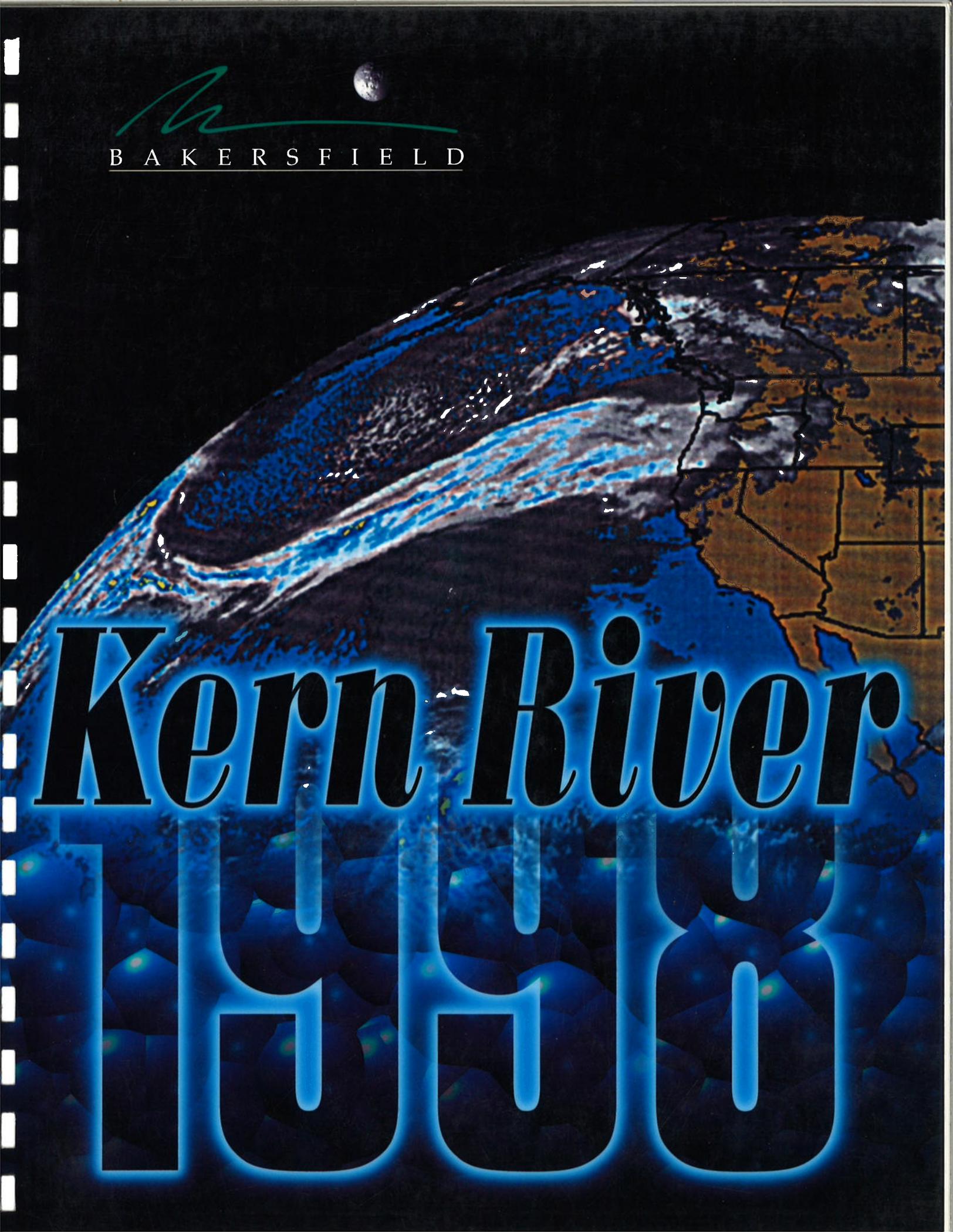




BAKERSFIELD



Kern River

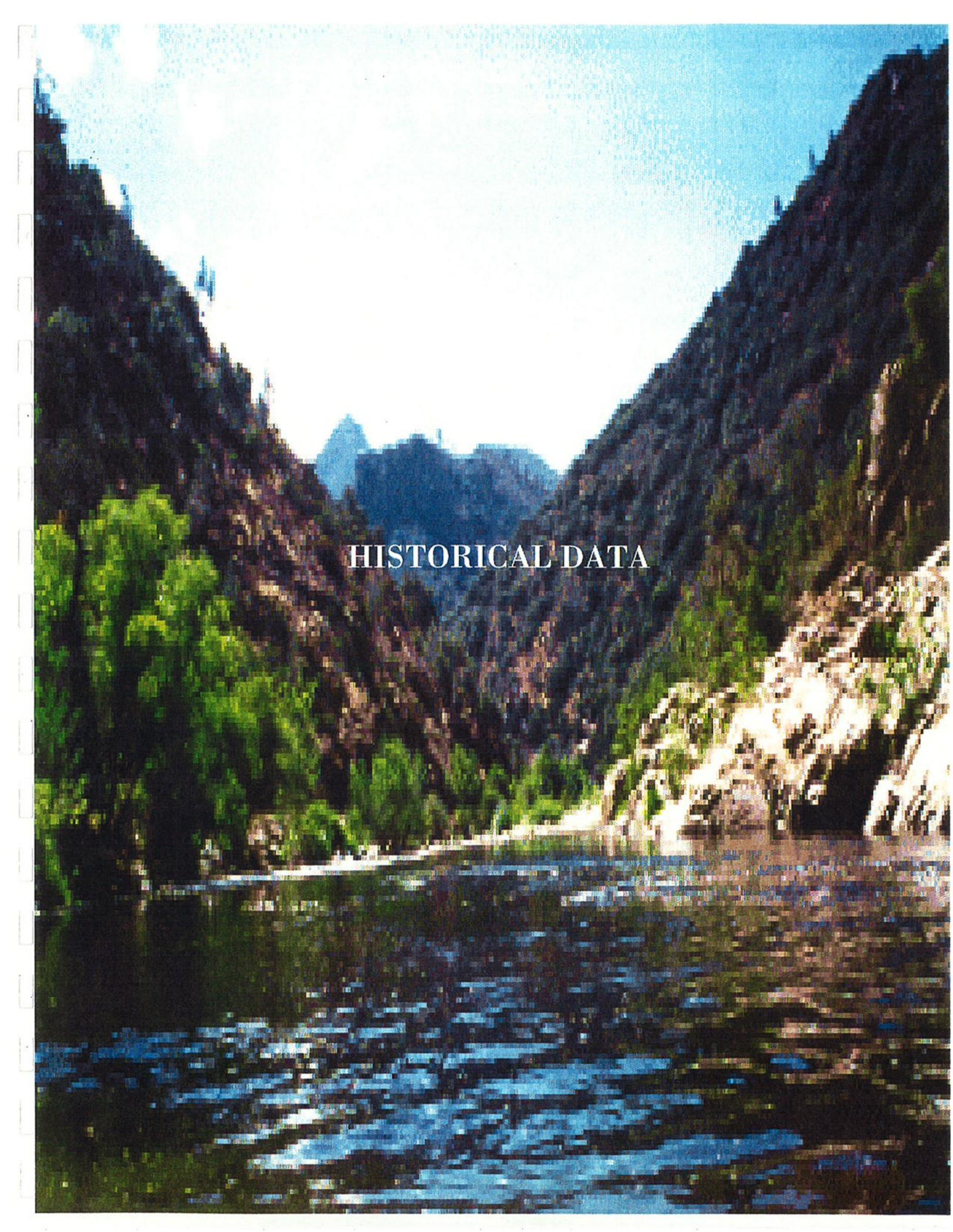
1990



1998
HYDROGRAPHIC ANNUAL REPORT

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HISTORICAL DATA

**HISTORICAL RECAP
KERN RIVER AT FIRST POINT OF MEASUREMENT**

YEAR	QUANTITY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	MAX.	MIN.	MEAN
Measurements and Estimates were not made prior to September 29, 1893....																	
1893	acre-feet mean s.f.d.	40,647	39,816	61,548	88,974	98,801	64,564	43,061	20,565	14,759	17,179	30,827	31,757	---	---	---	---
1894	acre-feet mean s.f.d.	661	717	1,001	1,495	1,607	1,085	700	334	248	279	244	470	533,326	---	---	---
1895	acre-feet mean s.f.d.	49,769	69,521	84,456	162,071	268,635	172,890	91,133	38,672	20,452	20,091	20,604	24,758	1,023,052	2,208	172	737
1896	acre-feet mean s.f.d.	809	1,252	1,374	2,724	4,369	2,906	1,482	629	344	327	346	403	---	5,583	276	1,413
1897	acre-feet mean s.f.d.	45,951	35,510	58,494	57,864	86,174	146,124	82,760	29,885	18,061	16,401	21,108	21,360	619,692	---	---	---
1898	acre-feet mean s.f.d.	747	617	951	972	1,401	2,456	1,346	486	304	267	355	347	---	3,611	223	854
1899	acre-feet mean s.f.d.	22,949	44,941	56,756	173,393	281,639	137,393	61,837	28,842	17,728	20,888	21,146	25,922	893,434	---	---	---
1900	acre-feet mean s.f.d.	373	809	923	2,914	4,580	2,309	1,006	469	298	340	355	422	---	5,342	260	1,234
1901	acre-feet mean s.f.d.	22,332	24,105	23,882	42,248	45,213	32,809	15,033	7,390	6,885	9,830	9,884	12,216	251,827	---	---	---
1902	acre-feet mean s.f.d.	363	434	388	710	735	551	244	120	116	160	166	199	---	1,342	80	348
1903	acre-feet mean s.f.d.	16,185	16,754	36,279	53,133	51,353	79,178	30,046	9,600	6,248	9,852	13,180	17,064	338,872	---	---	---
1904	acre-feet mean s.f.d.	263	302	590	893	835	1,331	489	156	105	160	221	278	---	4,932	86	468
1905	acre-feet mean s.f.d.	22,266	15,562	25,384	28,102	68,295	76,366	24,125	8,860	9,903	9,808	20,787	22,915	332,373	---	---	---
1906	acre-feet mean s.f.d.	362	280	413	472	1,111	1,283	392	144	166	160	349	373	---	1,969	101	459
1907	acre-feet mean s.f.d.	30,337	47,760	78,109	83,190	186,446	197,792	114,613	59,536	20,535	19,468	22,429	19,874	880,089	---	---	---
1908	acre-feet mean s.f.d.	493	860	1,270	1,398	3,032	3,324	1,864	968	345	317	377	323	---	4,419	226	1,216
1909	acre-feet mean s.f.d.	17,407	20,582	48,546	107,403	109,904	128,853	43,436	19,172	11,695	12,242	16,739	16,560	552,539	---	---	---
1910	acre-feet mean s.f.d.	283	371	790	1,805	1,787	2,165	706	312	197	199	281	269	---	3,758	160	763
1911	acre-feet mean s.f.d.	21,531	25,192	35,575	74,315	132,097	139,222	53,355	18,623	11,357	10,681	12,107	12,340	546,395	---	---	---
1912	acre-feet mean s.f.d.	350	454	579	1,249	2,148	2,340	868	303	191	174	203	201	---	3,374	150	755
1913	acre-feet mean s.f.d.	11,982	19,902	40,996	59,812	113,205	103,904	39,725	28,733	15,901	26,955	17,006	14,828	492,949	---	---	---
1914	acre-feet mean s.f.d.	195	346	667	1,005	1,841	1,746	646	467	267	438	286	241	---	3,167	156	679
1915	acre-feet mean s.f.d.	17,258	22,001	50,598	62,047	117,748	132,766	53,835	20,134	12,563	12,744	14,041	16,074	531,809	---	---	---
1916	acre-feet mean s.f.d.	281	396	823	1,043	1,915	2,231	876	327	211	207	236	261	---	3,247	165	735
1917	acre-feet mean s.f.d.	42,623	34,750	126,844	173,143	360,234	458,418	399,841	141,384	57,925	37,464	29,931	37,983	1,900,540	---	---	---
1918	acre-feet mean s.f.d.	693	626	2,063	2,910	5,859	7,704	6,503	2,299	973	609	503	618	---	9,684	222	2,625
1919	acre-feet mean s.f.d.	41,697	56,834	83,272	197,720	199,950	183,995	97,083	41,940	24,623	22,428	19,747	21,611	990,900	---	---	---
1920	acre-feet mean s.f.d.	678	1,023	1,354	3,323	3,252	3,092	1,579	682	414	365	332	351	---	---	---	1,369
1921	acre-feet mean s.f.d.	27,878	32,481	65,079	79,320	79,418	60,305	41,851	32,378	21,763	21,487	18,206	18,337	498,503	---	---	---
1922	acre-feet mean s.f.d.	453	565	1,058	1,333	1,292	1,013	681	527	366	349	306	298	---	---	---	687
1923	acre-feet mean s.f.d.	118,441	125,050	128,649	247,402	382,617	394,086	194,870	66,224	43,448	31,214	34,350	72,292	1,838,643	---	---	---
1924	acre-feet mean s.f.d.	1,926	2,252	2,092	4,158	6,223	6,623	3,169	1,077	730	508	577	1,176	---	11,870	295	2,540
1925	acre-feet mean s.f.d.	73,523	48,904	85,085	102,883	127,733	79,464	42,046	24,216	17,201	18,976	18,881	19,999	658,911	---	---	---
1926	acre-feet mean s.f.d.	1,196	881	1,384	1,729	2,077	1,335	684	394	289	309	317	325	---	4,847	222	910

**HISTORICAL RECAP
KERN RIVER AT FIRST POINT OF MEASUREMENT**

YEAR	QUANTITY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	MAX.	MIN.	MEAN
1911	acre-foot	38,241	53,944	80,166	138,113	184,481	222,076	156,498	45,880	25,222	25,422	21,691	21,650	1,013,384	—	—	—
	mean s.f.d.	622	971	1,304	2,321	3,000	3,732	2,545	746	424	413	365	352	—	5,383	273	1,400
1912	acre-foot	23,320	21,302	28,090	37,246	80,471	100,925	33,170	16,653	10,899	11,780	11,772	11,804	387,432	—	—	—
	mean s.f.d.	379	370	457	626	1,309	1,696	539	271	183	192	198	192	—	3,220	147	534
1913	acre-foot	13,019	15,731	25,191	42,494	73,561	60,738	34,929	31,454	25,357	13,402	15,368	16,596	367,840	—	—	—
	mean s.f.d.	212	283	410	714	1,196	1,021	568	512	426	218	258	270	—	1,976	126	508
1914	acre-foot	116,541	62,575	102,739	144,934	210,676	201,064	128,338	55,127	25,240	24,462	20,390	21,427	1,113,513	—	—	—
	mean s.f.d.	1,895	1,127	1,671	2,436	3,426	3,379	2,087	897	424	398	343	348	—	18,287	285	1,538
1915	acre-foot	22,500	30,254	48,536	80,916	124,506	172,324	77,496	24,668	16,457	14,452	14,858	19,320	646,287	—	—	—
	mean s.f.d.	366	545	789	1,360	2,025	2,896	1,260	401	277	235	250	314	—	4,249	203	891
1916	acre-foot	172,346	202,510	378,116	481,749	472,994	391,700	225,154	56,755	33,808	41,774	30,879	32,384	2,520,149	—	—	—
	mean s.f.d.	2,803	3,521	6,149	8,096	7,693	6,583	3,662	923	568	679	519	526	—	17,962	274	3,481
1917	acre-foot	40,128	44,894	65,242	126,329	165,062	187,638	81,275	36,990	19,696	17,970	18,488	19,370	823,082	—	—	—
	mean s.f.d.	653	808	1,061	2,123	2,684	3,153	1,322	602	331	292	311	315	—	4,331	267	1,137
1918	acre-foot	18,918	18,559	48,087	74,513	78,722	136,753	44,828	20,807	17,562	32,555	22,160	25,039	538,503	—	—	—
	mean s.f.d.	308	334	782	1,252	1,280	2,298	729	338	295	529	372	407	—	3,478	227	744
1919	acre-foot	21,098	23,002	37,973	86,574	140,215	81,844	34,364	16,288	11,722	13,835	13,884	18,325	499,124	—	—	—
	mean s.f.d.	343	414	618	1,455	2,280	1,375	559	265	197	225	233	298	—	4,299	156	689
1920	acre-foot	17,220	18,044	40,397	83,370	158,904	137,840	50,699	22,431	14,949	16,596	19,490	20,703	600,643	—	—	—
	mean s.f.d.	280	314	657	1,401	2,584	2,316	825	365	251	270	328	337	—	4,456	196	827
1921	acre-foot	23,520	30,791	55,402	51,723	100,096	120,387	49,119	18,073	12,595	13,180	12,960	21,673	509,519	—	—	—
	mean s.f.d.	383	554	901	869	1,628	2,023	799	294	212	214	218	352	—	3,548	110	704
1922	acre-foot	30,682	33,846	52,468	84,407	242,259	202,395	88,649	37,061	23,772	17,770	19,835	28,282	861,426	—	—	—
	mean s.f.d.	499	609	853	1,419	3,940	3,401	1,442	603	400	289	333	460	—	5,300	196	1,190
1923	acre-foot	26,863	25,720	31,372	73,355	120,849	82,528	55,800	22,322	18,054	15,495	14,348	13,809	500,515	—	—	—
	mean s.f.d.	437	463	510	1,233	1,965	1,387	908	363	303	252	241	225	—	3,275	179	691
1924	acre-foot	13,676	13,702	15,953	28,540	41,722	14,069	8,225	5,881	5,494	7,642	14,196	18,627	187,727	—	—	—
	mean s.f.d.	222	238	259	480	679	236	134	96	92	124	239	303	—	1,073	74	259
1925	acre-foot	17,992	26,333	31,299	56,408	102,016	96,252	58,437	25,938	11,405	12,906	12,305	14,622	465,913	—	—	—
	mean s.f.d.	293	474	509	948	1,659	1,618	950	422	192	210	207	238	—	2,819	148	635
1926	acre-foot	12,022	15,667	24,739	66,079	98,598	49,530	18,575	9,522	7,029	8,358	28,493	28,094	366,706	—	—	—
	mean s.f.d.	196	282	402	1,110	1,604	832	302	155	118	136	479	457	—	6,511	74	507
1927	acre-foot	20,485	75,279	73,083	100,362	184,721	161,153	75,481	26,817	14,842	14,037	27,180	19,140	792,580	—	—	—
	mean s.f.d.	333	1,355	1,189	1,687	3,004	2,708	1,228	436	249	228	457	311	—	6,571	188	1,095
1928	acre-foot	18,452	17,818	32,668	37,757	76,885	60,344	18,716	9,189	6,583	8,732	11,974	13,710	312,828	—	—	—
	mean s.f.d.	300	310	531	635	1,250	1,014	304	149	111	142	201	223	—	2,058	101	431
1929	acre-foot	13,864	14,654	25,176	39,064	85,995	63,487	30,986	12,797	9,146	8,793	9,035	9,961	322,958	—	—	—
	mean s.f.d.	225	264	409	656	1,399	1,067	504	208	154	143	152	162	—	2,003	119	446
1930	acre-foot	12,234	20,099	34,550	53,506	67,851	82,824	28,401	11,819	7,743	9,314	11,042	10,590	349,973	—	—	—
	mean s.f.d.	199	362	562	899	1,103	1,392	462	192	130	151	186	172	—	2,423	118	483

**HISTORICAL RECAP
KERN RIVER AT FIRST POINT OF MEASUREMENT**

YEAR	QUANTITY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	MAX.	MIN.	MEAN
1931	acre-feet	12,284	13,785	15,784	23,440	41,867	24,262	8,493	6,302	6,860	6,817	8,241	17,510	185,645	—	—	—
	mean s.f.d.	200	248	257	394	681	408	138	102	115	111	138	285	—	2,261	71	256
1932	acre-feet	22,235	39,596	68,647	111,273	154,742	166,404	94,013	28,243	13,593	13,942	12,077	12,962	737,727	—	—	—
	mean s.f.d.	362	688	1,116	1,870	2,517	2,797	1,529	459	228	227	203	211	—	3,726	180	1,016
1933	acre-feet	17,175	21,021	36,244	57,265	60,026	125,395	56,898	18,692	10,062	10,893	10,776	16,639	441,086	—	—	—
	mean s.f.d.	279	379	589	962	976	2,107	925	304	169	177	181	271	—	3,769	144	609
1934	acre-feet	20,033	16,842	27,429	39,919	43,065	21,820	11,341	6,948	7,043	8,196	11,272	13,757	227,665	—	—	—
	mean s.f.d.	326	303	446	671	700	367	184	113	118	133	189	224	—	914	82	314
1935	acre-feet	14,840	18,500	24,841	71,042	103,787	133,634	42,184	17,193	11,363	11,962	11,905	12,877	474,128	—	—	—
	mean s.f.d.	241	333	404	1,194	1,688	2,246	686	280	191	195	200	209	—	3,378	164	655
1936	acre-feet	14,737	46,808	57,374	157,290	219,404	137,028	67,902	32,987	14,372	15,423	15,828	17,294	796,447	—	—	—
	mean s.f.d.	240	814	933	2,643	3,568	2,303	1,104	536	242	251	266	281	—	4,173	194	1,097
1937	acre-feet	21,745	139,109	111,443	183,505	352,050	225,395	91,097	32,186	17,780	17,173	16,379	52,320	1,260,182	—	—	—
	mean s.f.d.	354	2,505	1,812	3,084	5,726	3,788	1,482	523	299	279	275	851	—	20,000	223	1,741
1938	acre-feet	31,265	42,456	162,121	223,928	315,044	291,880	130,917	54,155	28,693	27,475	24,748	26,003	1,358,685	—	—	—
	mean s.f.d.	508	764	2,637	3,763	5,124	4,905	2,129	881	482	447	416	423	—	14,582	356	1,877
1939	acre-feet	28,558	33,273	54,119	92,136	92,253	58,400	25,480	18,774	13,712	16,826	13,692	13,850	461,073	—	—	—
	mean s.f.d.	464	599	880	1,548	1,500	981	414	305	230	274	230	225	—	2,028	178	637
1940	acre-feet	45,082	65,032	77,810	118,175	196,465	145,503	50,471	18,926	13,234	14,670	16,007	27,723	789,098	—	—	—
	mean s.f.d.	733	1,131	1,265	1,986	3,195	2,445	821	308	222	239	269	451	—	5,454	167	1,087
1941	acre-feet	39,540	73,589	109,735	124,615	386,666	309,960	174,416	62,537	27,997	26,325	27,661	38,035	1,401,076	—	—	—
	mean s.f.d.	643	1,325	1,785	2,094	6,289	5,209	2,837	1,017	471	428	465	619	—	8,523	337	1,935
1942	acre-feet	49,438	40,834	58,487	112,586	150,036	178,754	81,529	30,284	16,500	14,648	16,130	22,740	771,966	—	—	—
	mean s.f.d.	804	735	951	1,892	2,440	3,004	1,326	493	277	238	271	370	—	4,060	141	1,066
1943	acre-feet	92,551	56,820	261,344	198,736	254,785	155,650	88,011	34,435	17,857	17,849	18,565	24,224	1,220,827	—	—	—
	mean s.f.d.	1,505	1,023	4,250	3,340	4,144	2,616	1,431	560	300	290	312	394	—	21,701	252	1,686
1944	acre-feet	27,473	32,781	69,836	80,223	150,109	115,862	59,197	20,305	12,843	12,952	21,521	22,435	625,537	—	—	—
	mean s.f.d.	447	570	1,136	1,348	2,441	1,947	963	330	216	211	362	365	—	3,071	191	862
1945	acre-feet	20,783	70,522	63,925	131,246	205,509	169,002	91,593	41,632	21,548	41,268	36,845	44,182	938,055	—	—	—
	mean s.f.d.	338	1,270	1,040	2,206	3,342	2,840	1,490	677	362	671	619	719	—	9,370	155	1,296
1946	acre-feet	45,481	34,854	60,958	109,658	155,476	85,880	39,733	20,091	13,261	16,141	31,365	37,785	650,683	—	—	—
	mean s.f.d.	740	628	991	1,843	2,529	1,443	646	327	223	263	527	615	—	3,814	192	899
1947	acre-feet	31,146	28,167	36,319	60,353	110,325	57,778	21,116	12,313	9,140	12,607	13,492	13,942	406,698	—	—	—
	mean s.f.d.	507	507	591	1,014	1,794	971	343	200	154	205	227	227	—	2,584	135	562
1948	acre-feet	13,486	13,267	16,233	43,976	86,108	78,565	31,331	9,927	6,899	8,908	9,586	11,220	329,506	—	—	—
	mean s.f.d.	219	231	264	739	1,400	1,320	510	161	116	145	161	182	—	2,206	97	454
1949	acre-feet	11,982	12,992	21,136	50,517	84,508	57,685	17,201	8,682	6,541	7,704	11,131	12,791	302,870	—	—	—
	mean s.f.d.	195	234	344	849	1,374	969	280	141	110	125	187	208	—	2,128	69	418
1950	acre-feet	17,119	39,761	37,087	76,155	98,483	90,367	34,901	12,179	10,393	9,955	96,968	77,992	601,360	—	—	—
	mean s.f.d.	278	716	603	1,280	1,602	1,519	568	198	175	162	1,630	1,268	—	37,000	128	831

**HISTORICAL RECAP
KERN RIVER AT FIRST POINT OF MEASUREMENT**

YEAR	QUANTITY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	MAX.	MIN.	MEAN
1951	acre-foot	32,975	30,018	35,101	48,914	85,039	88,980	38,941	12,966	7,793	9,364	11,958	40,163	442,222	—	—	—
	mean s.f.d.	536	541	571	822	1,383	1,496	633	211	131	152	201	653	—	8,341	69	611
1952	acre-foot	60,387	53,673	84,726	222,633	434,769	302,557	159,856	68,200	30,670	23,417	24,871	35,260	1,500,999	—	—	—
	mean s.f.d.	982	933	1,378	3,741	7,071	5,085	2,600	1,109	515	381	418	573	—	8,530	254	2,073
1953	acre-foot	60,760	40,498	38,709	70,730	86,019	103,164	69,657	21,503	12,730	13,125	15,023	16,915	548,833	—	—	—
	mean s.f.d.	988	729	630	1,189	1,399	1,734	1,133	350	214	213	252	275	—	3,798	119	758
1954	acre-foot	22,019	30,361	44,575	101,203	139,719	73,553	39,642	19,198	12,571	12,351	15,328	17,837	528,357	—	—	—
	mean s.f.d.	358	547	725	1,701	2,272	1,236	645	312	211	201	258	290	—	2,948	150	729
1955	acre-foot	20,438	24,625	29,734	37,567	69,544	86,660	31,014	19,293	9,840	10,100	12,526	92,959	444,300	—	—	—
	mean s.f.d.	332	443	484	631	1,131	1,456	504	314	165	164	211	1,512	—	12,711	101	614
1956	acre-foot	82,943	49,993	62,767	97,553	159,683	168,876	99,529	41,141	21,370	23,397	17,042	16,568	840,862	—	—	—
	mean s.f.d.	1,349	869	1,021	1,639	2,597	2,838	1,619	669	359	381	286	269	—	5,167	207	1,158
1957	acre-foot	18,535	26,178	31,357	38,644	79,355	132,359	41,988	17,518	12,111	13,648	14,013	18,632	444,338	—	—	—
	mean s.f.d.	301	471	510	649	1,291	2,224	683	285	204	222	235	303	—	3,411	147	614
1958	acre-foot	22,088	39,453	68,140	168,105	316,974	230,866	115,724	56,190	27,515	20,815	19,835	19,025	1,104,730	—	—	—
	mean s.f.d.	359	710	1,108	2,825	5,155	3,880	1,882	914	462	339	333	309	—	6,592	236	1,526
1959	acre-foot	20,592	22,258	33,274	40,566	39,945	32,061	18,013	10,094	9,852	9,689	10,419	11,215	257,978	—	—	—
	mean s.f.d.	335	401	541	682	650	539	293	164	166	158	175	182	—	944	104	356
1960	acre-foot	13,363	30,682	31,908	46,272	58,336	47,181	16,683	9,638	8,678	10,187	14,183	12,926	300,037	—	—	—
	mean s.f.d.	217	533	519	778	949	793	271	157	146	166	238	210	—	1,690	99	413
1961	acre-foot	11,466	10,905	14,221	24,137	29,980	24,305	8,952	16,018	8,463	7,353	9,554	12,288	177,642	—	—	—
	mean s.f.d.	186	196	231	406	488	408	146	261	142	120	161	200	—	626	99	245
1962	acre-foot	13,507	53,411	37,660	147,463	195,884	157,253	74,874	25,416	13,849	14,051	12,407	11,929	697,704	—	—	—
	mean s.f.d.	220	962	612	2,478	2,210	2,643	1,218	413	233	229	209	194	—	3,604	144	964
1963	acre-foot	27,793	101,595	42,994	69,412	137,839	163,944	105,384	47,008	28,883	27,291	25,837	23,470	801,450	—	—	—
	mean s.f.d.	452	1,829	699	1,167	2,242	2,755	1,714	765	485	444	434	382	—	15,584	160	1,107
1964	acre-foot	19,943	17,119	25,146	42,946	61,521	54,658	23,803	14,097	9,025	9,150	14,939	46,919	339,266	—	—	—
	mean s.f.d.	324	298	409	722	1,001	919	387	229	152	149	251	763	—	4,693	120	467
1965	acre-foot	46,768	31,702	36,359	80,043	131,980	149,357	95,288	49,105	22,036	17,631	29,542	30,551	720,362	—	—	—
	mean s.f.d.	761	571	591	1,345	2,146	2,510	1,550	799	370	287	496	497	—	3,322	226	995
1966	acre-foot	29,272	22,439	39,108	68,779	82,336	45,431	23,347	18,141	9,608	10,822	15,501	313,811	678,595	—	—	—
	mean s.f.d.	476	404	636	1,156	1,339	763	380	295	161	176	261	5,104	—	80,029	112	937
1967	acre-foot	63,580	65,831	86,200	99,509	269,631	311,063	243,802	94,834	55,255	36,230	34,546	35,746	1,396,227	—	—	—
	mean s.f.d.	1,034	1,185	1,402	1,672	4,385	5,228	3,965	1,542	929	589	581	581	—	7,223	419	1,928
1968	acre-foot	34,052	40,354	48,803	65,584	87,991	64,054	30,690	20,600	11,466	13,599	16,982	19,585	453,760	—	—	—
	mean s.f.d.	554	702	794	1,102	1,431	1,076	499	335	193	221	285	319	—	1,923	155	625
1969	acre-foot	178,493	111,342	157,595	378,333	617,968	496,796	254,777	111,100	49,936	36,036	34,862	34,132	2,461,370	—	—	—
	mean s.f.d.	2,903	2,005	2,563	6,358	10,050	8,349	4,144	1,807	839	586	586	555	—	24,216	344	3,400
1970	acre-foot	66,480	41,419	59,917	63,513	110,057	95,700	50,138	24,224	14,392	13,301	21,519	28,814	589,474	—	—	—
	mean s.f.d.	1,081	746	974	1,067	1,790	1,608	815	394	242	216	362	469	—	6,298	171	814

**HISTORICAL RECAP
KERN RIVER AT FIRST POINT OF MEASUREMENT**

YEAR	QUANTITY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	MAX.	MIN.	MEAN
1971	acre-feet	34,143	30,960	41,913	52,661	66,635	82,707	42,472	19,841	11,371	11,540	14,102	19,109	427,454	—	—	—
	mean s.f.d.	555	557	682	885	1,084	1,390	691	323	191	188	237	311	—	1,895	125	590
1972	acre-feet	19,864	18,827	33,213	28,288	45,965	38,531	14,936	10,927	11,334	11,431	14,703	20,408	268,427	—	—	—
	mean s.f.d.	323	327	540	475	748	648	243	178	190	186	247	332	—	951	111	370
1973	acre-feet	33,628	36,395	52,778	110,892	288,652	230,390	93,834	41,028	23,030	18,895	22,342	27,788	979,652	—	—	—
	mean s.f.d.	547	655	858	1,864	4,694	3,872	1,526	667	387	307	375	452	—	5,886	220	1,353
1974	acre-feet	50,337	29,873	74,247	114,113	183,733	167,740	69,580	39,991	23,532	21,953	19,904	23,603	818,606	—	—	—
	mean s.f.d.	819	538	1,208	1,918	2,988	2,819	1,132	650	395	357	334	384	—	4,141	220	1,130
1975	acre-feet	21,521	26,725	42,815	46,602	147,001	140,660	51,917	22,625	17,133	16,209	15,049	16,310	564,567	—	—	—
	mean s.f.d.	350	481	696	783	2,391	2,364	844	368	288	264	253	265	—	3,783	164	780
1976	acre-feet	16,308	16,994	23,074	25,924	47,151	20,930	14,749	14,573	25,097	20,523	12,954	11,191	249,468	—	—	—
	mean s.f.d.	265	295	375	436	767	352	240	237	422	334	218	182	—	1,188	142	344
1977	acre-feet	13,456	13,704	14,765	23,391	25,630	35,655	10,973	10,979	7,815	8,146	8,456	24,028	196,998	—	—	—
	mean s.f.d.	219	247	240	393	417	599	178	179	131	132	142	391	—	2,049	57	272
1978	acre-feet	46,596	116,432	175,484	181,700	363,157	354,825	194,693	74,001	61,696	29,562	26,874	28,485	1,653,505	—	—	—
	mean s.f.d.	758	2,096	2,854	3,054	5,906	5,963	3,166	1,204	1,037	481	452	463	—	10,901	350	2,284
1979	acre-feet	34,062	41,825	72,299	102,079	164,935	106,112	46,733	27,243	19,583	19,781	18,779	19,230	672,661	—	—	—
	mean s.f.d.	554	753	1,176	1,715	2,682	1,783	760	443	329	322	316	313	—	3,540	229	929
1980	acre-feet	145,545	168,887	139,620	211,608	287,825	282,877	208,715	78,143	35,068	26,955	25,006	29,708	1,639,957	—	—	—
	mean s.f.d.	2,367	2,936	2,271	3,556	4,681	4,754	3,394	1,271	589	438	420	483	—	14,171	261	2,259
1981	acre-feet	28,709	34,762	45,608	69,320	91,914	65,817	25,630	17,389	13,222	14,781	18,922	23,189	449,263	—	—	—
	mean s.f.d.	467	626	742	1,165	1,495	1,106	417	283	222	240	318	377	—	2,211	157	621
1982	acre-feet	37,682	52,996	78,724	212,963	254,985	198,748	130,098	61,956	61,716	46,306	57,116	77,849	1,271,139	—	—	—
	mean s.f.d.	613	954	1,280	3,579	4,147	3,340	2,116	1,008	1,037	753	960	1,266	—	9,075	389	1,756
1983	acre-feet	87,905	138,514	265,543	206,473	478,625	571,846	288,866	154,935	68,503	53,300	71,599	103,019	2,489,128	—	—	—
	mean s.f.d.	1,430	2,494	4,319	3,470	7,784	9,610	4,698	2,520	1,151	867	1,203	1,675	—	14,038	602	3,438
1984	acre-feet	76,054	60,926	82,738	91,359	161,613	93,114	77,046	49,698	28,306	26,428	35,020	39,495	821,797	—	—	—
	mean s.f.d.	1,237	1,059	1,346	1,535	2,628	1,565	1,253	808	476	430	589	642	—	3,305	288	1,132
1985	acre-feet	40,423	40,610	53,371	136,241	146,799	99,858	41,395	23,956	17,024	16,495	22,314	33,945	672,431	—	—	—
	mean s.f.d.	657	731	868	2,290	2,387	1,678	673	390	286	268	375	552	—	3,353	208	929
1986	acre-feet	42,668	149,966	204,775	208,147	293,335	263,794	121,398	57,160	26,567	28,330	25,341	23,458	1,444,939	—	—	—
	mean s.f.d.	694	2,700	3,330	3,498	4,771	4,433	1,974	930	446	461	426	382	—	8,296	313	1,996
1987	acre-feet	25,595	29,504	41,566	55,236	75,108	56,146	24,918	14,735	10,683	11,484	14,745	16,215	375,935	—	—	—
	mean s.f.d.	416	531	676	928	1,222	944	405	240	180	187	248	264	—	1,817	145	519
1988	acre-feet	22,677	19,815	30,210	39,584	58,350	43,140	20,969	13,454	10,733	9,283	10,955	15,515	294,685	—	—	—
	mean s.f.d.	369	344	491	665	949	725	341	219	180	151	184	252	—	1,418	118	406
1989	acre-feet	15,947	23,528	67,430	91,380	71,849	49,823	21,378	13,010	10,213	10,824	10,707	10,949	397,038	—	—	—
	mean s.f.d.	259	424	1,097	1,536	1,169	837	348	212	172	176	180	178	—	2,068	123	548
1990	acre-feet	12,916	13,127	23,048	32,019	38,600	29,345	13,380	8,386	6,428	8,834	8,340	9,148	203,571	—	—	—
	mean s.f.d.	210	236	375	538	628	493	218	136	108	144	140	149	—	845	78	281

**HISTORICAL RECAP
KERN RIVER AT FIRST POINT OF MEASUREMENT**

YEAR	QUANTITY	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL	MAX.	MIN.	MEAN
1991	acre-feet	10,931	9,215	47,341	58,092	79,763	100,423	38,265	14,854	11,040	9,358	13,940	13,067	406,289	—	—	—
	mean s.f.d.	178	166	770	976	1,297	1,688	622	242	186	152	234	213	—	5,025	109	561
1992	acre-feet	14,069	22,314	26,410	55,448	74,394	32,987	16,324	11,942	7,896	9,414	11,054	14,577	296,829	—	—	—
	mean s.f.d.	229	388	430	932	1,210	554	265	194	133	153	186	237	—	1,584	104	409
1993	acre-feet	39,221	39,564	94,231	133,993	200,864	162,420	87,414	32,763	16,506	14,223	14,398	18,163	853,760	—	—	—
	mean s.f.d.	638	712	1,533	2,252	3,267	2,730	1,422	533	277	231	242	295	—	3,957	203	1,179
1994	acre-feet	18,936	23,946	38,592	46,489	67,224	56,223	21,068	11,939	8,981	14,771	12,780	15,507	336,456	—	—	—
	mean s.f.d.	308	431	628	781	1,093	945	343	194	151	240	215	252	—	1,686	121	465
1995	acre-feet	46,832	48,774	156,387	143,244	255,046	293,129	237,802	89,657	39,108	24,093	22,268	28,820	1,385,160	—	—	—
	mean s.f.d.	762	878	2,543	2,407	4,148	4,926	3,867	1,458	657	392	374	469	—	8,420	240	1,913
1996	acre-feet	40,304	98,549	108,042	147,959	225,987	154,883	70,502	32,255	16,651	15,788	40,903	86,438	1,038,261	—	—	—
	mean s.f.d.	655	1,713	1,757	2,487	3,675	2,603	1,147	525	280	257	687	1,406	—	9,024	222	1,430
1997	acre-feet	246,022	104,771	120,448	142,909	214,290	142,358	71,919	38,047	26,039	20,926	23,708	30,532	1,181,969	—	—	—
	mean s.f.d.	4,001	1,887	1,959	2,402	3,485	2,392	1,170	619	438	340	398	497	—	19,794	284	1,633
1998	acre-feet	45,927	136,340	151,329	189,663	308,440	371,835	267,435	94,510	50,959	35,008	33,302	33,219	1,717,967	—	—	—
	mean s.f.d.	747	2,455	2,461	3,187	5,016	6,249	4,349	1,537	856	569	560	540	—	8,477	436	2,373

**KERN RIVER AT FIRST POINT OF MEASUREMENT
HISTORICAL MONTHLY NATURAL FLOWS**

YEAR: 1998

October 1893 to Date...

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Mean Monthly Flow (acre-feet)	37,967	44,534	66,723	101,106	158,411	142,080	74,401	32,054	18,768	17,707	20,061	28,188	742,000
Mean Monthly Flow (second foot days)	617	795	1,085	1,699	2,576	2,388	1,210	521	315	288	337	458	1,024
Maximum Monthly Flow (acre-feet)	246,022	202,510	378,116	481,749	617,968	571,846	399,841	154,935	68,503	53,300	96,968	313,811	
Minimum Monthly Flow (acre-feet)	10,931	9,215	14,221	23,391	25,630	14,069	8,225	5,881	5,494	6,817	8,241	9,148	
Number Months of Record	105	105	105	105	105	105	105	105	105	106	106	106	
Cumulative Monthly Flow (All Months - acre-feet)	3,986,562	4,676,097	7,005,966	10,616,180	16,633,194	14,918,368	7,812,125	3,365,698	1,970,590	1,876,979	2,126,479	2,987,898	
Median Monthly Flow (acre-feet)	23,679	31,002	48,539	77,562	122,309	115,442	50,971	22,449	14,299	14,739	16,215	19,795	557,001
Median Monthly Flow (second foot days)	385	553	789	1,303	1,989	1,940	829	365	240	240	273	322	769

MEAN APRIL - JULY RUNOFF TO DATE = 475,998 AcFt MEAN MARCH - OCTOBER RUNOFF TO DATE = 611,250 AcFt
 MEDIAN APRIL - JULY RUNOFF TO DATE = 366,284 AcFt MEDIAN MARCH - OCTOBER RUNOFF TO DATE = 466,310 AcFt

Kern River Mean Natural Flow at First Point of Measurement
(1893 to Date)

Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	463	752	879	1,323	2,169	2,750	1,742	741	375	306	295	358
2	516	716	913	1,330	2,195	2,719	1,720	717	371	303	292	361
3	613	671	995	1,346	2,233	2,706	1,695	700	368	300	290	376
4	513	624	969	1,341	2,297	2,701	1,667	682	359	297	287	400
5	506	624	1,000	1,372	2,342	2,712	1,608	656	372	290	289	510
6	482	686	960	1,399	2,381	2,720	1,560	641	377	297	289	1,130
7	474	819	917	1,420	2,408	2,719	1,511	625	353	287	291	534
8	479	760	933	1,446	2,448	2,697	1,464	610	340	293	290	437
9	460	805	1,022	1,475	2,484	2,647	1,421	595	329	294	291	445
10	475	770	1,066	1,503	2,509	2,628	1,380	585	318	289	297	454
11	494	704	1,071	1,604	2,514	2,590	1,330	575	313	286	311	466
12	558	719	1,021	1,622	2,517	2,570	1,294	562	317	283	313	448
13	578	828	1,026	1,614	2,544	2,550	1,263	536	307	283	308	424
14	680	813	1,035	1,630	2,575	2,512	1,240	517	297	278	312	397
15	599	810	1,003	1,650	2,595	2,475	1,202	510	296	279	309	395
16	611	789	1,037	1,695	2,613	2,424	1,175	506	291	279	310	386
17	599	814	1,065	1,717	2,638	2,391	1,142	494	289	286	320	389
18	669	918	1,129	1,748	2,670	2,348	1,113	491	286	283	336	381
19	637	919	1,119	1,793	2,708	2,311	1,079	488	280	282	471	374
20	591	908	1,111	1,844	2,707	2,277	1,053	475	280	284	419	371
21	601	851	1,149	1,891	2,706	2,243	1,017	455	280	282	372	379
22	703	852	1,136	1,930	2,715	2,209	986	437	280	279	384	410
23	723	876	1,141	1,946	2,704	2,162	971	427	278	280	369	545
24	725	846	1,153	1,964	2,712	2,100	970	412	278	279	389	494
25	966	849	1,202	1,984	2,733	2,046	928	402	295	277	388	492
26	942	842	1,228	2,018	2,778	1,982	898	389	337	284	368	468
27	784	845	1,263	2,041	2,783	1,938	877	388	311	288	383	503
28	735	832	1,267	2,086	2,788	1,887	846	391	293	290	377	477
29	651	878	1,265	2,103	2,806	1,836	812	390	298	291	366	457
30	628	-	1,265	2,139	2,800	1,782	789	385	294	296	398	498
31	687	-	1,300	-	2,794	-	757	379	-	302	-	452
TOTAL	19,142	22,453	33,640	50,974	79,866	71,632	37,510	16,161	9,462	8,927	10,114	14,211
MAXIMUM DAY	966	919	1,300	2,139	2,806	2,750	1,742	741	377	306	471	1,130
MINIMUM DAY	460	624	879	1,323	2,169	1,782	757	379	278	277	287	358
MEAN	617	795	1,085	1,699	2,576	2,388	1,210	521	315	288	337	458
TOTAL AC.FT.	37,967	44,534	66,723	101,106	158,411	142,080	74,401	32,054	18,768	17,707	20,061	28,188
WHOLE YEAR:-	TOTAL,	374,092	MAX.,	2,806	MIN.,	277	MEAN,	1,024	TOTAL AC.FT.,		742,000	

Kern River Median Natural Flow at First Point of Measurement
(1893 to Date) Year : 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	347	442	616	1,057	1,621	2,242	1,314	510	282	240	249	293
2	346	441	635	1,044	1,655	2,255	1,244	487	269	239	260	283
3	345	452	647	1,015	1,661	2,266	1,206	482	258	233	254	307
4	352	461	650	1,045	1,742	2,292	1,198	476	265	242	255	319
5	353	473	700	1,085	1,765	2,213	1,148	457	260	239	260	324
6	364	481	694	1,120	1,722	2,215	1,048	427	262	231	258	328
7	368	501	653	1,221	1,708	2,423	1,090	434	259	235	261	317
8	371	524	688	1,207	1,765	2,331	1,042	426	252	236	260	313
9	379	542	668	1,230	1,880	2,314	1,001	397	255	241	259	313
10	365	561	642	1,280	1,919	2,312	942	384	251	232	265	306
11	367	572	668	1,199	1,903	2,295	936	377	248	235	264	314
12	386	564	671	1,258	1,906	2,297	905	384	245	233	268	315
13	385	582	623	1,233	2,035	2,271	852	375	238	235	271	319
14	391	562	694	1,250	2,054	2,210	845	352	230	230	274	323
15	372	537	723	1,178	1,950	2,097	807	345	242	232	273	322
16	385	570	719	1,218	1,938	1,980	742	366	240	236	271	329
17	373	612	739	1,313	2,091	1,895	743	350	232	235	270	323
18	373	609	764	1,281	2,221	1,839	740	331	230	242	284	315
19	385	617	852	1,351	2,152	1,737	720	327	233	248	282	321
20	401	594	880	1,337	2,096	1,651	734	316	221	247	292	322
21	393	577	906	1,451	2,064	1,666	720	311	230	245	270	315
22	406	581	891	1,447	2,040	1,641	664	301	228	238	276	320
23	402	575	888	1,444	2,048	1,674	613	326	221	239	289	339
24	417	580	879	1,548	2,114	1,680	605	311	214	240	288	335
25	412	601	922	1,563	2,146	1,553	609	303	217	237	294	337
26	397	605	993	1,559	2,114	1,442	582	293	229	246	288	327
27	404	622	1,028	1,530	2,169	1,386	560	307	223	252	285	327
28	404	639	995	1,523	2,268	1,368	533	292	221	250	281	341
29	419	642	976	1,504	2,294	1,348	520	296	222	251	285	337
30	433	-	1,024	1,613	2,331	1,309	526	283	232	245	289	342
31	443	-	1,044	-	2,292	-	509	292	-	247	-	354
TOTAL	11,938	15,630	24,472	39,104	61,664	58,202	25,698	11,318	7,209	7,431	8,175	9,980
MAXIMUM DAY	443	642	1,044	1,613	2,331	2,423	1,314	510	282	252	294	354
MINIMUM DAY	345	441	616	1,015	1,621	1,309	509	283	214	230	249	283
MEAN	385	553	789	1,303	1,989	1,940	829	365	240	240	273	322
TOTAL AC.FT.	23,679	31,002	48,539	77,562	122,309	115,442	50,971	22,449	14,299	14,739	16,215	19,795
WHOLE YEAR:-	TOTAL,	280,821	MAX.,	2,423	MIN.,	214	MEAN,	769	TOTAL AC.FT.,	557,001		

KERN RIVER REGULATED FLOW AT FIRST POINT OF MEASUREMENT (1954 to Date) RECAPITULATION IN ACRE-FEET

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1954	22,019	30,361	44,575	79,089	80,539	81,189	61,059	39,830	12,114	14,450	17,500	17,595	510,320
1955	19,795	22,058	34,671	38,874	48,188	72,196	43,259	25,065	22,936	10,399	13,599	26,743	367,783
1956	41,377	40,326	62,779	49,291	94,887	115,428	124,007	99,489	52,098	42,294	16,990	16,594	755,500
1957	17,958	22,425	34,935	39,677	52,885	96,466	70,175	39,943	22,471	17,282	13,795	17,847	445,859
1958	19,137	28,175	42,125	78,472	131,421	181,305	143,722	143,722	61,519	49,825	25,095	18,825	967,511
1959	20,811	20,991	37,767	29,936	27,463	94,028	59,817	22,699	8,700	8,700	9,786	10,643	353,165
1960	12,516	17,405	24,044	25,041	47,986	81,481	38,991	26,396	13,154	10,483	13,803	12,798	324,088
1961	11,280	10,736	14,017	16,318	16,780	19,321	25,222	21,316	13,404	7,267	9,281	12,121	177,063
1962	13,121	27,435	44,838	95,445	87,187	112,437	113,318	40,778	26,164	22,623	12,448	12,054	607,848
1963	12,067	24,175	32,959	38,914	54,756	80,063	127,710	118,179	68,368	64,828	31,174	23,044	676,237
1964	20,356	21,152	28,532	27,485	28,451	76,268	71,078	31,323	10,989	8,852	14,259	22,879	361,624
1965	35,784	35,907	41,383	39,399	61,313	85,934	96,236	75,497	52,397	47,220	34,356	28,877	634,303
1966	29,978	22,752	50,933	44,634	37,289	67,486	68,338	51,110	19,535	14,739	15,265	82,447	504,506
1967	146,180	40,516	57,923	82,732	190,249	200,743	183,566	240,154	146,509	85,002	56,799	35,482	1,465,855
1968	33,088	36,284	44,904	45,035	52,156	88,046	82,937	56,584	13,656	13,886	16,365	14,085	497,026
1969	50,499	106,247	237,265	378,817	332,015	374,787	263,903	221,738	121,359	102,494	90,523	34,122	2,313,769
1970	42,299	32,206	52,489	60,101	53,698	86,904	94,112	88,421	35,667	21,285	18,228	15,844	601,254
1971	25,978	35,520	48,589	30,809	31,950	57,322	82,128	64,643	23,520	12,184	12,839	17,169	442,651
1972	19,527	22,094	32,130	29,760	32,410	44,965	47,996	31,579	11,560	10,286	12,460	16,524	311,291
1973	21,356	26,214	38,878	66,541	97,172	143,554	161,028	102,660	47,883	29,457	24,811	25,579	785,133
1974	35,447	45,969	49,248	47,151	57,477	96,807	120,476	109,093	69,648	54,365	37,085	23,137	745,903
1975	21,221	34,844	45,041	38,444	57,142	95,197	108,932	89,738	34,139	17,072	15,108	15,213	572,091
1976	14,690	31,789	45,041	23,609	28,901	52,300	54,190	30,742	21,888	19,440	12,946	11,341	320,784
1977	14,051	14,380	15,925	18,778	17,431	25,813	32,951	21,888	8,765	7,660	8,287	14,773	200,702
1978	26,132	50,285	49,222	46,508	266,073	236,549	198,587	146,660	32,267	93,098	70,927	30,458	1,390,675
1979	32,549	31,793	45,903	49,503	62,557	109,987	126,343	107,605	73,234	22,792	18,855	18,909	656,068
1980	55,976	81,590	157,503	185,089	167,415	194,134	238,716	200,338	106,516	82,893	61,644	28,838	1,560,652
1981	25,482	27,013	40,594	41,768	46,348	78,405	80,906	51,310	14,315	14,324	18,426	21,578	460,469
1982	30,363	43,374	49,110	57,060	86,469	155,508	166,492	156,341	88,411	104,122	101,403	82,435	1,121,088
1983	57,566	71,165	152,862	286,605	370,706	419,760	387,505	176,194	153,814	117,233	97,616	90,549	2,381,575
1984	84,280	96,998	68,614	49,793	67,327	89,409	110,785	96,734	43,180	41,726	37,420	47,770	834,036
1985	40,133	48,686	53,821	56,358	72,506	98,757	111,385	77,728	34,973	25,305	20,333	28,986	686,971
1986	31,277	39,039	95,946	172,221	205,204	233,197	193,767	141,114	67,569	82,792	45,227	24,208	1,331,561
1987	24,117	28,919	43,408	44,894	43,609	68,424	73,047	42,545	18,589	15,824	14,269	14,664	432,309
1988	20,793	26,906	35,036	33,769	31,815	50,995	60,458	28,346	13,529	9,025	10,318	14,483	335,473
1989	16,869	21,568	32,092	38,575	39,632	56,527	55,765	36,204	14,241	12,773	10,788	13,739	348,773
1990	12,926	16,124	25,071	24,422	25,454	30,030	31,129	21,519	6,885	8,979	8,037	8,925	219,501
1991	10,627	9,112	27,814	28,937	30,539	62,997	63,654	48,196	12,490	11,353	13,381	14,394	333,494
1992	13,593	20,711	25,451	25,777	33,548	38,600	40,967	31,928	10,195	7,789	10,383	13,880	272,822
1993	22,062	25,426	52,479	45,489	35,322	107,357	118,677	89,671	51,846	16,072	14,021	18,264	642,339
1994	19,622	28,720	41,819	41,256	35,411	69,470	75,175	53,484	16,072	13,745	12,060	15,527	422,361
1995	19,839	20,858	57,225	113,865	138,034	186,960	195,546	205,924	102,593	71,157	57,106	27,993	1,197,100
1996	28,994	34,576	47,226	59,046	148,419	153,050	147,913	113,232	64,770	43,593	45,201	82,016	968,036
1997	63,352	142,831	158,678	95,933	120,789	133,315	133,724	109,452	55,240	42,278	46,977	31,894	1,133,463
1998	45,636	93,987	97,468	132,317	239,423	284,408	239,607	200,713	114,224	89,980	93,054	31,739	1,662,556
MAXIMUM	146,180	142,831	237,265	378,817	370,706	419,760	387,505	240,154	153,814	117,233	101,403	90,549	2,381,575
MINIMUM	10,627	9,112	14,017	16,318	16,780	19,321	25,222	21,316	6,885	7,267	8,037	8,925	177,063
Acft TOTAL	1,382,723	1,696,861	2,505,081	3,153,484	4,014,346	5,287,879	5,169,467	3,925,815	2,015,160	1,637,599	1,340,248	1,186,925	33,315,588
Acft AVERAGE	30,727	37,708	55,668	70,077	89,208	117,508	114,877	87,240	44,781	36,391	29,783	26,376	740,344
S.F.D. AVERAGE	500	673	905	1,178	1,451	1,975	1,868	1,419	753	592	501	429	1,022
% OF TOTAL	4.15%	5.09%	7.52%	9.47%	12.05%	15.87%	15.52%	11.78%	6.05%	4.92%	4.02%	3.56%	100.00%

Kern River Mean Regulated Flow at First Point of Measurement
(1954 to Date)

Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	466	552	842	1,001	1,350	1,615	1,984	1,616	960	687	497	458
2	477	567	832	1,025	1,366	1,664	1,932	1,592	937	699	491	424
3	469	585	836	1,029	1,360	1,719	1,937	1,599	915	684	491	409
4	464	587	852	1,025	1,392	1,777	1,898	1,593	903	670	496	412
5	463	586	850	1,032	1,394	1,817	1,924	1,610	875	664	501	426
6	464	597	848	1,026	1,395	1,842	1,946	1,624	846	690	506	511
7	468	597	857	1,052	1,388	1,882	1,958	1,602	824	659	500	431
8	465	602	853	1,093	1,417	1,906	1,980	1,583	808	645	501	418
9	456	706	850	1,132	1,424	1,920	1,984	1,600	789	646	504	414
10	447	683	878	1,153	1,421	1,937	1,970	1,604	773	635	509	410
11	444	641	909	1,165	1,406	1,954	1,949	1,594	762	612	520	407
12	448	635	880	1,172	1,421	1,976	1,943	1,561	745	579	516	413
13	460	648	892	1,174	1,422	1,992	1,930	1,538	735	578	518	407
14	467	674	882	1,182	1,415	2,017	1,936	1,511	733	575	504	403
15	470	673	901	1,201	1,400	2,020	1,936	1,493	727	568	501	410
16	496	664	907	1,209	1,406	2,043	1,919	1,480	723	559	505	403
17	496	663	914	1,214	1,405	2,101	1,888	1,455	716	545	510	412
18	507	673	904	1,216	1,423	2,116	1,851	1,467	700	551	501	431
19	514	686	903	1,231	1,444	2,124	1,840	1,435	686	554	503	429
20	508	732	918	1,227	1,484	2,100	1,804	1,396	680	561	505	424
21	501	729	935	1,227	1,505	2,111	1,840	1,358	677	566	507	422
22	501	741	938	1,235	1,515	2,125	1,825	1,300	677	558	501	425
23	510	779	949	1,249	1,520	2,106	1,822	1,277	683	556	490	425
24	551	772	958	1,268	1,516	2,126	1,803	1,258	681	552	473	434
25	574	754	958	1,275	1,513	2,117	1,780	1,226	680	555	488	434
26	600	759	964	1,281	1,503	2,096	1,770	1,187	674	549	495	434
27	583	770	972	1,297	1,511	2,026	1,756	1,162	668	541	495	448
28	559	786	972	1,297	1,516	1,998	1,729	1,132	665	534	500	454
29	545	696	953	1,309	1,538	2,018	1,715	1,087	677	535	493	451
30	553	-	972	1,334	1,579	1,999	1,702	1,041	658	530	495	455
31	565	-	987	-	1,627	-	1,666	1,002	-	510	-	464
TOTAL	15,491	19,011	28,066	35,331	44,976	59,244	57,917	43,983	22,577	18,347	15,016	13,298
MAXIMUM INSTAN.	3,331	8,280	5,691	7,394	6,675	7,576	7,327	4,694	3,126	7,000	2,275	9,289
MINIMUM INSTAN.	111	67	143	181	223	215	349	84	64	40	66	22
MEAN	500	673	905	1,178	1,451	1,975	1,868	1,419	753	592	501	429
TOTAL AC.FT.	30,727	37,708	55,668	70,077	89,208	117,508	114,877	87,240	44,781	36,391	29,783	26,376
WHOLE YEAR--	TOTAL,	373,257	MAX.,	9,289	MIN.,	22	MEAN,	1,022	TOTAL AC.FT.,	740,344		

ACCRETIONS TO KERN RIVER BELOW ISABELLA DAM

APRIL 1954 TO DATE

Year: 1998

Quantities in acre-feet except where noted...

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1954				4,038	2,977	1,479	3,897	2,559	514	626	966	1,870	
1955	2,358	1,921	1,821	2,386	1,390	3,298	1,929	402	(314)	551	1,065	2,524	19,331
1956	5,828	1,732	2,448	2,860	2,366	1,406	2,347	3,061	1,119	5,799	1,356	1,452	31,774
1957	2,114	886	1,097	169	1,251	397	918	1,114	(369)	48	1,743	1,057	9,425
1958	1,494	2,918	6,644	14,550	4,681	(801)	(4,348)	5,125	1,735	222	1,168	1,289	34,677
1959	1,299	1,068	1,544	1,073	540	(936)	3,318	119	(383)	(880)	438	797	7,997
1960	1,071	2,739	1,633	1,581	92	1,601	1,311	1,559	149	502	1,060	1,099	14,397
1961	815	757	914	971	787	126	264	814	734	257	673	1,196	8,308
1962	1,085	6,284	5,125	7,050	4,778	2,709	2,271	1,753	633	1,041	835	816	34,380
1963	1,005	2,190	1,900	1,827	3,826	1,339	2,855	4,520	2,424	2,710	2,045	1,936	28,577
1964	1,692	472	2,378	3,237	1,275	2,408	1,793	577	346	432	926	2,729	18,265
1965	3,172	1,460	2,608	4,776	811	(367)	151	(2,100)	(46)	1,941	1,036	2,285	15,727
1966	2,286	997	1,303	2,095	803	(63)	1,229	1,932	(58)	1,214	1,740	14,810	28,288
1967	3,856	3,320	3,094	3,945	1,998	7,531	5,736	10,549	1,517	1,296	2,619	2,688	48,149
1968	1,870	1,300	1,400	1,224	1,383	1,757	2,220	1,993	418	936	1,687	2,428	18,616
1969	19,079	17,945	23,687	40,391	20,384	11,064	18,659	17,163	5,750	2,480	2,457	3,381	182,440
1970	4,742	2,450	3,028	1,168	186	2,916	869	1,434	739	655	2,794	1,814	22,795
1971	2,309	1,547	1,202	1,459	2,154	1,500	808	707	211	156	785	1,833	14,671
1972	1,634	1,204	975	1,003	501	844	180	42	16	777	222	1,075	8,473
1973	3,146	4,182	7,686	7,394	6,123	3,811	1,882	3,879	4,168	1,982	1,890	2,699	48,842
1974	4,393	2,003	5,145	6,054	1,704	1,011	817	2,357	3,055	2,717	2,303	2,894	34,453
1975		1,299	2,925	2,641	4,023	2,265	1,565	55	699	497	189	746	17,608
1976	1,646	1,503	1,373	1,562	386	1,675	833	821	1,914	1,679	1,172	1,120	15,684
1977	1,174	1,652	1,844	954	1,124	1,087	622	1,001	683	184	260	2,130	12,715
1978	4,577	26,353	12,041	11,512	11,745	4,945	7,597	736	2,682	1,438	2,039	1,656	87,321
1979	1,724	3,158	5,330	2,675	1,718	494	(415)	234	516	1,428	476	1,544	18,882
1980	6,814	9,429	8,860	7,525	3,543	7,595	9,802	8,239	(86)	2	(58)	1,426	63,091
1981	2,861	1,313	2,041	1,858	1,129	140	148	1,786	958	764	459	1,798	15,255
1982	3,805	3,501	7,352	10,277	1,973	3,885	5,471	3,876	1,128	1,256	1,897	4,141	48,562
1983	6,887	17,322	37,912	24,107	12,710	4,711	3,097	2,414	7,454	6,473	5,718	9,390	138,195
1984	7,549	5,329	5,418	3,381	2,701	2,213	4,495	3,970	1,434	328	1,460	3,897	42,175
1985	3,759	3,640	3,865	2,714	(625)	(593)	2,697	517	279	1,497	2,264	3,501	23,515
1986	3,734	6,350	8,619	9,540	9,416	13,375	13,999	11,019	2,280	2,850	2,957	2,192	86,331
1987	3,123	2,239	3,822	738	2,535	1,611	1,486	1,149	696	901	418	669	19,387
1988	713	764	1,228	(51)	(15)	495	(485)	100	534	415	1,042	870	5,610
1989	551	962	3,415	1,188	2,049	1,464	(716)	671	(9)	376	150	973	11,080
1990	1,471	1,278	1,669	42	298	59	(1,580)	228	170	571	763	1,300	6,269
1991	1,351	683	3,099	2,983	849	(236)	376	662	(66)	(26)	1,205	1,429	12,309
1992	1,384	2,297	1,800	1,196	(294)	(288)	16	267	352	(222)	(433)	1,183	7,258
1993	3,131	3,757	4,177	2,110	(1,854)	(1,528)	(638)	(1,789)	366	903	308	1,019	9,962
1994	604	1,351	446	226	(1,152)	(367)	258	746	(89)	208	537	1,435	4,203
1995	4,978	2,805	10,025	5,664	10,025	11,210	10,055	11,347	1,380	2,463	1,784	3,132	74,868
1996	3,627	10,773	8,346	4,362	7,908	3,906	2,628	2,405	531	716	1,360	5,573	52,135
1997	14,168	9,981	7,447	911	2,616	4,619	809	(1,658)	2,448	(1,509)	(1,397)	4,441	42,876
1998	5,482	34,907	24,539	25,855	30,900	25,533	16,059	12,476	4,730	(121)	155	3,425	183,940
Total	151,065	210,021	243,225	233,221	163,718	131,300	127,285	120,831	53,348	48,533	53,533	111,662	1,647,742
Maximum	19,079	34,907	37,912	40,391	30,900	25,533	18,659	17,163	7,454	6,473	5,718	14,810	183,940
Minimum	551	472	446	(51)	(1,854)	(1,528)	(4,348)	(2,100)	(383)	(1,509)	(1,397)	669	
Mean	3,433	4,773	5,528	5,183	3,638	2,918	2,829	2,685	1,186	1,079	1,190	2,481	36,922
Mean CFS	56	85	90	87	59	49	46	44	20	18	20	40	51

Year: 1998

Isabella Reservoir Daily Mean Storage (1954-1998)

MIDNIGHT STORAGE IN ACRE-FEET

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	151,860	164,633	175,883	189,242	218,072	286,383	305,785	262,464	206,669	180,073	159,752	149,775
2	152,129	165,070	176,299	190,048	219,696	288,579	305,270	260,736	205,494	179,229	159,305	149,660
3	152,875	165,206	176,648	190,767	221,320	290,635	304,684	258,905	204,329	178,206	158,862	149,719
4	153,218	165,305	177,126	191,428	223,038	292,505	304,107	257,035	203,203	177,629	158,405	149,688
5	153,490	165,428	177,727	192,050	224,705	294,323	303,354	255,079	202,224	176,832	157,919	150,214
6	153,654	165,591	178,091	192,698	226,488	296,031	302,504	253,054	201,318	175,997	157,460	153,457
7	153,800	165,805	178,354	193,297	228,225	297,730	301,536	251,060	200,362	175,220	156,992	154,120
8	153,946	166,135	178,692	193,827	229,954	299,265	300,414	249,133	199,398	174,435	156,548	154,302
9	154,057	166,659	178,988	194,414	231,810	300,667	299,221	247,080	198,432	173,653	156,085	154,403
10	154,186	167,141	179,384	195,000	233,814	301,983	297,971	245,028	197,463	172,876	155,644	154,533
11	154,383	167,397	179,887	195,961	235,781	303,134	296,645	243,030	196,525	172,145	155,227	154,770
12	154,889	167,613	180,261	196,966	237,729	304,172	295,233	241,046	195,649	171,496	154,784	154,884
13	155,537	168,137	180,545	197,904	239,773	304,992	293,827	239,031	194,739	170,815	154,376	154,949
14	156,186	168,620	180,877	198,796	241,827	305,752	292,413	237,050	193,811	170,147	153,977	154,969
15	156,556	169,073	181,106	199,679	243,982	306,372	290,901	235,083	192,886	169,492	153,599	154,968
16	157,094	169,514	181,346	200,535	246,199	306,898	289,410	233,172	191,957	168,873	153,192	154,960
17	157,535	169,940	181,658	201,439	248,449	307,251	287,890	231,240	191,056	168,305	152,846	154,929
18	157,766	170,880	181,932	202,363	250,799	307,469	286,407	229,289	190,181	167,710	152,580	154,880
19	158,124	171,698	182,241	203,299	253,324	307,711	284,860	227,423	189,319	167,104	152,271	154,724
20	158,418	172,549	182,519	204,311	255,862	307,964	283,256	225,597	188,463	166,513	151,933	154,721
21	158,757	173,085	182,909	205,388	258,373	308,116	281,567	223,774	187,645	165,859	151,652	154,653
22	159,089	173,555	183,361	206,518	260,953	308,184	279,918	222,045	186,804	165,237	151,470	154,734
23	159,401	174,019	183,812	207,620	263,542	308,210	278,226	220,315	185,950	164,625	151,239	155,417
24	159,864	174,360	184,295	208,682	266,105	308,066	276,534	218,622	185,121	164,029	151,068	155,805
25	161,233	174,759	184,786	209,779	268,585	307,862	274,803	216,941	184,360	163,404	150,946	156,141
26	162,119	175,263	185,292	210,892	271,122	307,627	273,021	215,303	183,798	162,820	150,727	156,418
27	162,662	175,329	185,865	212,110	273,675	307,441	271,278	213,696	183,125	162,293	150,437	156,811
28	163,009	175,557	186,523	213,443	276,240	307,191	269,526	212,159	182,364	161,763	150,182	157,067
29	163,239	186,961	187,120	214,875	278,853	306,793	267,733	210,682	181,605	161,455	149,968	157,178
30	163,409	-	187,716	216,443	281,379	306,319	265,962	209,282	180,851	160,741	149,907	157,246
31	163,873	-	188,456	-	283,924	-	264,177	207,930	-	160,287	-	157,281
MAXIMUM DAY	163,873	186,961	188,456	216,443	283,924	308,210	305,785	262,464	206,669	180,073	159,752	157,281
MINIMUM DAY	151,860	164,633	175,883	189,242	218,072	286,383	264,177	207,930	180,851	160,287	149,907	149,660

HISTORICAL INFLOWS TO LAKE ISABELLA

Runoff in 1,000 acre-feet

WATER YEAR ENDING	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANNUAL TOTAL
1955	11.8	14.4	16.0	18.1	22.7	28.1	35.1	67.9	83.4	29.1	18.9	10.3	355.8
1956	9.5	11.5	90.4	77.1	48.2	59.9	94.5	156.3	167.4	97.2	38.1	20.3	870.4
1957	17.6	15.7	15.1	16.4	25.3	30.3	38.5	78.1	131.8	41.0	16.4	12.5	438.7
1958	13.6	13.3	17.6	20.6	36.5	61.5	153.6	312.3	231.7	120.1	51.1	25.8	1057.7
1959	20.6	18.7	17.8	19.3	21.2	31.7	39.5	39.4	33.0	15.8	9.9	9.6	276.5
1960	9.6	9.7	10.3	12.2	27.9	30.2	44.5	58.0	45.5	15.1	7.9	8.4	279.3
1961	9.5	13.0	11.7	10.6	10.0	13.1	23.0	29.1	23.8	8.5	15.1	7.6	175.0
1962	7.1	8.8	11.0	12.4	47.1	32.4	140.5	130.8	154.7	72.1	23.7	13.1	653.7
1963	12.9	11.6	11.1	26.5	99.6	41.0	67.6	134.0	162.3	102.6	42.2	26.5	737.9
1964	24.5	23.8	21.5	16.2	16.6	22.7	39.6	60.0	52.3	22.0	13.3	8.6	323.1
1965	8.7	13.9	44.2	43.5	30.2	33.2	74.5	131.0	149.9	94.9	50.7	22.0	696.7
1966	15.6	13.7	28.3	27.0	21.4	37.8	66.7	81.5	45.4	21.9	16.1	9.6	399.7
1967	9.5	13.7	298.0	59.6	62.5	83.2	95.5	268.1	302.9	238.1	90.5	53.5	1576.1
1968	34.9	31.9	33.0	32.2	38.9	47.1	64.4	86.7	62.1	28.4	18.4	11.3	489.3
1969	12.6	15.3	17.1	159.4	93.4	133.9	337.4	597.5	485.6	236.0	93.8	44.3	2226.3
1970	33.3	32.4	30.9	61.8	39.0	56.9	62.1	109.8	92.7	49.2	22.7	13.4	604.2
1971	12.7	18.8	26.8	31.5	29.4	40.6	51.1	64.4	81.1	41.6	18.9	11.1	428.0
1972	11.4	13.4	17.2	18.2	17.6	32.3	27.3	45.4	37.7	14.6	10.7	11.2	257.0
1973	10.6	14.5	19.3	30.5	32.2	45.0	103.9	282.5	226.5	91.8	36.9	18.8	912.5
1974	16.8	20.4	25.1	45.6	28.1	68.8	108.1	182.2	166.7	68.6	37.6	20.4	788.4
1975	19.1	17.6	20.6	21.1	25.3	39.9	43.9	142.8	138.8	50.3	22.4	16.2	558.0
1976	15.1	14.7	15.6	14.6	15.3	21.8	24.2	47.0	18.9	13.9	13.7	23.1	237.9
1977	18.7	11.7	10.0	12.2	12.0	12.6	22.4	24.3	34.5	10.3	9.8	7.0	185.5
1978	7.9	8.1	21.8	42.0	90.0	163.4	170.2	352.2	351.9	188.1	73.1	58.9	1527.6
1979	28.1	24.3	27.2	32.2	38.7	66.9	99.4	164.0	105.5	47.0	26.9	19.1	679.3
1980	18.2	18.2	17.7	138.7	159.4	130.7	204.1	284.4	274.9	198.9	69.9	35.1	1550.2
1981	27.1	24.9	28.0	25.9	33.4	43.6	67.5	90.8	65.7	25.5	15.6	12.2	460.2
1982	14.0	18.5	21.4	33.9	49.5	71.4	202.9	253.0	194.9	124.6	58.1	60.6	1102.8
1983	45.1	55.2	73.7	81.0	121.2	227.6	182.2	465.9	567.1	285.8	152.5	61.0	2318.3
1984	46.9	65.9	93.6	69.1	55.0	77.3	88.0	159.4	90.7	72.4	45.6	26.9	890.8
1985	26.2	33.6	35.6	36.7	37.0	49.5	133.6	147.4	100.4	38.7	23.4	16.7	678.8
1986	15.1	20.0	30.4	38.9	143.6	196.2	198.6	283.9	250.4	107.4	46.1	24.3	1354.9
1987	25.5	22.4	21.3	22.5	27.3	37.7	54.5	72.6	54.5	23.4	13.6	10.0	385.3
1988	10.6	14.3	15.5	22.0	19.1	29.0	39.6	58.4	42.6	21.5	13.4	10.2	296.2
1989	8.9	9.9	14.6	15.4	22.6	64.0	90.2	69.8	48.4	22.1	12.3	10.2	388.4
1990	10.4	10.5	10.0	11.4	11.8	21.4	32.0	38.5	29.1	14.9	8.2	6.3	204.5
1991	8.3	7.6	7.8	9.6	8.5	44.2	55.2	78.9	100.7	37.9	14.1	11.1	383.9
1992	9.4	12.7	11.6	12.7	20.0	24.6	54.2	74.7	33.3	16.3	11.7	7.5	288.7
1993	9.6	11.5	13.4	36.1	35.8	90.1	131.9	202.9	163.9	88.0	34.6	16.1	833.9
1994	13.4	14.1	17.1	18.3	22.6	38.1	46.3	68.4	56.6	20.8	11.2	9.1	336.0
1995	14.6	12.2	14.1	41.9	45.9	146.4	137.6	245.0	281.9	227.7	78.3	37.7	1283.3
1996	21.7	20.4	25.7	36.7	87.8	99.7	143.7	218.1	150.6	67.9	29.9	16.0	918.2
1997	15.1	39.5	80.9	231.9	94.8	113.0	142.0	211.7	137.7	71.1	39.7	23.6	1201.0
1998	22.5	25.1	26.1	40.4	101.4	126.8	163.9	277.5	346.3	251.4	82.0	46.2	1509.6
MEAN	17.1	19.5	32.2	40.6	46.0	65.1	95.4	157.9	144.9	78.1	35.0	21.0	752.7

PRECIPITATION DATA -- ISABELLA DAM & RESERVOIR
OCTOBER 1949 TO DATE
(In Inches)

WATER YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1949-50	0.05	0.65	1.32	1.37	2.60	1.02	0.44	0.00	0.00	0.23	0.11	0.21	8.00
1950-51	0.08	3.16	0.98	1.12	0.18	0.11	0.93	0.03	0.00	0.00	0.00	0.00	6.59
1951-52	0.35	0.47	4.77	5.52	0.37	3.26	0.12	0.00	0.00	0.00	0.00	0.11	14.97
1952-53	0.00	1.98	3.09	2.39	0.04	0.67	1.20	0.20	0.00	0.00	0.09	0.00	9.66
1953-54	0.13	0.90	0.78	1.88	2.26	2.13	0.06	0.07	0.00	0.00	0.00	0.02	8.23
1954-55	0.00	0.80	1.30	2.47	1.05	0.00	0.67	0.78	0.00	0.00	0.00	0.00	7.07
1955-56	0.00	1.34	4.01	4.25	0.26	0.43	1.51	0.03	0.00	0.20	0.00	0.00	12.03
1956-57	0.42	0.00	0.17	1.88	0.96	0.84	0.72	1.03	0.01	0.02	0.00	0.00	6.05
1957-58	0.19	0.33	1.63	3.09	4.45	3.63	2.77	0.24	0.00	0.00	0.05	0.20	16.58
1958-59	0.17	0.48	0.02	0.64	1.54	0.08	0.64	0.07	0.00	0.00	0.00	0.34	3.79
1959-60	0.00	0.00	0.97	1.77	6.48	0.43	1.28	0.34	0.00	0.00	0.00	0.00	11.34
1960-61	0.12	1.26	0.12	0.50	0.01	1.59	0.51	0.16	0.11	0.02	1.20	0.00	5.60
1961-62	0.00	2.15	0.79	2.55	5.35	2.06	0.00	0.08	0.00	0.00	0.00	0.00	12.18
1962-63	0.03	0.00	0.00	1.52	3.06	2.06	1.07	0.13	0.72	0.00	1.16	0.00	10.91
1963-64	2.02	1.20	0.46	0.97	0.07	1.93	0.84	0.10	0.03	0.00	0.01	0.00	7.63
1964-65	0.47	1.82	3.99	1.75	0.27	1.21	2.58	0.18	0.13	0.39	0.18	0.20	13.49
1965-66	0.00	2.76	2.37	0.66	0.75	0.00	0.75	0.00	0.00	0.00	0.80	0.00	7.56
1966-67	0.00	1.09	11.53	2.49	0.02	0.63	2.75	0.18	0.24	0.30	0.23	1.63	21.09
1967-68	0.00	1.41	1.85	0.82	0.85	1.55	0.77	0.01	0.00	0.77	0.11	0.00	7.38
1968-69	0.35	1.28	1.65	9.56	6.12	0.95	1.14	0.35	0.34	0.27	0.30	0.10	22.11
1969-70	0.07	0.56	0.24	3.91	0.54	1.89	0.43	0.00	0.00	0.02	0.01	0.00	7.67
1970-71	0.04	3.47	2.20	0.54	0.37	0.45	0.66	0.89	0.00	0.06	0.54	0.00	9.22
1971-72	0.05	0.47	3.04	0.00	0.39	0.00	0.37	0.39	0.90	0.00	0.34	0.03	5.54
1972-73	0.66	3.13	2.48	3.96	2.57	2.65	0.25	0.25	0.00	0.00	0.00	0.00	15.95
1973-74	0.11	1.26	1.25	2.75	0.09	2.00	1.95	0.39	0.00	0.78	0.00	0.00	10.58
1974-75	2.30	0.10	2.41	0.65	1.82	2.77	0.49	0.04	0.00	0.49	0.03	1.85	12.46
1975-76	0.41	0.22	0.07	1.50	1.25	1.61	0.86	0.41	0.00	0.41	0.00	5.20	10.10
1976-77	0.23	0.07	0.62	0.02	1.04	0.75	0.00	0.91	0.39	0.00	0.87	0.00	6.38
1977-78	0.02	0.17	5.02	4.51	6.96	3.46	0.87	0.00	0.00	0.03	0.00	1.33	22.37
1978-79	0.02	0.39	0.74	3.24	3.24	3.24	0.00	0.19	0.00	0.03	0.14	0.93	11.44
1979-80	0.05	0.33	0.34	7.71	4.32	1.85	0.51	0.55	0.00	0.00	0.00	0.00	16.56
1980-81	0.09	0.01	0.63	2.65	1.49	3.05	0.23	0.34	0.00	0.00	0.00	0.04	8.53
1981-82	1.05	1.17	1.16	4.04	1.15	4.27	1.59	0.01	0.04	0.00	0.13	0.71	15.32
1982-83	0.78	3.14	3.78	4.31	4.36	5.96	0.58	0.09	0.00	0.00	1.14	0.20	24.34
1983-84	0.63	3.49	3.56	0.00	1.13	0.27	0.51	0.00	0.02	2.01	0.63	0.00	12.25
1984-85	0.62	2.90	1.93	0.68	1.16	1.71	0.03	0.00	0.00	0.00	0.00	0.15	9.18
1985-86	0.10	2.27	1.43	2.94	3.58	3.58	0.10	0.00	0.00	0.38	0.00	0.27	14.65
1986-87	0.24	0.54	0.27	2.65	2.03	1.88	0.10	0.42	0.48	0.00	0.00	0.04	8.65
1987-88	0.62	0.87	1.36	1.80	0.40	0.24	1.41	0.50	0.05	0.51	0.00	0.00	7.76
1988-89	0.00	1.75	3.15	0.29	2.24	2.28	0.09	0.04	0.00	0.00	0.00	0.62	10.46
1989-90	0.11	0.30	0.00	1.33	1.00	0.67	0.44	0.26	0.02	0.00	0.00	0.35	4.48
1990-91	0.01	0.61	0.74	0.99	1.17	6.43	0.03	0.09	0.00	0.00	0.01	0.19	10.27
1991-92	0.53	1.30	1.45	1.02	3.10	1.82	0.00	0.12	0.00	0.00	0.00	0.00	9.34
1992-93	0.94	0.00	2.80	4.09	4.15	0.79	0.00	0.00	0.64	0.00	0.00	0.00	13.41
1993-94	0.12	1.52	1.60	0.66	3.10	0.76	0.87	0.19	0.00	0.00	0.00	0.25	9.07
1994-95	0.31	1.45	0.71	7.26	1.35	3.83	0.35	0.55	0.40	0.00	0.51	0.00	16.75
1995-96	0.00	0.00	1.79	4.36	5.03	1.47	0.53	0.00	0.00	0.00	0.00	0.00	13.18
1996-97	0.66	2.38	4.29	3.90	0.13	0.00	0.00	0.00	0.00	0.00	0.00	1.02	12.46
1997-98	0.40	1.76	1.74	2.72	10.60	2.87	0.52	1.74	0.09	0.08	0.00	0.09	22.53
AVERAGE	0.33	1.20	1.89	2.48	2.17	1.75	0.68	0.25	0.09	0.12	0.18	0.35	11.49
MAXIMUM	2.30	3.49	11.53	9.56	10.60	6.43	2.77	1.74	0.80	2.01	1.20	5.20	24.34
DAILY MAXIMUM	0.96	2.85	5.20	2.40	3.40	1.72	1.45	0.75	0.50	0.88	1.01	3.09	
DATE OF OCCURRENCE	10/17/63	11/20/50	12/05/66	01/16/96	02/01/60	03/04/91	04/02/74	05/19/57	06/08/72	07/16/84	08/08/63	09/30/76	

ISABELLA, CALIFORNIA
AVERAGE MONTHLY TEMPERATURES (°F)
1956 to Date

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
1956	46.6	43.7	52.5	55.6	65.0	74.0	79.8	76.2	74.7	59.1	53.7	46.8	60.6
1957	40.6	52.5	52.0	58.1	62.8	77.3	81.9	78.4	73.5	59.3	49.8	46.9	61.1
1958	46.3	49.3	47.6	56.1	68.7	72.2	79.7	82.8	74.9	67.3	52.1	50.8	62.3
1959	47.6	46.1	56.5	64.1	62.8	77.2	86.4	79.9	70.7	65.4	55.6	47.3	63.3
1960	41.7	45.8	55.6	57.2	63.6	79.8	83.0	80.0	76.0	61.6	50.9	45.3	61.7
1961	48.0	50.0	50.7	59.5	62.0	79.4	84.5	81.3	71.2	62.3	49.6	44.7	61.9
1962	44.7	46.4	48.0	61.3	60.9	73.4	79.6	79.0	74.4	63.2	53.0	47.8	61.0
1963	44.0	52.7	48.6	50.2	63.5	68.2	76.7	76.1	74.3	62.7	51.0	46.1	59.5
1964	43.3	44.8	47.2	53.6	60.6	70.5	79.4	78.8	70.1	66.8	48.6	47.2	59.2
1965	46.1	47.9	49.6	54.1	60.7	67.1	77.3	76.8	66.5	64.4	51.8	43.6	58.8
1966	41.9	43.8	52.4	60.7	68.0	73.3	77.8	79.5	72.4	62.2	51.2	44.4	60.6
1967	44.4	47.9	50.9	45.4	62.6	69.2	80.9	82.1	72.3	63.9	56.4	39.7	59.6
1968	42.8	52.2	53.0	55.7	63.6	74.4	80.6	74.8	71.9	61.0	50.8	40.7	60.1
1969	44.0	42.4	48.1	54.3	65.9	69.6	78.9	79.4	73.1	57.6	53.3	45.0	59.3
1970	45.6	50.4	49.9	51.0	65.8	72.7	81.6	80.1	69.6	60.1	52.4	41.3	60.0
1971	43.4	44.8	50.6	52.5	58.3	70.7	79.7	76.1	68.2	56.4	48.6	38.8	57.9
1972	42.0	49.1	56.1	56.1	65.6	73.5	80.5	76.1	70.9	56.8	45.7	39.6	59.1
1973	40.3	42.8	42.8	53.0	64.9	73.1	76.9	74.8	68.5	59.1	46.9	44.9	57.6
1974	41.3	44.6	49.4	51.2	62.2	72.5	76.6	76.2	72.4	61.4	50.0	41.0	58.4
1975	43.1	43.6	45.7	45.7	60.7	71.2	75.9	73.6	72.4	57.6	48.7	45.1	56.9
1976	44.2	45.7	47.4	50.6	65.7	77.5	77.5	70.5	68.3	60.3	53.6	44.5	58.3
1977	42.8	48.4	43.8	57.5	55.4	74.0	77.6	77.2	70.0	62.3	51.1	47.3	59.0
1978	44.3	46.1	53.1	50.9	60.4	71.7	76.7	76.8	67.6	65.3	47.2	39.7	58.3
1979	40.7	41.7	48.5	60.6	63.2	71.4	75.9	72.6	74.0	61.8	50.0	48.4	59.1
1980	47.5	49.1	46.5	54.8	57.7	66.8	77.8	75.3	69.2	63.2	52.4	49.0	59.1
1981	48.3	49.5	47.7	57.0	63.6	76.0	79.1	79.7	73.2	56.9	52.9	47.1	60.9
1982	41.8	47.8	47.4	52.5	63.6	68.6	75.6	77.1	68.5	59.2	48.6	43.2	57.8
1983	45.2	47.2	48.5	49.9	61.4	69.2	73.0	75.7	74.0	61.3	50.2	46.1	58.5
1984	47.0	46.6	51.4	52.6	67.3	70.6	80.9	78.2	74.6	55.7	48.3	41.9	59.6
1985	43.2	45.7	46.5	59.3	62.9	75.1	79.9	75.3	65.1	59.0	47.0	44.5	58.6
1986	49.7	49.0	53.5	54.9	63.5	73.7	75.7	78.6	64.1	58.2	51.0	43.0	59.6
1987	38.9	45.9	47.5	59.0	63.2	73.8	72.6	76.5	69.6	64.4	48.6	38.8	58.2
1988	42.3	48.5	50.8	55.1	59.6	70.3	77.9	77.9	72.5	66.1	50.3	43.1	59.2
1989	41.8	43.4	52.7	61.7	63.0	72.1	80.1	74.9	69.6	58.6	51.8	44.2	59.2
1990	42.5	42.6	50.7	57.9	56.7	71.0	82.1	77.8	77.2	67.6	53.4	45.2	58.5
1991	42.7	50.8	43.6	62.5	71.7	73.3	80.1	81.3	74.5	64.8	51.3	42.0	62.1
1992	43.4	49.2	52.4	58.1	65.3	70.5	76.7	77.0	72.5	62.7	50.9	43.2	59.9
1993	46.5	45.5	54.9	56.8	65.3	79.6	86.8	85.5	76.7	64.8	48.0	46.1	63.3
1994	42.5	45.6	54.7	58.1	61.4	71.4	81.0	81.7	76.9	68.5	60.8	48.5	63.5
1995	45.2	56.1	53.8	56.2	64.7	74.1	82.3	82.0	73.4	61.2	52.7	48.1	62.2
1996	47.1	48.8	52.7	58.8	64.7	74.1	82.3	82.0	73.4	61.2	52.7	48.1	62.2
1997	46.4	48.1	57.1	58.3	71.2	72.4	78.8	80.0	74.5	61.4	52.6	44.2	62.1
1998	46.7	44.3	52.7	53.2	56.1	67.8	80.5	82.5	71.2	59.3	50.8	43.9	59.1
Normal	44.1	47.2	50.4	55.5	63.1	72.5	79.2	78.0	71.8	61.7	51.0	44.3	59.9
Maximum	49.7	56.1	57.1	64.1	71.7	79.8	86.8	85.5	77.2	68.5	60.8	50.8	63.5
Minimum	38.9	41.7	42.8	45.4	55.4	66.8	72.6	70.5	64.1	55.7	45.7	37.4	56.9

PAN EVAPORATION AT ISABELLA DAM & RESERVOIR
OCTOBER 1953 TO DATE
(In Inches)

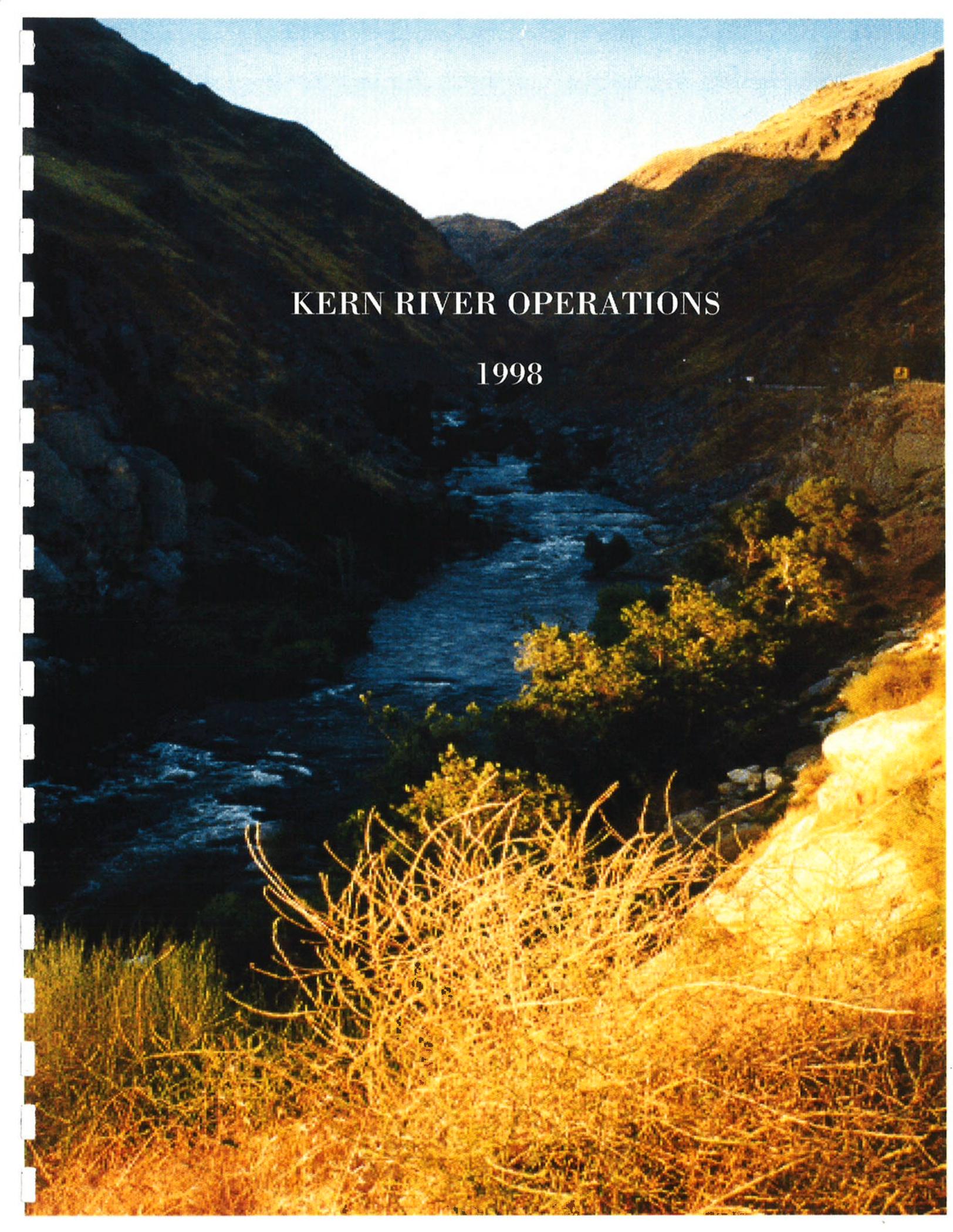
WATER YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1953-54	5.98	3.42	1.92	1.77	1.93	3.19	6.93	10.60	11.82	14.48	11.94	9.21	83.19
1954-55	6.57	3.03	2.02	1.24	2.52	5.05	5.94	8.93	11.76	13.92	13.67	9.86	84.31
1955-56	6.67	3.24	1.58	1.52	2.60	5.30	5.70	8.87	11.91	12.37	11.84	9.57	81.17
1956-57	4.93	3.99	2.29	1.83	2.46	4.40	6.60	7.53	12.51	13.76	12.90	9.18	82.38
1957-58	4.74	3.27	2.14	2.08	1.93	2.73	5.97	9.46	10.68	12.56	11.87	8.64	76.07
1958-59	6.54	3.03	2.60	2.36	2.13	5.95	7.98	9.73	13.56	15.53	13.76	9.03	92.20
1959-60	6.57	4.05	2.67	1.49	2.10	5.08	6.39	8.46	13.11	13.14	12.99	9.54	85.59
1960-61	5.43	2.34	2.02	2.60	3.05	4.28	7.20	8.99	13.65	15.41	10.39	9.06	84.42
1961-62	6.42	3.18	1.80	2.28	1.65	3.47	7.29	8.49	12.03	13.33	12.56	9.30	81.80
1962-63	5.55	3.00	2.70	2.82	2.74	4.46	4.38	8.31	10.74	14.32	12.03	7.89	78.94
1963-64	4.59	2.40	2.08	2.26	3.11	4.37	6.51	8.93	11.88	13.95	12.68	9.30	82.06
1964-65	6.54	2.58	2.02	1.83	2.97	3.94	4.74	8.90	10.32	11.87	10.48	8.19	74.38
1965-66	6.26	2.25	1.40	2.25	2.41	4.84	7.86	11.10	12.75	14.07	14.04	9.51	88.60
1966-67	6.20	2.55	1.58	1.89	2.52	4.43	3.72	8.22	10.20	12.71	11.63	7.41	73.06
1967-68	6.32	2.94	1.49	1.83	2.35	3.72	6.54	10.23	12.60	12.77	11.04	9.09	80.92
1968-69	5.24	2.58	1.24	1.40	1.57	4.03	5.76	9.30	9.78	12.28	12.56	8.70	74.44
1969-70	6.63	3.51	1.36	1.74	2.77	4.56	6.09	10.85	11.85	13.49	13.30	10.23	85.88
1970-71	6.32	3.39	1.46	2.33	3.47	6.94	7.89	11.28	12.03	16.09	12.93	9.33	86.86
1971-72	6.32	2.43	1.71	2.20	2.55	3.69	7.17	10.20	13.83	15.78	13.14	10.56	88.50
1972-73	6.79	3.69	1.89	1.83	3.42	4.28	7.02	12.06	14.82	15.13	14.32	11.82	97.07
1973-74	5.64	3.24	2.20	2.51	2.52	3.97	5.70	11.53	15.72	16.93	15.53	10.68	96.17
1974-75	6.39	3.87	2.45	3.69	3.61	6.11	8.04	13.86	15.68	15.93	13.27	8.88	101.78
1975-76	6.17	3.72	2.76	2.14	3.75	5.49	10.05	9.36	15.03	18.45	15.41	11.52	103.85
1976-77	7.56	4.47	2.70	1.77	2.55	4.34	6.15	12.21	15.36	16.34	14.82	8.76	97.03
1977-78	7.56	3.24	1.67	2.14	2.18	4.37	7.83	12.21	15.08	15.97	13.36	10.98	96.25
1978-79	6.14	3.42	2.39	2.05	2.63	4.22	7.23	8.46	12.39	14.23	14.14	9.78	87.08
1979-80	6.96	4.05	2.82	2.39	3.11	3.94	7.98	11.56	17.16	17.92	15.69	11.34	104.92
1980-81	5.55	3.66	2.36	2.08	3.06	3.66	6.84	11.19	12.15	15.28	13.36	8.28	87.47
1981-82	5.77	2.70	1.80	2.11	2.10	3.78	5.67	10.91	13.32	14.32	10.11	9.81	82.40
1982-83	5.30	2.43	1.86	2.82	3.22	5.83	7.71	13.61	14.22	13.14	12.06	10.20	92.40
1983-84	5.95	2.73	1.92	2.26	3.00	4.56	8.76	12.43	15.18	16.03	14.76	8.79	96.37
1984-85	6.42	3.09	1.74	2.51	2.60	4.56	8.31	12.28	14.82	15.56	15.25	9.60	96.74
1985-86	5.98	3.81	2.11	1.83	3.30	4.46	8.52	10.45	14.19	15.59	15.31	10.74	96.29
1986-87	6.85	3.18	1.77	2.29	3.67	6.94	7.56	10.45	12.38	15.25	12.74	9.84	92.92
1987-88	6.73	3.24	1.95	2.23	2.74	6.01	9.90	12.43	14.94	18.07	14.88	9.93	103.05
1988-89	6.54	4.38	2.98	2.60	2.97	5.80	8.73	12.25	15.36	17.48	14.85	10.95	104.89
1989-90	8.40	4.02	2.54	2.48	3.84	3.75	7.98	10.35	12.96	14.07	12.65	9.60	92.64
1990-91	7.44	5.61	4.71	4.25	4.37	5.86	9.45	11.56	12.36	14.14	14.20	10.53	104.48
1991-92	6.48	4.32	4.37	3.64	4.34	4.99	7.92	10.79	12.15	14.57	13.18	9.66	96.41
1992-93	6.12	3.83	1.98	2.33	2.51	5.44	7.35	9.99	14.93	15.80	14.96	9.75	94.99
1993-94	6.06	2.95	1.94	1.34	3.09	3.59	5.83	6.64	11.12	14.96	14.20	11.02	82.74
1994-95	7.75	4.31	2.43	2.65	1.96	5.20	9.14	12.78	14.88	15.78	14.03	10.50	101.41
1995-96	6.51	3.36	1.94	1.45	3.23	6.22	8.33	12.51	12.59	13.66	13.66	9.30	92.43
1996-97	6.64	2.61	2.07	1.51	0.91	3.91	5.44	6.21	10.42	13.95	13.83	8.59	76.09
1997-98	6.26	3.34	2.16	2.19	2.77	4.70	7.13	10.32	13.08	14.77	13.32	9.65	89.69
MEAN													

ISABELLA RESERVOIR EVAPORATION

April 1954 to Date

Quantities in acre-feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1954				181	1,662	2,554	2,599	1,563	833	436	192	109	10,129
1955	72	117	236	141	526	1,547	1,705	1,375	847	542	258	190	7,556
1956	407	788	1,444	1,797	3,330	5,496	6,084	5,484	4,183	2,056	1,650	897	33,616
1957	628	724	1,258	1,823	4,470	6,462	5,173	4,512	3,068	1,588	1,107	700	27,379
1958	593	494	734	2,043	4,470	6,462	7,720	6,843	4,729	3,521	1,603	1,307	40,519
1959	1,021	811	2,148	2,880	3,711	4,983	4,439	3,503	2,263	1,728	1,087	684	29,258
1960	323	466	1,099	1,505	2,287	3,372	2,720	2,128	1,379	783	341	280	16,683
1961	315	319	419	780	1,158	2,178	2,204	1,200	930	647	329	168	10,647
1962	188	182	446	1,105	2,307	4,128	4,840	4,084	2,880	1,684	916	770	23,530
1963	694	930	1,523	1,577	3,503	5,534	8,202	6,696	4,136	2,289	1,172	962	37,218
1964	916	1,105	1,418	2,162	3,221	4,584	4,842	3,915	2,836	2,057	849	635	28,540
1965	595	857	1,053	1,368	3,251	4,757	5,986	5,397	4,169	3,098	1,103	656	32,290
1966	843	833	1,555	2,624	4,159	5,117	5,246	4,576	2,821	1,819	767	928	31,288
1967	970	1,071	1,874	1,700	3,931	5,960	8,805	8,051	4,574	3,578	1,597	744	42,855
1968	801	930	1,380	2,511	4,243	5,574	5,258	4,048	3,239	1,954	991	476	31,405
1969	494	668	1,511	1,886	4,334	6,486	8,916	9,046	5,911	3,560	1,968	980	45,760
1970	885	1,289	1,935	2,593	4,954	6,051	6,959	6,376	4,597	3,010	1,623	619	40,891
1971	700	990	1,836	2,277	3,181	5,337	6,227	5,233	3,678	2,370	1,304	545	33,678
1972	729	1,000	1,807	2,045	3,096	3,512	4,154	2,703	1,816	1,059	524	355	22,800
1973	434	496	760	1,738	4,009	7,698	9,126	7,109	5,530	3,564	1,981	966	43,411
1974	825	1,347	1,622	3,023	6,119	9,055	9,630	8,904	7,073	3,308	1,864	1,166	53,936
1975	1,174	1,002	1,476	2,162	4,911	8,206	8,936	7,488	4,887	2,957	1,845	1,125	46,169
1976	1,468	1,291	1,952	2,537	4,582	5,226	4,560	3,261	2,108	1,609	984	702	30,250
1977	466	700	968	1,761	1,765	3,289	3,757	2,495	1,795	1,216	726	428	19,366
1978	343	621	1,597	2,698	5,891	9,253	10,969	9,945	6,020	5,115	2,049	996	55,497
1979	1,069	954	1,896	3,701	6,337	9,080	9,535	7,242	5,710	3,306	1,866	1,246	51,942
1980	1,047	1,375	2,229	3,715	4,943	8,289	10,374	10,171	6,637	4,544	2,446	1,565	57,335
1981	1,154	1,317	1,619	3,386	5,371	8,644	8,660	6,966	5,028	2,582	1,747	1,067	47,541
1982	827	1,093	1,333	3,172	6,563	8,180	10,967	9,418	5,732	4,086	1,769	1,053	54,193
1983	1,097	1,057	2,182	3,235	5,905	9,255	10,645	7,630	7,337	3,814	1,656	1,188	55,001
1984	1,624	1,547	2,545	3,594	7,055	8,327	7,914	7,142	6,085	3,642	1,642	1,103	52,220
1985	1,139	1,287	1,749	3,894	6,375	8,622	9,025	7,650	4,441	3,287	1,577	885	49,931
1986	1,119	1,150	2,323	4,740	7,436	10,088	10,933	10,276	6,361	3,866	2,329	1,206	61,827
1987	916	1,428	1,833	3,537	4,596	6,682	7,115	6,454	4,469	2,906	1,361	732	42,029
1988	823	1,178	1,962	2,132	3,148	4,141	4,667	3,318	2,493	1,777	865	500	27,004
1989	502	540	1,339	2,828	4,292	5,572	6,458	4,653	3,027	2,029	1,380	877	33,497
1990	667	649	1,148	1,755	2,705	3,713	3,993	2,872	2,035	1,609	797	480	22,423
1991	409	547	635	1,587	2,674	4,568	5,171	4,026	2,910	2,315	1,789	480	28,106
1992	1,137	1,016	1,295	2,218	3,459	4,132	4,542	4,024	2,910	1,862	1,285	1,238	29,118
1993	970	1,081	1,365	2,888	5,185	7,057	9,080	8,063	5,808	3,652	2,291	1,139	48,579
1994	1,170	1,063	2,212	2,945	4,253	6,827	6,833	5,585	3,431	2,221	1,099	704	38,343
1995	462	1,016	1,444	2,614	3,447	6,952	10,701	10,151	7,525	5,177	2,698	1,402	53,589
1996	1,341	914	2,646	5,072	7,928	9,967	10,681	9,076	6,587	4,019	2,053	1,139	61,423
1997	918	1,862	3,183	4,350	7,260	8,057	8,941	8,428	5,790	4,219	1,611	1,196	55,815
1998	768	415	1,817	2,807	3,586	6,714	10,102	10,163	6,050	4,296	1,981	1,472	50,171
Average	796	921	1,564	2,469	4,207	6,129	7,009	5,983	4,149	2,683	1,402	867	38,179

The image is a cover page for a report. It features a scenic photograph of a river valley. The river flows through the center of the valley, surrounded by steep, rocky mountains. The foreground is dominated by dry, golden-brown brush and grasses. The sky is a clear, pale blue. The text is centered on the page in a white, serif font.

KERN RIVER OPERATIONS

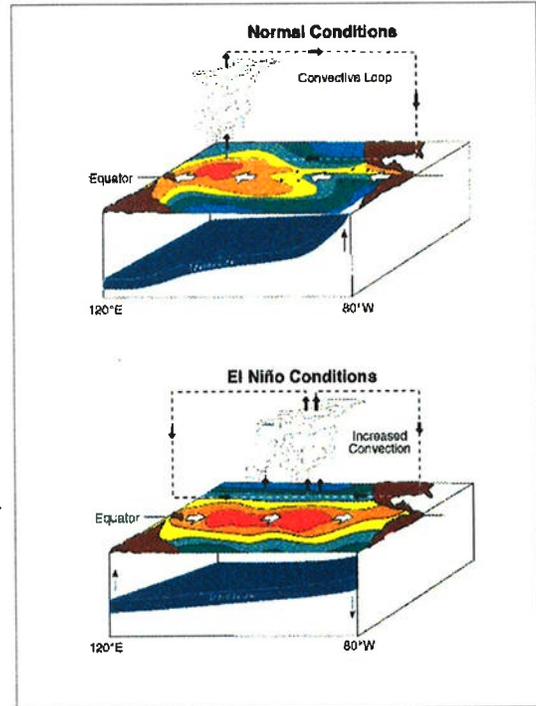
1998

KERN RIVER IN REVIEW

1998

Introduction

As early as June of 1997, climatologists began to detect an unusually warm pool of water developing in the equatorial Pacific Ocean. El Niño, the term used to describe this periodic warming of tropical Pacific waters, is a natural but unpredictable condition which can trigger changes to global weather systems. Under normal conditions (illustrated at right top), the tropical trade winds blow from east to west, ponding warm water in the western Pacific. During an El Niño episode (right bottom), the trade winds weaken, allowing the warm pool of water to drift eastward toward South America. The oceanic phenomenon was first identified by Peruvian fisherman about 200 years ago with the disappearance of their standard catch occurring around December and January. Because of the near coincidence in timing of the warming and Christmas, the fisherman called the phenomenon "El Niño", for the Christ child.



Beginning late January of 1998, the unusually broad pool of warm water, almost twice the size of the United States at its peak, allowed severe storms to form more closely to the California coastline than usual. Steered by an active southern branch of the jet stream, powerful Pacific storms battered the southern Sierra Nevada mountain range with record-breaking precipitation. The onslaught of El Niño related storms during February 1998 produced 10.60 inches of precipitation at Isabella Dam, an all-time record for the month and roughly 92% of the *annual* average of 11.49 inches. The Kern River basin yielded 1,717,967 acre-feet of runoff as measured at First Point during the 1998 calendar year, the 6th largest volume of runoff on record and the first time in history the river had generated over one million acre-feet of runoff four consecutive years.

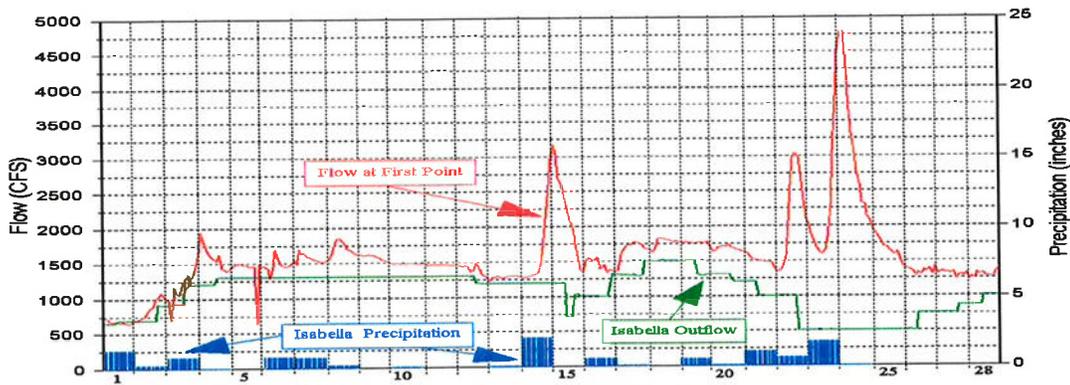
Precipitation

Monthly precipitation amounts in inches as recorded at selected Kern County stations during the 1997-98 Water Year were as follows:

	Bakersfield-Meadows Field (Elev. 494 ft.)			Isabella Dam (Elev. 2660 ft.)			Glennville (Elev. 3140 ft.)		
	97-98	Ave.	% of Ave.	97-98	Ave.	% of Ave.	97-98	Ave.	% of Ave.
Oct	0.25	0.29	86%	0.40	0.33	121%	0.60	0.74	81%
Nov	1.70	0.70	243%	1.76	1.20	147%	3.66	2.15	170%
Dec	0.97	0.63	154%	1.74	1.89	92%	2.18	2.86	76%
Jan	1.32	0.86	153%	2.72	2.48	110%	7.25	3.74	194%
Feb	5.36	1.06	506%	10.60	2.17	489%	12.28	3.18	386%
Mar	2.51	1.04	241%	2.87	1.75	164%	6.19	3.38	183%
Apr	0.87	0.57	153%	0.52	0.68	765%	3.29	1.83	180%
May	1.33	0.20	665%	1.74	0.25	696%	4.93	0.77	640%
Jun	0.30	0.10	300%	0.09	0.09	100%	1.50	0.16	938%
Jul	0.00	0.01	0%	0.00	0.12	0%	0.00	0.04	0%
Aug	0.00	0.09	0%	0.00	0.12	0%	0.00	0.15	0%
Sep	0.31	0.17	182%	0.09	0.18	50%	0.48	0.45	107%
TOTAL	14.92	5.72	261%	22.53	11.49	196%	42.36	19.45	218%

The 1997-98 water year began at a normal pace in the watershed while the floor of the southern San Joaquin valley was wetter than usual. El Niño's presence was felt beginning February 1998 with record rainfall amounts for Bakersfield and Isabella Dam. The cool, wet weather persisted until the middle of June before more normal weather patterns returned. Precipitation as recorded at Meadows Field, Bakersfield was 14.66 inches for the season ending June 30, 1998, replacing the 1978 season as the wettest ever.

LOWER KERN RIVER HYDROLOGY
February 1998



The above chart depicts Isabella Dam release operations, Isabella Lake area precipitation and Kern River flow at 1st Point of Measurement during February 1998. Beginning the first of the month, a series of El Niño powered storms began to saturate the Kern River watershed, producing record-breaking precipitation amounts on the lower Kern and heavy snow in the high Sierra's. Rainfall between Isabella and Bakersfield intensified with each February storm, eventually sending torrents of runoff down the various tributaries to the lower Kern (Erskine, Bodfish, Clear, Mill creeks, etc.). The local stream flow activity culminated during the early morning hours of February 24th when the instantaneous flow at First Point of Measurement peaked at 4,802 cubic feet per second even though outflow from the dam had been sharply reduced. Cumulative stream inflow to the Kern River below Isabella Dam amounted to 34,907 acre-feet during February 1998, a new maximum for the month and third highest of any month since the dam was constructed.

Temperature

Isabella, California 1998, mean air temperatures (°F) with comparative averages were as follows:

	1998 <u>Actual</u>	<u>Normal</u>	Variance from <u>Norm</u>		1998 <u>Actual</u>	<u>Normal</u>	Variance from <u>Norm</u>
Jan	46.7	44.2	+2.5	Jul	80.5	79.2	+1.3
Feb	44.3	47.2	-2.9	Aug	82.5	78.0	+4.5
Mar	52.7	50.4	+2.3	Sep	71.2	71.8	-0.6
Apr	53.2	55.5	-2.3	Oct	59.3	61.7	-2.4
May	56.1	63.1	-7.0	Nov	50.8	51.0	-0.2
Jun	67.8	72.5	-4.7	Dec	43.9	44.3	-0.4

The mean annual temperature for 1998 was 59.1° Fahrenheit, 0.8° below the long-term average. Temperature extremes reached 107°F during July and August, with the low of 19°F occurring on December 22nd and 23rd, 1998. On average, April 1, 1998 through June 30, 1998 mean air temperature for Isabella Lake was the coldest for this period on record. The cool climate affected the rate of Sierra snowmelt and slowed agricultural related activities within the Kern River service area.

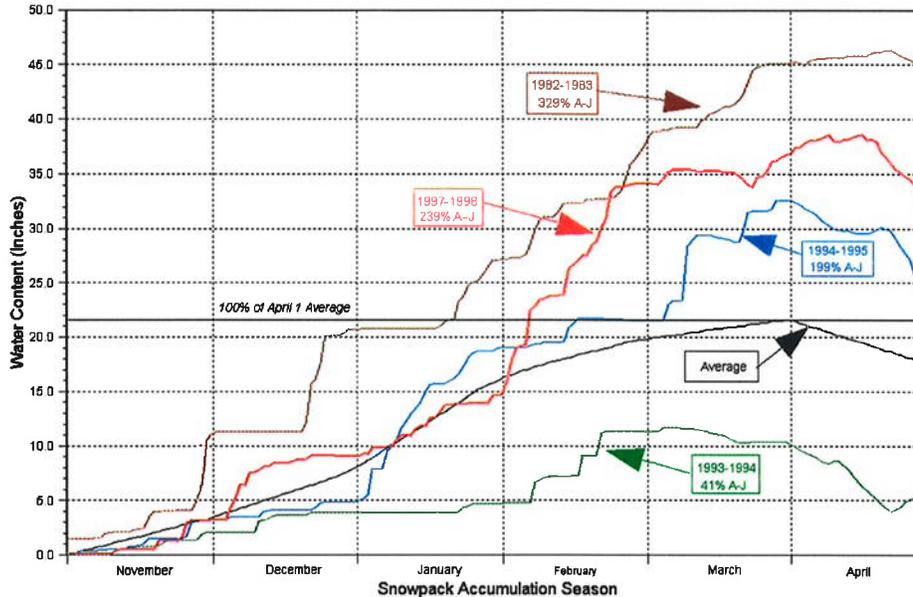
Snowpack

Listed below are approximate readings, in inches of water content, for the eight remote snow sensor sites located within the Kern River basin on April 1, 1998, with April 1st historical average water contents of same shown for comparison:

	<u>Upper Tyndall Creek</u>	<u>Crabtree Meadow</u>	<u>Chagoopa Plateau</u>	<u>Pascoe</u>	<u>Wet Meadow</u>	<u>Tunnel Guard</u>	<u>Casa Vieja Meadow</u>	<u>Beach Meadows</u>
April 1, 1998	46.7	29.8	35.1	55.9	44.6	27.1	34.6	24.9
April 1, Average	27.7	19.8	21.8	24.9	30.3	15.6	20.9	11.0

As graphically depicted below, snowpack accumulation within the Kern River basin received a jump-start in early December as a cold winter storm deposited 4-5 inches of water content in the snow shed. Normal storm activity prevailed during the remainder of December 1997 and January 1998, resulting in an average Kern drainage snowpack on February 1, 1998. During February 1998, the snowpack increased two-fold as a result of a succession of El Niño related storms. Relentless storm activity during March and early April of 1998 pushed the date of peak accumulation well past April 1st, the date which historically reflects the magnitude of the Kern snowpack at or near its seasonal maximum.

**KERN RIVER BASIN SNOWPACK ACCUMULATION
EIGHT SENSOR INDEX
1997 - 1998**



Forecast

The State of California, Department of Water Resources, issued the following forecasts of Kern River runoff into Isabella Reservoir for the 1998 April-July snowmelt period:

February 1, 1998:	100% of average (440,000 acre-feet)
March 1, 1998:	199% of average (880,000 acre-feet)
April 1, 1998:	215% of average (950,000 acre-feet)
May 1, 1998:	224% of average (990,000 acre-feet)

The February 1, 1998 forecast of 100% of normal Kern River April through July snowmelt runoff was indicative of the average yet mild beginning to the 1997-98 snowpack accumulation season. By late January of 1998, speculation had risen as to the validity of the El Niño prediction. February storms acted to confirm the warnings issued by weather experts regarding the awesome potential of forces generated by the El Niño climatic pattern.

Runoff

Actual 1998 April-July Kern River inflow to Isabella Reservoir was 1,039,090 acre-feet (235% of average). Peak inflow to Isabella Reservoir occurred on June 17, 1998 with 7,098 cfs. Calendar year runoff at First Point of Measurement equaled 1,717,967 acre-feet, 232% of the long-term average (742,000 acre-feet) and 308% of the historical median (557,001 acre-feet).



Storage

Reservoir storage for 1998 began at **242,525** acre-feet. Isabella Reservoir year end storage was **244,904** acre-feet, constituting **43%** of the lake capacity and **156%** of the average December 31st carryover storage figure of **157,281** acre-feet. The following table summarizes the history of winter carryover storage levels at Lake Isabella:

**ISABELLA RESERVOIR
DECEMBER 31st STORAGE
In Order of Magnitude**

Rank	Year	Storage												
1	1966	313,258	10	1997	242,525	19	1985	195,516	28	1971	122,04	37	1988	73,545
2	1983	311,944	10	1993	242,525	20	1970	172,038	29	1964	118,30	38	1959	71,608
3	1982	261,558	12	1980	229,813	21	1965	171,193	30	1994	115,58	39	1976	67,701
4	1996	252,811	13	1969	225,535	22	1975	170,190	31	1957	101,41	40	1972	55,589
5	1995	246,474	14	1974	223,930	23	1963	170,043	32	1991	89,654	41	1990	46,014
6	1984	244,979	15	1979	208,768	24	1981	168,210	33	1989	85,978	42	1977	43,820
7	1998	244,904	16	1973	205,948	25	1987	143,410	34	1962	82,849	43	1960	29,119
7	1978	244,904	17	1967	199,937	26	1956	130,313	35	1992	82,262	44	1961	17,524
9	1986	244,085	18	1958	198,112	27	1968	124,480	36	1955	78,567	45	1954	8,670

Peak Isabella storage occurred on July 24, 1998 at 562,474 acre-feet, the latest peak storage date recorded during the snowmelt season since the reservoir was put into operation. With the 1998 operation included, the lake has neared or topped the 500,000 acre-foot level each summer since 1995.

- MAXIMUM 1998 STORAGE = 562,474 Acre-Feet (July 24, 1998)
- MINIMUM 1998 STORAGE = 242,205 Acre-Feet (January 31, 1998)

Operations

Kern River regulated flow during the 1998 Calendar year amounted to **1,662,556** acre-feet, **225%** of the 1954-1998 average regulated flow at First Point of Measurement of **740,344** acre-feet. Peak regulated flow during 1998 occurred on June 30th, with a mean daily discharge of 4,916 cubic feet per second.

The total water yield of the Kern River drainage basin and its surface storage reservoir in acre-feet during 1998 is summarized as follows:

Kern River Computed Natural Flow	1,717,967	+
Isabella Reservoir Storage	2,376	-
Isabella Reservoir Evaporation	50,171	-
Kern River Diversion Above First Point	2,864	-
Kern River Regulated Flow at First Point	1,662,556	=

The delivery of *Kern River* water to canal and conveyance facilities located below First Point of Measurement during 1998 was as follows:

<u>Delivery Point</u>	<u>Flow in Acre-Feet</u>
Beardsley Canal	323,274
Calloway Canal (net of river loss)	141,374
Kern Island Canal	106,199
Eastside Canal	13,742
Stine Canal	33,091
Truxtun Lakes	7,788
Arvin-Edison Turnout	84,040
Buena Vista Canal	30,523
River Canal Boosters	17
James Canal	69,754
Rosedale Channel	102,958
Pioneer Canal	41,605
Berrenda Mesa Turnout	17,660
Pioneer Property	71,065
Boswell Turnout	8,841
2800 Acre Recharge Facility	88,759
Second Point of Measurement	426,346
Seepage Loss (River & Carrier)	95,520

Preparations for a major Kern River Channel operation were begun in the fall of 1997 as the sand plug was cut at the River Canal Weir located just upstream of Coffee Road in anticipation of heavy Kern River winter and spring runoff. The Kern River Intertie was initially activated on April 3, 1998 to receive floodwaters originating on the San Joaquin, Kaweah and Tule rivers and conveyed to the Kern River via the Friant-Kern Canal. Kern River water was introduced to the Intertie operation under a U.S. Army Corps of Engineers mandatory flood control release program at Lake Isabella beginning April 29, 1998. Isabella Dam releases of up to 4,600 cfs were authorized under Corps of Engineers flood control management through the 10th of July at which time the reservoir release operation was returned to the Kern River Watermaster.

Irrigation demands were minimal during the spring and early summer of 1998, influenced by the never-before-seen volume of runoff entering the southern San Joaquin valley floor from creeks such as Poso, Caliente, Comanche, Sycamore, Tejon, San Emigdio and Adobe. Extensive groundwater replenishment operations were conducted throughout the Kern River service area during 1998. In some areas of the Kern River alluvial fan, depth to water had been reduced to as little as ten feet by years end.

During November 1998, regulated flow at First Point amounted to 93,054 acre-feet, third largest on record for the month of November since 1954. Kern River Group efforts to draw down Isabella Lake storage to provide for winter flood control space were successfully accomplished as of midnight November 30, 1998.

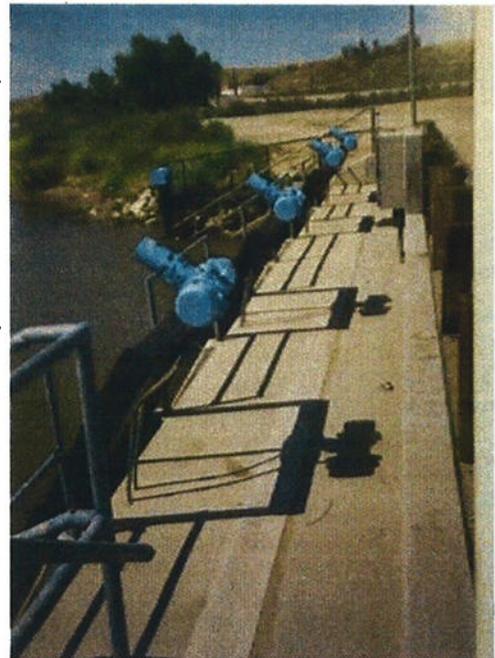


Photo: courtesy of C. H. Williams

Year: 1998

Kern River at First Point of Measurement "Computed Natural"

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	516	931	2,002	2,726	5,990	5,301	6,086	2,195	1,149	683	521	695
2	523	2,083	1,967	2,716	6,140	5,672	6,184	2,408	1,129	637	500	658
3	539	1,836	1,951	2,688	6,184	5,693	6,022	2,275	1,178	648	475	626
4	518	1,558	1,949	2,567	6,227	5,678	5,813	2,132	1,245	667	480	626
5	476	1,339	1,938	2,489	6,503	5,593	5,565	1,929	1,287	636	473	611
6	439	1,390	1,885	2,371	5,936	5,694	5,254	1,836	1,249	615	498	579
7	446	1,932	1,768	2,356	5,324	5,789	5,127	1,813	1,168	585	520	557
8	531	2,004	1,694	2,271	5,173	5,844	5,167	1,821	1,172	574	571	572
9	609	1,560	1,640	2,284	5,070	5,825	5,294	1,796	1,120	582	609	589
10	658	1,309	1,680	2,336	5,111	5,870	5,245	1,693	1,054	573	640	577
11	663	1,264	1,752	2,385	5,127	5,801	4,922	1,692	967	563	762	556
12	703	1,182	1,872	2,373	5,014	5,697	4,680	1,663	896	536	615	541
13	737	1,108	1,928	2,333	4,788	5,501	4,489	1,694	852	514	614	558
14	862	3,823	1,914	2,275	4,437	5,702	4,441	1,595	833	523	602	553
15	945	3,557	2,018	2,200	4,164	6,247	4,300	1,650	820	536	570	578
16	1,795	2,290	2,156	2,138	4,082	6,859	4,266	1,555	813	560	550	552
17	1,206	2,101	2,391	2,130	4,045	7,513	4,279	1,516	740	567	545	559
18	876	1,756	2,479	2,237	4,108	7,177	4,252	1,425	703	545	551	529
19	1,278	1,790	2,562	2,503	4,157	7,218	4,140	1,351	656	536	526	520
20	926	1,843	2,621	2,990	4,356	7,163	4,021	1,350	642	539	509	476
21	899	2,130	2,695	3,634	4,467	7,085	3,937	1,259	637	544	517	436
22	844	5,307	2,902	4,274	4,635	6,824	4,001	1,221	641	538	516	444
23	765	8,477	3,210	4,690	4,756	6,566	3,956	1,172	651	538	529	458
24	716	5,445	3,488	4,837	4,963	6,439	3,818	1,091	599	541	546	474
25	681	3,476	4,273	4,745	5,115	6,530	3,475	1,067	583	552	569	465
26	654	2,763	3,576	4,657	5,370	6,563	3,158	1,048	556	547	576	487
27	622	2,406	3,620	4,701	4,986	6,492	2,886	1,079	577	552	548	499
28	603	2,078	3,414	4,944	4,841	6,380	2,729	1,109	565	547	591	497
29	752	-	3,191	5,153	4,815	6,416	2,561	1,053	558	549	626	487
30	704	-	2,886	5,619	4,787	6,335	2,488	1,014	652	558	641	490
31	669	-	2,873	-	4,834	-	2,276	1,147	-	565	-	499
TOTAL	23,155	68,738	76,295	95,622	155,505	187,467	134,832	47,649	25,692	17,650	16,790	16,748
MAXIMUM DAY	1,795	8,477	4,273	5,619	6,503	7,513	6,184	2,408	1,287	683	762	695
MINIMUM DAY	439	931	1,640	2,130	4,045	5,301	2,276	1,014	556	514	473	436
MEAN	747	2,455	2,461	3,187	5,016	6,249	4,349	1,537	856	569	560	540
TOTAL AC.FT.	45,927	136,340	151,329	189,663	308,440	371,835	267,435	94,510	50,959	35,008	33,302	33,219
WHOLE YEAR:-	TOTAL,	866,143	MAX.,	8,477	MIN.,	436	MEAN,	2,373	TOTAL AC.FT.,	1,717,967		

Kern River North Fork Flow at Kernville
(As reported by U.S. Army Corps of Engineers)

DISCHARGE IN CUBIC FEET PER SECOND

Year: 1998

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	383	541	1,139	1,687	4,275	4,162	5,756	1,502	815	516	409	471
2	406	1,228	1,124	1,553	4,232	4,672	5,851	1,450	795	498	382	468
3	420	1,151	1,131	1,619	4,208	5,018	5,787	1,447	754	497	385	436
4	395	1,036	1,148	1,534	4,360	4,387	5,323	1,450	823	483	367	438
5	330	820	1,106	1,460	4,529	4,343	5,024	1,452	932	463	373	396
6	355	894	1,141	1,409	3,913	4,685	4,662	1,460	938	448	372	393
7	398	1,008	1,015	1,353	3,545	4,916	4,541	1,444	887	434	376	354
8	398	1,170	964	1,332	3,319	4,989	4,752	1,378	831	425	428	401
9	398	1,057	987	1,347	3,497	4,969	5,063	1,276	820	417	407	393
10	566	916	998	1,438	3,452	4,933	5,181	1,161	761	411	383	376
11	500	870	1,109	1,554	3,307	4,978	4,450	1,123	700	401	476	387
12	549	814	1,149	1,470	3,288	4,743	4,135	1,214	663	399	451	397
13	725	729	1,159	1,415	3,002	4,246	4,132	1,143	615	388	435	392
14	583	1,707	1,129	1,410	2,668	4,318	3,918	1,113	581	384	444	386
15	757	1,890	1,215	1,338	2,544	5,209	3,759	1,064	572	394	440	378
16	1,521	1,216	1,389	1,277	2,639	6,502	3,853	1,198	578	392	430	366
17	984	1,144	1,443	1,311	2,583	6,840	3,831	1,061	572	398	434	377
18	757	985	1,633	1,425	2,694	6,448	3,782	948	548	388	421	382
19	916	937	1,733	1,637	2,823	6,432	3,620	860	533	387	394	368
20	740	1,031	1,775	2,028	3,034	6,590	3,361	788	525	376	388	343
21	665	971	1,853	2,622	3,133	6,615	3,628	733	511	370	406	281
22	628	2,343	1,898	3,237	3,125	6,331	3,336	688	496	378	410	312
23	611	3,082	2,335	3,527	3,366	6,022	3,490	657	479	373	405	331
24	582	2,250	2,517	3,382	3,654	5,761	3,151	633	479	378	410	329
25	555	1,598	2,835	3,185	4,053	6,015	2,832	610	468	422	404	354
26	540	1,349	2,342	3,078	4,031	6,317	2,387	613	469	428	400	367
27	528	1,208	2,096	3,223	3,608	5,984	2,184	605	467	434	390	365
28	520	1,142	2,074	3,604	3,591	5,876	2,100	692	448	417	401	353
29	584	-	1,788	3,973	3,655	6,023	1,991	704	444	408	415	365
30	552	-	1,701	4,185	3,580	5,851	1,844	697	494	414	425	367
31	536	-	1,665	-	3,807	-	1,663	737	-	396	-	365
TOTAL	18,382	35,087	47,591	63,613	107,515	164,175	119,387	31,901	18,998	12,917	12,261	11,691
MAXIMUM DAY	1,521	3,082	2,835	4,185	4,529	6,840	5,851	1,502	938	516	476	471
MINIMUM DAY	330	541	964	1,277	2,544	4,162	1,663	605	444	370	367	281
MEAN	593	1,253	1,535	2,120	3,468	5,473	3,851	1,029	633	417	409	377
TOTAL AC.FT.	36,460	69,594	94,395	126,174	213,253	325,636	236,801	63,275	37,682	25,620	24,319	23,189
WHOLE YEAR:-	TOTAL,	643,518	MAX.,	6,840	MIN.,	281	MEAN,	1,763	TOTAL AC.FT.,	1,276,398		

Year: 1998

Kern River at First Point of Measurement "Regulated"

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	434	779	1,455	1,587	3,634	4,513	4,897	3,183	3,104	1,513	1,190	738
2	425	1,106	1,490	1,636	3,643	4,580	4,883	3,064	2,992	1,496	1,244	656
3	427	1,647	1,459	1,654	3,650	4,662	4,877	2,319	2,876	1,430	1,365	647
4	436	1,555	1,434	1,608	3,668	4,751	4,862	2,240	2,646	1,415	1,517	597
5	433	1,548	1,516	1,573	3,723	4,745	4,855	2,314	2,377	1,493	1,571	565
6	482	1,576	1,582	1,625	3,674	4,738	4,784	2,778	2,255	1,536	1,632	561
7	478	1,742	1,548	1,683	3,664	4,698	4,403	3,386	2,274	1,581	1,625	558
8	454	1,738	1,589	1,750	3,651	4,675	4,362	3,374	2,297	1,620	1,603	551
9	460	1,633	1,710	1,789	3,654	4,681	4,317	3,457	2,246	1,595	1,682	549
10	472	1,567	1,743	1,889	3,645	4,681	4,053	3,645	2,092	1,521	1,714	526
11	493	1,539	1,746	1,942	3,643	4,696	4,000	3,588	1,986	1,437	1,767	516
12	494	1,397	1,750	1,963	3,699	4,704	3,926	3,604	1,915	1,396	1,769	501
13	573	1,399	1,669	2,069	3,698	4,710	3,899	3,653	1,919	1,387	1,723	474
14	749	2,470	1,514	2,163	3,725	4,744	3,580	3,645	2,032	1,407	1,629	477
15	826	1,621	1,619	2,137	3,858	4,823	3,537	3,590	1,992	1,480	1,615	516
16	911	1,566	1,629	2,142	3,853	4,812	3,526	3,664	1,812	1,524	1,648	528
17	997	1,831	1,610	2,175	3,863	4,811	3,581	3,660	1,829	1,461	1,669	551
18	1,288	1,852	1,495	2,149	3,995	4,820	3,552	3,649	1,704	1,465	1,646	542
19	1,576	1,788	1,456	2,175	4,010	4,808	3,508	3,551	1,558	1,568	1,655	530
20	1,435	1,682	1,433	2,327	4,013	4,802	3,551	3,449	1,487	1,655	1,711	495
21	1,174	1,668	1,482	2,523	4,018	4,839	3,725	3,364	1,548	1,651	1,675	485
22	983	2,266	1,477	2,509	4,036	4,883	3,811	3,195	1,563	1,630	1,740	461
23	814	3,501	1,562	2,596	4,048	4,888	3,686	3,181	1,546	1,546	1,838	457
24	779	2,134	1,634	2,787	4,066	4,885	3,638	3,229	1,470	1,454	1,814	395
25	756	1,532	1,710	2,755	4,113	4,896	3,533	3,241	1,394	1,382	1,663	402
26	715	1,437	1,668	2,729	4,223	4,901	3,402	3,291	1,302	1,384	1,430	434
27	740	1,369	1,659	2,777	4,227	4,907	3,316	3,255	1,286	1,338	1,268	447
28	804	1,442	1,759	2,943	4,238	4,913	3,098	3,197	1,318	1,308	1,210	436
29	823	-	1,598	3,416	4,247	4,907	3,206	3,083	1,363	1,267	1,185	450
30	810	-	1,547	3,639	4,249	4,916	3,240	3,138	1,405	1,232	1,117	480
31	767	-	1,597	-	4,281	-	3,194	3,206	-	1,193	-	477
TOTAL	23,008	47,385	49,140	66,710	120,709	143,389	120,802	101,193	57,588	45,365	46,915	16,002
MAXIMUM INSTAN.	1,993	4,802	1,931	3,654	4,394	4,941	4,927	3,721	3,126	1,678	1,954	810
MINIMUM INSTAN.	365	721	1,365	1,460	3,573	4,484	3,062	2,216	1,189	1,177	716	284
MEAN	742	1,692	1,585	2,224	3,894	4,780	3,897	3,264	1,920	1,463	1,564	516
TOTAL AC.FT.	45,636	93,987	97,468	132,317	239,423	284,408	239,607	200,713	114,224	89,980	93,054	31,739
WHOLE YEAR:-	TOTAL,	838,206	MAX.,	4,941	MIN.,	284	MEAN,	2,296	TOTAL AC.FT.,	1,662,556		

Year: 1998

Kern River Conduit at Alternate Second Point (Total Flow)

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	100	134	167	164	153	123	182	201	0	0	0
2	0	99	93	185	180	161	132	169	130	0	0	0
3	0	123	89	176	180	157	134	53	114	0	30	0
4	0	216	92	167	206	162	140	131	100	0	61	0
5	0	268	67	161	205	171	170	103	90	0	82	0
6	0	271	84	201	219	158	191	167	88	0	83	0
7	0	272	103	177	225	162	170	254	88	0	82	0
8	0	268	114	160	233	167	137	249	93	0	84	0
9	0	268	124	161	236	160	140	250	87	0	98	0
10	0	275	128	159	238	155	172	250	89	0	108	0
11	0	281	128	157	243	145	179	248	90	0	157	0
12	0	296	121	159	251	135	162	246	90	0	201	0
13	0	294	120	160	233	122	176	244	90	0	201	0
14	0	398	110	159	223	113	184	248	78	0	203	0
15	0	312	141	170	208	125	157	248	38	0	203	0
16	0	179	143	159	203	173	159	246	0	0	206	0
17	0	98	147	146	198	172	163	252	0	0	212	0
18	0	163	140	146	177	168	164	245	0	0	209	0
19	0	164	133	145	148	149	186	243	0	0	211	0
20	0	173	133	142	144	114	218	245	0	0	210	0
21	0	248	141	135	146	101	185	243	0	0	204	0
22	41	304	142	105	147	120	155	242	0	0	204	0
23	94	220	158	143	149	166	152	247	0	0	203	0
24	118	130	173	166	142	177	146	248	0	0	203	0
25	120	189	143	175	162	168	162	248	0	0	201	0
26	122	196	139	175	177	168	178	246	0	0	151	0
27	109	193	150	174	171	201	177	246	0	0	98	0
28	97	181	163	161	157	182	167	247	0	0	97	0
29	97	-	170	163	166	167	175	252	0	0	91	0
30	98	-	166	184	183	136	163	250	0	0	73	0
31	100	-	174	-	162	-	179	219	-	0	-	0
TOTAL	996	6,179	4,063	4,838	5,876	4,608	5,096	6,961	1,466	0	4,166	0
MAXIMUM DAY	122	398	174	201	251	201	218	254	201	0	212	0
MINIMUM DAY	0	98	67	105	142	101	123	53	0	0	0	0
MEAN	32	221	131	161	190	154	164	225	49	0	139	0
TOTAL AC.FT.	1,976	12,256	8,059	9,596	11,655	9,140	10,108	13,907	2,908	0	8,263	0
WHOLE YEAR:-	TOTAL,	44,249	MAX.,	398	MIN.,	0	MEAN,	121	TOTAL AC.FT.,	87,768		

Year: 1998

Kern River Channel at Second Point of Measurement (Total Flow)

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	194	489	1,912	1,854	1,973	267	158	0	0	0
2	0	0	144	558	2,088	1,812	2,017	207	129	0	0	0
3	0	47	110	1,006	2,070	1,779	2,043	117	128	0	0	0
4	0	59	136	1,005	2,047	1,832	2,040	98	128	0	79	0
5	0	77	180	1,003	2,279	1,854	2,032	86	105	0	111	0
6	0	84	201	1,078	2,343	1,904	1,988	75	100	0	130	0
7	0	99	206	1,250	2,359	1,890	1,597	288	82	0	134	0
8	0	86	230	1,243	2,019	1,830	1,286	251	43	0	121	0
9	0	45	276	1,216	1,901	1,891	1,233	225	43	0	152	0
10	0	62	290	1,326	1,739	1,992	1,050	237	20	0	183	0
11	0	102	279	1,436	1,614	1,953	1,058	282	14	0	199	0
12	0	126	282	1,408	1,679	1,992	1,058	320	20	0	154	0
13	0	201	362	1,464	1,702	2,095	1,047	371	19	0	160	0
14	0	643	293	1,388	1,739	2,295	890	384	22	0	148	49
15	0	500	319	1,213	1,876	2,282	883	373	47	0	163	71
16	0	244	320	1,115	1,890	2,082	813	430	39	0	163	59
17	0	240	288	1,101	1,867	1,922	814	419	25	0	171	68
18	0	247	323	1,084	1,888	1,709	814	417	0	0	173	105
19	155	276	272	1,074	1,857	1,710	767	334	0	0	217	124
20	158	274	241	1,133	1,786	1,773	760	271	0	0	256	118
21	97	370	219	1,186	1,767	1,725	831	279	0	0	268	115
22	37	697	213	1,131	1,759	1,704	877	255	0	0	346	96
23	0	1,627	203	1,110	1,779	1,659	870	240	0	0	346	78
24	0	1,081	170	1,247	1,736	1,686	878	291	0	0	332	65
25	0	402	261	1,317	1,724	1,789	793	288	0	0	253	60
26	0	215	261	1,326	1,797	1,824	679	266	0	0	81	60
27	0	212	330	1,276	1,843	1,898	588	252	0	0	26	60
28	0	243	402	1,306	1,833	1,915	437	249	0	0	32	60
29	0	-	291	1,531	1,739	1,844	398	196	0	0	9	60
30	0	-	293	1,682	1,742	1,977	339	201	0	0	0	42
31	0	-	448	-	1,803	-	320	192	-	0	-	26
TOTAL	447	8,259	8,037	35,702	58,177	56,472	33,173	8,161	1,122	0	4,407	1,316
MAXIMUM DAY	158	1,627	448	1,682	2,359	2,295	2,043	430	158	0	346	124
MINIMUM DAY	0	0	110	489	1,614	1,659	320	75	0	0	0	0
MEAN	14	295	259	1,190	1,877	1,882	1,070	263	37	0	147	42
TOTAL AC.FT.	887	16,381	15,941	70,814	115,392	112,011	65,798	16,187	2,225	0	8,741	2,610
WHOLE YEAR:-	TOTAL,	215,273	MAX.,	2,359	MIN.,	0	MEAN,	590	TOTAL AC.FT.,	426,987		

Year: 1998

Friant-Kern Inflow to Kern River Channel (Total Flow)

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	255	395	759	0	200	0	0	0	0	0
2	0	0	243	454	905	0	271	0	0	0	0	0
3	0	0	226	865	905	0	234	0	0	0	0	0
4	0	0	220	865	905	0	200	0	0	0	0	0
5	0	0	220	968	905	0	133	0	0	0	0	0
6	0	0	220	1,010	905	0	167	0	0	0	0	0
7	0	0	317	1,010	805	0	200	0	0	0	0	0
8	0	0	365	998	484	0	0	0	0	0	0	0
9	0	0	365	990	270	0	0	0	0	0	0	0
10	0	0	335	999	134	0	0	0	0	0	0	77
11	0	198	325	1,005	0	0	0	0	0	0	0	190
12	0	386	325	1,005	0	0	66	0	0	0	0	269
13	0	537	325	990	0	0	167	0	0	0	0	290
14	0	658	345	817	0	0	267	0	0	0	0	290
15	0	700	360	722	0	0	333	0	0	0	0	290
16	0	496	360	690	0	0	317	0	0	0	0	290
17	0	146	360	690	0	0	310	0	0	0	0	293
18	0	0	391	690	0	0	315	0	0	0	0	315
19	0	85	445	690	0	0	315	0	0	0	0	325
20	0	253	424	690	0	0	315	0	0	0	0	385
21	0	330	407	690	0	0	315	0	0	0	0	415
22	0	225	409	690	0	0	268	0	0	0	0	435
23	0	163	410	690	0	0	240	0	0	0	0	445
24	0	62	254	690	0	0	240	0	0	0	0	465
25	0	35	191	754	0	0	240	0	0	0	0	475
26	0	112	210	800	0	0	240	0	0	0	0	475
27	0	203	210	800	0	0	240	0	0	0	0	475
28	0	255	229	743	0	0	240	0	0	0	0	475
29	0	-	240	581	0	0	240	0	0	0	0	388
30	0	-	240	416	0	133	187	0	0	0	0	342
31	0	-	337	-	0	-	100	0	-	0	-	293
TOTAL	0	4,844	9,563	23,397	6,977	133	6,360	0	0	0	0	7,697
MAXIMUM DAY	0	700	445	1,010	905	133	333	0	0	0	0	475
MINIMUM DAY	0	0	191	395	0	0	0	0	0	0	0	0
MEAN	0	173	308	780	225	4	205	0	0	0	0	248
TOTAL AC.FT.	0	9,608	18,967	46,408	13,838	264	12,614	0	0	0	0	15,267
WHOLE YEAR:-	TOTAL,	58,971	MAX.,	1,010	MIN.,	0	MEAN,	162	TOTAL AC.FT.,	116,966		

Year: 1998

Friant-Kern Inflow to Poso Creek Channel (Total Flow)

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	151	0	0	0	0	0
2	0	0	0	0	0	0	148	0	0	0	0	0
3	0	0	0	0	0	0	148	0	0	0	0	0
4	0	0	0	0	0	0	151	0	0	0	0	0
5	0	0	0	0	0	0	151	0	0	0	0	0
6	0	0	0	0	0	0	151	0	0	0	0	0
7	0	0	0	0	0	0	151	0	0	0	0	0
8	0	0	0	0	0	0	104	0	0	0	0	0
9	0	0	0	0	0	0	27	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	100	0	0	0	0	0	0
27	0	0	0	0	0	151	0	0	0	0	0	0
28	0	0	0	0	0	154	0	0	0	0	0	0
29	0	-	0	0	0	150	0	0	0	0	0	0
30	0	-	0	0	0	145	0	0	0	0	0	0
31	0	-	0	-	0	-	0	0	-	0	-	0
TOTAL	0	0	0	0	0	700	1,182	0	0	0	0	0
MAXIMUM DAY	0	0	0	0	0	154	151	0	0	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	23	38	0	0	0	0	0
TOTAL AC.FT.	0	0	0	0	0	1,388	2,344	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	1,882	MAX.,	154	MIN.,	0	MEAN,	5	TOTAL AC.FT.,	3,732		

Kern River Water Diverted Into Kern River/California Aqueduct Intertie												Year: 1998		
DISCHARGE IN CUBIC FEET PER SECOND														
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	0	0	412	1,332	724	0	0	0	0	0	0	0
2	0	0	0	0	572	1,163	613	0	0	0	0	0	0	0
3	0	0	0	0	721	1,295	742	0	0	0	0	0	0	0
4	0	0	0	0	752	1,304	734	0	0	0	0	0	0	0
5	0	0	0	0	824	1,239	753	0	0	0	0	0	0	0
6	0	0	0	0	933	1,213	687	0	0	0	0	0	0	0
7	0	0	0	0	553	1,220	612	0	0	0	0	0	0	0
8	0	0	0	0	318	1,199	185	0	0	0	0	0	0	0
9	0	0	0	0	516	1,221	0	0	0	0	0	0	0	0
10	0	0	0	0	706	1,287	0	0	0	0	0	0	0	0
11	0	0	0	0	715	1,277	0	0	0	0	0	0	0	0
12	0	0	0	0	720	1,316	0	0	0	0	0	0	0	0
13	0	0	0	0	696	1,276	0	0	0	0	0	0	0	0
14	0	0	0	0	789	1,250	0	0	0	0	0	0	0	0
15	0	0	0	0	712	1,173	0	0	0	0	0	0	0	0
16	0	0	0	0	721	1,335	0	0	0	0	0	0	0	0
17	0	0	0	0	696	1,328	0	0	0	0	0	0	0	0
18	0	0	0	0	638	1,260	0	0	0	0	0	0	0	0
19	0	0	0	0	738	1,231	0	0	0	0	0	0	0	0
20	0	0	0	0	716	1,227	0	0	0	0	0	0	0	0
21	0	0	0	0	811	1,168	0	0	0	0	0	0	0	0
22	0	0	0	0	640	1,083	0	0	0	0	0	0	0	0
23	0	0	0	0	852	976	0	0	0	0	0	0	0	0
24	0	0	0	0	781	890	0	0	0	0	0	0	0	0
25	0	0	0	0	831	785	0	0	0	0	0	0	0	0
26	0	0	0	0	933	947	0	0	0	0	0	0	0	0
27	0	0	0	0	1,174	950	0	0	0	0	0	0	0	0
28	0	0	0	0	1,237	922	0	0	0	0	0	0	0	0
29	0	-	0	579	1,201	990	0	0	0	0	0	0	0	0
30	0	-	0	993	1,287	667	0	0	0	0	0	0	0	0
31	0	-	0	-	1,314	-	0	0	-	0	-	0	0	0
TOTAL	0	0	0	1,572	24,509	34,524	5,050	0	0	0	0	0	0	0
MAXIMUM DAY	0	0	0	993	1,314	1,335	753	0	0	0	0	0	0	0
MINIMUM DAY	0	0	0	0	318	667	0	0	0	0	0	0	0	0
MEAN	0	0	0	52	791	1,151	163	0	0	0	0	0	0	0
TOTAL AC.FT.	0	0	0	3,118	48,614	68,477	10,017	0	0	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	65,655	MAX.,	1,335	MIN.,	0	MEAN,	180	TOTAL AC.FT.,	130,226				

DISCHARGE IN CUBIC FEET PER SECOND

Friant-Kern Water Diverted Into
Kern River/California Aqueduct Intertie

Year: 1998

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	759	0	200	0	0	0	0	0
2	0	0	0	0	905	0	271	0	0	0	0	0
3	0	0	0	330	905	0	234	0	0	0	0	0
4	0	0	0	734	905	0	200	0	0	0	0	0
5	0	0	0	736	905	0	133	0	0	0	0	0
6	0	0	0	791	905	0	167	0	0	0	0	0
7	0	0	0	798	853	0	200	0	0	0	0	0
8	0	0	0	933	484	0	0	0	0	0	0	0
9	0	0	0	859	270	0	0	0	0	0	0	0
10	0	0	0	899	134	0	0	0	0	0	0	0
11	0	0	0	881	0	0	0	0	0	0	0	0
12	0	0	0	987	0	0	0	0	0	0	0	0
13	0	0	0	864	0	0	0	0	0	0	0	0
14	0	0	0	920	0	0	0	0	0	0	0	0
15	0	0	0	870	0	0	0	0	0	0	0	0
16	0	0	0	865	0	0	0	0	0	0	0	0
17	0	0	0	791	0	0	0	0	0	0	0	0
18	0	0	0	794	0	0	0	0	0	0	0	0
19	0	0	0	858	0	0	0	0	0	0	0	0
20	0	0	0	810	0	0	0	0	0	0	0	0
21	0	0	0	701	0	0	0	0	0	0	0	0
22	0	0	0	674	0	0	0	0	0	0	0	0
23	0	0	0	691	0	0	0	0	0	0	0	0
24	0	0	0	669	0	0	0	0	0	0	0	0
25	0	0	0	760	0	0	0	0	0	0	0	0
26	0	0	0	810	0	0	0	0	0	0	0	0
27	0	0	0	803	0	0	0	0	0	0	0	0
28	0	0	0	762	0	0	0	0	0	0	0	0
29	0	-	0	0	0	0	0	0	0	0	0	0
30	0	-	0	0	0	133	0	0	0	0	0	0
31	0	-	0	-	0	-	0	0	-	0	-	0
TOTAL	0	0	0	20,590	7,025	133	1,405	0	0	0	0	0
MAXIMUM DAY	0	0	0	987	905	133	271	0	0	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	686	227	4	45	0	0	0	0	0
TOTAL AC.FT.	0	0	0	40,839	13,933	264	2,786	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	29,153	MAX.,	987	MIN.,	0	MEAN,	80	TOTAL AC.FT.,	57,822		

Quantities in acre-feet

CITY OF BAKERSFIELD
SUMMARY OF KERN RIVER ENTITLEMENTS

Year: 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Buena Vista W.S.D. Entitlement	186	18,113	44,993	55,442	102,678	129,544	83,581	24,323	0	0	0	0	458,860
Hacienda W.D. Entitlement	0	0	27,587	33,338	60,000	86,834	65,189						272,948
K.C.L. Entitlement @ 2nd Point	8	867	1,952	2,969	5,474	6,964	4,568	1,160	0	0	0	0	23,962
Kern Island (1-st)	18,446	17,564	18,359	17,851	18,446	17,851	18,446	18,446	17,851	18,446	17,851	18,446	218,003
Eastside													
Kern River Conduit			39,396	34,421	51,039	63,342	48,930	19,270					256,398
Castro	307	292	56	81	131	119	85	123	297	307	297	307	2,402
KCC & W Co.	877	813	163	276	363	341	242	351	867	862	835	857	6,847
South Fork	615	570	113	200	254	248	179	246	595	615	595	615	4,845
Buena Vista (1-st)	4,750	4,395	880	1,470	1,962	1,861	1,319	1,894	4,645	4,711	4,544	4,685	37,116
James (1-st)	6,637	6,587	1,331	2,206	2,943	2,787	1,976	2,836	6,964	7,022	6,256	5,776	53,321
Anderson (1-st)	904	1,105	218	357	494	460	327	474	1,164	899	660	623	7,685
Stine	5,812	8,227	1,662	2,759	3,677	3,485	2,463	3,549	6,647	1,470	1,490	1,234	42,475
Meacham	738	1,652	327	557	734	700	492	712	1,005	58	58		6,975
Farmers	2,622	8,227	1,662	2,759	3,677	3,485	2,463	3,549	4,308		61		32,813
Plunket	422	2,196	442	732	974	932	659	944	888				8,189
Joyce	293	2,140	442	732	974	932	659	944	859				7,975
Johnson	232	2,118	442	732	974	932	659	944	791				7,824
Pioneer (1-st)	748	6,842	1,442	2,388	3,188	3,023	2,140	2,825	2,376				24,972
Beardsley (1-st)	345	3,037	668	1,097	1,468	1,400	988	1,129	641				10,773
Lerdo (NKWSD)													
Anderson (2-nd)	58	494	109	198	248	238	167	180	60				1,752
James & Dixon	161	1,962	442	732	974	932	659	710	238				6,810
Wilson	22	315	56	121	135	121	99	91	24				984
KCC & W Co.	16	179	54	77	113	117	67	83	16				722
McCaffrey	97	1,244	281	488	639	599	426	444	52				4,270
McCord: Lerdo 30%	56	1,349	331	553	734	698	492	494	4				4,711
Beardsley 70%	131	3,146	775	1,289	1,716	1,631	1,150	1,154	12				11,004
Calloway: Central 20%	155	5,510	1,195	3,102	4,165	3,961	2,799	1,349					22,236
NKWSD 80%	613	22,044	4,787	12,414	16,663	15,844	11,198	5,399					86,962
Railroad: KCC & W Co. 20%		724	60	567	980	932	647	42					3,952
NKWSD 80%		2,890	240	2,271	3,917	3,727	2,588	169					15,802
Buena Vista (2-nd)		1,442	52	1,037	2,206	2,097	1,440						8,274
James (2-nd)		2,878	40	1,843	4,409	4,189	2,779						16,138
Pioneer (2-nd)		2,551	36	1,484	4,163	3,961	2,555						14,750
Beardsley (3-rd)		3,451	46	2,009	5,877	5,587	3,515						20,485
Kern Island (2-nd)		805	14	456	1,375	1,306	813						4,769
Computed Loss	676	611	676	655	676	655	676	676	655	676	655	676	7,963
Total 1st Point Group Entitlement	45,741	118,227	78,749	100,883	145,762	155,457	118,665	70,187	50,959	35,008	33,302	33,219	986,159

CITY OF BAKERSFIELD
SUMMARY OF KERN RIVER FIRST POINT GROUP
KERN RIVER DIVERSIONS

Year: 1998

Quantities in acre-feet

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FIRST POINT REGULATED FLOW	45,636	93,987	97,468	132,317	239,423	284,408	239,607	200,713	114,224	89,980	93,054	31,739	1,662,556
BEARDSLEY CANAL	9,049	11,990	17,946	23,195	31,127	41,254	44,231	40,048	31,076	32,743	22,276	18,339	323,274
CALLOWAY CANAL (Net of River Loss)	7,708	5,778	8,019	8,253	10,901	23,127	28,030	24,865	14,717	5,460	2,616	1,900	141,374
KERN ISLAND CANAL	7,739	1,095	4,653	4,447	9,413	17,105	20,729	19,825	10,270	5,461	2,130	3,332	106,199
EASTSIDE CANAL	375	12	270	724	1,589	2,592	3,148	2,497	1,150	847	381	157	13,742
STINE CANAL	833	48	1,073	1,468	3,745	5,336	7,422	7,390	3,737	1,640	393	6	33,091
TRUXTUN LAKES	345	157	389	333	297	545	710	885	1,196	1,563	1,271	97	7,788
ARVIN-EDISON TURNOUT	1,567	0	4,766	5,387	6,101	5,538	4,048	17,627	14,277	13,922	9,563	1,244	84,040
BUENA VISTA CANAL	1,886	1,521	1,254	1,285	2,493	4,733	7,119	6,500	2,251	660	276	545	30,523
RIVER CANAL BOOSTERS	0	0	9	8	0	0	0	0	0	0	0	0	17
JAMES CANAL	0	3,360	6,470	6,022	7,400	9,066	9,913	7,390	5,931	7,745	6,280	177	69,754
ROSEDALE CHANNEL	3,051	10,467	10,149	10,669	11,925	14,523	13,043	9,068	1,519	6,684	11,026	834	102,958
PIONEER CANAL	0	787	486	11,816	12,260	6,587	4,917	3,439	593	0	698	22	41,605
BERRENDA MESA PIPELINE (Net)	0	2,020	159	792	2,594	2,303	1,744	2,027	1,660	2,322	2,013	26	17,660
PIONEER PROPERTY	0	6,476	3,856	3,004	5,718	11,126	10,836	13,639	6,773	703	8,686	248	71,065
BOSWELL TURNOUT	0	1,140	970	611	672	1,821	1,857	1,498	272	0	0	0	8,841
2800 ACRE RECHARGE FACILITY	2,628	12,949	10,965	9,045	10,345	9,530	9,225	8,112	7,674	4,471	3,137	678	88,759
CARRIER CANAL LOSS/REFILL	347	423	524	549	713	813	893	841	539	492	401	256	6,791
RIVER LOSS & SPREADING	7,245	10,779	7,557	9,302	9,688	9,343	8,473	6,566	5,728	5,267	4,903	3,878	88,729
FIRST POINT CANALS TOTAL FLOW	42,773	69,002	79,515	96,910	126,981	165,342	176,338	172,217	109,363	89,980	76,050	31,739	1,236,210
TOTAL FLOW AT SECOND POINT	2,863	24,985	17,953	35,407	112,442	119,066	63,269	28,496	4,861	0	17,004	0	426,346
BUENA VISTA WSD	1,976	22,435	15,614	25,355	98,078	104,043	56,629	17,805	2,342	0	12,513	0	356,790
KERN WATER BANK	887	2,550	2,339	10,052	14,364	15,023	6,527	10,691	2,519	0	4,491	0	69,443
KERN DELTA WD	0	0	0	0	0	0	113	0	0	0	0	0	113

1998 Summary of Kern River Water
Diversions by Entity

(Acre-Feet)

<u>Area of Use</u>	<u>Diverted</u>
<u>Above First Point</u>	
City of Bakersfield	2
Kern Valley Golf Course	145
La Hacienda, Inc.	661
Lake Ming	790
Olcese WD	1,266
Sub-total	2,864
<u>Below First Point</u>	
Arvin-Edison WSD	35,869
Buena Vista WSD	355,667
Cawelo WD	61,613
City of Bakersfield, Irrigation and Spreading	112,180
Henry Miller WD	7,300
Improvement District #4	83,874
Kern County Water Agency	129,112
Kern Delta WD	193,646
Kern-Tulare WD	10,866
Kern Water Bank Authority	194,590
North Kern WSD	346,844
Rag Gulch WD	1,628
Rosedale Ranch Improvement District	15,053
Rosedale Rio Bravo WSD	113,863
South Fork	451
Sub-total	1,662,556
Grand Total	1,665,420

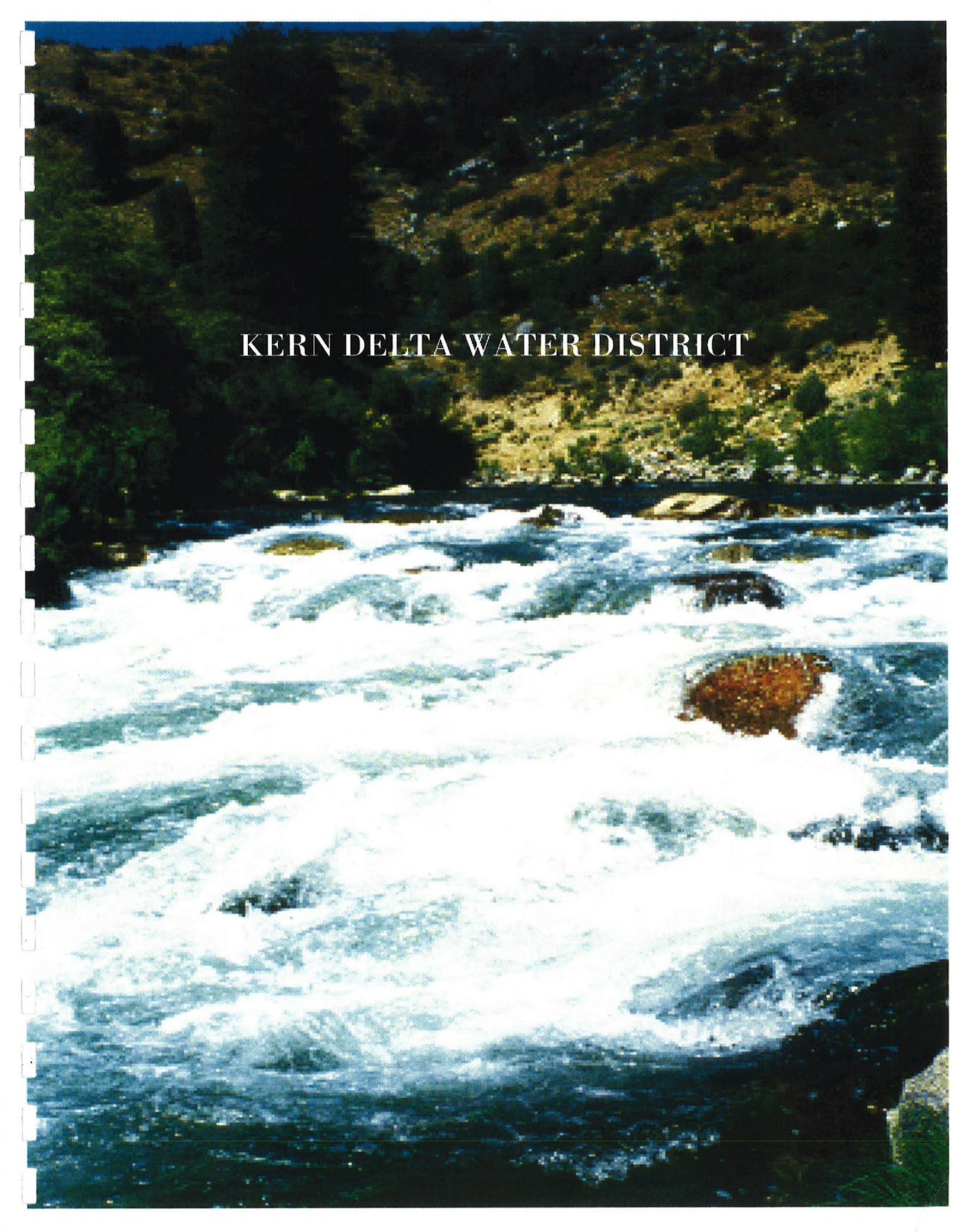
**UTILIZATION OF STORAGE - ISABELLA RESERVOIR
KERN RIVER FIRST POINT GROUP**

Year: 1998

Quantities in acre-feet

End of Month Unit Storage

STORAGE UNIT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Kern Island	2,500	15,000	15,000	15,000	18,000	14,000	7,000	2,500	2,500	2,500	2,500	2,500	99,000
Buena Vista	1,500	7,252	10,852	11,000	11,000	11,000	6,000	2,000	1,500	1,500	1,500	1,500	66,604
Stine	1,500	9,000	8,606	9,000	9,000	9,000	5,000	1,500	1,500	1,500	1,500	1,500	58,606
Farmers	1,500	6,000	5,690	6,000	6,000	6,000	4,000	2,500	2,000	1,500	1,500	1,500	44,190
Kern Delta	0	0	0	0	0	0	0	0	0	0	2,380	1,723	4,103
KERN DELTA WD TOTAL	7,000	37,252	40,148	41,000	44,000	40,000	22,000	8,500	7,500	7,000	9,380	8,723	272,503
City of Bakersfield	7,187	31,921	25,522	25,949	29,975	52,708	42,210	19,034	8,404	3,223	10,322	11,525	267,980
Kern River Canal & Irr. Co.	21,122	15,517	16,923	20,763	25,000	25,000	25,000	25,000	23,956	22,976	24,847	25,509	271,613
South Fork	600	1,208	1,855	2,480	3,088	3,632	4,231	4,776	5,324	5,911	600	600	34,305
CITY OF BAKERSFIELD TOTAL	28,909	48,646	44,300	49,192	58,063	81,340	71,441	48,810	37,684	32,110	35,769	37,634	573,898
NORTH KERN WSD	87,755	77,556	78,069	90,193	102,063	121,340	126,450	115,033	115,408	93,658	57,953	59,062	1,124,540
TOTAL 1ST POINT STORAGE	123,664	163,454	162,517	180,385	204,126	242,680	219,891	172,343	160,592	132,768	103,102	105,419	1,970,941



KERN DELTA WATER DISTRICT

KERN DELTA WATER DISTRICT

**Monthly Summary of Kern River Entitlements, Diversions,
Deliveries and Storage ... All Canals**

Quantities in acre-feet

Year: 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Kern River Entitlement	31,630	40,660	22,629	26,332	31,343	30,085	26,944	27,438	33,451	24,627	23,946	24,365	343,450
Release	(19,727)	(7,694)	(12,394)	(17,597)	(15,204)	(7,181)	(8,505)	(7,694)	(19,605)	(17,457)	(21,468)	(19,043)	(173,569)
Entitlement + or - Releases	= 11,903	32,966	10,235	8,735	16,139	22,904	18,439	19,744	13,846	7,170	2,478	5,322	169,881
Into Isabella Storage	28	30,302	3,940	1,207	3,395	528	0	739	266	80	56	48	40,589
From Isabella Storage	0	0	777	0	0	3,889	17,349	13,883	1,127	474	0	0	37,499
From City of Bakersfield	0	0	0	0	0	0	0	0	0	0	0	0	0
From Buena Vista WSD	0	0	0	0	0	0	0	0	0	0	0	0	0
To City of Bakersfield	0	0	0	0	0	0	0	0	0	0	0	0	0
Storage Transfer/Exch.	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrier Canal Loss/Refill	122	0	0	0	0	0	0	0	0	0	38	87	247
To North Kern WSD	0	0	0	0	0	0	0	0	0	0	0	0	0
Via Cawelo Water District	0	0	0	0	0	0	0	0	0	0	0	0	0
For Improvement District No.4	0	0	0	0	0	0	0	0	0	0	0	827	827
Other	0	0	0	0	0	0	0	(101)	0	0	0	0	(101)
Diverted at Heads of Canals	= 11,753	2,664	7,072	7,528	12,744	26,265	35,788	32,787	14,707	7,564	2,384	4,360	165,616
From North Kern WSD	0	0	0	0	0	0	0	0	0	0	0	0	0
From Cawelo Water District	0	0	0	0	0	0	0	0	0	0	0	0	0
From Improvement District No.4	0	0	0	0	0	0	0	0	0	0	0	827	827
Total Utility Supply	= 11,753	2,664	7,072	7,528	12,744	26,265	35,788	32,787	14,707	7,564	2,384	5,187	166,443
Utility Deliveries	7,124	1,609	2,549	2,601	6,859	18,621	27,538	25,514	9,172	3,098	826	3,102	108,613
Contract Deliveries	49	0	318	186	886	1,379	1,207	734	670	339	210	18	5,796
Total Irrigation Deliveries	- 7,173	1,609	2,867	2,787	7,545	20,000	28,745	26,248	9,842	3,437	1,036	3,120	114,409
Canal Conveyance Losses	4,580	1,055	4,205	4,741	5,199	6,265	7,043	6,539	4,865	4,127	1,348	2,067	52,034
Delivery Percentage	61%	60%	41%	37%	59%	76%	80%	80%	67%	45%	43%	60%	69%
Reservoir Evaporation Loss	28	50	267	355	395	639	651	356	139	106	56	48	3,090
End of Month Reservoir Storage	7,000	37,252	40,148	41,000	44,000	40,000	22,000	8,500	7,500	7,000	7,000	7,000	7,000

Year: 1998

Total Flow via the Kern Island Canal Headgate

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	48	51	28	48	198	256	339	353	410	106	73	0
2	42	50	30	44	197	287	348	339	413	115	65	0
3	60	4	35	37	165	300	348	323	377	100	64	0
4	62	9	31	32	159	293	373	311	280	83	72	0
5	70	19	35	32	121	287	326	319	234	87	64	27
6	77	7	53	29	129	238	322	292	131	97	56	69
7	69	6	54	36	120	227	342	254	140	124	62	156
8	70	2	55	50	116	216	385	250	160	166	66	170
9	73	6	68	55	106	198	369	262	170	165	63	173
10	154	16	74	41	111	194	333	280	166	98	62	134
11	164	15	84	33	94	211	310	262	147	86	63	60
12	170	14	99	38	73	208	308	268	129	82	66	53
13	195	12	82	36	94	180	318	303	136	82	63	50
14	210	4	114	48	92	172	325	320	164	79	53	52
15	210	4	111	54	95	210	355	336	166	82	48	49
16	220	4	112	45	89	265	396	367	149	63	46	48
17	216	30	99	45	86	359	409	339	151	53	39	63
18	202	35	83	45	98	422	391	342	157	52	37	70
19	202	30	108	53	108	418	348	395	152	73	12	69
20	213	32	112	61	114	380	341	400	147	89	0	60
21	224	32	108	78	129	399	390	380	143	89	0	33
22	211	15	100	102	150	395	389	299	126	89	0	36
23	163	8	116	122	169	353	325	277	124	71	0	31
24	108	29	105	139	188	328	306	265	118	58	0	31
25	100	30	90	125	242	328	295	271	128	56	0	39
26	69	30	83	138	253	317	273	330	110	69	0	41
27	61	29	56	149	254	312	266	388	102	86	0	28
28	61	29	67	167	244	291	241	359	114	86	0	37
29	61	-	61	176	249	286	293	336	123	91	0	37
30	63	-	60	184	256	294	356	370	111	89	0	36
31	54	-	33	-	247	-	331	405	-	87	-	28
TOTAL	3,902	552	2,346	2,242	4,746	8,624	10,451	9,995	5,178	2,753	1,074	1,680
MAXIMUM DAY	224	51	116	184	256	422	409	405	413	166	73	173
MINIMUM DAY	42	2	28	29	73	172	241	250	102	52	0	0
MEAN	126	20	76	75	153	287	337	322	173	89	36	54
TOTAL AC.FT.	7,739	1,095	4,653	4,447	9,413	17,105	20,729	19,825	10,270	5,461	2,130	3,332
WHOLE YEAR:-	TOTAL,	53,543	MAX.,	422	MIN.,	0	MEAN,	147	TOTAL AC.FT.,	106,199		

Year: 1998

Kern Island Water Diverted via Arvin-Edison Turnout

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	69	0	0	0	0	0	0	49	0	0	0	16
2	71	0	0	0	0	0	0	49	0	0	0	59
3	73	0	0	0	0	0	0	54	0	0	0	57
4	79	0	0	0	0	0	0	54	0	0	0	59
5	88	0	0	0	0	0	0	50	0	0	0	52
6	88	0	0	0	0	0	0	48	0	0	0	22
7	90	0	0	0	0	0	0	50	0	0	0	0
8	88	0	0	0	0	0	0	52	0	0	0	0
9	70	0	0	0	0	0	0	50	0	0	0	0
10	0	0	0	0	0	0	0	50	0	0	0	0
11	0	0	0	0	0	0	0	53	0	0	0	0
12	0	0	0	0	0	0	0	55	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	45	0	0	0	0	0	0
21	0	0	0	0	0	45	11	0	0	0	0	0
22	0	0	0	0	0	49	47	0	0	0	0	0
23	0	0	0	0	0	53	51	0	0	0	0	0
24	0	0	0	0	0	49	51	0	0	0	0	0
25	0	0	0	0	0	50	48	0	0	0	0	0
26	0	0	0	0	0	50	49	0	0	0	0	0
27	0	0	0	0	0	50	49	0	0	0	0	0
28	0	0	0	0	0	53	52	0	0	0	0	0
29	0	-	0	0	0	48	50	0	0	0	0	0
30	0	-	0	0	0	54	43	0	0	0	0	0
31	0	-	0	-	0	-	48	0	-	0	-	0
TOTAL	716	0	0	0	0	546	499	614	0	0	0	265
MAXIMUM DAY	90	0	0	0	0	54	52	55	0	0	0	59
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	23	0	0	0	0	18	16	20	0	0	0	9
TOTAL AC.FT.	1,420	0	0	0	0	1,083	990	1,218	0	0	0	526
WHOLE YEAR:-	TOTAL,	2,640	MAX.,	90	MIN.,	0	MEAN,	7	TOTAL AC.FT.,	5,237		

**KERN DELTA WATER DISTRICT
KERN ISLAND CANAL SERVICE AREA**

Quantities in acre-feet

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
River Entitlement	18,446	18,369	18,373	18,307	19,821	19,157	19,259	18,446	17,851	18,446	17,851	18,446	222,772
Release	8,953	4,534	14,556	13,918	8,247	5,039	3,418	1,631	8,111	13,199	15,861	14,004	111,471
Entitlement + or - Releases	9,493	13,835	3,817	4,389	11,574	14,118	15,841	16,815	9,740	5,247	1,990	4,442	111,301
Into Storage	10	12,520	103	131	3,161	119	0	430	204	36	20	18	16,752
From Storage	0	0	0	0	0	3,865	6,764	4,819	162	0	0	0	15,610
From City of Bakersfield	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrier Canal Loss/Refill	80	0	0	0	0	0	0	0	0	0	38	0	118
Other	+/-	0	0	0	0	0	0	0	0	0	0	0	0
Transfer in Storage	+/-	0	0	0	0	0	0	0	0	0	0	0	0
Eastside Canal Entitlement	0	0	167	551	1,123	2,035	2,326	1,095	0	0	0	0	7,297
To City of Bakersfield	0	0	0	0	0	0	0	0	0	0	0	0	0
For Improvement District No.4	0	0	0	0	0	0	0	0	0	0	0	827	827
Diverted at Head of Canal	9,403	1,315	3,547	3,707	7,290	15,829	20,279	20,109	9,698	5,211	1,932	3,597	101,917
From Improvement District No.4	0	0	0	0	0	0	0	0	0	0	0	827	827
Total Utility Supply	9,403	1,315	3,547	3,707	7,290	15,829	20,279	20,109	9,698	5,211	1,932	4,424	102,744
Utility Deliveries	6,570	787	1,076	1,258	3,896	11,109	15,111	15,255	6,165	2,361	693	2,745	67,026
Contract Deliveries	49	0	318	176	604	1,236	1,192	717	670	339	210	18	5,529
Total Irrigation Deliveries	6,619	787	1,394	1,434	4,500	12,345	16,303	15,972	6,835	2,700	903	2,763	72,555
Canal Conveyance Losses	2,784	528	2,153	2,273	2,790	3,484	3,976	4,137	2,863	2,511	1,029	1,661	30,189
Delivery Percentage	70%	60%	39%	39%	62%	78%	80%	79%	70%	52%	47%	62%	71%

Into Reservoir Storage	10	12,520	103	131	3,161	119	0	430	204	36	20	18	16,752
Reservoir Evaporation Loss	10	20	103	131	161	254	236	111	42	36	20	18	1,142
From Reservoir Storage	0	0	0	0	0	3,865	6,764	4,819	162	0	0	0	15,610
End of Month Reservoir Storage	2,500	15,000	15,000	15,000	18,000	14,000	7,000	2,500	2,500	2,500	2,500	2,500	

State Exchange Diverted	125	0	75	75	0	831	1,315	2,019	1,012	139	14	49	5,654
State Exchange Delivered	125	0	75	75	0	831	976	1,386	683	139	14	49	4,353
City of Bakersfield Miscellaneous Diverted	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Bakersfield Miscellaneous Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0
Mandatory Release Diverted	0	0	0	66	1,173	932	254	0	0	0	0	0	2,425
Mandatory Release Delivered	0	0	0	26	165	0	0	0	0	0	0	0	191
Arvin-Edison Payback Diverted	0	0	0	0	0	0	0	0	0	0	0	0	0
Arvin-Edison Payback Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0

KERN ISLAND CANAL
ENTITLEMENT AND DIVERSION OF CONTRACT WATER
BALFOUR - GUTHRIE CONTRACT

Year: 1998

Quantities in acre-feet
except where noted.....

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
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KERN ISLAND CANAL ENTITLEMENT:

Maximum	18,446	16,661	18,424	17,851	18,446	17,851	18,446	18,446	17,851	18,446	17,851	18,446	217,165
Actual	18,446	16,661	18,359	17,851	18,446	17,851	18,446	18,446	17,851	18,446	17,851	18,446	217,100
Maximum Percentage	100.00%	100.00%	99.65%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

CONTRACT ENTITLEMENT:

Maximum	269	242	269	260	269	260	269	269	260	269	260	--	2,896
Actual	269	242	268	260	269	260	269	269	260	269	260	--	2,895
Sum to Date	269	511	779	1,039	1,308	1,568	1,837	2,106	2,366	2,635	2,895	2,895	

CONTRACT DIVERTED:

For Month	0	0	181	97	233	684	726	287	174	48	0	0	2,430
To Date	0	0	181	278	511	1,195	1,921	2,208	2,382	2,430	2,430	2,430	

UNUSED ENTITLEMENT:

For Month	269	242	87	163	36	(424)	(457)	(18)	86	221	260	0	465
Sum to Date	269	511	598	761	797	373	(84)	(102)	(16)	205	465	465	

KERN ISLAND CANAL
ENTITLEMENT AND DIVERSION OF CONTRACT WATER
BLOOMFIELD CONTRACT

Year: 1998

Quantities in acre-feet
except where noted.....

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
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KERN ISLAND CANAL ENTITLEMENT:

Maximum	18,446	16,661	18,424	17,851	18,446	17,851	18,446	18,446	17,851	18,446	17,851	18,446	217,165
Actual	18,446	16,661	18,359	17,851	18,446	17,851	18,446	18,446	17,851	18,446	17,851	18,446	217,100
Maximum Percentage	100.00%	100.00%	99.65%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

CONTRACT ENTITLEMENT:

Maximum	336	303	336	325	336	325	336	336	325	336	325	--	3,619
Actual	336	303	335	325	336	325	336	336	325	336	325	--	3,618
Sum to Date	336	639	974	1,299	1,635	1,960	2,296	2,632	2,957	3,293	3,618	3,618	3,618

CONTRACT DIVERTED:

For Month	49	0	137	79	371	552	466	430	496	291	210	18	3,099
To Date	49	49	186	265	636	1,188	1,654	2,084	2,580	2,871	3,081	3,099	3,099

UNUSED ENTITLEMENT:

For Month	287	303	198	246	(35)	(227)	(130)	(94)	(171)	45	115	(18)	519
Sum to Date	287	590	788	1,034	999	772	642	548	377	422	537	519	519

Year: 1998

Total Flow via the Eastside Canal Headgate

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	47	32	56	52	30	24	6	0
2	0	0	0	0	17	37	50	56	29	16	5	0
3	0	0	0	0	34	41	43	56	25	12	5	0
4	0	0	0	0	16	46	31	52	15	13	5	0
5	0	0	0	0	6	43	44	48	14	16	5	0
6	0	0	0	0	19	39	48	49	8	16	3	0
7	10	0	0	0	18	37	46	48	16	16	3	0
8	8	0	0	0	18	37	52	49	25	16	7	0
9	2	0	10	0	13	43	58	50	27	15	7	0
10	9	0	10	6	14	44	57	54	25	15	5	0
11	9	1	10	6	12	39	53	56	24	15	1	0
12	7	5	10	6	5	30	50	54	24	17	6	0
13	6	0	3	6	14	33	56	53	24	17	4	0
14	6	0	4	9	13	34	58	48	26	19	0	0
15	2	0	5	3	15	40	53	43	23	19	1	0
16	6	0	6	0	17	48	52	38	23	15	14	0
17	9	0	8	0	17	47	47	33	24	11	16	0
18	13	0	8	0	31	42	38	38	19	14	23	2
19	13	0	8	2	32	42	44	42	17	15	6	5
20	13	0	11	10	37	43	49	42	17	15	0	6
21	13	0	9	24	38	48	54	33	17	16	0	10
22	13	0	9	30	42	54	57	24	16	21	2	6
23	12	0	18	29	43	53	59	26	11	14	15	6
24	9	0	7	29	42	55	54	26	12	5	21	6
25	7	0	0	24	36	54	49	25	10	7	9	6
26	4	0	0	26	33	55	48	30	9	9	10	6
27	4	0	0	33	34	44	50	26	11	8	8	6
28	3	0	0	36	36	41	59	25	17	7	0	5
29	6	-	0	37	37	50	60	26	20	9	5	5
30	5	-	0	49	35	56	59	26	22	9	0	5
31	0	-	0	-	30	-	53	31	-	6	-	5
TOTAL	189	6	136	365	801	1,307	1,587	1,259	580	427	192	79
MAXIMUM DAY	13	5	18	49	47	56	60	56	30	24	23	10
MINIMUM DAY	0	0	0	0	5	30	31	24	8	5	0	0
MEAN	6	0	4	12	26	44	51	41	19	14	6	3
TOTAL AC.FT.	375	12	270	724	1,589	2,592	3,148	2,497	1,150	847	381	157
WHOLE YEAR:-	TOTAL,	6,928	MAX.,	60	MIN.,	0	MEAN,	19	TOTAL AC.FT.,	13,742		

**KERN DELTA WATER DISTRICT
EASTSIDE CANAL SERVICE AREA**

Quantities in acre-feet

Year: 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Kern River Entitlement	+	0	0	167	551	2,035	2,326	1,095	0	0	0	0	7,297
Mandatory Release Diverted	+	0	0	0	56	6	0	0	0	0	0	0	528
State Exchange Diverted	+	375	12	99	117	551	822	1,402	1,150	847	381	157	5,913
City Miscellaneous Diverted	+	0	0	4	0	0	0	0	0	0	0	0	4
Friant-Kern Floodwater Diverted	+	0	0	0	0	0	0	0	0	0	0	0	0
Arvin-Edison Payback Diverted	+	0	0	0	0	0	0	0	0	0	0	0	0
Eastside Canal at Head	=	375	12	270	724	2,592	3,148	2,497	1,150	847	381	157	13,742
Utility Deliveries	+	0	0	121	321	1,654	2,017	1,040	0	0	0	0	6,151
Contract Deliveries	+	0	0	0	10	82	15	17	0	0	0	0	267
Total Utility Deliveries	=	0	0	121	331	1,797	2,032	1,057	0	0	0	0	6,418
Mandatory Release Delivered	+	0	0	0	56	383	0	0	0	0	0	0	439
State Exchange Delivered	+	176	15	26	117	551	802	1,285	1,039	809	265	58	5,143
City Miscellaneous Delivered	+	0	0	4	0	0	0	0	0	0	0	0	4
Friant-Kern Floodwater Delivered	+	0	0	0	0	0	0	0	0	0	0	0	0
Arvin-Edison Payback Delivered	+	0	0	0	0	0	0	0	0	0	0	0	0
Total Irrigation Deliveries	=	176	15	151	504	2,348	2,834	2,342	1,039	809	265	58	12,004
Canal Loss (Utility)	+	0	0	46	220	43	294	38	0	0	0	0	879
Canal Loss (State)	+	199	(3)	73	0	0	20	117	111	38	116	99	770
Canal Loss (Other)	+	0	0	0	0	83	0	0	0	0	0	0	89
Total Canal Loss	=	199	(3)	119	220	126	314	155	111	38	116	99	1,738
Delivery Percentage		47%	125%	56%	70%	92%	90%	94%	90%	96%	70%	37%	87%

Year: 1998

Total Flow via the Buena Vista Canal Headgate

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	12	50	0	19	59	54	125	113	75	15	0	5
2	12	33	0	14	63	59	123	111	73	17	0	0
3	12	0	0	13	59	62	120	114	83	23	0	0
4	12	0	0	12	62	53	125	118	92	25	0	0
5	14	0	12	12	58	46	138	137	88	26	0	0
6	14	0	13	11	43	50	139	144	84	21	0	0
7	12	0	9	11	36	53	138	151	71	17	0	0
8	12	0	13	11	35	56	142	136	61	15	0	0
9	12	24	19	11	32	64	145	120	42	12	0	0
10	11	39	25	11	29	73	127	119	38	12	3	5
11	13	48	25	11	28	77	108	100	35	11	7	24
12	13	51	25	11	28	80	119	84	31	12	6	21
13	17	50	25	11	27	75	124	69	30	11	3	20
14	24	49	26	11	27	72	115	75	30	9	4	15
15	29	47	29	11	27	75	112	87	25	8	4	31
16	30	45	32	11	27	75	114	105	24	8	5	30
17	30	48	30	11	29	84	112	117	24	9	6	30
18	29	51	30	11	34	86	110	117	25	8	5	27
19	31	54	29	13	37	82	94	112	22	8	5	27
20	35	50	28	22	37	74	73	107	12	11	5	20
21	45	45	27	25	37	78	79	107	14	11	7	0
22	45	45	24	35	37	92	88	102	23	11	11	0
23	44	38	25	37	36	92	93	102	21	12	12	0
24	45	0	33	40	37	102	108	88	19	8	10	5
25	54	0	32	34	39	115	103	80	16	8	10	5
26	63	0	32	32	42	121	105	91	13	5	10	5
27	57	0	32	37	48	105	119	97	17	0	10	5
28	56	0	26	47	58	100	125	106	17	0	6	0
29	57	-	9	55	56	113	121	106	15	0	5	0
30	57	-	9	58	43	118	122	86	15	0	5	0
31	54	-	13	-	47	-	123	76	-	0	-	0
TOTAL	951	767	632	648	1,257	2,386	3,589	3,277	1,135	333	139	275
MAXIMUM DAY	63	54	33	58	63	121	145	151	92	26	12	31
MINIMUM DAY	11	0	0	11	27	46	73	69	12	0	0	0
MEAN	31	27	20	22	41	80	116	106	38	11	5	9
TOTAL AC.FT.	1,886	1,521	1,254	1,285	2,493	4,733	7,119	6,500	2,251	660	276	545
WHOLE YEAR:-	TOTAL,	15,389	MAX.,	151	MIN.,	0	MEAN,	42	TOTAL AC.FT.,	30,523		

**KERN DELTA WATER DISTRICT
BUENA VISTA CANAL SERVICE AREA**

Quantities in acre-feet

Year: 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Kern River Entitlement	4,750	5,837	932	2,507	4,168	3,958	2,759	1,894	4,645	4,711	4,544	4,685	45,390
Release	(3,824)	649	3,983	(1,007)	(2,691)	(769)	(2,745)	(1,894)	(3,757)	(4,029)	(4,407)	(4,043)	(24,534)
Entitlement + or - Releases	= 926	6,486	4,915	1,500	1,477	3,189	14	0	888	682	137	642	20,856
Into Storage	- 6	5,760	3,661	243	99	163	0	0	14	22	12	10	9,990
From Storage	+ 0	0	0	0	0	0	4,834	3,915	482	0	0	0	9,231
To North Kern WSD	- 0	0	0	0	0	0	0	0	0	0	0	0	0
Other	+ or - 0	0	0	0	0	0	0	(101)	0	0	0	0	(101)
Transfer in Storage	+ or - 0	0	0	0	0	0	0	0	0	0	0	0	0
Carrier Canal Loss	- 36	0	0	0	0	0	0	0	0	0	0	87	123
Diverted at Head of Canal	= 884	726	1,254	1,257	1,378	3,026	4,848	3,814	1,356	660	125	545	19,873
From North Kern WSD	+ 0	0	0	0	0	0	0	0	0	0	0	0	0
Total Utility Supply	= 884	726	1,254	1,257	1,378	3,026	4,848	3,814	1,356	660	125	545	19,873
Utility Deliveries	373	620	606	476	638	2,263	4,158	3,507	920	181	42	331	14,115
Contract Deliveries	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Irrigation Deliveries	- 373	620	606	476	638	2,263	4,158	3,507	920	181	42	331	14,115
Canal Conveyance Losses	= 511	106	648	781	740	763	690	307	436	479	83	214	5,758
Delivery Percentage	42%	85%	48%	38%	46%	75%	86%	92%	68%	27%	34%	61%	71%

Into Reservoir Storage	6	5,760	3,661	243	99	163	0	0	14	22	12	10	9,990
Reservoir Evaporation Loss	6	8	61	95	99	163	166	85	32	22	12	10	759
From Reservoir Storage	0	0	0	0	0	0	4,834	3,915	482	0	0	0	9,231
End of Month Reservoir Storage	1,500	7,252	10,852	11,000	11,000	11,000	6,000	2,000	1,500	1,500	1,500	1,500	

State Exchange Diverted	0	0	0	0	0	0	321	425	151	0	0	0	897
State Exchange Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0
Mandatory Release Diverted	0	0	0	28	1,115	749	99	0	0	0	0	0	1,991
Mandatory Release Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0
Friant-Kern Floodwater Diverted	0	0	0	0	0	0	0	0	0	0	0	0	0
Friant-Kern Floodwater Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0
Arvin-Edison Payback Diverted	0	0	0	0	0	0	0	0	0	0	0	0	0
Arvin-Edison Payback Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Bakersfield via Buena Vista	0	0	0	0	0	0	0	0	0	0	151	0	151

**KERN DELTA WATER DISTRICT
BUENA VISTA CANAL
DISTRIBUTION OF WATER**

Year: 1998

Quantities in acre-feet

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Buena Vista Canal at Headworks	1,886	1,521	1,254	1,285	2,493	4,733	7,119	6,500	2,251	660	276	545	30,523
Buena Vista Canal from Maples Canal	0	0	0	0	0	0	113	0	0	0	0	0	113
TOTAL BUENA VISTA CANAL SUPPLY	1,886	1,521	1,254	1,285	2,493	4,733	7,232	6,500	2,251	660	276	545	30,636

Deliveries: Head to Section 17

Buena Vista Utility	42	0	606	258	500	2,067	2,918	2,271	617	181	42	0	9,502
Buena Vista State Exchange (Spreading)	0	0	0	0	0	0	321	425	151	0	0	0	897
Stine Utility	0	0	0	0	0	0	34	34	0	0	0	0	68
City of Bakersfield (Spreading)	0	0	0	0	0	0	0	0	0	0	151	0	151
Kern River Floodwater (Spreading)	0	0	0	28	1,053	749	99	0	0	0	0	0	1,929
Sub-Total	42	0	606	286	1,553	2,816	3,372	2,730	768	181	193	0	12,547

Deliveries: At or Below Section 17

Buena Vista Utility	331	620	0	218	138	196	1,240	1,236	303	0	0	331	4,613
Buena Vista State Exchange	0	0	0	0	0	0	0	0	0	0	0	0	0
Stine Utility	0	0	0	0	0	58	179	273	214	0	0	0	724
Stine State Exchange	0	0	0	0	0	0	0	0	0	0	0	0	0
Kern Island Utility	701	673	0	0	0	790	1,553	1,742	433	0	0	0	5,892
Kern Island State	0	0	0	0	0	0	0	0	0	0	0	0	0
Arvin-Edison Payback	0	0	0	0	0	0	0	0	0	0	0	0	0
Kern River Floodwater (Spreading)	0	0	0	0	62	0	0	0	0	0	0	0	62
Sub-Total	1,032	1,293	0	218	200	1,044	2,972	3,251	950	0	0	331	11,291

TOTAL DELIVERED	1,074	1,293	606	504	1,753	3,860	6,344	5,981	1,718	181	193	331	23,838
Canal Conveyance Losses	812	228	648	781	740	873	888	519	533	479	83	214	6,798
Delivery Percentage	57%	85%	48%	39%	70%	82%	88%	92%	76%	27%	70%	61%	78%

DISTRIBUTION:

Buena Vista Utility	884	726	1,254	1,257	1,378	3,026	4,848	3,814	1,356	660	125	545	19,873
Buena Vista State Exchange	0	0	0	0	0	0	0	425	151	0	0	0	897
Stine Utility	0	0	0	0	0	71	248	351	254	0	0	0	924
Stine State Exchange	0	0	0	0	0	0	0	0	0	0	0	0	0
Kern Island Utility	1,002	795	0	0	0	887	1,716	1,910	490	0	0	0	6,800
Kern Island State	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Bakersfield	0	0	0	0	0	0	0	0	0	0	151	0	151
Kern River Floodwater	0	0	0	28	1,115	749	99	0	0	0	0	0	1,991
TOTAL	1,886	1,521	1,254	1,285	2,493	4,733	7,232	6,500	2,251	660	276	545	30,636

Year: 1998

Total Flow via the Stine Canal Headgate

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	19	18	73	81	126	102	95	39	0	3
2	0	0	15	18	69	97	127	102	99	36	0	0
3	0	0	13	17	65	101	129	103	91	36	0	0
4	0	0	14	15	68	94	124	114	76	36	0	0
5	0	0	14	14	64	84	122	156	66	37	0	0
6	0	0	14	15	64	78	124	159	61	36	0	0
7	0	0	13	14	59	73	130	151	66	34	0	0
8	0	0	11	14	56	66	142	140	72	31	0	0
9	0	0	12	14	55	61	149	141	71	25	0	0
10	0	0	14	14	53	60	142	139	68	27	5	0
11	0	0	14	14	54	60	130	137	60	25	15	0
12	0	0	15	14	53	60	128	139	46	23	13	0
13	0	0	14	14	52	59	126	144	44	23	10	0
14	0	0	13	14	52	65	129	142	48	23	10	0
15	0	0	19	15	52	85	122	135	53	23	10	0
16	0	0	23	14	52	95	117	137	53	23	10	0
17	0	0	21	15	54	95	113	143	55	20	10	0
18	8	0	18	15	61	100	99	145	52	21	10	0
19	30	0	18	14	66	98	100	147	59	29	11	0
20	30	0	18	15	65	93	104	136	54	53	9	0
21	31	0	18	19	61	98	112	122	58	54	9	0
22	30	0	19	31	63	106	128	102	73	47	9	0
23	30	0	22	42	67	104	136	87	74	40	9	0
24	31	0	22	44	66	111	130	86	70	37	9	0
25	30	0	25	42	66	119	113	89	66	29	10	0
26	32	0	25	40	66	113	99	92	63	20	13	0
27	33	4	22	44	64	104	103	91	56	0	14	0
28	33	20	21	47	62	101	112	89	50	0	6	0
29	37	-	18	62	64	107	113	84	44	0	3	0
30	39	-	19	72	61	122	109	81	41	0	3	0
31	26	-	18	-	61	-	104	91	-	0	-	0
TOTAL	420	24	541	740	1,888	2,690	3,742	3,726	1,884	827	198	3
MAXIMUM DAY	39	20	25	72	73	122	149	159	99	54	15	3
MINIMUM DAY	0	0	11	14	52	59	99	81	41	0	0	0
MEAN	14	1	17	25	61	90	121	120	63	27	7	0
TOTAL AC.FT.	833	48	1,073	1,468	3,745	5,336	7,422	7,390	3,737	1,640	393	6
WHOLE YEAR:-	TOTAL,	16,683	MAX.,	159	MIN.,	0	MEAN,	46	TOTAL AC.FT.,	33,091		

**KERN DELTA WATER DISTRICT
STINE CANAL SERVICE AREA**

Year: 1998

Quantities in acre-feet

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
River Entitlement	5,812	8,227	1,662	2,759	3,677	3,485	2,463	3,549	6,647	1,470	1,490	1,234	42,475
Release	(4,967)	(667)	(551)	(1,238)	(2,207)	(619)	(1,672)	(2,388)	(4,166)	(418)	(1,289)	(1,052)	(21,234)
Entitlement + or - Releases	845	7,560	1,111	1,521	1,470	2,866	791	1,161	2,481	1,052	201	182	21,241
Into Storage	6	7,512	111	471	81	133	0	2	26	22	12	10	8,386
From Storage	0	0	444	0	0	0	3,857	3,423	0	0	0	0	7,724
To North Kern WSD	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfer in Storage	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrier Canal Loss	6	0	0	0	0	0	0	0	0	0	0	0	6
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted at Head of Canal	833	48	1,444	1,050	1,389	2,733	4,648	4,582	2,455	1,030	189	172	20,573
Utility Deliveries	23	0	427	219	449	1,502	3,136	3,180	1,357	274	16	19	10,602
Contract Deliveries	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Irrigation Deliveries	23	0	427	219	449	1,502	3,136	3,180	1,357	274	16	19	10,602
Canal Conveyance Losses	810	48	1,017	831	940	1,231	1,512	1,402	1,098	756	173	153	9,971
Delivery Percentage	3%	0%	30%	21%	32%	55%	67%	69%	55%	27%	8%	11%	52%

Into Reservoir Storage	6	7,512	111	471	81	133	0	2	26	22	12	10	8,386
Reservoir Evaporation Loss	6	12	61	77	81	133	143	79	26	22	12	10	662
From Reservoir Storage	0	0	444	0	0	0	3,857	3,423	0	0	0	0	7,724
End of Month Reservoir Storage	1,500	9,000	8,606	9,000	9,000	9,000	5,000	1,500	1,500	1,500	1,500	1,500	1,500

State Exchange Diverted	0	0	0	0	0	0	278	361	131	0	0	0	770
State Exchange Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0
Mandatory Release Diverted	0	0	0	28	724	522	139	0	0	0	0	0	1,413
Mandatory Release Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0
Arvin-Edison Payback Diverted	0	0	0	0	0	0	0	0	0	0	0	0	0
Arvin-Edison Payback Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Bakersfield via Stine	0	0	0	0	0	0	0	0	0	0	214	0	214

KERN DELTA WATER DISTRICT
FARMERS CANAL SERVICE AREA

Year: 1998

Quantities in acre-feet

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
River Entitlement	2,622	8,227	1,662	2,759	3,677	3,485	2,463	3,549	4,308	0	61	0	32,813
Release	(1,983)	(3,142)	(1,270)	(1,434)	(2,059)	(754)	(670)	(1,781)	(3,571)	189	89	56	(16,330)
Entitlement + or - Releases	= 639	5,085	392	1,325	1,618	2,731	1,793	1,768	737	189	150	56	16,483
Into Storage	6	4,510	65	362	54	113	0	307	22	0	12	10	5,461
From Storage	0	0	333	0	0	24	1,894	1,726	483	474	0	0	4,934
Transfer in Storage	0	0	0	0	0	0	0	0	0	0	0	0	0
Carrier Canal Loss	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted at Head of Canal	= 633	575	660	963	1,564	2,642	3,687	3,187	1,198	663	138	46	15,956
Utility Deliveries	158	202	319	327	878	2,093	3,116	2,532	730	282	75	7	10,719
Contract Deliveries	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Irrigation Deliveries	= 158	202	319	327	878	2,093	3,116	2,532	730	282	75	7	10,719
Canal Conveyance Losses	475	373	341	636	686	549	571	655	468	381	63	39	5,237
Delivery Percentage	25%	35%	48%	34%	56%	79%	85%	79%	61%	43%	54%	15%	67%

Into Reservoir Storage	6	4,510	65	362	54	113	0	307	22	0	12	10	5,461
Reservoir Evaporation Loss	6	10	42	52	54	89	106	81	39	26	12	10	527
From Reservoir Storage	0	0	333	0	0	24	1,894	1,726	483	474	0	0	4,934
End of Month Reservoir Storage	1,500	6,000	5,690	6,000	6,000	6,000	4,000	2,500	2,000	1,500	1,500	1,500	

State Exchange Diverted	0	0	0	0	0	0	288	321	180	0	0	0	789
State Exchange Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0
Mandatory Release Diverted	0	0	0	26	980	912	171	0	0	0	0	0	2,089
Mandatory Release Delivered	0	0	0	0	0	0	0	0	0	0	0	0	0

Kern Delta Water District Kern River Water Diverted via Kern River Canal												Year: 1998		
DISCHARGE IN CUBIC FEET PER SECOND														
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	14	0	0	0	0	0	0	0
20	0	0	0	0	0	0	13	0	0	0	0	0	0	0
21	0	0	0	0	0	0	14	0	0	0	0	0	0	0
22	0	0	0	0	0	0	14	0	0	0	0	0	0	0
23	0	0	0	0	0	0	2	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	-	0	0	0	0	0	0	0	0	0	0	0	0
30	0	-	0	0	0	0	0	0	0	0	0	0	0	0
31	0	-	0	-	0	-	0	-	0	0	-	0	0	0
TOTAL	0	0	0	0	0	0	57	0	0	0	0	0	0	0
MAXIMUM DAY	0	0	0	0	0	0	14	0	0	0	0	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	2	0	0	0	0	0	0	0
TOTAL AC.FT.	0	0	0	0	0	0	113	0	0	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	57	MAX.,	14	MIN.,	0	MEAN,	0	TOTAL AC.FT.,	0	0	0	0	113

Quantities in acre-feet

KERN DELTA WATER DISTRICT
State Aqueduct Exchange Diversion and Storage Recapitulation

Year: 1998

	Kern Island	Eastside	East of Kern Island	Buena Vista	Stine	Farmers	Pioneer Project	Transfer to BWWS	Westlands Transfer	For ID4	Reservoir		Storage Balance
											Loss	Total	
November	0	0	0	0	0	0	0	0	0	0	0	0	1,114
December	113	50	6	0	0	0	0	0	0	0	0	0	1,114
January	117	375	8	0	0	0	0	0	0	0	0	0	945
February	0	12	0	0	0	0	0	0	0	0	0	0	445
March	4	99	71	0	0	0	0	0	0	0	0	0	433
April	0	117	75	0	0	0	0	65	0	0	2	0	257
Total	234	653	160	0	0	0	0	65	0	0	2	0	1,114

March	0	0	0	0	0	0	0	0	0	0	0	0	0	25,500
April	0	0	0	0	0	0	0	0	0	0	0	0	0	25,500
May	0	0	0	0	0	0	0	0	0	0	0	0	0	25,500
June	299	551	532	0	0	0	0	0	0	0	0	0	0	24,118
July	644	822	671	321	278	288	886	0	1,308	0	0	0	0	18,900
August	1,184	1,402	835	425	361	321	1,967	0	0	0	0	0	0	12,405
September	482	1,150	530	151	131	180	0	0	0	0	0	0	0	9,781
October	12	847	127	0	0	0	0	0	0	0	0	0	0	8,795
November	0	0	0	0	0	0	0	0	0	0	0	0	0	8,795
Total	2,621	4,772	2,695	897	770	789	2,653	0	1,308	0	0	0	16,705	

November	0	381	14	0	0	0	0	0	0	0	0	0	0	8,380
December	43	157	6	0	0	0	0	0	0	435	16	0	0	7,723
Total	43	538	20	0	0	0	0	0	0	435	36	0	1,072	

KERN DELTA WATER DISTRICT
1990 State Pool Payback Diversion Recapitulation

Year: 1998

Quantities in acre-feet

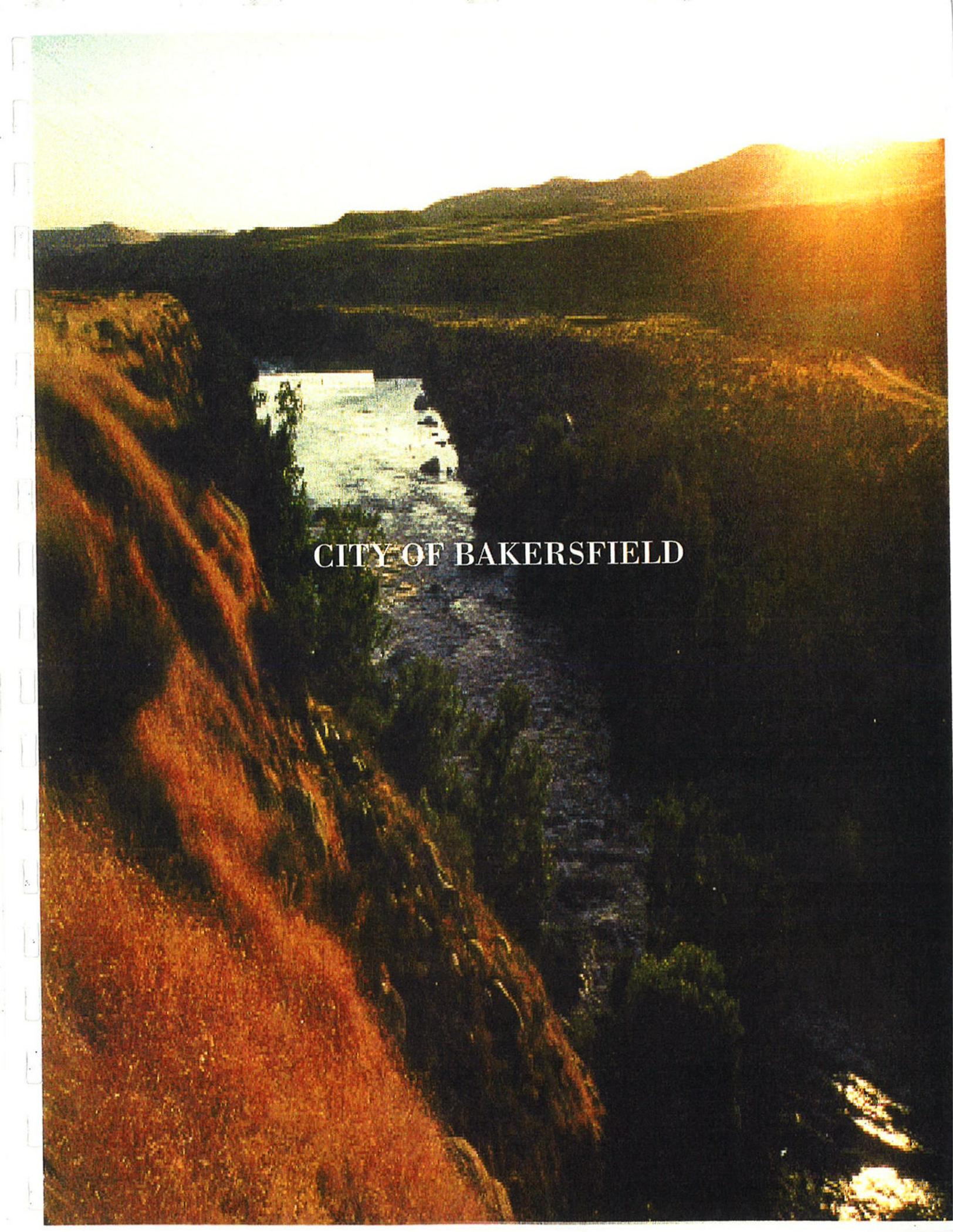
	Kern Island	Eastside	East of Kern Island	Buena Vista	Stine	Farmers	Total	Payback	
								Balance	6,571
January	0	0	0	0	0	0	0	6,571	6,571
February	0	0	0	0	0	0	0	6,571	6,571
March	0	0	0	0	0	0	0	6,571	6,571
April	0	0	0	0	0	0	0	6,571	6,571
May	0	0	0	0	0	0	0	6,571	6,571
June	0	0	0	0	0	0	0	6,571	6,571
July	0	0	0	0	0	0	0	6,571	6,571
August	0	0	0	0	0	0	0	6,571	6,571
September	0	0	0	0	0	0	0	6,571	6,571
October	0	0	0	0	0	0	0	6,571	6,571
November	0	0	0	0	0	0	0	6,571	6,571
December	0	0	0	0	0	0	0	6,571	6,571
Total	0	0	0	0	0	0	0	0	0

KERN DELTA WATER DISTRICT
Arvin-Edison WSD Water Exchange Recapitulation

Year: 1998

Quantities in acre-feet

	Arvin-Edison WSD Water Exchange Recapitulation						Transportation Loss		Total	Payback Balance
	Kern Island	Eastside	East of Kern Island	Buena Vista	Stine	Farmers	Loss			
January	0	0	0	0	0	0	71	71	3,736	
February	0	0	0	0	0	0	0	0	3,736	
March	0	0	0	0	0	0	0	0	3,736	
April	0	0	0	0	0	0	0	0	3,736	
May	0	0	0	0	0	0	0	0	3,736	
June	0	0	0	0	0	0	54	54	3,682	
July	0	0	0	0	0	0	50	50	3,632	
August	0	0	0	0	0	0	61	61	3,571	
September	0	0	0	0	0	0	0	0	3,571	
October	0	0	0	0	0	0	0	0	3,571	
November	0	0	0	0	0	0	0	0	3,571	
December	0	0	0	0	0	0	26	26	3,545	
Total	0	0	0	0	0	0	262	262		



CITY OF BAKERSFIELD

**KERN RIVER CHANNEL OPERATIONS
CITY OF BAKERSFIELD**

Year: 1998

Quantities in acre-feet

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
+ Kern River at First Point of Measurement	45,636	93,987	97,468	132,317	239,423	284,408	239,607	200,713	114,224	89,980	93,054	31,739	1,662,556
- Computed Loss	676	611	676	655	676	655	676	676	655	676	655	676	7,963
- Beardsley Canal at Head	9,049	11,990	17,946	23,195	31,127	41,254	44,231	40,048	31,076	32,743	22,276	18,339	323,274
- Carrier Canal at Head	11,996	13,863	20,703	18,476	22,405	35,032	38,668	36,206	23,654	16,848	8,836	5,328	252,015
= Rocky Point Weir	23,915	67,523	58,143	89,991	185,215	207,467	156,032	123,783	58,839	39,713	61,287	7,396	1,079,304
+ Carrier Waste Gate	14	0	0	0	0	0	0	0	0	0	517	117	648
+ Farmers-Stine-Anderson: to River	0	0	69	0	30	0	0	0	0	0	0	310	409
- Farmers-Stine-Anderson: from River	3,673	5,681	6,833	11,343	21,001	19,747	25,622	27,009	14,160	11,464	12,561	1,410	160,504
- Calloway Canal at Head	7,708	5,778	8,019	8,253	10,901	23,127	28,030	24,865	14,717	5,460	2,622	1,900	141,380
- River Loss: Rocky Point to Calloway Weir	694	926	734	760	829	803	847	710	669	562	524	248	8,306
= Calloway River Weir	11,854	55,138	42,626	69,635	152,514	163,790	101,533	71,199	29,293	22,227	46,097	4,265	770,171
+ CVC T.O. #4 to River	996	0	0	0	0	0	0	0	0	0	6	0	1,002
+ CVC T.O. #3 to River	0	0	0	0	0	0	0	0	0	0	0	1,416	1,416
+ Friant-Kern Inflow	0	9,608	18,967	46,408	13,838	264	12,614	0	0	0	0	15,267	116,966
- River Canal from River	0	0	0	0	0	204	214	15,778	7,150	6,680	11,265	6,058	47,349
- River Loss: Cally. Weir to River Canal Weir	4,177	5,034	3,693	3,977	4,114	3,967	3,511	3,233	2,830	2,660	2,543	2,347	42,086
= River Canal Weir	8,673	59,712	57,900	112,066	162,238	159,883	110,422	52,188	19,313	12,887	32,295	12,543	800,120
+ Pioneer Turnout	587	724	0	0	0	115	414	2,231	2,705	2,662	3,187	936	13,561
+ CVC T.O. #2 to River	0	0	0	0	0	0	0	0	704	60	0	375	1,139
- Rosedale Channel at Head	3,051	10,467	12,065	10,824	11,925	14,523	13,043	9,068	1,519	6,684	11,026	3,195	107,390
- Pioneer Canal at Head	0	3,665	7,722	12,619	12,260	6,587	4,917	3,439	593	0	698	141	52,641
- Berrenda Mesa Pipeline Turnout	0	2,482	2,858	1,726	2,624	2,303	2,168	2,027	2,295	2,382	2,013	1,472	24,350
- River Loss: River Canal to Bellevue Weir	1,946	2,190	1,482	1,551	1,640	1,537	1,466	1,359	1,047	829	805	1,172	17,024
= Flow at Bellevue Weir	4,263	41,632	33,773	85,346	133,789	135,048	89,242	38,526	17,268	5,714	20,940	7,874	613,415
- River Loss: Bellevue Weir to ID#4 Boundary	484	821	486	307	307	298	307	294	298	270	188	119	4,179
- River Loss: ID#4 Boundary to 2800 Acres	264	803	486	307	307	298	307	294	298	270	188	119	3,941
+ Outflow from Berrenda Mesa Spdg. Grounds	0	0	0	0	30	0	0	0	0	0	0	0	30
+ CVC T.O. #1 to River	2,329	0	0	0	95	0	0	0	328	2,017	0	141	4,910
+ River Canal Turnout to 2800 Acres	0	0	0	0	0	0	0	0	0	0	0	0	0
- Central Pioneer from 2800 Acres	0	0	0	0	0	0	0	0	0	0	0	0	0
- North Pioneer from 2800 Acres	698	8,872	5,895	3,128	5,718	11,126	12,246	13,639	7,101	1,734	8,686	1,549	80,392
- River Loss: 2800 Acres to Second Point	0	446	0	1,745	1,845	1,785	1,359	0	0	0	0	0	7,180
- 2800 Acre Recharge Facility	4,259	14,309	10,965	9,045	10,345	9,530	9,225	8,112	7,674	5,457	3,137	3,618	95,676
= Second Point via Kern River Channel	887	16,381	15,941	70,814	115,392	112,011	65,798	16,187	2,225	0	8,741	2,610	426,987

**CARRIER CANAL OPERATIONS
CITY OF BAKERSFIELD**

Year: 1998

Quantities in acre-feet

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
+ Carrier Canal at Head	11,996	13,863	20,703	18,476	22,405	35,032	38,668	36,206	23,654	16,848	8,836	5,328	252,015
- Carrier Waste Gate	14	0	0	0	0	0	0	0	0	0	517	117	648
+ Oilfield Discharge (Texaco Inc.)	0	0	0	0	0	0	0	0	0	0	0	0	0
- Canal Refill	0	0	0	0	0	0	0	0	0	0	38	0	38
= Carrier Reclamation Weir	11,982	13,863	20,703	18,476	22,405	35,032	38,668	36,206	23,654	16,848	8,281	5,211	251,329
+ Oilfield Discharge (Arco Oil)	14	0	0	0	0	0	0	0	0	0	0	0	14
+ Storm Drain Inflow	38	75	46	40	65	0	0	0	16	0	0	4	284
- Eastside Canal at Head	375	12	270	724	1,589	2,592	3,148	2,497	1,150	847	381	157	13,742
- Kern Island Canal at Head	7,739	1,095	4,653	4,447	9,413	17,105	20,729	19,825	10,270	5,461	2,130	3,332	106,199
= Levee No. 1	3,920	12,831	15,826	13,345	11,468	15,335	14,791	13,884	12,250	10,540	5,770	1,726	131,686
- Farmers-Stine-Anderson: to River	0	0	69	0	30	0	0	0	0	0	0	0	409
+ Farmers-Stine-Anderson: from River	3,673	5,681	6,833	11,343	21,001	19,747	25,622	27,009	14,160	11,464	12,561	1,410	160,504
= Carrier Canal at Oak Street	7,593	18,512	22,590	24,688	32,439	35,082	40,413	40,893	26,410	22,004	18,331	2,826	291,781
- Stine Canal at Head	833	48	1,073	1,468	3,745	5,336	7,422	7,390	3,737	1,640	393	6	33,091
- Carrier to Truxtun Lakes	805	567	1,095	1,172	1,128	1,337	1,688	1,954	2,154	2,414	2,118	286	16,718
+ Truxtun Lakes to Carrier	448	406	688	839	823	792	978	1,069	958	851	847	189	8,888
- Arvin-Edison Turnout	1,567	0	4,766	5,387	6,101	5,538	4,048	17,627	14,277	13,922	9,563	1,244	84,040
- Total Carrier Canal Loss	387	442	552	589	740	813	893	841	555	492	363	260	6,927
+ River Canal from River	0	0	0	0	0	204	214	15,778	7,150	6,680	11,265	6,058	47,349
= River Canal at Stockdale Highway	4,449	17,861	15,792	16,911	21,548	23,054	27,554	29,928	13,795	11,067	18,006	7,277	207,242
- Buena Vista Canal at Head	1,886	1,521	1,254	1,285	2,493	4,733	7,119	6,500	2,251	660	276	545	30,523
- Pioneer Turnout	587	724	0	0	0	115	414	2,231	2,705	2,662	3,187	936	13,561
- James Canal at Head	0	3,360	6,470	6,022	7,400	9,066	9,913	7,390	5,931	7,745	6,280	5,796	75,373
- River Canal Boosters	0	0	9	8	0	0	0	0	0	0	0	0	17
= River Canal at Alternate Second Point	1,976	12,256	8,059	9,596	11,655	9,140	10,108	13,807	2,908	0	8,263	0	87,768
+ 2800 Acre Well Water Production	0	0	0	0	0	0	0	0	0	0	0	0	0
- River Canal Turnout	0	0	0	0	0	0	0	0	0	0	0	0	0
- Boswell Turnout	0	1,140	970	611	672	1,821	1,857	1,498	272	0	0	0	8,841
- Kern Delta WD via River Canal	0	0	0	0	0	0	113	0	0	0	0	0	113
- Rosedale RBWSD via River Canal	0	0	0	0	0	0	0	0	0	0	0	0	0
- Henry Miller WD via River Canal	0	0	0	0	0	0	0	0	0	0	0	0	0
- County of Kern	0	0	0	0	0	0	0	0	0	0	0	0	0
= Second Point Group Flow via River Canal	1,976	11,116	7,089	8,985	10,983	7,319	8,138	12,309	2,636	0	8,263	0	78,814

**MONTHLY SUMMARY OF ENTITLEMENT, EXCHANGES, DIVERSIONS, DELIVERIES, LOSSES & SALES
CITY OF BAKERSFIELD**

Year: 1998

Quantities in acre-feet

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
River Entitlement	3,499	50,648	40,980	40,941	70,029	77,870	52,869	21,309	1,204	3,209	7,987	1,216	371,761
Release	6,691	5,385	1,011	1,262	6,444	3,509	903	780	1,409	16,701	18,850	6,968	69,913
ENTITLEMENT + OR - RELEASE	= 10,190	56,033	41,991	42,203	76,473	81,379	53,772	22,089	2,613	19,910	26,837	8,184	441,674
NKWSD to City	0	0	0	0	0	0	0	0	0	0	0	0	0
From Reservoir Storage	127	0	9,990	2,763	2,148	0	17,363	22,858	10,338	5,136	0	0	70,723
Into Reservoir Storage	48	24,783	3,792	3,420	6,443	23,364	7,954	446	0	119	7,183	1,286	78,838
Other	875	26,286	0	4,860	18,861	43,357	19,886	26	(1,268)	0	21,980	6	134,869
TOTAL SUPPLY	= 11,144	57,536	48,189	46,406	91,039	101,372	83,067	44,527	11,683	24,927	41,634	6,904	568,428

Lake Ming	16	16	44	60	77	105	127	121	91	65	42	26	790
Kern Valley Golf Course	0	0	2	13	13	22	28	28	18	13	6	2	145
Olcese Water District	0	0	0	0	0	0	0	0	0	0	0	0	0
Glen Grundeis	0	0	0	0	0	0	0	0	0	0	2	0	2
North Kern WSD	0	0	0	0	0	0	10,000	10,000	0	0	0	0	20,000
Cawelo WD	438	153	1,408	1,701	4,393	9,487	8,611	6,400	0	0	0	0	32,591
Kern-Tulare WD	0	0	1,866	2,013	2,162	4,083	5,947	7,059	4,862	2,695	0	0	30,687
Rag Gulch WD	0	0	279	302	323	612	891	1,058	728	404	0	0	4,597
Rosedale RBWSD	5,492	10,993	10,019	10,526	11,691	14,412	13,043	8,891	1,498	4,693	10,081	5,173	106,512
Rosedale Ranch ID	42	0	184	1,055	1,563	3,128	2,788	2,971	1,652	1,105	468	97	15,053
Boithouse Farms, Inc.	0	20	139	151	234	111	0	177	21	107	37	35	1,032
Kern Delta WD	0	0	4	0	0	0	0	0	0	0	0	0	4
via Kern Delta WD (Spreading)	0	0	0	0	0	0	0	0	0	0	365	0	365
Arvin-Edison WSD	0	0	4,766	5,387	6,101	4,455	5,950	0	200	0	0	0	26,859
California Water Service Company	0	0	0	0	0	0	0	0	0	0	0	0	0
Kern County Water Agency	0	16,827	1,574	244	0	0	9,453	1,690	1,453	14,560	18,381	1,444	65,626
Kern Water Bank Authority	3,690	9,629	10,021	437	0	0	0	0	0	0	0	0	23,777
Pioneer Project (Mandatory Release)	0	0	0	2,819	43,008	45,926	14,210	0	0	0	0	0	105,963
Improvement District #4	353	0	0	0	0	0	0	0	0	0	0	0	353
Kern River Canal & Irrigating Co.	0	0	0	0	0	0	0	0	0	0	0	0	0
Truxtun Lakes	0	153	0	0	0	0	0	0	0	0	1,271	0	1,424
First Point Passing Second Point	0	6,611	0	3,492	1,402	0	0	0	0	0	6,656	0	18,161
2800 Acre Spreading	0	3,471	10,965	9,045	10,345	9,530	3,330	0	0	0	0	0	46,686
River and Carrier Canal Loss	1,113	9,663	6,918	9,161	9,727	9,501	8,689	6,132	1,160	1,285	4,325	127	67,801
TOTAL DIVERTED	= 11,144	57,536	48,189	46,406	91,039	101,372	83,067	44,527	11,683	24,927	41,634	6,904	568,428

Into Reservoir Storage	48	24,783	3,792	3,420	6,443	23,364	7,954	446	0	119	7,183	1,286	78,838
Reservoir Evaporation Loss	27	49	201	230	269	631	1,089	764	292	164	84	83	3,883
From Reservoir Storage	127	0	9,990	2,763	2,148	0	17,363	22,858	10,338	5,136	0	0	70,723
End of Month Reservoir Storage	7,187	31,921	25,522	25,949	29,975	52,708	42,210	19,034	8,404	3,223	10,322	11,525	

**CITY OF BAKERSFIELD
STATUS OF LONG TERM CONTRACTS**

Quantities in acre-feet

NORTH KERN WATER STORAGE DISTRICT						CAWELO WATER DISTRICT					
Year	Basic Contract Amount	Cumulative Contract Amount	Basic Contract Delivered	Cumulative Contract Delivery	Basic Contract Balance	Year	Basic Contract Amount	Cumulative Contract Amount	Basic Contract Delivered	Cumulative Contract Delivery	Basic Contract Balance
1977	20,000	20,000	20,000	20,000	0	1977	27,000	27,000	5,024	5,024	(21,976)
1978	20,000	40,000	20,000	40,000	0	1978	27,000	54,000	35,404	40,428	(13,572)
1979	20,000	60,000	20,000	60,000	0	1979	27,000	81,000	36,780	77,208	(3,792)
1980	20,000	80,000	20,000	80,000	0	1980	27,000	108,000	30,792	108,000	0
1981	20,000	100,000	20,000	100,000	0	1981	27,000	135,000	27,000	135,000	0
1982	20,000	120,000	20,000	120,000	0	1982	27,000	162,000	27,000	162,000	0
1983	20,000	140,000	20,000	140,000	0	1983	27,000	189,000	27,000	189,000	0
1984	20,000	160,000	20,000	160,000	0	1984	27,000	216,000	27,000	216,000	0
1985	20,000	180,000	20,000	180,000	0	1985	27,000	243,000	27,000	243,000	0
1986	20,000	200,000	20,000	200,000	0	1986	27,000	270,000	27,000	270,000	0
1987	20,000	220,000	20,000	220,000	0	1987	27,000	297,000	27,000	297,000	0
1988	20,000	240,000	20,000	240,000	0	1988	27,000	324,000	12,821	309,821	(14,179)
1989	20,000	260,000	20,000	260,000	0	1989	27,000	351,000	22,460	332,281	(18,719)
1990	20,000	280,000	20,000	280,000	0	1990	27,000	378,000	17,723	350,004	(27,996)
1991	20,000	300,000	20,000	300,000	0	1991	27,000	405,000	29,316	379,320	(25,680)
1992	20,000	320,000	14,381	314,381	(5,619)	1992	27,000	432,000	28,868	408,188	(23,812)
1993	20,000	340,000	23,700	338,081	(1,919)	1993	27,000	459,000	32,000	440,188	(18,812)
1994	20,000	360,000	20,000	358,081	(1,919)	1994	27,000	486,000	23,760	463,948	(22,052)
1995	20,000	380,000	21,919	380,000	0	1995	27,000	513,000	32,000	495,948	(17,052)
1996	20,000	400,000	20,000	400,000	0	1996	27,000	540,000	32,000	527,948	(12,052)
1997	20,000	420,000	20,000	420,000	0	1997	27,000	567,000	32,000	559,948	(7,052)
1998	20,000	440,000	20,000	440,000	0	1998	27,000	594,000	32,000	591,948	(2,052)

KERN-TULARE WATER DISTRICT						RAG GULCH WATER DISTRICT					
Year	Basic Contract Amount	Cumulative Contract Amount	Basic Contract Delivered	Cumulative Contract Delivery	Basic Contract Balance	Year	Basic Contract Amount	Cumulative Contract Amount	Basic Contract Delivered	Cumulative Contract Delivery	Basic Contract Balance
1977	20,000	20,000	4,673	4,673	(15,327)	1977	3,000	3,000	449	449	(2,551)
1978	20,000	40,000	23,690	28,363	(11,637)	1978	3,000	6,000	3,550	3,999	(2,001)
1979	20,000	60,000	24,122	52,485	(7,515)	1979	3,000	9,000	3,550	7,549	(1,451)
1980	20,000	80,000	23,403	75,888	(4,112)	1980	3,000	12,000	3,550	11,099	(901)
1981	20,000	100,000	23,700	99,588	(412)	1981	3,000	15,000	3,550	14,649	(351)
1982	20,000	120,000	20,412	120,000	0	1982	3,000	18,000	3,351	18,000	0
1983	20,000	140,000	4,587	124,587	(15,413)	1983	3,000	21,000	600	18,600	(2,400)
1984	20,000	160,000	20,000	144,587	(15,413)	1984	3,000	24,000	3,000	21,600	(2,400)
1985	20,000	180,000	20,000	164,587	(15,413)	1985	3,000	27,000	3,000	24,600	(2,400)
1986	20,000	200,000	20,000	184,587	(15,413)	1986	3,000	30,000	3,000	27,600	(2,400)
1987	20,000	220,000	11,763	204,587	(15,413)	1987	3,000	33,000	3,000	30,600	(2,400)
1988	20,000	240,000	16,635	216,350	(23,650)	1988	3,000	36,000	1,764	32,364	(3,636)
1989	20,000	260,000	0	232,985	(27,015)	1989	3,000	39,000	2,495	34,859	(4,141)
1990	20,000	280,000	0	252,985	(47,015)	1990	3,000	42,000	0	34,859	(7,141)
1991	20,000	300,000	20,000	252,985	(47,015)	1991	3,000	45,000	3,000	37,859	(7,141)
1992	20,000	320,000	9,089	262,074	(57,926)	1992	3,000	48,000	1,363	39,222	(8,778)
1993	20,000	340,000	29,332	291,406	(48,594)	1993	3,000	51,000	4,394	43,616	(7,384)
1994	20,000	360,000	18,348	309,754	(50,246)	1994	3,000	54,000	2,753	46,369	(7,631)
1995	20,000	380,000	32,733	342,487	(37,513)	1995	3,000	57,000	4,993	51,362	(5,638)
1996	20,000	400,000	23,700	366,187	(33,813)	1996	3,000	60,000	3,550	54,912	(5,088)
1997	20,000	420,000	23,700	389,887	(30,113)	1997	3,000	63,000	3,550	58,462	(4,538)
1998	20,000	440,000	23,700	413,587	(26,413)	1998	3,000	66,000	3,550	62,012	(3,988)

CITY OF BAKERSFIELD
Deliveries to Long Term Contractors

Basic Contract

Year: 1998

Quantities in acre-feet

	NORTH KERN WSD		CAWELO WD		KERN-TULARE WD		RAG GULCH WD		MONTH TOTALS	
	Basic	Accum.	Basic	Accum.	Basic	Accum.	Basic	Accum.	Basic	Accum.
January	0	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0	0
March	0	0	1,408	1,408	1,866	1,866	279	279	3,553	3,553
April	0	0	1,701	3,109	2,013	3,879	302	581	4,016	7,569
May	0	0	4,393	7,502	2,162	6,041	323	904	6,878	14,447
June	0	0	9,487	16,989	4,083	10,124	612	1,516	14,182	28,629
July	10,000	10,000	8,611	25,600	5,947	16,071	891	2,407	25,449	54,078
August	10,000	20,000	6,400	32,000	4,681	20,752	701	3,108	21,782	75,860
September	0	20,000	0	32,000	2,948	23,700	442	3,550	3,390	79,250
October	0	20,000	0	32,000	0	23,700	0	3,550	0	79,250
November	0	20,000	0	32,000	0	23,700	0	3,550	0	79,250
December	0	20,000	0	32,000	0	23,700	0	3,550	0	79,250
Year Total	20,000		32,000		23,700		3,550		79,250	

City of Bakersfield Diverted to North Kern WSD (Basic Contract) (Does not include deliveries into Isabella Reservoir storage)													Year: 1998	
DISCHARGE IN CUBIC FEET PER SECOND														
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	-	0	0	0	0	0	0	0	0	0	0	0	0
30	0	-	0	0	0	0	0	0	0	0	0	0	0	0
31	0	-	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MAXIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL AC.FT.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	0	0	0	0	0	0	0	0	0	0	0	0	0
							MEAN,							TOTAL AC.FT.,
							0							0

CAWELO WATER DISTRICT OPERATIONS

Year: 1998

Quantities in acre-feet

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
+ Cawelo WD via Pump Station "B"	428	149	1,291	1,482	3,957	8,666	12,058	11,080	8,313	5,595	1,999	1,539	56,557
+ Lerdo Delivery Gate No. 8-0-1	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Lerdo Delivery Gate No. 8-0-2	0	0	0	0	26	26	28	38	28	24	0	0	170
+ Lerdo Delivery Gate No. 8-0-10	0	0	0	0	28	55	63	131	26	0	0	0	303
+ Lerdo Delivery Gate No. 8-0-15	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Lerdo Delivery Gate No. 8-0-22	0	0	14	69	20	200	200	224	95	123	0	0	945
+ Lerdo Delivery Gate No. 8-0-25	0	2	21	6	26	40	63	61	38	26	40	0	323
+ Lerdo Delivery Gate No. 8-0-100	0	0	0	0	4	2	18	8	2	4	0	0	38
+ Lerdo Delivery Gate No. 8-0-288	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Lerdo Delivery Gate No. 8-0-289	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Lerdo Delivery Gate No. 8-0-290	0	0	14	30	67	101	133	155	85	65	10	0	660
+ Lerdo Delivery Gate No. 8-0-291	0	0	16	36	93	145	151	161	133	93	6	0	834
+ Lerdo Delivery Gate No. 8-0-292	0	0	0	0	0	0	0	0	0	0	0	2	2
+ Lerdo Delivery Gate No. 8-23-006	0	0	0	14	65	93	188	105	50	14	57	0	586
= Total Lerdo Gate Deliveries	0	2	65	155	329	662	844	883	457	349	113	2	3,861
+ Beardsley Canal Loss	24	12	60	46	61	60	61	61	60	61	60	42	608
+ Lerdo Loss	4	2	14	18	46	99	137	127	91	63	22	16	639
+ Total Loss	28	14	74	64	107	159	198	188	151	124	82	58	1,247
= Total Diverted for Cawelo WD	456	165	1,430	1,701	4,393	9,487	13,100	12,151	8,921	6,068	2,194	1,599	61,665

Cawelo Water District Source of Supply:

+ City of Bakersfield Basic Contract	0	0	1,408	1,701	4,393	9,487	8,611	6,400	0	0	0	0	32,000
+ City of Bakersfield Miscellaneous	438	153	0	0	0	0	0	0	0	0	0	0	591
+ City of Bakersfield Non-Kern River	18	12	22	0	0	0	0	0	0	0	0	0	52
+ Buena Vista WSD Exchange	0	0	0	0	0	0	4,489	5,751	8,921	6,068	2,194	1,599	29,022
+ Buena Vista WSD Purchase	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Rosedale RBWSD Exchange	0	0	0	0	0	0	0	0	0	0	0	0	0
+ North Kern WSD Exchange	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Improvement District #4 Exchange	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Kern River Floodwater	0	0	0	0	0	0	0	0	0	0	0	0	0
+ via CVC Conduit "A"	0	0	0	0	0	0	0	0	0	0	0	0	0
+ North Kern WSD Non-Kern River	0	0	0	0	0	0	0	0	0	0	0	0	0
= Total Cawelo Water District Supply	456	165	1,430	1,701	4,393	9,487	13,100	12,151	8,921	6,068	2,194	1,599	61,665

Year: 1998

Cawelo Water District Total Diverted via Beardsley-Lerdo Canal System

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	19	19	0	24	103	163	203	201	185	88	43	19
2	19	19	19	23	101	173	211	200	228	105	43	0
3	19	19	19	24	98	189	171	215	224	102	44	0
4	0	8	19	22	103	185	167	204	229	102	44	0
5	0	0	19	23	98	183	166	214	192	110	64	0
6	0	0	19	22	44	150	216	221	158	106	65	0
7	0	0	20	0	24	121	214	230	161	103	65	19
8	0	0	19	0	24	174	224	214	162	101	64	19
9	0	0	19	0	23	127	217	190	188	104	67	19
10	0	0	20	0	23	131	237	225	163	103	70	19
11	0	0	20	0	30	137	220	183	165	104	69	20
12	0	2	21	0	27	129	225	193	118	107	50	0
13	0	0	19	22	26	123	236	188	113	106	48	0
14	0	0	19	23	23	43	229	213	163	110	29	19
15	0	0	19	22	22	129	242	198	160	104	26	19
16	0	0	21	24	21	136	184	196	178	101	27	19
17	0	16	24	0	20	137	189	218	169	101	25	19
18	0	0	20	6	44	159	207	205	168	101	20	19
19	0	0	42	5	89	162	222	198	115	105	21	39
20	0	0	45	31	88	180	230	184	113	110	20	38
21	19	0	43	56	102	168	216	192	141	107	21	99
22	20	0	40	68	103	172	219	177	143	106	20	99
23	19	0	23	66	103	169	216	180	115	107	19	80
24	19	0	31	54	98	183	220	184	113	98	19	60
25	19	0	23	55	109	176	224	198	112	98	19	59
26	19	0	23	54	107	179	223	183	112	97	19	60
27	19	0	24	57	73	185	226	180	114	96	20	60
28	0	0	22	54	71	191	206	188	119	97	19	0
29	0	-	24	62	118	221	212	187	86	97	19	0
30	20	-	22	60	153	208	213	176	90	42	27	0
31	19	-	23	-	147	-	220	191	-	42	-	2
TOTAL	230	83	721	857	2,215	4,783	6,605	6,126	4,497	3,060	1,106	806
MAXIMUM DAY	20	19	45	68	153	221	242	230	229	110	70	99
MINIMUM DAY	0	0	0	0	20	43	166	176	86	42	19	0
MEAN	7	3	23	29	71	159	213	198	150	99	37	26
TOTAL AC.FT.	456	165	1,430	1,701	4,393	9,487	13,100	12,151	8,921	6,068	2,194	1,599
WHOLE YEAR:-	TOTAL,	31,089	MAX.,	242	MIN.,	0	MEAN,	85	TOTAL AC.FT.,	61,665		

City of Bakersfield Diverted to Cawelo Water District
(Basic Contract) Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	24	103	163	203	201	0	0	0	0
2	0	0	18	23	101	173	211	200	0	0	0	0
3	0	0	18	24	98	189	171	215	0	0	0	0
4	0	0	18	22	103	185	167	204	0	0	0	0
5	0	0	18	23	98	183	166	214	0	0	0	0
6	0	0	18	22	44	150	216	221	0	0	0	0
7	0	0	19	0	24	121	214	230	0	0	0	0
8	0	0	18	0	24	174	224	214	0	0	0	0
9	0	0	18	0	23	127	217	190	0	0	0	0
10	0	0	19	0	23	131	237	225	0	0	0	0
11	0	0	19	0	30	137	220	183	0	0	0	0
12	0	0	20	0	27	129	225	193	0	0	0	0
13	0	0	19	22	26	123	236	188	0	0	0	0
14	0	0	19	23	23	43	229	213	0	0	0	0
15	0	0	19	22	22	129	242	198	0	0	0	0
16	0	0	21	24	21	136	184	138	0	0	0	0
17	0	0	24	0	20	137	189	0	0	0	0	0
18	0	0	20	6	44	159	207	0	0	0	0	0
19	0	0	42	5	89	162	222	0	0	0	0	0
20	0	0	45	31	88	180	230	0	0	0	0	0
21	0	0	43	56	102	168	132	0	0	0	0	0
22	0	0	40	68	103	172	0	0	0	0	0	0
23	0	0	23	66	103	169	0	0	0	0	0	0
24	0	0	31	54	98	183	0	0	0	0	0	0
25	0	0	23	55	109	176	0	0	0	0	0	0
26	0	0	23	54	107	179	0	0	0	0	0	0
27	0	0	24	57	73	185	0	0	0	0	0	0
28	0	0	22	54	71	191	0	0	0	0	0	0
29	0	-	24	62	118	221	0	0	0	0	0	0
30	0	-	22	60	153	208	0	0	0	0	0	0
31	0	-	23	-	147	-	0	0	-	-	-	0
TOTAL	0	0	710	857	2,215	4,783	4,342	3,227	0	0	0	0
MAXIMUM DAY	0	0	45	68	153	221	242	230	0	0	0	0
MINIMUM DAY	0	0	0	0	20	43	0	0	0	0	0	0
MEAN	0	0	23	29	71	159	140	104	0	0	0	0
TOTAL AC.FT.	0	0	1,408	1,701	4,393	9,487	8,611	6,400	0	0	0	0
WHOLE YEAR:-	TOTAL,	16,134	MAX.,	242	MIN.,	0	MEAN,	44	TOTAL AC.FT.,	32,000		

City of Bakersfield Diverted to Cawelo Water District
(Miscellaneous) Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	18	18	0	0	0	0	0	0	0	0	0	0
2	15	18	0	0	0	0	0	0	0	0	0	0
3	15	18	0	0	0	0	0	0	0	0	0	0
4	0	7	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	1	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	15	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	19	0	0	0	0	0	0	0	0	0	0	0
22	20	0	0	0	0	0	0	0	0	0	0	0
23	19	0	0	0	0	0	0	0	0	0	0	0
24	19	0	0	0	0	0	0	0	0	0	0	0
25	19	0	0	0	0	0	0	0	0	0	0	0
26	19	0	0	0	0	0	0	0	0	0	0	0
27	19	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	-	0	0	0	0	0	0	0	0	0	0
30	20	-	0	0	0	0	0	0	0	0	0	0
31	19	-	0	-	0	-	0	0	-	0	-	0
TOTAL	221	77	0	0	0	0	0	0	0	0	0	0
MAXIMUM DAY	20	18	0	0	0	0	0	0	0	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	7	3	0	0	0	0	0	0	0	0	0	0
TOTAL AC.FT.	438	153	0	0	0	0	0	0	0	0	0	0
WHOLE YEAR-	TOTAL	298	MAX.,	20	MIN.,	0	MEAN,	1	TOTAL AC.FT.,	591		

City of Bakersfield Diverted to Cawelo Water District
(Non-Kern River) Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	1	1	0	0	0	0	0	0	0	0	0	0
2	4	1	1	0	0	0	0	0	0	0	0	0
3	4	1	1	0	0	0	0	0	0	0	0	0
4	0	1	1	0	0	0	0	0	0	0	0	0
5	0	0	1	0	0	0	0	0	0	0	0	0
6	0	0	1	0	0	0	0	0	0	0	0	0
7	0	0	1	0	0	0	0	0	0	0	0	0
8	0	0	1	0	0	0	0	0	0	0	0	0
9	0	0	1	0	0	0	0	0	0	0	0	0
10	0	0	1	0	0	0	0	0	0	0	0	0
11	0	0	1	0	0	0	0	0	0	0	0	0
12	0	1	1	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	1	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	-	0	0	0	0	0	0	0	0	0	0
30	0	-	0	0	0	0	0	0	0	0	0	0
31	0	-	0	-	0	-	0	0	-	0	-	0
TOTAL	9	6	11	0	0	0	0	0	0	0	0	0
MAXIMUM DAY	4	1	1	0	0	0	0	0	0	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL AC.FT.	18	12	22	0	0	0	0	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	26	MAX.,	4	MIN.,	0	MEAN,	0	TOTAL AC.FT.,	52		

DISCHARGE IN CUBIC FEET PER SECOND **Year: 1998**
Buena Vista WSD Diverted to Cawelo WD
(Kern River/SWP Exchange)

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	0	0	185	88	43	19
2	0	0	0	0	0	0	0	0	228	105	43	0
3	0	0	0	0	0	0	0	0	224	102	44	0
4	0	0	0	0	0	0	0	0	229	102	44	0
5	0	0	0	0	0	0	0	0	192	110	64	0
6	0	0	0	0	0	0	0	0	158	106	65	0
7	0	0	0	0	0	0	0	0	161	103	65	19
8	0	0	0	0	0	0	0	0	162	101	64	19
9	0	0	0	0	0	0	0	0	188	104	67	19
10	0	0	0	0	0	0	0	0	163	103	70	19
11	0	0	0	0	0	0	0	0	165	104	69	20
12	0	0	0	0	0	0	0	0	118	107	50	0
13	0	0	0	0	0	0	0	0	113	106	48	0
14	0	0	0	0	0	0	0	0	163	110	29	19
15	0	0	0	0	0	0	0	0	160	104	26	19
16	0	0	0	0	0	0	0	58	178	101	27	19
17	0	0	0	0	0	0	0	218	169	101	25	19
18	0	0	0	0	0	0	0	205	168	101	20	19
19	0	0	0	0	0	0	0	198	115	105	21	39
20	0	0	0	0	0	0	0	184	113	110	20	38
21	0	0	0	0	0	0	84	192	141	107	21	99
22	0	0	0	0	0	0	219	177	143	106	20	99
23	0	0	0	0	0	0	216	180	115	107	19	80
24	0	0	0	0	0	0	220	184	113	98	19	60
25	0	0	0	0	0	0	224	198	112	98	19	59
26	0	0	0	0	0	0	223	183	112	97	19	60
27	0	0	0	0	0	0	226	180	114	96	20	60
28	0	0	0	0	0	0	206	188	119	97	19	0
29	0	-	0	0	0	0	212	187	86	97	19	0
30	0	-	0	0	0	0	213	176	90	42	27	0
31	0	-	0	-	0	-	220	191	-	42	-	2
TOTAL	0	0	0	0	0	0	2,263	2,999	4,497	3,060	1,106	806
MAXIMUM DAY	0	0	0	0	0	0	226	218	229	110	70	99
MINIMUM DAY	0	0	0	0	0	0	0	0	86	42	19	0
MEAN	0	0	0	0	0	0	73	94	150	99	37	26
TOTAL AC.FT.	0	0	0	0	0	0	4,489	5,751	8,921	6,068	2,194	1,599
WHOLE YEAR:-	TOTAL,	14,631	MAX.,	229	MIN.,	0	MEAN,	40	TOTAL AC.FT.,	29,022		

**RECAPITULATION OF CITY OF BAKERSFIELD DIVERSIONS FOR
KERN-TULARE AND RAG GULCH WATER DISTRICTS**

Year: 1998

Quantities in acre-feet

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
+ Total Basic Contract Diverted	0	0	2,145	2,315	2,485	4,695	6,838	5,382	3,390	0	0	0	27,250
- Kern-Tulare Water District	0	0	1,866	2,013	2,162	4,083	5,947	4,681	2,948	0	0	0	23,700
= Rag Gulch Water District	0	0	279	302	323	612	891	701	442	0	0	0	3,550
+ Total Misc. Quantity Diverted	0	0	0	0	0	0	0	2,735	2,200	3,099	0	0	8,034
- Kern-Tulare Water District	0	0	0	0	0	0	0	2,378	1,914	2,695	0	0	6,987
= Rag Gulch Water District	0	0	0	0	0	0	0	357	286	404	0	0	1,047
= Total Diverted	0	0	2,145	2,315	2,485	4,695	6,838	8,117	5,590	3,099	0	0	35,284
via Calloway Canal	0	0	1,756	1,982	2,188	4,150	5,052	4,497	2,583	0	0	0	22,208
+ River Transportation Loss/Spreading	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Carrier Canal Recharge	0	0	389	333	297	545	710	885	807	0	0	0	3,966
+ via Kern River Canal & Irrigating Co.	0	0	0	0	0	0	0	0	0	0	0	0	0
+ via Pioneer Project	0	0	0	0	0	0	1,076	0	0	0	0	0	1,076
- Total Diverted to I.D. #4	0	0	2,145	2,315	2,485	4,695	6,838	5,382	3,390	0	0	0	27,250
- Kern-Tulare Water District	0	0	1,866	2,013	2,162	4,083	5,947	4,681	2,948	0	0	0	23,700
= Rag Gulch Water District	0	0	279	302	323	612	891	701	442	0	0	0	3,550
via Arvin-Edison Turnout	0	0	0	0	0	0	0	2,723	2,192	3,085	0	0	8,000
+ Canal Transportation Loss	0	0	0	0	0	0	0	12	8	14	0	0	34
= Total Diverted to Arvin-Edison T.O.	0	0	0	0	0	0	0	2,735	2,200	3,099	0	0	8,034
- Kern-Tulare Water District	0	0	0	0	0	0	0	2,378	1,914	2,695	0	0	6,987
= Rag Gulch Water District	0	0	0	0	0	0	0	357	286	404	0	0	1,047
= Via North Kern Water Storage District	0	0	0	0	0	0	0	0	0	0	0	0	0
- Kern-Tulare Water District	0	0	0	0	0	0	0	0	0	0	0	0	0
= Rag Gulch Water District	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Bakersfield Diverted for Kern-Tulare WD (Kern-Tulare WD/Improvement District No. 4 Exchange)												Year: 1998		
DISCHARGE IN CUBIC FEET PER SECOND (Basic Contract)														
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	6	26	51	55	123	61	87	0	0	0		
2	0	0	19	33	39	52	120	63	82	0	0	0		
3	0	0	25	36	30	55	113	78	69	0	0	0		
4	0	0	25	33	27	54	122	89	67	0	0	0		
5	0	0	25	32	27	66	117	86	57	0	0	0		
6	0	0	25	29	27	51	124	82	61	0	0	0		
7	0	0	26	27	28	37	133	68	61	0	0	0		
8	0	0	26	37	27	56	134	68	73	0	0	0		
9	0	0	30	37	28	71	133	65	81	0	0	0		
10	0	0	31	34	28	59	113	72	76	0	0	0		
11	0	0	30	32	37	55	63	73	58	0	0	0		
12	0	0	33	25	27	41	64	98	63	0	0	0		
13	0	0	26	30	36	49	84	89	62	0	0	0		
14	0	0	37	28	33	55	94	75	76	0	0	0		
15	0	0	39	34	29	77	96	71	81	0	0	0		
16	0	0	37	31	30	90	96	68	74	0	0	0		
17	0	0	34	33	34	89	80	82	77	0	0	0		
18	0	0	34	34	37	90	76	86	75	0	0	0		
19	0	0	36	34	37	77	80	84	66	0	0	0		
20	0	0	31	41	46	67	92	81	70	0	0	0		
21	0	0	30	39	41	70	96	60	70	0	0	0		
22	0	0	39	27	39	85	95	64	0	0	0	0		
23	0	0	41	30	39	85	90	63	0	0	0	0		
24	0	0	39	30	39	86	86	86	0	0	0	0		
25	0	0	25	34	37	87	76	91	0	0	0	0		
26	0	0	28	35	30	74	75	91	0	0	0	0		
27	0	0	31	43	30	77	90	80	0	0	0	0		
28	0	0	38	44	47	93	98	68	0	0	0	0		
29	0	-	37	44	45	80	91	66	0	0	0	0		
30	0	-	39	43	45	75	80	70	0	0	0	0		
31	0	-	19	-	40	-	64	82	-	0	-	0		
TOTAL	0	0	941	1,015	1,090	2,058	2,998	2,360	1,486	0	0	0	TOTAL AC.FT., 23,700	
MAXIMUM DAY	0	0	41	44	51	93	134	98	87	0	0	0		
MINIMUM DAY	0	0	6	25	27	37	63	60	0	0	0	0		
MEAN	0	0	30	34	35	69	97	76	50	0	0	0		
TOTAL AC.FT.	0	0	1,866	2,013	2,162	4,083	5,947	4,681	2,948	0	0	0		
WHOLE YEAR:-	TOTAL,	11,948	MAX.,	134	MIN.,	0	MEAN,	33	TOTAL AC.FT.,	23,700				

City of Bakersfield Diverted for Kern-Tulare WD via Arvin-Edison Turnout (Miscellaneous)												Year: 1998		
DISCHARGE IN CUBIC FEET PER SECOND														
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	0	0	0	0	0	12	42	27	0	0		
2	0	0	0	0	0	0	0	11	43	21	0	0		
3	0	0	0	0	0	0	0	10	41	15	0	0		
4	0	0	0	0	0	0	0	10	36	19	0	0		
5	0	0	0	0	0	0	0	13	28	36	0	0		
6	0	0	0	0	0	0	0	14	33	45	0	0		
7	0	0	0	0	0	0	0	46	36	48	0	0		
8	0	0	0	0	0	0	0	44	40	55	0	0		
9	0	0	0	0	0	0	0	42	38	56	0	0		
10	0	0	0	0	0	0	0	42	34	54	0	0		
11	0	0	0	0	0	0	0	42	35	40	0	0		
12	0	0	0	0	0	0	0	44	33	38	0	0		
13	0	0	0	0	0	0	0	56	28	39	0	0		
14	0	0	0	0	0	0	0	56	38	43	0	0		
15	0	0	0	0	0	0	0	55	42	46	0	0		
16	0	0	0	0	0	0	0	55	42	50	0	0		
17	0	0	0	0	0	0	0	56	41	47	0	0		
18	0	0	0	0	0	0	0	55	36	38	0	0		
19	0	0	0	0	0	0	0	41	28	48	0	0		
20	0	0	0	0	0	0	0	42	23	55	0	0		
21	0	0	0	0	0	0	0	42	31	56	0	0		
22	0	0	0	0	0	0	0	43	32	57	0	0		
23	0	0	0	0	0	0	0	41	32	60	0	0		
24	0	0	0	0	0	0	0	41	26	53	0	0		
25	0	0	0	0	0	0	0	41	26	45	0	0		
26	0	0	0	0	0	0	0	42	20	50	0	0		
27	0	0	0	0	0	0	0	42	16	49	0	0		
28	0	0	0	0	0	0	0	43	20	50	0	0		
29	0	-	0	0	0	0	0	39	22	47	0	0		
30	0	-	0	0	0	0	0	38	23	38	0	0		
31	0	-	0	-	0	-	0	41	-	33	-	-		
TOTAL	0	0	0	0	0	0	0	1,199	965	1,358	0	0		
MAXIMUM DAY	0	0	0	0	0	0	0	56	43	60	0	0		
MINIMUM DAY	0	0	0	0	0	0	0	10	16	15	0	0		
MEAN	0	0	0	0	0	0	0	39	32	44	0	0		
TOTAL AC.FT.	0	0	0	0	0	0	0	2,378	1,914	2,695	0	0		
WHOLE YEAR:-	TOTAL,	3,522	MAX.,	60	MIN.,	0	MEAN,	10	TOTAL AC.FT.,	6,987				

City of Bakersfield Diverted for Rag Gulch WD (Rag Gulch WD/Improvement District No. 4 Exchange) (Basic Contract)												Year: 1998		
DISCHARGE IN CUBIC FEET PER SECOND														
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	1	4	7	8	19	9	13	0	0	0		
2	0	0	3	5	6	8	18	9	13	0	0	0		
3	0	0	4	5	4	8	16	12	10	0	0	0		
4	0	0	4	5	3	8	18	13	10	0	0	0		
5	0	0	4	5	4	11	18	13	9	0	0	0		
6	0	0	4	4	4	8	19	12	9	0	0	0		
7	0	0	4	4	4	5	20	10	9	0	0	0		
8	0	0	4	5	4	8	20	10	11	0	0	0		
9	0	0	5	5	4	11	20	10	12	0	0	0		
10	0	0	5	5	4	9	16	11	12	0	0	0		
11	0	0	5	5	6	8	10	11	9	0	0	0		
12	0	0	5	4	4	6	10	14	10	0	0	0		
13	0	0	4	4	5	7	13	13	9	0	0	0		
14	0	0	5	4	5	8	14	11	11	0	0	0		
15	0	0	5	5	4	12	14	11	12	0	0	0		
16	0	0	5	5	5	13	14	10	11	0	0	0		
17	0	0	5	5	5	13	12	12	12	0	0	0		
18	0	0	5	5	5	13	11	13	11	0	0	0		
19	0	0	5	5	6	11	12	13	10	0	0	0		
20	0	0	5	6	7	11	14	12	10	0	0	0		
21	0	0	5	5	6	11	14	9	10	0	0	0		
22	0	0	6	4	6	13	14	10	0	0	0	0		
23	0	0	6	5	6	13	14	10	0	0	0	0		
24	0	0	5	5	6	13	13	13	0	0	0	0		
25	0	0	4	5	6	13	11	14	0	0	0	0		
26	0	0	4	5	5	11	11	14	0	0	0	0		
27	0	0	5	7	5	12	13	12	0	0	0	0		
28	0	0	5	7	7	14	15	10	0	0	0	0		
29	0	-	5	7	7	12	14	10	0	0	0	0		
30	0	-	5	7	7	11	12	10	0	0	0	0		
31	0	-	3	-	6	-	10	12	-	0	-	-		
TOTAL	0	0	140	152	163	309	449	353	223	0	0	0	TOTAL AC.FT., 3,550	
MAXIMUM DAY	0	0	6	7	7	14	20	14	13	0	0	0		
MINIMUM DAY	0	0	1	4	3	5	10	9	0	0	0	0		
MEAN	0	0	5	5	5	10	14	11	7	0	0	0		
TOTAL AC.FT.	0	0	279	302	323	612	891	701	442	0	0	0		
WHOLE YEAR:-	TOTAL,	1,789	MAX.,	20	MIN.,	0	MEAN,	5	TOTAL AC.FT.,	3,550				

DISCHARGE IN CUBIC FEET PER SECOND **Year: 1998**
City of Bakersfield Diverted for Rag Gulch WD
via Arvin-Edison Turnout
(Miscellaneous)

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	0	2	6	4	0	0
2	0	0	0	0	0	0	0	2	6	3	0	0
3	0	0	0	0	0	0	0	1	6	2	0	0
4	0	0	0	0	0	0	0	2	5	3	0	0
5	0	0	0	0	0	0	0	2	5	5	0	0
6	0	0	0	0	0	0	0	2	5	7	0	0
7	0	0	0	0	0	0	0	7	5	7	0	0
8	0	0	0	0	0	0	0	7	6	8	0	0
9	0	0	0	0	0	0	0	7	6	9	0	0
10	0	0	0	0	0	0	0	7	5	8	0	0
11	0	0	0	0	0	0	0	7	5	6	0	0
12	0	0	0	0	0	0	0	7	5	6	0	0
13	0	0	0	0	0	0	0	8	5	6	0	0
14	0	0	0	0	0	0	0	8	6	6	0	0
15	0	0	0	0	0	0	0	8	6	7	0	0
16	0	0	0	0	0	0	0	8	6	8	0	0
17	0	0	0	0	0	0	0	8	6	7	0	0
18	0	0	0	0	0	0	0	8	5	6	0	0
19	0	0	0	0	0	0	0	6	5	7	0	0
20	0	0	0	0	0	0	0	7	4	8	0	0
21	0	0	0	0	0	0	0	6	5	8	0	0
22	0	0	0	0	0	0	0	6	5	9	0	0
23	0	0	0	0	0	0	0	6	5	9	0	0
24	0	0	0	0	0	0	0	6	4	8	0	0
25	0	0	0	0	0	0	0	6	4	7	0	0
26	0	0	0	0	0	0	0	6	2	7	0	0
27	0	0	0	0	0	0	0	6	2	7	0	0
28	0	0	0	0	0	0	0	6	3	8	0	0
29	0	-	0	0	0	0	0	6	3	7	0	0
30	0	-	0	0	0	0	0	6	3	6	0	0
31	0	-	0	-	0	-	0	6	-	5	-	0
TOTAL	0	0	0	0	0	0	0	180	144	204	0	0
MAXIMUM DAY	0	0	0	0	0	0	0	8	6	9	0	0
MINIMUM DAY	0	0	0	0	0	0	0	1	2	2	0	0
MEAN	0	0	0	0	0	0	0	6	5	7	0	0
TOTAL AC.FT.	0	0	0	0	0	0	0	357	286	404	0	0
WHOLE YEAR:-	TOTAL,	528	MAX.,	9	MIN.,	0	MEAN,	1	TOTAL AC.FT.,	1,047		

**IMPROVEMENT DISTRICT NO. 4
KERN RIVER SUPPLY AND DIVERSION RECAP**

YEAR: 1998

Quantities in acre-feet

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
+ Treatment Plant	1359	232	1581	1823	2019	3273	4108	3551	2826	2552	1936	1742	27002
+ Calloway Canal Operational Losses	140	26	159	159	169	189	220	205	163	149	131	122	1832
+ Calloway Canal Below '99'	0	0	0	0	0	0	0	0	0	2	0	4	6
+ Cross Valley Canal Filling Losses	0	0	16	0	0	115	119	127	282	301	228	0	1188
+ Cross Valley Canal Reverse Flow	0	0	0	0	0	573	605	614	446	531	321	0	3090
+ Cross Valley Canal River Turnout #4	0	0	0	0	0	0	0	0	0	0	6	0	6
+ Sub-total Calloway Canal	1499	258	1756	1982	2188	4150	5052	4497	3717	3535	2622	1868	33124
+ KRC&I Co. #1 Ditch Spreading	0	0	0	0	0	0	0	0	0	0	0	0	0
+ KRC&I Co. #1 Ditch to Cally. Spreading	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Truxtun Lakes	345	4	389	333	297	545	710	885	1196	1563	0	97	6364
+ Avin-Edison WSD Turnout	147	0	0	0	0	0	0	9301	6490	5018	3072	718	24746
+ Carrier Canal Loss/Spdg.	67	0	0	0	0	0	0	0	15	30	12	113	237
+ Sub-total via Carrier Canal	559	4	389	333	297	545	710	10186	7701	6611	3084	928	31347
+ River Loss/Spdg. Above Cally. Weir	428	38	0	0	0	0	0	0	0	0	0	248	714
+ River Spreading Below Cally. Weir	4923	246	0	0	0	0	0	294	3741	3374	0	2877	15455
+ Sub-total River Loss/Spreading	5351	284	0	0	0	0	0	294	3741	3374	0	3125	16169
+ Via James Canal	0	0	0	139	199	265	788	349	192	0	173	0	2105
+ Via Boswell Turnout	0	0	0	34	63	176	357	155	28	0	0	0	813
+ Via Pioneer Canal Inlet	0	0	0	689	1170	565	889	291	0	0	202	0	3806
+ Via Pioneer North	0	0	0	158	181	822	905	1159	582	0	367	0	4174
+ Kern Water Bank at 2nd Point	0	0	0	702	1382	1445	785	1102	258	0	258	0	5932
= Improvement District #4 Total Diverted	7409	546	2145	4037	5480	7968	9486	18033	16219	13520	6706	5921	97470
+ Kern-Tulare WD Basic Contract	0	0	1866	2013	2162	4083	5947	4681	2948	0	0	0	23700
+ Rag Gulch WD Basic Contract	0	0	279	302	323	612	891	701	442	0	0	0	3550
+ Sub-total K-TWD/RGWD Basic Contract	0	0	2145	2315	2485	4695	6838	5382	3390	0	0	0	27250
+ Kern-Tulare WD 1998 Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Rag Gulch WD 1998 Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Sub-total K-TWD/RGWD '98 Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0
+ City Truxtun Lake Exchange	353	0	0	0	0	0	0	0	0	0	0	0	353
+ City Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0
+ City for KCWA (Irrigation Water Exchange)	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Sub-total City	353	0	0	0	0	0	0	0	0	0	0	0	353
+ North Kern WSD Exchange	4323	0	0	0	0	0	0	0	0	0	0	0	4323
+ Buena Vista WSD SWP Exchange	0	0	0	1492	0	0	0	0	7728	13520	5706	0	28446
+ Hacienda WD 1997 Exchange	292	0	0	0	0	0	0	0	0	0	0	0	292
+ Hacienda WD 1998 Exchange	0	0	0	0	0	0	2648	12651	5101	0	1000	0	21400
+ Rosedale RBWSD Exchange	2441	546	0	0	0	0	0	0	0	0	0	4374	7361
+ Kern Delta WD Exchange	0	0	0	0	0	0	0	0	0	0	0	1262	1262
+ Kern River Floodwater	0	0	0	230	2995	3273	0	0	0	0	0	0	6498
= Improvement District #4 Total Supply	7409	546	2145	4037	5480	7968	9486	18033	16219	13520	6706	5921	97470

KERN RIVER WATER DELIVERIES

ARVIN – EDISON WATER STORAGE DISTRICT

1998
YEAR

Quantities in acre–feet
except where noted...

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Total Delivered (1)	1,567	0	4,766	5,387	6,101	5,538	6,940	17,627	14,277	13,922	9,563	1,244	86,932
Mean CFS Delivery	25	0	78	91	99	93	113	287	240	226	161	20	
Source of Supply:													
City of Bakersfield Misc.	0	0	4,766	4,903	0	0	5,534	0	200	0	0	0	15,403
Kern–Tulare/Rag Gulch	0	0	0	0	0	0	0	2,723	2,192	3,085	0	0	8,000
Improvement District #4 (2)	147	0	0	0	0	0	0	0	0	0	0	0	147
Improvement District #4 (3)	0	0	0	0	0	0	0	9,301	6,490	5,018	3,072	718	24,599
Rosedale RBWSD	0	0	0	0	0	0	0	2,505	2,017	615	453	0	5,590
Hacienda WD	0	0	0	0	0	0	0	1,880	3,378	2,739	2,003	0	10,000
Buena Vista WSD	0	0	0	0	0	0	0	0	0	2,465	4,035	0	6,500
Kern River Floodwater	0	0	0	484	6,101	4,455	416	0	0	0	0	0	11,456
Sub–Total	147	0	4,766	5,387	6,101	4,455	5,950	16,409	14,277	13,922	9,563	718	81,695
Kern Island Canal (KDWD)	1,420	0	0	0	0	1,083	990	1,218	0	0	0	526	5,237
Total	1,567	0	4,766	5,387	6,101	5,538	6,940	17,627	14,277	13,922	9,563	1,244	86,932

Notes: (1) Includes exchange deliveries via Pioneer Project
 (2) Reflects A–EWSD/ID#4 Friant–Kern/Kern River 1997–98 Exchange Deliveries
 (3) Reflects K–TWD/RGWD/ID#4 Long–Term Exchange Deliveries

Total Flow via the Rosedale Channel at Head (All Sources)
(Diverted from Kern River Channel)
 Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	37	0	186	185	227	217	258	164	144	72	187	67
2	23	114	191	182	231	218	255	169	101	74	195	64
3	0	202	198	179	228	221	257	24	113	75	194	62
4	0	199	198	172	228	230	256	0	129	74	191	65
5	0	199	200	169	209	248	257	0	102	74	195	66
6	0	205	200	172	205	248	256	31	104	74	202	67
7	0	202	201	171	193	247	257	168	73	73	215	30
8	0	201	202	165	192	247	260	168	0	74	212	0
9	0	199	200	160	196	248	257	168	0	73	218	0
10	0	197	204	160	195	245	256	169	0	76	213	0
11	0	196	206	158	198	243	260	168	0	76	212	0
12	0	199	202	160	189	245	261	165	0	76	213	0
13	0	203	192	160	180	248	235	168	0	75	216	0
14	106	208	173	162	176	243	201	166	0	81	213	0
15	152	197	176	164	179	244	182	167	0	103	197	0
16	166	201	187	163	176	239	183	165	0	104	166	0
17	186	203	203	160	176	246	193	164	0	101	170	0
18	198	206	196	164	179	251	193	165	0	101	165	0
19	225	205	193	158	179	252	189	164	0	112	166	0
20	199	201	195	169	180	250	189	166	0	155	166	30
21	120	204	192	185	179	251	191	165	0	147	167	76
22	36	198	196	183	177	249	188	168	0	149	164	76
23	0	203	194	195	180	250	189	168	0	147	164	76
24	0	187	179	204	182	254	188	168	0	149	164	116
25	0	180	204	204	187	249	187	170	0	147	166	141
26	0	181	205	214	196	247	172	170	0	142	169	141
27	8	195	205	227	199	246	160	170	0	130	171	141
28	51	192	205	229	197	247	157	172	0	125	166	143
29	31	-	199	241	198	247	163	169	0	139	164	113
30	0	-	200	242	196	252	164	169	0	181	158	97
31	0	-	201	-	205	-	162	164	-	191	-	40
TOTAL	1,538	5,277	6,083	5,457	6,012	7,322	6,576	4,572	766	3,370	5,559	1,611
MAXIMUM DAY	225	208	206	242	231	254	261	172	144	191	218	143
MINIMUM DAY	0	0	173	158	176	217	157	0	0	72	158	0
MEAN	50	188	196	182	194	244	212	147	26	109	185	52
TOTAL AC.FT.	3,051	10,467	12,065	10,824	11,925	14,523	13,043	9,068	1,519	6,684	11,026	3,195
WHOLE YEAR:-	TOTAL,	54,143	MAX.,	261	MIN.,	0	MEAN,	148	TOTAL AC.FT.,	107,390		

City of Bakersfield Diverted for Rosedale-Rio Bravo WSD
(Rosedale RBWSD/Improvement District No. 4 Exchange)

Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	166	0	0	0	0	0	0	0	0	0	168
2	0	31	0	0	0	0	0	0	0	0	0	173
3	0	31	0	0	0	0	0	0	0	0	0	176
4	0	32	0	0	0	0	0	0	0	0	0	117
5	0	15	0	0	0	0	0	0	0	0	0	52
6	0	0	0	0	0	0	0	0	0	0	0	56
7	0	0	0	0	0	0	0	0	0	0	0	31
8	0	0	0	0	0	0	0	0	0	0	0	57
9	0	0	0	0	0	0	0	0	0	0	0	28
10	0	0	0	0	0	0	0	0	0	0	0	45
11	0	0	0	0	0	0	0	0	0	0	0	92
12	0	0	0	0	0	0	0	0	0	0	0	94
13	0	0	0	0	0	0	0	0	0	0	0	84
14	0	0	0	0	0	0	0	0	0	0	0	79
15	0	0	0	0	0	0	0	0	0	0	0	65
16	0	0	0	0	0	0	0	0	0	0	0	77
17	33	0	0	0	0	0	0	0	0	0	0	65
18	48	0	0	0	0	0	0	0	0	0	0	60
19	25	0	0	0	0	0	0	0	0	0	0	55
20	34	0	0	0	0	0	0	0	0	0	0	44
21	142	0	0	0	0	0	0	0	0	0	0	19
22	114	0	0	0	0	0	0	0	0	0	0	21
23	66	0	0	0	0	0	0	0	0	0	0	18
24	43	0	0	0	0	0	0	0	0	0	0	19
25	31	0	0	0	0	0	0	0	0	0	0	22
26	34	0	0	0	0	0	0	0	0	0	0	15
27	69	0	0	0	0	0	0	0	0	0	0	24
28	134	0	0	0	0	0	0	0	0	0	0	90
29	156	-	0	0	0	0	0	0	0	0	0	107
30	164	-	0	0	0	0	0	0	0	0	0	129
31	138	-	0	-	0	-	0	0	-	0	-	123
TOTAL	1,231	275	0	0	0	0	0	0	0	0	0	2,205
MAXIMUM DAY	164	166	0	0	0	0	0	0	0	0	0	176
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	15
MEAN	40	10	0	0	0	0	0	0	0	0	0	71
TOTAL AC.FT.	2,441	546	0	0	0	0	0	0	0	0	0	4,374
WHOLE YEAR:-	TOTAL,	3,711	MAX.,	176	MIN.,	0	MEAN,	10	TOTAL AC.FT.,	7,361		

Rosedale-Rio Bravo Water Storage District Diverted via Arvin-Edison Turnout (Hacienda Water District/Rosedale RBWSD Exchange)												Year: 1998		
DISCHARGE IN CUBIC FEET PER SECOND														
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	0	0	0	0	0	13	45	8	7	0		
2	0	0	0	0	0	0	0	12	45	6	9	0		
3	0	0	0	0	0	0	0	10	44	4	10	0		
4	0	0	0	0	0	0	0	11	37	6	10	0		
5	0	0	0	0	0	0	0	14	30	10	10	0		
6	0	0	0	0	0	0	0	15	35	13	10	0		
7	0	0	0	0	0	0	0	47	38	14	9	0		
8	0	0	0	0	0	0	0	47	42	16	7	0		
9	0	0	0	0	0	0	0	45	41	16	8	0		
10	0	0	0	0	0	0	0	45	36	16	8	0		
11	0	0	0	0	0	0	0	45	37	12	8	0		
12	0	0	0	0	0	0	0	46	33	11	7	0		
13	0	0	0	0	0	0	0	58	31	12	7	0		
14	0	0	0	0	0	0	0	60	40	13	6	0		
15	0	0	0	0	0	0	0	58	44	13	6	0		
16	0	0	0	0	0	0	0	58	44	9	6	0		
17	0	0	0	0	0	0	0	59	43	9	7	0		
18	0	0	0	0	0	0	0	58	37	7	7	0		
19	0	0	0	0	0	0	0	44	31	8	9	0		
20	0	0	0	0	0	0	0	44	25	10	10	0		
21	0	0	0	0	0	0	0	45	32	10	9	0		
22	0	0	0	0	0	0	0	44	33	10	8	0		
23	0	0	0	0	0	0	0	43	34	11	9	0		
24	0	0	0	0	0	0	0	43	27	10	8	0		
25	0	0	0	0	0	0	0	43	27	8	7	0		
26	0	0	0	0	0	0	0	44	19	9	5	0		
27	0	0	0	0	0	0	0	44	17	9	5	0		
28	0	0	0	0	0	0	0	44	22	9	5	0		
29	0	-	0	0	0	0	0	41	24	8	5	0		
30	0	-	0	0	0	0	0	40	24	7	6	0		
31	0	-	0	-	0	-	0	43	-	6	-	0		
TOTAL	0	0	0	0	0	0	0	1,263	1,017	310	228	0		
MAXIMUM DAY	0	0	0	0	0	0	0	60	45	16	10	0		
MINIMUM DAY	0	0	0	0	0	0	0	10	17	4	5	0		
MEAN	0	0	0	0	0	0	0	41	34	10	8	0		
TOTAL AC.FT.	0	0	0	0	0	0	0	2,505	2,017	615	453	0		
WHOLE YEAR:-	TOTAL,	2,818	MAX.,	60	MIN.,	0	MEAN,	8	TOTAL AC.FT.,	5,590				

City of Bakersfield Diverted to Wm. Bolthouse Farms, Inc.
via Rosedale Channel (Miscellaneous) Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	4	1	9	4	0	0	3	0	0	0
2	0	0	3	3	11	4	0	0	2	0	0	0
3	0	0	2	2	6	4	0	0	2	0	1	6
4	0	0	5	1	4	5	0	0	2	0	0	4
5	0	0	2	0	0	5	0	0	0	0	0	4
6	0	0	3	0	0	5	0	0	0	0	2	2
7	0	0	4	0	0	5	0	0	2	3	1	2
8	0	0	4	0	0	10	0	4	0	4	0	0
9	0	0	4	0	0	8	0	4	0	5	2	0
10	0	0	4	0	0	1	0	4	0	4	3	0
11	0	0	4	0	0	0	0	4	0	4	2	0
12	0	0	4	0	0	0	0	4	0	0	0	0
13	0	0	2	0	0	0	0	5	0	0	0	0
14	0	0	2	0	0	0	0	10	0	0	2	0
15	0	0	3	0	0	0	0	9	0	0	0	0
16	0	0	1	0	0	2	0	9	0	0	0	0
17	0	0	3	0	0	1	0	8	0	3	0	0
18	0	0	2	0	0	0	0	6	0	0	0	0
19	0	0	2	0	5	2	0	2	0	2	1	0
20	0	0	2	5	10	0	0	2	0	0	0	0
21	0	0	1	11	9	0	0	2	0	2	0	0
22	0	0	1	4	7	0	0	0	0	4	0	0
23	0	0	2	3	5	0	0	3	0	7	0	0
24	0	0	2	5	4	0	0	2	0	5	0	0
25	0	0	0	6	4	0	0	2	0	4	3	0
26	0	0	0	5	4	0	0	1	0	0	2	0
27	0	4	0	4	5	0	0	1	0	1	0	0
28	0	6	0	8	4	0	0	4	0	3	0	0
29	0	-	0	8	10	0	0	1	0	0	0	0
30	0	-	0	6	10	0	0	1	0	1	0	0
31	0	-	0	-	11	-	0	1	-	1	-	0
TOTAL	0	10	66	72	118	56	0	89	11	54	19	18
MAXIMUM DAY	0	6	5	11	11	10	0	10	3	7	3	6
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	2	2	4	2	0	3	0	2	1	1
TOTAL AC.FT.	0	20	130	143	234	111	0	177	21	107	37	35
WHOLE YEAR:-	TOTAL,	513	MAX.,	11	MIN.,	0	MEAN,	1	TOTAL AC.FT.,	1,015		

ROSEDALE RIO BRAVO WATER STORAGE DISTRICT
Hydrographic and Accounting Report by City of Bakersfield

Quantities in acre-feet

Year: 1998

1	2	3	4	5		6		7		8		9	10	11	12	
				(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)					
Friant-Kern Inflow	Friant-Kern Delivered	River Canal Transportation Charge on Column 2	Total Kern River Delivered	Basic Contract		Miscellaneous		Other Supply				Kern River Floodwater	Friant-Kern	Hacienda WD Exchange	KCWA Misc.	
				No Charge (1st 4000)	acre-feet Sold at \$1.00	acre-feet Sold at \$6.00	acre-feet Sold at \$21.00									
January	0	0	5,492	4,000	1,492	0	0	0	0	0	0	0	0	0	0	0
February	0	0	10,993	0	4,508	6,485	0	0	0	0	0	0	0	0	0	0
March	1,916	0	10,019	0	0	10,019	0	0	0	0	0	0	1,916	0	0	0
April	155	0	10,526	0	0	9,596	0	0	0	0	0	930	155	0	0	0
May	0	0	11,691	0	0	0	0	0	0	0	0	11,691	0	0	0	0
June	0	0	14,412	0	0	0	0	0	0	0	0	14,412	0	0	0	0
July	0	0	13,043	0	0	7,947	0	0	0	0	0	5,096	0	0	0	0
August	0	0	8,891	0	0	8,891	0	0	0	0	0	0	0	0	0	0
September	0	0	1,498	0	0	1,498	0	0	0	0	0	0	0	0	0	0
October	0	0	6,577	434	0	4,259	0	0	0	0	0	0	0	0	0	0
November	0	0	10,989	4,081	6,000	0	0	0	0	0	0	0	0	0	0	0
December	2,361	0	5,173	3,485	1,688	0	0	0	0	0	0	0	2,361	0	0	0
Total	4,432	0	109,304	12,000	13,688	48,695	0	48,695	0	32,129	4,432	1,763	4,432	1,763	1,029	
				Current Escalator = 3,972		49,226	0	1997								
				Totals = \$54,368.74		38,603	0	1996								
				(per 1961 Agreement)		57,383	0	1995								
						0	0	1994								
						193,907	0									
						38,781	0									

Notes :

- (a) As charged RRBWSD by U.S.B.R.
- (b) Column 1 less transportation losses.
- (c) \$0.10 per acre-foot escalated annually (31.6 = 1-82 base index).
- (d) \$1.00 per acre-foot escalated annually (31.6 = 1-82 base index) after the first 4,000 AcFt of each successive 10,000 acre-feet delivered.
- (e) Subject to annual escalation per 1976 agreement (62.8 = 1-82 base index).
- (f) Delivered during periods of Kern River Mandatory Release when designated by U.S. Army Corps of Engineers.
- (g) Reflects delivery of Friant-Kern water.
- (h) Reflects delivery of Hacienda Water District Kern River exchange water.
- (i) Reflects delivery of Kern County Water Agency miscellaneous Kern River water.

Five Year Totals 0
 Five Year Averages 0

ROSEDALE RBWSD DIVERSION RECAPITULATION

Quantities in acre-feet

YEAR: 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Rosedale Channel at Headgate	+ 3,051	10,467	12,065	10,824	11,925	14,523	13,043	9,068	1,519	6,684	11,026	3,195	107,390
City to Bolthouse Farms	- 0	20	130	143	234	111	0	177	21	107	37	35	1,015
for Rosedale RBWSD	= 3,051	10,447	11,935	10,681	11,691	14,412	13,043	8,891	1,498	6,577	10,989	3,160	106,375
- City Contract Water	3,051	10,447	10,019	9,596	0	0	7,947	8,891	1,498	4,693	10,081	799	67,022
= Other Water	0	0	1,916	1,085	11,691	14,412	5,096	0	0	1,884	908	2,361	39,353
via James Canal to South Pioneer	+ 0	0	581	378	158	293	257	0	0	0	0	0	1,667
via 2800 Acres to North Pioneer	+ 0	0	77	743	1,081	426	688	0	0	0	0	0	3,015
Central Pioneer	+ 0	0	479	172	178	181	146	0	0	0	0	0	1,156
via Pioneer Canal Inlet	+ 0	0	588	684	99	501	267	0	0	0	0	0	2,139
2800 Acre Spreading (Net)	+ 0	0	1,279	698	0	0	0	0	0	0	0	0	1,977
Kern River Channel Spreading	+ 0	0	0	0	0	0	0	0	0	0	0	0	0
At Second Point of Measurement	+ 0	0	0	0	0	0	0	0	0	0	0	0	0
via Arvin - Edison T.O.	+ 0	0	0	0	0	0	0	2,505	2,017	615	453	0	5,590
For Improvement District #4	+ 2,441	546	0	0	0	0	0	0	0	0	0	4,374	7,361
Total Diverted	= 5,492	10,993	14,939	13,356	13,207	15,813	14,401	11,396	3,515	7,192	11,442	7,534	129,280

City of Bakersfield Basic Contract	+ 5,492	4,508	0	0	0	0	0	0	0	434	10,081	5,173	25,688
City of Bakersfield Miscellaneous	+ 0	6,485	10,019	9,596	0	0	7,947	8,891	1,498	4,259	0	0	48,695
KCWA Miscellaneous Purchase	+ 0	0	1,606	1,441	0	0	538	0	0	1,029	0	0	4,614
Hacienda WD Exchange	+ 0	0	0	0	0	0	0	2,505	2,017	1,470	1,361	0	7,353
Improvement District #4 Exchange	+ 0	0	0	0	0	0	0	0	0	0	0	0	0
Buena Vista WSD Purchase	+ 0	0	548	1,125	0	0	375	0	0	0	0	0	2,048
Kern River Floodwater via Headgate	+ 0	0	0	930	11,691	14,412	5,096	0	0	0	0	0	32,129
Kern River Floodwater via Pioneer	+ 0	0	0	55	1,516	1,401	445	0	0	0	0	0	3,417
Friant - Kern (Westlands Payback)	+ 0	0	228	0	0	0	0	0	0	0	0	0	228
Friant - Kern Floodwater via Headgate	+ 0	0	1,916	155	0	0	0	0	0	0	0	0	2,071
Friant - Kern 215 Contract Water	+ 0	0	0	0	0	0	0	0	0	0	0	2,361	2,361
Friant - Kern Floodwater via Pioneer	+ 0	0	622	54	0	0	0	0	0	0	0	0	676
Total Supply	= 5,492	10,993	14,939	13,356	13,207	15,813	14,401	11,396	3,515	7,192	11,442	7,534	129,280

STATUS OF CONTRACT
per terms of
ROSEDALE RIO BRAVO WATER STORAGE DISTRICT
Service Agreement, dated August 31, 1961.

Quantities in acre-feet

Year	TOTAL DELIVERED	FRIANT-KERN DELIVERED	TOTAL KERN RIVER DELIVERED	(1) KERN RIVER BASIC CONTRACT DELIVERED	KERN RIVER BASIC CONTRACT OBLIGATION	(2) CARRY FORWARD OVER (UNDER)	END of YEAR CONTRACT BALANCE (3)	
							(4)	60,000
1976	0	0	0	0	10,000	(10,000)	50,000	
1977	2,199	0	2,199	2,199	10,000	(7,801)	42,199	
1978	76,365	4,371	71,994	10,000	10,000	0	42,199	
1979	14,568	9,921	4,647	4,647	10,000	(5,353)	36,846	
1980	70,790	4,167	66,623	10,000	10,000	0	36,846	
1981	773	0	773	773	10,000	(9,227)	27,619	
1982	88,374	40,595	47,779	10,000	10,000	0	27,619	
1983	134,534	1,440	133,094	10,000	10,000	0	27,619	
1984	38,854	0	38,854	10,000	10,000	0	27,619	
1985	20,694	0	20,694	0	10,000	(10,000)	17,619	
1986	87,761	5,209	82,552	20,000	10,000	10,000	27,619	
1987	6,000	0	6,000	0	10,000	(10,000)	17,619	
1988	7,845	0	7,845	0	10,000	(10,000)	7,619	
1989	4,500	0	4,500	0	10,000	(10,000)	(2,381)	
1990	0	0	0	0	10,000	(10,000)	(12,381)	
1991	9,076	0	9,076	9,076	10,000	(924)	(13,305)	
1992	1,117	0	1,117	1,117	10,000	(8,883)	(22,188)	
1993	55,710	28,820	26,890	10,000	10,000	0	(22,188)	
1994	3,039	0	3,039	3,039	10,000	(6,961)	(29,149)	
1995	110,777	8,470	102,307	30,000	10,000	20,000	(9,149)	
1996	93,257	35,396	57,861	19,149	10,000	9,149	0	
1997	97,062	6,612	90,450	10,000	10,000	0	0	
1998	113,736	4,432	109,304	25,688	10,000	15,688	15,688	

- (1) Not less than 5,000 acre-feet for any consecutive 5-Year period.
- (2) Limit 30,000 acre-feet during any One year.
- (3) Gross limit of 60,000 acre-feet.
- (4) Pursuant to Article 3.2 of 1976 Agreement No. 76-80; City of Bakersfield carryover credit was 60,000 acre-feet as of January 1, 1976.

CITY OF BAKERSFIELD
STATUS OF MISCELLANEOUS WATER DELIVERIES
TO ROSEDALE RIO BRAVO WATER STORAGE DISTRICT

Quantities in acre-feet

Pursuant to June 6, 1976 Agreement No. 76-80

Year: 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
City Entitlement + or - Release	11,065	66,197	41,991	35,568	0	0	32,364	22,115	2,613	19,910	42,917	8,184	282,924
Lake Ming	16	16	44	56	0	0	87	121	91	65	42	26	564
North Kern Water Storage District	0	0	0	0	0	0	10,000	10,000	0	0	0	0	20,000
Cawelo Water District	0	0	1,408	1,459	0	0	4,594	6,400	0	0	0	0	13,861
Kern-Tulare Water District	0	0	1,866	1,840	0	0	3,503	4,681	2,948	0	0	0	14,838
Rag Gulch Water District	0	0	279	274	0	0	526	701	442	0	0	0	2,222
Rosedale Rio Bravo WSD	5,492	4,508	0	0	0	0	0	0	0	434	10,081	5,173	25,688
Kern River Canal & Irrigating Co.	0	0	0	0	0	0	0	0	0	0	0	0	0
Truxtun Lakes	0	153	0	0	0	0	0	0	0	0	1,271	0	1,424
First Point Passing Second Point	0	6,611	0	0	0	0	0	0	0	0	6,656	0	13,267
Transportation Loss Assignment	0	0	0	0	0	0	0	0	1,268	0	0	0	1,268
Isabella Reservoir Loss	27	49	201	204	0	0	742	764	292	164	84	83	2,610
River Transportation Loss	1,113	9,663	6,918	8,530	0	0	5,613	6,132	1,160	1,285	4,325	127	44,866
Total Basic Commitments	6,648	21,000	10,716	12,363	0	0	25,065	28,799	6,201	1,948	22,459	5,409	140,608

*Note: January Entitlement + or - Release includes 875 AcFt accrued in Isabella Reservoir storage...
February Entitlement + or - Release includes 10,164 AcFt accrued in Isabella Reservoir storage...
August Entitlement + or - Release includes 26 AcFt accrued in Isabella Reservoir storage...
November Entitlement + or - Release includes 16,080 AcFt accrued in Isabella Reservoir storage...*

Total City Miscellaneous Water.....	142,316
Rosedale Rio Bravo WSD 1/3 Share.....	47,439

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Misc. Water Delivered to RRBWSD	0	6,485	10,019	9,596	0	0	7,947	8,891	1,498	4,259	0	0	48,695
Del. under Art. 11, Sec. 2.1 (X7)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Misc. Delivered to RRBWSD	0	6,485	10,019	9,596	0	0	7,947	8,891	1,498	4,259	0	0	48,695

Over (Under) City Miscellaneous Water Obligation.....	1,256
Prior Year Miscellaneous Water Delivery Balance.....	(9,198)
Cumulative Miscellaneous Water Delivery Balance.....	(7,942)

STATUS OF CONTRACT
ROSEDALE RIO BRAVO WATER STORAGE DISTRICT

Cumulative Miscellaneous Water Balance
Pursuant to June 6, 1976 Agreement No. 76-80

Quantities in acre-feet

Year	(A) TOTAL CITY MISCELLANEOUS WATER	(B) RRBWS 1/3 SHARE OF MISC.	(C) MISC. WATER DELIVERED TO RRBWS (1)	(D) OVER (UNDER) 1/3 SHARE	(E) END of YEAR CUMULATIVE MISC. WATER BALANCE
					0
1977	0	0	0	0	0
1978	75,473	25,158	29,405	4,247	4,247
1979	34,885	11,628	0	(11,628)	(7,381)
1980	81,572	27,191	28,246	1,055	(6,326)
1981	1,634	545	0	(545)	(6,871)
1982	184,335	61,445	37,779	(23,666)	(30,537)
1983	64,686	21,562	12,292	(9,270)	(39,807)
1984	56,816	18,939	20,856	1,917	(37,890)
1985	50,537	16,846	20,694	3,848	(34,042)
1986	161,307	53,769	56,590	2,821	(31,221)
1987	0	0	6,000	6,000	(25,221)
1988	2,157	719	7,845	7,126	(18,095)
1989	3,838	1,279	4,500	3,221	(14,874)
1990	0	0	0	0	(14,874)
1991	0	0	0	0	(14,874)
1992	0	0	0	0	(14,874)
1993	49,610	16,537	16,890	353	(14,521)
1994	0	0	0	0	(14,521)
1995	91,532	30,511	57,383	26,872	12,351
1996	131,683	43,894	38,603	(5,291)	7,060
1997	196,451	65,484	49,226	(16,258)	(9,198)
1998	142,316	47,439	48,695	1,256	(7,942)

Notes:

- (1) Includes water delivered pursuant to Article II, Section 2.1 (i) (7) of Agreement No. 76-80, "Failure to Accept Water".
- Column (B) = Column (A) x 1/3.
- Column (D) = Column (C) minus Column (B).

**KERN RIVER CANAL & IRRIGATING COMPANY
CITY OF BAKERSFIELD**

Year: 1998

Quantities in acre-feet

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Kern River Entitlement	476	9,634	1,489	4,395	9,061	8,618	5,653	2,283	653	0	0	0	42,262
Release	+ 2,644	- 901	+ 153	- 270	+ (4,033)	- (6,924)	+ (3,797)	- (296)	0	0	2,588	880	(7,614)
ENTITLEMENT + OR - RELEASE	= 3,120	10,535	1,642	4,665	5,028	1,694	1,856	1,987	653	0	2,588	880	34,648
Oilfield Discharge	+ 0	- 0	+ 38	- 54	+ 56	- 38	+ 54	- 56	+ 63	- 74	+ 20	- 0	453
Other	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	0
Into Isabella Storage	- 3,076	+ 10,535	- 1,584	+ 4,001	- 4,457	+ 369	- 906	+ 1,190	- 434	+ 0	- 2,138	+ 880	29,570
From Isabella Storage	+ 12	- 0	+ 65	- 0	+ 0	- 418	+ 633	- 1,061	+ 646	- 71	+ 36	- 0	2,942
To NKWSD in Isabella Storage	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	0
DIVERTED AT HEAD	= 56	0	161	718	627	1,363	1,422	1,486	1,343	720	541	36	8,473
Irrigation Deliveries	- 30	+ 0	- 113	+ 462	- 365	+ 1,068	- 1,108	+ 1,167	- 1,003	+ 489	- 310	+ 15	6,130
NKWSD at Seventh Standard Line	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	0
Cawelo WD at Pump Station "B"	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	0
Spreading Deliveries	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	- 0	+ 0	0
Canal Loss	= 26	- 0	+ 48	- 256	+ 262	- 295	+ 314	- 319	+ 340	- 231	+ 231	- 21	2,343
Irrigation Delivery Percentage	= 54%	0%	70%	64%	58%	78%	78%	79%	75%	68%	57%	42%	72%

Into Isabella Storage	3,076	10,535	1,584	4,001	4,457	369	906	1,190	434	0	2,138	880	29,570
Isabella Evaporation Loss	71	18	113	161	220	369	488	557	417	334	196	182	3,126
From Isabella Storage	12	0	65	0	0	0	418	633	1,061	646	71	36	2,942
Transfer in Storage	0	16,122	0	0	0	0	0	0	0	0	0	0	16,122
End of Month Isabella Storage	21,122	15,517	16,923	20,763	25,000	25,000	25,000	25,000	23,956	22,976	24,847	25,509	

SOUTH FORK DIVERSION RIGHT SUMMARY

Year: 1998

Quantities in acre-feet

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Kern River Entitlement	615	570	113	200	254	248	179	246	595	615	595	615	4,845
Release	(615)	38	534	425	392	377	466	400	30	30	30	(615)	1,492
Entitlement + or - Release	0	608	647	625	646	625	645	646	625	645	625	0	6,337
Into Isabella Storage	0	608	647	625	608	544	599	545	548	587	589	0	5,900
From Isabella Storage	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	14	0	0	0	0	14
Total Deliveries	0	0	0	0	38	81	46	115	77	58	36	0	451
Old South Fork	0	0	0	0	0	0	0	0	0	0	0	0	0
Panama Ranch	0	0	0	0	38	81	46	115	77	58	36	0	451

Into Isabella Storage	0	608	647	625	608	544	599	545	548	587	589	0	5,900
From Isabella Storage	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfer in Storage	0	0	0	0	0	0	0	0	0	0	5,900	0	5,900
End of Month Isabella Storage	600	1,208	1,855	2,480	3,088	3,632	4,231	4,776	5,324	5,911	600	600	600

City of Bakersfield Diverted to Kern Delta Water District
(Miscellaneous) Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	2	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	-	0	0	0	0	0	0	0	0	0	0
30	0	-	0	0	0	0	0	0	0	0	0	0
31	0	-	0	-	0	-	0	0	-	0	-	0
TOTAL	0	0	2	0	0	0	0	0	0	0	0	0
MAXIMUM DAY	0	0	2	0	0	0	0	0	0	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL AC.FT.	0	0	4	0	0	0	0	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	2	MAX.,	2	MIN.,	0	MEAN,	0	TOTAL AC.FT.,	0	4	0

City of Bakersfield Diverted to Arvin-Edison Water Storage District
(Miscellaneous) Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	15	61	0	0	0	0	4	0	0	0
2	0	0	50	59	0	0	0	0	5	0	0	0
3	0	0	51	60	0	0	0	0	4	0	0	0
4	0	0	47	74	0	0	0	0	4	0	0	0
5	0	0	62	119	0	0	0	0	3	0	0	0
6	0	0	150	83	0	0	0	0	3	0	0	0
7	0	0	149	0	0	0	0	0	4	0	0	0
8	0	0	151	0	0	0	0	0	4	0	0	0
9	0	0	149	0	0	0	0	0	4	0	0	0
10	0	0	145	0	0	0	0	0	4	0	0	0
11	0	0	147	0	0	0	0	0	4	0	0	0
12	0	0	150	0	0	0	0	0	3	0	0	0
13	0	0	46	0	0	0	0	0	3	0	0	0
14	0	0	62	0	0	0	26	0	4	0	0	0
15	0	0	61	17	0	0	74	0	4	0	0	0
16	0	0	60	95	0	0	108	0	4	0	0	0
17	0	0	60	159	0	0	129	0	4	0	0	0
18	0	0	59	159	0	0	129	0	4	0	0	0
19	0	0	57	158	0	0	124	0	3	0	0	0
20	0	0	59	159	0	0	122	0	2	0	0	0
21	0	0	59	152	0	0	125	0	3	0	0	0
22	0	0	59	159	0	0	179	0	3	0	0	0
23	0	0	58	159	0	0	201	0	4	0	0	0
24	0	0	67	162	0	0	204	0	3	0	0	0
25	0	0	65	160	0	0	209	0	2	0	0	0
26	0	0	58	157	0	0	200	0	2	0	0	0
27	0	0	62	159	0	0	197	0	2	0	0	0
28	0	0	64	161	0	0	197	0	2	0	0	0
29	0	-	61	0	0	0	203	0	3	0	0	0
30	0	-	59	0	0	0	208	0	3	0	0	0
31	0	-	61	-	0	-	155	0	-	0	-	0
TOTAL	0	0	2,403	2,472	0	0	2,790	0	101	0	0	0
MAXIMUM DAY	0	0	151	162	0	0	209	0	5	0	0	0
MINIMUM DAY	0	0	15	0	0	0	0	0	2	0	0	0
MEAN	0	0	78	82	0	0	90	0	3	0	0	0
TOTAL AC.FT.	0	0	4,766	4,903	0	0	5,534	0	200	0	0	0
WHOLE YEAR:-	TOTAL,	7,766	MAX.,	209	MIN.,	0	MEAN,	21	TOTAL AC.FT.,	15,403		

Year: 1998

City of Bakersfield Diverted to Kern Valley Golf Course

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	1	0	1	0	0	0
2	0	0	0	0	1	0	0	1	0	1	0	1
3	0	0	0	0	0	1	0	0	0	0	0	0
4	0	0	0	0	0	0	1	1	0	0	1	0
5	0	0	0	0	0	1	0	0	1	1	0	0
6	0	0	0	0	0	0	1	1	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	1	0	0	0	0
9	0	0	0	0	0	0	1	0	1	0	1	0
10	0	0	0	0	1	1	0	1	0	1	0	0
11	0	0	0	0	0	0	1	0	1	0	0	0
12	0	0	0	0	0	0	0	1	0	0	0	0
13	0	0	0	0	0	1	0	0	0	0	0	0
14	0	0	0	0	0	0	1	1	0	1	0	0
15	0	0	0	1	1	0	0	0	1	0	0	0
16	0	0	0	0	0	1	1	1	0	0	0	0
17	0	0	1	1	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	1	1	0	1	0	0
19	0	0	0	0	1	0	1	0	1	0	0	0
20	0	0	0	0	0	1	0	0	0	0	0	0
21	0	0	0	1	0	1	1	1	0	0	0	0
22	0	0	0	0	0	1	0	0	1	1	0	0
23	0	0	0	1	0	0	1	1	0	0	0	0
24	0	0	0	0	1	1	0	0	0	0	0	0
25	0	0	0	0	0	0	1	0	1	0	1	0
26	0	0	0	0	0	1	0	1	0	0	0	0
27	0	0	0	0	0	1	0	0	0	0	0	0
28	0	0	0	0	1	0	1	1	0	0	0	0
29	0	-	0	1	0	0	0	0	1	0	0	0
30	0	-	0	0	1	0	1	1	0	0	0	0
31	0	-	0	-	0	-	0	0	-	0	-	0
TOTAL	0	0	1	6	7	11	14	14	9	6	3	1
MAXIMUM DAY	0	0	1	1	1	1	1	1	1	1	1	1
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL AC.FT.	0	0	2	13	13	22	28	28	18	13	6	2
WHOLE YEAR:-	TOTAL,	72	MAX.,	1	MIN.,	0	MEAN,	0	TOTAL AC.FT.,	145		

DISCHARGE IN CUBIC FEET PER SECOND **Year: 1998**

Total Water Spread in City of Bakersfield's 2800 Acre Recharge Facility
(All Sources, All Entities)

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	211	135	145	147	151	177	117	119	46	7
2	0	113	257	153	160	153	154	185	122	115	60	39
3	0	512	241	127	157	161	171	(7)	114	140	89	29
4	0	318	207	146	149	161	160	(98)	95	147	42	27
5	0	257	194	136	146	163	165	(86)	98	138	36	13
6	0	246	150	130	155	173	160	54	119	108	57	0
7	0	390	159	132	163	169	149	156	127	95	48	0
8	152	436	185	126	177	153	132	167	149	86	65	0
9	250	345	213	144	189	156	136	215	144	66	49	0
10	168	238	208	147	194	161	111	247	140	89	41	0
11	174	160	187	120	166	184	127	275	145	123	37	42
12	78	72	181	164	160	208	110	251	156	113	78	84
13	0	125	179	164	167	191	175	179	184	88	66	104
14	0	560	154	165	175	193	140	133	149	83	42	79
15	24	170	178	178	171	173	157	122	121	64	36	67
16	83	351	176	174	153	165	143	118	114	65	61	89
17	148	293	168	166	148	173	124	97	134	70	50	103
18	290	102	124	158	151	173	137	99	105	97	44	95
19	346	203	164	165	165	158	167	120	119	74	31	69
20	273	325	143	150	173	155	155	128	125	63	28	77
21	108	235	199	158	184	155	156	129	118	78	39	50
22	53	312	197	176	187	123	158	153	104	76	37	70
23	0	469	223	153	203	132	166	195	106	70	59	79
24	0	113	157	145	192	151	152	139	124	107	72	86
25	0	243	166	152	177	149	147	130	115	141	79	90
26	0	333	180	166	175	141	149	116	143	109	97	86
27	0	165	154	177	165	140	155	112	162	103	60	91
28	0	128	169	176	171	150	147	138	136	56	56	85
29	0	-	167	159	178	147	160	168	143	17	54	76
30	0	-	123	118	161	147	167	146	141	27	23	78
31	0	-	114	-	158	-	170	132	-	24	-	109
TOTAL	2,147	7,214	5,528	4,560	5,215	4,805	4,651	4,090	3,869	2,751	1,582	1,824
MAXIMUM DAY	346	560	257	178	203	208	175	275	184	147	97	109
MINIMUM DAY	0	0	114	118	145	123	110	(98)	95	17	23	0
MEAN	69	258	178	152	168	160	150	132	129	89	53	59
TOTAL AC.FT.	4,259	14,309	10,965	9,045	10,345	9,530	9,225	8,112	7,674	5,457	3,137	3,618
WHOLE YEAR:-	TOTAL,	48,236	MAX.,	560	MIN.,	(98)	MEAN,	132	TOTAL AC.FT.,	95,676		

City of Bakersfield												Year: 1998		
2800 Acre Spreading Operations														
(Kern River Supply)														
DISCHARGE IN CUBIC FEET PER SECOND	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	211	135	145	147	151	6	0	0	0	0	0	0
2	0	0	257	153	160	153	154	185	0	0	0	0	0	0
3	0	0	241	127	157	161	171	(7)	0	0	0	0	0	0
4	0	0	207	146	149	161	160	(98)	0	0	0	0	0	0
5	0	0	194	136	146	163	165	(86)	0	0	0	0	0	0
6	0	0	150	130	155	173	160	0	0	0	0	0	0	0
7	0	0	159	132	163	169	149	0	0	0	0	0	0	0
8	0	0	185	126	177	153	132	0	0	0	0	0	0	0
9	0	0	213	144	189	156	136	0	0	0	0	0	0	0
10	0	0	208	147	194	161	111	0	0	0	0	0	0	0
11	0	0	187	120	166	184	127	0	0	0	0	0	0	0
12	0	0	181	164	160	208	110	0	0	0	0	0	0	0
13	0	0	179	164	167	191	175	0	0	0	0	0	0	0
14	0	0	154	165	175	193	140	0	0	0	0	0	0	0
15	0	0	178	178	171	173	157	0	0	0	0	0	0	0
16	0	0	176	174	153	165	143	0	0	0	0	0	0	0
17	0	0	168	166	148	173	124	0	0	0	0	0	0	0
18	0	0	124	158	151	173	137	0	0	0	0	0	0	0
19	0	0	164	165	165	158	167	0	0	0	0	0	0	0
20	0	0	143	150	173	155	155	0	0	0	0	0	0	0
21	0	0	199	158	184	155	156	0	0	0	0	0	0	0
22	0	312	197	176	187	123	158	0	0	0	0	0	0	0
23	0	456	223	153	203	132	166	0	0	0	0	0	0	0
24	0	113	157	145	192	151	152	0	0	0	0	0	0	0
25	0	243	166	152	177	149	147	0	0	0	0	0	0	0
26	0	333	180	166	175	141	149	0	0	0	0	0	0	0
27	0	165	154	177	165	140	155	0	0	0	0	0	0	0
28	0	128	169	176	171	150	147	0	0	0	0	0	0	0
29	0	-	167	159	178	147	160	0	0	0	0	0	0	0
30	0	-	123	118	161	147	167	0	0	0	0	0	0	0
31	0	-	114	-	158	-	170	0	-	-	-	-	-	0
TOTAL	0	1,750	5,528	4,560	5,215	4,805	4,651	0	0	0	0	0	0	0
MAXIMUM DAY	0	456	257	178	203	208	175	185	0	0	0	0	0	0
MINIMUM DAY	0	0	114	118	145	123	110	(98)	0	0	0	0	0	0
MEAN	0	63	178	152	168	160	150	0	0	0	0	0	0	0
TOTAL AC.FT.	0	3,471	10,965	9,045	10,345	9,530	9,225	0	0	0	0	0	0	0
WHOLE YEAR:-	TOTAL	26,509	MAX.,	456	MIN.,	(98)	MEAN,	73	TOTAL AC.FT.,	52,581				

City of Bakersfield												Year: 1998		
2800 Acre Spreading Operations														
(Friant-Kern Supply)														
DISCHARGE IN CUBIC FEET PER SECOND														
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	13	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	-	0	0	0	0	0	0	0	0	0	0	0	0
30	0	-	0	0	0	0	0	0	0	0	0	0	0	0
31	0	-	0	-	0	-	0	0	-	0	-	0	0	0
TOTAL	0	13	0	0	0	0	0	0	0	0	0	0	0	0
MAXIMUM DAY	0	13	0	0	0	0	0	0	0	0	0	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL AC.FT.	0	25	0	0	0	0	0	0	0	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	13	MAX.,	13	MIN.,	0	MEAN,	0	TOTAL AC.FT.,	0	25			

Buena Vista Water Storage District
2800 Acre Spreading Operations
(Kern River Supply)

DISCHARGE IN CUBIC FEET PER SECOND

Year: 1998

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	0	171	117	0	0	0
2	0	0	0	0	0	0	0	0	122	0	0	0
3	0	0	0	0	0	0	0	0	114	0	0	0
4	0	0	0	0	0	0	0	0	95	0	0	0
5	0	0	0	0	0	0	0	0	98	0	0	0
6	0	0	0	0	0	0	0	54	119	0	0	0
7	0	0	0	0	0	0	0	156	127	0	0	0
8	0	0	0	0	0	0	0	167	149	0	0	0
9	0	0	0	0	0	0	0	215	144	0	0	0
10	0	0	0	0	0	0	0	247	140	0	0	0
11	0	0	0	0	0	0	0	275	145	0	0	0
12	0	0	0	0	0	0	0	251	156	0	0	0
13	0	0	0	0	0	0	0	179	184	0	0	0
14	0	0	0	0	0	0	0	133	149	0	0	0
15	0	0	0	0	0	0	0	122	121	0	0	0
16	45	0	0	0	0	0	0	118	114	0	0	0
17	0	0	0	0	0	0	0	97	134	0	0	0
18	0	0	0	0	0	0	0	99	105	0	0	0
19	0	0	0	0	0	0	0	120	119	0	0	0
20	0	0	0	0	0	0	0	128	125	0	0	0
21	0	0	0	0	0	0	0	129	118	0	0	0
22	0	0	0	0	0	0	0	153	104	0	0	0
23	0	0	0	0	0	0	0	195	106	0	0	0
24	0	0	0	0	0	0	0	139	124	0	0	0
25	0	0	0	0	0	0	0	130	115	0	0	0
26	0	0	0	0	0	0	0	116	143	0	0	0
27	0	0	0	0	0	0	0	112	162	0	0	0
28	0	0	0	0	0	0	0	138	136	0	0	0
29	0	-	0	0	0	0	0	168	143	0	0	0
30	0	-	0	0	0	0	0	146	141	0	0	0
31	0	-	0	-	0	-	0	132	-	0	-	0
TOTAL	45	0	0	0	0	0	0	4,090	3,869	0	0	0
MAXIMUM DAY	45	0	0	0	0	0	0	275	184	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	95	0	0	0
MEAN	1	0	0	0	0	0	0	132	129	0	0	0
TOTAL AC. FT.	89	0	0	0	0	0	0	8,112	7,674	0	0	0
WHOLE YEAR:-	TOTAL,	8,004	MAX.,	275	MIN.,	0	MEAN,	22	TOTAL AC.FT.,	15,875		

Kern County Water Agency												Year: 1998		
2800 Acre Spreading Operations														
(All Sources)														
DISCHARGE IN CUBIC FEET PER SECOND														
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	0	0	0	0	0	0	0	119	46	7		
2	0	113	0	0	0	0	0	0	0	115	60	39		
3	0	512	0	0	0	0	0	0	0	140	89	29		
4	0	318	0	0	0	0	0	0	0	147	42	27		
5	0	257	0	0	0	0	0	0	0	138	36	13		
6	0	246	0	0	0	0	0	0	0	108	57	0		
7	0	390	0	0	0	0	0	0	0	95	48	0		
8	152	436	0	0	0	0	0	0	0	86	65	0		
9	250	345	0	0	0	0	0	0	0	66	49	0		
10	168	238	0	0	0	0	0	0	0	89	41	0		
11	174	160	0	0	0	0	0	0	0	123	37	42		
12	78	72	0	0	0	0	0	0	0	113	78	84		
13	0	125	0	0	0	0	0	0	0	88	66	104		
14	0	560	0	0	0	0	0	0	0	83	42	79		
15	24	170	0	0	0	0	0	0	0	64	36	67		
16	38	351	0	0	0	0	0	0	0	65	61	89		
17	148	293	0	0	0	0	0	0	0	70	50	103		
18	290	102	0	0	0	0	0	0	0	97	44	95		
19	346	203	0	0	0	0	0	0	0	74	31	69		
20	273	325	0	0	0	0	0	0	0	63	28	77		
21	108	235	0	0	0	0	0	0	0	78	39	50		
22	53	0	0	0	0	0	0	0	0	76	37	70		
23	0	0	0	0	0	0	0	0	0	70	59	79		
24	0	0	0	0	0	0	0	0	0	107	72	86		
25	0	0	0	0	0	0	0	0	0	141	79	90		
26	0	0	0	0	0	0	0	0	0	109	97	86		
27	0	0	0	0	0	0	0	0	0	103	60	91		
28	0	0	0	0	0	0	0	0	0	56	56	85		
29	0	-	0	0	0	0	0	0	0	17	54	76		
30	0	-	0	0	0	0	0	0	0	27	23	78		
31	0	-	0	-	0	-	-	-	-	24	-	109		
TOTAL	2,102	5,451	0	0	0	0	0	0	0	2,751	1,582	1,824		
MAXIMUM DAY	346	560	0	0	0	0	0	0	0	147	97	109		
MINIMUM DAY	0	0	0	0	0	0	0	0	0	17	23	0		
MEAN	68	195	0	0	0	0	0	0	0	89	53	59		
TOTAL AC.FT.	4,170	10,813	0	0	0	0	0	0	0	5,457	3,137	3,618		
WHOLE YEAR:-	TOTAL,	13,710	MAX.,	560	MIN.,	0	MEAN,	38	TOTAL AC.FT.,	27,195				

Year: 1998

Total Flow via the James Canal Headgate

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	80	107	110	131	176	130	120	127	114	16
2	0	0	88	101	110	100	177	129	130	127	113	50
3	0	0	102	101	109	101	176	100	130	127	110	110
4	0	0	99	100	109	112	173	72	136	123	116	106
5	0	16	99	100	103	122	175	113	140	122	113	111
6	0	68	101	99	96	131	160	131	140	121	115	112
7	0	69	101	101	95	141	162	132	142	127	114	105
8	0	73	100	101	95	140	173	130	140	123	114	97
9	0	79	100	101	95	144	176	130	139	123	110	77
10	0	80	100	100	94	150	176	129	142	125	101	31
11	0	80	104	100	95	154	177	130	142	121	101	100
12	0	81	109	99	96	160	175	130	134	125	101	100
13	0	80	109	101	97	157	174	130	130	126	100	99
14	0	78	108	100	106	158	174	130	123	126	100	101
15	0	80	110	96	119	160	173	130	102	133	100	100
16	0	77	110	90	119	161	174	131	55	144	101	100
17	0	80	110	92	128	160	175	125	55	147	101	100
18	0	81	110	92	132	160	176	119	55	147	100	101
19	0	81	110	89	140	158	175	119	54	139	100	100
20	0	80	110	92	139	160	156	118	54	127	100	99
21	0	83	108	94	140	159	155	116	59	131	99	99
22	0	80	109	101	141	161	149	116	67	130	99	103
23	0	67	109	106	141	170	142	115	72	130	101	103
24	0	53	109	109	139	174	148	115	75	129	101	105
25	0	56	108	110	141	175	146	115	75	117	101	107
26	0	53	110	112	140	176	147	115	76	114	104	107
27	0	54	111	112	141	176	138	115	76	115	109	106
28	0	65	110	110	140	174	130	115	75	114	109	105
29	0	-	110	111	140	174	130	115	74	115	110	94
30	0	-	109	109	141	172	130	116	78	116	109	87
31	0	-	109	-	140	-	130	115	-	114	-	91
TOTAL	0	1,694	3,262	3,036	3,731	4,571	4,998	3,726	2,990	3,905	3,166	2,922
MAXIMUM DAY	0	83	111	112	141	176	177	132	142	147	116	112
MINIMUM DAY	0	0	80	89	94	100	130	72	54	114	99	16
MEAN	0	61	105	101	120	152	161	120	100	126	106	94
TOTAL AC.FT.	0	3,360	6,470	6,022	7,400	9,066	9,913	7,390	5,931	7,745	6,280	5,796
WHOLE YEAR:-	TOTAL,	38,001	MAX.,	177	MIN.,	0	MEAN,	104	TOTAL AC.FT.,	75,373		

Year: 1998

Total Flow via the Pioneer Canal Headgate

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	152	128	212	129	81	81	0	0	0	11
2	0	0	146	127	220	127	81	80	9	0	0	0
3	0	0	129	123	218	182	80	45	18	0	0	0
4	0	0	124	124	212	172	80	0	18	0	4	0
5	0	0	124	161	209	130	80	0	17	0	8	0
6	0	0	125	176	203	159	80	0	17	0	4	0
7	0	0	126	176	200	181	80	0	17	0	0	0
8	0	0	128	232	208	186	81	56	17	0	0	0
9	0	0	127	258	219	151	81	78	18	0	7	0
10	0	0	125	259	224	76	80	78	18	0	13	0
11	0	110	125	263	223	84	80	80	17	0	15	0
12	0	205	125	257	228	155	81	81	17	0	16	10
13	0	205	124	255	228	177	81	81	18	0	16	15
14	0	207	115	236	224	122	80	81	18	0	16	15
15	0	210	113	230	228	90	80	80	19	0	13	15
16	0	198	120	231	232	81	80	79	19	0	15	5
17	0	206	123	231	228	79	81	84	17	0	16	0
18	0	207	126	238	227	80	80	85	18	0	16	0
19	0	70	125	244	225	79	79	85	7	0	16	0
20	0	0	123	244	225	78	78	83	0	0	16	0
21	0	0	123	246	225	80	79	85	0	0	16	0
22	0	0	126	245	224	80	80	84	0	0	16	0
23	0	0	125	239	224	79	80	85	0	0	16	0
24	0	0	125	214	227	80	80	59	0	0	18	0
25	0	0	126	205	151	81	79	39	0	0	17	0
26	0	0	126	205	122	80	77	40	0	0	17	0
27	0	78	125	202	117	81	79	40	0	0	16	0
28	0	152	125	202	121	80	79	26	0	0	15	0
29	0	-	122	200	127	81	81	15	0	0	15	0
30	0	-	121	211	124	81	81	15	0	0	15	0
31	0	-	124	-	126	-	80	9	-	0	-	0
TOTAL	0	1,848	3,893	6,362	6,181	3,321	2,479	1,734	299	0	352	71
MAXIMUM DAY	0	210	152	263	232	186	81	85	19	0	18	15
MINIMUM DAY	0	0	113	123	117	76	77	0	0	0	0	0
MEAN	0	66	126	212	199	111	80	56	10	0	12	2
TOTAL AC.FT.	0	3,665	7,722	12,619	12,260	6,587	4,917	3,439	593	0	698	141
WHOLE YEAR:-	TOTAL,	26,540	MAX.,	263	MIN.,	0	MEAN,	73	TOTAL AC.FT.,	52,641		

Year: 1998

Total Flow via the Berrenda Mesa Pipeline at Head

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	9	40	29	54	44	30	41	49	29	4
2	0	0	9	40	31	53	45	29	40	39	30	0
3	0	13	41	39	37	39	45	22	44	45	35	16
4	0	56	52	35	43	46	50	0	39	48	38	36
5	0	59	57	39	46	44	49	0	39	47	38	34
6	0	59	63	40	44	45	49	0	39	46	35	30
7	0	59	66	33	43	45	42	0	38	45	32	25
8	0	60	66	31	43	43	39	9	42	43	36	19
9	0	61	68	32	42	42	35	26	33	44	36	16
10	0	61	61	34	42	45	35	28	33	47	36	0
11	0	53	59	35	43	35	34	31	33	50	36	0
12	0	44	61	36	44	34	34	37	42	44	36	10
13	0	52	61	26	44	33	31	60	28	42	36	30
14	0	53	46	19	42	34	32	61	34	41	36	32
15	0	55	35	19	43	35	27	49	34	39	36	29
16	0	59	36	19	44	34	29	49	33	38	36	28
17	0	57	41	19	43	31	29	49	34	41	34	34
18	0	58	41	20	44	31	31	53	34	41	32	32
19	0	63	42	23	46	32	28	30	37	40	30	31
20	0	64	38	24	46	32	32	35	38	40	32	31
21	0	61	35	24	40	35	33	36	38	34	30	31
22	0	62	40	25	41	32	32	36	38	29	31	28
23	0	66	43	25	44	33	31	37	38	32	28	28
24	0	59	46	26	44	33	33	37	39	31	28	28
25	0	17	50	25	44	35	32	37	40	24	31	28
26	0	0	49	28	43	37	31	37	44	35	37	28
27	0	0	48	30	42	39	32	41	44	32	35	28
28	0	0	49	29	45	43	32	35	44	27	35	28
29	0	-	46	30	48	43	32	41	48	28	35	28
30	0	-	42	25	48	44	33	43	49	28	36	26
31	0	-	41	-	45	-	32	44	-	32	-	24
TOTAL	0	1,251	1,441	870	1,323	1,161	1,093	1,022	1,157	1,201	1,015	742
MAXIMUM DAY	0	66	68	40	48	54	50	61	49	50	38	36
MINIMUM DAY	0	0	9	19	29	31	27	0	28	24	28	0
MEAN	0	45	46	29	43	39	35	33	39	39	34	24
TOTAL AC.FT.	0	2,482	2,858	1,726	2,624	2,303	2,168	2,027	2,295	2,382	2,013	1,472
WHOLE YEAR:-	TOTAL,	12,276	MAX.,	68	MIN.,	0	MEAN,	34	TOTAL AC.FT.,	24,350		

Cross Valley Canal - Turnout #1 to Kern River Channel
(As reported by Kern County Water Agency) Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	0	0	0	15	0	0
2	0	0	0	0	0	0	0	0	0	14	0	6
3	0	0	0	0	0	0	0	0	0	14	0	9
4	0	0	0	0	0	0	0	0	0	14	0	10
5	0	0	0	0	0	0	0	0	0	15	0	10
6	0	0	0	0	0	0	0	0	0	14	0	10
7	0	0	0	0	48	0	0	0	0	14	0	11
8	152	0	0	0	0	0	0	0	0	15	0	10
9	312	0	0	0	0	0	0	0	0	15	0	5
10	278	0	0	0	0	0	0	0	0	15	0	0
11	303	0	0	0	0	0	0	0	0	15	0	0
12	129	0	0	0	0	0	0	0	0	15	0	0
13	0	0	0	0	0	0	0	0	0	15	0	0
14	0	0	0	0	0	0	0	0	0	15	0	0
15	0	0	0	0	0	0	0	0	0	15	0	0
16	0	0	0	0	0	0	0	0	0	5	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	10	0	0	0
20	0	0	0	0	0	0	0	0	14	21	0	0
21	0	0	0	0	0	0	0	0	14	62	0	0
22	0	0	0	0	0	0	0	0	14	90	0	0
23	0	0	0	0	0	0	0	0	14	92	0	0
24	0	0	0	0	0	0	0	0	14	107	0	0
25	0	0	0	0	0	0	0	0	15	114	0	0
26	0	0	0	0	0	0	0	0	14	107	0	0
27	0	0	0	0	0	0	0	0	14	99	0	0
28	0	0	0	0	0	0	0	0	14	57	0	0
29	0	-	0	0	0	0	0	0	14	31	0	0
30	0	-	0	0	0	0	0	0	14	12	0	0
31	0	-	0	-	0	-	0	0	-	0	-	0
TOTAL	1,174	0	0	0	48	0	0	0	165	1,017	0	71
MAXIMUM DAY	312	0	0	0	48	0	0	0	15	114	0	11
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	38	0	0	0	2	0	0	0	6	33	0	2
TOTAL AC.FT.	2,329	0	0	0	95	0	0	0	328	2,017	0	141
WHOLE YEAR--	TOTAL,	2,475	MAX.,	312	MIN.,	0	MEAN,	7	TOTAL AC.FT.,	4,910		

DISCHARGE IN CUBIC FEET PER SECOND **Cross Valley Canal - Turnout #2 to Kern River Channel** **Year: 1998**
 (As reported by Kern County Water Agency)

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	0	0	0	30	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	17
4	0	0	0	0	0	0	0	0	0	0	0	31
5	0	0	0	0	0	0	0	0	0	0	0	30
6	0	0	0	0	0	0	0	0	0	0	0	31
7	0	0	0	0	0	0	0	0	0	0	0	31
8	0	0	0	0	0	0	0	0	0	0	0	31
9	0	0	0	0	0	0	0	0	0	0	0	18
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	5	0	0	0
20	0	0	0	0	0	0	0	0	8	0	0	0
21	0	0	0	0	0	0	0	0	7	0	0	0
22	0	0	0	0	0	0	0	0	7	0	0	0
23	0	0	0	0	0	0	0	0	7	0	0	0
24	0	0	0	0	0	0	0	0	27	0	0	0
25	0	0	0	0	0	0	0	0	42	0	0	0
26	0	0	0	0	0	0	0	0	49	0	0	0
27	0	0	0	0	0	0	0	0	49	0	0	0
28	0	0	0	0	0	0	0	0	49	0	0	0
29	0	-	0	0	0	0	0	0	53	0	0	0
30	0	-	0	0	0	0	0	0	52	0	0	0
31	0	-	0	-	0	-	0	0	-	0	-	0
TOTAL	0	0	0	0	0	0	0	0	355	30	0	189
MAXIMUM DAY	0	0	0	0	0	0	0	0	53	30	0	31
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	12	1	0	6
TOTAL AC.FT.	0	0	0	0	0	0	0	0	704	60	0	375
WHOLE YEAR:-	TOTAL,	574	MAX.,	53	MIN.,	0	MEAN,	2	TOTAL AC.FT.,	1,139		

Cross Valley Canal - Turnout #3 to Kern River Channel
(As reported by Kern County Water Agency) Year: 1998

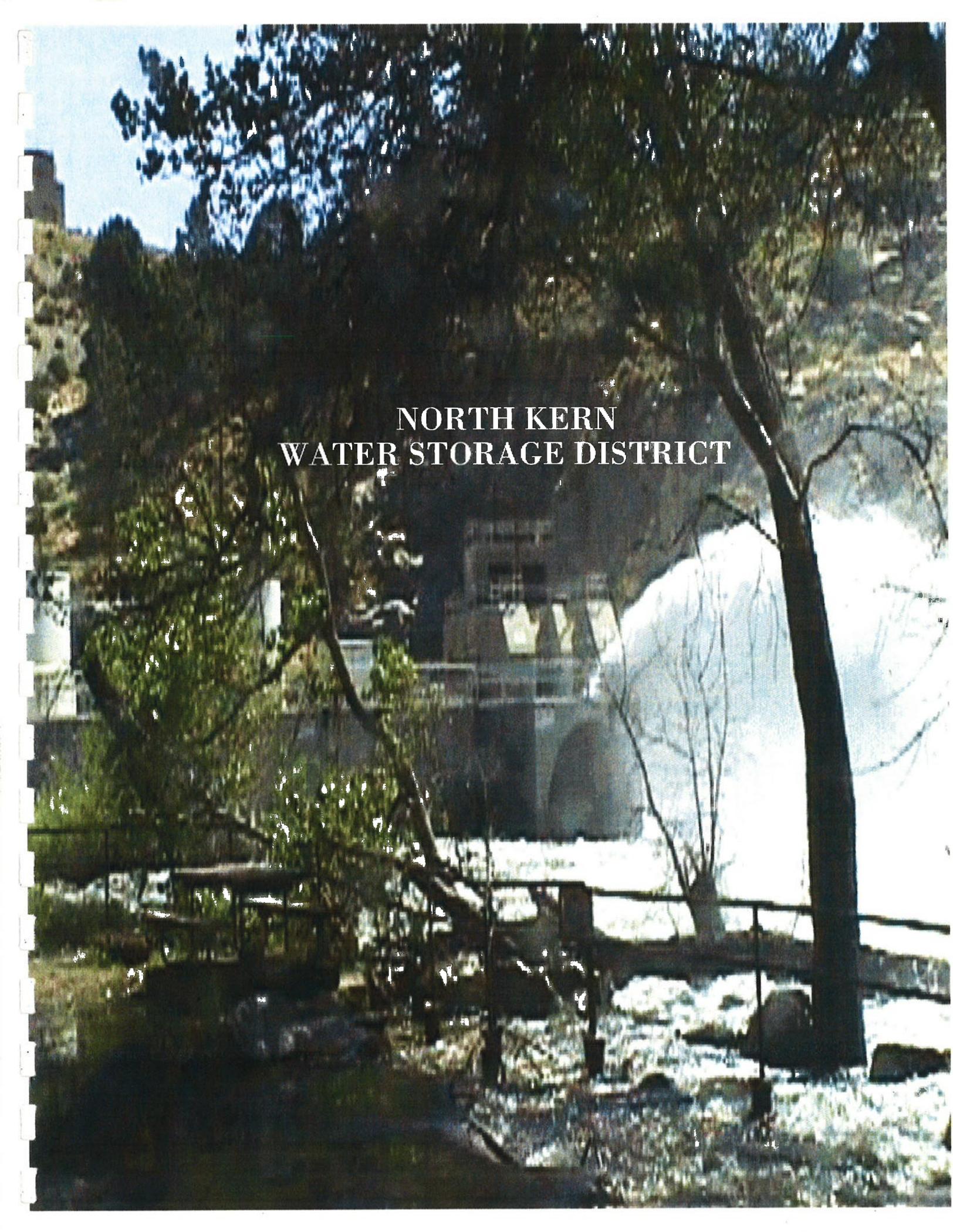
DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	0	0	0	0	0	2
2	0	0	0	0	0	0	0	0	0	0	0	62
3	0	0	0	0	0	0	0	0	0	0	0	113
4	0	0	0	0	0	0	0	0	0	0	0	103
5	0	0	0	0	0	0	0	0	0	0	0	90
6	0	0	0	0	0	0	0	0	0	0	0	91
7	0	0	0	0	0	0	0	0	0	0	0	97
8	0	0	0	0	0	0	0	0	0	0	0	99
9	0	0	0	0	0	0	0	0	0	0	0	57
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	-	0	0	0	0	0	0	0	0	0	0
30	0	-	0	0	0	0	0	0	0	0	0	0
31	0	-	0	-	0	-	0	0	-	0	-	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	714
MAXIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	113
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	23
TOTAL AC.FT.	0	0	0	0	0	0	0	0	0	0	0	1,416
WHOLE YEAR:-	TOTAL,	714	MAX.,	113	MIN.,	0	MEAN,	2	TOTAL AC.FT.,	1,416		

Cross Valley Canal - Turnout #4 to Kern River Channel
(As reported by Kern County Water Agency)
Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0
14	6	0	0	0	0	0	0	0	0	0	0	0
15	13	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	44	0	0	0	0	0	0	0	0	0	0	0
24	94	0	0	0	0	0	0	0	0	0	0	0
25	93	0	0	0	0	0	0	0	0	0	0	0
26	93	0	0	0	0	0	0	0	0	0	0	0
27	91	0	0	0	0	0	0	0	0	0	0	0
28	68	0	0	0	0	0	0	0	0	0	0	0
29	0	-	0	0	0	0	0	0	0	0	0	0
30	0	-	0	0	0	0	0	0	0	0	3	0
31	0	-	0	-	0	-	0	0	-	0	-	0
TOTAL	502	0	0	0	0	0	0	0	0	0	3	0
MAXIMUM DAY	94	0	0	0	0	0	0	0	0	0	3	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	16	0	0	0	0	0	0	0	0	0	0	0
TOTAL AC.FT.	996	0	0	0	0	0	0	0	0	0	6	0
WHOLE YEAR:-	TOTAL,	505	MAX.,	94	MIN.,	0	MEAN,	1	TOTAL AC.FT.,	1,002		

A scenic photograph of a dam and a river. In the foreground, there are several large, leafy trees, some of which are partially obscuring the view. A wooden fence runs across the middle ground. In the background, a large concrete dam with a central archway spans across a river. The river flows through the dam, creating white water rapids. The surrounding landscape is hilly and covered with green vegetation. The sky is clear and blue.

**NORTH KERN
WATER STORAGE DISTRICT**

NORTH KERN WATER STORAGE DISTRICT

Quantities in acre-feet

Year: 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
NKWSD River Entitlement	8,845	16,104	12,862	28,360	34,399	37,981	32,344	18,235	14,401	5,881	119	6,347	215,878
Release	11,007	1,370	10,696	15,640	12,401	10,219	10,933	6,810	18,166	726	0	11,810	109,778
ENTITLEMENT + OR - RELEASE	19,852	17,474	23,558	44,000	46,800	48,200	43,277	25,045	32,567	6,607	119	18,157	325,656
From KRC & Irr. Company	0	0	0	0	0	0	0	0	0	0	0	0	0
From City of Bakersfield	42	0	184	1,055	1,563	3,128	12,788	12,971	1,652	1,105	468	97	35,053
From Isabella Reservoir Storage	4,651	21,330	7,114	5,839	377	0	6,746	18,207	2,212	20,242	35,054	1,039	122,811
From Kern-Tulare WD	0	0	0	0	0	0	0	0	0	0	0	0	0
From Rag Gulch WD	0	0	0	0	0	0	0	0	0	0	0	0	0
From Buena Vista WSD	0	0	0	0	0	0	0	0	0	0	0	0	0
From Hacienda WD	0	0	0	0	0	0	0	0	0	0	0	0	0
To La Hacienda, Inc.	27	17	0	0	0	0	0	0	0	0	0	0	44
To City of Bakersfield	0	0	0	0	0	0	0	0	0	0	0	0	0
To Improvement District #4	4,323	0	0	0	0	0	0	0	0	0	0	0	4,323
Into Isabella Reservoir Storage	4,556	11,266	8,178	18,729	13,134	20,915	14,355	9,449	4,556	0	0	2,561	107,699
Other	(875)	(10,164)	0	(5,064)	(730)	19,006	4,285	61	0	0	(16,080)	4	(9,557)
TOTAL DIVERTED FROM RIVER	14,764	17,357	22,678	27,101	34,876	49,419	52,741	46,835	31,875	27,954	19,561	16,736	361,897
Loss to Seventh Standard Line	2,939	2,044	1,930	1,522	1,927	2,453	2,025	1,632	1,849	1,251	654	173	20,399
Oilfield Discharge	52	126	140	161	164	88	104	135	155	145	63	115	1,448
City of Bakersfield (Non-Kern River)	0	0	0	0	0	0	0	0	0	0	0	0	0
NKWSD Deep Well Production	0	0	0	0	0	0	0	0	0	0	0	0	0
Poso Creek Natural Flow	3,265	37,559	19,212	28,959	18,496	7,918	1,139	0	0	0	0	0	116,548
Friant-Kern Inflow to Poso Creek	0	0	0	0	0	1,388	2,344	0	0	0	0	0	3,732
Other Inflow to Poso Creek	0	0	0	0	0	0	0	0	0	0	1,464	1,400	2,864
Rosedale Ranch Improvement District	42	0	184	1,055	1,563	3,128	2,788	2,971	1,652	1,105	468	97	15,053
Semitropic WSD via Poso Creek	335	31,158	12,976	23,478	12,716	8,182	1,942	0	0	0	0	0	90,787
Shafter-Wasco Irrigation District Inflow	0	0	0	0	0	0	0	0	0	0	0	0	0
CVC Conduit "A" Inflow	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL DISTRICT SUPPLY	14,765	21,840	26,940	30,166	37,330	45,050	49,573	42,367	28,529	25,743	19,966	17,981	360,250
Class 1 Irrigation Deliveries	34	72	797	3,362	6,383	8,694	12,561	11,292	5,816	3,642	825	218	53,696
Class 2 Irrigation Deliveries	62	6	809	2,454	4,065	7,541	9,796	8,332	4,587	2,732	908	147	41,439
Semitropic WSD Irrigation Deliveries	0	0	0	12	0	67	75	40	0	0	0	0	194
Shafter-Wasco ID Irrigation Deliveries	0	0	0	0	0	0	0	0	58	115	54	0	227
TOTAL IRRIGATION USE	96	78	1,606	5,828	10,448	16,302	22,432	19,664	10,461	6,489	1,787	365	95,556
District Spreading Ponds (Kern)	11,135	14,245	17,520	16,443	16,179	16,491	18,617	16,651	14,704	16,167	15,711	14,926	188,789
District Spreading Ponds (Other)	490	1,407	456	625	2,815	2,204	83	0	0	0	149	214	8,443
Poso Creek Spreading (Kern)	0	0	0	738	0	940	2,089	2,114	1,990	1,603	758	903	11,135
Poso Creek Spreading (Other)	2,440	4,994	5,780	4,856	5,780	4,654	1,458	0	0	0	1,315	1,186	32,463
TOTAL DISTRICT SPREADING	14,065	20,646	23,756	22,662	24,774	24,289	22,247	18,765	16,694	17,770	17,931	17,229	240,830
TOTAL DISTRICT USE	14,161	20,724	25,362	28,490	35,222	40,591	44,679	38,429	27,155	24,259	19,720	17,594	336,386
Total NKWSD Canal Loss	604	1,116	1,578	1,676	2,108	4,459	4,894	3,938	1,374	1,484	246	387	23,864
Into Reservoir Storage	4,556	11,266	8,178	18,729	13,134	20,915	14,355	9,449	4,556	0	0	2,561	107,699
Reservoir Evaporation Loss	329	135	551	766	887	1,638	2,499	2,659	1,969	1,508	651	413	14,005
From Reservoir Storage	4,651	21,330	7,114	5,839	377	0	6,746	18,207	2,212	20,242	35,054	1,039	122,811
END OF MONTH RESERVOIR STORAGE	87,755	77,556	78,069	90,193	102,063	121,340	126,450	115,033	115,408	93,658	57,953	59,062	

Total Flow via the Beardsley Canal
(At Head of Lined Section)

Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	157	289	226	295	672	714	740	685	658	540	418	296
2	164	296	238	296	623	738	728	697	670	549	414	298
3	126	186	237	296	628	757	673	728	652	487	405	303
4	0	172	239	264	674	766	644	763	626	475	425	294
5	0	158	249	266	536	733	641	736	574	498	444	302
6	0	165	260	274	451	697	634	744	495	500	441	301
7	0	172	261	249	420	675	668	716	527	528	439	308
8	0	168	261	254	401	707	730	635	572	523	444	311
9	0	169	261	270	347	676	728	625	559	519	452	317
10	0	174	259	265	360	664	733	714	510	486	453	298
11	0	225	266	249	380	689	696	641	486	469	428	288
12	0	232	281	267	376	544	718	646	425	505	390	275
13	0	231	281	292	349	494	734	673	414	522	371	264
14	0	245	280	322	349	442	706	686	466	529	348	272
15	0	238	281	367	349	579	693	656	498	577	348	300
16	0	234	273	387	348	639	680	659	608	600	351	296
17	89	250	296	391	386	668	739	670	622	563	345	296
18	262	230	307	385	461	696	737	661	600	575	340	295
19	271	227	359	385	505	712	738	646	531	615	342	308
20	269	229	383	435	565	707	755	617	505	617	348	317
21	298	234	360	508	585	743	772	590	504	638	325	376
22	312	208	355	502	575	761	761	543	509	649	328	353
23	327	239	360	540	502	762	731	553	502	607	344	351
24	322	147	388	546	558	757	728	623	493	556	351	276
25	328	225	314	517	607	756	724	641	456	536	340	266
26	317	235	306	494	620	761	733	643	410	524	332	314
27	274	234	280	542	579	734	752	596	387	502	330	334
28	248	233	269	579	575	714	721	582	452	498	309	286
29	257	-	296	624	619	764	762	547	454	487	306	261
30	270	-	307	633	645	750	768	605	502	426	320	261
31	271	-	315	-	648	-	733	670	-	408	-	229
TOTAL	4,562	6,045	9,048	11,694	15,693	20,799	22,300	20,191	15,667	16,508	11,231	9,246
MAXIMUM DAY	328	296	388	633	674	766	772	763	670	649	453	376
MINIMUM DAY	0	147	226	249	347	442	634	543	387	408	306	229
MEAN	147	216	292	390	506	693	719	651	522	533	374	298
TOTAL AC.FT.	9,049	11,990	17,946	23,195	31,127	41,254	44,231	40,048	31,076	32,743	22,276	18,339
WHOLE YEAR:-	TOTAL,	162,984	MAX.,	772	MIN.,	0	MEAN,	447	TOTAL AC.FT.,	323,274		

DISCHARGE IN CUBIC FEET PER SECOND

Oilfield Discharge Diverted via Beardsley Canal (Total Flow)

Year: 1998

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	4	3	1	3	4	0	1	4	3	3	3	0
2	12	4	2	3	4	2	1	5	3	3	3	0
3	11	3	4	4	4	0	1	5	3	3	4	0
4	0	3	3	4	4	0	1	5	4	3	3	0
5	0	3	3	4	4	0	1	4	4	3	3	1
6	0	4	3	3	4	0	0	4	5	4	3	1
7	0	3	4	3	5	1	0	4	5	4	4	1
8	0	4	3	4	4	25	0	5	4	4	3	0
9	0	3	3	4	4	19	0	5	3	5	3	1
10	0	3	3	4	4	1	0	4	3	5	2	1
11	0	2	3	4	4	1	1	0	3	5	1	1
12	0	3	3	3	4	1	1	1	4	4	1	0
13	0	3	3	3	4	1	1	1	4	5	0	1
14	0	4	3	4	4	1	0	1	3	4	1	1
15	0	4	3	3	4	1	1	1	4	4	1	1
16	0	2	3	4	4	0	3	1	4	4	0	1
17	0	2	3	3	4	0	4	1	4	5	0	0
18	0	1	3	4	4	1	5	1	4	5	0	0
19	1	1	4	3	4	0	5	1	4	4	0	0
20	1	2	4	3	4	0	5	1	4	4	0	0
21	1	3	4	4	4	1	5	4	3	3	0	0
22	1	2	4	3	4	1	5	5	4	3	0	1
23	0	2	4	4	4	1	5	5	4	2	1	1
24	0	1	4	4	4	1	5	4	4	2	1	1
25	1	1	3	4	4	1	4	4	3	3	1	1
26	1	1	3	4	4	1	3	2	4	3	0	1
27	0	1	4	4	2	1	2	3	4	2	1	0
28	1	2	4	4	1	1	5	4	3	2	1	1
29	0	-	4	4	1	1	5	4	3	3	1	11
30	1	-	3	3	1	0	5	4	3	3	1	23
31	0	-	3	-	1	-	5	3	-	3	-	8
TOTAL	35	70	101	108	111	63	80	96	110	110	42	58
MAXIMUM DAY	12	4	4	4	5	25	5	5	5	5	4	23
MINIMUM DAY	0	1	1	3	1	0	0	0	3	2	0	0
MEAN	1	3	3	4	4	2	3	3	4	4	1	2
TOTAL AC.FT.	70	138	200	215	220	126	158	191	218	219	83	115
WHOLE YEAR:-	TOTAL,	984	MAX.,	25	MIN.,	0	MEAN,	3	TOTAL AC.FT.,	1,953		

**NORTH KERN WATER STORAGE DISTRICT
BEARDSLEY CANAL OPERATIONS**

Year: 1998

Quantities in acre-feet

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
+ Kern River	9,049	11,990	17,946	23,195	31,127	41,254	44,231	40,048	31,076	32,743	22,276	18,339	323,274
+ Oilfield Discharge	70	138	200	215	220	126	158	191	218	219	83	115	1,953
+ C.V.C. Conduit "A"	0	0	0	0	0	0	0	0	0	0	0	0	0
+ TOTAL BEARDSLEY CANAL SUPPLY =	9,119	12,128	18,146	23,410	31,347	41,380	44,389	40,239	31,294	32,962	22,359	18,454	325,227
+ KRC & Irr. Co. # 1 Lateral (Total Flow)	28	0	0	785	839	881	914	897	914	1,119	1,396	14	7,787
+ KRC & Irr. Co. # 4 Lateral	0	0	60	158	65	459	336	327	443	186	56	0	2,090
+ KRC & Irr. Co. # 5 Lateral	0	0	0	90	119	301	425	334	224	128	135	3	1,759
+ KRC & Irr. Co. Bidart Boosters	14	0	60	162	128	174	222	252	185	94	0	7	1,298
+ KRC & Irr. Co. via 1-0-20	0	0	0	0	0	0	0	0	0	0	0	0	0
+ KRC & Irr. Co. via 1-0-80	0	0	0	3	2	1	4	4	2	0	2	0	18
+ Lined Section Loss	14	0	41	54	61	60	61	61	60	61	60	12	545
- TOTAL KRC & IRR. CO. DIVERTED =	56	0	161	1,252	1,214	1,876	1,962	1,875	1,828	1,588	1,649	36	13,497
- Kern River Supply	56	0	123	1,198	1,158	1,838	1,908	1,819	1,765	1,514	1,629	36	13,044
- Oilfield Discharge Supply	0	0	38	54	56	38	54	56	63	74	20	0	453
- C.V.C. Conduit "A" Supply	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Cawelo WD via Pump Station "B"	428	149	1,291	1,482	3,957	8,666	12,058	11,080	8,313	5,595	1,999	1,539	56,557
+ Cawelo WD Lerdo Gate Deliveries	0	2	65	155	329	662	844	883	457	349	113	2	3,861
+ Lined Section Loss	24	12	60	46	61	60	61	61	60	61	60	42	608
+ Lerdo Canal Loss	4	2	14	18	46	99	137	127	91	63	22	16	639
- TOTAL CAWELO WD DIVERTED =	456	165	1,430	1,701	4,393	9,487	13,100	12,151	8,921	6,068	2,194	1,599	61,665
- Kern River Supply	438	153	1,408	1,701	4,393	9,487	13,100	12,151	8,921	6,068	2,194	1,599	61,613
- Oilfield Discharge Supply	18	12	22	0	0	0	0	0	0	0	0	0	52
- C.V.C. Conduit "A" Supply	0	0	0	0	0	0	0	0	0	0	0	0	0
- Rosedale Ranch ID Diverted	0	0	0	0	0	0	0	0	0	468	111	97	676
- KRC & Irr. Co. Diverted	0	0	0	0	0	0	0	0	0	0	0	0	0
- Kern-Tulare WD/Rag Guich WD Diverted	0	0	0	0	0	0	0	0	0	0	0	0	0
+ Lined Section Loss: NKWSD	69	156	82	80	61	60	61	61	60	61	60	129	940
= NKWSD FROM LERDO CANAL +	8,538	11,807	16,473	20,377	25,679	29,957	29,266	26,152	20,485	24,777	18,345	16,593	248,449
- Kern River Supply	8,555	11,837	16,415	20,296	25,576	29,929	29,223	26,078	20,390	24,693	18,342	16,607	247,941
- Oilfield Discharge Supply	52	126	140	161	164	88	104	135	155	145	63	115	1,448
- C.V.C. Conduit "A" Supply	0	0	0	0	0	0	0	0	0	0	0	0	0

Year: 1998

Lerdo Canal at Seventh Standard Line (Total Flow)

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	158	289	224	295	624	678	688	645	611	504	395	293
2	171	297	237	296	582	711	671	662	631	512	389	295
3	132	186	238	297	602	715	628	689	624	452	383	300
4	0	172	239	254	643	726	609	737	607	453	402	291
5	0	158	249	252	517	689	612	713	555	467	421	300
6	0	166	260	257	435	661	608	725	481	476	417	299
7	0	172	262	233	408	643	644	699	507	501	417	306
8	0	169	261	241	386	683	700	607	529	500	421	308
9	0	169	261	256	335	645	703	596	512	501	429	315
10	0	174	259	249	348	621	706	677	465	472	429	296
11	0	224	265	232	368	651	659	607	446	456	402	286
12	0	232	280	249	364	511	673	611	398	498	365	272
13	0	231	280	276	337	474	691	643	395	523	345	262
14	0	246	279	306	337	423	674	659	431	525	323	270
15	0	239	280	342	337	555	671	637	472	574	322	298
16	0	233	271	364	333	613	658	636	581	579	323	293
17	86	249	294	368	370	639	718	646	594	541	317	291
18	259	228	306	370	445	671	716	641	571	554	313	291
19	269	225	350	368	488	679	721	614	505	591	315	305
20	267	228	373	411	546	678	738	587	481	591	305	314
21	295	234	359	489	568	725	749	564	477	605	293	373
22	309	207	355	483	554	724	734	522	484	621	296	347
23	323	238	348	522	489	727	705	540	477	576	294	346
24	319	145	384	530	545	720	703	592	463	529	303	273
25	319	223	312	497	588	726	696	608	422	510	299	264
26	308	233	305	476	605	727	714	606	384	489	292	312
27	271	232	280	511	560	703	714	565	372	469	304	331
28	246	232	269	530	557	689	688	557	419	459	284	284
29	254	-	296	571	598	744	721	512	431	447	281	269
30	268	-	306	583	629	705	726	568	470	399	303	281
31	268	-	314	-	632	-	691	615	-	382	-	234
TOTAL	4,522	6,031	8,996	11,108	15,130	19,856	21,329	19,280	14,795	15,756	10,382	9,199
MAXIMUM DAY	323	297	384	583	643	744	749	737	631	621	429	373
MINIMUM DAY	0	145	224	232	333	423	608	512	372	382	281	234
MEAN	146	215	290	370	488	662	688	622	493	508	346	297
TOTAL AC.FT.	8,970	11,960	17,843	22,032	30,011	39,384	42,305	38,242	29,346	31,252	20,590	18,247
WHOLE YEAR:-	TOTAL,	156,384	MAX.,	749	MIN.,	0	MEAN,	428	TOTAL AC.FT.,	310,182		

**NORTH KERN WATER STORAGE DISTRICT
LERDO CANAL OPERATIONS**

Quantities in acre-feet

Year: 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Total Beardsley Canal Supply	+ 9,119	12,128	18,146	23,410	31,347	41,380	44,389	40,239	31,294	32,962	22,359	18,454	325,227
+ KRC & Irr. Co. Laterals	28	0	60	499	436	1,128	1,135	1,169	1,096	565	479	17	6,612
+ KRC & Irr. Co. Boosters	14	0	60	165	130	175	226	256	187	94	2	7	1,316
+ Lined Section Loss: KRC & Irr. Co.	14	0	41	54	61	60	61	61	60	61	60	12	545
= KRC & Irr. Co. from Beardsley	- 56	0	161	718	627	1,363	1,422	1,486	1,343	720	541	36	8,473
Rosedale Ranch ID via 1-1-0	- 0	0	0	401	579	513	540	389	483	431	357	0	3,693
KCWA-ID4 via 1-1-0 Lateral	- 0	0	0	0	0	0	0	0	0	0	0	0	0
North Kern WSD via 1-1-0	- 0	0	0	133	8	0	0	0	2	437	751	0	1,331
Lined Section Loss: Cawelo WD	- 24	12	60	46	61	60	61	61	60	61	60	42	608
Lined Section Loss: NKWSD	- 69	156	82	80	61	60	61	61	60	61	60	129	940
Lerdo Canal Total Flow	= 8,970	11,960	17,843	22,032	30,011	39,384	42,305	38,242	29,346	31,252	20,590	18,247	310,182
KRC & Irr. Co. via 8-1-0	- 0	0	0	0	0	0	0	0	0	0	0	0	0
City via 8-1-0	- 0	0	0	0	0	0	0	0	0	0	0	0	0
Rosedale Ranch ID via Lerdo	- 0	0	0	0	0	0	0	0	0	468	111	97	676
K-TWD/RGWD via 8-17-0	- 0	0	0	0	0	0	0	0	0	0	0	0	0
+ Cawelo WD Delivered at Sta. "B"	428	149	1,291	1,482	3,957	8,666	12,058	11,080	8,313	5,595	1,999	1,539	56,557
+ Cawelo WD 8-0 Deliveries	0	2	65	155	329	662	844	883	457	349	113	2	3,861
+ Lerdo Loss: to Station "B"	4	2	13	15	40	87	121	111	83	56	20	16	568
+ Lerdo Loss: 8-0 Deliveries	0	0	1	3	6	12	16	16	8	7	2	0	71
= Cawelo WD Total from Lerdo	- 432	153	1,370	1,655	4,332	9,427	13,039	12,090	8,861	6,007	2,134	1,557	61,057
North Kern WSD from Lerdo	= 8,538	11,807	16,473	20,377	25,679	29,957	29,266	26,152	20,485	24,777	18,345	16,593	248,449

Year: 1998

Total Flow via the Calloway Canal Headgate

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	126	100	132	188	272	442	417	339	182	36	31
2	0	131	128	133	180	311	418	418	336	181	50	31
3	21	133	125	135	166	325	411	418	319	179	66	31
4	131	131	120	132	154	321	409	495	306	149	67	13
5	109	113	133	124	158	325	406	532	272	131	54	36
6	161	100	125	124	158	323	432	509	272	152	41	36
7	202	101	126	114	161	329	484	460	267	153	41	30
8	180	103	125	129	162	358	481	465	296	137	38	33
9	161	101	132	130	161	371	476	474	293	138	37	27
10	154	101	132	122	158	357	459	506	276	121	46	31
11	160	101	132	126	173	360	456	463	242	104	58	31
12	170	102	133	112	161	347	442	450	225	67	54	28
13	206	103	132	120	159	346	435	442	221	70	37	28
14	222	109	128	119	169	351	452	425	234	68	36	28
15	226	102	138	123	156	383	447	425	238	64	40	28
16	223	108	136	122	160	405	458	410	238	53	54	27
17	135	100	137	124	159	417	430	431	229	53	66	28
18	82	98	134	123	165	429	441	410	235	49	52	28
19	72	106	131	127	163	408	456	386	224	58	42	25
20	73	104	125	128	173	392	502	363	235	68	41	22
21	87	114	128	142	170	432	514	332	237	69	42	30
22	91	104	138	161	168	495	509	326	245	64	41	30
23	90	97	142	164	167	567	452	306	235	52	41	31
24	112	42	142	159	188	527	436	342	222	49	41	39
25	92	77	135	164	219	425	456	357	216	40	34	41
26	83	103	122	161	219	406	472	376	219	53	38	33
27	130	101	131	174	209	363	491	343	203	58	38	31
28	129	102	138	181	215	422	476	309	174	57	28	31
29	130	-	133	181	219	450	479	307	186	48	29	35
30	127	-	141	175	224	443	473	304	186	47	34	34
31	127	-	121	-	214	-	437	335	-	39	-	51
TOTAL	3,886	2,913	4,043	4,161	5,496	11,660	14,132	12,536	7,420	2,753	1,322	958
MAXIMUM DAY	226	133	142	181	224	567	514	532	339	182	67	51
MINIMUM DAY	0	42	100	112	154	272	406	304	174	39	28	13
MEAN	125	104	130	139	177	389	456	404	247	89	44	31
TOTAL AC.FT.	7,708	5,778	8,019	8,253	10,901	23,127	28,030	24,865	14,717	5,460	2,622	1,900
WHOLE YEAR:-	TOTAL,	71,280	MAX.,	567	MIN.,	0	MEAN,	195	TOTAL AC.FT.,	141,380		

Total Flow Passing Seventh Standard Line
via Calloway Canal for North Kern WSD

Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	69	64	80	97	155	300	280	192	73	2	0
2	0	71	71	79	96	182	275	299	201	83	0	0
3	0	68	71	80	72	184	290	260	199	82	0	0
4	0	67	70	83	77	184	289	317	190	59	0	0
5	29	65	77	81	100	163	284	350	181	26	0	0
6	61	66	69	87	97	178	283	349	197	32	0	0
7	102	66	68	76	98	202	305	335	182	30	0	0
8	88	67	70	79	94	214	321	345	191	24	5	0
9	73	64	68	66	99	208	329	354	172	41	5	0
10	68	65	69	67	94	227	306	334	149	38	2	0
11	79	65	70	75	88	243	305	291	147	29	2	0
12	82	68	68	69	93	240	303	269	130	0	4	0
13	117	68	65	74	72	207	277	272	109	0	2	0
14	147	73	60	74	79	197	286	275	93	0	6	0
15	154	72	59	69	78	205	282	289	92	0	8	0
16	146	74	65	45	83	231	297	249	95	0	6	0
17	56	66	67	45	88	243	276	289	97	0	3	0
18	16	63	55	50	92	244	302	262	108	0	0	0
19	9	68	57	64	83	255	311	244	117	0	2	0
20	2	69	57	45	87	251	334	227	115	0	5	0
21	6	70	63	43	90	286	351	221	109	0	3	0
22	10	73	70	68	80	292	340	226	127	0	1	0
23	8	67	64	82	81	364	302	201	131	0	2	0
24	40	26	77	98	101	341	298	210	130	0	4	0
25	24	43	80	101	140	250	323	213	139	0	2	0
26	26	68	71	90	119	246	346	230	136	0	1	0
27	62	65	78	87	108	200	337	217	116	0	6	0
28	66	65	77	63	104	255	299	200	75	0	6	0
29	64	-	75	65	111	300	298	188	64	0	5	0
30	60	-	79	87	125	296	314	186	72	0	3	0
31	67	-	79	-	134	-	298	193	-	0	-	0
TOTAL	1,662	1,831	2,133	2,172	2,960	7,043	9,461	8,175	4,056	517	85	0
MAXIMUM DAY	154	74	80	101	140	364	351	354	201	83	8	0
MINIMUM DAY	0	26	55	43	72	155	275	186	64	0	0	0
MEAN	54	65	69	72	95	235	305	264	135	17	3	0
TOTAL AC.FT.	3,297	3,632	4,231	4,308	5,871	13,969	18,766	16,215	8,044	1,026	169	0
WHOLE YEAR:-	TOTAL,	40,095	MAX.,	364	MIN.,	0	MEAN,	110	TOTAL AC.FT.,	79,528		

Quantities in acre-feet

Year: 1998

**NORTH KERN WATER STORAGE DISTRICT
CALLOWAY CANAL OPERATIONS**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FLOW AT HEADWORKS	+ 7,708	5,778	8,019	8,253	10,901	23,127	28,030	24,865	14,717	5,460	2,622	1,900	141,380
KCWA Armco Turnout	- 1,404	242	1,651	1,875	2,073	4,015	4,885	4,346	3,606	3,438	2,543	1,795	31,873
Seepage Loss	- 111	95	109	107	115	135	167	151	111	95	79	69	1,344
FLOW AT MEASURING STATION	= 6,193	5,441	6,259	6,271	8,713	18,977	22,978	20,368	11,000	1,927	0	36	108,163
CVC Turnout to Calloway	+ 0	0	0	0	0	0	0	0	0	0	0	0	0
Seepage Loss	- 732	430	432	331	434	543	452	355	416	163	0	36	4,324
FLOW AT STANDARD WEIR	= 5,461	5,011	5,827	5,940	8,279	18,434	22,526	20,013	10,584	1,764	0	0	103,839
Friant-Kern Inflow	+ 0	0	0	0	0	0	0	0	0	0	0	0	0
KRC & Irr. Co. 1-1-0 Inflow	+ 0	0	0	567	641	684	660	496	573	899	1,202	0	5,722
KRC & Irr. Co. Calloway Delivery	- 0	0	0	0	0	0	0	0	0	0	0	0	0
Seepage Loss	- 1,862	1,244	1,269	986	1,287	1,601	1,271	1,037	1,214	914	560	0	13,245
FLOW AT LABORDE WEIR	= 3,599	3,767	4,558	5,521	7,633	17,517	21,915	19,472	9,943	1,749	642	0	96,316
KRC & Irr. Co. Calloway Delivery	- 0	0	0	27	42	137	92	83	68	23	74	0	546
Rosedale Ranch ID at Headworks	- 42	0	184	710	1,139	2,116	1,749	2,029	1,277	835	468	97	10,646
Seepage Loss	- 260	135	143	131	157	283	269	203	179	123	54	12	1,949
NKWSD 8-1-0 Inflow	+ 0	0	0	0	0	0	0	0	0	528	123	109	760
FLOW AT SEVENTH STANDARD LINE	= 3,297	3,632	4,231	4,653	6,295	14,981	19,805	17,157	8,419	1,296	169	0	83,935
for Rosedale Ranch ID	- 0	0	0	345	424	1,012	1,039	942	375	270	0	0	4,407
for North Kern WSD	= 3,297	3,632	4,231	4,308	5,871	13,969	18,766	16,215	8,044	1,026	169	0	79,528

KERN COUNTY WATER AGENCY / I.D. #4:

Operating Loss	+ 140	26	159	159	169	189	220	205	163	149	131	122	1,832
Turnout #4 to River	+ 0	0	0	0	0	0	0	0	0	0	6	0	6
ID #4 Treatment Plant	+ 1,359	232	1,581	1,823	2,019	3,273	4,108	3,551	2,826	2,552	1,936	1,742	27,002
Cross Valley Canal Filling Losses	+ 0	0	16	0	0	115	119	127	282	301	228	0	1,188
CVC Backflow (Net)	+ 0	0	0	0	0	573	605	614	446	531	321	0	3,090
Spreading Below Measuring Station	+ 0	0	0	0	0	0	0	0	0	2	0	4	6
TOTAL DIVERTED	= 1,499	258	1,756	1,982	2,188	4,150	5,052	4,497	3,717	3,535	2,622	1,868	33,124

KERN RIVER CANAL & IRRIGATING CO.:

Calloway Irrigation Deliveries	+ 0	0	0	27	42	137	92	83	68	23	74	0	546
Delivery Loss/ Spreading	+ 0	0	0	6	12	34	28	24	20	8	20	0	152
TOTAL DIVERTED	= 0	0	0	33	54	171	120	107	88	31	94	0	698

ROSEDALE RANCH ID:

Flow at Headworks	+ 42	0	184	710	1,139	2,116	1,749	2,029	1,277	835	468	97	10,646
Flow at Seventh Standard Line	+ 0	0	0	345	424	1,012	1,039	942	375	270	0	0	4,407
Assigned Loss	+ 0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL DIVERTED	= 42	0	184	1,055	1,563	3,128	2,788	2,971	1,652	1,105	468	97	15,053

NORTH KERN WATER STORAGE DISTRICT:

Flow at Seventh Standard Line	+ 3,297	3,632	4,231	4,308	5,871	13,969	18,766	16,215	8,044	1,026	169	0	79,528
Total Loss	+ 2,870	1,888	1,848	1,442	1,866	2,393	1,964	1,571	1,789	1,190	594	44	19,459
TOTAL DIVERTED	= 6,167	5,520	6,079	5,750	7,737	16,362	20,730	17,786	9,833	2,216	763	44	98,987

North Kern Water Storage District
Class 1 Irrigation Deliveries

Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	5	171	166	240	201	175	83	17	0
2	5	0	0	7	126	184	225	135	177	99	32	0
3	0	0	2	5	101	156	202	245	145	67	59	0
4	0	0	1	1	144	205	168	264	147	21	54	2
5	0	0	1	0	142	185	100	288	128	59	41	0
6	0	0	1	5	80	143	190	250	68	73	42	0
7	3	0	0	11	63	96	214	265	127	66	12	0
8	0	0	0	8	48	148	229	175	100	60	13	3
9	0	5	3	21	18	141	214	133	122	32	8	0
10	0	5	3	13	7	143	209	251	132	35	6	0
11	0	5	3	3	70	155	203	184	147	21	6	0
12	0	5	6	4	74	136	135	208	104	57	17	0
13	0	0	3	8	64	97	209	232	33	66	17	0
14	0	5	7	28	52	50	223	195	56	69	16	0
15	0	4	3	37	64	104	225	221	70	62	11	6
16	0	3	2	48	48	42	207	128	61	68	19	4
17	0	3	13	49	34	77	248	187	95	44	11	4
18	0	1	18	48	59	142	246	212	105	19	12	4
19	0	0	29	29	88	141	190	215	84	89	9	6
20	2	0	48	83	127	116	246	216	20	122	10	7
21	0	0	40	103	159	79	217	172	119	101	0	11
22	3	0	33	123	161	182	222	170	95	81	0	13
23	0	0	56	122	135	203	209	99	98	105	2	12
24	0	0	53	139	76	177	228	113	69	58	2	0
25	0	0	22	114	161	196	191	133	71	19	0	0
26	2	0	20	112	175	200	153	154	62	36	0	0
27	0	0	9	119	196	169	190	153	45	49	0	0
28	1	0	7	130	181	102	196	146	66	49	0	10
29	0	-	4	133	179	225	179	134	112	46	0	14
30	0	-	5	187	134	223	193	76	99	40	0	14
31	1	-	10	-	81	-	232	138	-	40	-	0
TOTAL	17	36	402	1,695	3,218	4,383	6,333	5,693	2,932	1,836	416	110
MAXIMUM DAY	5	5	56	187	196	225	248	288	177	122	59	14
MINIMUM DAY	0	0	0	0	7	42	100	76	20	19	0	0
MEAN	1	1	13	57	104	146	204	184	98	59	14	4
TOTAL AC.FT.	34	72	797	3,362	6,383	8,694	12,561	11,292	5,816	3,642	825	218
WHOLE YEAR:-	TOTAL,	27,071	MAX.,	288	MIN.,	0	MEAN,	74	TOTAL AC.FT.,	53,696		

North Kern Water Storage District
Class 2 Irrigation Deliveries

Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	3	0	14	109	82	166	135	156	44	10	0
2	0	0	0	8	95	76	166	123	138	35	22	0
3	0	0	0	28	74	116	159	166	132	40	21	0
4	0	0	21	4	100	129	153	154	122	24	41	0
5	0	0	0	3	78	120	101	156	90	61	45	0
6	0	0	0	6	32	105	127	168	71	72	37	0
7	0	0	0	28	47	69	125	178	93	96	22	3
8	0	0	0	11	44	109	138	163	92	42	20	3
9	0	0	4	12	26	108	140	141	100	31	32	3
10	0	0	4	23	9	126	138	139	77	18	29	3
11	0	0	4	8	26	142	143	133	74	45	28	1
12	0	0	20	2	37	99	125	138	49	29	26	0
13	0	0	19	5	28	108	134	149	51	31	20	0
14	0	0	18	22	30	73	153	145	69	36	1	3
15	0	0	0	33	38	106	159	135	74	59	6	3
16	0	0	7	39	27	29	171	124	66	59	15	3
17	0	0	27	54	17	142	164	122	92	30	17	0
18	0	0	11	51	61	151	164	140	86	16	8	0
19	0	0	33	11	87	116	156	124	78	63	9	0
20	0	0	10	45	94	130	176	110	58	60	9	0
21	0	0	31	88	106	118	173	116	69	66	3	0
22	0	0	24	85	103	173	196	114	55	64	3	0
23	0	0	17	90	62	166	183	109	71	63	2	0
24	0	0	37	85	52	162	203	128	64	41	8	0
25	0	0	15	86	107	188	164	111	79	34	7	0
26	10	0	7	53	128	184	133	143	61	46	5	0
27	3	0	12	51	117	185	192	150	45	46	5	0
28	4	0	34	74	103	160	196	136	20	46	0	2
29	4	-	18	109	79	153	176	94	41	35	4	19
30	5	-	11	109	76	177	193	94	40	22	3	19
31	5	-	24	-	57	-	172	163	-	24	-	12
TOTAL	31	3	408	1,237	2,049	3,802	4,939	4,201	2,313	1,378	458	74
MAXIMUM DAY	10	3	37	109	128	188	203	178	156	96	45	19
MINIMUM DAY	0	0	0	2	9	29	101	94	20	16	0	0
MEAN	1	0	13	41	66	127	159	136	77	44	15	2
TOTAL AC.FT.	62	6	809	2,454	4,065	7,541	9,796	8,332	4,587	2,732	908	147
WHOLE YEAR:-	TOTAL,	20,893	MAX.,	203	MIN.,	0	MEAN,	57	TOTAL AC.FT.,	41,439		

Year: 1998

Total Diverted to Rosedale Ranch Improvement District

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	0	0	1	18	44	52	66	46	19	6	0
2	0	0	0	1	19	52	48	48	43	16	16	0
3	0	0	0	1	41	54	29	52	44	13	23	0
4	0	0	0	1	30	54	24	57	41	18	19	0
5	0	0	0	1	10	60	29	60	22	18	14	0
6	0	0	0	1	10	59	37	56	14	24	17	0
7	0	0	0	1	12	61	46	38	25	27	18	0
8	0	0	0	3	16	59	44	35	28	31	6	0
9	0	0	0	15	16	60	46	34	31	22	6	0
10	0	0	0	11	16	41	48	60	36	11	9	0
11	0	0	0	7	26	28	45	62	29	12	8	0
12	0	0	0	7	26	31	42	61	23	10	5	3
13	0	0	2	6	32	55	47	65	34	17	6	6
14	0	0	7	10	37	58	43	59	43	17	4	7
15	0	0	7	8	29	55	44	56	44	24	4	7
16	0	0	6	31	26	39	37	79	45	30	4	7
17	0	0	6	30	15	42	56	51	43	13	6	7
18	0	0	14	23	15	48	54	52	38	14	8	7
19	0	0	8	10	19	37	52	43	26	32	6	5
20	0	0	14	28	19	35	48	45	33	34	3	0
21	0	0	8	37	19	35	45	38	27	30	5	0
22	2	0	3	37	33	64	49	26	15	14	5	0
23	11	0	8	29	28	68	44	26	14	14	5	0
24	6	0	3	27	28	67	32	25	12	13	3	0
25	2	0	1	26	8	69	33	36	10	9	5	0
26	0	0	1	25	40	71	29	46	9	8	5	0
27	0	0	1	24	48	68	43	46	10	7	5	0
28	0	0	1	51	50	58	60	42	7	7	5	0
29	0	-	1	54	44	50	66	46	21	16	5	0
30	0	-	1	26	35	55	66	45	20	20	5	0
31	0	-	1	-	23	-	68	43	-	17	-	0
TOTAL	21	0	93	532	788	1,577	1,406	1,498	833	557	236	49
MAXIMUM DAY	11	0	14	54	50	71	68	79	46	34	23	7
MINIMUM DAY	0	0	0	1	8	28	24	25	7	7	3	0
MEAN	1	0	3	18	25	53	45	48	28	18	8	2
TOTAL AC.FT.	42	0	184	1,055	1,563	3,128	2,788	2,971	1,652	1,105	468	97
WHOLE YEAR:-	TOTAL,	7,590	MAX.,	79	MIN.,	0	MEAN,	21	TOTAL AC.FT.,	15,053		

ROSEDALE RANCH IMPROVEMENT DISTRICT

Quantities in acre-feet

Year: 1998

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
TOTAL DIVERTED	+	42	0	184	1,055	1,563	3,128	2,788	2,971	1,652	1,105	468	97	15,053
RRID at Headgate	-	42	0	184	710	1,139	2,116	1,749	2,029	1,277	835	468	97	10,646
RRID via NKWSD 5-2 Lateral	-	0	0	0	0	0	0	0	0	0	0	0	0	0
RRID via NKWSD 5-7 Lateral	-	0	0	345	424	1,012	1,039	942	375	270	0	0	0	4,407
Upstream Diversion Loss	=	0	0	0	0	0	0	0	0	0	0	0	0	0
IRRIGATION DELIVERIES	+	12	0	61	569	817	2,228	2,116	2,545	1,210	595	159	66	10,378
City of Bakersfield Miscellaneous	-	12	0	61	569	817	2,228	2,116	2,545	1,210	595	159	66	10,378
City of Bakersfield Non-Kern River	-	0	0	0	0	0	0	0	0	0	0	0	0	0
NKWSD Kern River Exchange	-	0	0	0	0	0	0	0	0	0	0	0	0	0
NKWSD Non-Kern River	=	0	0	0	0	0	0	0	0	0	0	0	0	0
LOSS & SPREADING	+	30	0	123	486	746	900	672	426	442	510	309	31	4,675
City of Bakersfield Miscellaneous	-	30	0	123	417	0	0	414	426	442	510	309	31	2,702
City of Bakersfield Non-Kern River	-	0	0	0	0	0	0	0	0	0	0	0	0	0
NKWSD Kern River Exchange	-	0	0	0	0	0	0	0	0	0	0	0	0	0
NKWSD Non-Kern River	-	0	0	0	0	0	0	0	0	0	0	0	0	0
Kern River Floodwater	=	0	0	0	69	746	900	258	0	0	0	0	0	1,973
RECHARGE PURCHASE PROGRAM	+	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Bakersfield Miscellaneous	-	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Bakersfield Non-Kern River	=	0	0	0	0	0	0	0	0	0	0	0	0	0
NKWSD/RRID EXCHANGE STATUS														
RRID to NKWSD	+	0	0	0	0	0	0	0	0	0	0	0	0	0
NKWSD to RRID	-	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchange Balance	=	10,257	10,257	10,257	10,257	10,257	10,257	10,257	10,257	10,257	10,257	10,257	10,257	10,257

Year: 1998

Poso Creek Natural Flow as Measured at Highway "99"

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	0	94	420	684	270	173	61	0	0	0	0	0
2	0	89	355	751	265	164	58	0	0	0	0	0
3	0	147	350	659	295	166	57	0	0	0	0	0
4	0	224	320	723	312	187	46	0	0	0	0	0
5	0	218	245	666	328	173	43	0	0	0	0	0
6	0	188	285	586	458	159	38	0	0	0	0	0
7	0	160	290	646	399	155	39	0	0	0	0	0
8	0	205	250	603	374	196	38	0	0	0	0	0
9	0	250	220	519	335	180	32	0	0	0	0	0
10	0	232	235	486	330	160	24	0	0	0	0	0
11	0	218	220	469	306	156	20	0	0	0	0	0
12	0	207	220	507	296	208	23	0	0	0	0	0
13	5	175	220	574	396	176	24	0	0	0	0	0
14	52	166	220	496	460	168	24	0	0	0	0	0
15	43	952	220	505	403	152	19	0	0	0	0	0
16	44	1,083	220	484	371	137	16	0	0	0	0	0
17	200	722	200	430	349	129	11	0	0	0	0	0
18	147	762	190	410	324	120	1	0	0	0	0	0
19	107	590	185	401	299	112	0	0	0	0	0	0
20	174	718	180	400	279	107	0	0	0	0	0	0
21	138	825	174	406	269	102	0	0	0	0	0	0
22	123	1,193	176	414	257	94	0	0	0	0	0	0
23	98	2,487	172	405	244	88	0	0	0	0	0	0
24	82	3,315	153	391	235	89	0	0	0	0	0	0
25	78	1,682	165	401	229	84	0	0	0	0	0	0
26	66	904	342	364	231	78	0	0	0	0	0	0
27	37	635	691	330	226	78	0	0	0	0	0	0
28	23	495	660	311	208	76	0	0	0	0	0	0
29	49	-	852	296	195	65	0	0	0	0	0	0
30	65	-	646	283	194	60	0	0	0	0	0	0
31	115	-	610	-	188	-	0	0	-	0	-	0
TOTAL	1,646	18,936	9,686	14,600	9,325	3,992	574	0	0	0	0	0
MAXIMUM DAY	200	3,315	852	751	460	208	61	0	0	0	0	0
MINIMUM DAY	0	89	153	283	188	60	0	0	0	0	0	0
MEAN	53	676	312	487	301	133	19	0	0	0	0	0
TOTAL AC.FT.	3,265	37,559	19,212	28,959	18,496	7,918	1,139	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	58,759	MAX.,	3,315	MIN.,	0	MEAN,	161	TOTAL AC.FT.,	116,548		

**NORTH KERN WATER STORAGE DISTRICT
STATUS OF EXCHANGE**

Year: 1998

Quantities in acre - feet

	BUENA VISTA WSD		CAWELO WD		LA HACIENDA, INC.		IMPROVEMENT DISTRICT NO.4		KERN-TULARE WD		RAG GULCH WD		ROSEDALE RANCH ID		PARAMOUNT FARMING CO.		SEMITROPIC WSD		SHAFTER-WASCO ID		SOUTHERN SAN JOAQUIN MUD	
	to	from	to	from	to	from	to	from	to	from	to	from	to	from	to	from	to	from	to	from	to	from
<i>Prior Year Status</i>	0	0	695	0	0	5,868	1,241	0	0	0	0	0	10,257	0	31,739	0	1,522	0	31,270	0	10,868	
January	0	0	0	0	27	0	4,323	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	695	0	44	0	4,323	0	0	0	0	0	0	0	0	0	194	0	0	0	0	0
<i>Current Status</i>	0	0	695	0	0	5,824	5,564	0	0	0	0	0	10,257	0	31,739	0	1,328	0	31,270	0	10,868	

NORTH KERN WATER STORAGE DISTRICT
IMPROVEMENT DISTRICT NO. 4 WATER EXCHANGE SUMMARY

1998

<i>Pursuant to North Kern WSD/Improvement District #4 Accounting Agreement Dated March 1, 1995</i>							
CATEGORY 'A'				CATEGORY 'B'			
<i>Date</i>	<i>NKWS to ID4</i>	<i>ID4 to NKWS</i>	<i>Exchange Balance</i>	<i>Date</i>	<i>NKWS to ID4</i>	<i>ID4 to NKWS</i>	<i>Exchange Balance</i>
9-08-88	12,163	7,796	4,367	5-13-91	395	0	395
6-06-90	0	1,630	(1,630)				
8-22-91	0	261	(261)				
4-23-93	12,557	9,434	3,123				
3-02-95	0	8,635	(8,635)				
12-16-97	8,205	0	8,205				
Totals	32,925	27,756	5,169	Totals	395	0	395

CATEGORY 'A'

Priority

ID4 Priority 3 with figure of ten (10) years used in balance for use in ID4 "Priority equation D".

Point of Delivery

At any location along Cross Valley Canal provided North Kern WSD pays all incremental transportation costs and losses in the Cross Valley Canal. Incremental cost and losses shall not include fixed costs, overhead, and losses that would have occurred whether or not North Kern's water was being transported.

CATEGORY 'B'

Priority

ID4 Priority 2.

Point of Delivery

Beardsley Canal.

Excerpt From Priorities and Principles Governing Utilization of ID4 State Project Entitlement For Exchange Paybacks

Priority 2.

Exchanges with stipulated repayment schedules, repayment upon demand and residual amounts from firm regulated sources.

Priority 3.

Mutually agreeable schedules within specified time periods, however as limited by Paragraph D below.

Priority Equation D.

Paybacks within Priority 3 shall be allocated in proportion to time remaining and amount owed. Each exchanger shall be considered equally with others in Priority 3 up to an amount computed by dividing the total amount owed by the number of years remaining in the term. If ID4 is unable to repay amounts owed in the last year of a Priority 3 payback said amounts will be carried over to the following calendar year and thereafter on a year-to-year basis. However, if amounts owed in Priority 3 are available for payback in the last year of a mutually agreeable repayment term and the exchanger declines payback the amounts owed will be extinguished on December 31st of the last year.

North Kern Water Storage District												Year: 1998		
Semitropic Water Storage District Irrigation Deliveries														
DISCHARGE IN CUBIC FEET PER SECOND														
DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	0	0	0	0	2	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0
3	0	0	0	0	0	2	2	0	0	0	0	0	0	0
4	0	0	0	0	0	2	2	0	0	0	0	0	0	0
5	0	0	0	0	0	2	2	0	0	0	0	0	0	0
6	0	0	0	0	0	2	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	2	0	0	0	0	0	0
8	0	0	0	0	0	2	0	0	0	0	0	0	0	0
9	0	0	0	0	0	2	0	0	0	0	0	0	0	0
10	0	0	0	0	0	2	0	2	0	0	0	0	0	0
11	0	0	0	0	0	2	0	2	0	0	0	0	0	0
12	0	0	0	0	0	2	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	2	0	0	0	0	0	0
14	0	0	0	0	0	0	2	2	0	0	0	0	0	0
15	0	0	0	0	0	2	2	0	0	0	0	0	0	0
16	0	0	0	0	0	2	2	0	0	0	0	0	0	0
17	0	0	0	0	0	2	2	2	0	0	0	0	0	0
18	0	0	0	0	0	2	0	2	0	0	0	0	0	0
19	0	0	0	0	0	2	0	2	0	0	0	0	0	0
20	0	0	0	0	0	2	2	2	0	0	0	0	0	0
21	0	0	0	0	0	0	2	2	0	0	0	0	0	0
22	0	0	0	0	0	0	2	0	0	0	0	0	0	0
23	0	0	0	0	0	0	2	0	0	0	0	0	0	0
24	0	0	0	0	0	0	2	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	2	0	0	0	0	0	0	0
28	0	0	0	0	0	0	2	0	0	0	0	0	0	0
29	0	-	0	0	0	2	2	0	0	0	0	0	0	0
30	0	-	0	0	0	2	2	0	0	0	0	0	0	0
31	0	-	0	-	0	-	2	0	-	0	-	0	0	0
TOTAL	0	0	0	6	0	34	38	20	0	0	0	0	0	0
MAXIMUM DAY	0	0	0	2	0	2	2	2	0	0	0	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	1	1	1	0	0	0	0	0	0
TOTAL AC.FT.	0	0	0	12	0	67	75	40	0	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	98	MAX.,	2	MIN.,	0	MEAN,	0	TOTAL AC.FT.,	194				

North Kern Water Storage District												Year: 1998		
Shafter-Wasco Irrigation District Irrigation Deliveries														
(Non-Kern River)														
DISCHARGE IN CUBIC FEET PER SECOND	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
1	0	0	0	0	0	0	0	0	0	0	0	3	0	0
2	0	0	0	0	0	0	0	0	0	0	0	4	0	0
3	0	0	0	0	0	0	0	0	0	0	0	3	0	0
4	0	0	0	0	0	0	0	0	0	0	0	4	0	0
5	0	0	0	0	0	0	0	0	0	0	0	3	0	0
6	0	0	0	0	0	0	0	0	0	0	0	2	0	0
7	0	0	0	0	0	0	0	0	0	0	0	4	0	0
8	0	0	0	0	0	0	0	0	0	0	0	4	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	2	0	0	0	0	0
12	0	0	0	0	0	0	0	0	2	0	0	0	0	0
13	0	0	0	0	0	0	0	0	2	3	0	0	0	0
14	0	0	0	0	0	0	0	0	4	4	0	0	0	0
15	0	0	0	0	0	0	0	0	2	3	0	0	0	0
16	0	0	0	0	0	0	0	0	2	3	0	0	0	0
17	0	0	0	0	0	0	0	0	2	3	0	0	0	0
18	0	0	0	0	0	0	0	0	4	3	0	0	0	0
19	0	0	0	0	0	0	0	0	1	3	0	0	0	0
20	0	0	0	0	0	0	0	0	5	3	0	0	0	0
21	0	0	0	0	0	0	0	0	3	3	0	0	0	0
22	0	0	0	0	0	0	0	0	0	3	0	0	0	0
23	0	0	0	0	0	0	0	0	0	3	0	0	0	0
24	0	0	0	0	0	0	0	0	0	3	0	0	0	0
25	0	0	0	0	0	0	0	0	0	3	0	0	0	0
26	0	0	0	0	0	0	0	0	0	3	0	0	0	0
27	0	0	0	0	0	0	0	0	0	3	0	0	0	0
28	0	0	0	0	0	0	0	0	0	3	0	0	0	0
29	0	-	0	0	0	0	0	0	0	3	0	0	0	0
30	0	-	0	0	0	0	0	0	0	3	0	0	0	0
31	0	-	0	-	0	-	0	0	-	3	-	-	0	0
TOTAL	0	0	0	0	0	0	0	0	29	58	27	0	0	0
MAXIMUM DAY	0	0	0	0	0	0	0	0	5	4	4	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	1	2	1	0	0	0
TOTAL AC.FT.	0	0	0	0	0	0	0	0	58	115	54	0	0	0
WHOLE YEAR:-	TOTAL,	114	MAX.,	5	MIN.,	0	MEAN,	0	TOTAL AC.FT.,	227				

North Kern WSD Exchange Water Delivered to Improvement District No. 4
 (Pursuant to North Kern WSD/ID4 Exchange Agreement Dated December 16, 1997) Year: 1998

DISCHARGE IN CUBIC FEET PER SECOND

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	92	0	0	0	0	0	0	0	0	0	0	0
2	95	0	0	0	0	0	0	0	0	0	0	0
3	124	0	0	0	0	0	0	0	0	0	0	0
4	123	0	0	0	0	0	0	0	0	0	0	0
5	135	0	0	0	0	0	0	0	0	0	0	0
6	124	0	0	0	0	0	0	0	0	0	0	0
7	78	0	0	0	0	0	0	0	0	0	0	0
8	80	0	0	0	0	0	0	0	0	0	0	0
9	130	0	0	0	0	0	0	0	0	0	0	0
10	131	0	0	0	0	0	0	0	0	0	0	0
11	135	0	0	0	0	0	0	0	0	0	0	0
12	120	0	0	0	0	0	0	0	0	0	0	0
13	135	0	0	0	0	0	0	0	0	0	0	0
14	135	0	0	0	0	0	0	0	0	0	0	0
15	120	0	0	0	0	0	0	0	0	0	0	0
16	136	0	0	0	0	0	0	0	0	0	0	0
17	137	0	0	0	0	0	0	0	0	0	0	0
18	132	0	0	0	0	0	0	0	0	0	0	0
19	11	0	0	0	0	0	0	0	0	0	0	0
20	7	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0	-	0	0	0	0	0	0	0	0	0	0
30	0	-	0	0	0	0	0	0	0	0	0	0
31	0	-	0	-	0	-	0	0	-	0	-	0
TOTAL	2,180	0	0	0	0	0	0	0	0	0	0	0
MAXIMUM DAY	137	0	0	0	0	0	0	0	0	0	0	0
MINIMUM DAY	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	70	0	0	0	0	0	0	0	0	0	0	0
TOTAL AC.FT.	4,323	0	0	0	0	0	0	0	0	0	0	0
WHOLE YEAR:-	TOTAL,	2,180	MAX.,	137	MIN.,	0	MEAN,	6	TOTAL AC.FT.,	4,323		

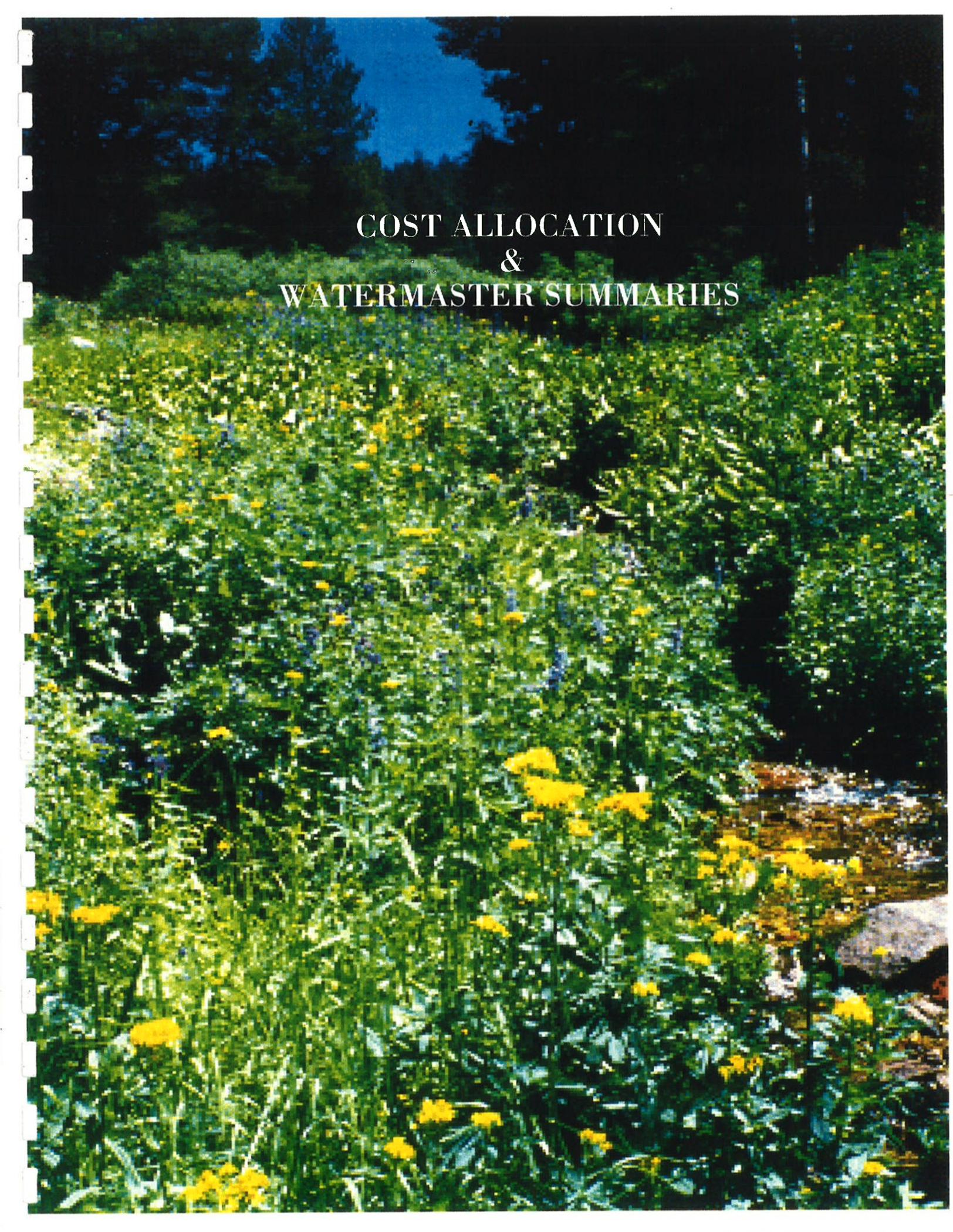
**WATER EXCHANGE BETWEEN
 NORTH KERN WSD and CITY OF BAKERSFIELD
 THREE YEAR RECAPITULATION**

Quantities in acre-feet

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1996													
NKWSD to CITY	5,669	0	0	0	0	0	0	0	0	0	0	0	5,669
CITY to NKWSD	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Purchase Rate	0	0	0	0	0	0	0	0	0	0	0	0	0
CITY Debit to NKWSD	61,961	61,961	61,961	61,961	61,961	61,961	61,961	61,961	61,961	61,961	61,961	61,961	61,961

1997													
NKWSD to CITY	0	0	0	0	0	0	0	0	0	0	0	0	0
CITY to NKWSD	0	0	0	0	0	5,000	5,000	0	0	0	0	0	10,000
Other Purchase Rate	0	0	0	0	0	0	0	0	0	0	0	0	0
CITY Debit to NKWSD	61,961	61,961	61,961	61,961	61,961	56,961	51,961	51,961	51,961	51,961	51,961	51,961	51,961

1998													
NKWSD to CITY	0	0	0	0	0	0	0	0	0	0	0	0	0
CITY to NKWSD	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Purchase Rate	0	0	0	0	0	0	0	0	0	0	0	0	0
CITY Debit to NKWSD	51,961	51,961	51,961	51,961	51,961	51,961	51,961	51,961	51,961	51,961	51,961	51,961	51,961

A vibrant field of yellow and blue wildflowers under a clear blue sky. The flowers are in full bloom, creating a dense and colorful landscape. The sky is a deep, clear blue, and the overall scene is bright and sunny.

**COST ALLOCATION
&
WATERMASTER SUMMARIES**

**CARRIER CANAL ABOVE FOUR WEIRS - ALLOCATION
Utilization of Water - Preceding Five Years**

Pursuant to Kern Delta Water District/City of Bakersfield Common Use Agreement dated January 1, 1994

Year: 1998

Quantities in acre-feet

	1994					1995					1996					1997					1998					Five Year Total		Allocation Percentage		
Carrier Canal at Head	213,564					258,457					248,201					278,954					252,015					1,251,191				99.74%
Oilfield Discharge	1,172					635					405					14					14					2,240				0.18%
Storm Drain Inflow	114					188					316					110					284					1,012				0.08%
TOTAL CARRIER CANAL FLOW	214,850					259,280					248,922					279,078					252,313					1,254,443				100.00%
Kern Island Canal (1)	134,703					129,588					151,613					153,501					106,237					675,642				53.86%
Eastside Canal	18,835					18,303					19,358					19,099					13,742					89,337				7.12%
Kern Delta WD via Levee #1	23,249					52,123					46,099					61,761					61,175					244,407				19.48%
KERN DELTA WATER DISTRICT TOTAL	176,787					200,014					217,070					234,361					181,154					1,009,386				80.46%
Carrier Waste Gate	1,759					4,422					2,212					185					648					9,226				0.74%
Kern River Conduit via Levee #1	36,304					54,844					29,640					44,532					70,511					235,831				18.80%
CITY OF BAKERSFIELD TOTAL	38,063					59,266					31,852					44,717					71,159					245,057				19.54%

Notes: (1) Includes Carrier Canal initial filling loss when applicable.

CARRIER CANAL BELOW FOUR WEIRS - ALLOCATION
Utilization of Water - Preceding Five Years

Quantities in acre-feet

Year: 1998

	1994	1995	1996	1997	1998	Five Year	
						Total	Allocation Percentage
TOTAL CARRIER CANAL FLOW (1)	57,061	329,696	304,573	323,656	339,130	1,354,116	100.00%
Stine Canal Total Diverted (2)	7,541	35,917	40,193	32,112	33,097	148,860	10.99%
Arvin-Edison Turnout Total Diverted (2)	0	0	0	8,142	5,293	13,435	0.99%
Buena Vista Canal Total Diverted (2)	14,551	38,005	31,521	41,905	30,670	156,652	11.57%
River Canal Total Diverted (3)	2,660	3,632	2,723	1,449	693	11,157	0.82%
KERN DELTA WATER DISTRICT TOTAL DIVERTED FROM CARRIER CANAL	24,752	77,554	74,437	83,608	69,753	330,104	24.37%
KERN RIVER CONDUIT (City of Bakersfield)	32,309	252,142	230,136	240,048	269,377	1,024,012	75.63%

Notes: (1) Sum of Carrier Canal flow at Oak Street and River Canal inflow.
(2) Sum of headgate diversion and pro-rated share of Carrier Canal loss.
(3) Includes diversions to Pioneer Project via River Canal.

CALLOWAY AND BEARDSLEY CANALS

Allocation of Joint Accounts

1998

Quantities in acre-feet

BEARDSLEY CANAL USED

Preceding Five Years

Year	Diverted via Beardsley Canal						
	North Kern Water Storage District			CITY	Subtotal	CWD/Other	TOTAL
	NKWSD	RRID	TOTAL				
1994	113,395	1,434	114,829	19,264	134,093	52,466	186,559
1995	227,937	3,729	231,666	26,284	257,950	68,967	326,917
1996	211,442	7,453	218,895	23,529	242,424	73,527	315,951
1997	198,111	3,140	201,251	17,889	219,140	74,666	293,806
1998	250,720	4,369	255,089	8,525	263,614	61,613	325,227
Total	1,001,605	20,125	1,021,730	95,491	1,117,221	331,239	1,448,460
Percent	89.65%	1.80%	91.45%	8.55%	100.00%		

CALLOWAY CANAL USED

Preceding Ten Years

Year	Diverted via Calloway Canal				
	NKWSD	CITY	Subtotal	ID4	TOTAL
1989	0	0	0	17,669	17,669
1990	0	0	0	3,317	3,317
1991	0	0	0	14,857	14,857
1992	0	0	0	10,095	10,095
1993	27,341	14,356	41,697	38,873	80,570
1994	0	0	0	22,829	22,829
1995	112,624	16,380	129,004	45,914	174,918
1996	40,699	7,266	47,965	39,140	87,105
1997	59,207	14,927	74,134	46,814	120,948
1998	97,572	10,684	108,256	33,124	141,380
Total	337,443	63,613	401,056	272,632	673,688
Percent	84.14%	15.86%	100.00%		

IMPROVEMENT DISTRICT NO. 4 USE OF CALLOWAY CANAL

Pursuant to Calloway Canal Agreement dated April 28, 1982

Year: 1998

Quantities in acre-feet
except where noted...

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Operating Loss	140	26	159	159	169	189	220	205	163	149	131	122	1,832
Treatment Plant	1,359	232	1,581	1,823	2,019	3,273	4,108	3,551	2,826	2,552	1,936	1,742	27,002
Reverse Flow via Pump Plant #7	0	0	0	0	0	573	605	614	446	531	321	0	3,090
CVC Extension Losses	0	0	16	0	0	115	119	127	282	301	228	0	1,188
T.O. #4 to River	0	0	0	0	0	0	0	0	0	0	6	0	6
Loss to Standard Weir	0	0	0	0	0	0	0	0	0	2	0	4	6
Western Reach Flow	0	0	0	0	0	0	0	0	0	0	0	0	0
Trans. Charge Waived	0	0	0	0	0	0	0	0	0	0	0	0	0
EC SUB-TOTAL DIVERSION	1,499	258	1,756	1,982	2,188	4,150	5,052	4,497	3,717	3,535	2,622	1,868	33,124
Base Rate	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75
Escalator	1,255	1,255	1,255	1,255	1,255	1,255	1,255	1,255	1,255	1,255	1,255	1,255	1,255
Current Rate	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94
EC SUB-TOTAL CHARGE	\$1,409.06	\$242.52	\$1,650.64	\$1,863.08	\$2,056.72	\$3,901.00	\$4,748.88	\$4,227.18	\$3,493.98	\$3,322.90	\$2,464.68	\$1,755.92	\$31,136.56
WH													
Bartell Spreading	0	0	0	0	0	0	0	0	0	0	0	0	0
Loss Below Standard Weir	0	0	0	0	0	0	0	0	0	0	0	0	0
NKWS Exchange Delivery	0	0	0	0	0	0	0	0	0	0	0	0	0
Trans. Charge Waived	0	0	0	0	0	0	0	0	0	0	0	0	0
EC SUB-TOTAL DIVERSION	0	0	0	0	0	0	0	0	0	0	0	0	0
Current Rate	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94	\$0.94
EC SUB-TOTAL CHARGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WH TOTAL CHARGE	\$1,409.06	\$242.52	\$1,650.64	\$1,863.08	\$2,056.72	\$3,901.00	\$4,748.88	\$4,227.18	\$3,493.98	\$3,322.90	\$2,464.68	\$1,755.92	\$31,136.56

HYDROGRAPHIC SUMMARY
UTILIZATION OF WATER - FIRST POINT GROUP - PRECEDING FIVE YEARS

Year: 1998

Quantities in acre-feet

Canal	1994					1995					1996					1997					1998					Five Year Total		Percentage				
Kern Island	132,003	18,740	12,148	6,904	5,596	130,779	18,303	27,623	25,655	18,742	146,701	19,358	27,238	26,384	20,128	158,389	19,099	29,830	25,760	19,934	188,454	18,834	253,012	18,834	188,454	677,868	89,242	119,751	107,673	83,234	1,077,768	15.85%
Eastside	18,740	12,148	6,904	5,596		18,303	27,623	25,655	18,742		19,358	27,238	26,384	20,128		19,099	29,830	25,760	19,934		13,742	22,912	22,970	18,834	109,996	89,242	119,751	107,673	83,234	677,868	2.08%	
Buena Vista	12,148	6,904	5,596			27,623	25,655	18,742			27,238	26,384	20,128			29,830	25,760	19,934			22,912	22,970	18,834		13,742	119,751	107,673	83,234	677,868	2.80%		
Stine	6,904	5,596				25,655	18,742				26,384	20,128				25,760	19,934				22,970	18,834			13,742	107,673	83,234	677,868	2.52%			
Farmers	5,596					18,742					20,128					19,934					18,834				13,742	83,234	677,868	677,868	1.94%			
Subtotal Kern Delta WD	175,391					221,102					239,809					253,012					188,454				188,454	1,077,768					1,077,768	25.19%
City of Bakersfield	50,623	12,258	22,829	0	0	275,218	11,462	62,294	29,223	38,248	256,182	11,774	39,140	14,928	7,161	282,696	10,762	61,741	13,277	13,398	511,316	8,020	43,808	69,754	41,605	1,376,035	54,276	229,812	127,182	100,412	1,887,717	32.17%
K.R.C. & I. Co. (Beardsley)	12,258	22,829	0	0		11,462	62,294	29,223	38,248		11,774	39,140	14,928	7,161		10,762	61,741	13,277	13,398		8,020	43,808	69,754	41,605	674,503	54,276	229,812	127,182	100,412	1,887,717	1.27%	
Central - I.D. #4 (Calloway)	22,829	0	0			62,294	29,223	38,248			39,140	14,928	7,161			61,741	13,277	13,398			43,808	69,754	41,605		674,503	229,812	127,182	100,412	1,887,717	5.37%		
James	0	0				29,223	38,248				14,928	7,161				13,277	13,398				69,754	41,605			674,503	127,182	100,412	1,887,717	2.97%			
Pioneer	0					38,248					7,161					13,398					41,605				674,503	100,412	1,887,717	100,412	2.35%			
Subtotal City of Bakersfield	85,710					416,445					329,185					381,874					674,503				674,503	1,887,717					1,887,717	44.13%
North Kern WSD	107,345					339,558					256,464					262,024					346,844				346,844	1,312,235					1,312,235	30.68%
Total First Point Group	368,446					977,105					825,458					896,910					1,209,801				1,209,801	4,277,720					4,277,720	100.00%
South Fork	972					880					721					594					451				451							
First Point Passing 2nd Point	0					0					0					37,075					18,161				18,161							
River Loss and Spreading	28,309					80,345					77,145					87,599					95,514				95,514							
Flow Above First Point	2,634					3,584					2,465					2,978					2,864				2,864							
Total 1st Point Group Diverted	400,361					1,061,914					905,789					1,025,156					1,326,791				1,326,791						1,326,791	

- Note:

ALL FIGURES REFLECT
GROSS DIVERSIONS...

**KERN RIVER WATERMASTER
ISABELLA RESERVOIR INTER-DISTRICT RENTAL CHARGES**

-- Pursuant to paragraph 9e, pages 10 and 11 of
Kern River Water Rights and Storage Agreement,
dated December 31, 1962

COMPUTED YEAR: 1998

Year	Acre-Foot Days of Irrigation Storage			Isabella O&M Charges (2)
	NKWSD (1)	BVWSD	Total A.F.D.	
1994	37,200,539	20,487,825	57,688,364	\$142,254
1995	71,087,019	34,039,777	105,126,796	(3) \$144,137
1996	79,233,687	40,842,839	120,076,526	\$144,137
1997	80,842,580	40,545,783	121,388,363	\$144,137
1998	83,156,954	39,569,618	122,726,572	\$144,137
5-Year Totals	351,520,779	175,485,842	527,006,621	\$718,802

- Interest/Rental Charge on Storage Purchase..... \$1,143,250
(Paragraph 9e, pages 10 and 11)

- Total 5-Year Operation & Interest Charge..... \$1,862,052

Total 5-Year Cost	\$1,862,052	\$0.0035333
----- =	----- =	-----
Total 5-Year Use	527,006,621	Rental Charge Per Acre-Foot Day

TOTAL 1998 HACIENDA WD Acre-Foot Storage Days = 22,665,712

TOTAL 1998 HACIENDA WD Share of 1998 Storage Costs = \$80,084.76

(1) Includes Hacienda Water District Storage when such storage occurs...

(2) \$ 32,603 per year through 1973; \$ 66,038 per year 1974 through 1978;
\$ 91,598 per year 1979 through 1983; \$159,115 per year 1984 through
1988; \$151,324 per year 1989 through 1993; \$142,254 per year 1994
through 1998... (includes contract administration charges by the U.S.B.R.)

(3) Reflects revised Isabella Reservoir O&M Charges for years 1995-1998
pursuant to Corps of Engineers billing statement dated February 13, 1995...

**KERN COUNTY RECREATION POOL REPORT
FROM THE KERN RIVER WATERMASTER**

Year: 1998

Quantities in acre-feet
except where noted...

	Total Storage in Reservoir	Total Water Surface Area (Acres)	Area Attributable to Rec. Pool (Acres)	County of Kern		
				Total Reservoir Loss	Ming Lake Net Inflow	Recreation Pool Loss
End of Previous Year	242,525	7,419	555			
January	242,005	7,410	555	768	16	50
February	283,910	8,107	490	415	16	24
March	335,862	8,865	425	1,817	44	101
April	390,244	9,564	375	2,807	60	119
May	455,445	10,309	335	3,586	77	127
June	535,769	11,138	300	6,714	105	198
July	552,939	11,306	295	10,102	127	264
August	436,061	10,096	345	10,163	121	296
September	366,420	9,268	395	6,050	91	240
October	306,848	8,454	460	4,296	65	200
November	244,979	7,463	550	1,981	42	121
December	244,904	7,461	550	1,472	26	101
ISABELLA RESERVOIR RECREATION POOL:				TOTALS	790	1,841
15,125 S.F.D.						
30,000 ACRE-FEET						

NOTE: Storage & Area quantities reflect last day of month

REPORT OF THE KERN RIVER WATERMASTER

SUMMARY OF KERN RIVER RUNOFF

Year: 1998

Quantities in acre--feet

	CALENDAR YEAR				WATER YEAR					
	FIRST POINT		ENTITLEMENT		FIRST POINT		ENTITLEMENT			
	REGULATED	NATURAL	NKWS	BWSD	HWD	REGULATED	NATURAL	NKWS	BWSD	HWD
JANUARY	45,636	45,927	45,741	186	0	42,278	20,926	20,926	0	0
<i>To Date</i>	45,636	45,927	45,741	186	0	42,278	20,926	20,926	0	0
FEBRUARY	93,987	136,340	118,227	18,113	0	46,977	23,708	23,708	0	0
MARCH	139,623	182,267	163,968	18,299	0	89,255	44,634	44,634	0	0
APRIL	97,468	151,329	78,749	44,993	27,587	31,894	30,532	30,532	0	0
MAY	237,091	333,596	242,717	63,292	27,587	121,149	75,166	75,166	0	0
JUNE	132,317	189,663	100,883	55,442	33,338	45,636	45,927	45,741	186	0
JULY	369,408	523,259	343,600	118,734	60,925	166,785	121,093	120,907	186	0
AUGUST	239,423	308,440	145,762	102,678	60,000	93,987	136,340	118,227	18,113	0
SEPTEMBER	608,831	831,699	489,362	221,412	120,925	260,772	257,433	239,134	18,299	0
OCTOBER	284,408	371,835	155,457	129,544	86,834	97,468	151,329	78,749	44,993	27,587
NOVEMBER	893,239	1,203,534	644,819	350,956	207,759	358,240	408,762	317,883	63,292	27,587
DECEMBER	239,607	267,435	118,665	83,581	65,189	132,317	189,663	100,883	55,442	33,338
YEAR	1,132,846	1,470,969	763,484	434,537	272,948	490,557	598,425	418,766	118,734	60,925
	200,713	94,510	70,187	24,323	0	239,423	308,440	145,762	102,678	60,000
	1,333,559	1,565,479	839,671	458,860	272,948	729,980	906,865	564,528	221,412	120,925
	114,224	50,959	50,959	0	0	284,408	371,835	155,457	129,544	86,834
	1,447,783	1,616,438	884,630	458,860	272,948	1,014,388	1,278,700	719,985	350,956	207,759
	89,980	35,008	35,008	0	0	239,607	267,435	118,665	83,581	65,189
	1,537,763	1,651,446	919,638	458,860	272,948	1,253,995	1,546,135	838,650	434,537	272,948
	93,054	33,302	33,302	0	0	200,713	94,510	70,187	24,323	0
	1,630,817	1,684,748	952,940	458,860	272,948	1,454,708	1,640,645	908,837	458,860	272,948
	31,739	33,219	33,219	0	0	114,224	50,959	50,959	0	0
Year	1,662,556	1,717,967	986,159	458,860	272,948	1,568,932	1,691,604	959,796	458,860	272,948

1894 to 1998 Mean April--July Runoff = 475,998 acre--feet (100% of Average)
 1998 April--July Runoff = 1,137,373 acre--feet (239% of Average)

1894 to 1998 Mean March--October Runoff = 611,250 acre--feet (100% of Average)
 1998 March--October Runoff = 1,469,179 acre--feet (240% of Average)



Quantities in S.F.D. except where noted

JANUARY 1998

REPORT OF THE KERN RIVER WATERMASTER

DAY	ELEVATION (FEET)	ISABELLA RESERVOIR		LOSS	FIRST POINT REGULATED FLOW	FLOW ABOVE 1ST PT.	STORAGE + FLOW ABOVE 1ST POINT	COMPUTED 1ST POINT NATURAL FLOW	MEAN TOTAL	STORAGE		KERN COUNTY RECREATION POOL LOSS	SECOND POINT GROUP FLOW AT 2ND POINT		FRIANT-KERN INFLOW	DAY
		ACRE- FEET	S.F.D.							IRRIGATION	RIVER		KERN	KERN		
Previous Day	2571.24	242,525	122,273	12	447	1	498	498	122,273	107,055	1	1	0	0	0	0
1	2571.26	242,671	122,347	13	434	1	522	516	122,341	107,123	1	1	0	0	0	1
2	2571.28	242,820	122,422	3	425	1	504	523	122,435	107,217	0	0	0	0	0	2
3	2571.31	243,043	122,534	3	427	1	543	539	122,543	107,325	0	0	0	0	0	3
4	2571.34	243,266	122,647	20	436	1	570	518	122,604	107,386	1	1	0	0	0	4
5	2571.34	243,266	122,647	8	433	0	441	476	122,639	107,421	1	1	0	0	0	5
6	2571.32	243,117	122,572	8	482	1	416	439	122,587	107,369	1	1	0	0	0	6
7	2571.31	243,043	122,534	18	478	1	459	446	122,536	107,318	1	1	0	0	0	7
8	2571.31	243,043	122,534	10	454	0	464	531	122,603	107,385	1	1	0	0	0	8
9	2571.36	243,415	122,722	20	460	1	669	609	122,731	107,513	1	1	0	0	0	9
10	2571.41	243,787	122,909	35	472	1	695	658	122,881	107,663	3	3	0	0	0	10
11	2571.44	244,011	123,022	3	493	1	610	663	123,047	107,829	0	0	0	0	0	11
12	2571.49	244,383	123,210	3	494	0	685	703	123,253	108,035	0	0	0	0	0	12
13	2571.55	244,829	123,435	13	573	1	812	737	123,403	108,185	1	1	0	0	0	13
14	2571.54	244,755	123,397	3	749	0	714	862	123,513	108,295	0	0	0	0	0	14
15	2571.60	245,203	123,623	8	826	1	1,061	926	123,623	108,405	1	1	0	0	0	15
16	2571.83	246,924	124,491	15	911	1	1,795	1,795	124,491	109,273	1	1	0	0	0	16
17	2571.88	247,299	124,680	20	997	0	1,206	1,206	124,680	109,462	1	1	0	0	0	17
18	2571.77	246,474	124,264	3	1,288	1	876	876	124,264	109,046	0	0	0	0	0	18
19	2571.69	245,876	123,963	3	1,576	0	1,278	1,278	123,963	108,745	0	0	0	0	0	19
20	2571.55	244,829	123,435	18	1,435	1	926	926	123,435	108,217	1	1	0	0	0	20
21	2571.48	244,309	123,173	13	1,174	1	926	899	123,146	107,928	1	1	0	0	0	21
22	2571.44	244,011	123,022	13	983	0	845	844	122,994	107,776	1	1	41	0	0	22
23	2571.42	243,862	122,947	20	814	1	760	765	122,924	107,706	1	1	94	0	0	23
24	2571.39	243,638	122,834	25	779	0	691	716	122,836	107,618	2	2	118	0	0	24
25	2571.37	243,489	122,759	15	756	1	697	681	122,745	107,527	1	1	120	0	0	25
26	2571.35	243,340	122,684	15	715	1	656	654	122,668	107,450	1	1	122	0	0	26
27	2571.31	243,043	122,534	20	740	0	610	622	122,530	107,312	1	1	109	0	0	27
28	2571.25	242,599	122,310	18	804	1	599	603	122,310	107,092	1	1	97	0	0	28
29	2571.23	242,450	122,235	3	823	1	752	752	122,235	107,017	0	0	97	0	0	29
30	2571.20	242,228	122,123	5	810	1	704	704	122,123	106,905	0	0	98	0	0	30
31	2571.17	242,005	122,011	13	767	1	669	669	122,011	106,793	1	1	100	0	0	31
		TOTAL SECOND FOOT DAYS		387	23,008	22	23,155	23,155	122,011	106,793	25	25	996	0	0	0
		TOTAL ACRE-FEET		768	45,636	43	45,927	45,927	242,005	211,821	50	50	1,976	0	0	0

By: *[Signature]*

Date: February 23, 1998

WATERMASTER NOTES *** KERN RIVER BULLETIN

MONTH DAY(S) PAGE NO. TITLE OF COLUMN COMMENT
 January None

SNOW SURVEY DATA FOR KERN RIVER BASIN

Date: February 1, 1998

SNOW COURSE	SNOW SENSOR	CALIF. NUMBER	ELEV. IN FEET	APRIL 1ST AVERAGE WATER CONTENT	DATE MEASURED	SNOW DEPTH IN INCHES	DENSITY (%)	WATER CONTENT IN INCHES	% OF APRIL 1ST AVERAGE	MEASURED BY
Upper Tyndall Creek		516	11,450	27.7	1-27	61.3	38%	23.3	84%	DWR
Bighorn Plateau		250	11,350	21.9	1-26	41.3	31%	12.6	58%	DWR
Cottonwood Pass		251	11,050	13.4	2-01	26.4	27%	7.1	53%	DWR
Siberian Pass		252	10,900	18.3	1-28	31.1	26%	8.0	44%	DWR
Crabtree Meadow		253	10,700	18.8	1-27	42.2	28%	11.8	63%	DWR
Guyot Flat		254	10,650	20.0	1-25	42.3	30%	12.8	64%	DWR
Tyndall Creek		255	10,650	18.3	1-26	41.6	27%	11.2	61%	DWR
Sandy Meadow		275	10,650	18.3	1-26	42.3	29%	12.2	67%	DWR
Chagoopa Plateau		514	10,300	21.8						
Big Whitney Meadow		257	9,750	16.6	1-31	36.3	26%	9.5	57%	DWR
Rock Creek		256	9,600	17.2	1-25	43.1	26%	11.3	66%	DWR
Round Meadow		569	9,130	24.9	1-27	62.5	19%	12.0	48%	USFS
Pascoe		258	9,000	24.9	1-27	51.6	21%	11.0	44%	USFS
Tunnel Guard		830	8,960	15.6	1-30	38.3	27%	10.5	67%	DWR
Wet Meadow		518	8,950	30.3						
Farnshaw Meadow		259	8,700	11.3	1-30	39.2	26%	10.0	88%	DWR
Little Whitney Mea.		260	8,500	13.5	1-30	40.2	26%	10.6	79%	DWR
Casa Vieja Meadow		262	8,400	19.6	1-28	43.1	21%	9.0	46%	USFS
Quinn Ranger Sta.		262	8,400	20.9						
Bonita Meadows		264	8,350	19.4						
Beach Meadows		261	8,300	13.8	1-27	35.8	26%	10.1	73%	USFS
		265	7,650	8.9	1-27	26.6	23%	6.0	67%	USFS
		860	7,650	11.0	1-27	22.4	39%	8.5	77%	USFS

CALIFORNIA COOPERATIVE SNOW SURVEYS FORECAST as of FEBRUARY 1, 1998 for KERN RIVER INFLOW TO ISABELLA RESERVOIR...

April-July = 440,000 acre-feet (100% of Average) *** Water Year = 700,000 acre-feet (101% of Average)

80 Percent Probability Range (Actual runoff should fall within the stated limits eight times out of ten)...

April-July = 260,000 AcFt (59% of Average) to 780,000 AcFt (176% of Average)*** Water Year = 450,000 AcFt (65% of Average) to 1,200,000 AcFt (173% of Average)

REPORT OF THE KERN RIVER WATERMASTER

FEBRUARY 1998

Quantities in S.F.D. except where noted

DAY	ELEVATION	ISABELLA		RESERVOIR		FIRST POINT REGULATED	FLOW	1ST PT.	FLOW	ABOVE	1ST POINT	CHANGE IN		COMPUTED	MEAN	STORAGE	KERN	COUNTY	TOTAL	SECOND POINT		DAY
		MIDNIGHT	ACRE-FEE	S.F.D.	LOSS							STORAGE+LOSS	+1ST POINT							1ST POINT	NATURAL	
Previous Day	2571.17	242,005	122,011	13	767	767	0	669	106,793	100	100	0	0	669	122,011	106,793	1	100	100	0	0	0
1	2571.21	242,302	122,161	2	779	779	0	931	106,943	100	100	0	0	931	122,161	106,943	0	100	100	0	0	0
2	2571.47	244,234	123,135	2	1,106	1,106	1	2,083	107,917	99	99	0	0	2,083	123,135	107,917	0	99	99	0	0	0
3	2571.52	244,606	123,322	2	1,647	1,647	0	1,836	108,104	170	170	0	0	1,836	123,322	108,104	0	170	170	0	0	0
4	2571.52	244,606	123,322	2	1,555	1,555	1	1,558	108,104	264	264	0	0	1,558	123,322	108,104	0	264	264	0	0	0
5	2571.46	244,160	123,097	15	1,548	1,548	1	1,339	107,879	325	325	0	0	1,339	123,097	107,879	1	325	325	0	0	0
6	2571.41	243,787	122,909	2	1,576	1,576	0	1,390	107,691	335	335	0	0	1,390	122,909	107,691	0	335	335	0	0	0
7	2571.46	244,160	123,097	2	1,742	1,742	0	1,932	107,879	350	350	0	0	1,932	123,097	107,879	0	350	350	0	0	0
8	2571.53	244,680	123,360	2	1,738	1,738	1	2,004	108,142	333	333	0	0	2,004	123,360	108,142	0	333	333	0	0	0
9	2571.51	244,531	123,284	2	1,633	1,633	1	1,560	108,066	292	292	0	0	1,560	123,284	108,066	0	292	292	0	0	0
10	2571.44	244,011	123,022	11	1,567	1,567	0	1,316	107,797	315	315	0	0	1,316	123,022	107,797	1	315	315	0	0	0
11	2571.37	243,489	122,759	18	1,539	1,539	1	1,295	107,503	349	349	1	1	1,295	122,759	107,503	1	349	349	29	198	11
12	2571.31	243,043	122,534	7	1,397	1,397	1	1,180	107,280	382	382	1	1	1,180	122,498	107,280	1	382	382	50	386	12
13	2571.22	242,376	122,198	9	1,399	1,399	0	1,072	106,980	455	455	1	1	1,072	122,198	106,980	1	455	455	50	537	13
14	2571.58	245,054	123,548	2	2,470	2,470	1	3,823	108,330	998	998	0	0	3,823	123,548	108,330	0	998	998	50	658	14
15	2572.09	248,877	125,476	7	1,621	1,621	1	3,557	110,258	771	771	1	1	3,557	125,476	110,258	1	771	771	50	700	15
16	2572.28	250,310	126,198	2	1,566	1,566	0	2,290	110,980	385	385	0	0	2,290	126,198	110,980	0	385	385	50	496	16
17	2572.35	250,840	126,465	2	1,831	1,831	1	2,101	111,247	324	324	0	0	2,101	126,465	111,247	0	324	324	185	21	17
18	2572.32	250,612	126,350	18	1,852	1,852	1	1,756	111,132	391	391	1	1	1,756	126,350	111,132	1	391	391	254	0	18
19	2572.32	250,612	126,350	2	1,788	1,788	0	1,790	111,132	420	420	0	0	1,790	126,350	111,132	0	420	420	247	0	19
20	2572.36	250,915	126,503	7	1,682	1,682	1	1,843	111,285	425	425	0	0	1,843	126,503	111,285	0	425	425	255	0	20
21	2572.48	251,825	126,962	2	1,668	1,668	1	2,130	111,744	590	590	0	0	2,130	126,962	111,744	0	590	590	191	0	21
22	2573.27	257,853	130,001	2	2,266	2,266	0	5,307	114,763	967	967	0	0	5,307	130,001	114,763	0	967	967	508	0	22
23	2574.54	267,715	134,973	3	3,501	3,501	1	8,477	119,755	1,820	1,820	0	0	8,477	134,973	119,755	0	1,820	1,820	954	0	23
24	2575.37	274,274	138,280	3	2,134	2,134	0	5,445	123,062	1,198	1,198	0	0	5,445	138,280	123,062	0	1,198	1,198	520	0	24
25	2575.85	278,106	140,212	12	1,532	1,532	0	3,476	124,994	35	35	1	1	3,476	140,212	124,994	1	35	35	328	35	25
26	2576.17	280,678	141,509	28	1,437	1,437	1	2,763	126,291	411	411	2	2	2,763	141,509	126,291	2	411	411	245	60	26
27	2576.42	282,696	142,526	19	1,369	1,369	1	2,406	127,308	399	399	1	1	2,406	142,526	127,308	1	399	399	250	60	27
28	2576.57	283,910	143,138	24	1,442	1,442	0	2,078	127,920	404	404	1	1	2,078	143,138	127,920	1	404	404	250	60	28
TOTAL SECOND FOOT DAYS				209	47,385	47,385	17	68,738	127,920	13,863	13,863	12	12	68,738	143,138	127,920	12	13,863	13,863	7,978	515	4,844
TOTAL ACRE-FEET				415	93,987	93,987	33	136,340	253,726	283,910	27,497	24	24	136,340	253,726	253,726	24	27,497	27,497	15,824	1,022	9,608

By: *Ad*

Date: March 24, 1998

NORTH KERN WATER STORAGE DISTRICT BUENA VISTA WATER STORAGE DISTRICT HACIENDA WATER DISTRICT

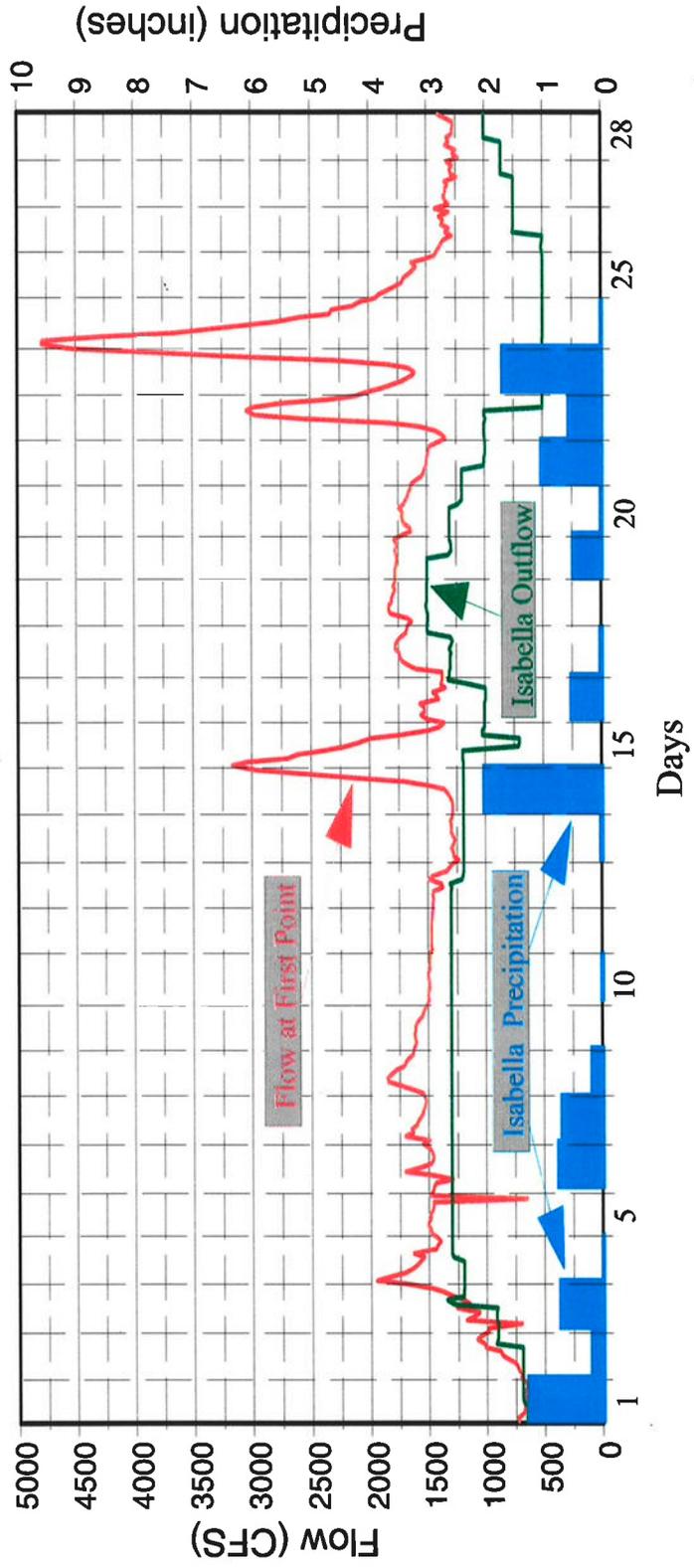
DAY	ENTL AT 1ST POINT	FLOW AT 1ST POINT	FLOW ABOVE FIRST POINT			ENTL AT 1ST POINT	RESERVOIR STORAGE	ENTL AT 1ST POINT	FLOW			FLOW ABOVE 1ST POINT			ENTL AT 1ST POINT	RESERVOIR STORAGE	FLOW			ENTL AT 1ST POINT	RESERVOIR STORAGE	
			LAKE MING	LAKE	VALLEY GOLF				VIA KWD	VIA CWD	VIA AT 2ND POINT	OLCESE HACIENDA	CARMEL WATER	OLCESE			WD	INC.	WD			INC.
1	669	667	0	0	0	0	62,347	0	0	0	100	0	0	0	4	32,191	0	0	0	0	1	12,255
2	931	679	0	0	0	1	62,588	0	0	0	100	0	0	1	32,090	0	0	0	0	0	0	12,255
3	1,898	1,007	0	1	0	1	63,487	185	0	0	99	0	0	1	32,175	0	0	0	0	0	0	12,255
4	1,729	1,524	0	0	0	1	63,691	107	0	0	123	0	0	1	32,158	0	0	0	0	0	0	12,255
5	1,540	1,350	1	0	0	1	63,879	18	0	0	205	0	0	1	31,970	0	0	0	0	0	0	12,255
6	1,339	1,300	0	1	0	9	63,908	0	0	0	248	0	0	4	31,718	0	0	0	0	2	12,253	
7	1,390	1,325	0	0	0	1	63,972	0	0	0	251	0	0	1	31,466	0	0	0	0	0	0	12,253
8	1,795	1,491	0	0	0	1	64,275	137	0	0	251	0	0	1	31,351	0	0	0	0	0	0	12,253
9	1,844	1,491	1	0	0	1	64,626	160	0	0	247	0	0	1	31,263	0	0	0	0	0	0	12,253
10	1,541	1,386	0	1	0	1	64,779	19	0	0	247	0	0	1	31,034	0	0	0	0	0	0	12,253
11	1,309	1,314	0	0	0	7	64,767	0	0	0	253	0	0	3	30,778	0	0	0	0	1	12,252	
12	1,264	1,265	1	0	0	11	64,754	0	1	0	273	0	0	5	30,499	0	0	0	0	2	12,250	
13	1,182	1,116	0	1	0	4	64,815	0	5	0	276	0	0	2	30,216	0	0	0	1	12,249		
14	1,108	1,088	0	0	0	5	64,830	0	0	0	311	0	0	3	29,902	0	0	0	1	12,248		
15	3,084	2,063	1	0	0	1	65,849	739	0	0	407	0	0	1	30,233	0	0	0	0	0	0	12,248
16	2,903	1,371	0	1	0	4	67,376	654	0	0	250	0	0	2	30,635	0	0	0	1	12,247		
17	2,039	1,316	0	0	0	1	68,098	251	0	0	250	0	0	1	30,635	0	0	0	0	0	0	12,247
18	1,910	1,646	1	0	0	1	68,360	191	0	0	185	0	0	1	30,640	0	0	0	0	0	0	12,247
19	1,675	1,598	0	1	0	11	68,425	81	0	0	254	0	0	5	30,462	0	0	0	2	12,245		
20	1,698	1,541	0	0	0	1	68,581	92	0	0	247	0	0	1	30,306	0	0	0	0	0	0	12,245
21	1,734	1,427	1	0	0	4	68,883	109	0	0	255	0	0	2	30,158	0	0	0	1	12,244		
22	1,930	1,477	0	1	0	1	69,334	200	0	0	191	0	0	1	30,166	0	0	0	0	0	0	12,244
23	4,096	1,758	0	0	0	1	71,671	1,211	0	0	508	0	0	1	30,868	0	0	0	0	0	0	12,244
24	6,257	2,547	1	0	0	2	75,378	2,220	0	0	954	0	0	1	32,133	0	0	0	0	0	0	12,244
25	4,190	1,614	0	1	0	2	77,951	1,255	0	0	520	0	0	1	32,867	0	0	0	0	0	0	12,244
26	2,847	1,204	0	0	0	8	79,586	629	0	0	328	0	0	3	33,165	0	0	0	1	12,243		
27	2,361	1,192	1	0	0	18	80,736	402	0	0	245	0	0	7	33,315	0	0	0	3	12,240		
28	2,118	1,119	0	1	0	12	81,722	288	0	0	250	0	0	5	33,348	0	0	0	2	12,238		
29	1,894	1,192	0	0	0	16	82,408	184	0	0	250	0	0	6	33,276	0	0	0	2	12,236		
S.F.D.	59,606	39,401	8	9	0	127	82,408	9,132	6	0	7,978	0	0	63	33,276	0	0	0	19	12,236		
AC.FT.	118,227	78,151	16	17	0	252	163,454	18,113	12	0	15,824	0	0	125	66,002	0	0	0	38	24,270		
TOTAL ACRE-FOOT STORAGE DAYS		3,825,596		TOTAL ACRE-FOOT STORAGE DAYS		1,743,127		TOTAL ACRE-FOOT STORAGE DAYS		680,211		TOTAL ACRE-FOOT STORAGE DAYS		1,743,127		TOTAL ACRE-FOOT STORAGE DAYS		680,211				

WATERMASTER NOTES *** KERN RIVER BULLETIN

MONTH	DAY(S)	PAGE NO.	TITLE OF COLUMN	COMMENT
February	1-28	1	FRIANT-KERN INFLOW	Includes Friant-Kern inflow to Kern River channel on behalf of the Kern County Water Agency (8,383 acre-feet), City of Bakersfield (799 acre-feet) and BUENA VISTA WATER STORAGE DISTRICT (426 acre-feet).

LOWER KERN RIVER HYDROLOGY

February 1998



Quantities in S.F.D. except where noted

MARCH 1988

REPORT OF THE KERN RIVER WATERMASTER

DAY	ELEVATION (FEET)	ISABELLA RESERVOIR		LOSS	FIRST POINT REGULATED FLOW		FLOW ABOVE 1ST PT.	CHANGE IN STORAGE + LOSS		COMPUTED NATURAL FLOW	MEAN STORAGE		KERN COUNTY RECREATION POOL LOSS	TOTAL FLOW AT 2ND POINT		SECOND POINT GROUP FLOW		FRONT-KERN INFLOW	DAY
		ACRE-FEET	S.F.D.		REGULATED FLOW	1ST POINT FLOW		+1ST POINT FLOW	1ST POINT FLOW		IRRIGATION	STORAGE		RECREATION	AT 2ND POINT	RIVER	FRONT-KERN		
Previous Day	2576.57	283,910	143,138	24	1,442	2,078	0	2,078	2,078	2,078	143,138	127,920	1	404	250	60	255		
1	2576.70	284,965	143,670	25	1,455	2,013	1	2,013	2,002	2,002	143,659	128,441	2	311	311	0	255	1	
2	2576.81	285,859	144,121	37	1,490	1,979	1	1,979	1,967	1,967	144,098	128,880	2	224	224	0	243	2	
3	2576.91	286,674	144,532	39	1,459	1,910	1	1,910	1,951	1,951	144,550	129,332	2	189	189	0	226	3	
4	2577.03	287,652	145,025	37	1,434	1,965	1	1,965	1,949	1,949	145,027	129,809	2	218	218	0	220	4	
5	2577.14	288,551	145,478	3	1,516	1,973	1	1,973	1,938	1,938	145,445	130,227	0	240	240	0	220	5	
6	2577.21	289,125	145,767	3	1,582	1,876	2	1,876	1,885	1,885	145,743	130,525	0	281	229	0	220	6	
7	2577.27	289,615	146,014	9	1,548	1,805	1	1,805	1,768	1,768	145,953	130,735	1	300	217	0	317	7	
8	2577.27	289,615	146,014	32	1,589	1,622	1	1,622	1,694	1,694	146,025	130,807	2	332	210	0	365	8	
9	2577.25	289,453	145,933	25	1,710	1,655	1	1,655	1,640	1,640	145,929	130,711	1	385	244	0	365	9	
10	2577.22	289,207	145,809	21	1,743	1,642	2	1,642	1,680	1,680	145,843	130,625	1	405	258	0	335	10	
11	2577.21	289,125	145,767	37	1,746	1,742	1	1,742	1,752	1,752	145,811	130,593	2	394	252	0	325	11	
12	2577.23	289,289	145,850	39	1,750	1,873	1	1,873	1,872	1,872	145,893	130,675	2	387	252	0	325	12	
13	2577.30	289,861	146,138	44	1,689	2,002	1	2,002	1,928	1,928	146,107	130,889	3	466	317	0	325	13	
14	2577.39	290,600	146,511	21	1,514	1,910	2	1,910	1,914	1,914	146,484	131,266	1	389	240	0	345	14	
15	2577.43	290,929	146,677	44	1,619	1,830	1	1,830	2,018	2,018	146,838	131,620	3	445	310	0	360	15	
16	2577.59	292,244	147,340	21	1,629	2,314	1	2,314	2,156	2,156	147,343	132,125	1	446	308	0	360	16	
17	2577.75	293,565	148,006	46	1,610	2,324	2	2,324	2,391	2,391	148,076	132,858	3	418	277	0	360	17	
18	2577.99	295,550	149,007	35	1,495	2,533	2	2,533	2,479	2,479	149,023	133,805	2	445	305	0	391	18	
19	2578.25	297,708	150,095	35	1,456	2,581	2	2,581	2,562	2,562	150,092	134,874	2	388	226	0	445	19	
20	2578.51	299,873	151,186	47	1,433	2,572	1	2,572	2,621	2,621	151,232	136,014	3	357	180	0	424	20	
21	2578.79	302,217	152,368	45	1,482	2,711	2	2,711	2,695	2,695	152,398	137,180	2	342	167	0	407	21	
22	2579.09	304,738	153,639	52	1,477	2,802	2	2,802	2,902	2,902	153,769	138,551	3	338	168	0	409	22	
23	2579.46	307,864	155,215	53	1,562	3,193	2	3,193	3,210	3,210	155,362	140,144	3	344	165	0	410	23	
24	2579.92	311,773	157,186	29	1,634	3,635	1	3,635	3,488	3,488	157,186	141,968	2	321	181	0	254	24	
25	2580.51	316,824	159,732	15	1,710	4,273	2	4,273	4,273	4,273	159,732	144,514	1	383	321	0	191	25	
26	2580.95	320,621	161,647	29	1,668	3,614	2	3,614	3,576	3,576	161,609	146,391	1	381	284	0	210	26	
27	2581.37	324,265	163,484	3	1,659	3,501	2	3,501	3,620	3,620	163,565	148,347	0	460	306	0	210	27	
28	2581.82	328,194	165,465	3	1,759	3,744	1	3,744	3,414	3,414	165,216	149,998	0	545	349	0	229	28	
29	2582.13	330,916	166,837	25	1,598	2,997	1	2,997	3,191	3,191	166,782	151,564	1	440	301	0	240	29	
30	2582.41	333,385	168,082	37	1,547	2,831	2	2,831	2,886	2,886	168,082	152,864	2	437	257	0	240	30	
31	2582.69	335,862	169,331	25	1,597	2,873	2	2,873	2,873	2,873	169,331	154,113	1	600	366	0	337	31	
		TOTAL SECOND FOOT DAYS		916	49,140	76,295	46	76,295	76,295	76,295	169,331	154,113	51	11,611	7,872	0	9,563		
		TOTAL ACRE- FEET		1,817	97,468	151,329	92	151,329	151,329	151,329	335,862	305,678	101	23,030	15,614	0	18,967		

By: *AS*

Date: April 24, 1988

HACIENDA WATER DISTRICT

BUENA VISTA WATER STORAGE DISTRICT

NORTH KERN WATER STORAGE DISTRICT

DAY	PREVIOUS DAY	FLOW ABOVE 1ST POINT		FLOW		FLOW ABOVE 1ST POINT		ENTITLEMENT		RESERVOIR		FLOW ABOVE 1ST POINT		RESERVOIR								
		ENTL AT 1ST	FLOW AT 1ST	VIA	PIONEER	AT 2ND	OLCESE	WD	INC.	La	CONTRIBUTED BY	LOSS STORAGE	WD	INC.	La	LOSS STORAGE						
POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT						
1,894	1,192	184	0	0	250	0	0	0	0	6	33,276	0	0	0	0							
1,460	1,144	542	0	0	311	0	0	0	0	6	33,501	0	0	0	0							
1,437	1,266	530	0	0	224	0	0	0	0	10	33,797	0	0	0	0							
1,426	1,270	525	0	0	189	0	0	0	0	10	34,123	0	0	0	0							
1,424	1,216	525	0	0	218	0	0	0	0	10	34,420	0	0	0	0							
1,417	1,276	521	0	0	240	0	0	0	0	1	34,700	0	0	0	0							
1,381	1,353	504	0	0	229	0	0	0	0	1	34,974	0	0	0	0							
1,301	1,275	467	0	0	217	0	0	0	0	2	35,166	0	0	0	0							
1,251	1,331	443	0	0	48	0	0	0	0	9	35,342	0	0	0	0							
1,214	1,405	426	0	0	53	244	0	0	0	7	35,456	0	0	0	0							
1,241	1,422	439	0	0	53	258	0	0	0	6	35,568	0	0	0	0							
1,290	1,431	462	0	0	53	252	0	0	0	10	35,705	0	0	0	0							
1,372	1,425	500	0	0	63	252	0	0	0	11	35,869	0	0	0	0							
1,410	1,293	518	0	0	53	317	0	0	0	12	35,989	0	0	0	0							
1,401	1,215	513	0	0	53	240	0	0	0	6	36,207	0	0	0	0							
1,470	1,246	548	0	0	55	310	0	0	0	12	36,370	0	0	0	0							
1,556	1,266	600	0	0	53	308	0	0	0	6	36,601	0	0	0	0							
1,701	1,273	690	0	0	58	277	0	0	0	13	36,941	0	0	0	0							
1,479	1,130	724	0	0	57	305	0	0	0	10	37,290	0	0	0	0							
960	1,167	757	0	0	61	226	0	0	0	10	37,748	0	0	0	0							
975	1,175	781	0	0	76	180	0	0	0	13	38,258	0	0	0	0							
995	1,215	811	0	0	96	167	0	0	0	13	38,789	0	0	0	0							
1,049	1,206	895	0	0	99	168	0	0	0	15	39,398	0	0	0	0							
1,126	1,287	1,025	0	0	104	165	0	0	0	15	40,133	0	0	0	0							
1,193	1,346	1,144	0	0	104	181	0	0	0	8	40,981	0	0	0	0							
1,357	1,301	1,506	0	0	88	321	0	0	0	4	42,074	0	0	0	0							
1,212	1,324	1,184	0	0	60	284	0	0	0	8	42,906	0	0	0	0							
1,221	1,294	1,204	0	0	59	306	0	0	0	1	43,744	0	0	0	0							
1,175	1,358	1,112	0	0	52	349	0	0	0	1	44,454	0	0	0	0							
1,121	1,248	1,017	0	0	49	301	0	0	0	7	45,114	0	0	0	0							
1,046	1,244	888	0	0	46	257	0	0	0	11	45,688	0	0	0	0							
1,042	1,179	883	0	0	50	366	0	0	0	7	46,146	0	0	0	0							
39,703	39,581	22,684	1	571	1,599	7,872	0	0	0	255	46,146	13,908	0	0	0							
78,749	78,509	44,993	2	1,132	3,171	15,614	0	0	0	506	91,529	27,587	0	0	0							
TOTAL ACRE-FOOT STORAGE DAYS																5,102,576	TOTAL ACRE-FOOT STORAGE DAYS		2,347,361	TOTAL ACRE-FOOT STORAGE DAYS		941,024
S.F.D.																39,703	S.F.D.		26,031	S.F.D.		26,031
AC.FT.																78,749	AC.FT.		51,632	AC.FT.		51,632

REPORT OF THE KERN RIVER WATERMASTER

MARCH 1998

WATERMASTER NOTES *** KERN RIVER BULLETIN

MONTH	DAY(S)	PAGE NO.	TITLE OF COLUMN	COMMENT
March	1-31	1	FRIANT-KERN INFLOW	Includes Friant-Kern inflow to Kern River channel on behalf of Kern County Water Agency (4,395 acre-feet) and City of Bakersfield (14,572 acre-feet).
March	18	2	HACIENDA WATER DISTRICT ENTITLEMENT	Reflects NORTH KERN WATER STORAGE DISTRICT contribution to HACIENDA WATER DISTRICT based on 1962 Kern River Water Rights and Storage Agreement beginning March 18, 1998. (33% of all natural flow above 250,000 acre-feet January thru March)

THE HISTORY OF 200% OF NORMAL APRIL-JULY RUNOFF ON KERN RIVER

FLOW IN ACRE-FEET

Year	April	May	June	July	Total	% of Normal
1938	223,928	315,044	291,880	130,917	961,769	205%
1941	124,615	386,666	309,960	174,416	995,657	212%
1967	99,509	269,631	311,063	243,802	924,005	197%
1980	211,608	287,825	282,877	208,715	991,025	211%
1986	208,147	293,335	263,794	121,398	886,674	189%
1995	143,244	255,046	293,129	237,802	929,221	198%
MEAN	168,509	301,258	292,117	186,175	948,059	202%

Quantities in S.F.D. except where noted

APRIL 1988

REPORT OF THE KERN RIVER WATERMASTER

DAY	ELEVATION (FEET)	ISABELLA		RESERVOIR		LOSS	FIRST POINT REGULATED FLOW	FLOW ABOVE 1ST PT.	CHANGE IN STORAGE+LOSS		COMPUTED 1ST POINT FLOW	MEAN STORAGE		KERN COUNTY RECREATION POOL LOSS	TOTAL FLOW AT SECOND POINT	SECOND POINT GROUP FLOW AT 2ND POINT		KERN RIVER INTERTIE	
		ACRE-Feet	S.F.D.	MIDNIGHT STORAGE	ACRE-Feet				S.F.D.	Recreation Pool + Dead Storage		IRRIGATION	AT 2ND POINT			KERN RIVER	FRIANT-KERN	FRIANT-KERN	RIVER
Previous Day	2582.69	335,862	169,331	25	1,597	2,873	2,873	154,113	169,331	154,113	0	600	366	0	337	0	0	0	0
1	2582.95	338,172	170,495	8	1,587	2,726	2,761	155,242	170,460	155,242	0	640	396	0	395	0	0	0	0
2	2583.17	340,132	171,483	28	1,636	2,655	2,716	156,291	171,509	156,291	1	731	510	0	454	0	0	0	0
3	2583.40	342,187	172,519	40	1,654	2,688	2,732	157,283	172,501	157,283	2	1,172	334	0	865	0	330	0	330
4	2583.63	344,249	173,559	25	1,608	2,676	2,567	158,214	173,432	158,214	1	1,162	299	0	865	0	734	0	734
5	2583.78	345,596	174,238	39	1,573	2,293	2,489	159,089	174,307	159,089	2	1,155	185	0	968	0	736	0	736
6	2583.97	347,309	175,102	5	1,625	2,497	2,371	159,827	175,045	159,827	0	1,268	246	0	1,010	0	791	0	791
7	2584.10	349,482	175,693	46	1,683	2,322	2,356	160,452	175,670	160,452	2	1,418	371	0	1,010	0	798	0	798
8	2584.20	349,387	176,149	41	1,750	2,250	2,271	160,929	176,147	160,929	2	1,394	201	0	998	0	933	0	933
9	2584.29	350,200	176,559	41	1,789	2,242	2,284	161,381	176,589	161,381	2	1,367	254	0	990	0	859	0	859
10	2584.38	351,017	176,971	56	1,889	2,366	2,336	161,769	176,987	161,769	3	1,475	316	0	999	0	859	0	859
11	2584.48	351,925	177,429	5	1,942	2,407	2,385	162,205	177,423	162,205	0	1,583	431	0	1,005	0	881	0	881
12	2584.57	352,741	177,840	10	1,963	2,387	2,373	162,602	177,820	162,602	0	1,558	298	0	1,005	0	987	0	987
13	2584.62	353,197	178,070	26	2,069	2,327	2,333	162,838	178,056	162,838	1	1,614	502	0	990	0	864	0	864
14	2584.64	353,379	178,162	26	2,163	2,284	2,275	162,921	178,139	162,921	1	1,537	463	0	817	0	920	0	920
15	2584.65	353,470	178,208	28	2,137	2,214	2,200	162,953	178,171	162,953	1	1,373	417	0	722	0	870	0	870
16	2584.63	353,288	178,116	51	2,142	2,103	2,138	162,896	178,114	162,896	2	1,265	376	0	690	0	865	0	865
17	2584.60	353,014	177,978	57	2,175	2,097	2,130	162,791	178,009	162,791	3	1,237	321	0	690	0	791	0	791
18	2584.60	353,014	177,978	38	2,149	2,190	2,237	162,838	178,056	162,838	2	1,220	317	0	690	0	794	0	794
19	2584.64	353,379	178,162	64	2,175	2,425	2,503	163,100	178,318	163,100	3	1,209	323	0	690	0	858	0	858
20	2584.75	354,381	178,667	59	2,327	2,894	2,990	163,701	178,919	163,701	3	1,265	425	0	690	0	810	0	810
21	2584.98	356,480	179,725	67	2,523	3,651	3,634	164,742	179,980	164,742	3	1,311	528	0	690	0	701	0	701
22	2585.36	359,961	181,480	91	2,509	4,358	4,274	166,413	181,631	166,413	4	1,226	448	0	690	0	674	0	674
23	2585.82	364,199	183,617	76	2,596	4,812	4,690	168,428	183,646	168,428	3	1,244	382	0	690	0	691	0	691
24	2586.26	368,275	185,672	55	2,787	4,900	4,837	170,420	185,638	170,420	2	1,402	515	0	690	0	669	0	669
25	2586.68	372,190	187,646	66	2,755	4,798	4,745	172,341	187,559	172,341	3	1,482	542	0	754	0	760	0	760
26	2587.05	375,653	189,392	58	2,729	4,536	4,657	174,208	189,426	174,208	2	1,490	499	0	800	0	810	0	810
27	2587.43	379,229	191,195	56	2,777	4,638	4,701	176,074	191,292	176,074	2	1,439	456	0	800	0	803	0	803
28	2587.83	383,009	193,100	78	2,943	4,929	4,944	177,994	193,212	177,994	3	1,456	455	0	743	0	762	0	762
29	2588.20	386,524	194,873	73	3,416	5,265	5,153	179,655	194,873	179,655	3	1,683	264	0	581	0	579	0	579
30	2588.59	390,244	196,748	102	3,639	5,619	5,619	181,530	196,748	181,530	4	1,856	137	0	416	0	993	0	993
TOTAL SECOND FOOT DAYS				1,415	66,710	95,622	95,622	181,530	196,748	181,530	60	40,232	11,211	0	23,397	1,572	20,590		
TOTAL ACRE-Feet				2,807	132,317	189,663	189,663	390,244	390,244	390,060	119	79,799	22,237	0	46,408	3,118	40,839		

By: *AD* Date: June 2, 1988

WATERMASTER NOTES *** KERN RIVER BULLETIN

MONTH	DAY(S)	PAGE NO.	TITLE OF COLUMN	COMMENT
April	1-30	1	FRIANT-KERN INFLOW	Includes 44,392 acre-feet of J.G. Boswell pump-in water from Tule and Kaweah River operations and 2,016 acre-feet of Friant-Kern floodwater.
April	3-30	1	KERN RIVER INTERTIE	Deliveries reflect utilization of system storage.
April	1	2	HACENDA WATER DISTRICT ENTITLEMENT	Allocation of HACENDA WATER DISTRICT April-July Entitlement beginning April 1, 1988 as set forth in paragraph 1 (c) of the 1962 Kern River Water Rights and Storage Agreement.
April	3-28	2	BWSD FLOW - FOR KWBA	Delivered as per terms of BUENA VISTA WATER STORAGE DISTRICT/Kern County Water Agency Pioneer Project Water Sale Agreement dated April 24, 1988.
April	3-28	2	BWSD FLOW - FOR KWBA	Delivered as per terms of BUENA VISTA WATER STORAGE DISTRICT/Kern County Water Authority Water Sale Agreement dated April 24, 1988.
April	13	2	BWSD FLOW - FOR ID4	Delivered as per terms of BUENA VISTA WATER STORAGE DISTRICT/Improvement District No. 4 Exchange Agreement dated April 21, 1988.
April	8	2	HACENDA WATER DISTRICT FLOW - KERN WATER BANK	Reflects delivery of Lower River water to Kern Water Bank property as per terms of Bravo Management Company, Inc. letter dated April 3, 1988.
April	29-30	1	FIRST POINT REGULATED FLOW	U.S. Army Corps of Engineers Mandatory Flood Control Release.

KERN RIVER BASIN --- HISTORICAL SNOW COURSE DATA
APRIL 1ST WATER CONTENT IN INCHES

YEAR	BIGHORN PLATEAU	COTTONWOOD PASS	SIBERIAN PASS	CRABTREE MEADOW	GUYOT FLAT	SANDY MEADOWS	TINDALL CREEK	BIG WHITNEY MEADOW	ROCK CREEK	ROUND MEADOW	RAMSHAW MEADOWS	LITTLE WHITNEY MEADOW	CASA VIA MEADOWS	QUINN RANGER STATION	BONITA MEADOWS	BEACH MEADOWS	BASIN WIDE AVERAGE	A-J RUNOFF IN PERCENT OF AVERAGE
1948																		
1949	3.8	5.8	6.6	9.1	12.8	12.0	12.7	4.9	18.5	4.4	5.2	10.6	14.6	10.5	6.8	6.6	52%	
1950	13.2	9.1	18.5	17.8	18.3	16.8	16.1	16.9	9.8	28.7	9.4	10.8	15.0	15.0	19.5	13.1	45%	
1951	17.3	10.9	12.5	11.8	11.5	10.5	9.7	7.5	30.2	10.5	12.1	18.7	17.6	13.5	0.1	16.9	64%	
1952	49.2	32.2	35.0	35.3	37.7	35.6	34.2	35.3	39.3	53.9	30.9	38.2	44.9	1.6	0.0	37.5	58%	
1953	16.8	9.4	14.1	12.7	14.2	12.3	12.9	12.1	18.4	6.3	17.4	17.4	17.4	17.4	17.4	12.1	24%	
1954	22.0	11.8	18.0	16.8	16.0	16.8	15.7	15.3	23.2	12.2	16.4	16.2	16.2	16.2	16.2	10.1	71%	
1955	14.7	8.1	11.6	13.4	13.4	13.4	13.4	13.4	23.2	9.0	18.5	18.5	18.5	18.5	18.5	11.1	76%	
1956	33.3	12.6	26.7	27.9	25.1	24.3	21.7	23.0	10.0	14.7	6.8	10.9	10.9	10.9	10.9	18.9	48%	
1957	14.3	11.7	11.6	14.1	12.6	10.5	14.2	11.5	10.0	14.7	17.0	17.1	15.1	14.4	6.3	10.5	113%	
1958	25.9	20.5	25.0	23.5	25.3	24.5	24.0	22.7	23.7	39.2	17.0	21.2	30.9	26.6	21.6	24.8	179%	
1959	10.3	5.7	9.0	9.7	8.7	7.5	9.2	8.4	6.7	6.0	5.8	6.8	8.4	1.8	0.0	7.0	28%	
1960	11.8	4.7	9.4	10.8	9.4	7.5	9.5	8.4	6.5	20.2	2.0	2.5	9.1	11.9	8.9	8.4	36%	
1961	6.0	3.8	6.0	7.1	35.5	32.6	31.4	30.7	30.6	40.5	0.0	0.0	32.1	1.6	0.0	4.6	19%	
1962	37.4	27.0	18.4	17.1	18.4	17.4	17.2	17.0	13.5	12.6	0.0	0.0	11.0	5.6	21.3	32.0	111%	
1963	19.7	17.5	16.1	16.1	16.1	15.4	14.8	14.3	15.1	15.1	0.0	0.0	11.0	5.6	21.3	13.5	102%	
1964	5.1	1.5	3.9	6.1	6.1	6.1	5.4	4.8	5.8	15.1	0.0	0.0	8.1	10.8	5.2	7.0	39%	
1965	25.9	15.1	16.4	15.3	15.3	15.3	13.2	11.6	10.9	18.5	8.6	6.9	17.0	16.5	10.3	16.0	98%	
1966	15.7	13.0	14.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	47%	
1967	37.1	25.2	35.8	32.2	35.8	30.6	30.0	30.3	30.4	19.4	13.5	20.3	27.8	10.6	10.9	4.7	11.5	198%
1968	14.1	8.9	12.9	12.9	12.9	12.9	11.6	11.6	11.4	17.5	7.6	6.2	12.9	9.7	8.6	3.0	25.5	53%
1969	95.3	40.1	45.4	45.4	50.6	46.3	46.6	45.0	45.8	69.8	38.1	46.1	61.4	59.8	50.2	36.8	49.5	375%
1970	14.7	11.7	12.6	16.4	14.7	16.1	14.6	11.4	12.5	16.7	4.5	7.2	12.7	12.7	9.4	4.1	11.8	69%
1971	5.7	2.5	5.6	6.3	7.6	5.2	3.4	5.4	4.1	4.8	0.0	0.0	14.0	15.9	3.4	11.2	53%	
1972	7.6	24.4	30.0	31.7	33.7	31.3	31.8	27.2	30.4	42.7	24.1	28.2	31.7	40.8	22.3	3.7	27%	
1973	32.0	13.2	20.6	20.5	22.6	19.0	20.4	19.1	18.1	29.8	14.3	14.8	20.7	22.0	10.1	30.8	155%	
1974	26.3	13.2	15.0	16.9	17.6	16.2	15.1	15.9	16.1	28.8	11.6	14.0	20.7	22.3	10.3	16.5	83%	
1975	15.9	9.7	15.0	16.9	17.6	16.2	15.1	15.9	16.1	28.8	11.6	14.0	20.7	22.3	10.3	16.5	23%	
1976	5.9	4.4	5.8	3.3	5.4	3.3	4.7	5.5	3.6	11.9	0.9	0.0	7.2	6.3	6.7	4.8	27%	
1977	5.0	3.5	4.0	4.7	4.8	3.2	3.5	4.9	3.1	4.8	0.0	0.0	2.0	2.0	0.0	3.7	21%	
1978	43.1	40.1	39.7	41.7	41.7	40.6	37.3	39.6	46.8	31.9	37.8	41.1	43.7	32.2	23.6	38.7	235%	
1979	19.9	13.2	17.5	17.5	18.2	17.5	18.8	14.7	14.2	25.3	12.2	14.2	18.2	14.9	14.9	16.9	90%	
1980	40.9	29.4	34.4	34.3	35.1	34.5	35.7	29.5	33.5	25.0	21.6	27.4	30.0	36.7	16.2	30.2	213%	
1981	15.3	11.8	13.0	14.0	14.8	14.1	15.8	10.9	12.8	17.4	8.6	9.6	14.6	15.7	12.3	13.0	54%	
1982	32.4	17.4	24.6	23.2	24.3	24.1	26.3	20.3	23.7	31.0	15.2	19.0	29.2	23.0	11.6	17.1	171%	
1983	48.9	34.9	45.0	45.3	49.2	46.9	43.7	48.4	44.7	63.4	33.2	37.8	48.1	52.1	42.2	44.0	332%	
1984	21.9	8.7	15.4	20.1	17.6	18.1	17.0	12.9	13.8	15.7	2.1	2.6	9.4	2.1	0.0	11.9	91%	
1985	18.6	17.2	20.5	20.5	20.8	16.3	15.5	19.0	18.9	26.2	14.6	15.0	25.5	19.1	17.7	10.8	18.3	91%
1986	45.1	34.1	39.3	39.3	36.6	37.3	35.1	34.8	36.5	44.2	22.8	25.4	35.0	29.8	21.3	32.5	180%	
1987	11.3	7.6	8.9	8.9	11.5	9.2	11.0	7.8	8.1	15.8	6.3	8.3	9.8	17.3	9.0	9.5	45%	
1988	9.8	5.3	7.8	8.8	8.8	8.9	9.0	6.3	7.2	0.0	0.0	2.7	2.4	0.4	0.0	2.7	35%	
1989	15.3	10.2	13.0	12.3	15.7	13.3	11.0	14.4	14.1	21.7	7.3	11.5	17.2	12.9	14.6	13.1	50%	
1990	7.8	1.9	6.1	6.8	7.2	4.9	7.9	6.2	4.0	9.9	0.9	2.2	4.9	1.6	0.0	4.8	24%	
1991	19.7	14.1	17.5	14.1	18.9	17.1	17.2	15.1	17.0	24.7	11.8	14.6	14.0	21.0	15.0	7.0	16.2	59%
1992	12.7	13.2	13.2	11.0	10.7	12.2	12.0	9.1	9.9	21.0	7.7	8.0	10.8	12.8	11.0	4.0	11.1	38%
1993	33.7	19.6	28.9	27.8	30.2	27.7	29.3	26.4	28.8	41.0	19.8	22.5	30.0	32.1	24.0	14.5	27.3	126%
1994	13.4	6.7	11.3	12.1	13.6	11.2	11.5	8.8	10.8	14.3	5.9	7.1	7.9	7.9	3.2	9.7	41%	
1995	35.3	30.5	34.8	32.8	35.3	33.0	32.5	30.5	32.2	44.4	23.3	28.4	35.7	51.0	26.6	14.5	32.3	189%
1996	29.8	23.0	23.0	23.2	24.6	23.4	25.9	18.6	21.9	31.0	12.5	18.5	25.5	21.0	16.9	9.8	21.4	122%
1997	32.5	17.0	26.7	26.4	26.1	26.1	26.1	19.0	23.7	26.1	18.5	18.5	20.0	22.1	9.0	2.1	20.9	122%
1998	36.9	26.7	30.8	34.8	31.6	34.8	31.6	27.9	30.6	0.0	22.9	28.3	0.0	0.0	0.0	0.0	30.5	235% (estimate)
MAX	55.3	41.1	48.4	48.5	50.8	46.9	48.6	45.0	45.8	68.8	38.1	46.1	61.4	59.8	50.2	36.8	49.5	
MIN.	5.0	3.3	4.8	3.3	4.0	3.1	3.4	4.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	
AVG.	22.7	14.5	19.0	19.2	20.7	19.0	19.2	17.0	17.9	24.5	11.4	13.7	18.6	18.3	14.2	8.1	17.5	

Quantities in S.F.D. except where noted

MAY 1988

REPORT OF THE KERN RIVER WATERMASTER

DAY	ELEVATION (FEET)	ISABELLA		RESERVOIR		LOSS	FIRST POINT REGULATED FLOW	FLOW ABOVE 1ST PT.	CHANGE IN STORAGE + LOSS + FLOW ABOVE 1ST POINT	COMPUTED 1ST POINT NATURAL FLOW	MEAN TOTAL IRRIGATION	STORAGE Recreation Pool + Dead Storage = 15,218 S.F.D. (30,184 ACFT)	KERN COUNTY RECREATION POOL LOSS	TOTAL FLOW AT SECOND POINT	SECOND POINT GROUP FLOW AT 2ND POINT		FRIANT-KERN INFLOW		KERN RIVER INTERTIE	
		ACRE- FEET	S.F.D.	ACRE- FEET	S.F.D.										KERN RIVER	FRIANT-KERN	KERN RIVER	FRIANT-KERN		
Previous Day	2588.59	390,244	196,748	102	3,639	3	3,639	3	5,619	5,619	196,748	181,530	4	1,856	137	0	416	983	0	0
1	2589.06	394,752	199,021	80	3,634	3	3,634	3	5,980	5,980	199,021	183,803	3	2,066	573	0	759	412	759	1
2	2589.56	399,576	201,453	75	3,643	4	3,643	4	6,154	6,140	201,439	186,221	3	2,258	474	0	905	572	905	2
3	2590.06	404,428	203,899	14	3,650	3	3,650	3	6,113	6,184	203,956	188,738	1	2,241	314	0	905	721	905	3
4	2590.59	409,604	206,509	3	3,668	3	3,668	3	6,284	6,227	206,509	191,291	0	2,243	289	0	905	752	905	4
5	2591.15	415,107	209,283	3	3,723	3	3,723	3	6,503	6,503	209,283	194,065	0	2,474	401	0	905	824	905	5
6	2591.60	419,554	211,525	17	3,674	3	3,674	3	5,936	5,936	211,525	196,307	1	2,552	394	0	905	933	905	6
7	2591.97	423,230	213,379	14	3,664	3	3,664	3	5,535	5,324	213,168	197,950	0	2,574	912	0	805	553	853	7
8	2592.21	425,621	214,584	43	3,651	3	3,651	3	4,902	5,173	214,644	199,426	2	2,422	1,202	0	484	318	484	8
9	2592.48	428,320	215,945	63	3,654	4	3,654	4	5,082	5,070	215,993	200,775	2	2,127	1,122	0	270	516	270	9
10	2592.78	431,326	217,460	64	3,645	3	3,645	3	5,227	5,111	217,392	202,174	2	1,966	909	0	134	706	134	10
11	2593.04	433,941	218,779	58	3,643	4	3,643	4	5,024	5,127	218,914	203,596	2	1,846	914	0	0	715	0	11
12	2593.32	436,766	220,203	3	3,699	4	3,699	4	5,130	5,014	220,122	204,904	0	1,918	1,009	0	0	720	0	12
13	2593.55	439,093	221,376	15	3,698	3	3,698	3	4,889	4,788	221,194	205,976	1	1,924	1,050	0	0	696	0	13
14	2593.66	440,209	221,939	55	3,725	3	3,725	3	4,346	4,437	221,948	206,630	2	1,952	1,022	0	0	789	0	14
15	2593.69	440,513	222,092	61	3,858	4	3,858	4	4,076	4,164	222,089	206,871	2	2,074	1,196	0	0	712	0	15
16	2593.72	440,818	222,246	58	3,853	4	3,853	4	4,069	4,082	222,256	207,038	2	2,083	1,183	0	0	721	0	16
17	2593.75	441,123	222,400	79	3,863	4	3,863	4	4,100	4,045	222,355	207,137	3	2,054	1,179	0	0	696	0	17
18	2593.78	440,920	222,297	70	3,995	4	3,995	4	3,966	4,108	222,394	207,176	2	2,054	1,235	0	0	638	0	18
19	2593.76	441,222	222,450	90	4,010	4	4,010	4	4,257	4,157	222,447	207,229	3	1,996	1,095	0	0	738	0	19
20	2593.79	441,527	222,603	79	4,013	4	4,013	4	4,249	4,356	222,707	207,489	3	1,921	1,029	0	0	716	0	20
21	2593.88	442,442	223,065	79	4,018	3	4,018	3	4,562	4,467	223,074	207,856	3	1,903	898	0	0	811	0	21
22	2593.97	443,359	223,527	88	4,036	4	4,036	4	4,590	4,635	223,581	208,363	3	1,896	1,026	0	0	640	0	22
23	2594.09	444,580	224,143	85	4,048	4	4,048	4	4,753	4,756	224,200	208,982	3	1,918	838	0	0	852	0	23
24	2594.24	446,111	224,914	85	4,066	4	4,066	4	4,926	4,963	225,008	209,790	3	1,868	856	0	0	781	0	24
25	2594.44	448,154	225,944	62	4,113	4	4,113	4	5,209	5,115	225,944	210,726	2	1,877	812	0	0	831	0	25
26	2594.65	450,304	227,028	59	4,223	4	4,223	4	5,370	5,370	227,028	211,810	2	1,964	777	0	0	933	0	26
27	2594.78	451,637	227,700	83	4,227	4	4,227	4	4,986	4,986	227,700	212,482	3	2,004	569	0	0	1,174	0	27
28	2594.87	452,563	228,167	68	4,238	4	4,238	4	4,777	4,841	228,231	213,013	2	1,979	498	0	0	1,237	0	28
29	2594.98	453,798	228,790	95	4,247	5	4,247	5	4,970	4,815	228,699	213,481	3	1,894	439	0	0	1,201	0	29
30	2595.06	454,517	229,152	80	4,249	5	4,249	5	4,696	4,787	229,152	213,934	3	1,908	363	0	0	1,287	0	30
31	2595.15	455,445	229,620	80	4,281	5	4,281	5	4,834	4,834	229,620	214,402	3	1,938	360	0	0	1,314	0	31
TOTAL SECOND FOOT DAYS				1,808	120,709	116	155,505	116	155,505	155,505	229,620	214,402	64	63,714	24,938	0	6,977	24,509	7,025	
TOTAL ACRE-FEET				3,586	239,423	229	308,440	229	308,440	308,440	455,445	425,261	127	126,375	49,464	0	13,838	48,614	13,933	

By: *APL*

Date: *June 25, 1988*

HACIENDA WATER DISTRICT

HACIENDA WATER DISTRICT

HACIENDA WATER DISTRICT

DAY	Previous Day	FLOW ABOVE 1ST POINT		KERN VALLEY GOLF COURSE		RESERVOIR LOSS STORAGE		ENTL AT 2ND POINT		FLOW			ENTITLEMENT Contributed by:		RESERVOIR LOSS STORAGE		FLOW ABOVE 1ST POINT		LOSS STORAGE	DAY					
		ENTL AT 1ST POINT	FLOW AT 1ST POINT	FLOW AT 1ST POINT	FLOW AT 1ST POINT	ENTL AT 2ND POINT	RESERVOIR LOSS STORAGE	RESERVOIR LOSS STORAGE	ENTL AT 2ND POINT	ENTL AT 2ND POINT	ENTL AT 2ND POINT	ENTL AT 2ND POINT	ENTL AT 2ND POINT	ENTL AT 2ND POINT	ENTL AT 2ND POINT			ENTL AT 2ND POINT	ENTL AT 2ND POINT						
1	2,678	3,426	1	0	53	90,944	1,953	0	0	0	0	0	0	0	0	0	0	0	0	0	1	19	36,306		
2	2,727	2,941	1	0	41	90,688	2,098	0	0	0	0	0	0	0	24	56,354	937	228	693	0	0	2	15	96,761	
3	2,783	2,948	1	1	38	90,483	2,163	0	0	0	0	0	0	0	23	58,494	960	234	695	0	0	1	14	37,244	
4	2,798	2,679	1	0	7	90,594	2,183	0	0	0	0	0	0	0	4	60,396	968	235	694	0	0	2	0	37,748	
5	2,814	1,586	1	0	1	91,820	2,202	0	0	0	0	0	0	0	1	61,213	974	237	698	0	0	1	1	38,258	
6	2,916	1,583	1	0	1	93,151	2,322	0	0	0	0	0	0	0	1	62,101	1,017	248	707	0	0	2	0	38,813	
7	2,707	1,620	1	0	9	94,228	2,074	0	0	0	0	0	0	0	5	62,818	929	226	702	0	0	1	3	39,261	
8	2,483	1,687	1	0	7	95,016	1,805	0	0	0	0	0	0	0	4	63,344	833	203	702	0	0	2	0	39,590	
9	2,428	1,697	1	0	21	95,725	1,739	0	0	0	0	0	0	0	14	63,816	809	197	701	0	0	1	1	39,885	
10	2,391	1,712	1	0	31	96,372	1,693	0	0	0	0	0	0	0	20	64,248	793	193	701	0	0	2	1	40,155	
11	2,406	1,701	1	1	32	97,043	1,711	0	0	0	0	0	0	0	20	64,696	799	195	701	0	0	0	12	40,435	
12	2,411	1,698	1	0	29	97,726	1,719	0	0	0	0	0	0	0	18	65,151	802	195	699	0	0	2	1	40,719	
13	2,370	1,740	1	0	1	98,354	1,689	0	0	0	0	0	0	0	1	65,569	784	191	709	0	0	2	1	40,981	
14	2,286	1,763	1	0	7	98,869	1,570	0	0	0	0	0	0	0	5	65,912	750	182	713	0	0	1	3	41,195	
15	2,159	1,818	1	0	27	99,182	1,415	0	0	0	0	0	0	0	17	66,122	694	189	719	0	0	2	0	41,326	
16	2,059	1,911	1	1	30	99,298	1,295	0	0	0	0	0	0	0	19	66,199	651	159	748	0	0	1	12	41,374	
17	2,028	1,918	1	0	29	99,378	1,260	0	0	0	0	0	0	0	18	66,252	639	155	746	0	0	2	1	41,408	
18	2,015	1,926	2	0	39	99,426	1,243	0	0	0	0	0	0	0	25	66,284	633	154	751	0	0	1	15	41,427	
19	2,038	1,984	1	0	34	99,445	1,271	0	0	0	0	0	0	0	22	66,296	643	156	774	0	0	2	1	41,435	
20	2,055	1,983	2	1	44	99,470	1,293	0	0	0	0	0	0	0	29	66,313	651	158	780	0	0	1	17	41,446	
21	2,129	1,964	1	1	39	99,595	1,380	0	0	0	0	0	0	0	25	66,396	681	166	777	0	0	2	1	41,498	
22	2,169	1,952	2	0	39	99,771	1,429	0	0	0	0	0	0	0	25	66,514	699	170	780	0	0	1	15	41,571	
23	2,231	1,944	1	0	43	100,014	1,502	0	0	0	0	0	0	0	28	66,676	725	177	780	0	0	2	1	41,673	
24	2,275	1,933	2	0	42	100,312	1,556	0	0	0	0	0	0	0	27	66,874	744	181	784	0	0	1	16	41,796	
25	2,351	1,920	1	1	42	100,699	1,646	0	0	0	0	0	0	0	27	67,133	777	189	786	0	0	2	0	41,958	
26	2,407	1,925	2	0	30	101,149	1,713	0	0	0	0	0	0	0	20	67,432	800	195	794	0	0	1	12	42,145	
27	2,498	1,949	1	0	29	101,669	1,826	0	0	0	0	0	0	0	19	67,779	841	204	814	0	0	2	1	42,362	
28	2,360	1,994	2	0	41	101,992	1,656	0	0	0	0	0	0	0	26	67,994	780	190	818	0	0	2	0	42,496	
29	2,306	2,017	1	1	33	102,246	1,593	0	0	0	0	0	0	0	22	68,164	758	184	820	0	0	1	13	42,603	
30	2,296	2,022	2	0	47	102,471	1,582	0	0	0	0	0	0	0	30	68,314	754	183	823	0	0	2	1	42,696	
31	2,287	2,028	1	1	40	102,688	1,569	0	0	0	0	0	0	0	25	68,459	749	182	822	0	0	2	1	42,787	
32	2,304	2,037	2	0	40	102,913	1,590	0	0	0	0	0	0	0	25	68,609	756	184	829	0	0	2	1	42,880	
S.F.D.	73,488	60,580	39	7	893	102,913	51,767	0	0	0	0	0	0	0	569	68,609	24,330	5,920	23,260	0	0	49	21	346	42,880 S.F.D.
AC.F.T.	145,762	120,158	77	13	1,771	204,126	102,678	0	0	0	0	0	0	0	1,129	136,084	48,258	11,742	46,136	0	0	98	41	686	85,051 AC.F.T.
TOTAL ACRE-FOOT STORAGE DAYS		6,033,293		TOTAL ACRE-FOOT STORAGE DAYS		4,010,422		TOTAL ACRE-FOOT STORAGE DAYS		2,510,926		TOTAL ACRE-FOOT STORAGE DAYS		2,510,926											

Quantities in S.F.D. except where noted

JUNE 1988

REPORT OF THE KERN RIVER WATERMASTER

DAY	ELEVATION (FEET)	ISABELLA		RESERVOIR		FIRST POINT REGULATED FLOW	FLOW ABOVE 1ST PT.	CHANGE IN STORAGE + LOSS	COMPUTED 1ST POINT FLOW	MEAN TOTAL IRRIGATION	STORAGE Recreation Pool + Dead Storage = 15,218 S.F.D. (\$0.184 ACFT)	KERN COUNTY RECREATION POOL LOSS	TOTAL FLOW AT SECOND POINT	SECOND POINT GROUP FLOW		KERN RIVER INTERTIE			
		ACRE- FEET	S.F.D.	LOSS	AT 2ND POINT									RIVER	KERN	FRIANT- KERN	FRIANT- KERN		
Previous Day	2595.15	455,445	229,620	80	4,281	5	4,834	4,834	229,620	214,402	3	1,938	360	0	0	1,314	0		
1	2595.28	456,785	230,296	106	4,513	6	5,301	5,301	230,296	215,078	3	1,986	370	0	0	1,332	0		
2	2595.45	458,543	231,182	100	4,580	6	5,572	5,672	231,282	216,064	3	1,953	530	0	0	1,163	0		
3	2595.67	460,821	232,331	53	4,662	7	5,871	5,693	232,253	217,035	2	1,911	365	0	0	1,295	0		
4	2595.82	462,376	233,115	94	4,751	6	5,635	5,678	233,080	217,862	3	1,966	374	0	0	1,304	0		
5	2595.95	463,729	233,797	94	4,745	6	5,527	5,593	233,828	218,610	3	1,997	492	0	0	1,239	0		
6	2596.10	465,289	234,583	88	4,738	6	5,618	5,694	234,690	219,472	3	2,035	561	0	0	1,213	0		
7	2596.33	467,582	235,739	76	4,698	6	5,936	5,789	235,699	220,481	2	2,025	538	0	0	1,220	0		
8	2596.52	469,672	236,793	79	4,675	6	5,814	5,844	236,783	221,565	2	1,970	541	0	0	1,199	0		
9	2596.71	471,664	237,797	92	4,681	6	5,783	5,825	237,829	222,611	3	2,025	532	0	0	1,221	0		
10	2596.92	473,867	238,908	79	4,681	6	5,877	5,870	238,933	223,715	2	2,120	566	0	0	1,287	0		
11	2597.14	476,181	240,075	83	4,696	6	5,962	5,801	239,949	224,731	3	2,072	518	0	0	1,277	0		
12	2597.29	477,760	240,871	67	4,704	6	5,573	5,697	240,869	225,651	2	2,102	526	0	0	1,316	0		
13	2597.43	479,240	241,617	102	4,710	7	5,565	5,501	241,551	226,333	3	2,193	655	0	0	1,276	0		
14	2597.53	480,295	242,149	84	4,744	6	5,366	5,702	242,419	227,201	3	2,390	895	0	0	1,250	0		
15	2597.76	482,729	243,376	118	4,823	6	6,174	6,247	243,719	228,501	4	2,382	939	0	0	1,173	0		
16	2598.18	487,193	245,627	132	4,812	7	7,202	6,859	245,627	230,409	4	2,218	626	0	0	1,335	0		
17	2598.66	492,315	248,209	113	4,811	7	7,513	7,513	248,209	232,991	3	2,058	487	0	0	1,328	0		
18	2598.07	496,710	250,425	130	4,820	6	7,172	7,177	250,430	235,212	4	1,842	341	0	0	1,260	0		
19	2599.48	501,126	252,651	147	4,808	7	7,188	7,218	252,686	237,468	4	1,825	301	0	0	1,231	0		
20	2599.91	505,775	254,995	141	4,802	7	7,294	7,163	254,899	239,681	4	1,856	389	0	0	1,227	0		
21	2600.28	509,790	257,019	138	4,839	7	7,008	7,085	257,000	241,782	4	1,790	380	0	0	1,168	0		
22	2600.63	513,605	258,943	139	4,883	7	6,953	6,824	258,795	243,577	4	1,792	453	0	0	1,083	0		
23	2600.90	516,557	260,431	126	4,888	7	6,509	6,566	260,340	245,122	4	1,792	593	0	0	976	0		
24	2601.12	518,967	261,646	129	4,885	7	6,236	6,439	261,758	246,540	4	1,827	725	0	0	890	0		
25	2601.40	522,044	263,197	119	4,896	7	6,573	6,530	263,266	248,048	3	1,920	896	0	0	785	0		
26	2601.71	525,460	264,920	150	4,901	7	6,781	6,563	264,771	249,553	4	1,956	777	0	0	947	0		
27	2601.94	528,001	266,201	140	4,907	7	6,335	6,492	266,209	250,991	4	2,060	862	0	0	950	0		
28	2602.17	530,547	267,484	157	4,913	7	6,360	6,380	267,512	252,294	4	2,055	899	0	0	922	0		
29	2602.42	533,322	268,883	131	4,907	7	6,444	6,416	268,883	253,665	4	1,970	762	0	0	990	0		
30	2602.62	535,769	270,117	178	4,916	7	6,335	6,335	270,117	254,899	5	2,074	1,038	0	133	667	133		
TOTAL SECOND FOOT DAYS													100	60,162	17,931	0	133	34,524	133
TOTAL ACRE - FEET													198	119,330	35,566	0	264	68,477	264

By:  Date: July 22, 1988

REPORT OF THE KERN RIVER WATERMASTER

JUNE 1956

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WATERMASTER NOTES * KERN RIVER BULLETIN**

<u>MONTH</u>	<u>DAY(S)</u>	<u>PAGE NO.</u>	<u>TITLE OF COLUMN</u>	<u>COMMENT</u>
June	1-30	1	FIRST POINT REGULATED FLOW	U.S. Army Corps of Engineers Mandatory Flood Control Release.
June	30	1	FRIANT-KERN INFLOW	Reflects Friant-Kern Inflow to Kern River Channel as a result of J.G. Boswell Company Kaweah River pump-in operations.

ISABELLA RESERVOIR -- SPRING SNOWMELT OPERATIONS
TOP TEN LATEST PEAK STORAGE VOLUMES WITH DATE OF OCCURRENCE

1954 TO DATE

<u>Rank</u>	<u>Year</u>	<u>Peak Storage</u>	<u>Date of Occurrence</u>
1	1998	562,134	July 21
2	1967	538,698	July 20
3	1995	551,921	July 19
4	1978	491,451	July 16
5	1969	578,116	July 14
6	1965	288,937	July 9
7	1983	630,825	July 6
8	1980	585,381	July 3
9	1956	283,033	June 30
10	1993	416,982	June 29
	1982	560,083	June 29
	1973	399,448	June 29
	1962	173,675	June 29

Quantities in S.F.D. except where noted

JULY 1998

REPORT OF THE KERN RIVER WATERMASTER

DAY	ELEVATION (FEET)	ISABELLA		RESERVOIR		FIRST POINT FLOW	REGULATED ABOVE 1ST PT.	FLOW	CHANGE IN		MEAN STORAGE	STORAGE	KERN COUNTY RECREATION POOL LOSS	TOTAL FLOW AT SECOND POINT	SECOND POINT			KERN RIVER		
		ACRE-FEET	MIDNIGHT STORAGE	S.F.D.	LOSS				STORAGE +LOSS	+1ST POINT					1ST POINT	NATURAL FLOW	1ST POINT	AT 2ND POINT	FRONT-KERN	FRONT-KERN
Previous Day	2602.62	535,769	270,117	178	4,916	7	6,335	6,335	270,117	254,899	5	2,074	1,038	0	133	667	133			
1	2602.82	537,775	271,128	169	4,897	9	6,086	6,086	271,128	255,910	5	2,068	913	0	200	724	200			
2	2603.02	540,008	272,254	166	4,883	9	6,184	6,184	272,254	257,036	4	2,115	990	0	271	613	271			
3	2603.21	542,136	273,327	119	4,877	9	6,078	6,022	273,271	258,053	3	2,142	914	0	234	742	234			
4	2603.37	543,929	274,231	134	4,862	9	5,909	5,813	274,079	258,861	4	2,150	972	0	200	734	200			
5	2603.45	544,828	274,684	134	4,855	9	5,451	5,565	274,646	259,428	4	2,169	1,041	0	133	753	133			
6	2603.52	545,612	275,080	145	4,784	9	5,334	5,254	274,962	259,744	4	2,145	1,032	0	167	687	167			
7	2603.59	546,399	275,476	170	4,403	9	4,978	5,127	275,507	260,289	5	1,738	717	0	200	612	200			
8	2603.69	547,525	276,044	131	4,362	9	5,070	5,167	276,172	260,954	3	1,388	953	0	0	185	0			
9	2603.86	549,439	277,009	163	4,317	9	5,454	5,294	276,977	261,759	4	1,332	1,085	0	0	0	0			
10	2604.06	551,695	278,146	160	4,053	9	5,359	4,922	278,000	262,782	4	1,187	942	0	0	0	0			
11	2604.19	553,166	278,888	171	4,000	9	4,922	4,922	278,742	263,524	4	1,199	955	0	0	0	0			
12	2604.26	553,955	279,286	153	3,926	9	4,486	4,680	279,334	264,116	4	1,192	934	0	66	0	0			
13	2604.36	555,089	279,858	153	3,899	9	4,633	4,489	279,762	264,544	4	1,192	931	0	167	0	0			
14	2604.46	556,223	280,429	187	3,580	9	4,347	4,441	280,427	265,209	5	1,040	850	0	267	0	0			
15	2604.57	557,469	281,057	168	3,537	9	4,342	4,300	281,013	265,795	4	1,005	765	0	333	0	0			
16	2604.66	558,492	281,573	161	3,526	9	4,212	4,266	281,583	266,365	4	937	682	0	317	0	0			
17	2604.74	559,403	282,032	195	3,581	9	4,244	4,279	282,077	266,859	5	942	690	0	310	0	0			
18	2604.85	560,652	282,662	191	3,552	9	4,382	4,252	282,577	267,359	5	944	688	0	315	0	0			
19	2604.93	561,564	283,122	154	3,508	9	4,131	4,140	283,046	267,828	4	929	671	0	315	0	0			
20	2604.96	561,906	283,284	173	3,551	10	3,906	4,021	283,333	268,115	4	946	694	0	315	0	0			
21	2604.98	562,134	283,409	176	3,725	9	4,025	3,937	283,360	268,142	5	987	732	0	315	0	0			
22	2604.96	561,906	283,294	176	3,811	9	3,881	4,001	283,365	268,147	5	1,005	694	0	268	0	0			
23	2605.00	562,362	283,524	173	3,686	9	4,098	3,956	283,453	268,235	4	997	714	0	240	0	0			
24	2605.01	562,474	283,581	184	3,638	9	3,888	3,818	283,440	268,222	5	1,003	738	0	240	0	0			
25	2604.97	562,020	283,352	154	3,533	9	3,467	3,475	283,219	268,001	4	933	683	0	240	0	0			
26	2604.88	560,994	282,835	176	3,402	9	3,070	3,158	282,790	267,572	5	833	587	0	240	0	0			
27	2604.78	559,855	282,260	187	3,316	9	2,937	2,886	282,164	266,946	5	738	502	0	240	0	0			
28	2604.67	558,606	281,631	172	3,098	9	2,650	2,729	281,614	266,396	4	578	392	0	240	0	0			
29	2604.53	557,015	280,829	187	3,206	9	2,600	2,561	280,773	265,555	5	548	369	0	240	0	0			
30	2604.36	555,089	279,858	154	3,240	9	2,432	2,488	279,858	264,640	5	477	338	0	187	0	0			
31	2604.17	552,939	278,774	157	3,194	9	2,276	2,276	278,774	263,556	4	474	332	0	100	0	0			
TOTAL	SECOND FOOT DAYS	5,093	120,802	280	134,832	134,832	267,435	267,435	552,939	522,755	133	37,333	23,500	0	6,360	5,050	1,405			
TOTAL	ACRE-FEET	10,102	239,607	556	267,435	267,435	267,435	267,435	552,939	522,755	264	74,049	46,612	0	12,614	10,017	2,786			

By:  Date: August 26, 1998

REPORT OF THE KERN RIVER WATERMASTER

JULY 1998

PAGE 5 of 5

WATERMASTER NOTES * KERN RIVER BULLETIN**

COMMENT
 Reflects Friant-Kern Inflow to Kern River Channel as a result of J.G. Boswell Company Kaweah River pump-in operations (1,405 s.f.d.; 2,786 acre-foot).
 Reflects Friant-Kern Inflow to Kern River Channel on behalf of Kern County Water Agency. U.S. Army Corps of Engineers Mandatory Flood Control Release.
 Delivered as per terms of Kern County Water Agency-ID4/HACIENDA WATER DISTRICT exchange agreement dated June 29, 1998.
 Delivered as per terms of Kern County Water Agency/HACIENDA WATER DISTRICT Kern River water sale agreement dated August 3, 1998.

MONTH	DAY(S)	PAGE NO.	TITLE OF COLUMN
July	1-7	1	FRIANT-KERN INFLOW
July	12-31	1	FRIANT-KERN INFLOW
July	1-10	1	FIRST POINT REGULATED FLOW
July	11	2	HACIENDA WD FLOW - FOR ID4
July	31	2	HACIENDA WD FLOW - FOR KOWA

KERN RIVER NATURAL FLOW
FIRST POINT OF MEASUREMENT
 APRIL - JULY
 1994 TO DATE

In order of Magnitude

YEAR	Quantities in acre-feet				% OF AVERAGE
	APR	MAY	JUN	JUL	
1961	24,137	29,980	24,305	8,952	18%
1962	28,540	41,722	14,069	8,225	19%
1977	23,391	25,630	35,659	10,973	20%
1931	23,440	41,867	24,262	8,493	21%
1976	25,924	47,151	14,749	10,874	23%
1990	32,019	38,600	29,345	13,380	24%
1934	39,919	43,065	21,820	11,341	24%
1972	28,288	45,965	38,531	14,836	27%
1959	40,566	39,945	32,061	18,013	27%
1898	42,248	45,213	32,809	15,033	28%
1988	39,594	56,350	43,140	20,969	34%
1960	46,272	56,336	47,161	16,883	35%
1992	55,448	61,521	54,668	23,987	38%
1964	46,439	67,224	56,223	21,068	39%
1928	37,757	76,885	60,344	18,716	40%
1900	28,102	66,295	76,366	24,125	41%
1949	50,517	84,508	57,685	17,201	44%
1987	55,236	75,108	56,146	24,918	44%
1913	42,494	73,961	60,798	34,829	44%
1889	53,133	79,178	30,046	213,710	44%
1929	39,094	85,965	63,487	30,986	46%
1968	68,779	82,396	45,431	21,952	46%
1955	53,506	67,851	86,660	31,014	47%
1926	66,079	98,398	49,530	23,491	49%
1989	91,380	71,949	73,765	21,372	49%
1971	52,661	67,391	82,054	31,331	49%
1968	65,594	107,351	57,778	244,475	50%
1947	60,353	100,925	30,690	30,690	50%
1989	43,876	86,108	73,765	42,472	51%
1971	52,661	67,391	82,054	31,331	52%
1968	65,594	107,351	57,778	244,475	52%
1947	60,353	100,925	30,690	30,690	52%
1971	52,661	67,391	82,054	31,331	52%
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1971	52,661	67,391	82,054	31,331	52%
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1971	52,661	67,391	82,054	31,331	52%
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1971	52,661	67,391	82,054	31,331	52%
1968	65,594	107,351	57,778	244,475	52%
1947	60,353	100,925	30,690	30,690	52%
1971	52,661	67,391	82,054	31,331	52%
1968	65,594	107,351	57,778	244,475	52%
1947	60,353	100,925	30,690	30,690	52%
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1947	60,353	100,925	30,690	30,690	52%
1971	52,661	67,391			

Quantities in S.F.D. except where noted

AUGUST 1998

REPORT OF THE KERN RIVER WATERMASTER

DAY	ELEVATION (FEET)	ISABELLA RESERVOIR		LOSS	FIRST POINT FLOW	FLOW ABOVE 1ST PT.	CHANGE IN STORAGE+LOSS		COMPUTED 1ST POINT NATURAL FLOW	MEAN TOTAL IRRIGATION	STORAGE Recreation Pool + Dead Storage = 15,218 S.F.D. (90,184 ACFT)	KERN COUNTY RECREATION POOL LOSS	TOTAL FLOW AT SECOND POINT	SECOND POINT GROUP FLOW AT 2ND POINT		FRIANT-KERN INFLOW
		ACRE- FEET	S.F.D.				+1ST POINT	+FLOW ABOVE						KERN RIVER	FRIANT-KERN	
Previous Day	2604.17	552,939	278,774	157	3,194	9	2,276	2,276	2,276	278,774	263,556	4	474	332	0	100
1	2603.97	550,681	277,635	143	3,183	8	2,195	2,195	2,195	277,635	262,417	4	424	289	0	1
2	2603.83	549,100	276,838	170	3,064	8	2,445	2,408	2,408	276,801	261,583	5	353	246	0	2
3	2603.80	548,762	276,688	177	2,319	8	2,334	2,304	2,275	276,572	261,354	5	160	160	0	3
4	2603.73	547,976	276,271	193	2,240	9	2,045	2,132	2,132	276,262	261,044	5	212	212	0	4
5	2603.64	546,962	275,760	205	2,314	8	2,016	1,929	1,929	275,664	260,446	5	169	169	0	5
6	2603.42	544,490	274,514	185	2,778	9	1,726	1,836	1,836	274,528	259,310	5	217	217	0	6
7	2603.09	540,792	272,649	238	3,386	8	1,767	1,813	1,813	272,709	257,491	6	511	435	0	7
8	2602.80	537,552	271,016	195	3,374	9	1,945	1,821	1,796	270,952	255,734	5	474	342	0	8
9	2602.46	533,767	269,108	195	3,457	8	1,752	1,796	1,796	269,088	253,870	5	448	299	0	9
10	2602.08	529,549	266,981	163	3,645	9	1,690	1,693	1,693	266,964	251,746	4	460	286	0	10
11	2601.70	525,349	264,864	159	3,588	8	1,638	1,692	1,650	264,901	249,683	4	505	313	0	11
12	2601.34	521,383	262,864	136	3,604	9	1,749	1,663	1,663	262,815	247,597	4	543	359	0	12
13	2600.94	516,995	260,652	154	3,653	8	1,603	1,694	1,694	260,694	245,476	4	590	344	0	13
14	2600.56	512,841	258,557	172	3,645	9	1,731	1,595	1,595	258,463	243,245	5	605	310	0	14
15	2600.14	508,270	256,253	157	3,590	8	1,451	1,650	1,650	256,358	241,140	4	595	342	0	15
16	2599.76	504,149	254,175	174	3,664	8	1,768	1,555	1,555	254,067	238,849	5	648	394	0	16
17	2599.32	499,399	251,780	174	3,660	8	1,447	1,516	1,516	251,741	236,523	5	643	390	0	17
18	2598.86	494,457	249,289	166	3,649	9	1,333	1,425	1,425	249,342	234,124	5	637	391	0	18
19	2598.45	490,071	247,078	147	3,551	8	1,495	1,351	1,351	246,987	231,769	4	553	318	0	19
20	2598.01	485,383	244,714	132	3,449	8	1,225	1,350	1,350	244,748	229,530	4	492	337	0	20
21	2597.60	481,036	242,522	149	3,364	9	1,330	1,259	1,259	242,485	227,267	5	499	288	0	21
22	2597.20	476,813	240,393	148	3,195	8	1,222	1,221	1,221	240,355	225,137	4	472	284	0	22
23	2596.78	472,396	238,166	148	3,181	9	1,111	1,172	1,172	238,189	222,971	5	463	248	0	23
24	2596.36	468,000	235,950	161	3,229	8	1,182	1,091	1,091	235,882	220,684	5	515	300	0	24
25	2595.90	463,208	233,534	146	3,241	8	979	1,067	1,067	233,554	218,336	5	512	295	0	25
26	2595.44	458,440	231,130	146	3,291	8	1,041	1,048	1,048	231,157	215,939	5	487	279	0	26
27	2595.00	453,901	228,842	149	3,255	8	1,124	1,079	1,079	228,824	213,606	5	473	273	0	27
28	2594.56	449,381	226,563	144	3,197	9	1,071	1,109	1,109	226,583	211,365	5	471	268	0	28
29	2594.15	445,192	224,451	154	3,083	8	1,133	1,053	1,053	224,391	209,173	5	423	239	0	29
30	2593.69	440,513	222,092	167	3,138	8	954	1,014	1,014	222,092	206,874	5	426	192	0	30
31	2593.25	436,061	219,848	177	3,206	8	1,147	1,147	1,147	219,848	204,630	6	387	158	0	31
TOTAL	SECOND FOOT DAYS			5,124	101,193	258	47,649	47,649	47,649	219,848	204,630	149	14,367	8,977	0	0
TOTAL	ACRE-FEET			10,163	200,713	512	94,510	94,510	94,510	436,061	405,877	296	28,496	17,805	0	0

By: 

Date: _____

September 23, 1998

Quantities in S.F.D. except where noted

AUGUST 1998

REPORT OF THE KERN RIVER WATERMASTER

HACIENDA WATER DISTRICT

BUENA VISTA WATER STORAGE DISTRICT

NORTH KERN WATER STORAGE DISTRICT

DAY	FLOW ABOVE 1ST POINT										FLOW										FLOW																																
	KERN VALLEY					AT 2ND POINT					VIA					PIONEER PROJECT					AT 2ND POINT					OLCESE HACIENDA					RESERVOIR					FOR					FOR					RESERVOIR							
	ENTL AT 1ST POINT	FLOW AT 1ST POINT	ENTL AT 1ST POINT	AT 1ST POINT	LAKE MING COURSE	RESERVOIR LOSS STORAGE	ENTL AT 2ND POINT	AT 2ND POINT	VIA FOR	KDWD CWD	VIA FOR	PIONEER PROJECT	ACRES	2ND POINT	AT 2ND POINT	WD INC.	INC.	LOSS STORAGE	RESERVOIR LOSS STORAGE	FOR ID4	FOR KCWA	FOR RRWSD	FOR A-EWSD	VIA WATER	BANK	LOSS STORAGE	DAY	ENTL AT 1ST POINT	FLOW AT 1ST POINT	ENTL AT 1ST POINT	AT 1ST POINT	LAKE MING COURSE	RESERVOIR LOSS STORAGE	ENTL AT 2ND POINT	AT 2ND POINT	VIA FOR	KDWD CWD	VIA FOR	PIONEER PROJECT	ACRES	2ND POINT	AT 2ND POINT	WD INC.	INC.	LOSS STORAGE	RESERVOIR LOSS STORAGE	FOR ID4	FOR KCWA	FOR RRWSD	FOR A-EWSD	VIA WATER	BANK	LOSS STORAGE
Previous Day	1,177	2,270	2	0	69	110,862	544	72	220	31	0	332	0	332	4	3	51	87,011	63	15	0	0	191	37	65,683	1	1,580	2,043	2	0	61	110,336	615	92	0	46	171	289	4	2	47	86,975	97	48	13	0	384	35	65,106	1			
1	1,580	2,043	2	0	61	110,336	615	92	0	46	171	289	4	2	47	86,975	97	48	13	0	384	35	65,106	1	1,580	2,043	2	0	61	110,336	615	92	0	46	171	289	4	2	47	86,975	97	48	13	0	384	35	65,106	1					
2	1,711	2,215	2	1	73	109,756	697	96	0	35	0	246	3	2	56	87,234	86	47	12	0	327	41	64,593	2	1,711	2,215	2	1	73	109,756	697	96	0	35	0	246	3	2	56	87,234	86	47	12	0	327	41	64,593	2					
3	1,629	1,849	2	0	76	109,458	646	90	0	0	0	160	4	2	59	87,565	57	33	10	0	120	42	64,331	3	1,629	1,849	2	0	76	109,458	646	90	0	0	160	4	2	59	87,565	57	33	10	0	120	42	64,331	3						
4	1,541	1,847	2	1	83	109,066	591	55	0	0	0	212	4	2	64	87,819	48	1	11	0	66	46	64,159	4	1,541	1,847	2	1	83	109,066	591	55	0	0	212	4	2	64	87,819	48	1	11	0	66	46	64,159	4						
5	1,411	1,910	2	0	87	108,478	518	65	0	25	0	169	4	2	69	88,003	57	13	14	0	61	49	63,965	5	1,411	1,910	2	0	87	108,478	518	65	0	25	0	169	4	2	69	88,003	57	13	14	0	61	49	63,965	5					
6	1,347	2,228	2	1	79	107,515	489	72	0	38	54	217	3	3	62	88,043	71	26	15	0	57	44	63,752	6	1,347	2,228	2	1	79	107,515	489	72	0	38	54	217	3	3	62	88,043	71	26	15	0	57	44	63,752	6					
7	1,332	2,226	2	0	101	106,518	481	53	0	64	156	435	4	2	80	87,730	202	6	47	0	197	57	63,243	7	1,332	2,226	2	0	101	106,518	481	53	0	64	156	435	4	2	80	87,730	202	6	47	0	197	57	63,243	7					
8	1,337	2,049	2	1	82	105,721	484	53	0	80	167	342	4	2	66	87,500	223	17	47	0	396	47	62,513	8	1,337	2,049	2	1	82	105,721	484	53	0	80	167	342	4	2	66	87,500	223	17	47	0	396	47	62,513	8					
9	1,320	2,042	2	0	83	104,914	476	93	0	76	215	299	3	3	66	87,221	221	49	45	0	417	46	61,735	9	1,320	2,042	2	0	83	104,914	476	93	0	76	215	299	3	3	66	87,221	221	49	45	0	417	46	61,735	9					
10	1,250	2,170	2	1	68	103,923	443	103	0	76	247	286	4	2	56	86,890	225	46	45	0	447	39	60,933	10	1,250	2,170	2	1	68	103,923	443	103	0	76	247	286	4	2	56	86,890	225	46	45	0	447	39	60,933	10					
11	1,249	2,044	2	0	67	103,059	443	115	0	46	275	313	4	2	54	86,524	226	53	45	0	471	38	60,100	11	1,249	2,044	2	0	67	103,059	443	115	0	46	275	313	4	2	54	86,524	226	53	45	0	471	38	60,100	11					
12	1,229	2,022	2	1	57	102,206	434	113	0	41	251	359	4	2	47	86,141	230	57	46	0	485	32	59,250	12	1,229	2,022	2	1	57	102,206	434	113	0	41	251	359	4	2	47	86,141	230	57	46	0	485	32	59,250	12					
13	1,251	2,032	2	0	65	101,358	443	96	0	35	179	344	3	3	53	85,871	284	81	58	0	544	36	58,247	13	1,251	2,032	2	0	65	101,358	443	96	0	35	179	344	3	3	53	85,871	284	81	58	0	544	36	58,247	13					
14	1,183	2,026	2	1	72	100,440	412	105	0	39	133	310	4	2	60	85,630	294	85	60	0	593	40	57,175	14	1,183	2,026	2	1	72	100,440	412	105	0	39	133	310	4	2	60	85,630	294	85	60	0	593	40	57,175	14					
15	1,221	2,026	2	0	66	99,567	429	84	0	34	122	342	4	2	55	85,416	286	81	58	0	557	36	56,157	15	1,221	2,026	2	0	66	99,567	429	84	0	34	122	342	4	2	55	85,416	286	81	58	0	557	36	56,157	15					
16	1,156	1,950	2	1	74	98,696	399	123	58	40	118	394	3	2	61	85,016	284	81	58	0	558	39	55,137	16	1,156	1,950	2	1	74	98,696	399	123	58	40	118	394	3	2	61	85,016	284	81	58	0	558	39	55,137	16					
17	1,129	1,820	2	0	74	97,929	387	117	218	45	97	390	4	2	61	84,469	285	85	59	0	544	39	54,125	17	1,129	1,820	2	0	74	97,929	387	117	218	45	97	390	4	2	61	84,469	285	85	59	0	544	39	54,125	17					
18	1,067	1,809	2	1	70	97,114	358	132	205	52	99	391	4	2	59	83,883	284	88	58	0	531	37	53,127	18	1,067	1,809	2	1	70	97,114	358	132	205	52	99	391	4	2	59	83,883	284	88	58	0	531	37	53,127	18					
19	1,017	1,788	2	0	63	96,278	334	135	198	41	120	318	3	3	52	83,947	230	56	44	0	531	37	53,127	19	1,017	1,788	2	0	63	96,278	334	135	198	41	120	318	3	3	52	83,947	230	56	44	0	531	37	53,127	19					
20	1,016	1,717	2	0	56	95,519	334	158	184	33	128	337	4	2	47	82,788	224	55	44	0	495	29	51,223	20	1,016	1,717	2	0	56	95,519	334	158	184	33	128	337	4	2	47	82,788	224	55	44	0	495	29	51,223	20					
21	954	1,626	2	1	64	94,780	305	138	192	25	129	288	4	2	53	82,262	236	51	45	0	559	32	50,225	21	954	1,626	2	1	64	94,780	305	138	192	25	129	288	4	2	53	82,262	236	51	45	0	559	32	50,225	21					
22	928	1,502	2	0	63	94,141	283	113	177	27	153	284	4	2	53	81,742	232	50	44	0	538	32	49,254	22	928	1,502	2	0	63	94,141	283	113	177	27	153	284	4	2	53	81,742	232	50	44	0	538	32	49,254	22					
23	895	1,452	2	1	64	93,517	277	120	180	27	195	248	3	3	53	81,190	230	55	43	0	558	31	48,264	23	895	1,452	2	1	64	93,517	277	120	180	27	195	248	3	3	53	81,190	230	55	43	0	558	31	48,264	23					
24	839	1,533	2	0	69	92,752	252	128	184	21	139	300	4	2	58	80,606	224	62	43	0	522	34	47,306	24	839	1,533	2	0	69	92,752	252	128	184	21	139	300	4	2	58	80,606	224	62	43	0	522	34	47,306	24					
25	823	1,548	2	0	63	91,962	244	132	198	32	130	295	4	2	53	79,997	224	57	43	0	502	30	46,377	25	823	1,548	2	0	63	91,962	244	132	198	32	130	295	4	2	53	79,997	224	57	43	0	502	30	46,377	25					
26	810	1,669	2																																																		

WATERMASTER NOTES *** KERN RIVER BULLETIN

MONTH	DAY(S)	PAGE NO.	TITLE OF COLUMN	COMMENT
August	1	2	HACIENDA WD FLOW - FOR RRBWS	Delivered as per terms of HACIENDA WATER DISTRICT (Bravo Management Company)/ Rosedale-Rio Bravo Water Storage District exchange agreement dated June 22, 1998.
August	19	2	HACIENDA WD FLOW - VIA A-EWSD	Delivered as per terms of HACIENDA WATER DISTRICT (Bravo Management Company)/ Arvin-Edison Water Storage District water sale agreement dated August 19, 1998.

1998 APRIL-JULY UNIMPAIRED RUNOFF
Central Valley Streams

Watershed	(1) 50-Year Average	Median Forecasts of				(2) 1998 Actual	% of Average
		Feb. 1	Mar. 1	Apr. 1	May 1		
Sacramento River above Bend Bridge	2,451	2,580	3,640	3,600	3,860	5,075	207%
Feather River at Oroville Reservoir	1,831	1,880	2,750	2,820	2,720	3,296	180%
Yuba River at Smartville	1,029	1,070	1,550	1,440	1,520	1,815	176%
American River at Folsom Reservoir	1,261	1,300	1,880	1,820	1,960	2,370	188%
Cosumnes River at Michigan Bar	128	120	190	190	220	319	249%
Mokelumne River at Pardee Reservoir	459	480	690	670	700	852	186%
Stanislaus River at Melones Reservoir	699	710	1,070	1,050	1,090	1,342	192%
Tuolumne River at Don Pedro Reservoir	1,184	1,210	1,840	1,850	1,930	2,242	189%
Merced River at Lake McClure	611	620	950	980	1,040	1,216	199%
San Joaquin River at Millerton Lake	1,212	1,200	1,840	1,940	2,050	2,306	190%
Kings River at Pine Flat Reservoir	1,183	1,140	1,820	1,910	2,020	2,246	190%
Kaweah River at Terminus Reservoir	276	260	460	480	540	670	243%
Tule River at Success Reservoir	59	55	130	145	180	259	439%
KERN RIVER AT ISABELLA RESERVOIR	442	440	880	950	950	1,039	235%

(1) All 50-year averages are based on data for water years 1946-1995 (2) Source: State of California Department of Water Resources

DAY	ELEVATION (FEET)	ISABELLA		RESERVOIR		LOSS	FIRST POINT FLOW REGULATED	FLOW ABOVE 1ST PT.	CHANGE IN		COMPUTED 1ST POINT NATURAL FLOW	MEAN STORAGE	KERN COUNTY RECREATION POOL LOSS	TOTAL FLOW AT SECOND POINT	SECOND POINT GROUP FLOW		DAY
		ACRE- FEET	MIDNIGHT STORAGE	S.F.D.	STORAGE + LOSS				AT 2ND POINT	KERN FRIANT - KERN INFLOW							
Previous Day	2593.25	436,061	219,848	177	3,206	8	1,147	1,147	219,848	204,630	6	387	158	0	0	0	1
1	2592.84	431,929	217,764	123	3,104	6	1,149	1,149	217,764	202,546	4	335	177	0	0	0	2
2	2592.46	428,119	215,843	81	2,992	5	1,157	1,129	215,815	200,597	3	249	140	0	0	0	3
3	2592.08	424,324	213,930	103	2,876	6	1,072	1,178	214,008	198,790	4	230	137	0	0	0	4
4	2591.80	421,538	212,526	58	2,646	5	1,305	1,245	212,544	197,326	2	217	129	0	0	0	5
5	2591.58	419,356	211,425	77	2,377	6	1,359	1,287	211,371	196,153	3	188	95	0	0	0	6
6	2591.35	417,080	210,278	84	2,255	5	1,197	1,249	210,276	195,058	3	178	91	0	0	0	7
7	2591.11	414,712	209,084	105	2,274	5	1,190	1,168	209,060	193,842	4	163	84	0	0	0	8
8	2590.85	412,154	207,794	105	2,297	6	1,118	1,172	207,824	192,606	4	127	70	0	0	0	9
9	2590.61	409,800	206,608	141	2,246	6	1,207	1,120	206,551	191,333	5	122	73	0	0	0	10
10	2590.37	407,452	205,424	123	2,092	5	1,036	1,054	205,385	190,167	5	103	43	0	0	0	11
11	2589.13	405,111	204,244	108	1,986	6	920	967	204,252	189,034	4	98	28	0	0	0	12
12	2589.91	402,970	203,164	104	1,915	6	945	896	203,123	187,905	4	102	26	0	0	0	13
13	2589.66	400,545	201,942	122	1,919	5	824	852	201,929	186,711	5	100	24	0	0	0	14
14	2589.38	397,837	200,576	117	2,032	5	788	833	200,608	185,390	4	93	21	0	0	0	15
15	2589.13	395,426	199,361	106	1,992	5	888	820	199,325	184,107	4	82	18	0	0	0	16
16	2588.89	393,119	198,198	128	1,812	6	783	813	198,192	182,974	5	39	14	0	0	0	17
17	2588.64	390,723	196,990	141	1,829	5	767	740	196,957	181,739	6	25	11	0	0	0	18
18	2588.40	388,430	195,834	116	1,704	5	669	703	195,835	180,617	5	0	0	0	0	0	19
19	2588.19	386,429	194,825	119	1,558	6	674	656	194,808	179,590	5	0	0	0	0	0	20
20	2587.98	384,528	193,866	91	1,487	6	625	642	193,866	178,648	4	0	0	0	0	0	21
21	2587.77	382,440	192,814	126	1,548	5	627	637	192,824	177,606	5	0	0	0	0	0	22
22	2587.56	380,455	191,813	90	1,563	6	658	641	191,806	176,588	4	0	0	0	0	0	23
23	2587.35	378,474	190,814	87	1,546	5	639	651	190,819	175,601	4	0	0	0	0	0	24
24	2587.16	376,687	189,913	80	1,470	6	655	599	189,862	174,644	3	0	0	0	0	0	25
25	2586.95	374,716	188,919	97	1,394	6	503	583	188,948	173,730	4	0	0	0	0	0	26
26	2586.78	373,123	188,116	86	1,302	5	590	556	188,111	172,893	4	0	0	0	0	0	27
27	2586.61	371,536	187,316	83	1,286	5	574	577	187,314	172,096	3	0	0	0	0	0	28
28	2586.43	369,858	186,470	89	1,318	6	567	565	186,466	171,248	4	0	0	0	0	0	29
29	2586.24	368,092	185,580	75	1,363	6	554	558	185,580	170,362	3	0	0	0	0	0	30
30	2586.06	366,420	184,737	85	1,405	5	652	652	184,737	169,519	3	0	0	0	0	0	0
TOTAL SECOND FOOT DAYS				3,050	57,588	165	25,692	25,692	184,737	169,519	121	2,451	1,181	0	0	0	
TOTAL ACRE - FEET				6,050	114,224	327	50,959	50,959	366,420	336,236	240	4,861	2,342	0	0	0	

By:  Date: October 22, 1988

HACIENDA WATER DISTRICT

BUENA VISTA WATER STORAGE DISTRICT

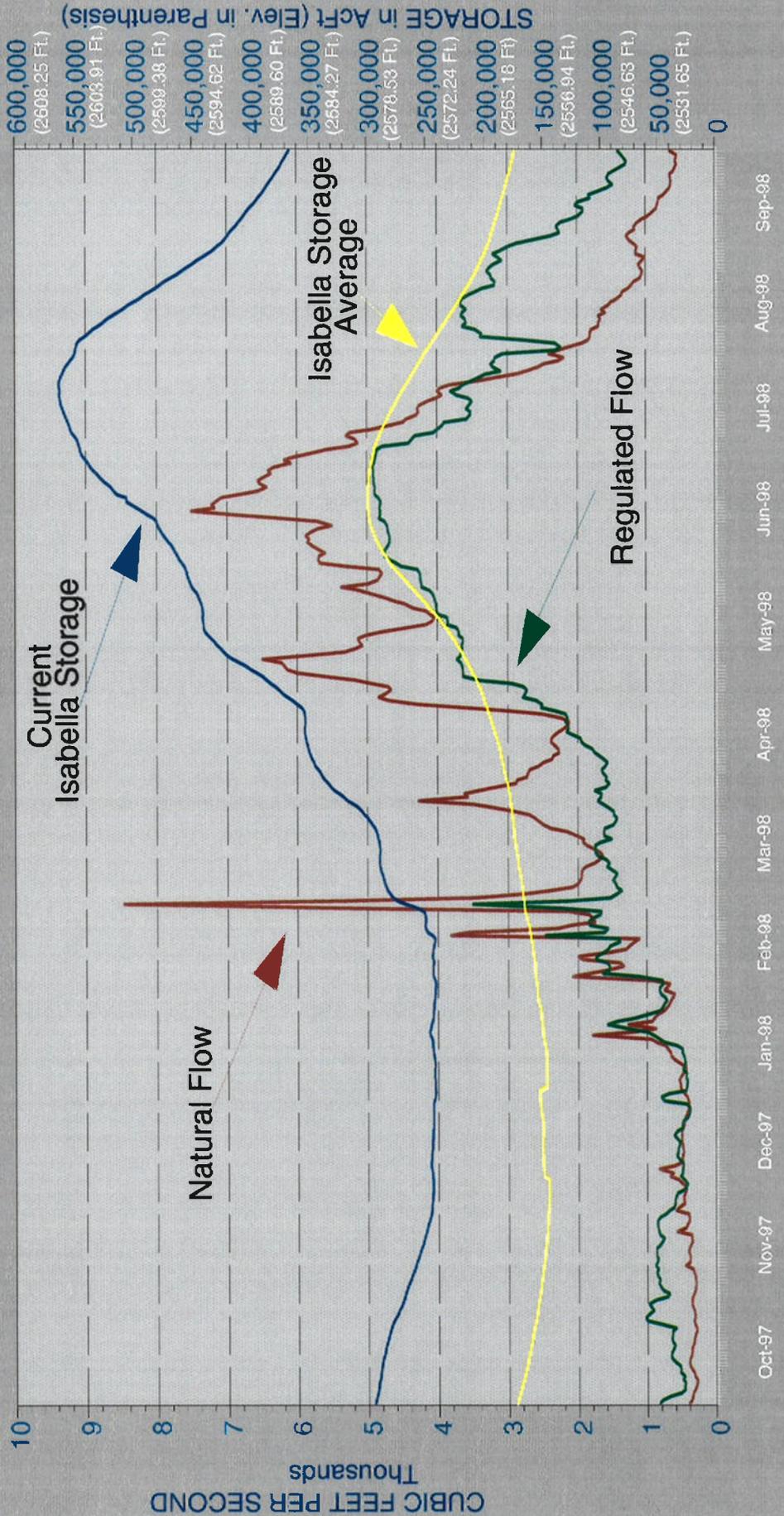
NORTH KERN WATER STORAGE DISTRICT

Previous Day	ENTL AT 1ST POINT		FLOW ABOVE 1ST POINT		KERN VALLEY GOLF COURSE		RESERVOIR LOSS STORAGE		ENTL AT 1ST POINT		FLOW		AT 2ND POINT		FLOW ABOVE 1ST PT. CARMEL WATER		RESERVOIR LOSS STORAGE		TRANS. LOSS		FOR KCWA RRBWSD A-EMSD		KERN WATER BANK		RESERVOIR LOSS STORAGE		DAY						
	DAY	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	VIA	FOR	FOR	FOR	FOR	FOR	FOR	FOR	FOR	FOR	FOR	FOR	FOR	FOR	FOR	FOR	FOR	FOR				
1	878	1,672	2	0	77	86,890	0	122	191	0	132	0	158	6	65	76,852	0	223	67	43	73	486	35	40,888	35	40,888	1						
2	1,149	1,592	1	1	53	85,753	0	92	185	0	117	0	177	4	46	76,231	11	239	131	45	75	440	24	40,562	24	40,562	2						
3	1,129	1,530	2	0	35	85,315	0	98	228	0	122	0	140	3	30	75,610	11	239	121	45	76	382	16	39,672	16	39,672	3						
4	1,178	1,477	2	0	45	84,969	0	99	224	0	114	0	137	4	38	74,994	13	232	121	44	73	342	20	38,827	20	38,827	4						
5	1,245	1,372	1	0	25	84,816	0	66	229	0	95	0	129	4	22	74,449	11	208	116	37	62	321	11	38,061	11	38,061	5						
6	1,287	1,207	2	1	34	84,859	0	62	192	0	98	0	95	3	29	73,970	10	181	131	30	51	320	14	37,324	14	37,324	6						
7	1,249	1,066	2	0	38	85,002	0	58	158	0	119	0	91	3	31	73,510	14	217	146	35	58	293	15	36,546	15	36,546	7						
8	1,168	1,059	1	0	47	85,063	0	58	161	0	127	0	84	4	39	73,037	15	222	160	38	63	287	19	35,742	19	35,742	8						
9	1,172	1,083	2	0	47	85,103	0	72	162	0	149	0	70	4	39	72,541	14	231	135	42	70	269	19	34,962	19	34,962	9						
10	1,120	1,016	1	1	64	85,141	0	78	188	0	144	0	73	4	52	72,002	11	224	136	41	68	267	25	34,190	25	34,190	10						
11	1,054	956	2	0	56	85,181	0	84	163	0	140	0	43	3	46	71,523	13	204	115	36	60	278	21	33,463	21	33,463	11						
12	967	872	1	1	50	85,224	0	76	165	0	145	0	28	4	40	71,065	10	203	113	37	62	275	18	32,745	18	32,745	12						
13	896	852	2	0	48	85,218	0	38	118	39	156	0	26	4	39	70,645	16	172	138	33	56	271	17	32,042	17	32,042	13						
14	852	849	1	0	57	85,163	0	29	113	224	184	226	24	4	45	69,796	7	0	136	31	52	44	20	31,752	20	31,752	14						
15	833	890	2	0	55	85,049	0	32	163	248	149	273	21	3	43	68,864	4	0	145	40	67	0	19	31,477	19	31,477	15						
16	820	933	1	1	50	84,884	0	28	160	254	121	278	18	3	39	67,963	3	0	79	44	74	0	17	31,260	17	31,260	16						
17	813	1,014	2	0	60	84,621	0	23	178	213	114	79	14	4	47	67,291	2	0	57	44	74	0	21	31,062	21	31,062	17						
18	740	1,047	1	0	67	84,246	0	27	169	199	134	16	11	4	51	66,680	5	0	106	43	72	0	23	30,813	23	30,813	18						
19	703	1,016	2	0	55	83,876	0	26	168	172	105	0	0	3	42	66,164	7	0	110	37	63	0	19	30,577	19	30,577	19						
20	656	972	1	1	57	83,501	0	28	115	153	119	0	0	4	43	65,702	4	0	85	31	51	0	15	30,387	15	30,387	20						
21	642	929	2	0	43	83,169	0	30	113	145	125	0	0	4	33	65,252	3	0	75	25	42	0	15	30,227	15	30,227	21						
22	637	898	1	0	61	82,846	0	24	141	185	118	0	0	4	45	64,735	5	0	91	32	54	0	20	30,025	20	30,025	22						
23	641	842	2	1	43	82,599	0	23	143	263	104	0	0	3	32	64,167	5	0	94	33	56	0	15	29,822	15	29,822	23						
24	651	864	1	0	42	82,343	0	23	115	260	106	0	0	4	31	63,628	3	0	84	34	57	0	14	29,630	14	29,630	24						
25	599	814	2	0	38	82,088	0	23	113	235	124	0	0	4	29	63,100	6	0	83	27	45	0	13	29,456	13	29,456	25						
26	583	798	1	1	46	81,825	0	19	112	216	115	0	0	4	35	62,599	4	0	58	27	45	0	16	29,306	16	29,306	26						
27	556	704	2	0	41	81,634	0	16	112	196	143	0	0	3	31	62,098	4	0	76	19	32	0	14	29,161	14	29,161	27						
28	577	664	1	0	41	81,505	0	16	114	208	162	0	0	4	29	61,565	4	0	72	17	29	0	13	29,026	13	29,026	28						
29	565	680	2	0	44	81,344	0	22	119	216	136	0	0	4	31	61,037	4	0	83	22	36	0	14	28,867	14	28,867	29						
30	558	739	1	1	37	81,124	0	24	86	234	143	0	0	4	26	60,520	6	0	67	24	40	0	12	28,718	12	28,718	30						
30	652	768	2	0	41	80,965	0	29	90	236	141	0	0	3	30	59,991	6	0	71	24	40	0	14	28,563	14	28,563	30						
S.F.D.	25,692	29,503	46	9	1,420	80,965	0	1,323	4,497	3,896	3,869	872	1,181	110	1,113	59,991	231	2,572	3,135	1,017	1,703	3,789	517	28,563	S.F.D.	28,563	S.F.D.	28,563					
AC.FT.	50,959	58,517	91	18	2,817	160,592	0	2,624	8,921	7,728	7,674	1,730	2,342	218	2,208	118,990	458	5,101	6,219	2,017	3,378	7,515	1,025	58,564	AC.FT.	58,564	AC.FT.	58,564					
															TOTAL ACRE-FOOT STORAGE DAYS															4,047,725		1,932,425	

WATERMASTER NOTES *** KERN RIVER BULLETIN

MONTH	DAY(S)	PAGE NO.	TITLE OF COLUMN	COMMENT
September	1	2	HACIENDA WATER DISTRICT - RESERVOIR STORAGE NORTH KERN WSD - RESERVOIR STORAGE	Includes: NORTH KERN WATER STORAGE DISTRICT Transportation Loss Assignment to HACIENDA WATER DISTRICT of 1,268 acre-feet (639 s.f.d.) per section 2 (b) of the 1962 Kern River Water Rights and Storage Agreement.
September	12	2	BUENA VISTA WSD FLOW - FOR ID4	Delivered as per terms of BUENA VISTA WATER STORAGE DISTRICT/Improvement District No. 4 Exchange Agreement dated June 5, 1998.

**KERN RIVER NATURAL FLOW, REGULATED FLOW, & ISABELLA RESERVOIR STORAGE
1997-1998 WATER YEAR**



REPORT OF THE KERN RIVER WATERMASTER

OCTOBER 1998

Quantities in S.F.D. except where noted

Previous Day	DAY	ELEVATION (FEET)	ISABELLA		RESERVOIR		LOSS	FIRST POINT REGULATED FLOW	FLOW ABOVE 1ST PT.	CHANGE IN STORAGE+LOSS		COMPUTED 1ST POINT NATURAL FLOW	MEAN STORAGE		KERN COUNTY RECREATION POOL LOSS	TOTAL FLOW AT SECOND POINT	SECOND POINT GROUP FLOW		DAY	
			ACRE-FEET	MIDNIGHT STORAGE	ACRE-FEET	S.F.D.				STORAGE +1ST POINT	+FLOW ABOVE 1ST POINT		IRRIGATION	Recreation Pool + Dead Storage = 15,218 S.F.D. (50,184 ACFT)			RIVER	KERN		FRIANT-KERN
	1	2585.06	366,420	184,737	85	1,405	5	652	683	183,804	169,519	3	0	0	0	0	0	0	0	1
	2	2585.86	364,569	183,804	98	1,513	5	683	683	183,804	168,586	4	0	0	0	0	0	0	0	2
	3	2585.65	362,630	182,826	94	1,496	5	617	637	182,846	167,628	4	0	0	0	0	0	0	0	3
	4	2585.47	360,973	181,991	76	1,430	5	676	648	181,983	166,765	3	0	0	0	0	0	0	0	4
	5	2585.29	359,318	181,156	65	1,415	5	650	667	181,165	165,947	3	0	0	0	0	0	0	0	5
	6	2585.09	357,485	180,232	101	1,493	6	676	636	180,201	164,983	4	0	0	0	0	0	0	0	6
	7	2584.86	355,383	179,172	101	1,536	5	582	615	179,174	163,956	4	0	0	0	0	0	0	0	7
	8	2584.63	353,288	178,116	57	1,581	5	587	585	178,116	162,898	3	0	0	0	0	0	0	0	8
	9	2584.38	351,017	176,971	107	1,620	5	587	574	176,958	161,740	5	0	0	0	0	0	0	0	9
	10	2584.13	348,753	175,830	89	1,595	5	548	582	175,851	160,633	4	0	0	0	0	0	0	0	10
	11	2583.91	346,768	174,829	85	1,521	5	610	573	174,813	159,595	4	0	0	0	0	0	0	0	11
	12	2583.70	344,878	173,876	71	1,437	5	560	563	173,863	158,645	3	0	0	0	0	0	0	0	12
	13	2583.49	342,994	172,926	67	1,396	5	518	536	172,931	157,713	3	0	0	0	0	0	0	0	13
	14	2583.28	341,113	171,978	85	1,387	5	529	514	171,968	156,750	4	0	0	0	0	0	0	0	14
	15	2583.06	339,150	170,988	74	1,407	5	496	523	171,005	155,787	3	0	0	0	0	0	0	0	15
	16	2582.83	337,104	169,957	91	1,480	5	545	536	169,965	154,747	4	0	0	0	0	0	0	0	16
	17	2582.60	335,064	168,928	66	1,524	5	566	560	168,930	153,712	3	0	0	0	0	0	0	0	17
	18	2582.38	333,119	167,948	84	1,461	5	570	567	167,947	152,729	4	0	0	0	0	0	0	0	18
	19	2582.16	331,180	166,970	73	1,465	5	565	545	166,949	151,731	4	0	0	0	0	0	0	0	19
	20	2581.90	328,896	165,818	80	1,568	5	501	536	165,832	150,614	4	0	0	0	0	0	0	0	20
	21	2581.63	326,533	164,627	72	1,655	5	541	539	164,639	149,421	4	0	0	0	0	0	0	0	21
	22	2581.37	324,265	163,484	62	1,651	5	575	544	163,465	148,247	3	0	0	0	0	0	0	0	22
	23	2581.10	321,919	162,301	65	1,630	5	517	538	162,303	147,085	3	0	0	0	0	0	0	0	23
	24	2580.85	319,755	161,210	62	1,546	5	522	538	161,228	146,010	3	0	0	0	0	0	0	0	24
	25	2580.63	317,857	160,253	75	1,454	4	576	541	160,236	145,018	4	0	0	0	0	0	0	0	25
	26	2580.43	316,138	159,386	6	1,382	5	526	552	159,395	144,177	0	0	0	0	0	0	0	0	26
	27	2580.23	314,423	158,522	30	1,384	4	554	547	158,524	143,306	2	0	0	0	0	0	0	0	27
	28	2580.04	312,796	157,701	40	1,338	5	562	552	157,693	142,475	2	0	0	0	0	0	0	0	28
	29	2579.85	311,176	156,885	43	1,308	5	540	547	156,884	141,666	2	0	0	0	0	0	0	0	29
	30	2579.67	309,645	156,113	40	1,267	5	540	549	156,121	140,903	2	0	0	0	0	0	0	0	30
	31	2579.50	308,204	155,386	57	1,232	4	566	558	155,386	140,168	3	0	0	0	0	0	0	0	31
	32	2579.34	306,848	154,703	50	1,193	5	585	585	154,703	139,485	3	0	0	0	0	0	0	0	32
	33	2579.18	305,492	154,020	43	1,154	5	604	604	154,020	138,760	3	0	0	0	0	0	0	0	33
	34	2579.02	304,136	153,337	36	1,115	5	623	623	153,337	138,035	3	0	0	0	0	0	0	0	34
	35	2578.86	302,780	152,654	29	1,076	5	642	642	152,654	137,310	3	0	0	0	0	0	0	0	35
	36	2578.70	301,424	151,971	22	1,037	5	661	661	151,971	136,585	3	0	0	0	0	0	0	0	36
	37	2578.54	300,068	151,288	15	998	5	680	680	151,288	135,860	3	0	0	0	0	0	0	0	37
	38	2578.38	298,712	150,605	8	959	5	699	699	150,605	135,135	3	0	0	0	0	0	0	0	38
	39	2578.22	297,356	150,000	1	919	5	718	718	150,000	134,410	3	0	0	0	0	0	0	0	39
	40	2578.06	296,000	149,385	0	879	5	737	737	149,385	133,685	3	0	0	0	0	0	0	0	40
	41	2577.90	294,644	148,770	0	839	5	756	756	148,770	132,960	3	0	0	0	0	0	0	0	41
	42	2577.74	293,288	148,155	0	799	5	775	775	148,155	132,235	3	0	0	0	0	0	0	0	42
	43	2577.58	291,932	147,540	0	759	5	794	794	147,540	131,510	3	0	0	0	0	0	0	0	43
	44	2577.42	290,576	146,925	0	719	5	813	813	146,925	130,785	3	0	0	0	0	0	0	0	44
	45	2577.26	289,220	146,310	0	679	5	832	832	146,310	130,060	3	0	0	0	0	0	0	0	45
	46	2577.10	287,864	145,695	0	639	5	851	851	145,695	129,335	3	0	0	0	0	0	0	0	46
	47	2576.94	286,508	145,080	0	600	5	870	870	145,080	128,610	3	0	0	0	0	0	0	0	47
	48	2576.78	285,152	144,465	0	560	5	889	889	144,465	127,885	3	0	0	0	0	0	0	0	48
	49	2576.62	283,796	143,850	0	520	5	908	908	143,850	127,160	3	0	0	0	0	0	0	0	49
	50	2576.46	282,440	143,235	0	480	5	927	927	143,235	126,435	3	0	0	0	0	0	0	0	50
	51	2576.30	281,084	142,620	0	440	5	946	946	142,620	125,710	3	0	0	0	0	0	0	0	51
	52	2576.14	279,728	142,005	0	400	5	965	965	142,005	124,985	3	0	0	0	0	0	0	0	52
	53	2575.98	278,372	141,390	0	360	5	984	984	141,390	124,260	3	0	0	0	0	0	0	0	53
	54	2575.82	277,016	140,775	0	320	5	1,003	1,003	140,775	123,535	3	0	0	0	0	0	0	0	54
	55	2575.66	275,660	140,160	0	280	5	1,022	1,022	140,160	122,810	3	0	0	0	0	0	0	0	55
	56	2575.50	274,304	139,545	0	240	5	1,041	1,041	139,545	122,085	3	0	0	0	0	0	0	0	56
	57	2575.34	272,948	138,930	0	200	5	1,060	1,060	138,930	121,360	3	0	0	0	0	0	0	0	57
	58	2575.18	271,592	138,315	0	160	5	1,079	1,079	138,315	120,635	3	0	0	0	0	0	0	0	58
	59	2575.02	270,236	137,700	0	120	5	1,098	1,098	137,700	119,910	3	0	0	0	0	0	0	0	59
	60	2574.86	268,880	137,085	0	80	5	1,117	1,117	137,085	119,185	3	0	0	0	0	0	0	0	60
	61	2574.70	267,524	136,470	0	40	5	1,136	1,136	136,470	118,460	3	0	0	0	0	0	0	0	61
	62	2574.54	266,168	135,855	0	0	5	1,155	1,155	135,855	117,735	3	0	0	0	0	0	0	0	62
	63	2574.38	264,812	135,240	0	0	5	1,174	1,174	135,240	117,010	3	0	0	0	0	0	0	0	63
	64	2574.22	263,456	134,625	0	0	5	1,193	1,193	134,625	116,285	3	0	0	0	0	0	0	0	64
	65	2574.06	262,100	134,010	0	0	5	1,212	1,212	134,010	115,560	3	0	0	0	0	0	0	0	65
	66	2573.90	260,744	133,395	0	0	5	1,231	1,231	133,395	114,835	3	0	0	0	0	0	0	0	66
	67	2573.74	259,388	132,780	0	0	5	1,250	1,250	132,780	114,110	3	0	0	0	0	0	0	0	67
	68	2573.58	258,032	132,165	0	0	5	1,269	1,269	132,165	113,385	3	0	0	0	0	0	0	0	68
	69	2573.42	256,676	131,550	0	0	5	1,288	1,288	131,550	112,660	3	0	0	0	0	0	0	0	69
	70	2573.26	255,320	130,935	0	0	5	1,307	1,307	130,935	111,935	3	0	0	0					

MONTH	DAY(S)	PAGE NO.	TITLE OF COLUMN	COMMENT
October	16	2	BUENA VISTA WSD FLOW - VIA A-EWSD	Delivered as per terms of BUENA VISTA WATER STORAGE DISTRICT/Arvin-Edison Water Storage District Exchange Agreement dated October 19, 1998.

TABLE OF ABSORPTION QUANTITIES WITHIN HISTORIC KERN RIVER SERVICE AREA
KERN RIVER WATER

1997 - 1998 WATER YEAR

Quantities in acre-feet

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
+ Kern River Natural Flow	20,926	23,708	30,532	45,927	136,340	151,329	189,663	308,440	371,835	267,435	94,510	50,959	1,691,604
- Isabella Reservoir Evaporation	4,219	1,611	1,196	768	415	1,817	2,807	3,586	6,714	10,102	10,163	6,050	49,448
- Into Isabella Storage	0	0	0	0	41,905	51,952	54,380	65,202	80,323	17,170	0	0	310,932
+ From Isabella Storage	25,803	24,950	2,602	520	0	0	0	0	0	0	116,878	69,642	240,395
Kern River via Kern River/ California Aqueduct Intertie	0	0	0	0	0	0	3,118	48,614	68,477	10,017	0	0	130,226
Monthly Absorption within Kern River Service Area	42,510	47,047	31,938	45,679	94,020	97,560	129,358	191,038	216,321	230,146	201,225	114,551	1,441,393
Accumulative Absorption within Kern River Service Area	42,510	89,557	121,495	167,174	261,194	358,754	488,112	679,150	895,471	1,125,617	1,326,842	1,441,393	

REPORT OF THE KERN RIVER WATERMASTER

NOVEMBER 1998

Quantities in S.F.D. except where noted

DAY	ELEVATION (FEET)	ISABELLA		RESERVOIR		LOSS	FIRST POINT REGULATED FLOW	FLOW ABOVE 1ST PT.	CHANGE IN STORAGE + LOSS		COMPUTED 1ST POINT NATURAL FLOW	MEAN TOTAL IRRIGATION	STORAGE Recreation Pool + Dead Storage = 15,216 S.F.D. (30,184 ACFT)	KERN COUNTY RECREATION POOL LOSS	TOTAL FLOW AT SECOND POINT	SECOND POINT GROUP FLOW		FRIANT-KERN INFLOW	DAY	
		ACRE- FEET	MIDNIGHT STORAGE	S.F.D.	ACRE- FEET				STORAGE	AT 2ND POINT						RIVER	KERN			
Previous Day	2579.34	306,848	154,703	50	1,193	5	585	585	139,485	3	0	0	0	0	0	0	0	0	0	1
1	2579.17	305,413	153,979	72	1,190	2	540	521	138,742	4	0	0	0	0	0	0	0	0	0	1
2	2578.98	303,814	153,173	41	1,244	3	482	500	137,954	2	0	0	0	0	0	0	0	0	0	2
3	2578.76	301,965	152,241	44	1,365	2	479	475	137,018	2	30	30	0	0	0	0	0	0	0	3
4	2578.50	299,792	151,145	40	1,517	3	464	480	135,938	2	140	62	0	0	0	0	0	0	0	4
5	2578.23	297,542	150,011	57	1,571	2	496	473	134,781	3	193	99	0	0	0	0	0	0	0	5
6	2577.94	295,135	148,797	37	1,632	3	458	498	133,607	2	213	112	0	0	0	0	0	0	0	6
7	2577.67	292,904	147,673	37	1,625	2	540	520	132,463	2	216	105	0	0	0	0	0	0	0	7
8	2577.41	290,764	146,594	36	1,603	3	563	571	131,392	2	205	95	0	0	0	0	0	0	0	8
9	2577.14	288,551	145,478	40	1,682	3	609	609	130,276	2	250	123	0	0	0	0	0	0	0	9
10	2576.88	286,429	144,408	10	1,714	2	656	640	129,190	1	291	170	0	0	0	0	0	0	0	10
11	2576.63	284,397	143,384	17	1,767	2	762	762	128,166	1	356	267	0	0	0	0	0	0	0	11
12	2576.34	282,049	142,200	30	1,769	3	618	615	126,979	2	355	305	0	0	0	0	0	0	0	12
13	2576.06	279,792	141,062	23	1,723	2	610	614	125,845	1	361	301	0	0	0	0	0	0	0	13
14	2575.80	277,705	140,010	36	1,629	2	615	602	124,780	2	351	290	0	0	0	0	0	0	0	14
15	2575.54	275,627	138,962	10	1,615	3	590	570	123,722	1	366	305	0	0	0	0	0	0	0	15
16	2575.25	273,321	137,799	29	1,648	2	516	550	122,593	2	369	299	0	0	0	0	0	0	0	16
17	2574.96	271,024	136,641	41	1,669	2	554	545	121,426	3	383	305	0	0	0	0	0	0	0	17
18	2574.68	268,816	135,528	29	1,646	2	564	551	120,300	2	382	310	0	0	0	0	0	0	0	18
19	2574.39	266,541	134,381	25	1,655	2	535	526	119,144	2	428	355	0	0	0	0	0	0	0	19
20	2574.07	264,042	133,121	25	1,711	3	479	509	117,914	2	466	365	0	0	0	0	0	0	0	20
21	2573.76	261,633	131,907	50	1,675	2	513	517	116,704	3	472	363	0	0	0	0	0	0	0	21
22	2573.44	259,162	130,661	63	1,740	2	559	516	115,415	4	550	419	0	0	0	0	0	0	0	22
23	2573.08	256,396	129,266	31	1,838	2	476	529	114,073	2	549	459	0	0	0	0	0	0	0	23
24	2572.74	253,801	127,958	43	1,814	2	551	546	112,760	3	535	445	0	0	0	0	0	0	0	24
25	2572.46	251,673	126,885	18	1,663	3	611	569	111,645	1	454	403	0	0	0	0	0	0	0	25
26	2572.22	249,858	125,970	28	1,430	2	545	576	110,761	2	232	179	0	0	0	0	0	0	0	26
27	2572.03	248,425	125,248	24	1,268	2	572	548	110,015	2	124	39	0	0	0	0	0	0	0	27
28	2571.84	246,999	124,529	33	1,210	2	526	591	109,361	2	129	44	0	0	0	0	0	0	0	28
29	2571.70	245,951	124,000	18	1,185	2	676	626	108,782	1	100	42	0	0	0	0	0	0	0	29
30	2571.57	244,979	123,510	12	1,117	2	641	641	108,292	1	73	18	0	0	0	0	0	0	0	30
TOTAL SECOND FOOT DAYS				969	46,915	69	16,790	16,790	108,292	61	8,573	6,309	0	0	0	0	0	0	0	0
TOTAL ACRE-FEET				1,981	93,054	138	33,302	33,302	214,795	121	17,004	12,513	0	0	0	0	0	0	0	0

By: 

Date: **December 17, 1998**

Quantities in S.F.D. except where noted

NOVEMBER 1988

REPORT OF THE KERN RIVER WATERMASTER

NORTH KERN WATER STORAGE DISTRICT BUENA VISTA WATER STORAGE DISTRICT HACIENDA WATER DISTRICT

DAY	Previous Day	NORTH KERN WATER STORAGE DISTRICT				BUENA VISTA WATER STORAGE DISTRICT				HACIENDA WATER DISTRICT														
		ENTL AT 1ST	FLOW ABOVE 1ST PT.	RESERVOIR LOSS	STORAGE	ENTL AT 1ST	FLOW ABOVE 1ST PT.	RESERVOIR LOSS	STORAGE	ENTL AT 1ST	FLOW ABOVE 1ST PT.	RESERVOIR LOSS	STORAGE											
POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT	POINT											
1	565	876	1	25	66,937	0	42	157	52	0	0	0	0	17	47,513	3	0	0	31	26	0	8	25,035	
2	521	897	1	36	67,933	0	43	87	67	30	0	0	1	24	45,852	1	0	0	32	33	0	12	24,957	
3	500	910	1	21	67,501	0	43	110	78	29	0	0	2	13	45,577	1	0	0	34	39	0	7	24,876	
4	475	957	1	22	66,996	0	44	132	86	35	0	30	1	14	45,235	3	0	0	35	43	0	8	24,787	
5	480	980	2	20	66,474	0	44	135	90	47	78	62	1	13	44,765	1	0	0	35	45	0	7	24,699	
6	473	969	0	28	65,950	0	64	123	89	54	94	99	2	19	44,221	0	0	0	35	44	0	10	24,610	
7	498	995	1	19	65,433	0	65	108	87	61	91	112	2	12	43,683	2	22	0	46	43	0	6	24,491	
8	520	993	1	19	64,940	0	65	100	77	67	100	105	1	12	43,156	2	24	0	54	38	0	6	24,367	
9	571	1,028	1	18	64,464	0	64	87	65	54	99	95	2	12	42,678	1	26	0	52	32	0	6	24,250	
10	609	1,045	2	20	64,006	0	67	92	71	50	115	123	1	13	42,146	3	28	0	53	35	0	7	24,124	
11	640	1,037	1	5	63,603	0	70	100	70	38	109	170	1	3	41,585	1	31	0	53	35	0	2	24,002	
12	762	1,024	1	9	63,331	0	69	109	68	34	80	267	1	5	40,952	1	28	0	53	34	0	3	23,883	
13	615	1,053	1	16	62,876	0	50	103	63	38	45	305	2	9	40,337	1	28	0	52	31	0	5	23,766	
14	614	1,033	1	12	62,444	0	48	83	62	35	54	301	1	7	39,746	2	40	0	34	31	0	4	23,655	
15	602	1,010	0	19	62,017	0	29	80	57	44	49	290	2	11	39,184	1	35	0	6	28	0	6	23,579	
16	570	1,044	1	5	61,537	0	26	81	54	43	0	305	2	3	38,670	0	29	0	6	27	0	2	23,515	
17	550	1,053	1	15	61,018	0	27	99	57	43	0	299	1	9	38,135	0	36	0	6	28	0	5	23,440	
18	545	1,032	0	21	60,510	0	25	115	64	47	0	305	1	13	37,565	1	41	0	7	32	1	7	23,351	
19	551	1,251	1	15	59,794	0	20	103	66	39	0	85	1	9	37,242	1	41	0	7	33	0	5	23,264	
20	526	1,327	1	13	58,979	0	21	101	78	38	0	0	1	8	36,995	1	41	0	9	39	0	4	23,170	
21	509	1,349	0	13	58,126	0	20	111	92	41	0	0	2	8	36,721	0	43	0	10	45	1	4	23,067	
22	517	1,365	1	26	57,251	0	21	103	81	37	0	0	1	15	36,463	1	11	7	9	40	0	9	22,990	
23	516	1,456	1	32	56,278	0	20	92	68	34	0	0	1	19	36,229	0	0	28	8	34	0	12	22,908	
24	529	1,529	0	15	55,263	0	19	102	79	37	0	0	1	10	35,981	0	0	24	9	39	1	6	22,829	
25	546	1,523	1	22	54,263	0	19	98	74	35	0	0	1	13	35,741	0	0	20	8	37	0	8	22,756	
26	569	1,301	2	9	53,520	0	19	79	60	32	0	0	1	6	35,544	1	0	134	7	30	0	3	22,581	
27	576	1,073	0	14	53,009	0	19	72	45	40	0	0	2	9	35,357	3	0	151	5	22	0	5	22,395	
28	548	927	1	12	52,617	0	20	70	42	37	0	0	1	8	35,179	2	0	144	5	21	0	4	22,219	
29	591	876	0	17	52,315	0	19	60	42	34	0	0	1	10	35,013	3	0	150	5	21	1	6	22,033	
30	626	841	1	9	52,090	0	19	65	46	33	0	0	1	6	34,843	4	0	149	5	23	0	3	21,849	
31	641	745	0	6	51,980	0	27	77	56	24	0	0	1	4	34,654	3	0	151	6	28	1	2	21,658	
S.F.D.	16,790	32,623	25	508	51,980	0	1,106	2,877	2,034	1,210	914	2,953	39	317	34,654	40	504	958	686	1,010	5	174	21,658	S.F.D.
AC.F.T.	33,302	64,707	50	1,007	103,102	0	2,194	5,706	4,035	2,400	1,812	5,857	78	629	68,735	79	1,000	1,900	1,361	2,003	10	345	42,958	AC.F.T.
TOTAL ACRE-FOOT STORAGE DAYS		3,583,174		TOTAL ACRE-FOOT STORAGE DAYS		2,339,402		TOTAL ACRE-FOOT STORAGE DAYS		1,396,504		TOTAL ACRE-FOOT STORAGE DAYS		1,396,504										

WATERMASTER NOTES *** KERN RIVER BULLETIN

MONTH	DAY(S)	PAGE NO.	TITLE OF COLUMN	COMMENT
November	1	2	BUENA VISTA WSD - RESERVOIR STORAGE NORTH KERN WSD - RESERVOIR STORAGE	Reflects transfer from BUENA VISTA WATER STORAGE DISTRICT to NORTH KERN WATER STORAGE DISTRICT (City of Bakersfield) of 2,795 acre-feet (1,409 s.f.d.) as per terms of Kern Delta Water District letter dated November 6, 1988.
November	6	2	HACIENDA WATER DISTRICT FLOW - FOR ID4	Delivered as per terms of Kern County Water Agency - ID4/HACIENDA WATER DISTRICT exchange agreement dated November 17, 1988.

HISTORICAL INFLOWS TO LAKE ISABELLA
Runoff in 1,000 acre-feet

WATER YEAR ENDING	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANNUAL TOTAL
1955	11.8	14.4	16.0	18.1	22.7	28.1	35.1	67.9	83.4	29.1	18.9	10.3	355.8
1956	9.5	11.5	90.4	77.1	48.2	59.9	94.5	156.3	167.4	97.2	38.1	20.3	870.4
1957	17.6	15.7	15.1	16.4	25.3	30.3	38.5	78.1	131.8	41.0	16.4	12.5	498.7
1958	13.6	13.9	17.6	20.6	36.5	61.5	153.6	312.3	231.7	120.1	51.1	25.8	1057.7
1959	20.8	18.7	17.8	19.3	21.2	31.7	39.5	39.4	33.0	15.8	9.9	9.6	276.5
1960	9.6	9.7	10.3	12.2	27.9	30.2	44.5	58.0	45.5	15.1	7.9	8.4	279.3
1961	9.5	13.0	11.7	10.6	10.0	13.1	23.0	29.1	23.8	8.5	15.1	7.6	175.0
1962	7.1	8.8	11.0	12.4	47.1	32.4	140.5	130.8	154.7	72.1	23.7	13.1	653.7
1963	12.9	11.6	11.1	26.5	99.6	41.0	67.6	134.0	162.3	102.6	42.2	26.5	737.9
1964	24.5	23.8	21.5	18.2	16.6	22.7	39.6	60.0	52.3	22.0	13.3	8.6	323.1
1965	8.7	13.9	44.2	43.5	30.2	33.2	74.5	131.0	149.9	94.9	50.7	22.0	696.7
1966	15.6	28.4	28.3	27.0	21.4	37.8	66.7	81.5	45.4	21.9	16.1	9.6	398.7
1967	9.5	13.7	298.0	59.6	62.5	83.2	95.5	268.1	302.9	238.1	90.5	53.5	1576.1
1968	34.9	31.9	33.0	32.2	38.9	47.1	64.4	86.7	62.1	28.4	18.4	11.3	489.3
1969	12.6	15.3	17.1	159.4	93.4	133.9	337.4	597.5	485.6	236.0	96.8	44.3	2226.3
1970	33.3	32.4	30.9	81.8	39.0	62.1	109.8	92.7	92.7	49.2	22.7	13.4	604.2
1971	12.7	18.8	26.8	31.5	29.4	40.6	64.4	81.1	64.4	18.9	11.1	428.0	416.0
1972	11.4	13.4	17.2	18.2	17.6	32.3	27.3	45.4	37.7	14.6	10.7	11.2	257.0
1973	10.6	14.5	19.3	30.5	32.2	45.0	103.9	282.5	226.5	91.8	36.9	18.8	912.5
1974	16.8	20.4	25.1	45.6	28.1	68.8	108.1	182.2	166.7	68.6	37.6	20.4	788.4
1975	19.1	17.6	20.6	21.1	25.3	39.9	43.9	142.8	138.8	50.3	22.4	16.2	558.0
1976	15.1	14.7	15.6	14.6	21.1	21.8	24.2	47.0	18.9	13.9	13.7	23.1	237.9
1977	18.7	11.7	10.0	12.2	12.0	12.6	22.4	24.3	34.5	10.3	9.8	7.0	185.5
1978	7.9	8.1	21.8	42.0	90.0	163.4	170.2	352.2	351.9	188.1	73.1	58.9	1527.8
1979	28.1	24.3	27.2	32.2	38.7	66.9	99.4	164.0	105.5	47.0	26.9	19.1	679.3
1980	18.2	18.2	17.7	136.7	159.4	130.7	204.1	294.4	274.9	196.9	69.9	35.1	1550.2
1981	27.1	24.9	28.0	25.9	33.4	43.6	67.5	90.8	65.7	25.5	15.6	12.2	460.2
1982	14.0	18.5	21.4	33.9	49.5	71.4	202.9	258.0	194.9	124.6	58.1	60.6	1102.8
1983	45.1	55.2	73.7	81.0	121.2	227.6	182.2	485.9	567.1	285.8	152.5	61.0	2318.3
1984	48.9	55.9	63.6	69.1	55.0	77.3	88.0	159.4	100.7	72.4	45.6	26.9	890.8
1985	26.2	33.6	35.6	36.7	37.0	49.5	133.6	147.4	90.4	36.7	23.4	16.7	678.8
1986	15.1	20.0	30.4	38.9	143.6	196.2	198.6	283.9	250.4	107.4	46.1	24.3	1354.9
1987	25.5	22.4	21.3	22.5	27.3	37.7	54.5	72.6	54.5	23.4	13.6	10.0	385.3
1988	10.6	14.3	15.5	22.0	19.1	29.0	38.6	58.4	42.6	21.5	13.4	10.2	296.2
1989	8.9	9.9	14.6	15.4	22.8	64.0	90.2	69.8	48.4	22.1	12.3	6.3	388.4
1990	10.4	10.5	10.0	11.4	11.8	21.4	32.0	38.5	29.1	14.9	8.2	6.3	204.5
1991	8.3	7.6	7.8	9.6	8.5	44.2	55.2	78.9	100.7	37.9	14.1	11.1	268.7
1992	9.4	12.7	11.6	12.7	20.0	24.6	54.2	74.7	33.3	16.3	11.7	7.5	288.9
1993	9.6	11.5	13.4	36.1	35.8	38.1	131.9	202.9	163.9	88.0	34.6	16.1	833.9
1994	13.4	14.1	17.1	18.3	22.6	38.1	46.3	68.4	56.6	20.8	11.2	9.1	336.0
1995	14.6	12.2	14.1	41.9	45.9	146.4	137.6	245.0	281.9	227.7	78.3	37.7	1283.3
1996	21.7	20.4	25.7	36.7	87.8	99.7	143.7	218.1	150.6	67.9	29.9	16.0	916.2
1997	15.1	39.5	80.9	231.9	113.0	113.0	142.0	211.7	137.7	71.1	38.7	23.6	1201.0
1998	22.5	25.1	26.1	40.4	101.4	126.8	163.9	277.5	346.3	251.4	92.0	46.2	1509.6
MEAN	17.1	19.5	32.2	40.6	46.0	65.1	95.4	157.9	144.9	78.1	35.0	21.0	752.7

REPORT OF THE KERN RIVER WATERMASTER

DECEMBER 1988

Quantities in S.F.D. except where noted

PAGE 1 of 5

DAY	ELEVATION (FEET)	ISABELLA RESERVOIR		LOSS	FIRST POINT REGULATED FLOW	FLOW ABOVE 1ST PT.	CHANGE IN STORAGE + LOSS		COMPUTED 1ST POINT NATURAL FLOW	MEAN TOTAL IRRIGATION	STORAGE Recreation Pool + Dead Storage = 15,218 S.F.D. (30,184 ACFT)	KERN COUNTY RECREATION POOL LOSS	TOTAL FLOW AT SECOND POINT	SECOND POINT GROUP FLOW		FRIANT - KERN INFLOW	DAY
		ACRE- FEET	S.F.D.				STORAGE + LOSS	+FLOW ABOVE 1ST POINT						AT 2ND POINT	RIVER		
Previous Day	2571.57	244,979	123,510	12	1,117	2	641	641	641	123,510	108,292	1	73	18	0	0	0
1	2571.56	244,904	123,473	20	738	2	723	695	695	123,445	108,227	1	0	0	0	0	1
2	2571.55	244,829	123,435	20	656	1	639	658	658	123,426	108,208	1	0	0	0	0	2
3	2571.53	244,680	123,360	38	647	2	612	626	626	123,365	108,147	3	0	0	0	0	3
4	2571.52	244,606	123,322	67	597	2	628	626	626	123,325	108,107	5	0	0	0	0	4
5	2571.53	244,680	123,360	35	565	1	639	611	611	123,335	108,117	3	0	0	0	0	5
6	2571.53	244,680	123,360	3	561	1	565	579	579	123,349	108,131	0	0	0	0	0	6
7	2571.52	244,606	123,322	12	558	2	534	557	557	123,334	108,116	1	0	0	0	0	7
8	2571.52	244,606	123,322	20	551	1	572	572	572	123,334	108,116	1	0	0	0	0	8
9	2571.53	244,680	123,360	20	549	1	608	589	589	123,353	108,135	1	0	0	0	0	9
10	2571.54	244,755	123,397	23	526	2	588	577	577	123,379	108,161	2	0	0	0	77	10
11	2571.54	244,755	123,397	17	516	2	535	556	556	123,400	108,182	1	0	0	0	190	11
12	2571.55	244,829	123,435	6	501	1	546	541	541	123,433	108,215	0	0	0	0	269	12
13	2571.56	244,904	123,473	29	474	1	542	558	558	123,487	108,269	2	0	0	0	290	13
14	2571.58	245,054	123,548	32	477	1	585	553	553	123,530	108,312	2	49	0	0	290	14
15	2571.58	245,054	123,548	15	516	2	533	578	578	123,575	108,357	1	71	0	0	290	15
16	2571.59	245,128	123,585	49	528	1	615	552	552	123,549	108,381	4	59	0	0	290	16
17	2571.57	244,979	123,510	29	551	2	507	559	559	123,526	108,308	2	68	0	0	293	17
18	2571.56	244,904	123,473	49	542	1	555	529	529	123,463	108,245	4	105	0	0	315	18
19	2571.55	244,829	123,435	32	530	1	525	520	520	123,420	108,202	2	124	0	0	325	19
20	2571.54	244,755	123,397	23	495	1	481	476	476	123,377	108,159	2	118	0	0	385	20
21	2571.52	244,606	123,322	12	485	1	423	436	436	123,315	108,097	1	115	0	0	415	21
22	2571.50	244,458	123,248	15	461	2	404	444	444	123,281	108,063	1	96	0	0	435	22
23	2571.51	244,531	123,284	12	457	1	506	458	458	123,269	108,051	1	78	0	0	445	23
24	2571.52	244,606	123,322	29	395	1	463	474	474	123,318	108,100	2	65	0	0	465	24
25	2571.53	244,680	123,360	12	402	1	453	465	465	123,368	108,150	1	60	0	0	475	25
26	2571.54	244,755	123,397	6	434	1	478	487	487	123,414	108,196	0	60	0	0	475	26
27	2571.56	244,904	123,473	6	447	1	530	499	499	123,459	108,241	0	60	0	0	475	27
28	2571.57	244,979	123,510	15	436	2	490	497	497	123,503	108,285	1	60	0	0	475	28
29	2571.57	244,979	123,510	20	450	1	471	487	487	123,519	108,301	1	60	0	0	388	29
30	2571.57	244,979	123,510	18	480	1	499	490	490	123,510	108,292	1	42	0	0	342	30
31	2571.56	244,904	123,473	58	477	1	499	489	489	123,473	108,255	4	26	0	0	293	31
TOTAL SECOND FOOT DAYS				742	16,002	41	16,748	16,748	16,748	123,473	108,255	51	1,316	0	0	7,697	
TOTAL ACRE-FEET				1,472	31,739	81	33,219	33,219	33,219	244,904	214,720	101	2,610	0	0	15,267	

By: 

Date: _____

January 20, 1989

NORTH KERN WATER STORAGE DISTRICT

BUENA VISTA WATER STORAGE DISTRICT

HACENDA WATER DISTRICT

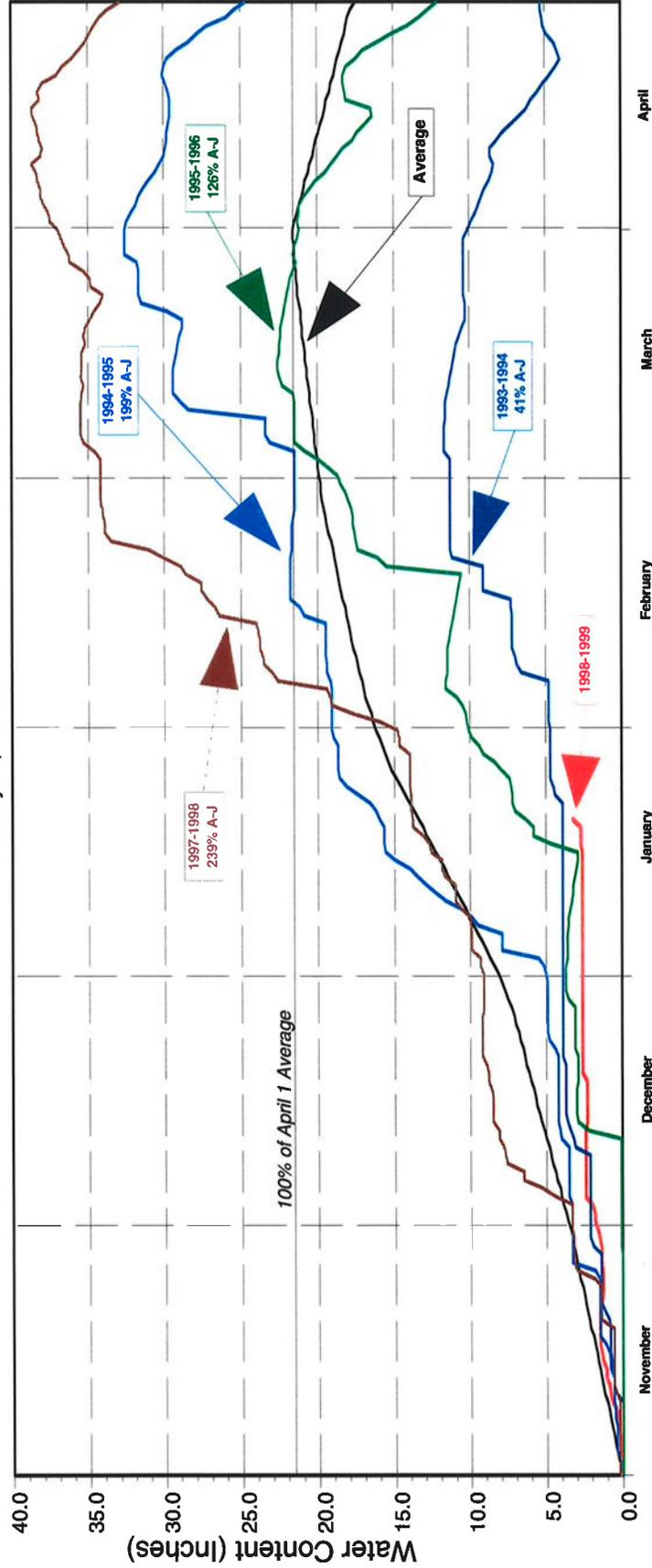
DAY	FLOW ABOVE 1ST POINT				FLOW				FLOW ABOVE 1ST POINT				ENTITLEMENT				FLOW ABOVE 1ST POINT			
	KERN		VALLEY		AT		CARMEL WATER		OLCESE HACIENDA		L.A.		CONTRIBUTED BY		OLCESE HACIENDA		L.A.			
	ENT'L AT 1ST POINT	FLOW AT 1ST POINT	LAKE MING COURSE	RESERVOIR LOSS STORAGE	ENT'L AT 1ST POINT	VIA KWD	VIA CWD	VIA 2ND POINT	WD	INC.	WD	INC.	NKWSD	BVWSD	WD	INC.	WD	INC.		
Previous Day	641	745	0	6	51,980	0	0	27	0	1	0	0	0	0	0	0	0	0		
1	685	719	0	10	51,945	0	0	19	0	0	0	0	0	0	0	0	0	0		
2	658	656	0	10	51,936	0	0	0	0	0	0	0	0	0	0	0	0	0		
3	626	647	0	19	51,895	0	0	0	0	0	0	0	0	0	0	0	0	0		
4	626	597	0	34	51,890	0	0	0	0	0	0	0	0	0	0	0	0	0		
5	611	565	1	18	51,917	0	0	0	0	0	0	0	0	0	0	0	0	0		
6	579	561	0	1	51,934	0	0	0	0	0	0	0	0	0	0	0	0	0		
7	557	539	1	6	51,945	0	0	19	0	0	0	0	0	0	0	0	0	0		
8	572	532	0	10	51,975	0	0	19	0	0	0	0	0	0	0	0	0	0		
9	589	530	1	10	52,023	0	0	19	0	0	0	0	0	0	0	0	0	0		
10	577	507	0	12	52,081	0	0	19	0	0	0	0	0	0	0	0	0	0		
11	556	496	1	9	52,131	0	0	20	0	0	0	0	0	0	0	0	0	0		
12	541	501	0	3	52,168	0	0	0	0	0	0	0	0	0	0	0	0	0		
13	558	474	1	15	52,236	0	0	0	0	0	0	0	0	0	0	0	0	0		
14	553	458	0	16	52,315	0	0	19	0	0	0	0	0	0	0	0	0	0		
15	578	497	1	7	52,388	0	0	19	0	0	0	0	0	0	0	0	0	0		
16	552	509	0	25	52,406	0	0	19	0	0	0	0	0	0	0	0	0	0		
17	559	532	1	15	52,417	0	0	19	0	0	0	0	0	0	0	0	0	0		
18	529	523	0	25	52,398	0	0	19	0	0	0	0	0	0	0	0	0	0		
19	520	491	0	16	52,411	0	0	39	0	0	0	0	0	0	0	0	0	0		
20	476	457	1	12	52,417	0	0	38	0	0	0	0	0	0	0	0	0	0		
21	436	386	0	6	52,461	0	0	99	0	0	0	0	0	0	0	0	0	0		
22	444	362	0	7	52,536	0	0	99	0	0	0	0	0	0	0	0	0	0		
23	458	377	1	6	52,610	0	0	80	0	0	0	0	0	0	0	0	0	0		
24	474	335	0	15	52,734	0	0	60	0	0	0	0	0	0	0	0	0	0		
25	465	343	0	6	52,850	0	0	59	0	0	0	0	0	0	0	0	0	0		
26	487	374	1	3	52,959	0	0	60	0	0	0	0	0	0	0	0	0	0		
27	499	387	0	3	53,068	0	0	60	0	0	0	0	0	0	0	0	0	0		
28	497	436	0	7	53,122	0	0	0	0	0	0	0	0	0	0	0	0	0		
29	487	450	1	10	53,148	0	0	0	0	0	0	0	0	0	0	0	0	0		
30	490	480	0	9	53,149	0	0	0	0	0	0	0	0	0	0	0	0	0		
31	499	475	0	29	53,149	0	0	2	0	0	0	0	0	0	0	0	0	0		
S.F.D.	16,748	15,196	13	374	53,149	0	0	806	0	0	0	0	0	0	0	0	0	0		
AC.FT.	33,219	30,140	26	742	105,419	0	0	1,599	0	0	0	0	0	0	0	0	0	0		
				TOTAL ACRE-FOOT STORAGE DAYS	3,222,373					TOTAL ACRE-FOOT STORAGE DAYS	2,104,031					TOTAL ACRE-FOOT STORAGE DAYS	1,326,305			
				RESERVOIR LOSS STORAGE	4					RESERVOIR LOSS STORAGE	4					RESERVOIR LOSS STORAGE	2			
				OLCESE HACIENDA	0					OLCESE HACIENDA	0					OLCESE HACIENDA	0			
				L.A.	0					L.A.	0					L.A.	0			
				CONTRIBUTED BY	0					CONTRIBUTED BY	0					CONTRIBUTED BY	0			
				ENTITLEMENT	0					ENTITLEMENT	0					ENTITLEMENT	0			
				FLOW ABOVE 1ST POINT	0					FLOW ABOVE 1ST POINT	0					FLOW ABOVE 1ST POINT	0			

WATERMASTER NOTES *** KERN RIVER BULLETIN

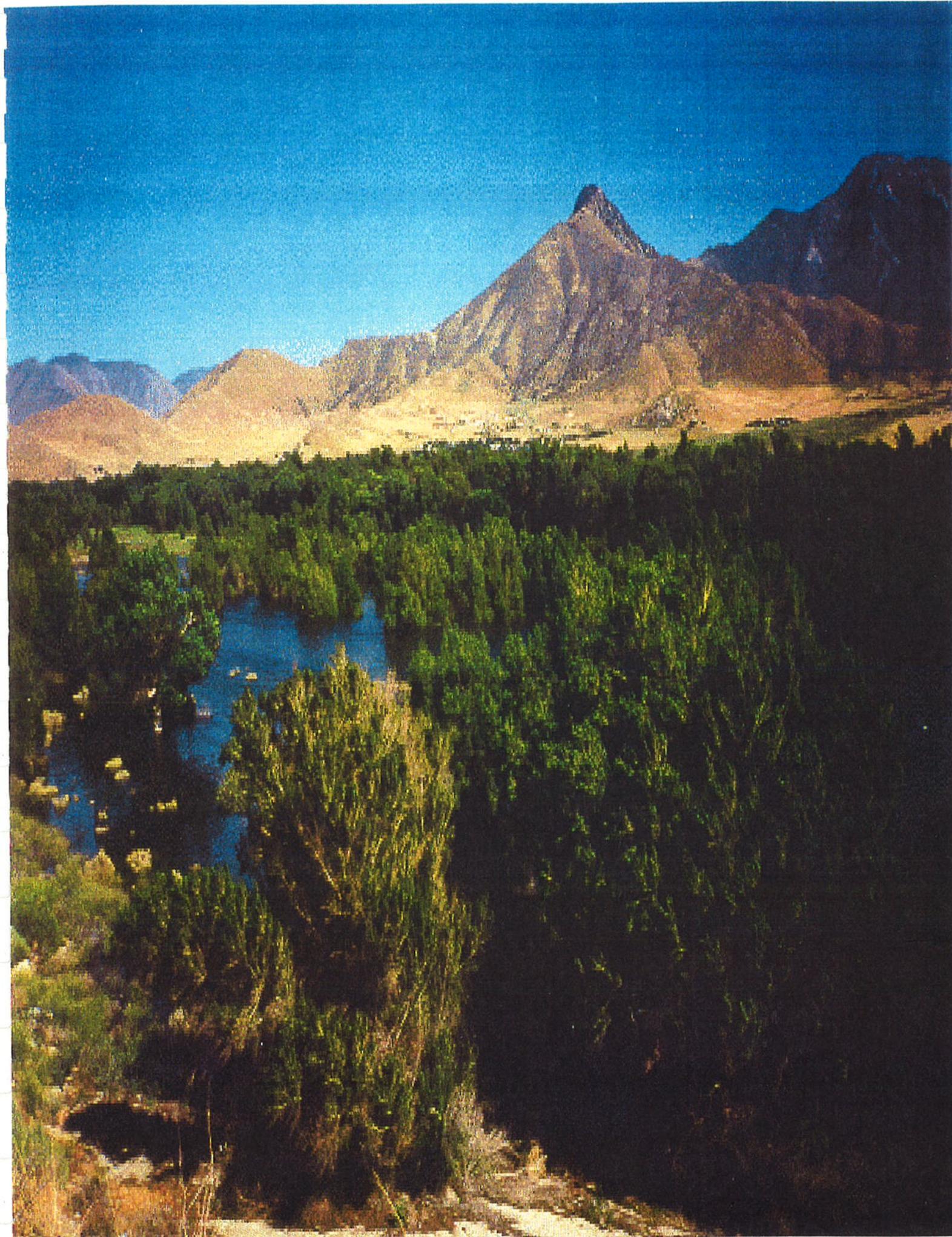
MONTH	DAY(S)	PAGE NO.	TITLE OF COLUMN	COMMENT
December	10-31	1	FRIANT-KERN INFLOW	Friant-Kern Inflow to Kern River channel on behalf of Kern County Water Agency.
December	31	2	NKWSO RESERVOIR STORAGE BVWSD RESERVOIR STORAGE HACIENDA WD RESERVOIR STORAGE	Reflects transfer of 10 acre-feet (5 s.f.d.) from HACIENDA WATER DISTRICT to NORTH KERN WATER STORAGE DISTRICT and 4 acre-feet (2 s.f.d.) from HACIENDA WATER DISTRICT to BUENA VISTA WATER STORAGE DISTRICT as compensation for additional evaporation of Kern River water due to Rio Bravo Power Plant operations during calendar year 1998 pursuant to terms of May 14, 1986 Memorandum of Understanding between Olcese WD and Kern River Interests. (Total of 14 acre-feet of additional evaporation; shared 75% NKWSO & 25% BVWSD)

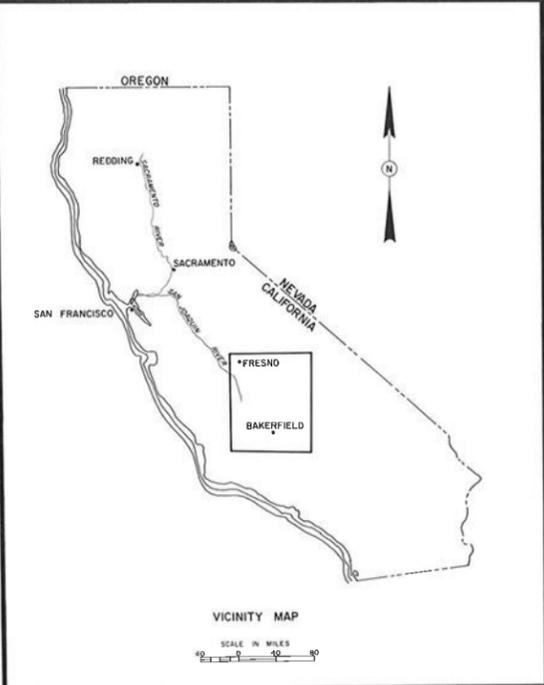
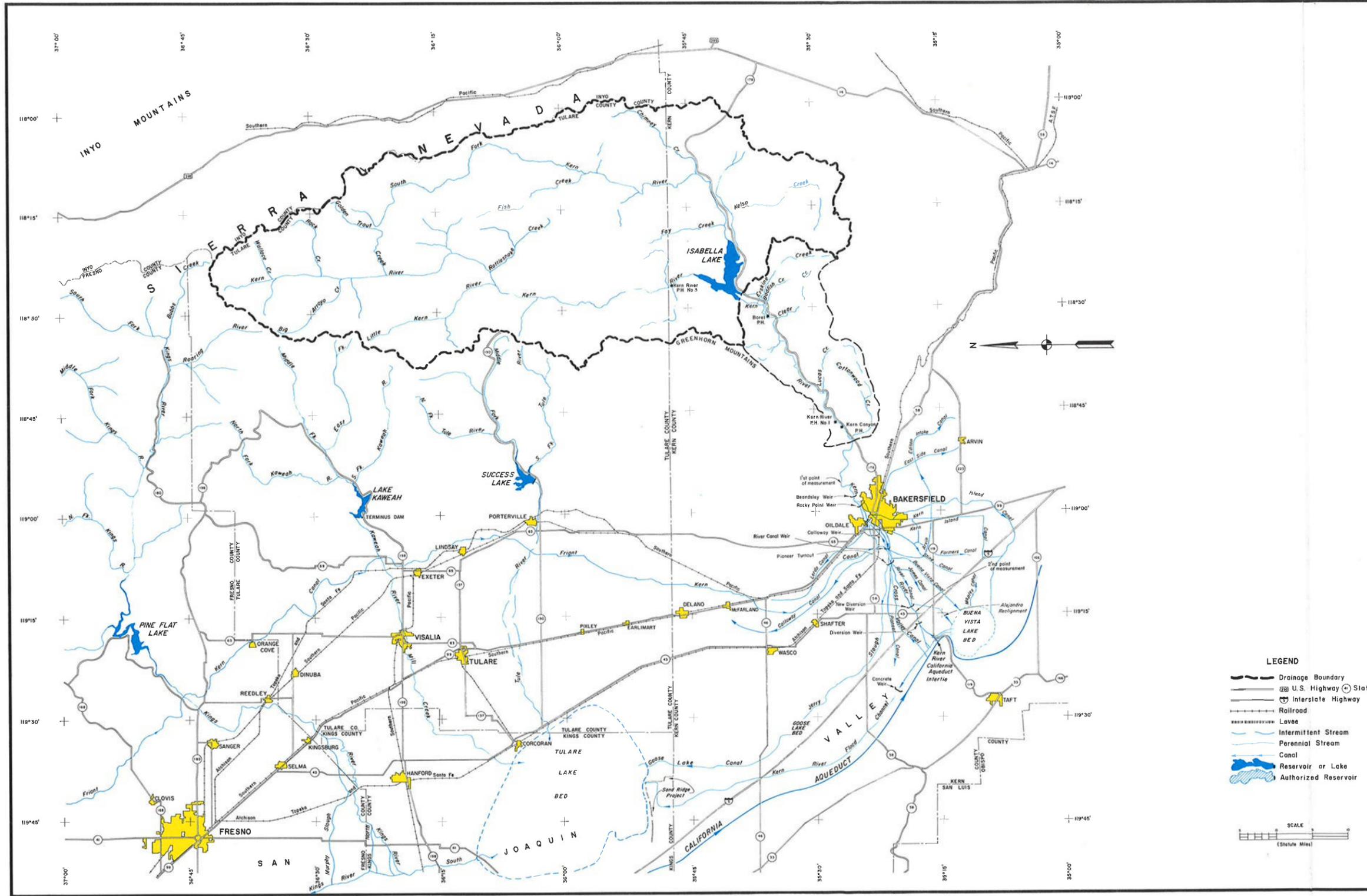
KERN RIVER BASIN SNOWPACK ACCUMULATION
EIGHT SENSOR INDEX

January 20, 1999



Snowpack Accumulation Season





LEGEND

- Drainage Boundary
- U.S. Highway State Highway
- Interstate Highway
- Railroad
- Levee
- Intermittent Stream
- Perennial Stream
- Canal
- Reservoir or Lake
- Authorized Reservoir

SCALE
(Statute Miles)

**ISABELLA LAKE
KERN RIVER, CALIFORNIA**

GENERAL MAP

CORPS OF ENGINEERS SACRAMENTO, CALIFORNIA

Prepared: C.D.M. Date: NOVEMBER 1977
 Drawn: T.K.B.

EL NIÑO



1998