

MEADOWLARK WATER RECLAMATION FACILITY

"Award of Excellence" - 2009
American Society of Civil Engineers

"Recycled Agency of the Year" - 2008
WaterReuse Association


"Plant of the Year" - 1985, 1987, 1989, 1994
"Award of Excellence" - 1987
California Water Environment Association
(CWEA)

"Safety Award" - 1997 (CWEA)



Recycling our most precious resource
for a sustainable future.

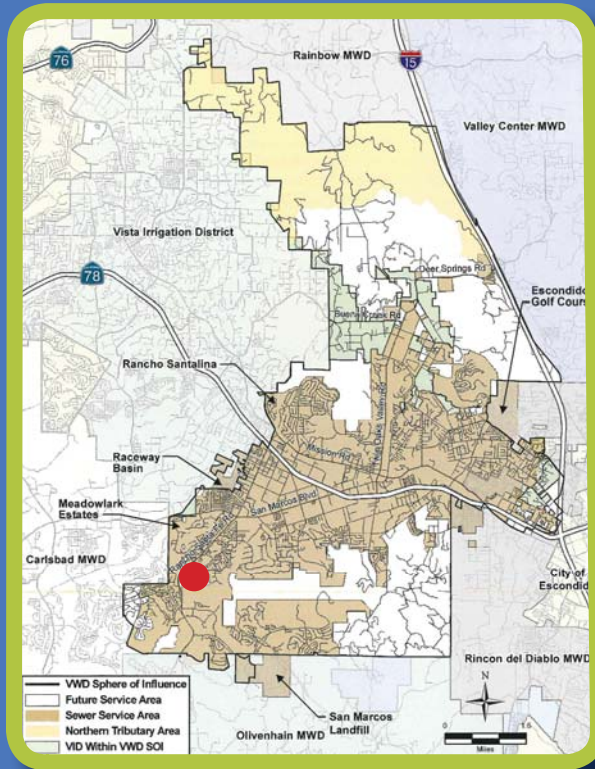


 VALLECITOS
WATER DISTRICT
Water and Wastewater Specialists since 1955

Meadowlark Water Reclamation Facility

History

- Opened in 1958 to treat wastewater at 0.25 million gallons per day (mgd) capacity.
- Converted to a water recycling (tertiary treatment) plant in 1982, with an increased capacity of approximately 2 mgd.
- Expanded in 2005 as part of a \$25 million upgrade for operational efficiency and to increase capacity to 5 mgd.



Vallecitos service area and location of Meadowlark (in red).

A New Plant within a Plant

All contained within the existing boundaries, the District's most recent upgrade was completed in 2008 to expand and improve the biological processes, which allowed the plant to increase capacity and more efficiently treat the wastewater while using less treatment chemicals. The upgrade consisted of adding:

Primary Treatment

- Grinders and augers to remove large debris, and sedimentation basins to improve the removal of solids.

Secondary Treatment

- Roughing filters for a more efficient, fixed-film biological process, followed by activated sludge with aeration basins to improve the water quality.

Tertiary Treatment

- Three additional tertiary filters.

By increasing capacity to 5 mgd, Vallecitos is now able to recycle up to 74% of the wastewater generated in the service area. This reduces the demand for imported water to the region to attain a sustainable future.



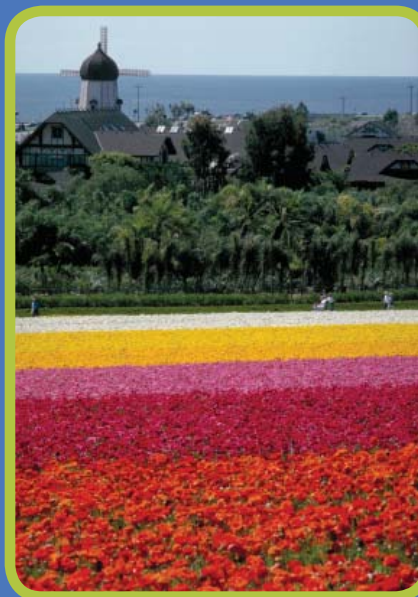
24-inch recycled water pipeline

Distributing the Finished Product

Recycled water is sold to neighboring water agencies and gravity-fed to the lower elevated coastal-communities of Carlsbad and Encinitas.

After the recycled water is processed at Meadowlark, the reclaimed water enters a 24-inch recycled water pipeline en route to:

- Olivenhain Municipal Water District - Contracted to purchase up to 1.5 mgd depending on availability.
- City of Carlsbad - Contracted to purchase a minimum of 2 mgd (December through March) and 3 mgd the remainder of the year, irrigating locations such as Legoland, Carlsbad City Hall and the Carlsbad Flower Fields.
- Surplus recycled water is stored in the District's nearby, 54-million gallon capacity Mahr Reservoir.



The Carlsbad Flower Fields irrigates with recycled water produced at Meadowlark.

Future Recycled Water Use

Vallecitos encourages the use of this viable water source as a member of the North San Diego County Regional Recycled Water Project, a group consisting of 11 North San Diego County water and wastewater agencies that has been assembled to investigate expanded uses of recycled water.



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