Appendix D: Summary of Lower American River Hydrologic Analysis

Table A - 1: Long-term and Water Year Type Averages of Folsom Reservoir End of Month Storage Under the 17,000 AF WA and No Action Alternative Conditions

Analysis	Average Storage (1,000 AF) Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep												
Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
			Lo	ng-teri	m Full	Simula	tion P	eriod ¹					
No Action Alternative	548	500	495	499	506	611	737	862	832	711	635	560	
17,000 AF WA	545	499	494	499	507	611	737	862	831	712	632	558	
Difference	-3	-1	-1	0	1	0	0	0	-1	1	-3	-2	
Percent Difference ²	-1	0	0	0	0	0	0	0	0	0	0	0	
				V	/ater Y	ear Ty	pes ³						
Wet													
No Action Alternative	586	536	534	522	501	634	794	967	964	891	780	646	
17,000 AF WA	584	536	535	522	501	633	794	967	964	891	779	646	
Difference	-2	0	1	0	0	-1	0	0	0	0	-1	0	
Percent Difference	0	0	0	0	0	0	0	0	0	0	0	0	
Above Normal													
No Action Alternative	519	465	468	530	530	644	796	969	953	811	735	640	
17,000 AF WA	510	459	464	530	530	643	796	968	950	809	738	641	
Difference	-9	-6	-4	0	0	-1	0	-1	-3	-2	3	1	
Percent Difference	-2	-1	-1	0	0	0	0	0	0	0	0	0	
Below Normal													
No Action Alternative	552	513	498	522	552	650	792	937	904	749	671	594	
17,000 AF WA	551	511	496	523	554	652	791	937	906	754	666	593	
Difference	-1	-2	-2	1	2	2	-1	0	2	5	-5	-1	
Percent Difference	0	0	0	0	0	0	0	0	0	1	-1	0	

Table A - 2: Long-term and Water Year Type Averages of Folsom Reservoir End of Month Storage Under the 17,000 AF WA and No Action Alternative Conditions (Continued)

Analysis					Avera	ge Sto	rage (1,000 A	F)			
Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Dry												
No Action Alternative	541	503	509	500	535	629	741	818	738	571	516	502
17,000 AF WA	540	502	508	497	532	628	738	815	735	564	512	499
Difference	-1	-1	-1	-3	-3	-1	-3	-3	-3	-7	-4	-3
Percent Difference	0	0	0	-1	-1	0	0	0	0	-1	-1	-1
Critical												
No Action Alternative	498	435	408	388	398	457	487	506	480	384	356	338
17,000 AF	496	438	410	391	402	461	490	509	482	402	349	330
WA												
Difference	-2	3	2	3	4	4	3	3	2	18	-7	-8
Percent Difference	0	1	0	1	1	1	1	1	0	5	-2	-2

¹ Based on the 82-year simulation period ² Relative difference of the monthly average

³ As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB, 1995)

Table A-2: Long-term and Water Year Type Average for Lower American River Flow below Nimbus Dam Under the 17,000 AF WA and No Action Alternative Conditions

					Мо	nthly Me	an Flow	(cfs)				
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
				Long-	term Full	Simulati	on Perio	d ¹				
No Action Alternative	1,501	2,931	3,663	4,670	5,402	3,798	3,401	3,619	3,837	3,608	2,645	2,705
17,000 AF WA	1,497	2,899	3,653	4,655	5,391	3,795	3,378	3,591	3,796	3,526	2,672	2,675
Difference	-4.4	-31.5	-10.6	-15.2	-10.9	-3.5	-22.3	-27.7	-41.6	-82.9	26.6	-29.2
Percent Difference ²	-0.3	-1.1	-0.3	-0.3	-0.2	-0.1	-0.7	-0.8	-1.1	-2.3	1.0	-1.1
					Water \	Year Type	es³					
Wet												
No Action Alternative	1,637	3,761	6,493	8,987	9,354	6,101	5,358	6,213	6,123	3,907	3,670	4,052
17,000 AF WA	1,638	3,736	6,481	8,993	9,350	6,106	5,324	6,181	6,078	3,858	3,638	4,028
Difference	1.3	-25.2	-11.3	5.8	-4.1	4.8	-33.8	-32.0	-44.5	-49.1	-32.1	-23.2
Percent Difference	0.1	-0.7	-0.2	0.1	0.0	0.1	-0.6	-0.5	-0.7	-1.3	-0.9	-0.6
Above Normal												
No Action Alternative	1,485	3,441	3,339	5,195	6,605	5,465	3,628	3,933	3,410	3,898	2,810	3,165
17,000 AF WA	1,481	3,388	3,292	5,139	6,599	5,482	3,579	3,902	3,414	3,830	2,709	3,152
Difference	-4.0	-53.1	-47.1	-55.9	-5.9	17.2	-49.3	-30.9	3.9	-68.0	- 101.1	-12.8
Percent Difference	-0.3	-1.5	-1.4	-1.1	-0.1	0.3	-1.4	-0.8	0.1	-1.7	-3.6	-0.4

Table A-2: Long-term and Water Year Type Average for Lower American River Flow below Nimbus Dam Under the 17,000 AF WA and No Action Alternative Conditions (Continued)

					Mor	nthly Mea	an Flow	(cfs)				
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Below Normal												
No Action Alternative	1,450	2,431	2,760	2,674	4,366	2,458	3,317	2,962	3,149	4,036	2,731	2,796
17,000 AF WA	1,450	2,435	2,762	2,614	4,353	2,455	3,326	2,932	3,068	3,939	2,847	2,714
Difference	0.0	3.3	2.8	-60.1	-12.7	-2.7	9.1	-29.5	-81.3	-97.5	115.5	-81.7
Percent Difference	0.0	0.1	0.1	-2.2	-0.3	-0.1	0.3	-1.0	-2.6	-2.4	4.2	-2.9
Dry												
No Action Alternative	1,438	2,268	1,821	1,790	2,393	2,260	1,918	1,810	2,839	3,607	2,046	1,539
17,000 AF WA	1,426	2,257	1,825	1,804	2,384	2,230	1,906	1,791	2,790	3,627	1,954	1,510
Difference	-11.6	-10.6	3.9	13.6	-8.8	-29.6	-12.0	-19.8	-48.8	20.5	-91.3	-28.7
Percent Difference	-0.8	-0.5	0.2	0.8	-0.4	-1.3	-0.6	-1.1	-1.7	0.6	-4.5	-1.9
Critical												
No Action Alternative	1,376	2,198	1,676	1,442	1,361	1,014	1,255	1,165	1,613	2,175	1,057	967
17,000 AF WA	1,365	2,102	1,666	1,431	1,329	1,010	1,232	1,140	1,589	1,866	1,412	970
Difference	-11.2	-95.6	-9.8	-10.8	-32.0	-4.6	-22.9	-24.9	-23.7	308.8	355.1	2.2
Percent Difference	-0.8	-4.4	-0.6	-0.7	-2.4	-0.5	-1.8	-2.1	-1.5	-14.2	33.6	0.2

Based on the 82-year simulation period

Relative difference of the monthly average
 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB, 1995)

Table A-3 Long-term and Water Year Type Average of Folsom Reservoir End of Month Elevations Under the 17,000 AF WA and No Action Alternative Conditions

				A	verag	e Eleva	ation (1	feet m	sl)			
Analysis Period	Oct	No v	De c	Jan	Fe b	Ma r	Apr	Ma y	Ju n	Jul	Aug	Se p
1 01100				erm F	_	•	n Perio	•				P
No Action Alternative	420	414	414	414	415	429	442	454	451	438	430	422
17,000 AF WA	420	414	414	414	415	429	442	454	451	438	429	422
Difference	0	0	0	0	0	0	0	0	0	0	-1	0
Percent Difference ²	0	0	0	0	0	0	0	0	0	0	0	0
	•			Wate	r Year	Types	3					
Wet												
No Action Alternative	425	419	419	418	415	432	448	465	465	458	447	434
17,000 AF WA	425	419	419	418	415	431	448	465	465	458	447	433
Difference	0	0	0	0	0	-1	0	0	0	0	0	-1
Percent Difference	0	0	0	0	0	0	0	0	0	0	0	0
Above Normal												
No Action Alternative	415	408	410	419	419	433	449	465	464	450	443	433
17,000 AF WA	413	407	409	419	419	433	449	465	463	450	443	433
Difference	-2	-1	-1	0	0	0	0	0	-1	0	0	0
Percent Difference	0	0	0	0	0	0	0	0	0	0	0	0
Below Normal												
No Action Alternative	420	416	414	417	421	434	448	462	459	443	435	427
17,000 AF WA	420	416	414	418	422	434	448	462	459	444	435	427
Difference	0	0	0	1	1	0	0	0	0	1	0	0
Percent Difference	0	0	0	0	0	0	0	0	0	0	0	0

Table A-3 Long-term and Water Year Type Average of Folsom Reservoir End of Month Elevations Under the 17,000 AF WA and No Action Alternative Conditions (Continued)

				A	verag	e Elev	ation (feet m	sl)			
Analysis Period	Oct	No v	De c	Jan	Fe b	Ma r	Apr	Ma y	Ju n	Jul	Aug	Se p
Dry												
No Action Alternative	420	415	416	415	419	431	443	451	442	423	417	415
17,000 AF WA	420	415	416	415	419	431	443	450	442	422	416	415
Difference	0	0	0	0	0	0	0	-1	0	-1	-1	0
Percent Difference	0	0	0	0	0	0	0	0	0	0	0	0
Critical												
No Action Alternative	414	406	402	398	400	409	413	415	412	398	393	391
17,000 AF WA	414	406	403	399	400	410	413	416	412	401	393	390
Difference	0	0	1	1	0	1	0	1	0	3	0	-1
Percent Difference	0	0	0	0	0	0	0	0	0	1	0	0

¹ Based on the 82-year simulation period

² Relative difference of the monthly average

³ As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB, 1995)

Table A-4 Long-term and Water Year Type Count of Elevation Decreases of Greater than Six Feet at Folsom Reservoir Under the 17,000 AF WA and No Action Alternative Conditions

Analysis Davied		N	umber o	f Months	with El	evation	Decreas	es Great	er than s	Six Fee	t	
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
			Long-t	erm Full	Simulat	ion Peri	od ¹					
No Action Alternative	6	45	13	11	6	0	0	1	17	63	47	43
17,000 AF WA	5	46	15	11	6	0	0	1	16	62	49	44
Difference	-1	1	2	0	0	0	0	0	-1	-1	2	1
Percent Difference ²	-17	2	15	0	0	0	0	0	-6	-2	4	2
				Water \	Year Typ	es³						
Wet												
No Action Alternative	2	14	3	4	4	0	0	0	0	10	21	24
17,000 AF WA	2	15	3	4	4	0	0	0	0	10	21	24
Difference	0	1	0	0	0	0	0	0	0	0	0	0
Percent Difference	0	7	0	0	0	0	0	0	0	0	0	0
Above Normal												
No Action Alternative	2	5	1	1	0	0	0	0	1	11	5	10
17,000 AF WA	2	6	1	1	0	0	0	0	1	11	5	10
Difference	0	1	0	0	0	0	0	0	0	0	0	0
Percent Difference	0	20	0	0	0	0	0	0	0	0	0	0
Below Normal												
No Action Alternative	0	9	2	0	0	0	0	0	3	13	10	7
17,000 AF WA	0	8	3	0	0	0	0	0	3	13	10	7
Difference	0	-1	1	0	0	0	0	0	0	0	0	0
Percent Difference	0	-11	50	0	0	0	0	0	0	0	0	0
Dry												
No Action Alternative	1	11	2	1	1	0	0	0	11	18	9	2
17,000 AF WA	0	11	2	2	1	0	0	0	10	18	9	2
Difference	-1	0	0	1	0	0	0	0	-1	0	0	0
Percent Difference	-100	0	0	100	0	0	0	0	-9	0	0	0
Critical												
No Action Alternative	1	6	5	5	1	0	0	1	2	11	2	0
17,000 AF WA	1	6	6	4	1	0	0	1	2	10	4	1
Difference	0	0	1	-1	0	0	0	0	0	-1	2	1
Percent Difference	0	0	20	-20	0	0	0	0	0	-9	100	0

¹ Based on the 82-year simulation period ² Relative difference of the monthly average ³ As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB, 1995)

Table A-5 Long-term and Water Year Type Averages for Lower American River Flows at Watt Avenue under the 17,000 AF WA and No Action Alternative

Analysis						Monthly	Mean Flow	(cfs)				
Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
					Long-ter	m Full Simula	ation Period	i¹.				
No Action Alternative	1,438	2,905	3,645	4,655	5,372	3,750	3,332	3,533	3,733	3,500	2,543	2,619
17,000 AF WA	1,434	2,874	3,635	4,640	5,362	3,747	3,310	3,506	3,692	3,418	2,570	2,590
Difference	-4.0	-31.2	-9.9	-14.7	-10.5	-2.9	-21.8	-27.3	-41.2	-82.5	27.4	-29.6
Percent Difference	-0.3	-1.1	-0.3	-0.3	-0.2	-0.1	-0.7	-0.8	-1.1	-2.4	1.1	-1.1
					V	Vater Year Ty	/pes²					
Wet												
No Action Alternative	1,577	3,755	6,490	8,972	9,287	6,028	5,278	6,109	5,994	3,779	3,565	3,956
17,000 AF WA	1,578	3,730	6,479	8,978	9,283	6,033	5,244	6,077	5,950	3,730	3,533	3,933
Difference	1.8	-24.8	-10.8	6.2	-3.9	5.0	-33.8	-31.9	-44.2	-48.7	-31.7	-22.9
Percent Difference	0.1	-0.7	-0.2	0.1	0.0	0.1	-0.6	-0.5	-0.7	-1.3	-0.9	-0.6
Above Normal												
No Action Alternative	1,430	3,410	3,316	5,210	6,600	5,415	3,550	3,853	3,302	3,793	2,705	3,076
17,000 AF WA	1,426	3,357	3,270	5,155	6,595	5,434	3,502	3,823	3,307	3,725	2,604	3,064
Difference	-3.9	-52.6	-46.0	-54.9	-4.7	19.5	-48.1	-29.5	5.0	-68.1	-100.4	-11.9
Percent Difference	-0.3	-1.5	-1.4	-1.1	-0.1	0.4	-1.4	-0.8	0.2	-1.8	-3.7	-0.4
Below Normal												
No Action Alternative	1,380	2,403	2,736	2,653	4,361	2,413	3,264	2,875	3,051	3,933	2,625	2,711
17,000 AF WA	1,381	2,407	2,739	2,593	4,349	2,411	3,273	2,845	2,970	3,837	2,741	2,628
Difference	0.8	3.6	3.0	-59.8	-11.9	-2.3	9.1	-29.7	-81.1	-96.7	116.3	-82.8
Percent Difference	0.1	0.1	0.1	-2.3	-0.3	-0.1	0.3	-1.0	-2.7	-2.5	4.4	-3.1
Dry												
No Action Alternative	1,370	2,234	1,799	1,766	2,370	2,231	1,848	1,733	2,749	3,507	1,943	1,461
17,000 AF WA	1,359	2,224	1,804	1,780	2,362	2,202	1,837	1,715	2,700	3,528	1,852	1,433
Difference	-11.2	-10.6	4.4	13.9	-8.6	-29.2	-10.9	-18.7	-48.6	20.9	-91.5	-27.9
Percent Difference	-0.8	-0.5	0.2	0.8	-0.4	-1.3	-0.6	-1.1	-1.8	0.6	-4.7	-1.9
Critical												
No Action Alternative	1,313	2,149	1,639	1,416	1,346	989	1,201	1,100	1,536	2,088	969	896
17,000 AF WA	1,302	2,054	1,630	1,405	1,314	985	1,179	1,075	1,512	1,779	1,327	894
Difference	-11.4	-95.1	-8.6	-10.3	-32.0	-4.1	-22.1	-24.8	-23.4	-308.5	357.9	-2.1
Percent Difference	-0.9	-4.4	-0.5	-0.7	-2.4	-0.4	-1.8	-2.3	-1.5	-14.8	36.9	-0.2

² As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB, 1995)

Table A-6 Long-term Average Water Temperatures and Average Water Temperatures by Water Year Type in the Lower American River at Watt Avenue under the 17,000 AF WA and No Action **Alternative Conditions**

					Av	erage Ten	nperature	(ºF)				
Analysis Period	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
			Lo	ng-term F	ull Simul	ation Peri	od¹					
No Action Alternative	60.1	56.1	49.6	46.4	47.8	52.1	56.8	60.9	64.3	66.5	67.0	66.6
17,000 AF WA	60.1	56.1	49.5	46.4	47.9	52.1	56.8	60.9	64.4	66.5	66.9	66.6
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
				Wat	er Year Ty	/pes²			'		'	
Wet												
No Action Alternative	59.5	56.0	49.9	46.5	47.4	51.0	55.0	58.8	62.6	66.3	66.5	66.3
17,000 AF WA	59.5	56.0	49.9	46.5	47.4	51.0	55.0	58.8	62.6	66.3	66.5	66.3
Difference	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Above Normal												
No Action Alternative	60.6	56.1	50.0	46.9	47.7	51.3	56.3	60.3	64.2	65.7	65.6	65.4
17,000 AF WA	60.5	56.0	49.9	46.9	47.7	51.3	56.4	60.3	64.2	65.7	65.6	65.3
Difference	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-0.1
Below Normal												
No Action Alternative	59.5	55.7	49.1	45.9	47.0	52.1	56.5	60.3	63.7	65.8	65.9	65.7
17,000 AF WA	59.6	55.7	49.1	45.9	47.0	52.1	56.5	60.3	63.8	65.8	65.8	65.7
Difference	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	-0.1	0.0
Dry												
No Action Alternative	60.2	56.0	49.4	46.2	48.0	52.7	58.1	62.8	65.6	66.1	67.0	66.9
17,000 AF WA	60.1	56.0	49.4	46.2	48.0	52.7	58.1	62.8	65.7	66.0	67.1	67.0
Difference	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	0.1	0.1
Critical												
No Action Alternative	61.9	56.7	49.2	46.6	49.8	54.3	59.3	63.6	67.1	69.2	70.5	69.1
17,000 AF WA	61.8	56.7	49.2	46.5	49.8	54.3	59.4	63.7	67.0	69.4	69.9	69.2
Difference	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	-0.2	0.2	-0.5	0.0

Based on the 81-year simulation period
 As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB, 1995)

Table A-7 Difference in Number of Occurrences of Water Temperature Changes Relative to Index Values by Month, Water Year Type, and Life Stages in the Lower American River at Watt Avenue under the 17,000 AF WA vs. No Action Alternative Conditions

Species/Life Stage	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	S e p
Fall-run Chinoo	k Salmo	n - Aduli	Immig	ration a	nd Holo	ling						
60°F												
64°F												
68°F												
Fall-run Chinoo	k Salmo	n - Aduli	Spaw	ning and	d Incuba	ation						\square
56°F		-1(B)										-
58°F	1(B)											-
	-1(C)											-
60°F												-
62°F	-1(A)											
Fall-run Chinoo	k Salmor	n - Juve	nile Re	aring ar	d Down	stream	Movem	ent				
60°F												-
63°F												:
65°F									1(D) -1(C)			-
68°F												-
70°F												-
75°F												-
Steelhead - Adu	It Immig	ration a	nd Hold	ling								
52°F												-
56°F		-1(B)										:
70°F												-
Steelhead - Adu	It Spawn	ing and	Incuba	ation								
52°F												-
54°F												-
57°F												-
60°F		-									-	-

Table A-7 Difference in Number of Occurrences of Water Temperature Changes Relative to Index Values by Month, Water Year Type, and Life Stages in the Lower American River at Watt Avenue under the 17,000 AF WA vs. No Action Alternative Conditions (Continued)

Species/Life Stage	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	S e p
Steelhead - Fry	& Finger	ling Rea	aring a	nd Dow	nstream	Movem	ent					
65°F									1(D) -1(C)			
68°F										1(C)		
72°F											-1(C)	
75°F											-1(C)	
Steelhead - Smo	lt Emigr	ation										
52°F												
55°F												-
Striped Bass - A	dult Spa	wning,	Incuba	tion & Ir	nitial Re	aring						
59°F												-
68°F												-
American Shad	- Adult I	mmigrat	ion & S	Spawnin	ıg							
60°F												-
70°F			1	-	1	1	1					-

¹ Difference in water temperatures presented as a change from the No Action Alternative. Positive differences indicate additional occurrence(s) of water temperatures above the specified water temperature index value, and negative differences indicate fewer occurrence(s) of water temperatures above the specified water temperature index value.

² Modeled water temperature changes of greater than 0.3°F are considered to represent measurable changes.

³ As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB, 1995) W=Wet; A=Above Normal; B=Below Normal; D=Dry; C=Critical (40-30-30 Water Year Types); shading indicates life stage periodicity.

Table of Contents

Figure C - 1: Lower American River Flow at Watt Avenue During October Under Proposed Action and No Action Alternative Conditions
Figure C - 2: Lower American River Flow at Watt Avenue During November Under Proposed Action and No Action Alternative Conditions
Figure C - 3: Lower American River Flow at Watt Avenue During December Under Proposed Action and No Action Alternative Conditions
Figure C - 4: Lower American River Flow at Watt Avenue During January Under Proposed Action and No Action Alternative Conditions
Figure C - 5: Lower American River Flow at Watt Avenue During February Under Proposed Action and No Action Alternative Conditions
Figure C - 6: Lower American River Flow at Watt Avenue during March Under Proposed Action and No Action Alternative Conditions
Figure C - 7: Lower American River Flow at Watt Avenue During April Under Proposed Action and No Action Alternative Conditions9
Figure C - 8: Lower American River Flow at Watt Avenue During May Under Proposed Action and No Action Alternative Conditions
Figure C - 9: Lower American River Flow at Watt Avenue During June Under Proposed Action and No Action Alternative t Conditions
Figure C - 10: Lower American River Flow at Watt Avenue During July Under Proposed Action and No Action Alternative Conditions
Figure C - 11: Lower American River Flow at Watt Avenue During August Under Proposed Action and No Action Alternative Conditions
Figure C - 12: Lower American River Flow at Watt Avenue During September Under Proposed Action and No Action Alternative Conditions

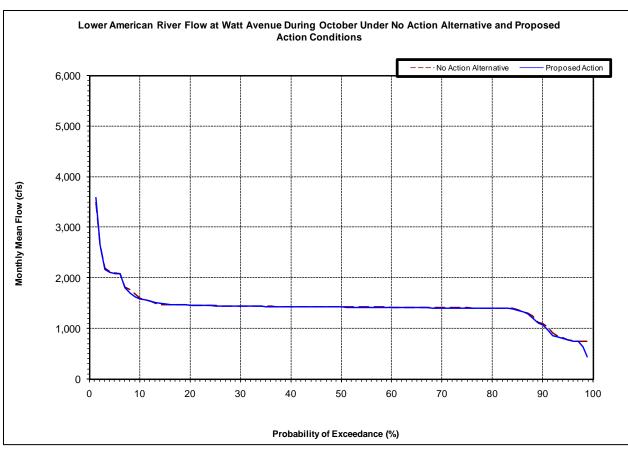


Figure C - 1: Lower American River Flow at Watt Avenue During October Under Proposed Action and No Action Alternative Conditions.

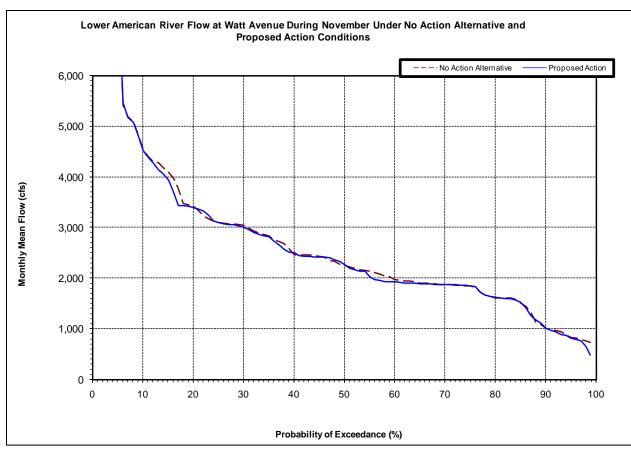


Figure C - 2: Lower American River Flow at Watt Avenue During November Under Proposed Action and No Action Alternative Conditions.

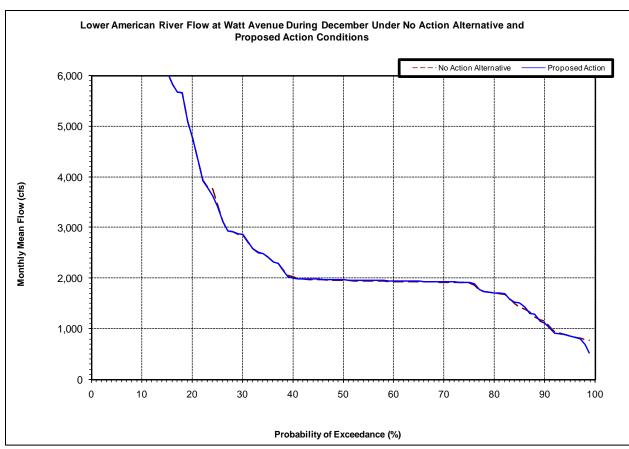


Figure C - 3: Lower American River Flow at Watt Avenue During December Under Proposed Action and No Action Alternative Conditions.

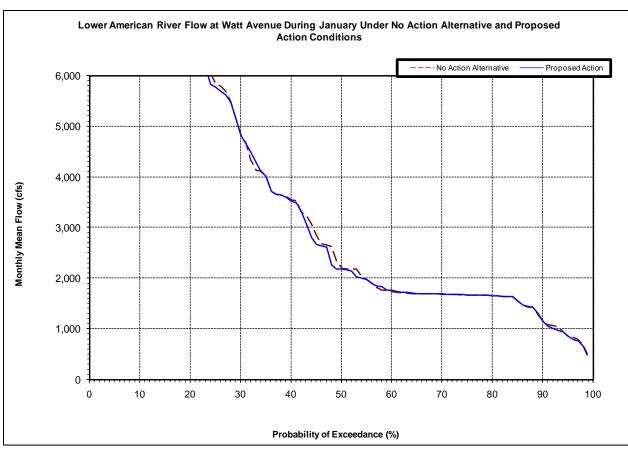


Figure C - 4: Lower American River Flow at Watt Avenue During January Under Proposed Action and No Action Alternative Conditions.

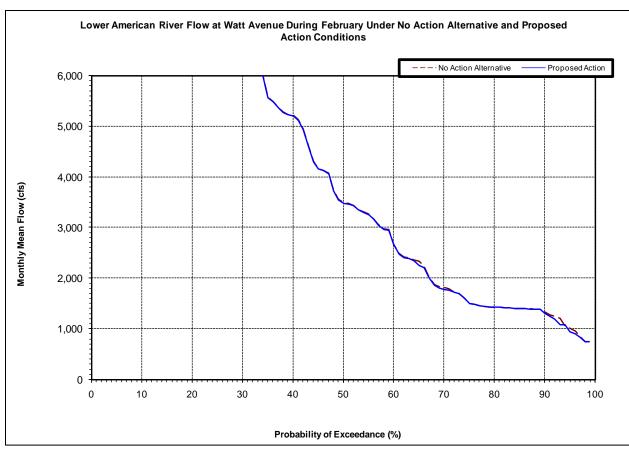


Figure C - 5: Lower American River Flow at Watt Avenue During February Under Proposed Action and No Action Alternative Conditions.

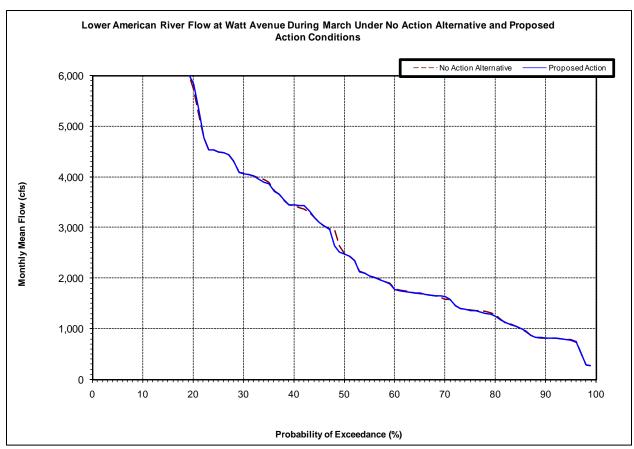


Figure C - 6: Lower American River Flow at Watt Avenue during March Under Proposed Action and No Action Alternative Conditions.

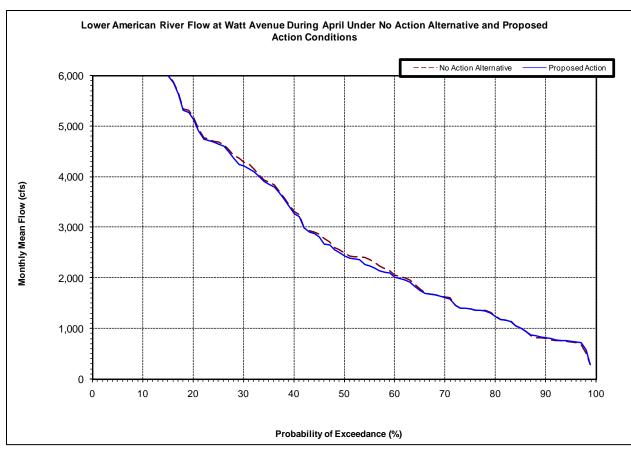


Figure C - 7: Lower American River Flow at Watt Avenue During April Under Proposed Action and No Action Alternative Conditions.

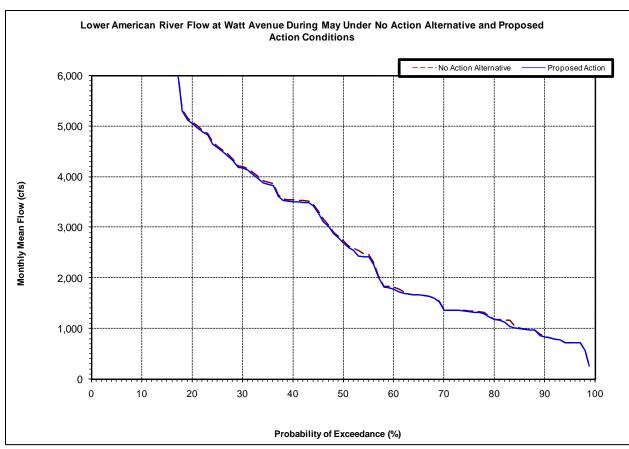


Figure C - 8: Lower American River Flow at Watt Avenue During May Under Proposed Action and No Action Alternative Conditions.

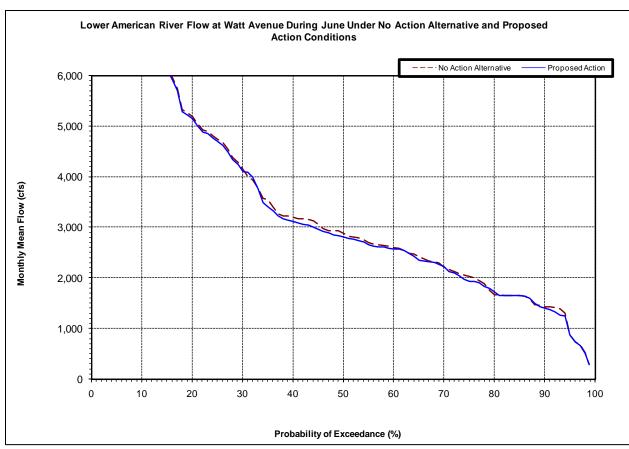


Figure C - 9: Lower American River Flow at Watt Avenue During June Under Proposed Action and No Action Alternative t Conditions.

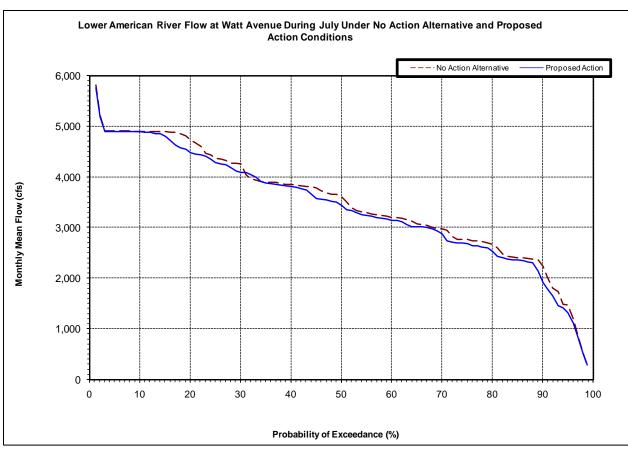


Figure C - 10: Lower American River Flow at Watt Avenue During July Under Proposed Action and No Action Alternative Conditions.

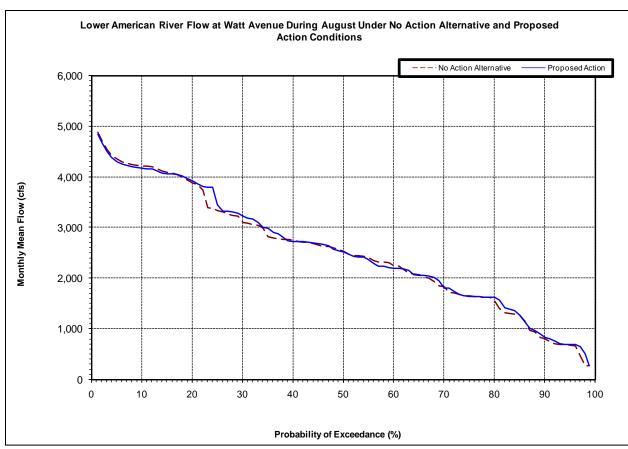


Figure C - 11: Lower American River Flow at Watt Avenue During August Under Proposed Action and No Action Alternative Conditions.

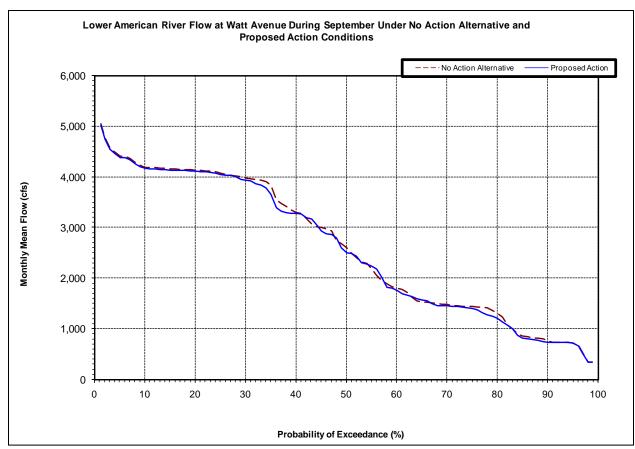


Figure C - 12: Lower American River Flow at Watt Avenue During September Under Proposed Action and No Action Alternative Conditions.