

MPWMD WATER SUPPLY PROJECTS

The Monterey Peninsula Water Management District has developed a number of smaller water supply projects to complement the Regional Water Project, or to offer alternative solutions should the RWP be delayed or withdrawn. By doing so, the MPWMD can help eliminate unlawful diversions, reduce the need for rationing, reduce the capacity needed from a regional desalination plant, and can provide water for legal lots of record and remodels after Phase 1 of the RWP is constructed.

Project Description	Expected Yield	Potential Yield
Water Project #1 – Phase 1 Aquifer Storage and Recovery	920 AF	
Water Project #2 – Phase 2 Aquifer Storage and Recovery	1,000 AF	4,000 AF
Water Project #3 – Local Desalination Plant	2,000 AF	3,500 AF
Water Project #4 – Groundwater Replenishment	2,700 AF	2,700 AF
Water Project #5 – Expanded Capacity of Los Padres Reservoir	850 AF	1,500 AF
Total (Excluding Phase 1 ASR)	6,550 AF	11,700 AF

WATER PROJECT 1

In phase 1 of Aquifer Storage and Recovery excess winter flow from the Carmel River is treated, transported and injected into the Seaside Basin via special wells. This water is then taken in the dry season for customer use.

Santa Margarita Wells #1 and #2 are complete. Construction on a facilities building is complete, with permanent power installation underway. MPWMD continues coordination with Cal Am regarding system operations and capacity, pipeline easement and ownership/operations.

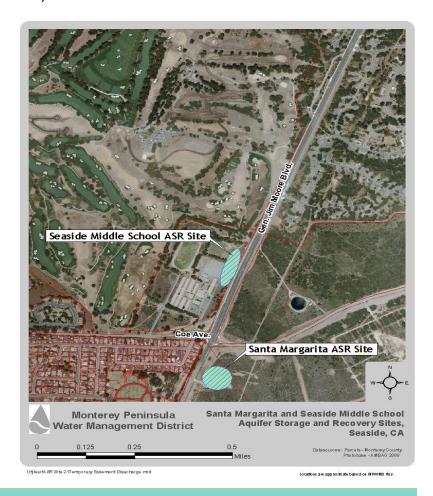
1,117 AF were injected in Water Year 2011, for a total injection of 4,346 AF since 1998. Expected average yield is 920 AFY.

WATER PROJECT 2

Water Project 2 is an expansion of Water Project 1 (Phase 1 of ASR). Phase 2 of ASR includes two planned wells at Seaside Middle School.

Well #1 is drilled, with production testing complete. Installation of a permanent pump and motor, along with temporary electrical control, is in progress. Construction on Well #2 is planned for 2012, based on funding availability. A Cal Am pipeline link to Water Project #1 site is pending approval from the Fort Ord Reuse Authority and the City of Seaside. MPWMD and Cal Am continue to coordinate on needed infrastructure to enable operation of Water Projects #1 and #2 at full capacity, as well as plans for future ASR expansion.

Expected average yield is 1,000 AFY.



WATER PROJECT 3

Desalination is treating seawater or brackish water to remove impurities and salts in order to produce drinking water and concentrated effluent. Seawater Reverse Osmosis desalination uses membrane filters for coastal projects.

MPWMD engineers continue to explore desalination feasibility at an abandoned treatment plant in the Sand City area and on U.S. Navy property at Del Monte Beach. There are planned meetings with Coastal Commission and National Marine Sanctuary staff. MPWMD has also received additional information from regional Deep Water Desalination which is under review by staff and the Water Supply Planning Committee.



Expected average yield is 2,000 AFY.

WATER PROJECT 4

Modeled after the successful "Water Factory 21" project in Orange County, Water Project #4 is a groundwater replenishment plan where the Monterey Regional Water Pollution Control Agency would inject highly purified water from its treatment plant into the Seaside Basin. After meeting time and distance standards, this water could later be recovered for use.

MPWMD continues to coordinate with MRWPCA regarding the best avenues of support for the Groundwater Replenishment Project including funding planning and public education.

Expected average yield is 2,700 AFY.

Groundwater Replenishment (GWR)/ Regional Urban Recycled Water (RW) Combination Project Output City of Marina (Developing Region) Water to the transport of Marina (Developing Region) City of Seaside WARD TO SEASIDE WARD T

WATER PROJECT 5



Water Project #5 explores the possibility of expanding capacity of the Los Padres Reservoir via dredging and/or a small increase in spillway elevation. The increase in spillway elevation could perhaps be achieved by a rubber dam.

MPWMD continues conversations with Cal Am and fishery agencies regarding the value of water release from the Los Padres Reservoir in order to improve river habitat and increase aquifer storage, especially in the dry summer months.

Expected average yield increase of 850 AFY through dredging, or up to 1,500 AFY if additional capacity is created (e.g. a rubber dam).

