



## Staff Report

**TO:** M1W GM & Director of Engineering  
**FROM:** Dave Lindow, Pure Water Monterey Program Manager  
**DATE:** September 19, 2024  
**SUBJECT:** **Update on Pure Water Monterey Expansion and Pure Water Monterey Projects**

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### **Pure Water Monterey Expansion (PWM X)**

- AWPf Expansion Construction Status
  - ✓ AWPf shutdowns being planned / executed; SOR #12 under development.
  - ✓ Microfiltration & Reverse Osmosis treatment units fabrication nearing completion; factory testing to be witnessed by Engineer's membrane design subconsultant (Separation Processes Inc.) and possibly M1W operations staff. Shipping from Rancho Cucamonga, CA factory planned for late-October 2024.
  - ✓ Ozone treatment unit to be delivered by November 2024.
  - ✓ Major electrical equipment to be delivered starting in December 2024
  - ✓ Change Order #2 with seven items for \$181,641 processed in September, 66% of change order costs M1W-initiated, no schedule impact, includes:
    - Ozone auto-strainers modifications
    - CL & NH3 analyzer panels 6.2 & 7.2 modifications
    - Microfiltration feed pump piping and support X2
    - Reverse Osmosis feed pump motor upgrade
    - Piping modifications for new PRV at PWPS discharge header X2
  - ✓ Change Order #3 with two items for ~\$987,000 being negotiated now, 100% of change order costs M1W-initiated, no schedule impact, includes:
    - Reverse osmosis treatment train modifications
    - Microfiltration & reverse osmosis flush system modifications
  - ✓ To avoid project delays, an American Iron & Steel (AIS) Availability Waiver Application is being submitted to PWM X federal funding agencies for the 25 butterfly valves required for Change Order #3 work.
  - ✓ A construction contingency increase (~\$1M) for Change Order #3 will be requested during the November 2024 RWC/Board approval cycle.
  
- Injection Wells Phase 4 Construction Status
  - ✓ Installation of Deep Injection Well No. 6 (DIW-6) started with mobilization of a bucket auger to place the 54-inch conductor casing at upper portion of the well.

- ✓ A separate reverse rotary drill rig has completed the 1,170-ft deep pilot borehole for DIW-6. Reaming of the final borehole should be completed by the end of September 2024, at which time well casing installation will begin.
  - ✓ DIW-5 construction is complete, pump testing and well development is ongoing, and will hopefully be completed by the end of September 2024.
  - ✓ By late-October, construction should start on the purified recycled water pipeline (1.9 miles of 24-inch diameter pipe) connecting the new Eastern Wellfield to the existing Black Horse reservoir.
  - ✓ Injection well backwash pumps X2 to be delivered by December 2024.
  - ✓ Major electrical equipment to be delivered by March 2025.
  - ✓ Change Order #2 with five items for \$71,391 being finalized, no schedule impact.
  - ✓ A construction contingency increase (~\$750K) for injection well field backwash pumps VFD upgrades which are 100% M1W-initiated will be requested during the November 2024 RWC/Board approval cycle.
- PWM X permitting activities with the State Division of Drinking Water (DDW) and the RWQCB continue on the Amended Title 22 Engineering Report to permit injection of up to 5,750 AFY as groundwater replenishment to the Seaside Basin.
    - ✓ After +7-month DDW review period, DDW comment letter received 9-10-24.
    - ✓ PWM X permitting team resolving DDW’s technical comments, but several issues will eventually require other interagency action, e.g., MCWD-CalAm intertie agreement and increased CalAm extraction capabilities.
    - ✓ DDW-mandated Public Hearing of T22 Eng Report will slip to late-2024.
    - ✓ Delayed DDW review/approval of T22 Eng Report will slip RWQCB adoption of WDR-WRR permits previously forecasted as June 2025 to October 2025. It’s possible securing the WDR-WRR permits may slip further to December 2025.
  - M1W & MPWMD secured grants totaling ~\$42 million from state and federal sources. EPA Water Infrastructure Finance and Innovation Act (WIFIA) loan and grant payment requests are being paid on a timely basis. Funding source status table below:

<b>PWM X Loan &amp; Grant Reimbursements Status through June 30, 2024</b>		
<b>Funding Sources</b>	<b>Requested Amount</b>	<b>Amount Received</b>
EPA WIFIA Loan (\$77M upper limit)	\$12,037,726.46	\$12,037,726.46
<b>Grants</b>		
California State Water Board - Governor’s Earmark (\$4.8M)	\$1,037,314.25	\$819,674.25
California DWR Urban Community Drought Relief (\$11.94M)	\$2,864,511.83	\$446,274.00
California State Revolving Fund: Recycled Water (\$15M)	\$ -	\$ -
US Bureau of Reclamation Title XVI (\$10.32M)	\$ -	\$ -
<b>Total</b>	<b>\$3,901,826</b>	<b>\$1,265,948</b>

- The attached PWM X schedule illustrates that all the new PWM X facilities will be operational by the end of 2025.

### **Pure Water Monterey (PWM)**

- August 2024 recharge was 250 AF. August 2024 recharge was 24% less than the August 2023 recharge volume of 327 AF.
- September 2024 recharge volumes trending toward a 300 AF month which would be 38% more than the September 2023 recharge volume of 218 AF.
- Total PWM water recharged to the Seaside Basis by mid-September 2024 is 15,730 AF.

### **Source Water Pump Stations and Advanced Water Purification Facility**

- Reclamation Ditch PS and Blanco Drain PS are operational (as-needed).
- AWWPF is operational.

### **Water Conveyance Pipeline and Blackhorse Reservoir**

- The pipeline & Blackhorse reservoir are conveying purified recycled water full-time to the injection facilities.

### **Purified Recycled Water for Irrigation**

- The Bayonet & Black Horse golf courses turf irrigation is being supplemented with purified recycled water. Marina Coast Water District is the PWM recycled water retailer.

### **Injection Wells Facilities for Groundwater- Recharge**

- All injection wells are in service; recharge volumes are being managed appropriately.

ATTACHMENT: PWM Expansion Schedule Gantt Chart

## PWM Expansion Schedule (09-19-24 Update)

ID	Task Name	Duration	Start	Finish	2022												2023												2024												2025												
					J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
1	<b>AWPF Expansion</b>	<b>1112 days</b>	<b>Thu 7/1/21</b>	<b>Fri 10/31/25</b>	[Gantt bar for AWPF Expansion]																																																
2	Expansion WPA & CPUC	453 days	Thu 7/1/21	Tue 4/4/23	[Gantt bar for Expansion WPA & CPUC]																																																
3	Expansion EPA WIFIA Funding	504 days	Thu 7/1/21	Thu 6/15/23	[Gantt bar for Expansion EPA WIFIA Funding]																																																
4	DOW & RWQCB Permitting	573 days	Mon 8/7/23	Fri 10/31/25	[Gantt bar for DOW & RWQCB Permitting]																																																
5	AWPF Expansion BOD Report	76 days	Thu 7/1/21	Fri 10/15/21	[Gantt bar for AWPF Expansion BOD Report]																																																
6	AWPF Expansion Final Design	140 days	Sun 10/3/21	Fri 4/15/22	[Gantt bar for AWPF Expansion Final Design]																																																
7	Bid and Award	74 days	Mon 4/17/23	Mon 7/31/23	[Gantt bar for Bid and Award]																																																
8	Construction NTP	0 days	Mon 8/14/23	Mon 8/14/23	[Milestone diamond for Construction NTP on 8/14]																																																
9	Submittals & Approvals	172 days	Mon 9/11/23	Fri 5/10/24	[Gantt bar for Submittals & Approvals]																																																
10	Equip & Material Procurement	254 days	Mon 1/15/24	Fri 1/10/25	[Gantt bar for Equip & Material Procurement]																																																
11	AWPF Expansion Construction	249 days	Mon 3/4/24	Fri 2/21/25	[Gantt bar for AWPF Expansion Construction]																																																
12	AWPF Expansion Testing & Startup	113 days	Mon 1/6/25	Fri 6/13/25	[Gantt bar for AWPF Expansion Testing & Startup]																																																
13	AWPF Substantial Completion	0 days	Sun 5/4/25	Sun 5/4/25	[Milestone diamond for AWPF Substantial Completion on 5/4]																																																
14	Punchlist & Closeout	58 days	Mon 4/14/25	Thu 7/3/25	[Gantt bar for Punchlist & Closeout]																																																
15	<b>Injection Wells Phase 4</b>	<b>1112 days</b>	<b>Thu 7/1/21</b>	<b>Fri 10/31/25</b>	[Gantt bar for Injection Wells Phase 4]																																																
16	DOW & RWQCB Permitting	573 days	Mon 8/7/23	Fri 10/31/25	[Gantt bar for DOW & RWQCB Permitting]																																																
17	Exploratory Borings	20 days	Mon 11/29/21	Fri 12/24/21	[Gantt bar for Exploratory Borings]																																																
18	DIW-5/6 & Pipeline BOD Report	76 days	Thu 7/1/21	Fri 10/15/21	[Gantt bar for DIW-5/6 & Pipeline BOD Report]																																																
19	DIW-5/6 & Pipeline Final Design	140 days	Sun 10/3/21	Fri 4/15/22	[Gantt bar for DIW-5/6 & Pipeline Final Design]																																																
20	First Bid Period	51 days	Mon 4/17/23	Tue 6/27/23	[Gantt bar for First Bid Period]																																																
21	Rebid and Award	39 days	Tue 8/1/23	Mon 9/25/23	[Gantt bar for Rebid and Award]																																																
22	Construction NTP	1 day	Thu 10/5/23	Thu 10/5/23	[Milestone diamond for Construction NTP on 10/05/2023]																																																
23	Submittals & Approvals	157 days	Mon 10/16/23	Fri 5/24/24	[Gantt bar for Submittals & Approvals]																																																
24	Equip & Material Procurement	352 days	Mon 1/15/24	Fri 5/30/25	[Gantt bar for Equip & Material Procurement]																																																
25	Well Site & Perc Pond Grading	372 days	Mon 11/13/23	Sat 4/26/25	[Gantt bar for Well Site & Perc Pond Grading]																																																
26	Monitoring Well Construction	40 days	Mon 4/1/24	Fri 5/24/24	[Gantt bar for Monitoring Well Construction]																																																
27	DIW-5/6 Well Construction	185 days	Mon 5/13/24	Fri 1/31/25	[Gantt bar for DIW-5/6 Well Construction]																																																
28	Interconnect Pipeline Construction	40 days	Mon 2/19/24	Fri 4/12/24	[Gantt bar for Interconnect Pipeline Construction]																																																
29	Interconnect Pipeline Tie-In	0 days	Fri 12/6/24	Fri 12/6/24	[Milestone diamond for Interconnect Pipeline Tie-In on 12/6]																																																
30	Eastern Pipeline Construction	40 days	Mon 10/28/24	Fri 12/20/24	[Gantt bar for Eastern Pipeline Construction]																																																
31	Eastern Pipeline Testing	23 days	Mon 12/9/24	Fri 1/10/25	[Gantt bar for Eastern Pipeline Testing]																																																
32	DIW-5/6 Pumps, Elec., & Controls	244 days	Mon 8/19/24	Fri 8/1/25	[Gantt bar for DIW-5/6 Pumps, Elec., & Controls]																																																
33	DIW-5/6 Testing & Startup	70 days	Fri 6/13/25	Fri 9/19/25	[Gantt bar for DIW-5/6 Testing & Startup]																																																
34	DIW-5/6 First Injection	0 days	Mon 8/25/25	Mon 8/25/25	[Milestone diamond for DIW-5/6 First Injection on 8/25]																																																
35	Punchlist & Closeout	74 days	Mon 7/14/25	Thu 10/23/25	[Gantt bar for Punchlist & Closeout]																																																

Project: PWM GWR Summary Date: Thur 9/19/24	AWPF Expansion	[Blue Bar] AWPF Expansion/IW Ph 4 Summary	[Blue Arrow] PWM Expansion Milestones	[Blue Diamond] .
	Injection Well Ph 4	[Green Bar] Injection Well Ph 4 Summary	[Green Arrow] Injection Wells Phase 4 Milestone	[Green Diamond] .