Status of Pure Water Monterey Project



Pure Water Monterey

A Groundwater Replenishment Project

Overall Program Management

Updated Pure Water Monterey / Groundwater Replenishment Schedule Gantt chart attached.

On October 3 – 4, 2018 a working session with the Independent Advisory Panel (IAP) reviewed the current status of PWM; State Division of Drinking Water (DDW) and RWQCB staff also participated. The two-day session included a tour of active construction sites and the Demonstration Facility, along with detailed updates on RTP improvements, PWM construction progress, public outreach issues, PWM O&M staffing plan, PWM system SCADA integration, and ongoing permitting/regulatory compliance efforts.

Source Waters (includes Blanco Drain/Reclamation Ditch/Salinas Industrial Wastewater and Storm Water Storage and Recovery elements)

- The Blanco Drain PS foundation has been poured as well as the wet well walls. Anderson Pacific (AP) is moving full speed ahead, but PS completion delays due to foundation support pier repairs, which took most of summer, are being evaluated now.
- The Meet & Confer phase of the AP Differing Site Condition claim at the Blanco Drain PS has been closed. M1W's initial claim rejection has not changed.
- Good progress on the in-channel work is being made at the Reclamation Ditch PS site. The weir manhole and the in-ditch concrete matting has been installed. PG&E has signed-off and should complete their work by first week of November. Excavation for and installation of the precast wet well will take place next week and the following week.
- Potential construction change orders (CO's) are being analyzed and negotiated with AP. Negotiation of the following near-term CO's is nearly complete:
 - ➤ Switch from Overhead to Underground Electrical Service: \$86,588
 - Modifications to Reclamation Ditch PS Location: \$71,445
 - > Adjustments to Forcemain alignment at/near Headworks: \$15,290

- Having gotten the necessary input on City of Salinas scope items, the Salinas Storm Water Project (Dry Weather Diversion and Salinas Treatment Facility Storage and Recovery) will be advertised for construction bids in mid-October.
- M1W and City of Salinas' staff are finalizing an agreement for M1W to divert, treat, and recycle storm water. The agreement will be considered at the next City of Salinas Council meeting, after which it will be brought to the M1W Board for approval.

Advanced Water Purification Facility

- Anderson Pacific (AP) completed backfilling and sheet piling removal for the Source Water PS. The storage tanks were installed at the Chemical Building and metal building erection has begun. The final wall section of the Product Water PS walls was poured.
- The Ozone Building metal building, roof, and doors were installed.
- The two 130,000-gallon welded-steel MF Feed and MF Filtrate tanks were fabricated. Interior coating is complete and exterior coating is proceeding.
- Various yard piping has been installed and tested.
- No change orders were issued last month. Thirteen CO's valued at over \$400K are on hold while AP confirms any schedule impacts.
- The new on-site construction manager, MWHC, began work on September 22nd and is working closely with AP to develop a more detailed AWPF startup/testing schedule.
- Staff continues to talk with and meet the RWQCB about our new RTP NPDES permit, which includes the 5 mgd AWPF. The permit is on the RWQCB December 2018 agenda.

Water Conveyance Pipeline & Reservoir (aka MCWD's RUWAP)

- All conveyance pipeline installation has been completed by Mountain Cascade. All related pavement restoration is nearing completion.
- Pressure testing of the existing MCWD recycled pipeline in General Jim Moore Blvd, which connects the conveyance pipeline to the injection facilities, was completed.
- The Black Horse reservoir is complete, with painting and final disinfection of the reservoir and pipeline to be completed by mid-November.
- With the project nearly complete, the final analysis and negotiations of potential construction CO's are being processed with Mountain Cascade.

Phase 2 Injection Facilities

- The deep injection well (DIW-2) was constructed, sealed, and is being developed. Pump testing is expected to occur by the end of October.
- Construction of the shallow (vadose zone) injection well failed due to adverse geologic conditions. An infiltration test was performed on the failed hole prior to destruction to obtain a more accurate estimate of the replacement vadose zone well depth required to achieve the needed injection capacity. The prime contractor was able to remove the grouted 60-inch conductor casing and backfill the hole with native material, preserving the site for possible future use.
- Another attempt at drilling a shallow (vadose zone) injection well will commence at a location with more favorable geologic conditions. The shallow injection well will be

- constructed by Maggiora Brothers using the same method they used to successfully drill and install the deep injection well.
- All six of the Phase 2 monitoring wells have been drilled; including the Phase 1 monitoring wells, there are now a total of eight monitoring wells completed.
- The medium voltage switchgear submittal was rejected by PG&E. The submittal was revised and resubmitted to PG&E for approval. After PG&E approves the submittal, the switchgear can be released for construction. The CM and Contractor are conducting a Time Impact Analysis to determine if there will be any schedule slippage from the extended PG&E review period.
- The electrical building was re-designed and expanded to meet PG&E requirements; Specialty Construction is preparing a quote for this change order.
- Potential construction CO's are being analyzed and negotiated with Specialty Construction. Near-term CO's being considered include:
 - ➤ Utility Relocation: \$4,000 (estimated)
 - > PWM System Antenna at Blackhorse Reservoir: \$60,000 (estimated)
 - > Excavating Work Required by Grading Permit:
 - o Road Surface Modification: \$4,174
 - o Landscaping Upgrades: \$36,784 (estimated)
 - o Fencing Upgrade: \$29,809
 - o Mulch Upgrade: \$15,000 (estimated)
 - ➤ Sonic Core Improved Method: \$83,317 savings
 - ➤ Monitoring Well Changes: \$20,000 (estimated)
 - ➤ Enlarging Electrical Building for New PG&E Equipment: Price TBD

EXPENDITURES

Brine/Outfall (UR 504)

Cal Am continues to pump water from their slant well into our Ocean Outfall manhole. The Outfall Protection 60% design was started with a kick-off meeting on September 6th. Since then the engineer has performed a LIDAR inspection of most of the Land Outfall and a diving inspection of the Ocean Outfall to collect data necessary for the design. The Brine Mixing Structure 60% design is expected by mid-October and 90% design could start in November. An Ocean Outfall modeling and Ocean Plan Compliance report is expected in October and will be reviewed/discussed in November. All three projects are paid for by Cal Am.

Brine/Outfall UR-504	FY2018/19 Approved Budget	Costs to Date FY18/19	Costs during September 2018				
Budget for all Cal Am projects	\$385,000	\$209,109	\$119,699				
Total Budget or Expenditures	\$385,000	\$209,109	\$119,699				
Funding and Reimbursements							
	Approved Budget	Amounts Billed	FY 18/19 Amts. Received				

Groundwater Replenishment (UR 502)

Expenditures were 25% of budget on Sept 30, 2018 for the Fiscal Year 2018/2019.

	Expenditures from 2006 - FY 17/18	FY 2018/19 Approved Budget	Costs to Date FY2018/19	Change Orders to Date	FY 2018/19 Costs during July 2018
Combined Categories	\$57,619,343				
Advanced Water Purification		\$33,802,728	\$7,490,938	\$580,955.95	\$3,013,669
Source Water Facilities		5,852,953	286,244	\$68,438.23	186,784
Injection Wells-Phase I	,			\$36,399.02	9
Injection Wells-Phase II		11,286,428	1,284,479	(83,317)	1,110,597
Pipeline Conveyance System		3,325,650	4,679,116	\$103,953.67	1,586,309
TOTALS	\$57,619,343	\$54,267,759	\$13,470,777	\$706,429.87	\$5,897,359

Funding and Reimbursements						
Organization	Funding 2006 - FY 17/18	FY18/19 Approved Budget	FY18/19 Amounts Billed ⁽¹⁾	FY 18/19 Amounts Received		
General Fund	7,204,996	-	-	_		
Watermaster	100,000	-	:4	<u>=</u>		
MPWMD	12,233,955	_	**************************************			
SRF Facilities Grant	74,883	Ψ.		-		
SRF Loan(1)	31,394,188	\$37,927,666	15,818,146	13,163,551		
Prop. 1 Grant - GWR ⁽²⁾	6,098,846	\$8,901,154	14			
Prop. 1 Grant - Stormwater	362,684	\$2,084,316				
MCWD (3)	-	\$5,354,623		8 # 8		
BOR Title 16 Feasibility Water SMART Grant / Other Resource	149,791	- .	:-			
TOTALS	\$57,619,343	\$54,267,759		13,163,551		

⁽¹⁾ SRF loan requests for Source water facilities and Advance water purification were sent out in September. (2)\$15M Recycled Water Grant for AWPF

⁽³⁾ Represents MCWD 13.953% est. contribution for the Advanced Water Purification Facility