

M&I 2020 Sch A-9 F.Z22.xlsm  
09/25/2019

CENTRAL VALLEY PROJECT  
SCHEDULE OF ESTIMATED M&I OPERATION & MAINTENANCE COSTS  
BY FACILITY AND/OR COMPONENT  
2020 M&I WATER RATES

A		B	C	D
Facility/Contractor		Estimated O&M & Corps Expense	Estimated Project Use Energy Cost <A-11>	Total Estimated Costs (B+C)
Ref				
<b>Storage</b>				
	American River	\$ 16,920	\$ -	\$ 16,920
	Black Butte Reservoir	\$ 39,098	\$ -	\$ 39,098
	Clair A. Hill Whiskeytown Dam	\$ 22,677	\$ -	\$ 22,677
	Clear Creek Tunnel	\$ 4,750	\$ -	\$ 4,750
	Columbia-Mowry System	\$ 45,693	\$ 3,008	\$ 48,701
	Coleman National Fish Hatchery	\$ 348,133	\$ -	\$ 348,133
	Delta Cross Channel	\$ 21,333	\$ -	\$ 21,333
	Folsom D&R	\$ 170,880	\$ -	\$ 170,880
	Folsom Pipeline	\$ -	\$ -	\$ -
	Folsom PP	\$ 45,180	\$ 82,949	\$ 128,129
	Friant D&R	\$ 191,917	\$ 15,794	\$ 207,711
	Gianelli, WR PGP	2/ \$ -	\$ 491,451	\$ 491,451
	Regeneration Credit	2/ \$ -	\$ (451,133)	\$ (451,133)
	New Melones D&R	\$ -	\$ -	\$ -
	Nimbus D&R	\$ 13,282	\$ -	\$ 13,282
	San Joaquin River	\$ 8,163	\$ -	\$ 8,163
	Sacramento River	\$ 4,284	\$ -	\$ 4,284
	Security Costs	\$ 578,914	\$ -	\$ 578,914
	San Luis Unit - Other Routine O&M Costs - Joint.	\$ 2,183,808	\$ -	\$ 2,183,808
	Shasta Dam and Reservoir	\$ 206,827	\$ 78,237	\$ 285,064
	Spring Creek Tunnel	\$ 15	\$ -	\$ 15
	Trinity Dam and Clair Engle Lake	\$ 13,154	\$ -	\$ 13,154
	Water Forum - American River Division	\$ 3,600	\$ -	\$ 3,600
	<b>Total Storage including PUE Offset</b>	2/ 3/ \$ 3,918,629	\$ 220,306	\$ 4,138,935
	<b>Storage PUE Credit</b>	3/ \$ -	\$ (220,306)	\$ (220,306)

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<b>Conveyance</b>			
DMC Regulatory Actions	\$ 5,187	\$ -	\$ 5,187
Friant-Kern Canal	\$ 640	\$ -	\$ 640
Little Panoche Detention Dam	\$ 228	\$ -	\$ 228
Los Banos Creek Detention Dam - Oper. Joint	\$ 4	\$ -	\$ 4
Tehama-Colusa Canal	\$ 545	\$ -	\$ 545
San Luis Canal - Federal Only	\$ -	\$ -	\$ -
Folsom-South Canal (Water Ratesetting)	\$ 65,600	\$ -	\$ 65,600
Total Conveyance	\$ 72,204	\$ -	\$ 72,204
Less Direct Billed	\$ (6,604)	\$ -	\$ (6,604)
Net Conveyance	\$ 65,600	\$ -	\$ 65,600
<b>Conveyance Pumping</b>			
Dos Amigos Pumping Plant	\$ -	\$ 109,171	\$ 109,171
O'Neill Pump Gen Plant - Federal	\$ -	\$ 372,452	\$ 372,452
Jones Pumping Plant	\$ -	\$ 2,280,931	\$ 2,280,931
Jones Switchyard	\$ -	\$ -	\$ -
Total Conv. Pumping (Direct Billed)	\$ -	\$ 2,762,554	\$ 2,762,554
Less Direct Billed	\$ -	\$ (2,762,554)	\$ (2,762,554)
Net Conveyance Pumping	\$ -	\$ -	\$ -
<b>Direct Pumping</b>			
Colusa County WD	\$ -	\$ 1,924	\$ 1,924
Contra Costa PP (Contra Costa WD)	\$ -	\$ 825,878	\$ 825,878
Kanawha WD	\$ -	\$ 27	\$ 27
Pleasant Valley PP (City of Coalinga)	\$ -	\$ 196,786	\$ 196,786
San Benito County WD			
Gianelli, WR PGP	1/ \$ -	\$ 32,878	\$ 32,878
Pacheco PP	1/ \$ -	\$ 32,009	\$ 32,009
San Luis WD Relifts	\$ -	\$ 9,116	\$ 9,116
Santa Clara Valley WD			
Coyote PP	1/ \$ -	\$ 220,873	\$ 220,873
Gianelli, WR PGP	1/ \$ -	\$ 700,214	\$ 700,214
Pacheco PP	1/ \$ -	\$ 681,715	\$ 681,715
Shasta PP (City of Shasta Lake)	\$ 125,000	\$ 1,381	\$ 126,381
State-Delta PP (Cross Valley Canal)	\$ -	\$ 1,157	\$ 1,157
Westlands WD Relifts	\$ -	\$ 28,111	\$ 28,111
Wintu PP (Bella Vista WD)	\$ -	\$ 59,994	\$ 59,994

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Facility/Contractor Ref	Estimated O&M & Corps Expense	Estimated Project Use Energy Cost <A-11>	Total Estimated Costs (B+C)
Dos Amigos PP (Cross Valley Canal)	\$ -	\$ 2,756	\$ 2,756
Total Direct Pumping	\$ 125,000	\$ 2,794,817	\$ 2,919,817
Direct Pumping to WAPA (Specific Users)	\$ -	\$ (2,532,743)	\$ (2,532,743)
Direct Pumping Credit/to WAPA	\$ -	\$ (262,073)	\$ (262,073)
Direct Pumping in Ratesetting	\$ 125,000	\$ -	\$ 125,000
Sub Total	\$ 4,109,229	\$ -	\$ 4,109,229
<b><u>Non-Recurring O&amp;M</u></b>			
<b><u>Storage</u></b>			
Gianelli Pump/Gen Plant - San Felipe Unit	\$ 140,210	\$ -	\$ 140,210
Gianelli Pump/Gen Plant - All Other Contractors	\$ 424,891	\$ -	\$ 424,891
Nimbus Dam - San Felipe Unit	\$ 468	\$ -	\$ 468
Nimbus Dam - All Other Contractors	\$ 1,418	\$ -	\$ 1,418
Shasta Dam - San Felipe Unit	\$ 20,909	\$ -	\$ 20,909
Shasta Dam - All Other Contractors	\$ 63,361	\$ -	\$ 63,361
Folsom Dam - San Felipe Unit	\$ 25,308	\$ -	\$ 25,308
Folsom Dam - All Other Contractors	\$ 76,692	\$ -	\$ 76,692
Friant Dam - San Felipe Unit	\$ 6,205	\$ -	\$ 6,205
Friant Dam - All Other Contractors	\$ 18,805	\$ -	\$ 18,805
San Luis Dam - San Felipe Unit	\$ 50,756	\$ -	\$ 50,756
San Luis Dam - All Other Contractors	\$ 153,810	\$ -	\$ 153,810
Delta Cross Channel - San Felipe Unit	\$ 63,048	\$ -	\$ 63,048
Delta Cross Channel - All Other Contractors	\$ 191,061	\$ -	\$ 191,061
Total Non-Recurring O&M Storage	\$ 1,236,940	\$ -	\$ 1,236,940
<b><u>Water Marketing Expense</u></b>			
Suisun Marsh Protection	\$ 98,582	\$ -	\$ 98,582
Water Contract Administration	\$ 1,322,764	\$ -	\$ 1,322,764
Water & Power Systems Control	\$ 404,453	\$ -	\$ 404,453
Other Expenses	\$ 388,706	\$ -	\$ 388,706
Hazardous Materials Management Program	\$ 24,674	\$ -	\$ 24,674
General Expense	\$ 24,284	\$ -	\$ 24,284
Cost Allocation Study Cost	\$ 87,150	\$ -	\$ 87,150
Water Wheeling	\$ 105,755	\$ -	\$ 105,755
Non-Permanent Contractor Revenue	\$ (254,254)	\$ -	\$ (254,254)
Total Water Marketing	\$ 2,202,114	\$ -	\$ 2,202,114
Grand Total	\$ 7,548,284	\$ -	\$ 7,548,284

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**Footnotes:**

1/ Suballocation of San Felipe Unit Direct Pumping Costs:

	Projected FY 2020 Deliveries <Sch A-12>	Ratios	Direct Pumping Allocation (Sch A-11)			
			William R. Gianelli Pump-Generator Plant PUE	Pacheco PP	Coyote PP	Grand Total
San Benito County WD	4,001	0.044848	\$ 32,878	\$ 32,009		\$ 64,887
Santa Clara Valley WD	85,208	0.955152	\$ 700,214	\$ 681,715	\$ 220,873	\$ 1,602,802
	<b>89,209</b>	<b>1.000000</b>	<b>\$ 733,092</b>	<b>\$ 713,724</b>	<b>\$ 220,873</b>	<b>\$ 1,667,688</b>
Total San Felipe	89,209	0.248114				
All Other Contractors	270,338	0.751886				
Total Storage	<b>359,547</b>	<b>1.000000</b>				

2/ Storage Costs are broken down between San Felipe Unit Contractors and all others as follows:

	San Felipe Unit Storage	All Other Contractors Storage	Total
Projected 2020 Storage Deliveries	<b>89,209</b>	<b>270,338</b>	<b>359,547</b>
Ratios	<b>0.248114</b>	<b>0.751886</b>	<b>1.000000</b>
Allocated Gianelli, WR Pump Generator Costs			
Project Use Costs	*	\$ 491,451	\$ 491,451
Regeneration Credit	\$ -	\$ (451,133)	\$ (451,133)
Allocated Storage O&M Costs	\$ 1,016,924	\$ 3,081,693	\$ 4,098,617
Allocated Storage O&M Costs - Non-Recurring O&M	\$ 306,903	\$ 930,037	\$ 1,236,940
Total	<b>\$ 1,323,827</b>	<b>\$ 4,052,048</b>	<b>\$ 5,375,875</b>
Cost per Acre-foot (to Schedule A-8)	<b>\$14.84</b>	<b>\$14.99</b>	

\*San Felipe Unit contractors' share of the William R. Gianelli PG PUE has been included in the direct pumping section (see Schedule A-11, page 2)

3/ Project Use Energy payment is being remitted to Western Area Power Authority for storage and direct pumping based on the deliveries of a select few contractors. The rates for the select few contractors are reduced as a credit in the O&M rates. All contractors will ultimately pay for the storage and direct pumping service but as an offset to the amount paid by the select few. Refer to schedule A-11 for calculation details.