1	1	0	0	0	-2	7	5	2	2
1973	Above Normal	55	60	-66	-5	0	3	1	0	0	0	1	1	4
1974	Wet	1	2	0	0	0	0	0	0	0	0	0	1	0
1975	Wet	1	1	1	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	0	0	0	-2	-12	15	35	28	24	7
1977	Critical	-19	-34	-6	-17	-150	-227	-107	-33	-20	-21	-38	-61	-61
1978	Above Normal	-15	21	16	40	6	36	17	-1	7	-1	6	14	12
1979	Below Normal	11	4	-6	18	9	-2	-3	1	0	6	12	3	4
1980	Above Normal	-6	35	59	6	28	20	0	-1	2	0	0	0	12
1981	Dry	0	0	0	0	0	0	0	-2	-5	-3	3	-5	-1
1982	Wet	-3	30	5	0	-1	2	1	0	0	0	-1	-1	3
1983	Wet	0	0	-4	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	-1	0
1985	Dry	-1	3	-1	-9	-9	-7	-7	0	3	0	9	19	0
1986	Wet	3	-4	-2	-4	-2	5	-5	0	1	-49	-16	-7	-7
1987	Dry	5	10	10	7	31	8	-16	-16	-35	-14	5	-5	-1
1988	Critical	-10	-8	-6	-5	0	1	0	0	-1	-9	-36	-44	-10
1989	Dry	-8	9	-23	6	-15	-5	1	0	5	7	-11	26	-1
1990	Critical	-10	29	36	-48	-23	-4	0	0	4	17	16	16	1
1991	Critical	2	-1	6	-32	-17	-1	0	0	0	-1	0	0	-4
1992	Critical	0	0	0	0	0	0	0	-1	1	1	12	23	3
1993	Above Normal	8	3	-3	-17	0	0	0	5	12	1	9	21	3
1994	Critical	13	6	-6	0	36	21	6	2	-11	-6	18	-74	0
Average		0	2	0	-5	-5	-3	-1	-1	-1	0	2	1	-1
Wet		-6	-1	5	2	-1	0	0	0	0	-2	-1	0	0
Above Normal		0	13	1	5	7	6	1	0	2	0	0	1	3
Below Normal		1	-2	-4	-8	-4	-1	0	0	1	2	-2	4	-1
Dry		7	2	-6	-16	4	5	1	-1	-7	2	15	7	1
Critical		-3	0	4	-6	-36	-30	-9	-4	-2	-5	-3	-10	-9

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Old R. at Bacon Island
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	1%	-8%	-12%	-1%	-3%	-2%	0%	0%	0%	-2%	-2%	-1%	-2%
1924	Critical	2%	1%	0%	0%	-19%	-23%	-6%	-1%	0%	-1%	0%	1%	-4%
1925	Dry	0%	-1%	-6%	-3%	12%	17%	3%	0%	-1%	-1%	0%	1%	2%
1926	Dry	0%	-1%	-1%	0%	0%	0%	0%	-1%	0%	2%	1%	2%	0%
1927	Wet	1%	2%	3%	1%	1%	1%	0%	1%	0%	0%	0%	0%	1%
1928	Above Normal	0%	1%	2%	3%	4%	0%	-2%	-1%	0%	-2%	-2%	0%	0%
1929	Critical	1%	-1%	-2%	3%	-1%	-1%	0%	-1%	-1%	3%	0%	-2%	0%
1930	Dry	-1%	0%	0%	0%	0%	-1%	0%	0%	-1%	7%	1%	-11%	0%
1931	Critical	-5%	0%	3%	1%	-12%	-3%	5%	2%	-1%	-11%	-4%	2%	-2%
1932	Dry	1%	0%	0%	-3%	-4%	1%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-2%	-6%	-2%	0%	0%	0%	0%	-1%	-1%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	-1%	0%	0%
1936	Below Normal	2%	1%	0%	-1%	1%	1%	0%	0%	0%	0%	0%	-1%	0%
1937	Below Normal	-4%	-2%	0%	-3%	-6%	0%	0%	1%	0%	0%	0%	-1%	-1%
1938	Wet	0%	3%	4%	3%	0%	0%	0%	0%	0%	0%	0%	3%	1%
1939	Dry	4%	1%	1%	0%	-1%	0%	0%	0%	0%	-1%	7%	-9%	0%
1940	Above Normal	-8%	-3%	-2%	-2%	2%	1%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	1%	0%	1%	0%	0%	0%	0%	-1%	0%	0%	0%
1942	Wet	4%	7%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	-1%	-4%	3%	7%	2%	1%
1945	Below Normal	-3%	-2%	-3%	-2%	-3%	-3%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	4%	8%	0%	-1%	-1%	0%	0%	0%	3%	3%	11%	2%
1947	Dry	7%	0%	-5%	-3%	-3%	-1%	0%	0%	0%	5%	4%	4%	1%
1948	Below Normal	1%	2%	-2%	0%	3%	2%	0%	0%	1%	4%	-3%	2%	1%
1949	Dry	-2%	-3%	-1%	0%	1%	-2%	0%	0%	0%	-8%	-4%	3%	-1%
1950	Below Normal	0%	-6%	-6%	-5%	-5%	-1%	0%	-2%	1%	2%	1%	-2%	-2%
1951	Above Normal	4%	6%	0%	3%	1%	0%	0%	0%	2%	3%	-3%	-1%	1%
1952	Wet	0%	1%	1%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	2%	0%	-2%	-1%	0%	2%	4%	0%	-1%	5%	11%	8%	2%
1956	Wet	0%	-8%	-2%	0%	-5%	-2%	0%	0%	0%	0%	0%	0%	-2%
1957	Above Normal	0%	0%	0%	2%	3%	0%	0%	0%	0%	0%	-1%	-3%	0%
1958	Wet	-1%	9%	4%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1960	Dry	1%	10%	4%	-23%	-1%	1%	0%	0%	-10%	-6%	3%	3%	-1%
1961	Dry	3%	0%	1%	5%	5%	9%	5%	1%	-1%	3%	6%	17%	4%
1962	Below Normal	6%	7%	6%	-7%	-3%	0%	0%	0%	6%	1%	-8%	0%	1%
1963	Wet	-3%	0%	13%	7%	2%	0%	0%	0%	0%	1%	0%	-2%	2%
1964	Dry	1%	-2%	-4%	-2%	-1%	0%	0%	1%	-8%	5%	10%	-9%	-1%
1965	Wet	-11%	-9%	-4%	0%	-4%	-3%	-1%	-1%	-3%	2%	-2%	-2%	-3%
1966	Below Normal	-3%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1967	Wet	-3%	-1%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	-2%	-2%	0%
1969	Wet	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-2%	-1%	0%	0%	0%	0%	0%	1%	0%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	2%	1%	0%
1973	Above Normal	5%	10%	-17%	-2%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	-1%	-3%	2%	5%	4%	3%	1%
1977	Critical	-2%	-4%	-1%	-2%	-18%	-38%	-21%	-6%	-3%	-4%	-6%	-7%	-9%
1978	Above Normal	-1%	2%	2%	8%	2%	10%	4%	0%	3%	-1%	2%	3%	3%
1979	Below Normal	1%	0%	-1%	3%	3%	-1%	-1%	0%	0%	3%	3%	0%	1%
1980	Above Normal	-1%	5%	11%	2%	6%	5%	0%	0%	1%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	1%	-1%	0%
1982	Wet	0%	5%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-3%	-2%	-2%	0%	1%	0%	1%	3%	3%	0%
1986	Wet	0%	0%	0%	-1%	0%	1%	-2%	0%	0%	-16%	-5%	-1%	-2%
1987	Dry	1%	1%	1%	1%	5%	3%	-6%	-5%	-10%	-3%	1%	-1%	-1%
1988	Critical	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	-2%	-6%	-5%	-1%
1989	Dry	-1%	1%	-2%	1%	-1%	-1%	0%	0%	2%	2%	-2%	4%	0%
1990	Critical	-1%	3%	4%	-6%	-4%	-1%	0%	0%	0%	1%	2%	2%	0%
1991	Critical	0%	0%	1%	-3%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1993	Above Normal	1%	0%	0%	-3%	0%	0%	0%	2%	6%	0%	3%	4%	1%
1994	Critical	2%	1%	-1%	0%	4%	6%	2%	1%	-3%	-1%	2%	-7%	1%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		-1%	0%	1%	1%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	0%	1%	2%	2%	0%	0%	1%	0%	0%	0%	1%
Below Normal		0%	0%	0%	-1%	-1%	0%	0%	0%	1%	1%	-1%	1%	0%
Dry		1%	0%	-1%	-2%	1%	2%	0%	0%	-2%	1%	3%	1%	0%
Critical		0%	0%	0%	-1%	-5%	-5%	-2%	-1%	-1%	-1%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	602	597	625	601	591	463	329	307	335	388	320	439	466
1923	Below Normal	584	585	600	490	467	523	352	330	388	310	364	496	457
1924	Critical	546	591	685	741	902	969	663	569	615	543	546	553	660
1925	Dry	670	712	725	807	719	638	407	311	401	388	436	522	561
1926	Dry	648	619	709	782	709	656	399	401	401	408	466	550	562
1927	Wet	672	505	436	482	532	536	325	307	315	304	314	467	433
1928	Above Normal	589	504	486	522	483	451	330	326	334	360	345	542	439
1929	Critical	654	618	728	785	865	821	572	498	514	465	498	582	633
1930	Dry	689	701	750	624	616	629	369	400	413	432	448	570	553
1931	Critical	689	640	728	791	920	821	603	567	594	515	575	593	670
1932	Dry	675	702	673	524	710	706	544	456	445	426	433	546	570
1933	Critical	647	604	703	756	790	754	521	464	504	470	504	537	604
1934	Critical	644	707	717	733	721	867	596	533	540	452	495	591	633
1935	Below Normal	686	704	793	656	675	586	377	360	355	343	386	540	538
1936	Below Normal	641	603	705	665	560	332	306	326	411	325	371	503	479
1937	Below Normal	619	595	671	754	488	449	333	272	407	360	367	466	482
1938	Wet	617	621	454	525	427	338	265	254	259	350	313	310	394
1939	Dry	276	325	588	758	775	684	500	387	380	415	444	581	509
1940	Above Normal	685	615	696	682	599	338	292	317	369	320	309	491	476
1941	Wet	602	619	615	532	463	321	281	262	382	402	346	402	436
1942	Wet	384	478	559	452	312	354	306	284	360	401	328	329	379
1943	Wet	305	334	415	382	287	308	295	315	413	367	338	461	352
1944	Dry	617	595	674	744	740	527	381	342	368	388	459	520	530
1945	Below Normal	630	585	607	604	512	352	377	335	359	350	371	505	465
1946	Below Normal	590	540	471	454	443	421	351	338	375	322	375	510	433
1947	Dry	602	603	695	658	667	642	397	425	398	386	461	580	543
1948	Below Normal	694	636	758	762	880	672	386	358	324	290	380	511	554
1949	Dry	599	594	697	808	787	617	387	420	403	363	485	573	561
1950	Below Normal	667	605	714	701	553	561	336	330	317	332	343	475	495
1951	Above Normal	603	435	394	379	283	367	339	291	290	308	315	523	377
1952	Wet	605	625	658	546	455	407	233	207	288	344	295	303	414
1953	Wet	287	410	595	469	478	606	340	280	287	272	324	411	397
1954	Above Normal	403	487	643	751	509	561	335	352	334	329	311	505	460
1955	Dry	641	673	670	535	539	574	453	427	404	367	439	547	522
1956	Wet	649	679	684	446	364	343	315	325	369	404	352	334	439
1957	Above Normal	285	323	521	697	715	575	355	299	302	299	322	533	436
1958	Wet	576	413	528	495	583	536	232	190	317	364	309	316	405
1959	Below Normal	288	375	616	718	518	552	432	357	363	328	363	540	454
1960	Dry	643	633	705	808	782	521	368	408	385	419	445	554	556
1961	Dry	673	670	799	769	769	641	393	426	399	378	446	527	574
1962	Below Normal	617	630	738	781	688	503	364	350	341	316	365	578	523
1963	Wet	614	344	477	481	538	574	385	313	355	293	302	471	429
1964	Dry	601	593	459	522	568	568	427	416	388	398	502	533	498
1965	Wet	640	669	581	419	351	417	330	327	354	310	338	440	431
1966	Below Normal	576	539	459	476	463	533	352	343	350	330	360	565	446
1967	Wet	712	691	708	602	507	423	294	228	291	297	288	294	445
1968	Below Normal	280	361	576	643	529	568	382	360	348	324	363	529	439
1969	Wet	633	634	617	644	421	391	292	245	249	351	315	321	426
1970	Wet	277	344	485	314	335	327	304	309	322	331	311	499	347
1971	Wet	647	515	504	438	501	470	316	290	283	274	310	444	416
1972	Below Normal	424	518	643	614	656	567	349	376	373	346	364	571	483
1973	Above Normal	738	569	504	604	587	460	353	357	393	295	331	492	474
1974	Wet	638	426	443	457	432	304	294	321	391	366	349	383	400
1975	Wet	290	337	524	569	396	300	301	311	371	371	341	395	376
1976	Critical	297	295	489	681	816	751	466	460	560	582	591	636	552
1977	Critical	727	665	778	719	868	875	684	598	603	489	535	598	678
1978	Above Normal	732	760	790	677	637	638	394	311	405	397	350	434	544
1979	Below Normal	570	614	689	608	368	321	331	311	329	289	367	513	442
1980	Above Normal	652	567	549	435	377	389	350	338	372	405	350	448	436
1981	Dry	550	548	682	732	524	552	381	355	373	407	450	571	510
1982	Wet	642	561	430	533	301	333	229	210	340	376	314	258	377
1983	Wet	206	267	378	413	355	300	303	264	250	229	196	221	282
1984	Wet	255	208	323	337	241	318	329	341	385	308	319	474	320
1985	Dry	556	477	421	452	564	595	446	379	349	390	505	506	470
1986	Wet	561	582	705	610	494	338	248	230	365	517	374	412	453
1987	Dry	489	514	667	762	765	650	418	406	399	420	490	566	545
1988	Critical	694	659	739	718	709	813	512	481	478	394	516	611	610
1989	Dry	717	736	768	764	954	611	323	362	324	372	491	524	579
1990	Critical	588	641	759	703	766	624	469	453	504	547	577	600	603
1991	Critical	731	750	774	846	928	692	469	437	485	563	582	556	651
1992	Critical	713	798	793	918	754	624	387	407	423	389	490	596	608
1993	Above Normal	724	782	830	709	618	541	332	342	418	382	327	456	538
1994	Critical	579	639	731	823	863	632	390	411	421	571	589	712	613
Average		573	563	623	622	590	535	378	356	384	378	397	494	491
Wet		515	489	529	483	418	393	296	277	331	344	318	378	398
Above Normal		601	564	604	606	540	478	341	324	355	348	328	486	465
Below Normal		562	563	646	638	557	496	359	339	360	326	367	521	478
Dry		603	606	668	691	699	613	412	395	389	397	463	548	540
Critical		626	634	719	768	825	770	528	490	520	498	542	597	626

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	602	597	625	601	591	463	329	307	335	389	320	439	467
1923	Below Normal	586	559	572	489	463	527	352	330	388	314	365	492	453
1924	Critical	553	598	687	751	776	916	615	565	626	543	542	553	644
1925	Dry	676	708	702	793	809	718	422	312	397	380	431	526	573
1926	Dry	651	614	705	781	704	650	395	394	393	410	469	560	560
1927	Wet	679	509	440	484	546	547	326	312	314	304	313	469	437
1928	Above Normal	590	507	490	527	489	445	323	324	336	343	339	543	438
1929	Critical	659	619	717	800	860	819	570	490	470	438	499	574	626
1930	Dry	683	699	749	625	591	599	361	400	411	404	458	529	542
1931	Critical	661	635	738	807	802	769	596	570	603	492	555	597	652
1932	Dry	680	703	673	596	723	708	545	456	445	426	434	547	578
1933	Critical	647	605	700	758	790	754	521	464	504	470	504	536	605
1934	Critical	645	708	718	738	715	865	595	532	540	452	494	589	633
1935	Below Normal	684	703	790	659	676	619	380	360	355	342	388	537	541
1936	Below Normal	648	607	705	664	566	333	307	325	411	331	368	500	481
1937	Below Normal	603	585	670	750	485	448	333	273	409	363	368	465	479
1938	Wet	616	633	458	543	428	338	263	254	259	350	313	312	397
1939	Dry	280	327	590	759	773	670	500	384	376	393	455	553	505
1940	Above Normal	640	599	692	678	601	339	291	317	370	321	309	491	471
1941	Wet	602	621	617	532	467	321	281	262	381	401	346	402	436
1942	Wet	391	499	566	452	312	354	306	284	360	401	328	330	382
1943	Wet	306	334	415	383	287	308	295	315	413	367	338	462	352
1944	Dry	619	596	675	744	739	529	382	340	356	372	466	532	529
1945	Below Normal	620	576	599	599	507	352	375	335	359	350	370	503	462
1946	Below Normal	590	552	480	455	443	415	350	338	375	311	379	549	437
1947	Dry	631	610	675	650	657	672	397	425	406	386	468	600	548
1948	Below Normal	698	646	754	760	892	678	386	359	322	297	368	521	557
1949	Dry	596	582	693	805	791	600	384	421	403	351	463	585	556
1950	Below Normal	673	587	689	683	544	554	337	318	316	331	346	470	487
1951	Above Normal	620	448	394	389	282	367	339	285	285	320	311	517	380
1952	Wet	602	629	662	547	456	409	233	207	288	344	295	303	414
1953	Wet	287	411	596	470	478	607	340	280	287	272	325	417	397
1954	Above Normal	405	488	644	751	509	561	334	352	334	331	311	505	460
1955	Dry	651	677	662	534	538	643	466	429	386	349	433	580	529
1956	Wet	657	639	679	446	360	342	315	325	369	404	351	334	435
1957	Above Normal	285	323	521	700	720	576	355	299	301	300	320	526	435
1958	Wet	568	434	538	496	583	536	232	190	317	364	309	317	407
1959	Below Normal	288	375	617	718	517	552	434	356	361	328	364	541	454
1960	Dry	649	659	737	693	760	521	368	413	401	415	471	565	554
1961	Dry	691	670	802	795	789	694	418	431	396	382	460	586	593
1962	Below Normal	655	651	778	750	681	503	360	348	360	332	346	575	528
1963	Wet	603	341	501	493	530	573	386	313	355	294	305	466	430
1964	Dry	604	588	453	518	567	569	424	422	389	388	531	508	497
1965	Wet	588	625	566	420	338	410	329	322	343	307	337	435	418
1966	Below Normal	562	536	462	476	455	493	347	343	349	328	359	563	439
1967	Wet	699	685	722	603	507	428	294	228	291	297	288	294	445
1968	Below Normal	280	361	576	642	528	568	381	361	348	322	359	522	437
1969	Wet	633	636	615	645	421	392	292	245	249	351	315	322	426
1970	Wet	277	344	485	314	335	327	304	309	321	329	311	499	346
1971	Wet	646	510	503	438	476	466	316	290	283	274	310	446	413
1972	Below Normal	428	520	644	614	657	567	349	376	364	342	366	576	484
1973	Above Normal	759	607	473	596	587	468	355	357	393	295	332	493	476
1974	Wet	638	427	443	457	432	304	294	321	391	366	349	383	400
1975	Wet	290	337	525	569	396	300	301	311	371	371	341	395	376
1976	Critical	297	295	489	681	816	745	463	453	559	596	606	654	554
1977	Critical	733	640	789	704	734	788	586	556	589	495	527	573	643
1978	Above Normal	704	767	789	702	642	665	395	313	408	393	348	439	547
1979	Below Normal	576	616	687	612	371	320	329	312	329	291	374	515	444
1980	Above Normal	651	581	578	437	367	389	350	337	372	405	351	448	439
1981	Dry	550	548	682	732	524	552	380	354	371	405	452	569	510
1982	Wet	642	576	435	534	301	334	229	210	340	376	314	258	379
1983	Wet	206	267	378	412	354	301	304	264	250	229	196	221	282
1984	Wet	255	208	323	337	241	318	329	341	385	308	319	473	320
1985	Dry	555	478	421	449	559	550	436	378	357	391	510	517	467
1986	Wet	565	580	704	608	494	337	249	230	367	409	352	410	442
1987	Dry	490	517	672	772	760	570	374	388	379	414	483	562	532
1988	Critical	690	655	736	715	715	814	512	481	473	387	502	588	606
1989	Dry	707	741	758	767	944	604	321	361	332	382	487	537	579
1990	Critical	584	649	785	679	735	615	467	453	504	548	584	608	601
1991	Critical	734	749	777	839	919	690	469	437	485	563	582	556	650
1992	Critical	713	798	793	918	754	625	387	406	420	388	495	608	609
1993	Above Normal	730	786	833	703	618	541	332	346	424	379	324	464	540
1994	Critical	587	643	729	822	877	646	396	413	411	563	604	671	614
Average		573	564	624	621	584	533	375	355	382	375	397	495	490
Wet		512	488	532	485	416	393	296	277	330	339	317	378	397
Above Normal		599	570	604	608	541	481	340	324	356	347	327	487	465
Below Normal		564	563	644	634	556	495	359	338	360	327	366	523	477
Dry		607	607	666	688	702	616	411	394	387	391	467	553	541
Critical		625	633	721	768	791	754	515	485	515	495	541	592	620

Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	2	-26	-28	-1	-4	3	0	0	0	5	2	-4	-4
1924	Critical	7	7	1	10	-126	-54	-48	-4	10	1	-3	0	-17
1925	Dry	6	-3	-23	-14	90	80	15	1	-4	-7	-5	4	12
1926	Dry	3	-6	-4	-2	-5	-6	-4	-7	-8	2	2	11	-2
1927	Wet	8	5	4	2	14	12	1	5	0	0	0	1	4
1928	Above Normal	0	3	4	5	6	-6	-7	-3	2	-18	-6	2	-1
1929	Critical	5	1	-12	15	-4	-2	-2	-8	-45	-27	1	-8	-7
1930	Dry	-6	-3	0	1	-26	-30	-8	0	-2	-28	9	-41	-11
1931	Critical	-29	-5	10	16	-119	-52	-6	3	9	-24	-20	4	-18
1932	Dry	5	1	-1	72	14	2	1	-1	1	0	0	1	8
1933	Critical	1	0	-2	2	1	1	0	0	0	0	0	-1	0
1934	Critical	0	1	1	6	-6	-2	-2	0	0	0	-1	-2	0
1935	Below Normal	-2	-1	-2	3	0	32	3	0	0	-2	2	-3	3
1936	Below Normal	7	4	1	-1	6	1	1	-1	0	6	-3	-2	2
1937	Below Normal	-16	-9	-1	-4	-3	-1	0	0	2	3	1	-2	-2
1938	Wet	-1	12	4	19	1	0	-2	0	0	0	0	3	3
1939	Dry	4	2	2	1	-2	-14	0	-3	4	-22	11	-28	-4
1940	Above Normal	-45	-16	-4	-5	2	1	-1	0	0	1	0	1	-5
1941	Wet	0	1	2	0	3	0	0	0	-1	-1	0	0	0
1942	Wet	7	21	7	0	0	0	0	0	0	0	0	1	3
1943	Wet	1	0	0	0	0	0	0	0	0	0	0	1	0
1944	Dry	1	1	0	0	-1	1	2	-2	-13	-16	7	12	-1
1945	Below Normal	-10	-9	-8	-5	-5	0	-1	0	0	0	0	-1	-3
1946	Below Normal	0	13	9	0	-1	-5	-1	0	0	-11	4	39	4
1947	Dry	29	7	-21	-8	-9	30	0	0	8	0	7	20	5
1948	Below Normal	4	10	-5	-1	12	6	0	1	-2	8	-11	9	2
1949	Dry	-3	-12	-5	-3	4	-18	-4	0	0	-12	-22	12	-5
1950	Below Normal	7	-19	-26	-18	-10	-7	1	-12	-1	-1	2	-5	-7
1951	Above Normal	17	13	0	10	0	0	0	-6	-4	11	-4	-6	3
1952	Wet	-2	3	4	0	0	2	0	0	0	0	0	0	1
1953	Wet	0	1	1	0	0	1	0	0	0	0	1	5	1
1954	Above Normal	2	1	1	0	0	0	0	0	0	2	0	0	1
1955	Dry	10	4	-8	-1	-1	68	14	2	-18	-19	-6	33	7
1956	Wet	9	-40	-5	0	-4	-1	0	0	0	0	0	-1	-4
1957	Above Normal	0	0	0	3	5	0	0	0	-1	1	-3	-6	0
1958	Wet	-9	21	10	2	0	0	0	0	0	0	0	0	2
1959	Below Normal	0	0	1	0	-1	-1	2	-1	-2	-1	1	2	0
1960	Dry	6	26	33	-115	-22	0	0	5	16	-4	26	11	-2
1961	Dry	18	0	3	26	19	53	24	5	-2	4	15	59	19
1962	Below Normal	39	22	40	-31	-7	0	-4	-3	18	17	-19	-3	6
1963	Wet	-11	-3	24	12	-8	-2	1	0	1	0	3	-5	1
1964	Dry	3	-5	-6	-4	-1	1	-3	6	0	-10	28	-25	-1
1965	Wet	-52	-43	-15	0	-12	-8	-1	-5	-11	-3	-1	-5	-13
1966	Below Normal	-13	-3	3	0	-8	-40	-5	0	-2	-2	-1	-3	-6
1967	Wet	-13	-6	14	1	-1	4	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	-1	-1	0	-1	2	0	-2	-3	-7	-1
1969	Wet	1	1	-2	1	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	-1	-1	0	-1	-1	0	1	0
1971	Wet	-1	-5	0	0	-26	-5	0	0	0	0	0	2	-3
1972	Below Normal	4	2	1	0	0	0	0	0	-9	-4	2	5	0
1973	Above Normal	21	37	-31	-7	0	8	2	0	0	0	0	0	2
1974	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	1	0	0	0	0	0	0	0	-1	0	0	0
1976	Critical	0	0	0	0	0	-6	-3	-7	-1	14	15	18	2
1977	Critical	5	-25	10	-15	-134	-87	-98	-42	-14	6	-8	-25	-36
1978	Above Normal	-28	7	0	25	4	28	2	2	2	-3	-2	5	3
1979	Below Normal	6	2	-1	5	2	-1	-1	2	0	1	7	3	2
1980	Above Normal	-1	13	28	2	-10	0	0	-1	0	0	1	0	3
1981	Dry	0	0	0	0	0	0	-1	-1	-2	-2	2	-2	0
1982	Wet	0	16	5	1	0	2	0	0	0	0	0	0	2
1983	Wet	0	0	0	-1	-1	1	1	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	1	0	-3	-5	-45	-10	0	8	0	4	11	-3
1986	Wet	3	-2	-1	-2	0	-2	1	0	2	-108	-22	-2	-11
1987	Dry	2	4	5	10	-5	-80	-44	-17	-19	-7	-7	-4	-14
1988	Critical	-4	-5	-3	-3	6	1	1	0	-5	-7	-14	-23	-5
1989	Dry	-10	6	-10	3	-10	-7	-2	-1	9	10	-5	14	0
1990	Critical	-4	9	26	-24	-31	-10	-2	-1	0	1	7	8	-2
1991	Critical	3	-2	3	-8	-10	-2	0	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	1	0	-1	-3	-1	5	12	1
1993	Above Normal	6	3	3	-6	0	0	0	4	6	-3	-2	8	2
1994	Critical	8	4	-2	-2	15	14	6	2	-10	-8	16	-41	0
Average		0	1	0	0	-6	-2	-3	-1	-1	-4	0	1	-1
Wet		-3	-1	2	2	-2	0	0	0	0	-5	-1	0	-1
Above Normal		-3	6	0	3	1	3	0	0	1	-1	-2	0	1
Below Normal		2	-1	-1	-4	-1	-1	0	-1	0	1	-1	2	0
Dry		4	1	-2	-2	2	2	-1	-1	-2	-7	4	5	0
Critical		-1	-1	3	0	-34	-17	-13	-5	-5	-4	0	-5	-7

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Delta Mendota Canal at Tracy Pumping Plant
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-4%	-5%	0%	-1%	1%	0%	0%	0%	2%	0%	-1%	-1%
1924	Critical	1%	1%	0%	1%	-14%	-6%	-7%	-1%	2%	0%	-1%	0%	-2%
1925	Dry	1%	0%	-3%	-2%	12%	13%	4%	0%	-1%	-2%	-1%	1%	2%
1926	Dry	0%	-1%	-1%	0%	-1%	-1%	-1%	-2%	-2%	0%	1%	2%	0%
1927	Wet	1%	1%	1%	0%	3%	2%	0%	2%	0%	0%	0%	0%	1%
1928	Above Normal	0%	1%	1%	1%	1%	-1%	-2%	-1%	1%	-5%	-2%	0%	-1%
1929	Critical	1%	0%	-2%	2%	-1%	0%	0%	-2%	-9%	-6%	0%	-1%	-1%
1930	Dry	-1%	0%	0%	0%	-4%	-5%	-2%	0%	-1%	-6%	2%	-7%	-2%
1931	Critical	-4%	-1%	1%	2%	-13%	-6%	-1%	0%	1%	-5%	-4%	1%	-2%
1932	Dry	1%	0%	0%	14%	2%	0%	0%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	6%	1%	0%	0%	0%	1%	-1%	0%
1936	Below Normal	1%	1%	0%	0%	1%	0%	0%	0%	0%	2%	-1%	0%	0%
1937	Below Normal	-3%	-2%	0%	-1%	-1%	0%	0%	0%	0%	1%	0%	0%	0%
1938	Wet	0%	2%	1%	4%	0%	0%	-1%	0%	0%	0%	0%	1%	1%
1939	Dry	1%	1%	0%	0%	0%	-2%	0%	-1%	-1%	-5%	3%	-5%	-1%
1940	Above Normal	-7%	-3%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	2%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	-1%	-3%	-4%	2%	2%	0%
1945	Below Normal	-2%	-2%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	2%	2%	0%	0%	-1%	0%	0%	0%	-3%	1%	8%	1%
1947	Dry	5%	1%	-3%	-1%	-1%	5%	0%	0%	2%	0%	1%	3%	1%
1948	Below Normal	1%	2%	-1%	0%	1%	1%	0%	0%	-1%	3%	-3%	2%	0%
1949	Dry	-1%	-2%	-1%	0%	1%	-3%	-1%	0%	0%	-3%	-5%	2%	-1%
1950	Below Normal	1%	-3%	-4%	-3%	-2%	-1%	0%	-4%	0%	0%	1%	-1%	-1%
1951	Above Normal	3%	3%	0%	3%	0%	0%	0%	-2%	-2%	4%	-1%	-1%	1%
1952	Wet	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	2%	1%	-1%	0%	0%	12%	3%	0%	-4%	-5%	-1%	6%	1%
1956	Wet	1%	-6%	-1%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	-1%	0%
1958	Wet	-1%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	1%	0%	-1%	0%	0%	0%	0%
1960	Dry	1%	4%	5%	-14%	-3%	0%	0%	1%	4%	-1%	6%	2%	0%
1961	Dry	3%	0%	0%	3%	3%	8%	6%	1%	-1%	1%	3%	11%	3%
1962	Below Normal	6%	3%	5%	-4%	-1%	0%	-1%	-1%	5%	5%	-5%	-1%	1%
1963	Wet	-2%	-1%	5%	3%	-1%	0%	0%	0%	0%	0%	1%	-1%	0%
1964	Dry	1%	-1%	-1%	-1%	0%	0%	-1%	1%	0%	-2%	6%	-5%	0%
1965	Wet	-8%	-6%	-3%	0%	-4%	-2%	0%	-1%	-3%	-1%	0%	-1%	-2%
1966	Below Normal	-2%	0%	1%	0%	-2%	-7%	-1%	0%	-1%	-1%	0%	0%	-1%
1967	Wet	-2%	-1%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-5%	-1%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-2%	-1%	1%	1%	0%
1973	Above Normal	3%	7%	-6%	-1%	0%	-2%	1%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-1%	-1%	-2%	0%	2%	2%	3%	0%
1977	Critical	1%	-4%	1%	-2%	-15%	-10%	-14%	-7%	-2%	1%	-1%	-4%	-5%
1978	Above Normal	-4%	1%	0%	4%	1%	4%	0%	1%	1%	-1%	-1%	1%	1%
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	2%	0%	0%
1980	Above Normal	0%	2%	5%	0%	-3%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1982	Wet	0%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-8%	-2%	0%	2%	0%	1%	2%	-1%
1986	Wet	1%	0%	0%	0%	0%	-1%	0%	0%	1%	-21%	-6%	0%	-2%
1987	Dry	0%	1%	1%	1%	-1%	-12%	-10%	-4%	-5%	-2%	-1%	-1%	-3%
1988	Critical	-1%	-1%	0%	0%	1%	0%	0%	-1%	-2%	-2%	-3%	-4%	-1%
1989	Dry	-1%	1%	-1%	0%	-1%	-1%	-1%	0%	3%	3%	-1%	3%	0%
1990	Critical	-1%	1%	3%	-3%	-4%	-2%	0%	0%	0%	0%	1%	1%	0%
1991	Critical	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	1%	2%	0%
1993	Above Normal	1%	0%	0%	-1%	0%	0%	0%	1%	1%	-1%	-1%	2%	0%
1994	Critical	1%	1%	0%	0%	2%	2%	2%	1%	-2%	-1%	3%	-6%	0%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	1%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		1%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	1%	1%	0%
Critical		0%	0%	0%	0%	-4%	-2%	-2%	-1%	-1%	-1%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	801	741	741	668	808	339	340	289	287	255	272	541	507
1923	Below Normal	788	765	736	380	312	294	346	307	249	276	393	669	460
1924	Critical	720	781	862	907	930	745	542	492	674	606	642	712	718
1925	Dry	945	1,000	913	990	711	326	271	273	266	283	393	662	586
1926	Dry	889	788	923	991	715	325	279	330	301	404	515	732	599
1927	Wet	929	602	315	368	453	286	248	285	239	231	291	588	403
1928	Above Normal	791	647	420	522	316	265	330	302	246	282	356	715	433
1929	Critical	885	802	953	1,008	1,055	593	441	424	404	443	585	796	699
1930	Dry	952	936	967	647	436	293	258	313	322	375	482	768	563
1931	Critical	950	807	905	964	901	531	440	491	625	590	714	788	725
1932	Dry	918	936	863	425	485	378	362	371	312	286	405	710	538
1933	Critical	866	745	841	782	555	413	356	364	409	442	558	670	583
1934	Critical	870	975	885	769	444	390	371	381	404	389	576	823	606
1935	Below Normal	964	933	1,023	668	350	288	276	319	254	251	404	709	537
1936	Below Normal	867	764	884	1,054	1,140	404	275	295	265	256	383	657	604
1937	Below Normal	850	767	837	998	928	680	339	262	257	259	326	580	590
1938	Wet	847	809	360	329	520	635	395	362	344	276	283	315	456
1939	Dry	226	287	657	1,013	944	599	469	345	329	447	513	788	551
1940	Above Normal	946	782	811	924	715	331	271	281	260	244	297	642	542
1941	Wet	814	829	855	583	746	428	374	268	269	274	287	447	515
1942	Wet	425	579	773	612	389	277	305	280	262	274	302	362	403
1943	Wet	279	322	324	510	364	400	432	304	309	259	301	593	366
1944	Dry	855	789	878	969	1,039	371	344	309	293	392	526	669	619
1945	Below Normal	851	758	704	646	668	473	359	313	253	279	392	684	532
1946	Below Normal	811	700	513	272	343	323	347	315	265	290	420	661	438
1947	Dry	819	799	932	786	702	402	369	357	319	408	544	771	601
1948	Below Normal	956	817	1,010	929	995	428	291	293	234	252	423	654	607
1949	Dry	783	746	869	1,025	827	365	351	329	290	384	583	760	609
1950	Below Normal	900	751	912	817	405	261	262	300	242	269	357	598	506
1951	Above Normal	803	467	374	613	667	285	327	288	246	248	317	683	443
1952	Wet	801	821	879	708	322	343	401	268	271	269	260	287	469
1953	Wet	244	449	864	376	286	270	333	274	234	243	316	477	364
1954	Above Normal	437	581	761	1,039	337	262	329	300	246	260	309	650	459
1955	Dry	857	894	868	496	374	308	364	338	301	327	470	718	526
1956	Wet	864	874	906	822	432	313	265	296	263	260	296	356	496
1957	Above Normal	240	268	515	844	774	286	317	281	236	253	327	714	421
1958	Wet	770	441	551	392	661	835	754	294	258	262	288	323	486
1959	Below Normal	246	376	757	1,007	413	295	375	329	318	335	400	725	465
1960	Dry	879	817	848	1,048	1,056	359	351	331	363	459	509	722	645
1961	Dry	912	864	1,075	934	830	358	278	305	333	413	550	662	626
1962	Below Normal	811	798	952	927	764	322	276	317	269	305	409	780	577
1963	Wet	770	295	415	484	357	265	493	291	224	232	282	601	392
1964	Dry	804	785	364	469	346	299	409	342	330	437	611	679	490
1965	Wet	853	878	641	375	286	257	292	308	258	242	287	556	436
1966	Below Normal	780	710	377	304	289	259	330	311	280	324	400	748	426
1967	Wet	976	923	930	668	317	340	363	326	275	297	266	269	496
1968	Below Normal	227	355	697	780	315	244	324	328	304	321	390	687	414
1969	Wet	839	821	727	754	858	579	538	360	310	274	295	333	557
1970	Wet	224	331	517	635	431	282	345	299	267	272	301	650	380
1971	Wet	894	638	419	273	270	255	310	272	237	241	316	540	389
1972	Below Normal	484	630	774	742	720	345	353	330	305	323	402	765	514
1973	Above Normal	1,034	784	461	610	536	313	341	326	254	243	339	651	491
1974	Wet	913	492	324	295	267	271	323	298	270	244	338	426	372
1975	Wet	246	319	570	579	557	337	357	299	249	243	312	431	375
1976	Critical	260	240	438	807	1,032	604	449	425	630	714	767	900	605
1977	Critical	1,017	868	1,068	785	864	665	553	523	656	559	692	822	756
1978	Above Normal	1,052	1,051	1,023	767	470	532	424	368	299	262	302	562	593
1979	Below Normal	764	835	922	699	401	316	310	307	248	263	394	673	511
1980	Above Normal	921	747	596	469	805	558	386	313	317	285	312	578	524
1981	Dry	752	715	891	1,034	378	257	328	322	345	461	540	751	565
1982	Wet	869	735	268	578	352	442	477	286	263	273	310	311	430
1983	Wet	206	300	485	956	837	789	738	365	317	303	240	209	479
1984	Wet	212	255	454	427	349	268	348	323	274	261	311	647	344
1985	Dry	779	619	294	311	500	368	389	331	290	439	628	636	466
1986	Wet	723	736	909	690	810	690	366	280	286	342	319	505	555
1987	Dry	644	679	877	1,063	804	423	387	337	370	474	572	734	614
1988	Critical	945	853	960	809	390	366	352	382	395	422	632	847	613
1989	Dry	998	977	991	913	1,135	496	257	279	282	421	606	663	668
1990	Critical	758	819	973	809	660	371	357	339	503	685	725	814	651
1991	Critical	1,039	1,023	1,014	1,019	1,027	643	337	318	491	707	701	718	753
1992	Critical	1,038	1,102	1,032	1,197	769	379	284	314	386	420	627	816	697
1993	Above Normal	1,032	1,089	1,083	812	675	454	260	281	242	232	284	565	584
1994	Critical	775	848	926	1,019	1,004	420	355	309	400	731	758	982	711
Average		756	713	746	725	615	399	364	324	316	346	428	633	530
Wet		652	593	595	544	470	408	403	302	270	265	295	439	436
Above Normal		806	716	679	727	610	362	332	303	263	256	312	630	500
Below Normal		736	711	793	730	574	352	319	309	267	286	392	685	513
Dry		813	789	826	820	705	370	342	326	315	401	528	714	579
Critical		844	822	905	906	802	510	403	397	498	559	665	807	676

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	801	741	741	668	808	339	340	289	287	256	272	541	507
1923	Below Normal	792	719	655	378	307	289	344	308	250	273	387	661	447
1924	Critical	735	795	858	927	828	554	497	488	672	600	640	721	693
1925	Dry	948	993	865	959	773	381	283	274	264	281	394	670	591
1926	Dry	894	778	915	988	713	325	280	328	300	411	520	745	600
1927	Wet	939	611	323	372	454	288	248	289	239	231	292	591	406
1928	Above Normal	791	652	430	532	328	265	330	299	246	278	349	717	435
1929	Critical	894	807	926	1,045	1,047	588	439	420	397	453	586	779	698
1930	Dry	942	931	967	649	436	292	258	314	320	398	494	680	557
1931	Critical	901	804	926	991	806	491	460	500	620	533	685	802	710
1932	Dry	926	935	862	420	469	382	362	371	312	286	405	710	537
1933	Critical	867	745	843	786	559	415	356	364	409	442	557	671	585
1934	Critical	870	977	888	756	422	384	369	380	404	389	573	817	602
1935	Below Normal	961	932	1,018	676	351	290	277	319	253	252	402	704	536
1936	Below Normal	881	772	885	1,049	1,136	407	276	294	266	255	382	651	604
1937	Below Normal	817	750	835	997	868	677	339	261	259	260	324	576	580
1938	Wet	844	830	375	329	504	633	395	361	344	276	282	323	458
1939	Dry	234	291	661	1,015	938	597	470	344	330	439	554	729	550
1940	Above Normal	863	755	799	913	719	334	271	281	260	244	298	642	531
1941	Wet	814	831	860	583	747	430	374	268	268	273	287	447	515
1942	Wet	438	621	798	612	388	277	305	280	263	273	302	364	410
1943	Wet	280	321	324	511	365	401	432	304	309	259	302	595	367
1944	Dry	857	791	878	970	1,035	371	345	307	284	399	559	688	624
1945	Below Normal	831	742	687	634	655	458	358	313	253	278	391	682	524
1946	Below Normal	811	724	551	273	340	320	345	315	265	298	429	735	450
1947	Dry	873	813	881	767	680	398	368	357	320	425	565	804	604
1948	Below Normal	965	837	995	923	1,025	437	292	294	235	262	407	671	612
1949	Dry	774	721	861	1,020	834	360	349	329	290	356	556	785	603
1950	Below Normal	910	712	859	781	386	259	262	294	244	275	362	588	494
1951	Above Normal	829	492	375	616	682	285	324	288	248	255	308	672	448
1952	Wet	798	827	886	709	323	347	411	268	271	269	261	288	471
1953	Wet	245	450	865	376	286	270	333	274	234	243	319	487	365
1954	Above Normal	441	583	763	1,039	337	262	329	300	246	261	309	650	460
1955	Dry	875	903	850	493	373	311	373	339	298	340	516	777	537
1956	Wet	875	799	886	822	414	307	265	296	262	260	295	354	486
1957	Above Normal	240	268	516	853	792	288	317	282	236	253	324	699	422
1958	Wet	754	480	574	396	662	835	754	294	257	262	289	325	490
1959	Below Normal	247	377	759	1,008	413	295	376	330	317	336	402	729	466
1960	Dry	887	862	953	811	1,010	364	351	333	334	431	524	741	633
1961	Dry	942	866	1,079	979	864	387	290	308	331	423	575	773	651
1962	Below Normal	860	840	1,032	863	743	322	275	317	280	311	375	776	583
1963	Wet	752	291	462	505	365	265	494	291	225	233	282	590	396
1964	Dry	810	778	352	459	344	299	409	344	308	450	675	632	488
1965	Wet	758	805	606	376	276	250	289	305	251	245	281	545	416
1966	Below Normal	755	704	388	305	288	258	329	312	279	324	398	743	424
1967	Wet	953	909	958	672	317	340	363	326	275	297	266	270	495
1968	Below Normal	227	356	698	778	315	243	324	330	306	322	384	674	413
1969	Wet	841	827	721	760	858	580	536	360	310	274	295	334	558
1970	Wet	224	332	518	635	431	281	344	299	267	271	302	651	380
1971	Wet	892	629	418	273	266	251	309	272	237	241	316	543	387
1972	Below Normal	491	634	776	743	720	345	353	330	304	321	408	771	516
1973	Above Normal	1,071	850	406	601	536	315	342	326	254	243	339	652	495
1974	Wet	913	494	324	295	267	271	323	298	270	244	338	426	372
1975	Wet	246	320	571	579	557	337	358	299	249	243	312	432	375
1976	Critical	260	240	438	807	1,032	604	449	415	642	745	798	920	613
1977	Critical	1,007	821	1,072	767	746	431	437	487	636	540	657	762	697
1978	Above Normal	1,030	1,079	1,021	812	475	556	447	366	306	261	307	576	603
1979	Below Normal	775	839	919	710	413	315	306	308	248	269	406	675	515
1980	Above Normal	918	768	662	481	800	591	386	312	319	285	312	578	534
1981	Dry	752	715	891	1,034	378	257	327	321	340	457	544	747	564
1982	Wet	867	758	276	578	351	444	483	286	263	273	310	310	433
1983	Wet	206	300	482	954	837	789	738	365	317	303	240	209	478
1984	Wet	212	255	454	427	349	268	348	323	274	261	311	647	344
1985	Dry	778	621	295	304	490	362	383	330	292	439	636	656	465
1986	Wet	728	732	908	686	808	703	364	278	287	289	299	498	548
1987	Dry	648	687	890	1,062	830	435	389	320	337	459	577	728	614
1988	Critical	938	843	955	803	390	367	353	382	394	415	598	803	603
1989	Dry	985	990	963	922	1,135	483	258	278	286	430	593	690	668
1990	Critical	750	833	1,024	760	634	365	357	338	503	688	741	830	652
1991	Critical	1,042	1,020	1,023	989	1,009	641	337	318	490	707	700	717	750
1992	Critical	1,038	1,102	1,032	1,197	768	379	284	313	387	421	637	839	700
1993	Above Normal	1,042	1,090	1,089	794	675	454	260	285	254	232	292	585	588
1994	Critical	789	855	922	1,015	1,033	444	363	311	391	720	782	912	711
Average		755	714	747	720	610	395	363	323	315	345	430	634	529
Wet		647	592	599	545	468	408	403	302	270	263	294	439	436
Above Normal		803	728	680	731	615	369	335	303	266	257	311	631	502
Below Normal		737	710	790	723	569	351	318	309	269	288	390	688	512
Dry		820	792	823	803	706	375	343	325	309	402	543	722	580
Critical		841	820	909	904	773	472	392	393	496	554	663	798	668

Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1 (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	4	-46	-81	-3	-5	-5	-2	1	1	-3	-6	-8	-13
1924	Critical	15	14	-4	21	-101	-191	-45	-4	-2	-5	-2	9	-25
1925	Dry	4	-7	-48	-31	62	56	11	1	-2	-2	1	8	4
1926	Dry	5	-11	-8	-3	-2	0	1	-2	-1	7	5	13	0
1927	Wet	10	8	9	4	1	2	0	3	0	0	1	2	3
1928	Above Normal	1	5	10	10	12	1	1	-3	0	-4	-7	3	2
1929	Critical	9	6	-27	37	-8	-5	-2	-4	-6	9	1	-18	-1
1930	Dry	-11	-5	0	2	0	-1	0	1	-3	23	12	-88	-6
1931	Critical	-49	-4	21	27	-94	-39	20	9	-6	-58	-29	14	-16
1932	Dry	8	-2	-1	-5	-16	4	1	0	0	0	0	0	-1
1933	Critical	1	0	2	4	4	1	0	0	0	0	-1	1	1
1934	Critical	0	2	3	-13	-22	-6	-2	0	0	0	-3	-6	-4
1935	Below Normal	-3	-1	-5	8	1	1	1	0	0	1	-2	-5	0
1936	Below Normal	14	8	1	-5	-4	2	1	-1	0	-1	-1	-6	1
1937	Below Normal	-33	-17	-2	-1	-60	-3	0	0	1	-1	-1	-4	-10
1938	Wet	-2	21	15	-1	-17	-2	-1	0	0	0	0	8	2
1939	Dry	8	4	5	3	-6	-1	1	-1	1	-8	40	-59	-1
1940	Above Normal	-84	-27	-12	-12	4	3	0	0	0	0	0	1	-11
1941	Wet	0	2	5	0	1	2	0	0	-1	-2	0	0	1
1942	Wet	13	41	25	1	0	0	0	0	0	-1	0	2	7
1943	Wet	1	0	-1	1	1	0	0	0	0	0	1	2	0
1944	Dry	2	3	0	1	-3	1	1	-1	-9	7	33	20	5
1945	Below Normal	-20	-16	-17	-11	-13	-14	-1	0	0	-1	-1	-3	-8
1946	Below Normal	0	23	39	1	-3	-3	-1	0	0	7	9	74	12
1947	Dry	54	15	-51	-19	-22	-4	-1	0	1	17	21	33	4
1948	Below Normal	9	19	-15	-6	30	9	1	1	1	10	-15	17	5
1949	Dry	-9	-25	-9	-5	7	-5	-2	0	0	-28	-30	25	-7
1950	Below Normal	10	-39	-53	-35	-20	-2	0	-6	3	5	5	-10	-12
1951	Above Normal	27	25	1	4	15	0	-3	-1	2	6	-9	-10	5
1952	Wet	-3	6	8	1	0	3	10	0	0	0	0	1	2
1953	Wet	1	2	1	0	0	0	0	0	0	0	4	10	2
1954	Above Normal	4	2	2	1	0	0	0	0	1	0	0	1	1
1955	Dry	18	10	-18	-2	-1	4	9	1	-3	13	46	59	11
1956	Wet	11	-75	-20	0	-18	-6	0	0	0	0	-1	-1	-9
1957	Above Normal	0	0	1	9	18	1	0	1	0	-1	-4	-15	1
1958	Wet	-17	39	23	4	1	1	0	0	0	0	1	2	4
1959	Below Normal	1	1	2	1	0	0	0	0	0	1	2	3	1
1960	Dry	9	45	104	-238	-46	5	0	2	-29	-29	16	18	-12
1961	Dry	30	2	4	45	34	28	12	3	-2	10	25	111	25
1962	Below Normal	49	42	79	-65	-20	0	-1	0	11	6	-34	-3	6
1963	Wet	-18	-4	47	21	8	0	1	0	0	1	0	-10	4
1964	Dry	6	-7	-12	-10	-2	0	1	2	-22	14	64	-48	-1
1965	Wet	-96	-73	-35	0	-9	-7	-3	-3	-7	3	-6	-12	-21
1966	Below Normal	-25	-6	11	1	0	-1	0	1	0	-1	-2	-4	-2
1967	Wet	-23	-13	28	3	0	0	0	0	0	0	0	1	0
1968	Below Normal	0	1	0	-2	0	0	0	2	3	1	-6	-13	-1
1969	Wet	2	6	-6	6	0	1	-2	0	0	0	0	1	1
1970	Wet	1	1	1	0	0	-1	-1	0	-1	-1	1	1	0
1971	Wet	-2	-9	-1	0	-4	0	0	0	0	0	0	3	-1
1972	Below Normal	7	4	2	1	1	0	0	0	-1	-2	6	6	2
1973	Above Normal	37	67	-55	-9	0	2	1	0	0	0	1	1	4
1974	Wet	0	2	0	0	0	0	0	0	0	0	0	1	0
1975	Wet	1	1	1	0	0	0	0	0	0	0	0	1	0
1976	Critical	0	0	0	0	0	0	0	-11	12	31	31	21	7
1977	Critical	-10	-47	4	-18	-118	-233	-116	-36	-20	-20	-36	-60	-59
1978	Above Normal	-22	28	-2	45	5	24	22	-2	8	-1	5	14	10
1979	Below Normal	11	4	-4	11	13	-1	-4	2	0	5	12	3	4
1980	Above Normal	-3	21	66	12	-5	33	0	-2	2	0	0	0	10
1981	Dry	0	0	0	-1	0	0	0	-2	-5	-3	4	-4	-1
1982	Wet	-2	23	8	0	-1	2	6	0	0	0	0	-1	3
1983	Wet	0	0	-3	-1	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	-1	0
1985	Dry	-1	2	0	-7	-10	-6	-6	-1	2	0	8	19	0
1986	Wet	4	-4	-2	-4	-3	13	-3	-2	1	-53	-20	-7	-6
1987	Dry	5	9	13	-1	26	12	2	-17	-33	-15	6	-6	0
1988	Critical	-7	-9	-5	-6	0	1	0	0	-1	-7	-34	-45	-9
1989	Dry	-12	13	-28	9	0	-13	1	0	4	9	-13	27	0
1990	Critical	-8	14	50	-49	-26	-5	-1	0	0	3	16	16	1
1991	Critical	3	-3	9	-30	-19	-2	0	0	0	0	0	0	-3
1992	Critical	0	0	0	0	0	0	0	-1	1	1	10	23	3
1993	Above Normal	10	0	5	-18	-1	0	0	4	12	1	8	21	3
1994	Critical	14	7	-4	-4	29	24	8	2	-9	-11	23	-71	1
Average		-1	1	1	-4	-6	-4	-1	-1	-1	-1	2	1	-1
Wet		-6	-1	5	2	-2	0	0	0	0	-2	-1	0	0
Above Normal		-3	12	1	4	5	6	2	0	2	0	-1	1	3
Below Normal		2	-2	-3	-8	-6	-1	0	0	1	2	-2	3	-1
Dry		7	3	-3	-16	1	5	2	-1	-6	1	15	8	1
Critical		-3	-2	4	-3	-30	-38	-11	-4	-3	-5	-2	-10	-9

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Contra Costa Canal Pumping Plant #1
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-6%	-11%	-1%	-2%	-2%	-1%	0%	0%	-1%	-2%	-1%	-2%
1924	Critical	2%	2%	0%	2%	-11%	-26%	-8%	-1%	0%	-1%	0%	1%	-3%
1925	Dry	0%	-1%	-5%	-3%	9%	17%	4%	0%	-1%	-1%	0%	1%	2%
1926	Dry	1%	-1%	-1%	0%	0%	0%	0%	-1%	0%	2%	1%	2%	0%
1927	Wet	1%	1%	3%	1%	0%	1%	0%	1%	0%	0%	0%	0%	1%
1928	Above Normal	0%	1%	2%	2%	4%	0%	0%	-1%	0%	-1%	-2%	0%	0%
1929	Critical	1%	1%	-3%	4%	-1%	-1%	0%	-1%	-2%	2%	0%	-2%	0%
1930	Dry	-1%	0%	0%	0%	0%	0%	0%	0%	-1%	6%	3%	-11%	0%
1931	Critical	-5%	0%	2%	3%	-10%	-7%	4%	2%	-1%	-10%	-4%	2%	-2%
1932	Dry	1%	0%	0%	-1%	-3%	1%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-2%	-5%	-2%	0%	0%	0%	0%	-1%	-1%	-1%
1935	Below Normal	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1936	Below Normal	2%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	-1%	0%
1937	Below Normal	-4%	-2%	0%	0%	-6%	0%	0%	0%	0%	0%	0%	-1%	-1%
1938	Wet	0%	3%	4%	0%	-3%	0%	0%	0%	0%	0%	0%	2%	0%
1939	Dry	4%	1%	1%	0%	-1%	0%	0%	0%	0%	-2%	8%	-8%	0%
1940	Above Normal	-9%	-3%	-2%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1942	Wet	3%	7%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-3%	2%	6%	3%	1%
1945	Below Normal	-2%	-2%	-2%	-2%	-2%	-3%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	3%	8%	0%	-1%	-1%	0%	0%	0%	2%	2%	11%	2%
1947	Dry	7%	2%	-5%	-2%	-3%	-1%	0%	0%	0%	4%	4%	4%	1%
1948	Below Normal	1%	2%	-1%	-1%	3%	2%	0%	0%	0%	4%	-4%	3%	1%
1949	Dry	-1%	-3%	-1%	-1%	1%	-1%	0%	0%	-7%	-5%	-3%	-1%	-1%
1950	Below Normal	1%	-5%	-6%	-4%	-5%	-1%	0%	-2%	1%	2%	1%	-2%	-2%
1951	Above Normal	3%	5%	0%	1%	2%	0%	-1%	0%	1%	3%	-3%	-2%	1%
1952	Wet	0%	1%	1%	0%	0%	1%	3%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	2%	1%	-2%	0%	0%	1%	3%	0%	-1%	4%	10%	8%	2%
1956	Wet	1%	-9%	-2%	0%	-4%	-2%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	0%	-1%	-2%	0%
1958	Wet	-2%	9%	4%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
1960	Dry	1%	5%	12%	-23%	-4%	1%	0%	1%	-8%	-6%	3%	3%	-1%
1961	Dry	3%	0%	0%	5%	4%	8%	4%	1%	-1%	2%	5%	17%	4%
1962	Below Normal	6%	5%	8%	-7%	-3%	0%	0%	0%	4%	2%	-8%	0%	1%
1963	Wet	-2%	-1%	11%	4%	2%	0%	0%	0%	0%	0%	0%	-2%	1%
1964	Dry	1%	-1%	-3%	-2%	-1%	0%	0%	1%	-7%	3%	10%	-7%	0%
1965	Wet	-11%	-8%	-5%	0%	-3%	-3%	-1%	-1%	-3%	1%	-2%	-2%	-3%
1966	Below Normal	-3%	-1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%
1967	Wet	-2%	-1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	-2%	0%
1969	Wet	0%	1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-1%	-2%	0%	0%	0%	0%	0%	1%	0%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	2%	1%	0%
1973	Above Normal	4%	9%	-12%	-1%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-2%	0%	4%	4%	2%	1%
1977	Critical	-1%	-5%	0%	-2%	-14%	-35%	-21%	-7%	-3%	-4%	-5%	-7%	-9%
1978	Above Normal	-2%	3%	0%	6%	1%	5%	5%	-1%	3%	0%	2%	2%	2%
1979	Below Normal	1%	0%	0%	2%	3%	0%	-1%	1%	0%	2%	3%	0%	1%
1980	Above Normal	0%	3%	11%	3%	-1%	6%	0%	-1%	0%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	1%	-1%	0%
1982	Wet	0%	3%	3%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-2%	-2%	-2%	-2%	0%	1%	0%	1%	3%	0%
1986	Wet	1%	-1%	0%	-1%	0%	2%	-1%	-1%	0%	-16%	-6%	-1%	-2%
1987	Dry	1%	1%	1%	0%	3%	3%	0%	-5%	-9%	-3%	1%	-1%	-1%
1988	Critical	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	-2%	-5%	-5%	-1%
1989	Dry	-1%	1%	-3%	1%	0%	-3%	0%	0%	2%	2%	-2%	4%	0%
1990	Critical	-1%	2%	5%	-6%	-4%	-1%	0%	0%	0%	0%	2%	2%	0%
1991	Critical	0%	0%	1%	-3%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1993	Above Normal	1%	0%	0%	-2%	0%	0%	0%	1%	5%	0%	3%	4%	1%
1994	Critical	2%	1%	0%	0%	3%	6%	2%	1%	-2%	-1%	3%	-7%	0%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		-1%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	0%	1%	1%	1%	1%	0%	1%	0%	0%	0%	1%
Below Normal		0%	0%	0%	-1%	-1%	0%	0%	0%	0%	1%	-1%	1%	0%
Dry		1%	0%	0%	-2%	0%	2%	1%	0%	-2%	0%	3%	1%	0%
Critical		0%	0%	0%	0%	-4%	-5%	-2%	-1%	-1%	-1%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	599	591	574	497	525	417	312	296	324	338	300	434	434
1923	Below Normal	590	589	553	427	433	420	337	320	331	283	349	503	428
1924	Critical	551	591	670	719	905	960	634	558	606	525	538	552	651
1925	Dry	691	732	713	794	638	585	383	301	382	355	424	513	543
1926	Dry	654	617	696	773	599	581	381	389	371	377	446	556	537
1927	Wet	692	490	311	348	394	390	310	299	280	268	286	462	377
1928	Above Normal	596	498	384	405	335	388	317	318	303	329	319	541	394
1929	Critical	654	620	720	783	833	784	542	486	505	442	490	590	621
1930	Dry	703	714	734	538	476	481	346	392	388	408	423	575	515
1931	Critical	704	643	720	766	918	774	580	560	581	497	570	597	659
1932	Dry	685	715	642	396	597	693	525	442	428	404	415	540	540
1933	Critical	650	603	689	744	709	705	494	450	495	447	495	534	585
1934	Critical	651	723	699	678	683	838	570	524	528	423	482	598	616
1935	Below Normal	698	714	795	587	583	450	357	353	322	307	357	542	505
1936	Below Normal	653	600	687	594	536	333	298	316	372	286	350	503	461
1937	Below Normal	627	592	647	754	474	394	318	264	387	325	342	463	466
1938	Wet	625	629	410	465	381	319	255	245	244	332	303	291	375
1939	Dry	258	311	550	767	745	607	478	370	346	384	420	590	485
1940	Above Normal	692	620	681	647	489	339	287	309	321	274	284	491	453
1941	Wet	610	627	610	455	439	321	273	255	367	367	305	363	416
1942	Wet	374	480	522	424	310	330	299	273	338	378	315	315	363
1943	Wet	288	318	310	375	294	293	287	309	402	305	289	457	327
1944	Dry	627	599	665	756	714	421	364	331	337	353	436	517	510
1945	Below Normal	633	587	552	537	512	354	371	325	313	275	334	505	441
1946	Below Normal	599	542	449	382	435	392	342	328	326	285	357	512	412
1947	Dry	611	612	699	625	605	497	378	415	370	353	439	582	516
1948	Below Normal	706	636	763	754	849	560	372	346	294	262	356	509	534
1949	Dry	601	589	680	797	727	459	369	412	379	341	467	569	533
1950	Below Normal	659	602	701	645	391	387	320	316	289	297	316	467	449
1951	Above Normal	614	409	379	339	268	338	332	277	267	270	287	522	358
1952	Wet	605	633	623	484	367	391	240	200	277	323	277	277	391
1953	Wet	265	404	556	398	411	450	320	270	259	248	296	394	356
1954	Above Normal	390	482	614	742	336	379	320	343	298	284	282	501	414
1955	Dry	645	683	641	409	403	447	431	415	375	330	419	542	478
1956	Wet	647	682	655	405	366	330	311	316	348	375	317	315	422
1957	Above Normal	264	308	454	679	614	384	341	289	277	268	296	531	392
1958	Wet	577	400	446	358	463	486	213	187	304	334	292	296	363
1959	Below Normal	267	363	595	709	393	456	408	345	332	300	336	541	420
1960	Dry	657	633	692	814	719	370	347	399	353	388	413	550	528
1961	Dry	680	676	815	736	690	485	370	416	364	339	423	512	542
1962	Below Normal	622	632	730	750	639	407	349	339	309	288	345	585	500
1963	Wet	614	318	374	345	388	395	367	300	290	253	274	467	365
1964	Dry	608	594	340	404	437	419	411	406	354	367	487	527	446
1965	Wet	644	678	504	386	331	394	321	319	329	289	306	426	411
1966	Below Normal	578	544	389	387	396	378	333	332	316	297	335	562	404
1967	Wet	719	702	695	478	347	369	273	225	280	292	273	270	410
1968	Below Normal	259	347	533	597	421	387	364	348	316	296	336	522	394
1969	Wet	635	636	559	580	378	388	281	235	234	334	303	303	406
1970	Wet	258	333	416	293	336	316	296	299	304	294	285	497	327
1971	Wet	659	503	372	299	379	325	302	280	257	244	283	432	361
1972	Below Normal	415	513	604	558	570	366	327	365	340	309	339	569	440
1973	Above Normal	745	557	404	434	495	383	342	345	348	269	314	486	427
1974	Wet	655	409	351	392	339	299	290	312	365	296	304	355	364
1975	Wet	270	325	463	500	433	302	298	302	332	305	296	355	348
1976	Critical	278	275	405	658	794	610	439	450	546	573	593	657	523
1977	Critical	749	667	785	688	854	851	655	587	597	473	525	596	669
1978	Above Normal	748	777	791	613	564	604	390	308	390	355	309	432	523
1979	Below Normal	573	628	677	573	373	317	327	302	287	265	351	515	432
1980	Above Normal	666	570	471	423	342	386	340	328	362	376	315	437	418
1981	Dry	557	551	684	729	369	389	362	344	343	386	433	573	477
1982	Wet	656	553	289	408	298	322	223	201	323	359	308	268	351
1983	Wet	205	258	374	355	326	267	291	257	235	220	201	213	267
1984	Wet	242	209	301	335	251	300	325	328	345	274	298	483	308
1985	Dry	573	472	292	324	467	504	427	368	316	368	496	503	426
1986	Wet	561	585	697	533	460	313	246	225	354	520	342	400	436
1987	Dry	491	520	669	777	679	513	395	395	369	391	471	563	519
1988	Critical	692	655	734	679	657	791	485	471	452	367	503	616	592
1989	Dry	730	748	772	736	953	483	310	357	284	342	473	519	559
1990	Critical	586	637	758	653	705	521	448	446	495	539	572	603	580
1991	Critical	748	765	776	841	912	601	444	425	476	555	575	546	639
1992	Critical	733	811	796	923	663	511	364	400	410	374	486	595	589
1993	Above Normal	738	797	828	661	489	381	318	332	372	329	304	439	499
1994	Critical	584	639	712	804	794	487	369	402	388	556	578	722	586
Average		576	563	587	570	526	456	362	347	358	348	376	489	463
Wet		514	484	468	410	366	348	287	268	308	315	293	364	369
Above Normal		605	561	558	544	446	400	330	314	326	309	301	481	431
Below Normal		563	564	620	590	501	400	344	329	324	291	343	521	449
Dry		611	610	643	648	614	496	392	385	360	368	443	546	510
Critical		632	636	705	745	786	703	502	480	507	481	534	601	609

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	599	591	574	497	525	417	312	296	324	340	300	434	434
1923	Below Normal	592	559	508	425	424	426	337	321	331	284	348	498	421
1924	Critical	559	599	675	732	722	895	586	555	620	524	535	550	629
1925	Dry	689	726	682	775	792	686	397	302	377	348	416	520	559
1926	Dry	656	611	691	771	594	569	377	383	361	379	449	567	534
1927	Wet	698	495	317	352	410	404	311	303	280	268	286	463	382
1928	Above Normal	597	502	390	413	342	377	310	315	305	307	313	543	393
1929	Critical	663	620	705	803	826	782	541	478	451	413	490	581	613
1930	Dry	696	711	734	539	445	425	340	393	385	371	444	529	501
1931	Critical	673	637	733	786	756	718	575	563	593	470	549	602	638
1932	Dry	691	715	641	474	606	695	526	442	429	404	415	541	548
1933	Critical	650	603	688	744	706	706	494	450	495	447	495	533	584
1934	Critical	651	723	701	678	675	836	568	523	528	423	481	596	615
1935	Below Normal	697	713	792	592	583	487	360	353	321	304	357	538	508
1936	Below Normal	660	604	688	592	539	335	298	315	373	290	348	502	462
1937	Below Normal	609	583	646	748	469	393	318	264	392	329	343	461	463
1938	Wet	624	643	416	480	381	319	255	245	244	332	303	295	378
1939	Dry	262	314	553	768	742	593	479	368	340	370	441	555	482
1940	Above Normal	643	604	676	640	493	341	286	309	322	275	285	492	447
1941	Wet	610	628	613	456	438	321	273	255	366	365	305	363	416
1942	Wet	382	504	532	424	310	330	299	273	338	377	315	316	367
1943	Wet	289	318	310	376	294	293	287	309	401	304	288	458	327
1944	Dry	628	601	666	756	712	424	366	329	326	349	449	531	511
1945	Below Normal	622	577	541	530	512	353	370	325	314	275	333	504	438
1946	Below Normal	600	557	463	382	435	382	341	328	326	284	362	557	418
1947	Dry	644	618	668	614	591	522	378	415	378	361	449	604	520
1948	Below Normal	715	646	756	753	864	567	372	348	290	271	347	519	537
1949	Dry	595	577	674	794	734	435	366	412	380	327	443	582	527
1950	Below Normal	668	582	669	620	378	379	321	307	288	294	319	460	440
1951	Above Normal	628	423	380	342	269	338	332	273	263	281	282	515	360
1952	Wet	604	637	629	485	367	395	240	200	277	323	277	278	393
1953	Wet	266	405	557	398	411	452	320	270	260	248	297	400	357
1954	Above Normal	393	483	615	743	336	379	320	343	299	286	282	500	415
1955	Dry	657	688	630	408	401	553	442	417	354	318	409	577	488
1956	Wet	662	640	648	405	358	328	311	316	348	374	316	314	418
1957	Above Normal	264	308	454	684	623	384	341	289	276	265	293	526	392
1958	Wet	568	424	460	360	463	486	213	187	304	333	292	297	366
1959	Below Normal	267	363	596	710	392	456	410	344	329	300	337	542	420
1960	Dry	657	662	727	656	695	370	348	402	370	378	436	562	522
1961	Dry	698	675	817	769	716	580	392	421	362	345	440	583	567
1962	Below Normal	652	651	783	712	628	407	346	336	330	300	324	581	504
1963	Wet	602	316	407	362	385	398	368	300	292	256	277	461	369
1964	Dry	611	588	333	397	435	420	408	410	349	370	522	499	445
1965	Wet	587	630	483	386	314	381	320	314	308	285	305	420	394
1966	Below Normal	561	542	394	387	382	319	329	332	314	295	334	560	396
1967	Wet	702	693	714	480	346	372	273	225	280	292	273	270	410
1968	Below Normal	258	348	533	596	420	386	363	350	315	295	333	514	393
1969	Wet	637	637	557	582	378	388	281	235	234	334	303	304	406
1970	Wet	258	334	416	293	336	315	296	299	303	292	285	497	327
1971	Wet	658	497	370	299	337	319	302	280	257	244	283	434	357
1972	Below Normal	419	515	605	559	571	366	327	365	331	305	342	574	440
1973	Above Normal	769	597	360	424	495	393	344	346	347	268	314	486	429
1974	Wet	655	410	351	392	339	299	290	312	365	296	304	356	364
1975	Wet	270	326	464	500	433	302	298	302	332	306	296	355	349
1976	Critical	279	275	405	658	794	604	436	443	546	590	609	679	526
1977	Critical	737	638	802	668	670	753	552	547	583	480	522	566	626
1978	Above Normal	722	785	791	652	571	631	394	312	393	347	305	438	529
1979	Below Normal	580	630	675	580	378	316	327	303	287	266	359	518	435
1980	Above Normal	665	586	511	426	343	386	341	327	362	376	316	438	423
1981	Dry	557	551	684	729	370	385	361	343	342	384	436	570	476
1982	Wet	650	571	295	408	297	320	223	201	323	359	308	267	352
1983	Wet	205	258	374	355	326	267	291	257	235	220	201	213	267
1984	Wet	242	209	301	335	251	300	325	328	345	274	298	483	308
1985	Dry	573	473	292	319	460	456	418	368	321	368	501	515	422
1986	Wet	564	583	695	531	460	312	249	226	356	370	317	397	422
1987	Dry	494	524	675	779	684	417	357	379	346	383	464	557	505
1988	Critical	695	650	731	675	666	792	485	471	445	365	489	589	588
1989	Dry	719	755	752	740	939	475	309	356	293	351	467	535	558
1990	Critical	581	650	793	622	660	511	446	446	495	541	580	612	578
1991	Critical	751	763	779	831	899	599	444	425	476	555	575	546	637
1992	Critical	733	811	796	923	663	513	364	399	406	373	488	609	590
1993	Above Normal	744	801	832	652	489	381	318	337	386	322	301	449	501
1994	Critical	593	644	709	802	816	505	375	405	378	548	596	676	587
Average		576	563	587	569	519	454	360	345	356	345	377	490	462
Wet		511	484	472	412	364	348	287	268	307	307	292	364	368
Above Normal		602	568	558	547	449	403	330	315	328	307	299	482	432
Below Normal		564	562	618	585	498	398	344	328	324	292	342	523	448
Dry		614	612	639	643	620	500	391	384	357	363	449	552	510
Critical		630	635	710	743	738	684	489	475	501	477	534	595	601

Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake (umhos/cm)
 Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	1	0	0	0
1923	Below Normal	2	-30	-45	-1	-9	6	0	0	0	1	-1	-5	-7
1924	Critical	9	8	5	12	-183	-65	-48	-3	14	-1	-3	-2	-21
1925	Dry	-2	-6	-31	-19	154	101	14	1	-5	-7	-7	7	17
1926	Dry	3	-6	-5	-2	-5	-12	-4	-6	-11	2	3	11	-3
1927	Wet	6	5	6	3	16	14	1	5	0	0	0	1	5
1928	Above Normal	0	3	6	8	8	-11	-7	-3	2	-22	-6	2	-2
1929	Critical	9	1	-15	20	-6	-3	-2	-9	-54	-29	0	-9	-8
1930	Dry	-7	-3	0	1	-31	-56	-6	1	-3	-37	21	-46	-14
1931	Critical	-31	-5	13	20	-162	-56	-5	3	11	-27	-21	5	-21
1932	Dry	5	0	-1	78	9	2	1	-1	1	0	0	1	8
1933	Critical	1	0	-1	0	-2	0	0	0	0	0	0	-1	0
1934	Critical	0	0	1	0	-7	-2	-2	0	0	0	-1	-2	-1
1935	Below Normal	-2	-1	-3	5	0	36	3	0	-1	-3	1	-4	3
1936	Below Normal	8	5	1	-2	4	2	1	-1	1	4	-2	-1	1
1937	Below Normal	-18	-10	-1	-6	-4	0	0	0	4	4	2	-2	-3
1938	Wet	-2	14	7	15	0	0	0	0	0	0	0	4	3
1939	Dry	5	2	3	1	-4	-15	0	-1	-6	-13	21	-35	-3
1940	Above Normal	-49	-15	-5	-7	3	2	0	0	1	1	1	1	-6
1941	Wet	0	1	2	0	-1	0	0	0	-1	-2	0	0	0
1942	Wet	8	24	10	0	0	0	0	0	0	-1	0	1	3
1943	Wet	1	0	0	1	0	0	0	0	0	-1	0	1	0
1944	Dry	2	1	1	0	-2	3	1	-3	-11	-5	13	14	1
1945	Below Normal	-11	-10	-11	-7	0	-1	-1	0	0	0	-1	-2	-3
1946	Below Normal	1	15	15	1	0	-11	-1	0	0	0	5	45	6
1947	Dry	33	5	-31	-11	-14	25	0	0	9	8	9	23	5
1948	Below Normal	9	10	-6	-1	15	7	0	1	-4	9	-10	10	3
1949	Dry	-6	-13	-6	-3	6	-24	-3	0	1	-14	-24	14	-6
1950	Below Normal	8	-21	-32	-25	-14	-8	1	-10	-1	-3	3	-6	-9
1951	Above Normal	13	14	1	3	1	0	0	-4	-4	12	-5	-7	2
1952	Wet	-1	4	6	1	0	3	1	0	0	0	0	1	1
1953	Wet	0	1	1	0	0	1	0	0	1	0	1	6	1
1954	Above Normal	2	1	1	0	0	0	0	0	1	2	0	0	1
1955	Dry	12	4	-11	-2	-2	106	11	2	-20	-12	-10	36	9
1956	Wet	14	-42	-7	0	-8	-2	0	0	0	0	-1	-1	-4
1957	Above Normal	0	0	0	5	9	0	0	0	-1	-3	-3	-5	0
1958	Wet	-8	24	14	3	0	0	0	0	0	0	0	1	3
1959	Below Normal	0	0	1	0	-1	-1	2	-1	-2	-1	1	2	0
1960	Dry	0	29	34	-158	-24	0	0	3	17	-10	24	12	-6
1961	Dry	18	-1	2	34	27	95	22	4	-3	5	17	71	24
1962	Below Normal	30	19	54	-39	-11	0	-3	-2	20	12	-21	-3	5
1963	Wet	-12	-2	33	17	-3	3	1	0	2	4	3	-6	3
1964	Dry	3	-6	-8	-6	-2	1	-3	4	-5	3	35	-28	-1
1965	Wet	-57	-48	-21	0	-17	-13	-1	-5	-20	-3	-2	-7	-16
1966	Below Normal	-18	-2	4	0	-13	-60	-4	0	-2	-2	-2	-2	-8
1967	Wet	-17	-8	20	2	-1	4	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	-1	-1	0	-1	2	0	-1	-4	-8	-1
1969	Wet	2	1	-3	2	0	0	0	0	0	0	0	1	0
1970	Wet	0	1	0	0	0	-1	-1	0	-1	-2	0	1	0
1971	Wet	-1	-5	-1	0	-43	-6	0	0	0	0	0	2	-4
1972	Below Normal	4	2	1	1	1	0	0	0	-9	-4	3	5	0
1973	Above Normal	23	40	-45	-10	0	11	2	0	-1	0	0	1	2
1974	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	1	1	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	-6	-2	-7	0	17	16	22	3
1977	Critical	-11	-29	16	-20	-185	-98	-104	-40	-14	8	-3	-30	-42
1978	Above Normal	-26	8	0	39	8	27	3	4	3	-8	-4	7	5
1979	Below Normal	6	2	-2	7	4	-1	0	1	0	2	8	3	3
1980	Above Normal	-1	16	41	3	1	1	-1	-1	0	0	1	0	5
1981	Dry	0	0	0	0	1	-3	-1	-2	-2	-2	3	-3	-1
1982	Wet	-6	18	6	1	0	-2	0	0	0	0	0	0	1
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	-1	1	0	-5	-7	-48	-9	0	5	0	5	12	-4
1986	Wet	3	-2	-1	-3	0	-2	3	0	2	-150	-25	-3	-15
1987	Dry	2	4	6	2	5	-96	-38	-16	-23	-8	-7	-6	-15
1988	Critical	3	-5	-4	-4	9	1	1	0	-7	-3	-14	-27	-4
1989	Dry	-10	8	-20	4	-14	-8	-1	-1	9	9	-6	16	-1
1990	Critical	-5	14	35	-31	-45	-11	-2	-1	0	1	8	10	-2
1991	Critical	3	-2	3	-10	-12	-2	0	0	0	0	0	0	-2
1992	Critical	0	0	0	0	0	2	0	-1	-4	0	2	14	1
1993	Above Normal	6	4	4	-10	0	0	0	5	14	-7	-3	11	2
1994	Critical	9	4	-3	-2	22	18	6	2	-10	-8	18	-46	1
Average		-1	1	0	-1	-7	-2	-2	-1	-2	-4	1	1	-1
Wet		-3	-1	3	2	-3	0	0	0	-1	-7	-1	0	-1
Above Normal		-3	7	0	3	3	3	0	0	1	-2	-2	1	1
Below Normal		1	-1	-2	-5	-2	-2	0	-1	0	1	-1	2	-1
Dry		4	1	-4	-5	6	4	-1	-1	-3	-5	6	6	1
Critical		-1	-1	4	-1	-48	-18	-13	-5	-5	-4	0	-6	-8

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at West Canal at mouth of CCForebay Intake
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-5%	-8%	0%	-2%	1%	0%	0%	0%	0%	0%	-1%	-1%
1924	Critical	2%	1%	1%	2%	-20%	-7%	-8%	0%	2%	0%	-1%	0%	-2%
1925	Dry	0%	-1%	-4%	-2%	24%	17%	4%	0%	-1%	-2%	-2%	1%	3%
1926	Dry	0%	-1%	-1%	0%	-1%	-2%	-1%	-1%	-3%	1%	1%	2%	-1%
1927	Wet	1%	1%	2%	1%	4%	4%	0%	2%	0%	0%	0%	0%	1%
1928	Above Normal	0%	1%	2%	2%	2%	-3%	-2%	-1%	1%	-7%	-2%	0%	-1%
1929	Critical	1%	0%	-2%	3%	-1%	0%	0%	-2%	-11%	-6%	0%	-2%	-2%
1930	Dry	-1%	0%	0%	0%	-6%	-12%	-2%	0%	-1%	-9%	5%	-8%	-3%
1931	Critical	-4%	-1%	2%	3%	-18%	-7%	-1%	1%	2%	-5%	-4%	1%	-3%
1932	Dry	1%	0%	0%	20%	1%	0%	0%	0%	0%	0%	0%	0%	2%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	1%	0%	8%	1%	0%	0%	-1%	0%	-1%	1%
1936	Below Normal	1%	1%	0%	0%	1%	0%	0%	0%	0%	1%	-1%	0%	0%
1937	Below Normal	-3%	-2%	0%	-1%	-1%	0%	0%	0%	1%	1%	0%	0%	0%
1938	Wet	0%	2%	2%	3%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1939	Dry	2%	1%	1%	0%	0%	-2%	0%	0%	-2%	-3%	5%	-6%	-1%
1940	Above Normal	-7%	-2%	-1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	2%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	1%	0%	-1%	-3%	-1%	3%	3%	0%
1945	Below Normal	-2%	-2%	-2%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	3%	3%	0%	0%	-3%	0%	0%	0%	0%	1%	9%	1%
1947	Dry	5%	1%	-4%	-2%	-2%	5%	0%	0%	2%	2%	2%	4%	1%
1948	Below Normal	1%	2%	-1%	0%	2%	1%	0%	0%	-1%	3%	-3%	2%	1%
1949	Dry	-1%	-2%	-1%	0%	1%	-5%	-1%	0%	0%	-4%	-5%	2%	-1%
1950	Below Normal	1%	-3%	-5%	-4%	-4%	-2%	0%	-3%	0%	-1%	1%	-1%	-2%
1951	Above Normal	2%	3%	0%	1%	0%	0%	0%	-2%	-1%	4%	-2%	-1%	0%
1952	Wet	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1955	Dry	2%	1%	-2%	0%	-1%	24%	2%	0%	-5%	-4%	-2%	7%	2%
1956	Wet	2%	-6%	-1%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	0%	-1%	-1%	-1%	0%
1958	Wet	-1%	6%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%
1960	Dry	0%	5%	5%	-19%	-3%	0%	0%	1%	5%	-3%	6%	2%	0%
1961	Dry	3%	0%	0%	5%	4%	20%	6%	1%	-1%	2%	4%	14%	5%
1962	Below Normal	5%	3%	7%	-5%	-2%	0%	-1%	-1%	6%	4%	-6%	-1%	1%
1963	Wet	-2%	-1%	9%	5%	-1%	1%	0%	0%	1%	1%	1%	-1%	1%
1964	Dry	1%	-1%	-2%	-2%	0%	0%	-1%	1%	-2%	1%	7%	-5%	0%
1965	Wet	-9%	-7%	-4%	0%	-5%	-3%	0%	-2%	-6%	-1%	-1%	-2%	-3%
1966	Below Normal	-3%	0%	1%	0%	-3%	-16%	-1%	0%	-1%	-1%	0%	0%	-2%
1967	Wet	-2%	-1%	3%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-11%	-2%	0%	0%	0%	0%	0%	0%	-1%
1972	Below Normal	1%	0%	0%	0%	0%	0%	0%	0%	-3%	-1%	1%	1%	0%
1973	Above Normal	3%	7%	-11%	-2%	0%	3%	1%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-1%	-1%	-2%	0%	3%	3%	3%	0%
1977	Critical	-2%	-4%	2%	-3%	-22%	-11%	-16%	-7%	-2%	2%	-1%	-5%	-6%
1978	Above Normal	-3%	1%	0%	6%	1%	5%	1%	1%	1%	-2%	-1%	2%	1%
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	0%	0%	1%	2%	1%	1%
1980	Above Normal	0%	3%	9%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	1%	0%	0%
1982	Wet	-1%	3%	2%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-2%	-1%	-9%	-2%	0%	2%	0%	1%	2%	-1%
1986	Wet	1%	0%	0%	-1%	0%	-1%	1%	0%	1%	-29%	-7%	-1%	-3%
1987	Dry	0%	1%	1%	0%	1%	-19%	-10%	-4%	-6%	-2%	-1%	-1%	-3%
1988	Critical	0%	-1%	0%	-1%	1%	0%	0%	-2%	-2%	-1%	-3%	-4%	-1%
1989	Dry	-1%	1%	-3%	1%	-1%	-2%	0%	0%	3%	3%	-1%	3%	0%
1990	Critical	-1%	2%	5%	-5%	-6%	-2%	0%	0%	0%	0%	1%	2%	0%
1991	Critical	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	2%	0%
1993	Above Normal	1%	0%	0%	-1%	0%	0%	0%	1%	4%	-2%	-1%	2%	0%
1994	Critical	1%	1%	0%	0%	3%	4%	2%	1%	-3%	-1%	3%	-6%	0%
Average		0%	0%	0%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	1%	1%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	1%	0%	1%	1%	1%	0%	0%	0%	-1%	-1%	0%	0%
Below Normal		0%	0%	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
Dry		1%	0%	-1%	0%	1%	1%	0%	0%	-1%	-1%	1%	1%	0%
Critical		0%	0%	1%	0%	-5%	-2%	-2%	-1%	-1%	-1%	0%	-1%	-1%

Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	443	471	475	474	540	425	359	320	345	358	328	347	407
1923	Below Normal	427	438	509	472	471	474	389	339	351	301	317	371	405
1924	Critical	409	441	497	583	734	773	692	587	525	428	416	423	542
1925	Dry	491	547	541	629	628	513	466	323	415	386	368	406	476
1926	Dry	478	484	506	599	562	447	454	420	378	329	354	418	452
1927	Wet	487	422	315	363	449	422	366	318	326	302	288	357	368
1928	Above Normal	432	406	346	399	375	393	375	345	343	323	293	402	369
1929	Critical	478	464	528	617	712	626	592	499	464	396	380	441	516
1930	Dry	516	542	555	480	456	414	406	438	366	331	347	420	439
1931	Critical	504	500	543	619	720	713	609	575	503	394	433	455	547
1932	Dry	512	548	538	414	563	646	590	447	455	424	401	421	497
1933	Critical	489	492	523	584	567	544	533	473	464	412	408	430	493
1934	Critical	487	549	533	554	503	562	604	561	487	378	365	446	502
1935	Below Normal	520	519	615	549	489	480	416	343	368	327	317	400	445
1936	Below Normal	472	464	502	537	548	351	329	343	390	311	327	380	413
1937	Below Normal	449	456	492	613	509	451	299	262	325	353	353	368	411
1938	Wet	447	492	423	469	482	333	268	256	260	342	317	275	364
1939	Dry	294	329	410	610	678	642	552	376	356	336	342	420	445
1940	Above Normal	494	486	524	591	540	383	313	334	341	295	283	369	413
1941	Wet	437	447	496	471	477	346	270	264	355	398	322	302	382
1942	Wet	333	377	443	460	350	335	328	284	337	402	327	283	355
1943	Wet	302	330	334	411	330	311	290	324	406	333	288	349	334
1944	Dry	442	443	500	584	648	480	423	337	359	319	354	387	440
1945	Below Normal	464	445	443	478	522	413	389	340	324	278	295	370	397
1946	Below Normal	428	408	426	419	466	431	394	341	347	287	312	384	387
1947	Dry	441	440	525	547	564	454	442	417	395	313	350	421	442
1948	Below Normal	504	479	578	590	747	569	427	378	345	279	309	383	466
1949	Dry	451	464	511	644	661	481	446	461	426	310	384	425	472
1950	Below Normal	499	476	536	553	412	366	381	328	327	294	294	359	402
1951	Above Normal	448	394	387	380	304	334	380	266	284	283	268	387	343
1952	Wet	452	456	522	492	389	404	272	212	283	335	288	264	364
1953	Wet	293	354	460	413	468	399	373	279	294	268	292	333	352
1954	Above Normal	356	392	471	634	361	348	385	385	345	287	266	376	384
1955	Dry	468	481	508	433	461	480	516	456	400	331	336	411	440
1956	Wet	489	500	600	456	383	349	353	339	368	402	334	290	405
1957	Above Normal	295	347	391	539	539	384	397	290	313	288	277	391	371
1958	Wet	438	358	381	387	513	528	243	202	301	353	294	274	356
1959	Below Normal	295	347	420	606	444	515	493	357	341	281	288	399	399
1960	Dry	472	491	516	636	644	406	399	443	343	321	329	400	450
1961	Dry	495	491	596	607	609	438	425	481	380	287	323	391	460
1962	Below Normal	465	488	539	624	643	489	419	339	352	282	297	417	446
1963	Wet	496	346	351	353	438	408	429	313	295	281	276	356	362
1964	Dry	439	466	330	386	441	479	472	445	359	312	377	399	409
1965	Wet	479	486	465	398	351	396	362	328	341	325	324	332	382
1966	Below Normal	421	431	378	413	433	392	394	343	336	282	287	412	377
1967	Wet	509	506	593	527	410	403	318	247	288	305	279	263	387
1968	Below Normal	297	328	393	522	425	367	435	360	332	284	294	402	370
1969	Wet	473	475	465	578	435	400	295	249	248	341	308	276	379
1970	Wet	293	324	382	342	347	331	333	312	339	300	278	373	330
1971	Wet	464	418	373	354	393	410	347	289	292	261	264	349	351
1972	Below Normal	359	412	466	466	527	360	379	383	352	298	292	419	393
1973	Above Normal	516	455	384	462	505	420	406	369	365	295	302	370	404
1974	Wet	441	381	370	433	391	334	321	339	388	334	283	309	360
1975	Wet	300	327	385	439	442	323	327	316	348	353	289	303	346
1976	Critical	302	313	345	527	668	544	477	459	460	462	455	469	457
1977	Critical	523	501	591	576	645	707	665	579	539	403	397	431	546
1978	Above Normal	527	580	586	606	600	647	439	326	393	389	318	334	479
1979	Below Normal	417	437	481	528	423	344	356	314	296	273	328	383	382
1980	Above Normal	456	426	396	444	388	397	356	348	375	402	319	330	386
1981	Dry	402	418	490	631	413	413	440	361	350	332	350	416	418
1982	Wet	473	460	318	451	336	374	234	212	319	380	308	254	343
1983	Wet	209	266	381	488	338	274	300	268	243	233	212	215	286
1984	Wet	276	225	305	357	285	301	362	329	344	295	295	365	312
1985	Dry	403	402	315	340	471	548	505	395	335	314	391	387	400
1986	Wet	432	446	525	487	502	334	275	242	340	461	354	321	393
1987	Dry	378	393	476	628	584	493	457	426	349	331	364	419	441
1988	Critical	503	501	543	608	491	549	552	507	440	317	364	450	485
1989	Dry	535	551	592	583	796	519	353	412	283	281	357	398	472
1990	Critical	442	482	568	530	612	532	447	476	467	440	431	449	490
1991	Critical	532	574	622	700	747	599	468	478	444	447	450	416	540
1992	Critical	514	609	632	738	628	447	405	437	401	327	364	424	494
1993	Above Normal	526	600	620	651	546	458	374	354	388	359	327	341	462
1994	Critical	423	472	524	627	697	479	411	449	368	409	422	493	481
Average		436	445	474	516	509	450	408	366	363	335	330	375	417
Wet		406	400	423	435	405	367	317	282	320	334	296	307	358
Above Normal		449	456	458	518	470	419	378	334	349	328	298	365	402
Below Normal		430	438	484	527	504	429	393	340	342	295	308	389	407
Dry		451	468	494	547	574	491	459	415	372	329	358	409	447
Critical		467	491	537	605	644	589	538	507	464	401	407	444	508

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	443	471	475	475	540	425	359	320	345	359	329	347	407
1923	Below Normal	428	430	487	471	462	471	389	339	351	303	321	368	402
1924	Critical	409	445	494	596	627	637	645	585	552	431	412	424	521
1925	Dry	490	548	525	611	708	599	478	323	413	379	364	404	487
1926	Dry	479	481	503	597	558	442	448	418	366	329	356	419	450
1927	Wet	490	424	318	366	455	427	367	320	326	302	288	358	370
1928	Above Normal	432	407	349	404	380	389	366	344	346	318	289	403	369
1929	Critical	479	465	519	631	710	623	590	496	440	372	381	437	512
1930	Dry	513	541	555	481	455	403	398	438	364	317	354	402	435
1931	Critical	486	495	541	639	661	629	594	576	522	384	414	455	533
1932	Dry	515	548	538	441	575	650	591	447	456	424	402	422	501
1933	Critical	489	491	523	585	568	545	533	473	464	412	408	430	493
1934	Critical	488	551	534	554	496	556	602	561	487	378	365	445	501
1935	Below Normal	518	519	612	552	489	494	421	343	368	324	317	399	446
1936	Below Normal	475	466	502	536	551	353	329	342	391	313	327	378	414
1937	Below Normal	443	452	491	615	505	450	299	262	327	357	356	368	411
1938	Wet	446	498	429	480	483	332	268	256	260	342	317	277	366
1939	Dry	295	330	411	612	676	642	553	376	348	322	351	407	443
1940	Above Normal	472	480	522	587	544	385	312	334	343	296	284	370	411
1941	Wet	438	448	497	472	477	346	270	264	354	397	323	303	382
1942	Wet	336	385	449	460	349	335	328	283	338	402	327	283	356
1943	Wet	303	330	334	412	330	311	290	324	406	332	287	349	334
1944	Dry	442	443	500	584	647	482	425	336	358	314	361	395	441
1945	Below Normal	461	441	438	474	515	411	389	340	324	278	295	368	395
1946	Below Normal	428	412	434	420	465	428	392	341	346	285	313	404	389
1947	Dry	454	445	510	544	556	450	442	417	398	314	355	434	443
1948	Below Normal	504	483	575	589	753	575	426	379	341	284	302	389	467
1949	Dry	453	460	508	641	666	474	442	461	427	308	367	430	470
1950	Below Normal	505	473	520	539	403	365	383	322	323	291	295	356	398
1951	Above Normal	450	400	388	382	306	334	380	265	281	288	267	383	344
1952	Wet	449	457	527	493	389	408	273	212	283	335	288	264	365
1953	Wet	293	354	461	413	468	399	373	279	294	268	290	335	352
1954	Above Normal	357	392	471	634	361	348	384	385	345	288	266	376	384
1955	Dry	471	484	501	431	458	482	524	457	389	309	341	425	439
1956	Wet	499	482	593	456	374	348	353	339	367	402	333	290	403
1957	Above Normal	295	346	391	541	545	384	396	290	311	283	275	387	370
1958	Wet	432	366	390	389	512	529	243	202	301	353	293	274	357
1959	Below Normal	294	347	420	606	442	514	495	356	337	279	288	399	398
1960	Dry	471	484	550	544	616	404	399	445	359	310	336	406	444
1961	Dry	502	491	594	631	627	471	447	486	377	287	331	422	472
1962	Below Normal	485	487	576	601	634	489	413	340	372	295	287	414	449
1963	Wet	490	343	371	365	438	410	431	313	297	285	283	354	365
1964	Dry	440	464	326	382	440	479	468	448	352	306	398	388	408
1965	Wet	452	464	450	398	340	387	361	323	320	317	325	328	372
1966	Below Normal	416	430	379	413	433	379	387	343	332	279	286	410	374
1967	Wet	503	501	606	528	409	404	318	247	288	305	278	263	387
1968	Below Normal	297	327	393	521	422	366	434	361	329	282	293	397	368
1969	Wet	470	476	463	579	435	400	295	249	248	341	309	277	378
1970	Wet	293	324	382	342	347	331	333	312	338	299	279	373	329
1971	Wet	463	415	372	354	393	402	347	289	292	261	264	350	350
1972	Below Normal	361	413	466	466	528	361	379	383	347	293	292	423	393
1973	Above Normal	524	474	348	449	505	424	408	369	364	295	301	370	403
1974	Wet	441	381	370	433	391	335	321	339	388	334	283	309	360
1975	Wet	300	327	386	439	442	323	327	316	347	354	289	303	346
1976	Critical	303	313	345	527	668	545	475	456	455	457	465	475	457
1977	Critical	525	479	593	561	614	598	580	551	530	418	400	416	522
1978	Above Normal	514	588	584	635	610	671	443	331	395	380	309	336	483
1979	Below Normal	420	439	481	531	425	343	357	314	297	272	333	386	383
1980	Above Normal	457	430	417	447	383	397	356	348	375	403	321	331	389
1981	Dry	402	418	491	632	414	411	438	360	352	332	352	415	418
1982	Wet	472	469	323	452	335	374	234	212	319	380	309	254	345
1983	Wet	209	266	381	488	337	274	300	268	243	233	212	215	286
1984	Wet	276	225	305	357	285	301	362	329	344	295	296	365	312
1985	Dry	403	403	315	337	466	536	496	395	335	315	393	393	399
1986	Wet	435	445	524	486	502	340	275	243	342	383	330	322	386
1987	Dry	377	392	480	627	589	466	411	413	343	318	362	414	433
1988	Critical	503	500	542	605	491	550	553	507	437	323	359	435	484
1989	Dry	526	555	577	585	792	510	350	411	286	286	352	404	470
1990	Critical	440	481	594	512	592	518	445	475	467	441	436	455	488
1991	Critical	535	572	627	694	736	596	468	478	444	447	450	415	538
1992	Critical	514	609	632	738	628	447	405	437	397	326	364	431	494
1993	Above Normal	532	600	623	644	545	458	374	358	403	349	317	345	462
1994	Critical	427	474	523	625	710	494	416	450	364	402	435	468	482
Average		436	445	474	516	507	446	405	366	363	333	331	376	416
Wet		404	399	425	436	404	367	318	282	319	330	295	307	357
Above Normal		448	459	457	520	472	421	378	334	351	326	296	365	402
Below Normal		431	437	484	524	502	429	392	340	342	295	307	390	406
Dry		452	468	493	542	578	494	457	414	370	323	361	411	447
Critical		466	490	539	606	625	561	526	504	463	399	407	441	502

Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal (umhos/cm)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	0	0	0	1	0	0	0	0	0	1	1	0	0
1923	Below Normal	0	-8	-21	-1	-9	-3	0	0	-1	2	3	-3	-3
1924	Critical	1	5	-3	13	-107	-136	-47	-2	26	3	-4	0	-21
1925	Dry	-1	1	-15	-18	80	86	12	0	-3	-7	-4	-2	11
1926	Dry	1	-2	-3	-2	-5	-5	-6	-1	-11	0	1	1	-3
1927	Wet	3	2	3	2	6	6	1	2	0	0	0	0	2
1928	Above Normal	0	1	3	5	5	-4	-9	-1	3	-5	-5	1	0
1929	Critical	1	1	-9	13	-2	-3	-2	-4	-24	-23	1	-4	-4
1930	Dry	-3	-1	0	1	0	-12	-8	0	-1	-14	7	-17	-4
1931	Critical	-19	-5	-1	20	-59	-84	-14	1	19	-10	-18	0	-14
1932	Dry	3	0	0	27	12	5	1	-1	1	0	1	1	4
1933	Critical	1	0	0	1	1	1	0	0	0	0	0	0	0
1934	Critical	1	2	1	0	-6	-5	-2	0	0	0	0	-2	-1
1935	Below Normal	-1	0	-3	3	1	14	5	0	-1	-3	1	-1	1
1936	Below Normal	3	2	1	-1	4	2	0	-1	1	2	0	-2	1
1937	Below Normal	-6	-4	-1	1	-4	0	0	0	2	4	3	0	0
1938	Wet	-1	7	6	10	2	-1	0	0	0	0	0	1	2
1939	Dry	1	1	1	1	-2	0	1	0	-9	-14	9	-12	-2
1940	Above Normal	-22	-6	-2	-4	4	2	-1	0	1	2	1	1	-2
1941	Wet	1	1	1	1	0	0	0	0	-1	-1	1	0	0
1942	Wet	3	8	7	0	0	0	-1	0	1	0	0	1	1
1943	Wet	1	0	0	1	0	0	0	0	0	-1	-1	0	0
1944	Dry	0	0	0	1	-1	3	2	-1	-1	-5	7	8	1
1945	Below Normal	-4	-4	-6	-5	-6	-1	0	0	1	1	1	-1	-2
1946	Below Normal	0	4	7	1	-1	-3	-2	0	0	-2	1	20	2
1947	Dry	13	6	-16	-3	-8	-3	0	0	3	1	5	13	1
1948	Below Normal	1	4	-3	-1	5	6	0	1	-4	5	-7	5	1
1949	Dry	2	-4	-3	-3	5	-7	-4	0	1	-2	-17	5	-2
1950	Below Normal	6	-3	-15	-15	-9	-1	2	-5	-4	-3	0	-3	-4
1951	Above Normal	2	6	0	2	1	0	0	-1	-3	5	-1	-4	1
1952	Wet	-2	1	4	1	0	4	1	0	0	0	0	0	1
1953	Wet	0	0	1	0	0	0	0	0	1	0	-1	2	0
1954	Above Normal	1	1	1	0	0	0	0	0	0	1	0	0	0
1955	Dry	4	3	-7	-1	-3	2	8	1	-11	-21	5	14	-1
1956	Wet	9	-18	-6	0	-8	-1	0	0	-1	0	-1	-1	-2
1957	Above Normal	-1	-1	-1	2	6	0	0	0	-2	-4	-2	-5	-1
1958	Wet	-6	9	9	2	-1	0	0	0	0	0	-1	0	1
1959	Below Normal	-1	0	0	0	-2	-1	2	-1	-4	-2	0	1	-1
1960	Dry	-1	-7	35	-92	-28	-2	0	3	16	-11	8	6	-6
1961	Dry	8	0	-2	23	19	33	23	5	-3	0	8	31	12
1962	Below Normal	20	-2	37	-24	-9	0	-5	2	21	13	-10	-3	3
1963	Wet	-7	-3	21	12	-1	2	2	0	2	5	7	-2	3
1964	Dry	1	-2	-4	-4	-1	0	-4	3	-7	-6	21	-11	-1
1965	Wet	-27	-21	-15	0	-12	-9	-1	-5	-21	-8	1	-4	-10
1966	Below Normal	-5	-1	2	0	0	-14	-7	0	-4	-3	-2	-2	-3
1967	Wet	-6	-5	13	1	-1	1	0	0	0	0	-1	0	0
1968	Below Normal	-1	0	0	-1	-3	0	-1	1	-3	-2	-2	-5	-1
1969	Wet	-3	1	-2	2	0	0	0	0	0	0	1	1	0
1970	Wet	0	0	0	0	0	-1	0	0	-1	-1	0	0	0
1971	Wet	0	-2	0	0	0	-8	0	0	0	0	0	1	-1
1972	Below Normal	2	1	1	1	1	0	0	0	-4	-5	0	4	0
1973	Above Normal	8	19	-35	-12	0	4	2	0	-1	0	0	0	-1
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	-1	-3	-5	-5	10	6	0
1977	Critical	2	-21	2	-15	-31	-109	-85	-28	-9	15	4	-15	-24
1978	Above Normal	-13	8	-2	30	10	23	4	5	2	-9	-9	2	4
1979	Below Normal	3	1	0	3	3	-1	1	1	0	-1	5	3	1
1980	Above Normal	1	4	22	3	-5	0	0	0	0	0	2	0	2
1981	Dry	1	0	0	1	1	-2	-2	-1	1	-1	2	-1	0
1982	Wet	-1	9	5	1	0	0	0	0	0	0	1	0	1
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	1	0	-2	-5	-12	-9	0	0	0	2	6	-2
1986	Wet	3	0	-1	-2	0	6	0	0	2	-78	-23	1	-8
1987	Dry	-1	0	4	0	5	-28	-46	-13	-6	-13	-2	-5	-9
1988	Critical	0	-2	-2	-3	0	2	1	0	-4	6	-5	-14	-2
1989	Dry	-9	3	-15	2	-4	-9	-3	-1	3	5	-5	5	-2
1990	Critical	-2	-1	26	-18	-20	-14	-2	0	0	0	5	6	-2
1991	Critical	3	-3	5	-6	-11	-3	0	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	0	0	0	-4	-1	0	7	0
1993	Above Normal	6	0	3	-6	0	0	0	4	15	-9	-10	4	1
1994	Critical	4	2	-1	-2	13	16	5	1	-4	-7	13	-25	1
Average		0	0	0	-1	-2	-4	-3	-1	0	-3	0	0	-1
Wet		-2	-1	2	2	-1	0	0	0	-1	-4	-1	0	0
Above Normal		-2	3	-1	2	2	2	0	1	2	-2	-2	0	0
Below Normal		1	-1	0	-3	-2	0	0	0	0	0	0	1	0
Dry		1	0	-2	-4	4	3	-2	0	-2	-5	3	3	0
Critical		-1	-2	1	0	-18	-28	-12	-3	0	-2	0	-3	-6

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Electrical Conductivity at Middle River at Victoria Canal
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-2%	-4%	0%	-2%	-1%	0%	0%	0%	1%	1%	-1%	-1%
1924	Critical	0%	1%	-1%	2%	-15%	-18%	-7%	0%	5%	1%	-1%	0%	-3%
1925	Dry	0%	0%	-3%	-3%	13%	17%	3%	0%	-1%	-2%	-1%	0%	2%
1926	Dry	0%	-1%	-1%	0%	-1%	-1%	-1%	0%	-3%	0%	0%	0%	-1%
1927	Wet	1%	0%	1%	1%	1%	1%	0%	1%	0%	0%	0%	0%	1%
1928	Above Normal	0%	0%	1%	1%	1%	-1%	-2%	0%	1%	-2%	-2%	0%	0%
1929	Critical	0%	0%	-2%	2%	0%	0%	0%	-1%	-5%	-6%	0%	-1%	-1%
1930	Dry	-1%	0%	0%	0%	0%	-3%	-2%	0%	0%	-4%	2%	-4%	-1%
1931	Critical	-4%	-1%	0%	3%	-8%	-12%	-2%	0%	4%	-3%	-4%	0%	-2%
1932	Dry	1%	0%	0%	7%	2%	1%	0%	0%	0%	0%	0%	0%	1%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	0%	0%	3%	1%	0%	0%	-1%	0%	0%	0%
1936	Below Normal	1%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%
1937	Below Normal	-1%	-1%	0%	0%	-1%	0%	0%	0%	1%	1%	1%	0%	0%
1938	Wet	0%	1%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-4%	3%	-3%	-1%
1940	Above Normal	-4%	-1%	0%	-1%	1%	0%	0%	0%	0%	1%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	1%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	1%	0%	0%	0%	-2%	2%	2%	0%
1945	Below Normal	-1%	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Normal	0%	1%	2%	0%	0%	-1%	0%	0%	0%	-1%	0%	5%	1%
1947	Dry	3%	1%	-3%	-1%	-1%	-1%	0%	0%	1%	0%	1%	3%	0%
1948	Below Normal	0%	1%	-1%	0%	1%	1%	0%	0%	-1%	2%	-2%	1%	0%
1949	Dry	0%	-1%	-1%	-1%	1%	-1%	-1%	0%	0%	-1%	-4%	1%	-1%
1950	Below Normal	1%	-1%	-3%	-3%	-2%	0%	0%	-2%	-1%	-1%	0%	-1%	-1%
1951	Above Normal	0%	1%	0%	0%	0%	0%	0%	0%	-1%	2%	0%	-1%	0%
1952	Wet	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	1%	0%
1954	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	1%	1%	-1%	0%	-1%	0%	2%	0%	-3%	-6%	1%	3%	0%
1956	Wet	2%	-4%	-1%	0%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Normal	0%	0%	0%	0%	1%	0%	0%	0%	-1%	-1%	-1%	-1%	0%
1958	Wet	-1%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1960	Dry	0%	-1%	7%	-14%	-4%	0%	0%	1%	5%	-3%	2%	2%	-1%
1961	Dry	2%	0%	0%	4%	3%	7%	5%	1%	-1%	0%	2%	8%	3%
1962	Below Normal	4%	0%	7%	-4%	-1%	0%	-1%	0%	6%	5%	-3%	-1%	1%
1963	Wet	-1%	-1%	6%	3%	0%	0%	0%	0%	1%	2%	2%	-1%	1%
1964	Dry	0%	0%	-1%	-1%	0%	0%	-1%	1%	-2%	-2%	6%	-3%	0%
1965	Wet	-6%	-4%	-3%	0%	-3%	-2%	0%	-2%	-6%	-2%	0%	-1%	-2%
1966	Below Normal	-1%	0%	0%	0%	0%	-3%	0%	-2%	0%	-1%	-1%	0%	-1%
1967	Wet	-1%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	-1%	0%	0%	0%	-1%	-1%	-1%	-1%	0%
1969	Wet	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	0%	-2%	0%	0%	0%	0%	0%	0%	0%
1972	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	0%	1%	0%
1973	Above Normal	2%	4%	-9%	-3%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	2%	1%	0%
1977	Critical	0%	-4%	0%	-3%	-5%	-15%	-13%	-5%	-2%	4%	1%	-3%	-4%
1978	Above Normal	-2%	1%	0%	5%	2%	4%	1%	2%	0%	-2%	-3%	1%	1%
1979	Below Normal	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	1%	0%
1980	Above Normal	0%	1%	5%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-2%	-2%	0%	0%	0%	1%	2%	0%
1986	Wet	1%	0%	0%	0%	0%	2%	0%	0%	1%	-17%	-7%	0%	-2%
1987	Dry	0%	0%	1%	0%	1%	-6%	-10%	-3%	-2%	-4%	0%	-1%	-2%
1988	Critical	0%	0%	0%	-1%	0%	0%	0%	-1%	-1%	2%	-1%	-3%	0%
1989	Dry	-2%	1%	-2%	0%	-1%	-2%	-1%	0%	1%	2%	-2%	1%	0%
1990	Critical	0%	0%	5%	-3%	-3%	-3%	-1%	0%	0%	0%	1%	1%	0%
1991	Critical	1%	0%	1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	2%	0%
1993	Above Normal	1%	0%	1%	-1%	0%	0%	0%	1%	4%	-3%	-3%	1%	0%
1994	Critical	1%	0%	0%	0%	2%	3%	1%	0%	-1%	-2%	3%	-5%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	1%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	1%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%
Below Normal		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	-1%	1%	1%	0%	0%	0%	-2%	1%	1%	0%
Critical		0%	0%	0%	0%	-3%	-4%	-2%	-1%	0%	0%	0%	-1%	-1%

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	120	119	127	120	117	82	46	40	48	62	43	76	83
1923	Below Normal	116	116	120	90	84	99	52	46	62	41	55	92	81
1924	Critical	105	118	143	158	202	221	137	111	124	104	105	107	136
1925	Dry	139	150	154	176	152	130	67	41	66	62	75	99	109
1926	Dry	133	125	150	170	150	135	65	66	66	68	83	106	110
1927	Wet	140	94	75	88	101	102	45	40	42	39	42	84	74
1928	Above Normal	117	94	89	98	88	79	46	45	47	54	50	104	76
1929	Critical	135	125	155	170	192	180	112	92	96	83	92	115	129
1930	Dry	144	148	161	126	124	128	57	65	69	74	78	112	107
1931	Critical	144	131	155	172	207	180	121	111	118	97	113	118	139
1932	Dry	140	148	140	99	150	149	105	81	78	72	74	105	112
1933	Critical	133	121	148	163	172	162	98	83	94	84	94	103	121
1934	Critical	132	149	152	156	153	193	119	102	103	79	91	118	129
1935	Below Normal	143	148	172	135	140	116	59	54	53	50	62	103	103
1936	Below Normal	131	121	148	138	109	47	40	45	68	45	57	93	87
1937	Below Normal	125	118	139	162	89	79	47	30	67	54	56	83	88
1938	Wet	125	126	80	99	73	48	28	26	27	52	42	41	64
1939	Dry	32	45	117	163	168	143	93	62	60	69	77	115	95
1940	Above Normal	143	124	146	142	120	48	36	43	57	43	40	90	86
1941	Wet	120	125	124	101	83	44	33	28	60	66	51	66	75
1942	Wet	61	87	109	79	41	53	40	34	54	66	46	46	60
1943	Wet	39	47	69	61	35	40	37	42	69	56	48	82	52
1944	Dry	125	118	140	159	158	100	60	50	57	62	81	98	101
1945	Below Normal	128	116	122	121	96	52	59	47	54	52	57	94	83
1946	Below Normal	117	103	85	80	77	71	52	48	59	44	58	95	74
1947	Dry	120	121	146	136	138	131	65	72	65	62	82	114	104
1948	Below Normal	146	130	163	164	196	140	61	54	45	35	60	96	107
1949	Dry	120	118	146	177	171	125	62	71	66	55	89	113	109
1950	Below Normal	138	121	151	147	107	109	48	46	43	47	50	86	91
1951	Above Normal	121	75	64	59	33	56	49	36	35	40	42	99	59
1952	Wet	121	127	136	105	80	67	20	13	35	50	37	39	69
1953	Wet	34	68	119	84	87	122	49	33	34	30	45	68	64
1954	Above Normal	66	89	132	161	95	109	47	52	47	46	41	94	82
1955	Dry	131	140	139	102	103	113	80	73	66	56	76	105	99
1956	Wet	133	142	143	78	55	50	42	45	57	66	52	47	76
1957	Above Normal	34	44	98	146	151	113	53	38	39	38	44	102	75
1958	Wet	113	69	100	91	115	102	19	8	43	56	41	42	67
1959	Below Normal	35	58	124	152	98	107	74	53	55	46	55	103	80
1960	Dry	132	129	149	177	170	98	57	67	61	70	78	107	108
1961	Dry	140	139	174	166	166	131	63	72	65	59	78	100	113
1962	Below Normal	124	128	158	169	144	94	55	52	49	42	56	114	99
1963	Wet	124	50	86	87	103	113	61	42	53	36	38	85	73
1964	Dry	120	118	81	99	111	111	73	70	62	65	93	102	92
1965	Wet	131	139	115	71	52	70	46	45	53	41	48	76	74
1966	Below Normal	113	103	82	86	82	102	52	50	52	46	54	110	78
1967	Wet	151	145	149	120	95	72	36	18	35	37	35	36	77
1968	Below Normal	33	55	113	132	100	111	60	54	51	45	55	101	76
1969	Wet	129	129	124	132	71	63	36	23	24	52	42	44	72
1970	Wet	32	50	89	42	48	45	39	40	44	46	41	92	51
1971	Wet	133	97	94	76	93	85	42	35	33	31	41	77	70
1972	Below Normal	72	98	132	124	135	111	51	59	58	50	55	112	88
1973	Above Normal	158	112	94	121	116	82	52	54	63	37	47	91	85
1974	Wet	130	73	77	81	74	39	36	44	63	56	51	61	65
1975	Wet	35	48	99	111	64	38	38	41	57	57	49	64	59
1976	Critical	37	37	89	142	179	161	83	82	109	115	117	130	107
1977	Critical	155	138	169	152	193	195	143	119	121	90	102	119	141
1978	Above Normal	156	164	172	141	130	130	64	41	67	64	52	75	105
1979	Below Normal	112	124	144	122	57	44	46	41	46	35	56	96	77
1980	Above Normal	134	111	106	75	59	62	52	48	58	67	52	78	75
1981	Dry	106	106	142	156	99	107	60	53	58	67	79	112	95
1982	Wet	131	109	74	102	38	47	19	13	49	59	42	27	59
1983	Wet	12	29	59	69	53	38	39	28	24	19	10	16	33
1984	Wet	26	13	44	48	22	43	46	49	61	40	43	85	43
1985	Dry	108	86	71	80	110	118	78	59	51	63	94	94	84
1986	Wet	109	115	148	123	91	48	24	19	56	97	58	68	80
1987	Dry	89	96	138	164	165	134	70	67	65	71	90	111	105
1988	Critical	146	136	158	152	150	178	96	87	87	64	97	123	123
1989	Dry	152	157	166	165	217	123	44	55	44	58	90	99	114
1990	Critical	117	131	163	148	165	127	84	80	94	105	114	120	121
1991	Critical	156	161	167	187	210	145	84	75	89	110	115	108	134
1992	Critical	151	174	173	207	162	126	62	67	72	62	90	119	122
1993	Above Normal	154	170	183	150	125	104	47	49	70	60	45	81	103
1994	Critical	114	131	156	181	192	129	63	68	71	112	117	151	124
Average		113	110	126	126	117	102	59	53	61	59	65	91	90
Wet		97	90	101	88	70	63	37	32	46	50	43	59	65
Above Normal		120	110	121	121	103	87	49	45	53	51	46	89	83
Below Normal		109	110	132	130	108	91	54	49	54	45	56	98	87
Dry		121	122	138	145	147	124	69	64	62	65	82	106	104
Critical		127	129	152	166	181	166	100	90	98	92	104	119	127

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	121	119	127	120	117	83	46	40	48	62	44	76	83
1923	Below Normal	116	109	112	90	82	100	52	46	62	42	56	91	80
1924	Critical	107	119	144	161	168	206	124	110	127	104	104	107	132
1925	Dry	141	149	148	173	177	152	71	41	65	60	74	100	113
1926	Dry	134	124	149	169	148	134	64	64	63	68	84	109	109
1927	Wet	142	95	76	88	105	106	45	41	42	39	42	84	75
1928	Above Normal	117	94	90	100	90	78	44	44	48	50	49	104	76
1929	Critical	136	125	152	175	191	180	112	90	84	76	92	113	127
1930	Dry	142	147	161	127	117	120	55	65	68	66	81	100	104
1931	Critical	136	129	158	177	175	166	119	112	121	90	108	119	134
1932	Dry	142	148	140	119	154	149	105	81	78	72	74	105	114
1933	Critical	133	121	147	163	172	162	98	83	94	84	94	102	121
1934	Critical	132	149	152	158	151	192	118	101	103	79	91	117	129
1935	Below Normal	143	148	172	136	141	125	60	54	53	49	62	103	104
1936	Below Normal	133	122	149	137	110	47	40	45	68	47	57	93	87
1937	Below Normal	121	116	139	161	88	78	47	31	68	55	57	83	87
1938	Wet	124	129	81	104	73	48	28	25	27	52	42	41	65
1939	Dry	33	45	117	163	167	139	93	61	59	63	80	107	94
1940	Above Normal	131	120	145	141	120	49	36	43	57	44	41	90	85
1941	Wet	120	126	125	101	83	44	33	28	60	66	51	66	75
1942	Wet	63	92	111	79	41	53	40	34	54	66	46	46	60
1943	Wet	40	47	69	61	35	40	37	42	69	56	48	82	52
1944	Dry	125	119	140	159	158	100	61	49	53	58	83	101	101
1945	Below Normal	125	113	120	120	95	52	59	48	54	52	57	94	82
1946	Below Normal	117	107	87	80	77	69	52	48	59	41	60	106	75
1947	Dry	128	123	140	134	136	140	64	72	67	62	84	120	106
1948	Below Normal	147	132	162	164	200	141	62	54	44	37	57	98	108
1949	Dry	119	115	145	176	172	120	61	71	66	52	83	116	108
1950	Below Normal	140	116	144	143	105	107	48	43	42	46	50	84	89
1951	Above Normal	125	78	64	62	33	56	49	34	34	43	41	97	60
1952	Wet	121	128	137	105	80	68	20	13	35	50	37	39	69
1953	Wet	34	68	119	84	87	122	49	33	35	30	45	70	65
1954	Above Normal	67	89	132	161	95	109	47	52	47	46	41	94	82
1955	Dry	134	141	137	102	103	132	83	73	61	51	74	114	101
1956	Wet	136	131	141	78	54	49	42	45	57	66	52	47	75
1957	Above Normal	34	44	98	147	153	113	53	38	38	38	43	100	75
1958	Wet	111	75	103	92	115	102	19	8	43	56	40	43	67
1959	Below Normal	35	59	124	152	97	107	75	53	55	46	55	104	80
1960	Dry	133	136	157	145	164	98	57	69	66	69	85	110	107
1961	Dry	145	139	175	173	171	146	70	74	64	60	82	116	118
1962	Below Normal	135	134	168	161	142	94	54	51	54	47	51	113	100
1963	Wet	121	49	93	91	101	112	61	42	53	36	39	83	74
1964	Dry	121	117	80	97	111	111	72	71	62	62	101	95	92
1965	Wet	117	127	111	71	48	68	46	44	50	40	48	75	70
1966	Below Normal	110	103	82	86	80	91	51	50	51	46	54	110	76
1967	Wet	147	143	153	121	94	73	36	18	35	37	35	36	77
1968	Below Normal	33	55	113	131	100	111	60	55	51	44	54	98	75
1969	Wet	129	130	124	132	71	63	36	23	24	52	42	44	72
1970	Wet	32	50	89	42	48	45	39	40	44	46	41	92	51
1971	Wet	132	95	94	76	86	83	42	35	33	31	41	78	69
1972	Below Normal	73	98	132	124	135	111	51	59	55	49	56	113	88
1973	Above Normal	163	122	85	119	116	84	53	54	63	37	47	91	86
1974	Wet	130	73	77	81	74	39	36	44	63	56	51	61	65
1975	Wet	35	48	99	111	64	38	38	41	57	57	49	64	59
1976	Critical	37	37	90	142	179	159	82	80	109	119	121	135	107
1977	Critical	156	131	171	148	157	171	116	108	117	91	100	113	132
1978	Above Normal	148	166	172	148	131	138	64	42	67	64	51	76	105
1979	Below Normal	113	124	144	123	57	44	46	41	46	35	58	97	77
1980	Above Normal	134	115	114	75	56	62	52	48	58	67	52	78	76
1981	Dry	106	106	142	156	99	107	60	53	57	67	80	111	95
1982	Wet	131	113	75	102	38	47	19	13	49	59	42	27	60
1983	Wet	12	29	59	69	53	38	39	28	24	19	10	16	33
1984	Wet	26	13	44	48	22	43	46	49	61	40	43	85	43
1985	Dry	108	87	71	79	109	106	75	59	53	63	95	97	84
1986	Wet	110	115	148	122	91	48	24	19	56	68	52	68	77
1987	Dry	90	97	139	167	164	112	58	62	60	69	88	110	101
1988	Critical	144	135	157	151	151	178	96	87	85	62	93	117	121
1989	Dry	149	158	163	166	214	121	44	55	47	61	89	103	114
1990	Critical	115	133	170	142	157	124	83	80	94	106	116	122	120
1991	Critical	157	160	168	185	207	145	84	75	88	110	115	108	134
1992	Critical	151	174	173	207	162	127	62	67	71	62	91	122	122
1993	Above Normal	155	171	184	148	125	104	47	50	72	60	45	83	104
1994	Critical	116	132	155	180	196	132	64	69	68	110	121	139	124
Average		113	110	126	126	116	102	59	53	61	58	65	91	90
Wet		96	89	101	88	70	63	37	32	46	49	43	59	64
Above Normal		120	112	121	122	104	88	49	44	53	51	45	89	83
Below Normal		110	110	132	129	108	91	54	48	54	45	56	99	86
Dry		122	122	138	144	148	124	68	64	62	63	84	107	104
Critical		127	129	153	166	172	162	97	89	97	91	104	118	125

Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant (mg/L)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	0	-7	-8	0	-1	1	0	0	0	1	0	-1	-1
1924	Critical	2	2	0	3	-34	-15	-13	-1	3	0	-1	0	-5
1925	Dry	2	-1	-6	-4	24	22	4	0	-1	-2	-1	1	3
1926	Dry	1	-2	-1	0	-1	-2	-1	-2	-2	1	1	3	-1
1927	Wet	2	1	1	1	4	3	0	1	0	0	0	0	1
1928	Above Normal	0	1	1	1	2	-2	-2	-1	0	-5	-2	0	0
1929	Critical	1	0	-3	4	-1	-1	0	-2	-12	-7	0	-2	-2
1930	Dry	-2	-1	0	0	-7	-8	-2	0	-1	-8	3	-11	-3
1931	Critical	-8	-1	3	4	-32	-14	-2	1	2	-6	-6	1	-5
1932	Dry	1	0	0	20	4	1	0	0	0	0	0	0	2
1933	Critical	0	0	-1	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	2	-2	-1	0	0	0	0	0	-1	0
1935	Below Normal	0	0	-1	1	0	9	1	0	0	0	1	-1	1
1936	Below Normal	2	1	0	0	2	0	0	0	0	2	-1	-1	0
1937	Below Normal	-4	-3	0	-1	-1	0	0	0	1	-1	0	0	-1
1938	Wet	0	3	1	5	0	0	0	0	0	0	0	1	1
1939	Dry	1	1	1	0	-1	-4	0	-1	-1	-6	3	-8	-1
1940	Above Normal	-12	-4	-1	-1	1	0	0	0	0	0	0	0	-1
1941	Wet	0	0	0	0	1	0	0	0	0	0	0	0	0
1942	Wet	2	6	2	0	0	0	0	0	0	0	0	0	1
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	-1	-3	-4	2	3	0
1945	Below Normal	-3	-2	-2	-1	-1	0	0	0	0	0	0	0	-1
1946	Below Normal	0	3	2	0	0	-1	0	0	0	-3	1	11	1
1947	Dry	8	2	-6	-2	-2	8	0	0	2	0	2	5	1
1948	Below Normal	1	3	-1	0	3	2	0	0	-1	2	-3	3	1
1949	Dry	-1	-3	-1	-1	1	-5	-1	0	0	-3	-6	3	-1
1950	Below Normal	2	-5	-7	-5	-3	-2	0	-3	0	0	1	-1	-2
1951	Above Normal	5	4	0	3	0	0	0	-2	-1	3	-1	-2	1
1952	Wet	-1	1	1	0	0	1	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1954	Above Normal	1	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	3	1	-2	0	0	19	4	1	-5	-5	-2	9	2
1956	Wet	2	-11	-1	0	-1	0	0	0	0	0	0	0	-1
1957	Above Normal	0	0	0	1	1	0	0	0	0	0	-1	-2	0
1958	Wet	-2	6	3	0	0	0	0	0	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	1	0	-1	0	0	0	0
1960	Dry	2	7	9	-31	-6	0	0	1	4	-1	7	3	0
1961	Dry	5	0	1	7	5	15	7	1	-1	1	4	16	5
1962	Below Normal	11	6	11	-9	-2	0	-1	-1	5	5	-5	-1	2
1963	Wet	-3	-1	7	3	-2	0	0	0	0	0	1	-1	0
1964	Dry	1	-1	-2	-1	0	0	-1	2	0	-3	8	-7	0
1965	Wet	-14	-12	-4	0	-3	-2	0	-1	-3	-1	0	-1	-4
1966	Below Normal	-4	-1	1	0	-2	-11	-1	0	0	0	0	-1	-2
1967	Wet	-4	-2	4	0	0	1	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	-1	-1	-2	0
1969	Wet	0	0	-1	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	-1	0	0	-7	-1	0	0	0	0	0	0	-1
1972	Below Normal	1	1	0	0	0	0	0	0	-2	-1	1	1	0
1973	Above Normal	6	10	-8	-2	0	2	1	0	0	0	0	0	1
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	-2	-1	-2	0	4	4	5	1
1977	Critical	1	-7	3	-4	-37	-24	-27	-12	-4	2	-2	-7	-10
1978	Above Normal	-8	2	0	7	1	8	0	0	1	-1	0	1	1
1979	Below Normal	2	1	0	1	1	0	0	0	0	0	2	1	1
1980	Above Normal	0	4	8	1	-3	0	0	0	0	0	0	0	1
1981	Dry	0	0	0	0	0	0	0	0	0	-1	1	-1	0
1982	Wet	0	4	1	0	0	0	0	0	0	0	0	0	1
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-1	-1	-12	-3	0	2	0	1	3	-1
1986	Wet	1	0	0	-1	0	0	0	0	1	-30	-6	-1	-3
1987	Dry	0	1	1	3	-1	-22	-12	-5	-5	-2	-2	-1	-4
1988	Critical	-1	-1	-1	-1	2	0	0	0	-1	-2	-4	-6	-1
1989	Dry	-3	2	-3	1	-3	-2	0	0	2	3	-1	4	0
1990	Critical	-1	2	7	-7	-9	-3	-1	0	0	0	2	2	0
1991	Critical	1	0	1	-2	-3	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	-1	0	1	3	0
1993	Above Normal	2	1	1	-2	0	0	0	1	2	-1	-1	2	0
1994	Critical	2	1	-1	0	4	4	2	1	-3	-2	4	-11	0
Average		0	0	0	0	-2	-1	-1	0	0	-1	0	0	0
Wet		-1	0	1	0	0	0	0	0	0	-1	0	0	0
Above Normal		-1	2	0	1	0	1	0	0	0	0	0	0	0
Below Normal		1	0	0	-1	0	0	0	0	0	0	0	1	0
Dry		1	0	-1	-1	1	1	0	0	-1	-2	1	1	0
Critical		0	0	1	0	-9	-5	-4	-1	-1	-1	0	-1	-2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Delta Mendota Canal at Tracy Pumping Plant
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	0%	-6%	-6%	0%	-1%	1%	0%	0%	0%	3%	1%	-1%	-1%
1924	Critical	2%	2%	0%	2%	-17%	-7%	-10%	-1%	2%	0%	-1%	0%	-2%
1925	Dry	1%	-1%	-4%	-2%	16%	17%	6%	1%	-2%	-3%	-2%	1%	2%
1926	Dry	1%	-1%	-1%	0%	-1%	-1%	-2%	-3%	-3%	1%	1%	3%	-1%
1927	Wet	1%	1%	1%	1%	4%	3%	1%	4%	0%	0%	0%	0%	1%
1928	Above Normal	0%	1%	1%	1%	2%	-2%	-4%	-2%	1%	-9%	-3%	0%	-1%
1929	Critical	1%	0%	-2%	2%	-1%	0%	0%	-2%	-13%	-9%	0%	-2%	-2%
1930	Dry	-1%	0%	0%	0%	-6%	-6%	-4%	0%	-1%	-10%	3%	-10%	-3%
1931	Critical	-5%	-1%	2%	3%	-16%	-8%	-1%	1%	2%	-7%	-5%	1%	-3%
1932	Dry	1%	0%	0%	20%	2%	0%	0%	0%	0%	0%	0%	0%	2%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	0%	1%	0%	8%	2%	0%	0%	-1%	1%	-1%	1%
1936	Below Normal	1%	1%	0%	0%	1%	0%	1%	-1%	0%	4%	-1%	-1%	1%
1937	Below Normal	-4%	-2%	0%	-1%	-1%	0%	0%	0%	1%	2%	1%	0%	0%
1938	Wet	0%	3%	2%	5%	0%	0%	-1%	0%	0%	0%	0%	2%	1%
1939	Dry	3%	1%	0%	0%	0%	-3%	0%	-1%	-2%	-9%	4%	-7%	-1%
1940	Above Normal	-9%	-4%	-1%	-1%	0%	1%	-1%	0%	0%	1%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	3%	7%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	1%	-1%	-6%	-7%	3%	3%	-1%
1945	Below Normal	-2%	-2%	-2%	-1%	-1%	0%	-1%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	3%	3%	0%	0%	-2%	-1%	0%	0%	-7%	2%	11%	1%
1947	Dry	7%	2%	-4%	-2%	-2%	6%	0%	0%	3%	0%	2%	5%	1%
1948	Below Normal	1%	2%	-1%	0%	2%	1%	0%	1%	-1%	6%	-5%	3%	1%
1949	Dry	-1%	-3%	-1%	0%	1%	-4%	-2%	0%	0%	-6%	-7%	3%	-2%
1950	Below Normal	1%	-4%	-5%	-3%	-2%	-2%	1%	-7%	-1%	-1%	1%	-2%	-2%
1951	Above Normal	4%	5%	0%	5%	0%	0%	0%	-4%	-3%	8%	-3%	-2%	1%
1952	Wet	-1%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1955	Dry	2%	1%	-2%	0%	0%	17%	5%	1%	-7%	-9%	-2%	9%	1%
1956	Wet	2%	-8%	-1%	0%	-2%	-1%	0%	0%	0%	0%	0%	0%	-1%
1957	Above Normal	0%	0%	0%	1%	1%	0%	0%	0%	-1%	0%	-2%	-2%	0%
1958	Wet	-2%	8%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	1%	0%	-1%	0%	0%	0%	0%
1960	Dry	1%	5%	6%	-18%	-4%	0%	0%	2%	7%	-1%	9%	3%	1%
1961	Dry	4%	0%	0%	4%	3%	11%	10%	2%	-1%	2%	5%	16%	5%
1962	Below Normal	8%	5%	7%	-5%	-1%	0%	-2%	-1%	10%	11%	-9%	-1%	2%
1963	Wet	-2%	-2%	8%	4%	-2%	0%	1%	0%	0%	0%	2%	-2%	1%
1964	Dry	1%	-1%	-2%	-1%	0%	0%	-1%	2%	0%	-4%	8%	-7%	0%
1965	Wet	-11%	-9%	-4%	0%	-6%	-3%	-1%	-3%	-6%	-2%	-1%	-2%	-4%
1966	Below Normal	-3%	-1%	1%	0%	-2%	-11%	-3%	0%	-1%	-1%	-1%	-1%	-2%
1967	Wet	-2%	-1%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	1%	0%	-1%	-2%	-2%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1971	Wet	0%	-1%	0%	0%	-8%	-2%	0%	0%	0%	0%	0%	1%	-1%
1972	Below Normal	1%	1%	0%	0%	0%	0%	0%	0%	-4%	-2%	1%	1%	0%
1973	Above Normal	4%	9%	-9%	-2%	0%	3%	1%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-1%	-1%	-2%	0%	3%	3%	4%	1%
1977	Critical	1%	-5%	2%	-3%	-19%	-12%	-19%	-10%	-3%	2%	-2%	-6%	-6%
1978	Above Normal	-5%	1%	0%	5%	1%	6%	1%	1%	1%	-1%	-1%	2%	1%
1979	Below Normal	1%	0%	0%	1%	1%	-1%	-1%	1%	0%	1%	3%	1%	1%
1980	Above Normal	0%	3%	7%	1%	-5%	0%	0%	-1%	0%	0%	0%	0%	1%
1981	Dry	0%	0%	0%	0%	0%	0%	-1%	-1%	-1%	-1%	1%	-1%	0%
1982	Wet	0%	4%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-1%	-1%	-10%	-4%	0%	4%	0%	1%	3%	-1%
1986	Wet	1%	0%	0%	0%	0%	-1%	1%	1%	1%	-30%	-11%	-1%	-3%
1987	Dry	0%	1%	1%	2%	-1%	-16%	-17%	-7%	-8%	-3%	-2%	-1%	-4%
1988	Critical	-1%	-1%	0%	-1%	1%	0%	0%	0%	-2%	-3%	-4%	-5%	-1%
1989	Dry	-2%	1%	-2%	1%	-1%	-2%	-1%	0%	5%	5%	-1%	4%	1%
1990	Critical	-1%	2%	4%	-4%	-5%	-2%	-1%	0%	0%	0%	2%	2%	0%
1991	Critical	1%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	2%	3%	0%
1993	Above Normal	1%	1%	0%	-1%	0%	0%	0%	2%	2%	-1%	-1%	3%	0%
1994	Critical	2%	1%	0%	0%	2%	3%	3%	1%	-4%	-2%	4%	-8%	0%
Average		0%	0%	0%	0%	-1%	0%	-1%	0%	0%	-1%	0%	0%	0%
Wet		0%	0%	1%	1%	-1%	0%	0%	0%	0%	-2%	0%	0%	0%
Above Normal		0%	2%	0%	1%	0%	1%	0%	0%	0%	0%	-1%	0%	0%
Below Normal		0%	0%	0%	-1%	0%	0%	0%	0%	0%	1%	-1%	1%	0%
Dry		1%	0%	0%	0%	0%	1%	-1%	0%	-1%	-3%	1%	2%	0%
Critical		0%	0%	0%	0%	-5%	-2%	-2%	-1%	-2%	-1%	0%	-1%	-1%

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	191	175	175	155	192	67	67	54	53	44	49	121	112
1923	Below Normal	187	181	173	78	60	55	69	58	43	50	81	155	99
1924	Critical	169	185	207	219	225	176	121	108	157	138	148	167	168
1925	Dry	229	244	221	241	167	63	49	49	47	52	81	153	133
1926	Dry	214	187	223	242	168	63	51	64	57	84	114	172	137
1927	Wet	225	137	60	75	97	53	42	52	40	38	54	134	84
1928	Above Normal	188	149	89	116	61	47	64	57	42	52	71	168	92
1929	Critical	213	191	231	246	259	135	94	90	84	95	133	189	163
1930	Dry	231	227	235	149	93	55	45	60	62	77	105	182	127
1931	Critical	231	192	219	234	217	118	94	108	144	134	167	187	170
1932	Dry	222	227	207	90	106	77	73	75	59	53	85	166	120
1933	Critical	208	176	201	186	125	87	71	74	86	95	126	155	132
1934	Critical	209	237	213	182	95	81	75	78	84	80	130	197	139
1935	Below Normal	234	226	250	155	70	53	50	62	44	43	84	166	120
1936	Below Normal	208	181	213	258	282	84	50	55	47	45	79	152	138
1937	Below Normal	204	181	200	243	225	158	67	46	45	45	63	131	134
1938	Wet	203	193	72	64	115	146	82	73	68	50	52	60	98
1939	Dry	36	53	152	247	229	136	102	69	64	96	114	187	124
1940	Above Normal	230	186	193	224	168	65	49	51	46	41	56	148	121
1941	Wet	194	198	205	132	176	91	76	48	48	49	53	96	114
1942	Wet	90	131	183	140	80	50	58	51	46	49	57	73	84
1943	Wet	51	62	63	113	74	83	92	57	59	45	57	135	74
1944	Dry	205	187	211	236	254	75	68	59	55	81	117	155	142
1945	Below Normal	204	179	165	149	155	103	72	60	44	51	81	159	118
1946	Below Normal	193	164	113	49	68	63	69	60	47	54	88	153	93
1947	Dry	196	190	226	187	164	84	75	72	61	85	122	183	137
1948	Below Normal	232	195	247	225	243	91	54	55	39	44	89	151	139
1949	Dry	186	176	209	251	198	74	70	64	54	79	133	180	139
1950	Below Normal	217	177	220	195	85	46	46	56	41	48	72	136	112
1951	Above Normal	191	101	76	140	155	52	64	53	42	43	61	159	95
1952	Wet	191	196	211	166	62	68	83	48	49	48	46	53	102
1953	Wet	41	96	207	77	53	48	65	49	39	41	61	104	73
1954	Above Normal	93	132	180	254	66	46	64	56	42	46	59	150	99
1955	Dry	206	216	209	109	76	58	74	67	57	64	102	168	117
1956	Wet	208	210	219	196	92	60	47	55	46	46	55	71	109
1957	Above Normal	40	48	114	202	183	53	61	51	39	44	64	167	89
1958	Wet	182	94	124	81	153	200	178	55	45	46	53	63	106
1959	Below Normal	42	77	179	246	87	55	77	64	61	66	83	170	101
1960	Dry	212	195	203	257	259	72	70	65	73	99	112	170	149
1961	Dry	220	208	264	226	198	72	50	58	65	87	123	153	144
1962	Below Normal	193	190	231	225	181	62	50	61	48	58	85	185	131
1963	Wet	182	55	87	106	72	47	108	54	36	38	51	137	81
1964	Dry	191	186	74	102	69	56	85	68	64	93	140	158	107
1965	Wet	205	211	148	77	53	45	54	59	45	41	53	125	93
1966	Below Normal	185	166	77	58	53	45	64	59	51	63	83	176	90
1967	Wet	238	223	225	155	61	67	73	63	50	56	47	48	109
1968	Below Normal	37	71	163	185	60	41	63	64	57	62	80	160	87
1969	Wet	201	196	171	178	206	131	120	72	59	49	55	65	125
1970	Wet	36	65	114	146	92	52	69	56	48	49	57	150	78
1971	Wet	216	147	88	49	48	44	59	49	39	41	61	121	80
1972	Below Normal	106	145	183	175	169	68	70	65	58	63	84	181	114
1973	Above Normal	253	186	99	139	120	60	67	63	44	41	67	151	108
1974	Wet	221	108	63	55	48	49	63	56	48	42	67	90	76
1975	Wet	42	61	129	131	125	66	72	56	43	41	60	92	76
1976	Critical	46	40	93	192	253	138	96	90	145	167	182	217	138
1977	Critical	249	209	262	186	208	154	124	116	152	126	162	196	179
1978	Above Normal	258	258	250	182	102	118	90	75	56	46	57	127	135
1979	Below Normal	181	200	223	163	83	61	59	58	42	47	82	156	113
1980	Above Normal	223	176	136	102	192	126	79	60	61	52	60	131	116
1981	Dry	178	168	215	253	77	45	64	62	68	100	121	177	127
1982	Wet	209	173	48	131	70	94	104	53	47	49	59	59	91
1983	Wet	31	56	106	232	200	187	174	74	61	57	40	32	104
1984	Wet	33	44	98	90	69	48	69	62	50	46	59	149	68
1985	Dry	185	142	55	59	110	75	80	65	54	94	144	147	101
1986	Wet	170	173	220	161	193	161	74	51	53	68	62	111	125
1987	Dry	149	158	211	261	191	89	80	66	75	103	129	173	140
1988	Critical	229	204	233	193	81	74	70	78	82	89	145	203	140
1989	Dry	243	238	242	221	280	109	45	51	52	89	138	154	155
1990	Critical	179	196	237	193	153	75	72	67	111	160	170	194	151
1991	Critical	254	250	248	249	251	148	66	61	107	166	164	168	178
1992	Critical	254	271	253	297	172	78	52	60	80	88	144	195	163
1993	Above Normal	252	268	266	194	157	98	46	51	41	38	52	127	133
1994	Critical	184	203	224	249	245	89	71	59	83	172	179	239	166
Average		179	167	176	170	141	83	73	63	61	69	91	146	118
Wet		151	135	135	122	102	85	84	57	48	47	55	94	93
Above Normal		192	168	158	171	140	73	65	57	47	45	60	145	110
Below Normal		173	167	188	172	130	70	61	59	48	53	81	160	113
Dry		194	188	197	196	165	75	68	63	61	83	118	167	131
Critical		202	196	218	219	191	113	84	82	110	126	154	192	157

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	191	175	175	155	192	67	67	54	53	45	49	121	112
1923	Below Normal	188	169	152	77	58	53	68	59	43	49	80	153	96
1924	Critical	173	189	206	225	198	124	109	107	156	137	148	169	162
1925	Dry	230	242	208	233	183	78	52	49	47	51	82	156	134
1926	Dry	216	184	221	241	167	63	51	64	56	86	115	176	137
1927	Wet	228	140	63	76	98	53	42	53	40	38	54	134	85
1928	Above Normal	188	151	91	119	64	47	65	56	42	50	70	168	93
1929	Critical	216	192	224	256	257	134	94	89	82	97	133	185	163
1930	Dry	228	226	235	150	93	54	45	60	62	83	108	158	125
1931	Critical	217	191	224	242	192	108	99	110	142	119	159	191	166
1932	Dry	224	227	207	89	102	78	73	75	60	53	84	166	120
1933	Critical	208	176	202	187	126	87	71	74	86	94	125	156	133
1934	Critical	209	238	214	179	89	79	75	78	84	80	129	195	137
1935	Below Normal	233	226	249	157	70	54	50	62	44	44	84	165	120
1936	Below Normal	212	183	213	257	280	85	50	55	47	44	78	150	138
1937	Below Normal	195	177	200	243	209	157	67	46	45	46	63	130	132
1938	Wet	202	198	76	64	111	146	82	73	68	50	52	62	99
1939	Dry	39	54	153	248	227	136	102	68	64	94	124	171	123
1940	Above Normal	207	178	190	221	169	66	49	51	46	41	56	148	118
1941	Wet	194	199	207	132	176	91	76	48	48	49	53	96	114
1942	Wet	93	142	190	140	80	50	58	51	46	49	57	73	86
1943	Wet	51	62	63	113	74	83	92	57	59	45	57	136	74
1944	Dry	206	188	211	236	253	76	68	58	52	83	126	160	143
1945	Below Normal	199	175	160	146	151	99	72	60	44	51	81	159	116
1946	Below Normal	193	170	124	49	67	62	69	60	47	56	91	173	97
1947	Dry	210	194	212	182	158	83	75	72	62	90	127	191	138
1948	Below Normal	235	200	243	223	251	93	54	55	39	46	85	156	140
1949	Dry	183	169	207	249	199	73	70	64	54	71	125	186	138
1950	Below Normal	220	167	206	185	79	45	46	55	42	50	73	134	108
1951	Above Normal	198	108	76	141	159	52	63	53	43	44	59	156	96
1952	Wet	190	198	214	166	62	69	86	48	49	48	46	53	102
1953	Wet	42	97	208	77	53	48	65	50	39	41	62	107	74
1954	Above Normal	94	132	180	255	66	46	64	56	42	46	59	150	99
1955	Dry	210	218	204	108	76	59	76	67	56	67	114	184	120
1956	Wet	211	190	213	196	87	58	47	55	46	46	55	71	106
1957	Above Normal	40	48	114	205	188	53	61	52	39	44	63	163	89
1958	Wet	178	105	130	82	153	200	178	55	45	46	53	63	107
1959	Below Normal	42	77	179	246	87	55	77	64	61	66	84	171	101
1960	Dry	214	207	231	193	247	74	70	65	66	91	117	174	146
1961	Dry	228	208	265	238	207	80	54	59	65	89	130	183	151
1962	Below Normal	206	201	252	207	175	62	50	61	51	59	76	184	132
1963	Wet	178	54	100	111	74	47	108	54	36	38	51	134	82
1964	Dry	193	184	70	99	68	56	86	68	59	97	157	145	107
1965	Wet	179	192	138	77	50	43	54	58	43	42	51	122	87
1966	Below Normal	178	165	80	58	53	45	64	59	51	63	83	175	90
1967	Wet	231	220	233	156	61	67	73	63	50	56	47	48	109
1968	Below Normal	37	71	163	184	60	41	63	64	58	62	79	157	87
1969	Wet	201	198	169	180	206	131	120	72	59	49	55	66	126
1970	Wet	36	65	115	146	92	51	68	56	47	49	57	150	78
1971	Wet	215	145	88	49	47	43	59	49	39	41	61	122	80
1972	Below Normal	107	146	184	175	169	68	71	65	57	62	85	183	114
1973	Above Normal	263	204	85	137	120	60	68	63	44	41	67	151	109
1974	Wet	221	108	63	55	48	49	63	56	48	42	67	90	76
1975	Wet	42	62	129	131	125	66	72	56	43	41	60	92	77
1976	Critical	46	40	93	192	253	138	96	87	148	176	190	223	140
1977	Critical	246	196	263	182	176	92	93	106	146	121	152	180	163
1978	Above Normal	252	265	250	194	103	125	96	74	58	46	58	130	138
1979	Below Normal	184	201	222	166	87	60	58	59	42	48	85	157	114
1980	Above Normal	222	182	153	105	190	134	80	60	62	52	60	131	119
1981	Dry	178	168	215	253	77	45	64	62	67	99	122	176	127
1982	Wet	208	179	50	131	70	95	105	53	47	49	59	59	92
1983	Wet	31	56	105	232	200	187	174	74	61	57	40	32	104
1984	Wet	33	44	98	90	69	48	69	62	50	46	59	149	68
1985	Dry	185	142	55	57	107	73	79	64	54	94	146	152	101
1986	Wet	171	172	219	160	192	164	74	51	53	53	56	109	123
1987	Dry	150	160	215	261	198	93	80	62	66	99	131	171	140
1988	Critical	227	202	232	191	81	74	71	78	82	87	136	191	138
1989	Dry	240	241	234	223	280	105	45	51	53	91	135	161	155
1990	Critical	177	199	250	180	146	74	72	67	111	160	174	199	151
1991	Critical	255	249	250	241	246	148	66	61	107	165	164	168	177
1992	Critical	254	271	253	297	182	78	52	60	80	89	147	201	164
1993	Above Normal	255	268	268	189	157	98	46	52	44	38	54	133	133
1994	Critical	187	205	223	248	253	95	73	59	81	169	185	220	167
Average		178	167	176	169	139	82	73	63	60	69	91	146	118
Wet		149	135	137	122	101	85	84	57	48	46	55	94	93
Above Normal		191	171	158	172	141	75	66	57	47	45	59	145	111
Below Normal		174	166	188	170	128	70	61	59	48	53	80	160	113
Dry		196	188	196	191	165	77	68	63	59	84	122	170	132
Critical		201	196	220	218	183	102	81	81	109	125	154	190	155

Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1 (mg/L)
 Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	1	-12	-22	-1	-1	-1	-1	0	0	-1	-2	-2	-3
1924	Critical	4	4	-1	6	-27	-51	-12	-1	-1	-1	-1	2	-7
1925	Dry	1	-2	-13	-8	17	15	3	0	0	0	0	2	1
1926	Dry	1	-3	-2	-1	-1	0	0	-1	0	2	1	3	0
1927	Wet	3	2	2	1	0	1	0	1	0	0	0	1	1
1928	Above Normal	0	1	3	3	3	0	0	-1	0	-1	-2	1	1
1929	Critical	2	2	-7	10	-2	-1	0	-1	-2	2	0	-5	0
1930	Dry	-3	-1	0	1	0	0	0	0	-1	6	3	-24	-2
1931	Critical	-13	-1	6	7	-25	-11	5	2	-1	-15	-8	4	-4
1932	Dry	2	0	0	-1	-4	1	0	0	0	0	0	0	0
1933	Critical	0	0	1	1	1	0	0	0	0	0	0	0	0
1934	Critical	0	0	1	-3	-6	-2	0	0	0	0	-1	-2	-1
1935	Below Normal	-1	0	-1	2	0	0	0	0	0	0	0	-1	0
1936	Below Normal	4	2	0	-1	-1	1	0	0	0	0	0	-1	0
1937	Below Normal	-9	-5	-1	0	-16	-1	0	0	0	0	0	-1	-3
1938	Wet	-1	6	4	0	-4	-1	0	0	0	0	0	2	0
1939	Dry	2	1	1	1	-2	0	0	0	0	-2	11	-16	0
1940	Above Normal	-22	-7	-3	-3	1	1	0	0	0	0	0	0	-3
1941	Wet	0	1	1	0	0	1	0	0	0	0	0	0	0
1942	Wet	4	11	7	0	0	0	0	0	0	0	0	1	2
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	1	0
1944	Dry	1	1	0	0	-1	0	0	0	-2	2	9	5	1
1945	Below Normal	-5	-4	-5	-3	-4	-4	0	0	0	0	0	-1	-2
1946	Below Normal	0	6	10	0	-1	-1	0	0	0	2	2	20	3
1947	Dry	14	4	-14	-5	-6	-1	0	0	0	4	6	9	1
1948	Below Normal	2	5	-4	-2	8	2	0	0	0	3	-4	5	1
1949	Dry	-2	-7	-2	-1	2	-1	0	0	0	-8	-8	7	-2
1950	Below Normal	3	-11	-14	-9	-5	-1	0	-1	1	1	1	-3	-3
1951	Above Normal	7	7	0	1	4	0	-1	0	1	2	-2	-3	1
1952	Wet	-1	2	2	0	0	1	3	0	0	0	0	0	1
1953	Wet	0	1	0	0	0	0	0	0	0	0	1	3	0
1954	Above Normal	1	1	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	5	3	-5	-1	0	1	2	0	-1	3	12	16	3
1956	Wet	3	-20	-5	0	-5	-2	0	0	0	0	0	0	-2
1957	Above Normal	0	0	0	2	5	0	0	0	0	0	-1	-4	0
1958	Wet	-4	11	6	1	0	0	0	0	0	0	0	1	1
1959	Below Normal	0	0	0	0	0	0	0	0	0	0	1	1	0
1960	Dry	2	12	28	-64	-12	1	0	0	-8	-8	4	5	-3
1961	Dry	8	0	1	12	9	8	3	1	-1	3	7	30	7
1962	Below Normal	13	11	21	-17	-5	0	0	0	3	2	-9	-1	1
1963	Wet	-5	-1	12	6	2	0	0	0	0	0	0	-3	1
1964	Dry	2	-2	-3	-3	-1	0	0	1	-6	4	17	-13	0
1965	Wet	-26	-20	-9	0	-3	-2	-1	-1	-2	1	-2	-3	-6
1966	Below Normal	-7	-2	3	0	0	0	0	0	0	0	0	-1	-1
1967	Wet	-6	-4	8	1	0	0	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	-1	0	0	0	0	1	0	-2	-3	0
1969	Wet	1	2	-2	2	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	-1	-2	0	0	-1	0	0	0	0	0	0	1	0
1972	Below Normal	2	1	0	0	0	0	0	0	0	-1	2	2	1
1973	Above Normal	10	18	-15	-2	0	1	0	0	0	0	0	0	1
1974	Wet	0	1	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	-3	3	8	8	6	2
1977	Critical	-3	-12	1	-5	-32	-63	-31	-10	-5	-5	-10	-16	-16
1978	Above Normal	-6	8	0	12	1	6	6	-1	2	0	1	4	3
1979	Below Normal	3	1	-1	3	3	0	-1	0	0	1	3	1	1
1980	Above Normal	-1	6	18	3	-1	9	0	0	1	0	0	0	3
1981	Dry	0	0	0	0	0	0	0	0	-1	-1	1	-1	0
1982	Wet	-1	6	2	0	0	1	1	0	0	0	0	0	1
1983	Wet	0	0	-1	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-2	-3	-2	-2	0	1	0	2	5	0
1986	Wet	1	-1	0	-1	-1	3	-1	0	0	-14	-5	-2	-2
1987	Dry	1	2	3	0	7	3	1	-5	-9	-4	2	-2	0
1988	Critical	-2	-2	-1	-2	0	0	0	0	0	-2	-9	-12	-3
1989	Dry	-3	4	-8	3	0	-4	0	0	1	2	-3	7	0
1990	Critical	-2	4	13	-13	-7	-1	0	0	0	1	4	4	0
1991	Critical	1	-1	2	-8	-5	0	0	0	0	0	0	0	-1
1992	Critical	0	0	0	0	0	0	0	0	0	0	3	6	1
1993	Above Normal	3	0	1	-5	0	0	0	1	3	0	2	6	1
1994	Critical	4	2	-1	-1	8	7	2	1	-2	-3	6	-19	0
Average		0	0	0	-1	-2	-1	0	0	0	0	1	0	0
Wet		-2	0	1	0	-1	0	0	0	0	-1	0	0	0
Above Normal		-1	3	0	1	1	2	1	0	1	0	0	0	1
Below Normal		0	0	-1	-2	-2	0	0	0	0	1	-1	1	0
Dry		2	1	-1	-4	0	1	0	0	-2	0	4	2	0
Critical		-1	0	1	-1	-8	-10	-3	-1	-1	-1	-1	-3	-2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at Contra Costa Canal Pumping Plant #1
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Normal	1%	-7%	-13%	-1%	-2%	-3%	-1%	0%	1%	-2%	-2%	-1%	-2%
1924	Critical	2%	2%	-1%	3%	-12%	-29%	-10%	-1%	0%	-1%	0%	1%	-4%
1925	Dry	0%	-1%	-6%	-3%	10%	24%	6%	1%	-1%	-1%	0%	1%	3%
1926	Dry	1%	-2%	-1%	0%	0%	0%	0%	-1%	0%	2%	1%	2%	0%
1927	Wet	1%	2%	4%	2%	0%	1%	0%	2%	0%	0%	1%	0%	1%
1928	Above Normal	0%	1%	3%	2%	5%	0%	0%	-1%	0%	-2%	-3%	0%	1%
1929	Critical	1%	1%	-3%	4%	-1%	-1%	0%	-1%	-2%	3%	0%	-2%	0%
1930	Dry	-1%	-1%	0%	0%	0%	-1%	0%	0%	-1%	8%	3%	-13%	0%
1931	Critical	-6%	0%	3%	3%	-12%	-9%	6%	2%	-1%	-12%	-5%	2%	-2%
1932	Dry	1%	0%	0%	-1%	-4%	1%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	-2%	-6%	-2%	-1%	0%	0%	0%	-1%	-1%	-1%
1935	Below Normal	0%	0%	-1%	1%	0%	1%	0%	0%	0%	0%	-1%	-1%	0%
1936	Below Normal	2%	1%	0%	-1%	0%	1%	0%	-1%	0%	0%	0%	-1%	0%
1937	Below Normal	-4%	-2%	0%	0%	-7%	0%	0%	1%	1%	-1%	-1%	-1%	-1%
1938	Wet	0%	3%	6%	0%	-4%	0%	0%	0%	0%	0%	0%	3%	1%
1939	Dry	6%	2%	1%	0%	-1%	0%	0%	0%	1%	-2%	9%	-9%	1%
1940	Above Normal	-10%	-4%	-2%	-1%	1%	1%	0%	0%	0%	0%	0%	0%	-1%
1941	Wet	0%	0%	1%	0%	0%	1%	0%	0%	-1%	-1%	0%	0%	0%
1942	Wet	4%	8%	4%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	-1%	-4%	2%	8%	3%	1%
1945	Below Normal	-3%	-2%	-3%	-2%	-2%	-4%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	4%	9%	1%	-1%	-1%	-1%	0%	0%	4%	3%	13%	2%
1947	Dry	7%	2%	-6%	-3%	-4%	-1%	0%	0%	0%	5%	5%	5%	1%
1948	Below Normal	1%	3%	-2%	-1%	3%	3%	1%	0%	1%	6%	-5%	3%	1%
1949	Dry	-1%	-4%	-1%	-1%	1%	-2%	-1%	0%	0%	-10%	-6%	4%	-2%
1950	Below Normal	1%	-6%	-6%	-5%	-6%	-1%	0%	-3%	2%	3%	2%	-2%	-2%
1951	Above Normal	4%	7%	0%	1%	3%	0%	-1%	0%	2%	4%	-4%	-2%	1%
1952	Wet	0%	1%	1%	0%	0%	1%	3%	0%	0%	0%	0%	1%	1%
1953	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	2%	1%	-2%	-1%	0%	2%	3%	1%	-1%	5%	12%	9%	3%
1956	Wet	1%	-10%	-2%	0%	-5%	-3%	0%	0%	0%	0%	0%	-1%	-2%
1957	Above Normal	0%	0%	0%	1%	3%	1%	0%	0%	0%	0%	-1%	-2%	0%
1958	Wet	-2%	11%	5%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1959	Below Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%
1960	Dry	1%	6%	14%	-25%	-5%	2%	0%	1%	-11%	-8%	4%	3%	-1%
1961	Dry	4%	0%	0%	5%	5%	11%	6%	1%	-1%	3%	6%	19%	5%
1962	Below Normal	7%	6%	9%	-8%	-3%	0%	0%	0%	6%	3%	-11%	0%	1%
1963	Wet	-3%	-2%	14%	5%	3%	0%	0%	0%	0%	1%	0%	-2%	1%
1964	Dry	1%	-1%	-4%	-3%	-1%	0%	0%	1%	-9%	4%	12%	-8%	-1%
1965	Wet	-13%	-9%	-6%	0%	-5%	-4%	-1%	-2%	-4%	2%	-3%	-2%	-4%
1966	Below Normal	-4%	-1%	4%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%
1967	Wet	-3%	-2%	3%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
1968	Below Normal	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	-2%	-2%	0%
1969	Wet	0%	1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1971	Wet	0%	-2%	0%	0%	-2%	-3%	0%	0%	0%	0%	0%	1%	-1%
1972	Below Normal	2%	1%	0%	0%	0%	0%	0%	0%	-1%	-1%	2%	1%	0%
1973	Above Normal	4%	10%	-15%	-2%	0%	1%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	-3%	2%	5%	5%	3%	1%
1977	Critical	-1%	-6%	0%	-3%	-15%	-41%	-25%	-8%	-4%	-4%	-6%	-8%	-10%
1978	Above Normal	-2%	3%	0%	7%	1%	5%	7%	-1%	4%	-1%	2%	3%	2%
1979	Below Normal	2%	1%	0%	2%	4%	-1%	-2%	1%	0%	3%	4%	0%	1%
1980	Above Normal	0%	3%	13%	3%	-1%	7%	0%	-1%	1%	0%	0%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	0%	0%	-1%	-2%	-1%	1%	-1%	0%
1982	Wet	0%	4%	5%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-3%	-3%	-2%	-2%	0%	1%	0%	1%	4%	0%
1986	Wet	1%	-1%	0%	-1%	0%	2%	-1%	-1%	1%	-21%	-9%	-2%	-3%
1987	Dry	1%	1%	2%	0%	4%	4%	1%	-7%	-12%	-4%	1%	-1%	-1%
1988	Critical	-1%	-1%	-1%	-1%	0%	0%	0%	0%	0%	-2%	-6%	-6%	-1%
1989	Dry	-1%	1%	-3%	1%	0%	-3%	1%	0%	2%	3%	-2%	5%	0%
1990	Critical	-1%	2%	6%	-7%	-5%	-2%	0%	0%	0%	1%	3%	2%	0%
1991	Critical	0%	0%	1%	-3%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%	0%
1993	Above Normal	1%	0%	1%	-3%	0%	0%	0%	2%	8%	1%	4%	4%	1%
1994	Critical	2%	1%	0%	0%	3%	7%	3%	1%	-3%	-2%	3%	-8%	1%
Average		0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%
Wet		-1%	0%	1%	0%	-1%	0%	0%	0%	0%	-1%	0%	0%	0%
Above Normal		0%	2%	0%	1%	1%	2%	1%	0%	1%	0%	0%	1%	1%
Below Normal		0%	0%	0%	-1%	-1%	0%	0%	0%	1%	1%	-1%	1%	0%
Dry		1%	0%	0%	-2%	0%	2%	1%	0%	-2%	0%	3%	2%	0%
Critical		0%	0%	0%	0%	-4%	-6%	-2%	-1%	-1%	-1%	0%	-1%	-1%

Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	120	117	113	92	100	70	41	37	45	48	38	75	75
1923	Below Normal	117	117	107	73	74	71	48	44	47	33	51	93	73
1924	Critical	106	117	139	153	203	218	129	108	122	99	103	107	134
1925	Dry	145	156	151	173	130	116	61	38	60	53	72	96	104
1926	Dry	135	125	146	167	120	115	60	62	57	59	78	108	103
1927	Wet	145	90	41	51	64	63	41	38	33	29	34	82	59
1928	Above Normal	119	92	61	67	47	62	43	43	39	46	43	104	64
1929	Critical	135	125	153	170	183	170	104	89	94	77	90	117	126
1930	Dry	148	151	156	103	86	87	51	63	62	67	72	113	97
1931	Critical	148	132	153	165	207	167	114	109	115	92	112	119	136
1932	Dry	143	151	131	64	119	145	99	77	73	66	69	104	104
1933	Critical	133	121	144	159	150	149	91	79	91	78	91	102	116
1934	Critical	134	153	147	141	142	185	112	99	100	72	88	119	124
1935	Below Normal	147	151	173	116	115	79	54	53	44	40	54	104	94
1936	Below Normal	134	120	144	118	102	47	37	42	58	34	52	93	82
1937	Below Normal	127	118	133	162	85	64	43	28	62	45	49	82	83
1938	Wet	127	128	68	83	60	43	26	23	23	47	39	36	58
1939	Dry	26	41	106	165	160	122	87	57	50	61	71	117	89
1940	Above Normal	145	125	142	133	90	49	34	40	44	31	34	90	80
1941	Wet	123	127	123	80	76	44	31	26	56	56	39	55	70
1942	Wet	58	87	98	72	41	46	38	31	48	59	42	42	55
1943	Wet	35	43	41	59	36	36	34	41	66	39	35	81	45
1944	Dry	127	120	138	162	151	71	56	47	48	53	75	97	95
1945	Below Normal	129	116	107	103	96	53	57	45	42	31	47	94	77
1946	Below Normal	120	104	79	60	75	63	50	46	45	34	54	96	69
1947	Dry	123	123	147	127	121	92	59	69	57	52	76	115	97
1948	Below Normal	149	130	164	162	188	109	58	51	36	28	53	95	102
1949	Dry	120	117	142	174	155	81	57	69	60	49	84	111	101
1950	Below Normal	136	121	148	132	63	62	43	42	35	37	42	84	79
1951	Above Normal	124	68	60	49	29	48	47	32	29	30	34	99	54
1952	Wet	121	129	126	88	56	63	22	11	32	44	32	32	63
1953	Wet	29	66	108	65	68	79	43	30	27	24	37	64	53
1954	Above Normal	63	88	124	159	48	60	43	50	38	34	33	93	69
1955	Dry	132	143	131	68	66	78	74	69	58	46	71	104	87
1956	Wet	133	142	135	67	56	46	41	42	51	58	43	42	71
1957	Above Normal	28	40	80	141	124	61	49	35	32	29	37	101	63
1958	Wet	114	65	78	54	83	89	14	7	39	47	36	37	55
1959	Below Normal	29	55	119	150	63	81	67	50	47	38	48	104	71
1960	Dry	136	129	145	178	152	57	51	65	52	62	69	106	100
1961	Dry	142	141	179	157	144	88	57	70	56	49	72	96	104
1962	Below Normal	126	129	155	161	131	67	51	49	41	35	50	116	92
1963	Wet	124	43	58	50	62	64	56	38	35	25	31	83	56
1964	Dry	122	118	49	66	75	71	68	67	53	56	89	100	78
1965	Wet	132	141	94	62	46	64	44	43	46	35	40	72	68
1966	Below Normal	114	105	62	62	64	59	47	47	42	37	48	110	66
1967	Wet	152	148	146	87	51	57	31	18	33	36	31	30	68
1968	Below Normal	27	51	102	119	71	62	55	51	42	37	48	99	64
1969	Wet	129	130	109	115	59	62	33	20	20	47	39	39	67
1970	Wet	26	47	70	36	48	42	37	38	39	36	34	92	45
1971	Wet	136	93	58	38	60	45	38	33	26	23	33	74	55
1972	Below Normal	69	96	121	109	112	56	45	56	49	40	49	111	76
1973	Above Normal	160	108	67	75	91	61	49	50	51	29	42	89	73
1974	Wet	135	68	52	63	49	38	35	41	56	37	39	53	55
1975	Wet	30	45	82	93	74	39	37	38	47	39	37	53	51
1976	Critical	32	31	67	136	173	123	76	79	105	113	118	135	99
1977	Critical	160	138	170	144	189	188	135	116	119	85	99	119	139
1978	Above Normal	160	168	172	123	110	121	63	40	63	53	40	74	99
1979	Below Normal	113	127	141	113	58	43	45	38	34	28	52	97	74
1980	Above Normal	138	112	85	72	50	61	49	46	55	59	42	75	70
1981	Dry	108	106	143	155	57	62	55	50	50	61	74	112	86
1982	Wet	135	107	35	67	37	44	17	11	44	54	40	29	52
1983	Wet	12	27	58	53	45	29	36	26	20	16	11	14	29
1984	Wet	22	13	38	48	25	38	45	46	50	31	38	88	40
1985	Dry	113	85	36	45	84	94	73	57	42	56	92	93	72
1986	Wet	109	116	146	102	82	42	23	18	53	98	49	65	75
1987	Dry	90	98	139	168	142	96	64	64	57	63	85	110	98
1988	Critical	145	135	157	141	136	172	88	85	79	56	93	124	118
1989	Dry	155	160	167	157	216	88	41	54	34	49	85	98	109
1990	Critical	116	130	163	134	149	98	78	78	91	103	112	121	115
1991	Critical	160	165	168	186	205	120	77	72	86	108	113	105	130
1992	Critical	156	178	173	208	137	96	56	65	68	58	89	119	117
1993	Above Normal	158	174	182	137	90	60	43	47	58	46	39	76	92
1994	Critical	116	131	151	176	173	89	57	66	62	108	114	153	116
Average		113	110	116	112	100	81	55	51	54	51	59	90	83
Wet		96	88	84	68	56	51	34	29	40	42	36	55	57
Above Normal		121	109	108	105	78	65	46	42	45	41	38	88	74
Below Normal		110	110	125	117	93	65	50	46	45	36	50	98	79
Dry		123	123	132	133	124	91	63	61	54	57	77	105	95
Critical		129	130	149	159	171	148	93	87	94	87	102	120	122

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average X2 Position (km)
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1923	Below Norma	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%	0%
1924	Critical	0%	0%	0%	0%	-1%	-1%	1%	1%	0%	0%	0%	0%	0%
1925	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1926	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1927	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1928	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1929	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1930	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1931	Critical	0%	0%	0%	-1%	-1%	1%	1%	0%	0%	0%	0%	0%	0%
1932	Dry	0%	0%	0%	-2%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1936	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1937	Below Norma	0%	0%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1938	Wet	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1939	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	-1%	-2%	-2%	0%
1940	Above Norma	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1942	Wet	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1943	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1945	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1946	Below Norma	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1947	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1948	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1949	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%
1950	Below Norma	-1%	-1%	0%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1951	Above Norma	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1952	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1954	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1955	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1956	Wet	-1%	-1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1957	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1958	Wet	1%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1959	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1960	Dry	0%	0%	-4%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%
1961	Dry	0%	0%	0%	0%	0%	2%	2%	0%	0%	-1%	0%	0%	0%
1962	Below Norma	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%
1963	Wet	-1%	-1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1964	Dry	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-2%	-2%	0%
1965	Wet	-1%	-1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1966	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1967	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1968	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1969	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1971	Wet	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1972	Below Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1973	Above Norma	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1977	Critical	-1%	-1%	-2%	-1%	-1%	-2%	-2%	0%	0%	0%	-1%	-1%	-1%
1978	Above Norma	1%	1%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1979	Below Norma	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%
1980	Above Norma	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1981	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1982	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1986	Wet	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%	0%
1987	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	-1%	-1%	0%
1988	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1989	Dry	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%
1990	Critical	0%	0%	-1%	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1991	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1993	Above Norma	0%	0%	0%	0%	0%	0%	3%	3%	1%	0%	0%	0%	1%
1994	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	-1%	-1%	0%
Average		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wet		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Above Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Below Norma		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dry		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Critical		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Normal	120	118	113	92	99	70	41	37	45	49	38	75	75
1923	Below Normal	118	109	95	72	72	72	48	44	46	34	51	92	71
1924	Critical	109	120	140	156	153	200	116	108	125	99	102	106	128
1925	Dry	144	154	142	168	172	143	64	38	59	51	70	98	109
1926	Dry	135	123	145	166	118	112	59	61	55	60	79	111	102
1927	Wet	147	91	43	52	68	66	41	39	32	29	34	83	60
1928	Above Normal	119	93	62	69	50	59	41	42	39	40	42	104	63
1929	Critical	137	125	148	175	182	169	104	87	79	69	90	115	123
1930	Dry	146	150	156	103	78	72	49	63	61	57	77	100	93
1931	Critical	140	130	156	171	163	152	113	110	118	84	106	120	130
1932	Dry	145	151	131	85	121	146	100	77	73	66	69	104	106
1933	Critical	134	121	144	159	149	149	91	79	91	78	91	102	116
1934	Critical	134	154	147	141	140	184	111	99	100	72	88	119	124
1935	Below Normal	146	151	172	118	115	89	54	53	44	39	54	103	95
1936	Below Normal	136	121	144	118	103	48	38	42	58	35	51	93	82
1937	Below Normal	122	115	132	160	84	63	43	28	63	46	50	82	82
1938	Wet	126	132	70	87	60	43	26	23	23	47	39	37	59
1939	Dry	28	42	107	166	159	118	87	57	49	57	76	108	88
1940	Above Normal	132	121	141	131	91	49	34	40	44	31	34	90	78
1941	Wet	123	128	123	81	76	44	31	26	56	56	39	55	70
1942	Wet	60	94	101	72	41	46	38	31	48	59	42	42	56
1943	Wet	35	43	41	59	36	36	34	41	66	39	35	81	45
1944	Dry	128	120	138	162	150	72	56	46	45	51	79	101	96
1945	Below Normal	126	114	104	101	96	52	57	45	42	31	47	94	76
1946	Below Normal	120	108	83	61	75	60	49	46	45	34	55	108	70
1947	Dry	132	125	139	124	117	99	59	69	59	55	79	121	98
1948	Below Normal	151	132	163	162	192	111	58	51	35	30	51	98	103
1949	Dry	119	114	140	173	156	75	56	69	60	45	77	115	100
1950	Below Normal	138	115	139	125	59	60	44	40	35	36	43	82	76
1951	Above Normal	127	72	60	49	30	48	47	31	28	33	33	97	54
1952	Wet	121	130	128	88	56	64	22	11	32	44	32	32	63
1953	Wet	29	67	108	65	68	79	43	30	27	24	37	65	54
1954	Above Normal	63	88	124	159	48	60	43	50	38	34	33	93	69
1955	Dry	135	144	128	67	65	107	77	70	53	43	68	114	89
1956	Wet	137	131	133	67	54	46	41	42	51	58	42	42	70
1957	Above Normal	28	40	80	143	126	61	49	35	31	29	36	100	63
1958	Wet	111	72	82	54	83	89	14	7	39	47	36	37	56
1959	Below Normal	29	55	119	150	63	81	68	50	46	38	48	104	71
1960	Dry	136	137	155	135	146	57	51	66	57	59	75	110	99
1961	Dry	147	140	179	166	152	114	63	71	55	50	76	115	111
1962	Below Normal	134	134	170	150	128	67	51	48	46	38	44	115	94
1963	Wet	120	42	67	55	61	65	57	38	36	26	32	82	57
1964	Dry	123	117	47	65	75	71	68	68	51	57	99	92	78
1965	Wet	116	128	88	62	42	60	43	42	40	34	39	71	64
1966	Below Normal	109	104	64	62	60	43	46	47	42	37	47	109	64
1967	Wet	148	145	151	87	51	58	31	18	33	36	31	30	68
1968	Below Normal	27	51	102	119	71	62	55	52	42	37	47	97	63
1969	Wet	130	130	108	115	59	62	33	20	20	47	39	39	67
1970	Wet	27	47	70	36	48	42	37	38	39	36	34	92	45
1971	Wet	136	92	57	38	48	43	38	33	26	23	33	74	53
1972	Below Normal	71	97	121	109	112	56	45	56	46	39	50	113	76
1973	Above Normal	166	119	54	72	91	63	50	50	51	29	42	89	73
1974	Wet	135	68	52	63	49	38	35	41	56	37	39	53	55
1975	Wet	30	45	83	93	74	39	37	38	47	40	37	53	51
1976	Critical	32	31	67	136	173	121	75	77	105	117	122	142	100
1977	Critical	157	130	175	138	139	162	107	105	115	87	99	111	127
1978	Above Normal	153	170	172	134	112	128	64	41	63	51	39	76	100
1979	Below Normal	114	128	140	115	59	42	45	39	34	29	54	97	75
1980	Above Normal	138	116	96	72	50	62	49	45	55	59	42	76	72
1981	Dry	108	107	143	155	57	61	55	50	49	61	75	112	86
1982	Wet	134	112	37	68	37	44	17	11	44	54	40	29	52
1983	Wet	12	27	58	53	45	29	36	26	20	16	11	14	29
1984	Wet	22	13	38	48	25	38	45	46	50	31	38	88	40
1985	Dry	112	85	36	43	82	81	70	57	44	57	93	97	71
1986	Wet	110	115	146	101	82	41	24	18	53	57	43	65	71
1987	Dry	91	99	140	169	143	70	54	60	51	61	83	108	94
1988	Critical	146	134	156	140	138	172	89	85	78	56	90	117	117
1989	Dry	152	162	162	158	212	86	40	53	36	52	83	102	108
1990	Critical	115	134	173	126	136	95	78	78	91	104	114	123	114
1991	Critical	161	164	169	183	202	120	77	72	86	108	113	105	130
1992	Critical	156	178	173	208	137	96	56	65	67	58	89	122	117
1993	Above Normal	159	175	183	134	90	60	43	48	61	44	38	79	93
1994	Critical	118	132	150	175	179	94	58	67	59	106	119	141	116
Average		113	110	116	111	98	80	54	50	53	50	59	90	82
Wet		96	88	85	69	55	51	34	29	40	40	36	55	57
Above Normal		121	111	109	106	79	66	46	42	46	40	38	88	74
Below Normal		110	110	125	116	92	65	50	46	45	36	49	99	78
Dry		124	123	130	132	125	93	63	61	54	55	79	107	95
Critical		128	129	150	159	158	143	90	86	93	86	102	119	120

Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake (mg/L)
Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Normal	1	-8	-12	0	-3	2	0	0	0	0	0	-1	-2
1924	Critical	2	2	1	3	-50	-18	-13	-1	4	0	-1	-1	-6
1925	Dry	-1	-2	-8	-5	42	28	4	0	-1	-2	-2	2	5
1926	Dry	1	-2	-1	-1	-1	-3	-1	-2	-3	1	1	3	-1
1927	Wet	2	1	2	1	4	4	0	1	0	0	0	0	1
1928	Above Normal	0	1	2	2	2	-3	-2	-1	1	-6	-2	1	0
1929	Critical	3	0	-4	6	-2	-1	0	-2	-15	-8	0	-2	-2
1930	Dry	-2	-1	0	0	-8	-15	-2	0	-1	-10	6	-13	-4
1931	Critical	-9	-1	4	5	-44	-15	-1	1	3	-7	-6	1	-6
1932	Dry	1	0	0	21	2	1	0	0	0	0	0	0	2
1933	Critical	0	0	0	0	-1	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	-2	-1	-1	0	0	0	0	-1	0
1935	Below Normal	0	0	-1	1	0	10	1	0	0	-1	0	-1	1
1936	Below Normal	2	1	0	-1	1	0	0	0	0	1	-1	0	0
1937	Below Normal	-5	-3	0	-2	-1	0	0	0	1	1	0	0	-1
1938	Wet	0	4	2	4	0	0	0	0	0	0	0	1	1
1939	Dry	1	1	1	0	-1	-4	0	0	-2	-4	6	-10	-1
1940	Above Normal	-13	-4	-1	-2	1	0	0	0	0	0	0	0	-2
1941	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1942	Wet	2	6	3	0	0	0	0	0	0	0	0	0	1
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	1	0	-1	-3	-1	4	4	0
1945	Below Normal	-3	-3	-3	-2	0	0	0	0	0	0	0	0	-1
1946	Below Normal	0	4	4	0	0	-3	0	0	0	0	1	12	2
1947	Dry	9	1	-8	-3	-4	7	0	0	2	2	3	6	1
1948	Below Normal	2	3	-2	0	4	2	0	0	-1	2	-3	3	1
1949	Dry	-2	-3	-2	-1	2	-7	-1	0	0	-4	-7	4	-2
1950	Below Normal	2	-6	-9	-7	-4	-2	0	-3	0	-1	1	-2	-2
1951	Above Normal	4	4	0	1	0	0	0	-1	-1	3	-1	-2	1
1952	Wet	0	1	2	0	0	1	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	2	0
1954	Above Normal	1	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	3	1	-3	0	-1	29	3	0	-6	-3	-3	10	3
1956	Wet	4	-12	-2	0	-2	-1	0	0	0	0	0	0	-1
1957	Above Normal	0	0	0	1	3	0	0	0	0	-1	-1	-1	0
1958	Wet	-2	6	4	1	0	0	0	0	0	0	0	0	1
1959	Below Normal	0	0	0	0	0	0	1	0	-1	0	0	0	0
1960	Dry	0	8	9	-43	-7	0	0	1	5	-3	6	3	-2
1961	Dry	5	0	1	9	7	26	6	1	-1	1	5	19	7
1962	Below Normal	8	5	15	-11	-3	0	-1	-1	5	3	-6	-1	1
1963	Wet	-3	-1	9	5	-1	1	0	0	1	1	-2	-1	1
1964	Dry	1	-2	-2	-2	0	0	-1	1	-1	1	10	-8	0
1965	Wet	-16	-13	-6	0	-5	-4	0	-1	-6	-1	0	-2	-4
1966	Below Normal	-5	-1	1	0	-4	-16	-1	0	-1	0	0	-1	-2
1967	Wet	-5	-2	5	1	0	1	0	0	0	0	0	0	0
1968	Below Normal	0	0	0	0	0	0	0	0	0	0	-1	-2	0
1969	Wet	0	0	-1	1	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	-1	0	0	0
1971	Wet	0	-1	0	0	-12	-2	0	0	0	0	0	1	-1
1972	Below Normal	1	1	0	0	0	0	0	0	-3	-1	1	1	0
1973	Above Normal	6	11	-12	-3	0	3	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	-2	-1	-2	0	5	4	6	1
1977	Critical	-3	-8	4	-5	-50	-27	-28	-11	-4	2	-1	-8	-12
1978	Above Normal	-7	2	0	11	2	7	1	1	1	-2	-1	2	1
1979	Below Normal	2	1	-1	2	1	0	0	0	0	0	2	1	1
1980	Above Normal	0	4	11	1	0	0	0	0	0	0	0	0	1
1981	Dry	0	0	0	0	0	-1	0	0	0	0	1	-1	0
1982	Wet	-2	5	2	0	0	-1	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	-1	-2	-13	-2	0	1	0	1	3	-1
1986	Wet	1	-1	0	-1	0	0	1	0	1	-41	-7	-1	-4
1987	Dry	1	1	2	0	1	-26	-10	-4	-6	-2	-2	-2	-4
1988	Critical	1	-1	-1	-1	2	0	0	0	-2	-1	-4	-7	-1
1989	Dry	-3	2	-5	1	-4	-2	0	0	2	2	-2	4	0
1990	Critical	-1	4	10	-9	-12	-3	-1	0	0	0	2	3	-1
1991	Critical	1	-1	1	-3	-3	-1	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	1	0	0	-1	0	1	4	0
1993	Above Normal	2	1	1	-3	0	0	0	1	4	-2	-1	3	1
1994	Critical	2	1	-1	-1	6	5	2	1	-3	-2	5	-13	0
Average		0	0	0	0	-2	-1	-1	0	0	-1	0	0	0
Wet		-1	0	1	1	-1	0	0	0	0	-2	0	0	0
Above Normal		-1	2	0	1	1	1	0	0	0	-1	-1	0	0
Below Normal		0	0	-1	-1	-1	-1	0	0	0	0	0	1	0
Dry		1	0	-1	-1	2	1	0	0	-1	-1	2	2	0
Critical		0	0	1	0	-13	-5	-4	-1	-1	-1	0	-2	-2

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Percent Change in Monthly Average of Daily Chloride at West Canal at mouth of CCForebay Intake
From No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1923	Below Normal	1%	-7%	-11%	-1%	-3%	2%	0%	0%	0%	1%	0%	-1%	-2%
1924	Critical	2%	2%	1%	2%	-25%	-8%	-10%	-1%	3%	0%	-1%	0%	-3%
1925	Dry	0%	-1%	-6%	-3%	32%	24%	6%	1%	-2%	-4%	-3%	2%	4%
1926	Dry	1%	-1%	-1%	0%	-1%	-3%	-2%	-3%	-5%	1%	1%	3%	-1%
1927	Wet	1%	2%	4%	2%	7%	6%	1%	3%	0%	0%	0%	0%	2%
1928	Above Normal	0%	1%	3%	3%	4%	-5%	-5%	-2%	1%	-13%	-4%	1%	-1%
1929	Critical	2%	0%	-3%	3%	-1%	0%	0%	-3%	-16%	-10%	0%	-2%	-2%
1930	Dry	-1%	-1%	0%	0%	-10%	-18%	-3%	0%	-1%	-15%	8%	-11%	-4%
1931	Critical	-6%	-1%	2%	3%	-21%	-9%	-1%	1%	3%	-8%	-5%	1%	-3%
1932	Dry	1%	0%	0%	33%	2%	0%	0%	0%	0%	0%	0%	0%	3%
1933	Critical	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1934	Critical	0%	0%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%
1935	Below Normal	0%	0%	-1%	1%	0%	13%	2%	0%	0%	-2%	0%	-1%	1%
1936	Below Normal	2%	1%	0%	0%	1%	1%	0%	-1%	0%	3%	-1%	0%	0%
1937	Below Normal	-4%	-2%	0%	-1%	-1%	0%	0%	0%	2%	2%	1%	-1%	0%
1938	Wet	0%	3%	3%	5%	0%	0%	0%	0%	0%	0%	0%	3%	1%
1939	Dry	5%	2%	1%	0%	-1%	-3%	0%	-1%	-3%	-6%	8%	-8%	-1%
1940	Above Normal	-9%	-3%	-1%	-2%	1%	1%	0%	0%	0%	1%	0%	0%	-1%
1941	Wet	0%	0%	0%	0%	0%	0%	0%	0%	-1%	-1%	0%	0%	0%
1942	Wet	4%	7%	3%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1943	Wet	1%	0%	0%	0%	0%	0%	0%	0%	0%	-1%	0%	0%	0%
1944	Dry	0%	0%	0%	0%	0%	1%	1%	-2%	-6%	-2%	5%	4%	0%
1945	Below Normal	-2%	-2%	-3%	-2%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
1946	Below Normal	0%	4%	5%	0%	0%	-5%	-1%	0%	0%	0%	3%	13%	2%
1947	Dry	7%	1%	-6%	-2%	-3%	7%	0%	0%	4%	4%	3%	5%	2%
1948	Below Normal	2%	2%	-1%	0%	2%	2%	0%	1%	-3%	9%	-5%	3%	1%
1949	Dry	-1%	-3%	-1%	0%	1%	-8%	-1%	0%	0%	-8%	-8%	3%	-2%
1950	Below Normal	2%	-5%	-6%	-5%	-6%	-3%	1%	-6%	-1%	-2%	2%	-2%	-3%
1951	Above Normal	3%	6%	0%	2%	1%	0%	0%	-4%	-4%	11%	-4%	-2%	1%
1952	Wet	0%	1%	1%	0%	0%	1%	1%	0%	0%	0%	0%	1%	0%
1953	Wet	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	3%	0%
1954	Above Normal	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
1955	Dry	2%	1%	-2%	-1%	-1%	37%	4%	1%	-10%	-7%	-4%	9%	2%
1956	Wet	3%	-8%	-1%	0%	-4%	-1%	0%	0%	0%	0%	0%	-1%	-1%
1957	Above Normal	0%	0%	0%	1%	2%	0%	0%	0%	-1%	-3%	-2%	-1%	0%
1958	Wet	-2%	10%	5%	1%	0%	0%	0%	0%	0%	0%	0%	1%	1%
1959	Below Normal	0%	0%	0%	0%	-1%	0%	1%	0%	-1%	0%	1%	0%	0%
1960	Dry	0%	6%	6%	-24%	-4%	0%	0%	1%	9%	-4%	9%	3%	0%
1961	Dry	4%	0%	0%	6%	5%	29%	11%	2%	-1%	3%	6%	20%	7%
1962	Below Normal	6%	4%	9%	-7%	-2%	0%	-2%	-1%	14%	9%	-12%	-1%	2%
1963	Wet	-3%	-2%	16%	9%	-1%	1%	0%	0%	1%	4%	3%	-2%	2%
1964	Dry	1%	-1%	-4%	-3%	-1%	0%	-1%	2%	-3%	2%	11%	-8%	0%
1965	Wet	-12%	-9%	-6%	0%	-10%	-6%	-1%	-3%	-12%	-3%	-1%	-2%	-5%
1966	Below Normal	-4%	-1%	2%	0%	-6%	-27%	-2%	0%	-1%	-1%	-1%	-1%	-4%
1967	Wet	-3%	-2%	4%	1%	0%	2%	0%	0%	0%	0%	0%	0%	0%
1968	Below Normal	0%	0%	0%	0%	-1%	0%	0%	1%	0%	-1%	-2%	-2%	0%
1969	Wet	0%	0%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1970	Wet	0%	0%	0%	0%	0%	-1%	0%	0%	-1%	-1%	0%	0%	0%
1971	Wet	0%	-2%	-1%	0%	-19%	-4%	0%	0%	0%	0%	0%	1%	-2%
1972	Below Normal	2%	1%	0%	0%	0%	0%	0%	0%	-5%	-3%	2%	1%	0%
1973	Above Normal	4%	10%	-18%	-4%	0%	5%	1%	0%	0%	0%	0%	0%	0%
1974	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1975	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1976	Critical	0%	0%	0%	0%	0%	-1%	-1%	-3%	0%	4%	4%	4%	1%
1977	Critical	-2%	-6%	3%	-4%	-27%	-14%	-21%	-9%	-3%	2%	-1%	-7%	-7%
1978	Above Normal	-4%	1%	0%	9%	2%	6%	1%	3%	1%	-4%	-3%	2%	1%
1979	Below Normal	2%	1%	0%	2%	2%	0%	0%	1%	0%	2%	4%	1%	1%
1980	Above Normal	0%	4%	13%	1%	1%	0%	-1%	-1%	0%	0%	1%	0%	2%
1981	Dry	0%	0%	0%	0%	0%	-2%	-1%	-1%	-1%	-1%	1%	-1%	0%
1982	Wet	-1%	5%	5%	0%	0%	-1%	0%	0%	0%	0%	0%	0%	1%
1983	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1984	Wet	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1985	Dry	0%	0%	0%	-3%	-2%	-14%	-3%	0%	3%	0%	1%	4%	-1%
1986	Wet	1%	0%	0%	-1%	0%	-1%	4%	0%	1%	-42%	-14%	-1%	-4%
1987	Dry	1%	1%	1%	0%	1%	-27%	-16%	-7%	-11%	-4%	-2%	-1%	-5%
1988	Critical	0%	-1%	-1%	-1%	2%	0%	0%	-2%	-2%	-1%	-4%	-6%	-1%
1989	Dry	-2%	1%	-3%	1%	-2%	-3%	-1%	0%	7%	5%	-2%	5%	0%
1990	Critical	-1%	3%	6%	-6%	-8%	-3%	-1%	0%	0%	0%	2%	2%	-1%
1991	Critical	1%	0%	0%	-1%	-2%	0%	0%	0%	0%	0%	0%	0%	0%
1992	Critical	0%	0%	0%	0%	0%	1%	0%	0%	-1%	0%	1%	3%	0%
1993	Above Normal	1%	1%	1%	-2%	0%	0%	0%	3%	7%	-4%	-2%	4%	1%
1994	Critical	2%	1%	-1%	0%	4%	6%	3%	1%	-4%	-2%	4%	-8%	0%
Average		0%	0%	0%	0%	-1%	0%	-1%	0%	-1%	-1%	0%	0%	0%
Wet		-1%	0%	2%	1%	-1%	0%	0%	0%	-1%	-2%	-1%	0%	0%
Above Normal		-1%	2%	0%	1%	1%	1%	0%	0%	1%	-1%	-1%	0%	0%
Below Normal		0%	0%	0%	-1%	-1%	-1%	0%	0%	0%	1%	-1%	1%	0%
Dry		1%	0%	-1%	0%	1%	1%	0%	0%	-1%	-2%	2%	2%	0%
Critical		0%	0%	1%	0%	-7%	-3%	-3%	-1%	-2%	-1%	0%	-1%	-1%

Monthly Average X2 Location (km)
No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	79	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	87	87	70	67	67	74	74	71	71	78	84	84	76
1924	Critical	87	87	86	83	83	76	76	85	85	86	86	86	84
1925	Dry	90	90	84	83	83	65	65	72	72	82	86	86	80
1926	Dry	87	87	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	88	88	77	70	70	59	59	65	65	75	83	83	73
1928	Above Normal	87	87	80	75	75	58	58	69	69	78	84	84	75
1929	Critical	88	88	84	84	84	78	78	81	81	85	87	87	84
1930	Dry	88	88	81	77	77	68	68	77	77	83	85	85	80
1931	Critical	88	88	86	82	82	81	81	85	85	86	87	87	85
1932	Dry	88	88	78	75	75	74	74	76	76	82	86	86	80
1933	Critical	88	88	86	80	80	78	78	81	81	86	86	86	83
1934	Critical	90	90	83	77	77	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	83	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	85	70	70	63	63	69	69	79	85	85	76
1937	Below Normal	88	88	85	82	82	61	61	69	69	79	84	84	78
1938	Wet	88	88	62	63	63	47	47	54	54	72	82	82	67
1939	Dry	78	78	84	83	83	76	76	78	78	83	85	85	81
1940	Above Normal	88	88	86	72	72	54	54	65	65	75	83	83	74
1941	Wet	87	87	70	57	57	51	51	58	58	75	83	83	68
1942	Wet	83	83	65	57	57	62	62	62	62	75	83	83	69
1943	Wet	82	82	71	59	59	54	54	67	67	77	84	84	70
1944	Dry	88	88	84	83	83	72	72	77	77	83	83	83	81
1945	Below Normal	87	87	80	82	82	66	66	74	74	79	84	84	79
1946	Below Normal	87	87	64	61	61	69	69	73	73	78	84	84	74
1947	Dry	87	87	82	82	82	82	73	77	77	82	85	85	81
1948	Below Normal	88	88	85	83	83	76	76	69	69	78	83	83	80
1949	Dry	87	87	84	83	83	67	67	75	75	82	84	84	80
1950	Below Normal	88	88	86	78	78	71	71	73	73	80	84	84	80
1951	Above Normal	87	87	56	55	55	62	62	71	71	75	83	83	71
1952	Wet	87	87	69	58	58	55	55	55	55	71	80	80	68
1953	Wet	82	82	69	57	57	70	70	69	69	77	84	84	72
1954	Above Normal	85	85	85	72	72	61	61	66	66	75	83	83	75
1955	Dry	87	87	77	75	75	79	79	77	77	83	86	86	81
1956	Wet	88	88	62	51	51	59	59	63	63	76	83	83	69
1957	Above Normal	78	78	85	82	82	64	64	71	71	76	84	84	77
1958	Wet	82	82	76	67	67	51	51	56	56	73	82	82	69
1959	Below Normal	80	80	85	72	72	67	67	78	78	84	84	84	77
1960	Dry	87	87	85	83	83	72	72	77	77	82	84	84	81
1961	Dry	87	87	82	82	82	74	74	78	78	82	84	84	81
1962	Below Normal	87	87	82	83	83	69	69	74	74	77	84	84	79
1963	Wet	73	73	73	76	76	65	65	63	63	74	83	83	72
1964	Dry	86	86	82	75	75	78	78	78	78	82	83	83	80
1965	Wet	87	87	63	54	54	67	67	66	66	76	84	84	71
1966	Below Normal	87	87	76	70	70	69	69	75	75	78	84	84	77
1967	Wet	88	88	72	63	63	58	58	58	58	68	80	80	69
1968	Below Normal	79	79	82	71	71	64	64	75	75	78	84	84	76
1969	Wet	88	88	77	58	58	54	54	56	56	73	83	83	69
1970	Wet	79	79	66	50	50	59	59	73	73	76	83	83	69
1971	Wet	87	87	65	62	62	63	63	66	66	74	83	83	72
1972	Below Normal	84	84	81	80	80	68	68	76	76	79	84	84	79
1973	Above Normal	88	88	73	59	59	57	57	71	71	76	84	84	72
1974	Wet	87	87	59	51	51	53	53	64	64	76	84	84	68
1975	Wet	79	79	81	80	80	56	56	65	65	76	83	83	74
1976	Critical	77	77	82	83	83	77	77	85	85	86	87	87	82
1977	Critical	87	87	84	85	85	82	82	85	85	86	87	87	85
1978	Above Normal	89	89	82	65	65	57	57	66	66	77	84	84	73
1979	Below Normal	87	87	84	74	74	64	64	71	71	79	85	85	77
1980	Above Normal	87	87	78	58	58	55	55	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	68	68	77	77	81	85	85	79
1982	Wet	87	87	59	56	56	52	52	57	57	75	83	83	67
1983	Wet	71	71	56	52	52	42	42	52	52	60	67	67	57
1984	Wet	73	73	50	54	54	62	62	73	73	76	83	83	68
1985	Dry	86	86	73	79	79	75	75	76	76	82	83	83	79
1986	Wet	86	86	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	87	87	86	82	82	69	69	78	78	83	85	85	81
1988	Critical	88	88	82	73	73	78	78	81	81	85	87	87	82
1989	Dry	89	89	84	84	84	67	67	74	74	82	84	84	80
1990	Critical	87	87	85	79	79	79	79	82	82	86	87	87	83
1991	Critical	89	89	87	86	86	72	72	82	82	86	86	86	84
1992	Critical	90	90	88	83	83	73	73	80	80	85	87	87	83
1993	Above Normal	89	89	83	65	65	62	62	64	64	75	83	83	74
1994	Critical	87	87	84	83	83	75	75	79	79	82	85	85	82
Average		86	86	78	72	72	66	66	71	71	79	84	84	76
Wet		83	83	68	60	60	56	56	62	62	74	82	82	69
Above Normal		86	86	79	68	68	59	59	67	67	76	83	83	74
Below Normal		86	86	81	75	75	68	68	72	72	79	84	84	77
Dry		87	87	82	80	80	72	72	76	76	82	85	85	80
Critical		87	87	85	82	82	77	77	82	82	85	87	87	83

Shasta Lake Water Resources Investigation
Physical Resource Appendix-Water Quality Technical Report

Monthly Average X2 Location (km)

Alternative CP3 (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
Year	Year Type													
1922	Above Normal	83	83	79	79	79	66	66	61	61	73	83	83	75
1923	Below Normal	87	87	69	67	67	74	74	71	71	79	84	84	76
1924	Critical	87	87	86	83	83	77	77	85	85	86	86	86	84
1925	Dry	90	90	83	83	83	65	65	72	72	82	86	86	80
1926	Dry	87	87	86	80	80	74	74	74	74	83	86	86	81
1927	Wet	88	88	77	70	70	59	59	65	65	75	83	83	73
1928	Above Normal	87	87	80	75	75	58	58	69	69	77	84	84	75
1929	Critical	88	88	84	83	83	78	78	81	81	85	87	87	84
1930	Dry	88	88	81	77	77	68	68	77	77	83	85	85	80
1931	Critical	88	88	86	82	82	81	81	85	85	86	87	87	85
1932	Dry	88	88	78	74	74	74	74	76	76	82	86	86	80
1933	Critical	88	88	86	80	80	78	78	81	81	86	86	86	83
1934	Critical	90	90	83	78	78	75	75	81	81	85	88	88	83
1935	Below Normal	88	88	83	72	72	70	70	64	64	79	84	84	77
1936	Below Normal	87	87	85	70	70	63	63	69	69	79	85	85	76
1937	Below Normal	87	87	86	82	82	61	61	69	69	79	84	84	78
1938	Wet	88	88	63	64	64	47	47	54	54	72	82	82	67
1939	Dry	79	79	84	83	83	77	77	78	78	82	84	84	80
1940	Above Normal	87	87	86	72	72	54	54	65	65	75	83	83	74
1941	Wet	87	87	70	57	57	51	51	58	58	75	83	83	68
1942	Wet	84	84	65	57	57	62	62	62	62	75	83	83	70
1943	Wet	82	82	71	59	59	54	54	67	67	77	84	84	70
1944	Dry	88	88	84	83	83	72	72	77	77	82	83	83	81
1945	Below Normal	87	87	80	82	82	66	66	74	74	79	85	85	79
1946	Below Normal	87	87	65	62	62	69	69	73	73	78	84	84	74
1947	Dry	87	87	82	82	82	73	73	77	77	81	85	85	81
1948	Below Normal	88	88	85	83	83	76	76	69	69	78	83	83	80
1949	Dry	87	87	84	83	83	66	66	75	75	82	86	86	80
1950	Below Normal	87	87	86	77	77	71	71	73	73	80	83	83	79
1951	Above Normal	87	87	56	55	55	62	62	71	71	75	83	83	71
1952	Wet	87	87	69	58	58	55	55	55	55	71	80	80	68
1953	Wet	82	82	69	57	57	70	70	69	69	77	84	84	72
1954	Above Normal	85	85	85	72	72	61	61	66	66	75	83	83	75
1955	Dry	87	87	77	75	75	79	79	77	77	83	86	86	81
1956	Wet	87	87	63	51	51	59	59	63	63	76	83	83	69
1957	Above Normal	78	78	85	82	82	64	64	71	71	76	83	83	76
1958	Wet	82	82	76	67	67	51	51	56	56	73	82	82	69
1959	Below Normal	80	80	85	72	72	67	67	78	78	78	84	84	77
1960	Dry	87	87	82	83	83	72	72	77	77	83	85	85	81
1961	Dry	87	87	82	82	82	75	75	78	78	81	84	84	81
1962	Below Normal	87	87	82	82	82	69	69	74	74	77	84	84	79
1963	Wet	73	73	74	76	76	65	65	63	63	74	83	83	72
1964	Dry	86	86	82	75	75	78	78	78	78	83	82	82	80
1965	Wet	87	87	64	54	54	67	67	66	66	77	84	84	71
1966	Below Normal	87	87	76	69	69	69	69	75	75	77	84	84	77
1967	Wet	88	88	72	63	63	58	58	58	58	68	80	80	70
1968	Below Normal	79	79	82	71	71	64	64	75	75	78	84	84	76
1969	Wet	88	88	77	58	58	54	54	56	56	73	83	83	69
1970	Wet	79	79	66	50	50	59	59	73	73	76	83	83	69
1971	Wet	87	87	65	62	62	63	63	66	66	74	83	83	72
1972	Below Normal	85	85	81	80	80	68	68	76	76	78	84	84	79
1973	Above Normal	89	89	74	60	60	57	57	71	71	76	84	84	72
1974	Wet	87	87	59	51	51	53	53	64	64	76	84	84	68
1975	Wet	79	79	81	80	80	56	56	65	65	76	83	83	74
1976	Critical	77	77	82	83	83	77	77	84	84	86	87	87	82
1977	Critical	86	86	82	85	85	81	81	85	85	86	86	86	85
1978	Above Normal	90	90	83	65	65	58	58	66	66	77	84	84	74
1979	Below Normal	87	87	84	75	75	64	64	71	71	79	85	85	77
1980	Above Normal	87	87	77	59	59	55	55	70	70	77	84	84	72
1981	Dry	87	87	83	73	73	69	69	77	77	81	84	84	79
1982	Wet	87	87	59	56	56	52	52	57	57	75	83	83	67
1983	Wet	71	71	56	52	52	42	42	52	52	60	67	67	57
1984	Wet	73	73	50	54	54	62	62	73	73	76	83	83	68
1985	Dry	86	86	73	79	79	75	75	76	76	82	83	83	79
1986	Wet	86	86	81	75	75	48	48	69	69	77	84	84	74
1987	Dry	87	87	86	82	82	70	70	78	78	83	84	84	81
1988	Critical	87	87	82	73	73	78	78	81	81	85	87	87	82
1989	Dry	89	89	84	84	84	68	68	74	74	82	84	84	80
1990	Critical	87	87	83	79	79	79	79	82	82	86	87	87	83
1991	Critical	89	89	87	86	86	72	72	82	82	86	86	86	83
1992	Critical	90	90	88	83	83	73	73	80	80	85	87	87	83
1993	Above Normal	89	89	83	65	65	62	62	66	66	76	83	83	74
1994	Critical	87	87	84	83	83	75	75	79	79	83	84	84	82
Average		86	86	78	72	72	66	66	71	71	79	84	84	76
Wet		83	83	68	61	61	57	57	62	62	74	82	82	69
Above Normal		86	86	79	68	68	60	60	68	68	76	83	83	74
Below Normal		86	86	81	75	75	68	68	72	72	78	84	84	77
Dry		87	87	82	80	80	72	72	76	76	82	85	85	80
Critical		87	87	84	82	82	77	77	82	82	85	86	86	83

Change in Monthly Average X2 Position (km)
 Alternative CP3 (2030) - No Action Alternative (2030)

SVI		October	November	December	January	February	March	April	May	June	July	August	September	Average
1922	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1923	Below Norm	0	0	0	0	0	0	0	0	0	1	0	0	0
1924	Critical	0	0	0	0	0	1	1	0	0	0	0	0	0
1925	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1926	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1928	Above Norm	0	0	0	0	0	0	0	0	0	-1	0	0	0
1929	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	Critical	0	0	0	-1	-1	1	1	0	0	0	0	0	0
1932	Dry	0	0	0	-1	-1	0	0	0	0	0	0	0	0
1933	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1937	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1938	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1939	Dry	0	0	0	0	0	1	1	0	0	-1	-1	-1	0
1940	Above Norm	0	0	0	0	0	1	1	0	0	0	0	0	0
1941	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1942	Wet	1	1	0	0	0	0	0	0	0	0	0	0	0
1943	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1944	Dry	0	0	0	0	0	0	0	0	0	-1	0	0	0
1945	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	Below Norm	0	0	1	0	0	0	0	0	0	0	0	0	0
1947	Dry	0	0	0	0	0	0	0	0	0	-1	0	0	0
1948	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	Dry	0	0	0	0	0	0	0	0	0	0	2	2	0
1950	Below Norm	-1	-1	0	-1	-1	0	0	0	0	0	0	0	0
1951	Above Norm	0	0	0	0	0	0	0	0	0	0	1	0	0
1952	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	Wet	-1	-1	0	0	0	0	0	0	0	0	0	0	0
1957	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	Dry	0	0	-3	0	0	0	0	0	0	1	1	1	0
1961	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1962	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	Wet	-1	-1	1	0	0	0	0	0	0	0	0	0	0
1964	Dry	0	0	0	0	0	0	0	0	0	0	-2	-2	0
1965	Wet	0	0	1	0	0	0	0	0	0	0	0	0	0
1966	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	Below Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	Above Norm	1	1	1	0	0	0	0	0	0	0	0	0	0
1974	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	Critical	-1	-1	-1	0	0	-1	-1	0	0	0	-1	-1	-1
1978	Above Norm	1	1	0	0	0	1	1	0	0	0	0	0	0
1979	Below Norm	0	0	0	1	1	0	0	0	0	0	0	0	0
1980	Above Norm	0	0	0	0	0	0	0	0	0	0	0	0	0
1981	Dry	0	0	0	0	0	1	1	0	0	0	0	0	0
1982	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1983	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1985	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	Wet	0	0	0	0	0	0	0	0	0	0	0	0	0
1987	Dry	0	0	0	0	0	1	1	0	0	0	-1	-1	0
1988	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	Dry	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	Critical	0	0	-1	0	0	0	0	0	0	0	0	0	0
1991	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	Critical	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	Above Norm	0	0	0	0	0	0	0	2	2	0	0	0	0
1994	Critical	0	0	0	0	0	0	0	0	0	1	-1	-1	0
Average		0	0	0	0	0	0	0	0	0	0	0	0	0
Wet		0	0	0	0	0	0	0	0	0	0	0	0	0
Above Norm		0	0	0	0	0	0	0	0	0	0	0	0	0
Below Norm		0	0	0	0	0	0	0	0	0	0	0	0	0
Dry		0	0	0	0	0	0	0	0	0	0	0	0	0
Critical		0	0	0	0	0	0	0	0	0	0	0	0	0