

# Appendix I

## Projected Water Budgets

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## Appendix I-1

# Projected Annual Surface Water Budget

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Projected  
Annual  
Surface Water Budget

Fillmore Basin Groundwater Sustainability Plan  
Fillmore and Piru Basins  
Groundwater Sustainability Agency

Water Year	Type	Inflows			Outflows	Inflows
		Sespe Creek	Santa Clara River (from Piru)	Pole Creek	Santa Clara River (to Santa Paula)	- Outflows
2022	--	131,388	172,347	1,768	-319,471	-13,968
2023	--	50,347	17,475	711	-81,788	-13,256
2024	Dry	45,006	32,454	611	-81,857	-3,787
2025	Dry	35,343	16,774	637	-54,897	-2,143
2026	Critical	3,861	466	208	-7,952	-3,417
2027	Critical	6,007	108	268	-6,956	-573
2028	Critical	12,685	914	434	-11,859	2,175
2029	Critical	1,213	31	166	-371	1,039
2030	Wet	129,413	37,856	1,842	-150,746	18,366
2031	Above Normal	14,475	24,233	578	-25,103	14,183
2032	Dry	29,631	6,777	478	-29,507	7,379
2033	Dry	13,069	3,040	422	-10,687	5,844
2034	Below Normal	27,607	5,716	726	-28,091	5,958
2035	Dry	22,480	4,204	539	-21,363	5,859
2036	Wet	188,768	36,795	2,696	-208,621	19,639
2037	Above Normal	34,389	17,989	635	-43,417	9,595
2038	Critical	10,459	17,714	296	-23,704	4,765
2039	Critical	6,254	74	297	-4,908	1,717
2040	Above Normal	172,686	43,475	2,439	-203,587	15,012
2041	Above Normal	15,213	25,307	623	-27,729	13,414
2042	Dry	10,593	1,040	430	-8,357	3,707
2043	Dry	16,942	1,312	427	-13,700	4,981
2044	Above Normal	134,239	45,618	1,941	-165,142	16,657
2045	Wet	123,891	30,820	2,468	-140,628	16,551
2046	Above Normal	18,230	17,808	709	-31,183	5,563
2047	Wet	483,111	394,113	7,173	-893,859	-9,462
2048	Wet	48,310	19,709	823	-79,862	-11,020
2049	Dry	53,242	29,436	931	-88,682	-5,073
2050	Dry	24,500	21,806	564	-46,118	753
2051	Above Normal	161,911	60,776	1,759	-223,850	596
2052	Wet	50,665	29,667	866	-83,074	-1,876
2053	Below Normal	51,465	14,583	408	-69,483	-3,027
2054	Below Normal	35,027	8,515	429	-43,001	970
2055	Below Normal	13,818	8,291	285	-23,495	-1,102
2056	Wet	419,294	210,153	4,545	-642,775	-8,783
2057	Wet	97,047	100,376	673	-222,951	-24,855
2058	Wet	157,252	153,476	3,302	-343,812	-29,782
2059	Above Normal	28,149	19,477	1,077	-60,048	-11,345
2060	Below Normal	34,768	27,657	479	-66,940	-4,037
2061	Wet	296,234	144,764	7,340	-472,948	-24,610
2062	Wet	30,193	20,726	1,341	-71,546	-19,286

Projected  
Annual  
Surface Water Budget

Fillmore Basin Groundwater Sustainability Plan  
Fillmore and Piru Basins  
Groundwater Sustainability Agency

Water Year	Type	Inflows			Outflows	Inflows
		Sespe Creek	Santa Clara River (from Piru)	Pole Creek	Santa Clara River (to Santa Paula)	- Outflows
2064	Above Normal	197,448	53,739	2,713	-262,137	-8,237
2065	Dry	13,248	10,660	507	-27,586	-3,172
2066	Dry	53,738	11,523	625	-65,620	267
2067	Dry	11,655	7,201	418	-19,019	254
2068	Critical	13,394	2,038	223	-15,353	302
2069	Dry	85,142	36,467	798	-114,754	7,653
2070	Wet	198,786	76,254	2,115	-265,869	11,285
2071	Wet	367,779	261,874	4,524	-650,925	-16,747
2072	Above Normal	31,272	19,466	5,096	-67,263	-11,428
2073	Wet	325,342	176,883	12,476	-540,599	-25,899
2074	Above Normal	35,523	46,092	2,311	-98,045	-14,119
2075	Below Normal	71,001	34,489	1,292	-120,666	-13,883
2076	Wet	358,230	276,249	5,995	-679,833	-39,360
2077	Above Normal	20,580	17,779	1,046	-55,949	-16,544
2078	Dry	47,646	51,217	1,123	-109,150	-9,164
2079	Above Normal	158,826	42,327	3,006	-217,124	-12,965
2080	Critical	6,710	16,057	461	-27,786	-4,558
2081	Dry	45,351	22,879	593	-72,408	-3,585
2082	Below Normal	31,674	12,118	1,258	-48,072	-3,023
2083	Wet	534,507	359,147	12,710	-943,167	-36,803
2084	Wet	128,151	48,874	1,696	-204,386	-25,665
2085	Critical	10,725	15,986	364	-33,242	-6,167
2086	Critical	135,113	48,847	1,469	-187,848	-2,419
2087	Dry	26,358	12,100	445	-39,365	-462
2088	Below Normal	70,664	30,419	659	-100,785	958
2089	Above Normal	131,591	40,033	860	-180,704	-8,220
2090	--	12,925	16,848	818	-33,231	-2,639
2091	--	3,786	11,192	94	-19,150	-4,080
2092	--	23,618	5,891	138	-29,129	517
2093	--	8,256	1,481	184	-9,589	333
2094	--	6,853	2,088	29	-7,675	1,294
2095	--	96,584	29,090	9,321	-127,532	7,463
2096	--	17,578	2,758	156	-15,011	5,481
2097	--	146,116	43,299	1,878	-176,068	15,224

## Appendix I-2

# Projected Annual Groundwater Budget

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Projected (2070CT)  
Annual  
Groundwater Budget

Fillmore Basin Groundwater Sustainability Plan  
Fillmore and Piru Basins  
Groundwater Sustainability Agency

Water Year	Type	Inflows				Inflow/Outflow Stream Exchange	Outflows			Change in Groundwater in Storage		Error	
		Underflow from Piru	Recharge (Basin Floor)	Recharge (Mountain Front)	Underflow from Outside		Wells	Underflow to Santa Paula	Evapo-transpiration (ET)	Annual	Cumulative	Annual	Cumulative
2022		51,292	20,134	8,636	1,135	4,820	-45,571	-17,541	-13,264	9,641	9,641	-2	-2
2023		53,437	17,016	7,358	1,159	-5,721	-45,950	-17,433	-12,895	-3,032	6,610	-1	-3
2024	Dry	52,699	15,692	6,119	1,185	-149	-55,069	-17,317	-11,869	-8,710	-2,100	-1	-4
2025	Dry	50,123	15,234	6,258	1,060	31	-50,545	-15,506	-10,877	-4,223	-6,322	0	-4
2026	Critical	46,655	13,294	4,581	1,099	-2,997	-57,425	-15,291	-7,266	-17,350	-23,672	0	-4
2027	Critical	39,662	14,471	4,709	1,278	-714	-56,633	-15,010	-4,839	-17,077	-40,748	0	-4
2028	Critical	36,874	15,714	5,628	1,354	2,021	-52,043	-16,867	-4,467	-11,784	-52,532	1	-3
2029	Critical	33,794	14,178	4,563	1,526	899	-60,253	-17,093	-3,153	-25,530	-78,062	8	5
2030	Wet	35,629	25,515	11,577	1,130	16,491	-47,720	-17,346	-3,756	21,526	-56,536	5	10
2031	Above Normal	43,642	14,254	5,358	1,085	9,697	-48,942	-16,912	-4,337	3,845	-52,691	0	10
2032	Dry	43,368	17,629	7,083	1,062	5,408	-52,677	-16,869	-4,483	521	-52,169	0	10
2033	Dry	42,056	15,313	5,723	1,115	4,681	-52,041	-17,031	-4,286	-4,471	-56,639	0	10
2034	Below Normal	39,434	16,203	6,444	1,142	5,194	-48,799	-17,035	-4,151	-1,559	-58,197	9	19
2035	Dry	37,061	16,096	5,918	1,206	5,127	-54,643	-17,039	-3,779	-10,038	-68,234	14	33
2036	Wet	39,605	24,048	11,337	1,031	18,294	-39,938	-16,931	-5,310	32,140	-36,094	4	37
2037	Above Normal	45,438	14,444	5,971	1,130	6,528	-52,061	-17,284	-5,769	-1,590	-37,684	12	49
2038	Critical	44,214	14,433	5,259	963	2,444	-52,247	-17,124	-5,535	-7,587	-45,271	5	54
2039	Critical	38,400	13,391	4,634	1,438	1,505	-60,072	-16,827	-4,290	-21,810	-67,081	10	65
2040	Above Normal	36,036	22,549	9,828	1,139	14,421	-48,846	-16,608	-4,499	14,022	-53,059	3	68
2041	Above Normal	41,149	16,362	5,961	1,162	9,213	-54,679	-16,538	-4,124	-1,486	-54,544	8	76
2042	Dry	36,902	14,263	4,897	1,029	3,332	-51,630	-15,396	-3,573	-10,176	-64,719	2	77
2043	Dry	35,460	14,316	5,880	1,246	4,836	-47,682	-16,772	-2,878	-5,589	-70,307	5	82
2044	Above Normal	36,035	19,514	8,522	920	15,442	-47,642	-15,638	-3,692	13,464	-56,843	2	84
2045	Wet	44,453	20,706	9,421	798	16,159	-37,846	-15,938	-5,275	32,479	-24,364	0	84
2046	Above Normal	50,046	15,057	5,880	1,086	4,528	-45,564	-17,382	-7,344	6,306	-18,058	0	84
2047	Wet	51,822	26,905	13,235	1,030	11,215	-44,598	-17,329	-12,451	29,827	11,769	-1	82
2048	Wet	53,497	15,685	5,978	1,340	-4,371	-49,095	-17,482	-12,787	-7,235	4,534	-1	81
2049	Dry	52,180	16,521	6,741	1,221	-1,179	-49,214	-17,465	-11,965	-3,161	1,374	-1	80
2050	Dry	52,659	15,763	5,858	1,290	840	-62,647	-16,960	-9,868	-13,057	-11,683	7	87
2051	Above Normal	53,029	22,917	9,712	1,082	3,981	-54,001	-16,906	-10,025	9,789	-1,893	0	87
2052	Wet	52,570	16,764	6,810	1,081	2,222	-49,361	-17,160	-10,794	2,132	240	0	86
2053	Below Normal	52,171	17,181	7,195	1,095	-1,085	-48,196	-17,394	-10,992	-26	215	0	86
2054	Below Normal	49,876	15,575	6,570	1,133	-495	-49,581	-17,300	-9,459	-3,682	-3,466	0	86
2055	Below Normal	47,777	15,132	5,662	1,016	-2,351	-51,220	-16,283	-8,481	-8,750	-12,215	0	86
2056	Wet	49,496	29,783	14,146	1,125	6,620	-42,694	-17,100	-12,535	28,841	16,626	-1	86
2057	Wet	54,604	20,368	8,657	1,204	-7,854	-43,912	-17,246	-14,160	1,658	18,285	-2	84
2058	Wet	53,585	23,381	10,586	1,393	-6,787	-46,258	-16,971	-15,110	3,819	22,105	-2	83
2059	Above Normal	53,714	15,774	5,929	1,640	-5,602	-53,344	-16,996	-13,526	-12,412	9,693	-1	81
2060	Below Normal	52,442	16,622	6,427	1,372	-775	-51,381	-17,087	-11,056	-3,435	6,258	0	81
2061	Wet	52,334	29,583	13,040	1,436	-1,641	-47,090	-17,131	-13,876	16,661	22,920	6	87
2062	Wet	55,393	14,992	5,750	1,920	-8,742	-48,609	-16,987	-14,524	-10,809	12,112	-1	86
2063	Critical	54,247	13,599	5,092	1,414	-5,815	-49,446	-17,062	-12,486	-10,457	1,655	-1	85
2064	Above Normal	53,274	21,277	9,631	1,406	-1,556	-41,264	-17,215	-13,049	12,502	14,157	-1	84
2065	Dry	51,319	13,712	4,239	1,459	-1,577	-57,936	-17,323	-11,059	-17,166	-3,009	0	84
2066	Dry	51,312	16,213	5,883	1,231	241	-47,508	-17,229	-10,691	-548	-3,556	0	84
2067	Dry	51,917	14,406	4,998	1,179	-505	-57,361	-16,852	-9,296	-11,513	-15,069	0	84
2068	Critical	47,563	14,373	4,971	1,189	72	-58,896	-16,811	-6,674	-14,212	-29,281	0	84
2069	Dry	44,773	19,591	8,196	1,167	6,414	-57,497	-16,899	-5,734	12	-29,269	0	84
2070	Wet	51,060	24,032	10,473	968	12,319	-50,585	-17,029	-8,932	22,307	-9,662	0	83
2071	Wet	52,442	26,881	12,768	1,276	5,464	-42,607	-16,950	-13,798	25,480	18,518	5	88
2072	Above Normal	55,249	15,400	5,832	1,891	-3,347	-53,104	-17,004	-13,069	-8,145	10,373	8	96
2073	Wet	54,437	26,402	12,628	2,092	-2,315	-47,592	-17,079	-14,879	13,695	24,069	2	98
2074	Above Normal	54,718	17,694	6,711	2,112	-6,055	-56,286	-17,134	-13,554	-11,778	12,291	14	112
2075	Below Normal	54,767	18,438	7,731	1,794	-5,605	-46,255	-17,046	-14,326	-503	11,789	-1	111
2076	Wet	54,147	29,905	14,330	1,640	-9,173	-39,306	-17,065	-14,696	19,788	31,577	3	114
2077	Above Normal	55,541	13,476	4,483	1,990	-8,510	-53,117	-16,883	-13,644	-16,652	14,926	12	126
2078	Dry	54,383	18,199	7,110	1,526	-2,447	-52,856	-16,812	-13,066	-3,963	10,963	-1	125
2079	Above Normal	54,161	21,694	9,558	1,517	-3,471	-49,574	-17,030	-13,052	3,802	14,766	-1	124
2080	Critical	51,816	11,937	4,239	1,539	-2,911	-51,412	-17,086	-11,456	-13,335	1,431	-1	124
2081	Dry	50,731	17,389	7,039	1,113	-2,211	-42,041	-17,106	-12,050	2,863	4,295	0	124
2082	Below Normal	50,211	14,337	5,864	1,211	-2,238	-48,558	-17,346	-11,263	-7,782	-3,487	0	124
2083	Wet	50,457	30,529	15,410	1,429	-1,966	-36,402	-17,102	-14,065	28,288	24,802	-2	122
2084	Wet	53,079	16,939	7,517	1,766	-10,195	-40,784	-17,040	-14,241	-2,962	21,840	-1	121
2085	Critical	51,565	10,628	3,892	1,491	-3,243	-52,170	-16,999	-12,762	-17,599	4,241	-1	120
2086	Critical	52,347	18,784	7,795	1,337	2,952	-55,199	-16,995	-12,185	-1,162	3,079	0	120
2087	Dry	52,034	14,598	5,421	1,194	823	-54,533	-17,035	-10,276	-7,775	-4,696	0	120
2088	Below Normal	51,875	18,630	7,521	1,078	2,418	-48,819	-17,225	-10,658	4,820	124	0	120
2089	Above Normal	52,526	19,503	8,748	1,095	-1,305	-43,135	-17,124	-11,964	8,345	8,469	-1	119
2090		50,208	12,154	4,250	1,294	-430	-50,779	-16,569	-11,168	-11,041	-2,571	0	119
2091		47,393	13,651	5,263	1,006	-3,187	-50,940	-15,248	-9,485	-11,548	-14,118	0	119
2092		42,536	15,268	6,003	1,115	593	-55,976	-15,318	-7,070	-12,847	-26,964	0	119
2093		39,358	14,075	5,042	1,099	211	-50,620	-15,216	-5,032	-11,082	-38,046	0	119
2094		37,420	16,355	6,310	1,032	1,662	-53,459	-15,646	-4,605	-10,932	-48,978	0	119
2095		38,770	20,956	9,183	1,344	10,476	-52,289	-15,555	-4,937	7,948	-41,030	0	119
2096		38,985	15,674	5,961	1,367	4,543	-53,054	-15,342	-4,308	-6,174	-47,204	0	119
2097		39,411	19,536	9,183	1,007	14,936	-39,164	-16,081	-5,133	23,695	-23,508	0	118

Notes:  
- Information is from United (2021a,b)  
- Values are in acre-feet per year (AFY).