

## **Appendix C: 2017 Water Needs Assessments**



**Contractor's Water Supply Sources and Quantities (acre-feet)**

Timeframe 1	Surface Water Supply							Groundwater Supply				Total Supply 13
	Reference Delivery 2	USBR Total Deliv/Max 3	SWP 4	Local 5	Local Source 6	Trsfr/Rtrn /Recycle In 7	Trsfr/ Out 8	District 9	Private 10	Safe Yield 11	Recharge 12	
1995	3,500 *	2,432	0	0		0	0	0	0		0	2,432
1997 representative	3,500 *	2,432	0	0		0	0	0	0		0	2,432
2015	3,500 *	2,436	0	0		0	0	0	0		0	2,436
2025	3,500 *	3,500	0	0		0	0	0	0		0	3,500
2050	3,500 *	3,500	0	0		0	0	0	0		0	3,500

**Contractor's Agricultural Water Demands**

Maximum ProductiveAcres= 0

Timeframe 1	Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%) 16	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ft) 18	Calculated Net Crop Water Req (acre-feet) 19	USBR Net Crop Water Req (acre-feet) 20	Average Irrigated Acres (acres) 21	Reference Irrigated Acres (acres) 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25	Total Ag Demand (acre-feet) 26
1995												
1997												
2015												
2025												
2050												

**Contractor's M&I Water Demands**

Timeframe 1	Residential Water Demand			Nonresidential Water Demand			Loss	Ref Urban Per Capita Dmd (gpcd) 35	Calc Urban Per Capita Dmd (gpcd) 36	Total MCI Demand (acre-feet) 37	Total Ag+ MCI Dmd (acre-feet) 38	Unmet Demand (acre-feet) 39
	Population 28	Per Capita Demand (gpcd) 29	Total Demand (acre-feet) 30	Industrial (acre-feet) 31	Comm/ Instit (acre-feet) 32	Total Demand (acre-feet) 33	Unacc /Distr (acre-feet) 34					
1995	6,495	106.1	772	33	1,300	1,333	328	311.0	334.4	2,433	2,433	1
1997	6,495	106.1	772	33	1,300	1,333	328	311.0	334.4	2,433	2,433	1
2015	16,367	56.7	1,039	33	1,397	1,430	328	198.0	152.6	2,797	2,797	361
2025	12,000	97.2	1,306	57	2,143	2,200	385	274.0	289.5	3,891	3,891	391
2050	20,210	166.0	3,758	33	1,586	1,619	471	166.0	258.3	5,848	5,848	2,348

\* Represents Maximum Contract Amount

**Notes:** Unaccounted beneficial use is added to distribution system loss; the total is shown under Distribution system loss.

**Contractor's Water Supply Sources and Quantities (acre-feet)**

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	Reference Delivery 2	USBR Total Deliv/Max 3	SWP 4	Local 5	Local Source 6	Trsfrr/Rtrn /Recycle In 7	Trsfrr/ Out 8	District 9	Private 10	Safe Yield 11	Recharge 12	
1998	10,000 *	3,995	0	0		0	0	0	0		0	3,995
2011	10,000 *	5,859	0	0		0	0	0	0		0	5,859
2050	10,000 *	10,000	0	0		0	0	0	0		0	10,000

**Contractor's Agricultural Water Demands**

Maximum ProductiveAcres=

Timeframe 1	Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%) 16	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ft) 18	Calculated Net Crop Water Req (acre-feet) 19	USBR Net Crop Water Req (acre-feet) 20	Average Irrigated Acres (acres) 21	Reference Irrigated Acres (acres) 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25	Total Ag Demand (acre-feet) 26
1998												
2011												
2050												

**Contractor's M&I Water Demands**

Timeframe 1	Residential Water Demand			Nonresidential Water Demand			Loss	Ref Urban Per Capita Dmd (gpcd) 35	Calc Urban Per Capita Dmd (gpcd) 36	Total MCI Demand (acre-feet) 37	Total Ag+ MCI Dmd (acre-feet) 38	Unmet Demand (acre-feet) 39
	Population 28	Per Capita Demand (gpcd) 29	Total Demand (acre-feet) 30	Industrial (acre-feet) 31	Comm/ Instit (acre-feet) 32	Total Demand (acre-feet) 33	Unacc /Distr (acre-feet) 34					
1998	15,400	108.7	1,875	600	1,295	1,895	225	311.0	231.6	3,995	3,995	0
2011	19,362	88.5	1,919	1,226	881	2,107	475	198.0	207.5	4,501	4,501	-1,358
2050	29,665	166.0	5,517	3,104	881	3,985	1,225	166.0	322.8	10,727	10,727	727

\* Represents Maximum Contract Amount

**Notes:** Unaccounted beneficial uses are added to distribution system losses and shown under Distribution system loss.

**Contractor's Water Supply Sources and Quantities (acre-feet)**

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	Reference Delivery 2	USBR Total Deliv/Max 3	SWP 4	Local 5	Local Source 6	Trsfr/Rtrn /Recycle In 7	Trsfr/ Out 8	District 9	Private 10	Safe Yield 11	Recharge 12	
1996	3,000 *	982	0	0		0	0	0	0		0	982
2015	3,000 *	726	0	0		0	0	0	0		0	726
2050	3,000 *	3,000	0	0		0	0	0	0		0	3,000

**Contractor's Agricultural Water Demands**

Maximum ProductiveAcres=

Timeframe 1	Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%) 16	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ft) 18	Calculated Net Crop Water Req (acre-feet) 19	USBR Net Crop Water Req (acre-feet) 20	Average Irrigated Acres (acres) 21	Reference Irrigated Acres (acres) 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25	Total Ag Demand (acre-feet) 26
1996		0									0	
2015												
2050												

**Contractor's M&I Water Demands**

Timeframe 1	Residential Water Demand			Nonresidential Water Demand			Loss	Ref Urban Per Capita Dmd (gpcd) 35	Calc Urban Per Capita Dmd (gpcd) 36	Total MCI Demand (acre-feet) 37	Total Ag+ MCI Dmd (acre-feet) 38	Unmet Demand (acre-feet) 39
	Population 28	Per Capita Demand (gpcd) 29	Total Demand (acre-feet) 30	Industrial (acre-feet) 31	Comm/ Instit (acre-feet) 32	Total Demand (acre-feet) 33	Unacc /Distr (acre-feet) 34					
1996	5,608	75.9	477	311	114	425	80	311.0	156.3	982	982	0
2015	8,082	28.6	259	86	348	434	58	198.0	83.0	751	751	25
2050	14,086	166.0	2,619	150	607	757	240	166.0	229.2	3,616	3,616	616

\* Represents Maximum Contract Amount

**Notes:** Unaccounted beneficial use it totaled with the distribution system loss. The total for both is shown under Distribution system loss.

Division: **West San Joaquin**  
M&I Water Supply

**Water Needs Assessment**

District: 204750

Date: 1/17/2017

**CA DEPT OF FISH & WILDLIFE**

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	Reference Delivery 2	USBR Total Deliv/Max 3	SWP 4	Local 5	Local Source 6	Trsfrr/Rtrn /Recycle In 7	Trsfrr/ Out 8	District 9	Private 10	Safe Yield 11		Recharge 12
2015	10	10	0	0		0	0	0	0		0	10
2050	10 *	10	0	0		0	0	0	0		0	10

**Contractor's Agricultural Water Demands**

Maximum Productive Acres=

Timeframe 1	Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%) 16	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ft) 18	Calculated Net Crop Water Req (acre-feet) 19	USBR Net Crop Water Req (acre-feet) 20	Average Irrigated Acres (acres) 21	Reference Irrigated Acres (acres) 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25	Total Ag Demand (acre-feet) 26
2015												
2050												

**Contractor's M&I Water Demands**

Timeframe 1	Residential Water Demand			Nonresidential Water Demand			Loss	Ref Urban Per Capita Dmd (gpcd) 35	Calc Urban Per Capita Dmd (gpcd) 36	Total M&I Demand (acre-feet) 37	Total Ag+ M&I Dmd (acre-feet) 38	Unmet Demand (acre-feet) 39
	Population 28	Per Capita Demand (gpcd) 29	Total Demand (acre-feet) 30	Industrial (acre-feet) 31	Comm/ Instit (acre-feet) 32	Total Demand (acre-feet) 33	Unacc /Distr (acre-feet) 34					
2015	15	59.5	1	0	9	9	0	77.0	595.2	10	10	0
2050	15	165.5	3	0	9	9	0	166.0	701.1	12	12	2

\* Represents Maximum Contract Amount

**Notes:**