

MAP UNITS*

WELL DRAINED TO POORLY DRAINED SOILS DOMINANTLY IN THE LACUSTRINE BASIN

- 1 Imperial: Nearly level, moderately well drained silty clay in the lacustrine basin
- 2 Imperial-Holtville-Glenbar: Nearly level, moderately well drained and well drained and well drained silty clay, silty clay loam, and clay loam in the lacustrine basin
- 3 Meloland-Vint-Indio: Nearly level, well drained fine sand, loamy very fine sand, fine sandy loam, very fine sandy loam, loam, and silt loam in the lacustrine basin and on low alluvial fans
- 4 Niland-Imperial: Nearly level, moderately well drained gravelly sand, fine sand, silty clay, and silty clay loam at the edges of the lacustrine basin
- 5 Glenbar-Imperial: Nearly level, well drained and moderately well drained silt loam, clay loam, silty clay loam, sand, fine sand, and silty clay dominantly in basins on West Mesa
- 6 Fluvaquents: Nearly level, poorly drained soils of undifferentiated texture in the lacustrine basin

EXCESSIVELY DRAINED TO SOMEWHAT POORLY DRAINED, NEARLY LEVEL TO MODERATELY STEEP SOILS ON ALLUVIAL FANS AND VALLEY FILL AND IN LACUSTRINE BASINS IN THE COACHELLA VALLEY

- 7 Niland-Imperial-Carsitas association: Nearly level to moderately sloping, moderately well drained to excessively drained sands, gravelly sands, cobbly sands, fine sands, and silty clays in lacustrine basins
- 8 Carsitas-Myoma-Carrizo association: Nearly level to moderately steep, somewhat excessively drained or excessively drained sands, fine sands, gravelly sands, cobbly sands, and stony sands on alluvial fans and valley fill

WELL DRAINED AND SOMEWHAT EXCESSIVELY DRAINED SOILS DOMINANTLY ON EAST MESA AND ON WEST MESA

- 9 Rositas: Nearly level to moderately steep, somewhat excessively drained sand, fine sand, and silt loam in alluvial basins and on fans and sandhills
- 8 Rositas-Superstition: Nearly level, somewhat excessively drained loamy fine sand or fine sand on alluvial terraces and fans
- 9 Antho-Superstition-Rositas: Nearly level, well drained and somewhat excessively drained fine sand and loamy fine sand in alluvial basins and on alluvial fans and terraces
- 10 Holtville-Antho: Nearly level, well drained loamy fine sand, loam, silty clay loam, and silty clay on alluvial terraces

* Texture refers to surface layer

Source:

U.S. Department of Agriculture, Soil Conservation Service,
General Soil Map, Imperial and Riverside Counties, 1979.



SCALE IN FEET



Figure 2-3 Study Area Soil Series by Map Unit Identity

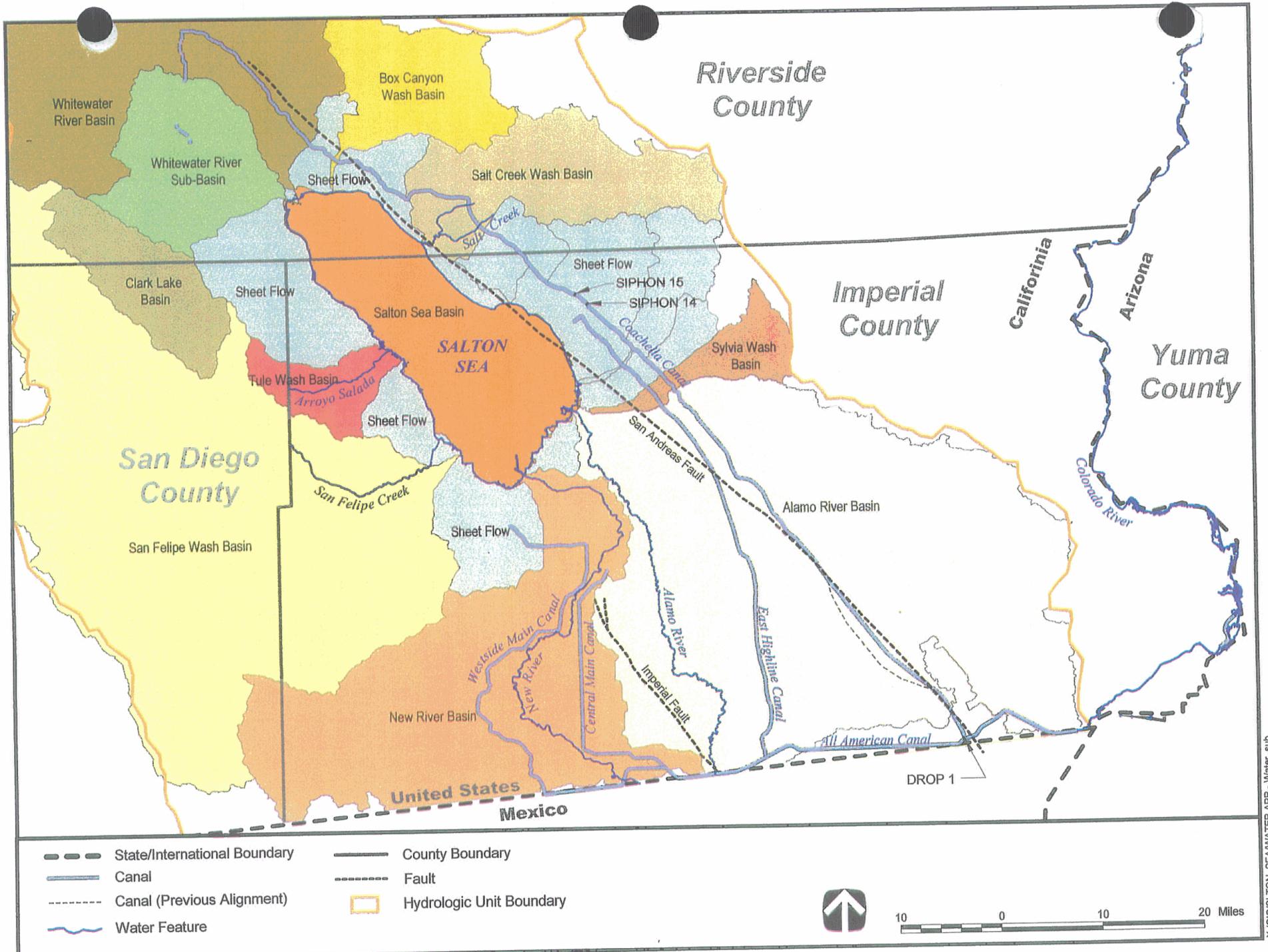


Figure 2-4 Holocene/Recent Hydrologic Features for Study Area

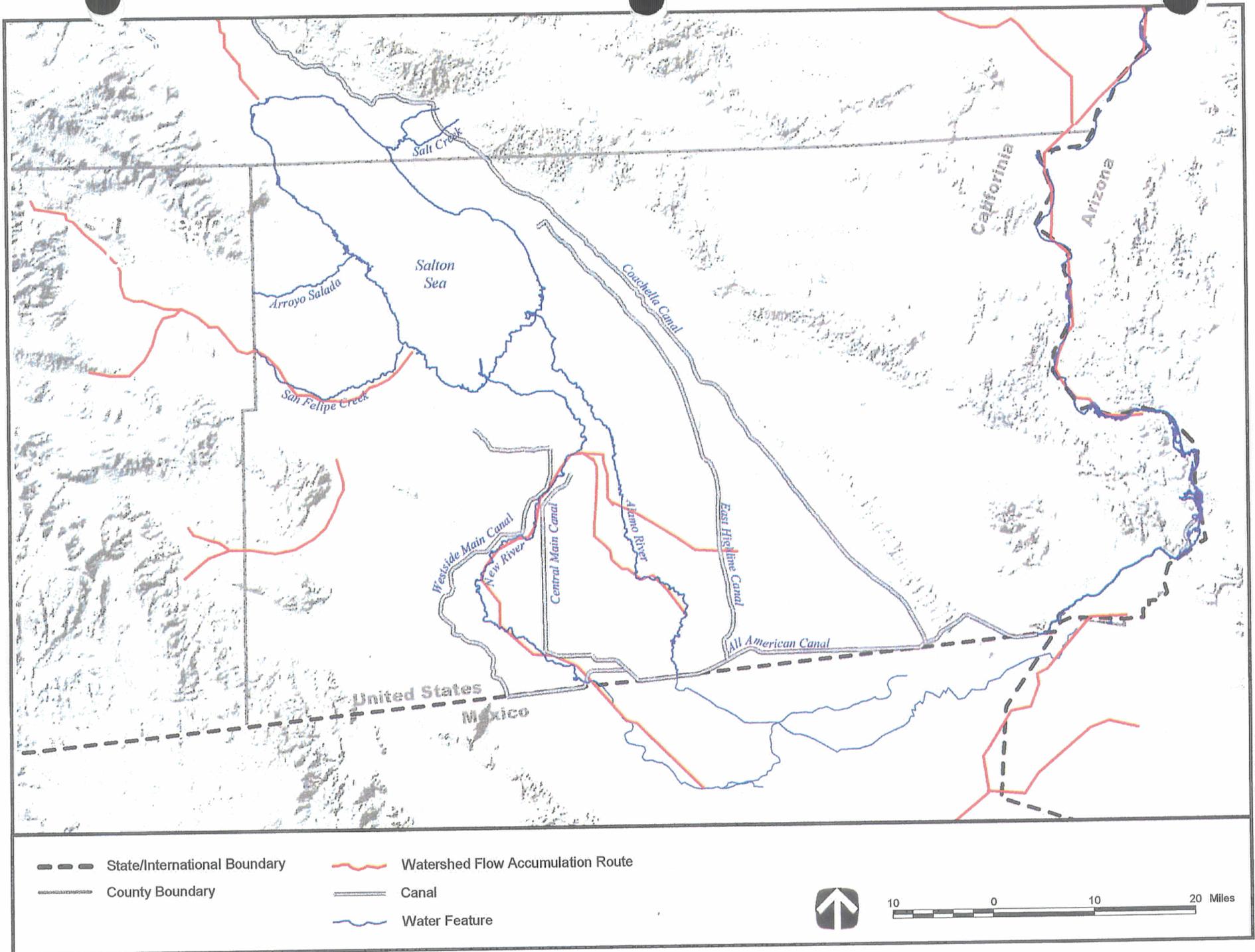


Figure 2-5 Watershed Drainage Routing

A STUDY ON SEEPAGE AND SUBSURFACE INFLOWS
TO SALTON SEA AND ADJACENT WETLANDS

Table 2-1

**River and Drain Flows in Imperial Valley
(acre-feet per year)**

Year	Alamo River				New River				Drains	All IID Area
	From Mexico	Discharge into Salton Sea	Gain in US	Gain in US (% of total)	From Mexico	Discharge into Salton Sea	Gain in US	Gain in US (% of total)	Direct flow to Salton Sea	Total flow to Salton Sea
1963	2,158	723,765	721,607	99.70	138,906	477,479	338,573	70.91	93,647	1,294,891
1964	1,834	563,557	561,723	99.67	105,087	365,857	260,770	71.28	82,660	1,012,074
1965	1,758	535,096	533,338	99.67	111,339	357,747	246,408	68.88	103,256	996,099
1966	1,545	610,745	609,200	99.75	102,958	383,469	280,511	73.15	114,974	1,109,188
1967	1,556	621,091	619,535	99.75	96,899	383,211	286,312	74.71	122,123	1,126,425
1968	1,469	611,089	609,620	99.76	106,019	384,078	278,059	72.40	113,348	1,108,515
1969	1,595	592,664	591,069	99.73	103,312	375,449	272,137	72.48	99,433	1,067,546
1970	1,645	619,018	617,373	99.73	99,671	390,487	290,816	74.48	112,314	1,121,819
1971	1,510	671,770	670,260	99.78	107,281	422,995	315,714	74.64	106,597	1,201,362
1972	1,435	638,743	637,308	99.78	111,165	418,063	306,898	73.41	119,331	1,176,137
1973	1,370	638,902	637,532	99.79	117,160	428,639	311,479	72.67	116,403	1,183,944
1974	1,227	682,320	681,093	99.82	111,839	436,575	324,736	74.38	117,663	1,236,558
1975	1,568	682,345	680,777	99.77	99,791	434,507	334,716	77.03	112,775	1,229,627
1976	1,077	638,917	637,840	99.83	102,888	435,111	332,223	76.35	114,924	1,188,952
1977	1,419	615,009	613,590	99.77	107,733	412,978	305,245	73.91	101,942	1,129,929
1978	1,296	603,073	601,777	99.79	98,408	393,045	294,637	74.96	99,260	1,095,378
1979	1,416	635,126	633,710	99.78	144,905	457,720	312,815	68.34	110,127	1,202,973
1980	1,655	641,581	639,926	99.74	156,320	454,544	298,224	65.61	105,091	1,201,216
1981	2,274	591,591	589,317	99.62	155,443	433,241	277,798	64.12	95,810	1,120,642
1982	2,090	543,354	541,264	99.62	157,009	416,302	259,293	62.28	87,915	1,047,571
1983	1,909	551,591	549,682	99.65	242,606	477,433	234,827	49.19	82,946	1,111,970
1984	1,831	563,917	562,086	99.68	267,904	512,260	244,356	47.70	88,592	1,164,769
1985	1,867	509,547	507,680	99.63	260,238	489,532	229,294	46.84	93,867	1,092,946
1986	1,920	498,992	497,072	99.62	264,837	512,348	247,511	48.31	89,534	1,100,874
1987	2,058	512,200	510,142	99.60	250,862	493,152	242,290	49.13	99,262	1,104,614
1988	2,152	558,687	556,535	99.61	226,802	488,940	262,138	53.61	100,053	1,147,680
1989	1,883	593,664	591,781	99.68	153,439	431,428	277,989	64.43	96,109	1,121,201
1990	1,993	617,866	615,873	99.68	133,088	430,510	297,422	69.09	91,088	1,139,464
1991	1,951	594,126	592,175	99.67	130,775	410,629	279,854	68.15	88,341	1,093,096
1992	1,709	546,043	544,334	99.69	143,178	396,595	253,417	63.90	80,734	1,023,372
1993	1,642	617,025	615,383	99.73	190,457	460,296	269,839	58.62	88,589	1,165,910
1994	1,744	641,071	639,327	99.73	145,260	443,064	297,804	67.21	108,805	1,192,940
1995	1,233	646,167	644,934	99.81	148,762	472,686	323,924	68.53	115,134	1,233,987
1996	1,077	640,974	639,897	99.83	118,678	436,589	317,911	72.82	118,746	1,196,309
1997	1,653	636,810	635,157	99.74	160,762	487,223	326,461	67.00	107,093	1,231,126
average	1,672	605,384	603,712	99.72	147,765	434,405	286,640	66.59	102,242	1,142,032