

IRR 2020 Sch A-11 F.Z22.XLSM  
09/24/2019

CENTRAL VALLEY PROJECT  
SCHEDULE OF ESTIMATED IRRIGATION DIRECT PUMPING OPERATION & MAINTENANCE COSTS  
2020 IRRIGATION WATER RATES

A	B	C	D	E	F	G	H	I	J	K	L
<b>2020 Projected Deliveries</b>											
Facility/Contractor Ref.	Wintu PP <Sch A-12>	Tehama-Colusa Canal Relifts						Corning Canal Relifts			
		Colusa County WD <Sch A-12>	Dunnigan WD <Sch A-12>	Glenn Valley WD <Sch A-12>	Kanawha WD <Sch A-12>	Orland- Artois WD <Sch A-12>	Westside WD <Sch A-12>	Corning WD <Sch A-12>	Proberta WD <Sch A-12>		
<b>Corning Canal</b>											
Corning WD										8,050	
Proberta WD											1,225
<b>Cow Creek Unit</b>											
Bella Vista WD	5,950										
<b>Tehama-Colusa Canal</b>											
Colusa County WD		30,785									
Dunnigan WD			8,155								
Glenn Valley WD				1,013							
Kanawha WD					24,144						
Orland-Artois WD						22,713					
Westside WD							33,317				
<b>Total Deliveries</b>	<b>5,950</b>	<b>30,785</b>	<b>8,155</b>	<b>1,013</b>	<b>24,144</b>	<b>22,713</b>	<b>33,317</b>			<b>8,050</b>	<b>1,225</b>
Est. 2020 Non-Recurring O&M Cost	\$ -	\$ -	\$ -		\$ -	\$ -	\$ -			\$ -	\$ -
Est. 2020 O&M Cost	\$ 85,185	\$ 436,884	\$ 7,033	\$ -	\$ 51,042	\$ 105,709	\$ 43,076			\$ 68,417	\$ 1,923
Total (Sch. A-9)	\$ 85,185	\$ 436,884	\$ 7,033	\$ -	\$ 51,042	\$ 105,709	\$ 43,076			\$ 68,417	\$ 1,923
<b>Direct Pumping: 3/</b>											
Cost Per A/F Remittance to WAPA		\$ 14.19			\$ 2.11	\$ 4.65					
Cost Per A/F Offset for Direct Pumping	\$ 14.32		\$ 0.86	\$ -			\$ 1.29			\$ 8.50	\$ 1.57
<b>Other PUE Remittance to WAPA: 3/</b>											
Paid as Other PUE		\$ 87,772			\$ 10,255	\$ 21,238					
Paid thru Direct Pumping PUE		\$ 2.85			\$ 0.42	\$ 0.94					
Credit in O&M Rate for Other PUE		\$ (2.85)			\$ (0.42)	\$ (0.94)					

CENTRAL VALLEY PROJECT  
SCHEDULE OF ESTIMATED IRRIGATION DIRECT PUMPING OPERATION & MAINTENANCE COSTS  
2020 IRRIGATION WATER RATES

A	B	C	D	E	F	G	H	I	J	K	L
	San Luis Canal Relifts					San Felipe Out-of-Basin					
	Westlands WD 1/								Cross Valley Contractors 2/		
Facility/Contractor Ref.	Panoche WD <Sch A-12>	San Luis WD <Sch A-12>	Westlands WD Relifts <Sch A-12>	Pleasant Valley PP <Sch A-12>	Pleasant Valley Relifts <Sch A-12>	Total AF (D+E) Cost (D+E+F)	Gianelli PP	Coyote PP	Pacheco PP	State Delta PP <Sch A-12>	Dos Amigos PP <Sch A-12>
<b>Cross Valley Canal</b>											
County of Fresno										840	840
County of Tulare										1,387	1,387
Hills Valley ID										1,171	1,171
Kern-Tulare ID										18,655	18,655
Lower Tule River ID - CVC										10,886	10,886
Pixley ID										10,886	10,886
Tri-Valley WD										400	400
<b>San Felipe Unit</b>											
San Benito County WD							12,443		12,443		
Santa Clara Valley WD							12,135	12,135	12,135		
<b>San Luis Canal</b>											
Panoche WD - SLC	23,398										
San Luis WD - SLC		34,650									
Westlands WD - SLC			366,043	41,065	7,788	407,108					
Westlands WD - SLC (DD#2)			1,321	148	28	1,469					
Total Deliveries	23,398	34,650	367,364	41,213	7,816	408,577	24,578	12,135	24,578	44,224	44,224
							0.51				
Est. 2020 Non-Recurring O&M Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				\$ -	\$ -
Est. 2020 O&M Cost	\$ 181	\$ 726,098	\$ 3,845,979	\$ 700,834	\$ 91,499	\$ 4,638,312	\$ 201,972	\$ 31,456	\$ 196,636	\$ 183,986	\$ 438,484
Total (Sch. A-9)	\$ 181	\$ 726,098	\$ 3,845,978.78	\$ 700,833.82	\$ 91,498.91	\$ 4,638,312.00	\$ 201,971.71	\$ 31,456.25	\$ 196,635.72	\$ 183,986	\$ 438,484
<b>Direct Pumping: 3/</b>											
Cost Per A/F Remittance to WAPA		\$ 20.96				\$ 11.35	\$ 8.22	\$ 2.59	\$ 8.00		
Cost Per A/F Offset for Direct Pumping	\$ 0.01									\$4.16	\$9.92
<b>Other PUE Remittance to WAPA: 3/</b>											
Paid as Other PUE		\$ 145,877	\$ 772,679.52	\$ 140,801.59	\$ 18,382.66	\$ 931,864.00	\$ 40,577.29	\$ 6,319.74	\$ 39,505.26		
Paid thru Direct Pumping PUE		\$ 4.21				\$ 2.28	\$ 1.65	\$ 0.52	\$ 1.61		
Credit in O&M Rate for Other PUE		\$ (4.21)				\$ (2.28)	\$ (1.65)	\$ (0.52)	\$ (1.61)		

CENTRAL VALLEY PROJECT  
SCHEDULE OF ESTIMATED IRRIGATION DIRECT PUMPING OPERATION & MAINTENANCE COSTS  
2020 IRRIGATION WATER RATES

**FOOTNOTES:**

1/ Westlands WD & Westlands WD DD#2 (DD#2) deliveries are based on firm supplies:

	<b>Allocated 2020 Deliveries</b>		
	<b>Ratios</b>	<b>Westlands WD</b>	<b>DD#2</b>
Westlands WD Relifts:			
High Side - Relift Pumps	0.26957	109,742	396
Low Side (LS) - Gravity Feed	0.62957	256,301	925
Subtotal	0.89913	366,043	1,321
Pleasant Valley PP:			
High Side - Relift Pump	0.01913	7,788	28
Coalinga Canal, LS - Gravity	0.08174	33,277	120
Subtotal (Pleasant Valley PP)	0.10087	41,065	148
Total - WWD Deliveries	1.0000	407,108	1,469

2/ Cross Valley Canal Estimated 2020 Project Use Energy Cost

	<b>Dos Amigos PP</b>	<b>State Delta PP</b>
<u>2020 PUE Estimate</u>		
Direct Billed	\$ 4,748,335	\$ 436,650
Cross Valley Canal 2020 Projected Cost	\$ 441,240	\$ 185,143
Total	\$ 5,189,575	\$ 621,793

  

	Deliveries	Ratio	<b>Dos Amigos PP</b>	<b>State Delta PP</b>
M&I	278	0.00625	\$ 2,756	\$ 1,157
Irrigation	44,224	0.99375	\$ 438,484	\$ 183,986
Total	44,502	1.00000	\$ 441,240	\$ 185,143

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.

CENTRAL VALLEY PROJECT  
SCHEDULE OF ESTIMATED IRRIGATION DIRECT PUMPING OPERATION & MAINTENANCE COSTS  
2020 IRRIGATION WATER RATES

A	B Acre-Feet		D Ratio of Acre-Feet		F	G	H For Water Ratesetting		I
	M&I	Irrigation	M&I	Irrigation	Total	Total \$	M&I	Irrigation	
Ref	<Sch A-12>	<Sch A-12>	(B/(B+C))	(C/(B+C))	(D+E)	<Meter Costs>	(D*G)	(E*G)	
<b>Used in Schedule 9</b>									
<b>Storage:</b>									
Friant D&R	169	N/A	100.00%		100.00%	\$ 15,794	\$ 15,794	\$ -	
Shasta D&R (Includes Jdg F Carr PH)	1,297	3,736	25.77%	74.23%	100.00%	\$ 303,557	\$ 78,237	\$ 225,320	
Columbia Mowry (Based on Avg. KWH's)	94,394	594,511	13.70%	86.30%	100.00%	\$ 21,956	\$ 3,008	\$ 18,947	
Folsom Pump Plant	33,216	N/A	100.00%		100.00%	\$ 82,949	\$ 82,949	\$ -	
New Melones Dam & Reservoir	27,912	25,900	51.87%	48.13%	100.00%	\$ -	\$ -	\$ -	
Gianelli WR Pump-Gen Plt	270,338	1,413,838	16.05%	83.95%	100.00%	\$ 3,061,682	\$ 491,451	\$ 2,570,232	
Regen. Credit - San Luis PP	270,338	1,413,838	16.05%	83.95%	100.00%	\$ (2,810,509)	\$ (451,133)	\$ (2,359,375)	
SFU Gianelli WR PGP (Direct Pumping)	89,209	24,578	78.40%	21.60%	100.00%	\$ -	\$ -	\$ -	
Offsetting Revenue for PUE Paid to WAPA							<b>\$ 220,306</b>	<b>\$ 455,124</b>	
<b>Conveyance Pumping (Direct Bill):</b>									
Corning Pumping Plant	N/A	11,515		100.00%	100.00%	\$ 220,254	\$ -	\$ 220,254	
Dos Amigos Pumping Plant	11,011	467,893	2.30%	97.70%	100.00%	\$ 4,748,335	\$ 109,171	\$ 4,639,164	
O'Neill Pump-Gen Plt	100,632	494,352	16.91%	83.09%	100.00%	\$ 2,280,509	\$ 385,710	\$ 1,894,799	
Regen. Credit - O'Neill Pump-Gen Plt	100,632	494,352	16.91%	83.09%	100.00%	\$ (78,390)	\$ (13,258)	\$ (65,132)	
Jones Pumping Plant	156,733	1,163,331	11.87%	88.13%	100.00%	\$ 19,210,812	\$ 2,280,931	\$ 16,929,881	
In-Lieu of Jones Pumping						\$ 436,650	\$ -	\$ 436,650	
<b>Total Conveyance Pumping Direct Bill</b>							<b>\$ 2,762,554</b>	<b>\$ 24,055,616</b>	

CENTRAL VALLEY PROJECT  
SCHEDULE OF ESTIMATED IRRIGATION DIRECT PUMPING OPERATION & MAINTENANCE COSTS  
2020 IRRIGATION WATER RATES

A	B Acre-Feet		C Ratio of Acre-Feet		D	E	F	G	H For Water Ratesetting		I
	M&I	Irrigation	M&I	Irrigation	Total	Total \$		M&I	Irrigation		
Ref	<Sch A-12>	<Sch A-12>	(B/(B+C))	(C/(B+C))	(D+E)	<Meter Costs>		(D*G)	(E*G)		
<b>Used in Schedule 11 Page 1</b>											
<b>Direct Pumping:</b>											
Gianelli PGP - SFU	89,209	24,578	78.40%	21.60%	100.00%	\$ 935,063	\$	733,092	\$	201,972	
Contra Costa PP	96,890	-	100.00%		100.00%	\$ 825,878	\$	825,878	\$	-	
Colusa CWD (Incl. Arb./Will O&M Office)	136	30,785	0.44%	99.56%	100.00%	\$ 438,808	\$	1,924	\$	436,884	
Kanawha WD	13	24,144	0.05%	99.95%	100.00%	\$ 51,069	\$	27	\$	51,042	
Orland-Artois WD	N/A	22,713		100.00%	100.00%	\$ 105,709	\$	-	\$	105,709	
Pleasant Valley PP	-	18,193		100.00%	100.00%	\$ 700,834	\$	-	\$	700,834	
Pleasant Valley Relifts	N/A	22,741		100.00%	100.00%	\$ 91,499	\$	-	\$	91,499	
San Luis WD Relifts	435	34,650	1.24%	98.76%	100.00%	\$ 735,214	\$	9,116	\$	726,098	
Westlands WD Relifts	2,687	367,644	0.73%	99.27%	100.00%	\$ 3,874,089	\$	28,111	\$	3,845,979	
Coyote PP - Out of Basin	42,604	6,068	87.53%	12.47%	100.00%	\$ 252,329	\$	220,873	\$	31,456	
Pacheco PP - Out of Basin	89,209	24,578	78.40%	21.60%	100.00%	\$ 910,359	\$	713,724	\$	196,636	
								2,532,743		6,388,108	
<b>Paid Directly As PUE to WAPA</b>											
Glenn Valley WD	N/A	1,013		100.00%	100.00%		\$	-	\$	-	
Corning WD	N/A	8,050		100.00%	100.00%	\$ 68,417	\$	-	\$	68,417	
Dunnigan WD	N/A	8,155		100.00%	100.00%	\$ 7,033	\$	-	\$	7,033	
Westside WD	N/A	33,317		100.00%	100.00%	\$ 43,076	\$	-	\$	43,076	
Proberta WD	N/A	1,225		100.00%	100.00%	\$ 1,923	\$	-	\$	1,923	
Panoche WD - SLC	N/A	23,398		100.00%	100.00%	\$ 181	\$	-	\$	181	
Pleasant Valley PP	5,108	-	100.00%		100.00%	\$ 196,786	\$	196,786	\$	-	
State-Delta PP - Cross Valley Canal (CVC)	278	44,224	0.62%	99.38%	100.00%	\$ 185,143	\$	1,157	\$	183,986	
Dos Amigos PP - CVC (Offset with Direct Pumping)	278	44,224	0.62%	99.38%	100.00%	\$ 441,240	\$	2,756	\$	438,484	
Wintu PP	4,190	5,950	41.32%	58.68%	100.00%	\$ 145,178	\$	59,994	\$	85,185	
City of Shasta Lake (Shasta PP)	1,109	-	100.00%		100.00%	\$ 1,381	\$	1,381	\$	-	
<b>Offsetting Revenue for PUE Paid to WAPA</b>								262,073		828,284	
<b>Direct Pumping Total</b>								\$ 2,794,817	\$	7,216,393	
Reimbursable Billing						\$ 6,876					
Project General						\$ 12,118					
Nonreimbursable F&W						\$ 42,664					
Nonreimbursable Demo Treatment						\$ 16,986					
						\$ 37,583,454	\$	5,777,677	\$	31,727,133	

CENTRAL VALLEY PROJECT  
SCHEDULE OF ESTIMATED IRRIGATION DIRECT PUMPING OPERATION & MAINTENANCE COSTS  
2020 IRRIGATION WATER RATES

A	B	C	D	E	F	G
	Cost to Determine Ratio		Ratio		Distribution	
	M&I	Irrigation	M&I	Irrigation	M&I	Irrigation
Ref						

Offsetting Revenue for Storage PUE Paid to WAPA	\$ 220,306	\$ 455,124				
Offsetting Revenue for Direct Pumping PUE Paid to WAPA	\$ 262,073	\$ 828,284				
Offsetting Revenue for Unpaid Costs from Current B6A	\$ -	\$ 0				
<b>Total Offsetting Revenue</b>	<b>\$ 482,379</b>	<b>\$ 1,283,408</b>				

**Determination of PUE sent to WAPA:**

**Based on Direct Pumping Cost:**

Gianelli PGP - SFU	\$ 733,092	\$ 201,972	28.94%	3.16%	\$ 139,623	40,577
Contra Costa PP	\$ 825,878	\$ -	32.61%		\$ 157,295	
Colusa CWD (Incl. Arb./Will O&M Office)	\$ 1,924	\$ 436,884	0.08%	6.84%	\$ 366	87,772
Kanawha WD	\$ 27	\$ 51,042	0.00%	0.80%	\$ 5	10,255
Orland-Artois WD	\$ -	\$ 105,709		1.65%	\$ -	21,238
Pleasant Valley PP	\$ -	\$ 700,834		10.97%	\$ -	140,802
Pleasant Valley Relifts	\$ -	\$ 91,499		1.43%	\$ -	18,383
San Luis WD Relifts	\$ 9,116	\$ 726,098	0.36%	11.37%	\$ 1,736	145,877
Westlands WD Relifts	\$ 28,111	\$ 3,845,979	1.11%	60.21%	\$ 5,354	772,680
Coyote PP - Out of Basin	\$ 220,873	\$ 31,456	8.72%	0.49%	\$ 42,067	6,320
Pacheco PP - Out of Basin	\$ 713,724	\$ 196,636	28.18%	3.08%	\$ 135,934	39,505
<b>Total for Determining Rates to Remit to WAPA</b>	<b>\$ 2,532,743</b>	<b>\$ 6,388,108</b>	<b>100.00%</b>	<b>100.00%</b>	<b>\$ 482,379</b>	<b>\$ 1,283,408</b>