



Monterey Peninsula Groundwater Replenishment Project

Providing A Safe And Sustainable Water Supply

FREQUENTLY ASKED QUESTIONS

What is the Monterey Peninsula Groundwater Replenishment Project (GWR)?

Since the 1990's the Monterey region has been looking for solutions to critical water shortages, court-ordered water withdrawal reductions from its main aquifer supply, an adjudicated water basin in its supplemental aquifer, and periodic droughts. Conserving and reusing the water resources that we have is the most sustainable way for our communities to have reliable and cost-effective water for now and the future.

Monterey Regional Water Pollution Control Agency (MRWPCA) started planning for the Monterey Peninsula Groundwater Replenishment Project (GWR) in 2006. Its Board of Directors and management believe that it's important that Monterey Peninsula have *numerous* viable options to bring additional water to the community. Studies have already been conducted which conclude that the GWR Project can bring high quality, safe drinking water to the Peninsula, and more studies are underway. The GWR Project is part of the overall Regional Water Program and program-level environmental review has already been completed.

The Monterey Peninsula Groundwater Replenishment Project can supply an estimated 2,700 acre feet of water that will recharge the Seaside Groundwater Basin and blend with groundwater before being extracted. The highly treated recycled water will be further purified using state-of-the-art microfiltration, reverse osmosis, and oxidation with ultraviolet light and hydrogen peroxide, resulting in water that is more pure than bottled water. The purified water will then be blended with existing groundwater and newly percolated rain water. This same technology is used at the highly successful Orange County Water District's Groundwater Replenishment System, which is on track to produce over 100 million gallons per day of highly purified water.

Why is MRWPCA planning this project?

In California (as well as other parts of the country and the world) water supplies are being stretched to the limit. The Monterey region is dealing with regulated and adjudicated water basins, limited water supplies, stricter environmental constraints, and periodic droughts that will curtail unlimited use of our water supplies. Conserving and reusing this water resource instead of disposing it into the ocean provides a long-term, sustainable water supply for our communities.

How does this project benefit the Monterey Peninsula?

A groundwater replenishment system would create a reliable, locally produced, ultra-pure water supply. In addition, this strictly regulated water supply would allow us to limit wastewater discharge into the sensitive Monterey Bay National Marine Sanctuary. It also helps improve management of the groundwater basin because it produces water to recharge an adjudicated water basin, thus reducing overdraft and the threat of seawater intrusion.

What other communities use groundwater recharge?

Groundwater replenishment is used in many places around the world. As an example, Orange County, California has operated a groundwater replenishment project since 1971. In this case, highly treated recycled water is used to prevent seawater intrusion into its aquifer by recharging it, and it is used to replenish drinking water. Other communities include: Inland Empire/Los Angeles, California; Las Vegas, Nevada; Fairfax, Virginia; and Scottsdale, Arizona.

What happens to the water after it is purified?

After the water has been purified, it would then be injected into the Seaside aquifer where it percolates or filters through the soil naturally, just like rainwater. The purified water then mixes with natural groundwater. This process “recharges” or helps replenish the aquifer while safeguarding the water quality from seawater intrusion.

Is the technology safe?

The California Department of Public Health is charged with the responsibility for establishing uniform statewide reclamation criteria to ensure that the use of recycled water will not be detrimental to public health. This technology is proven in other regions and it is used in the production of bottled water, baby food and manufacturing processes.

The Monterey Peninsula Groundwater Replenishment Project proposed by MRWPCA would take tertiary-treated recycled water and put it through an additional three-step process of microfiltration, reverse osmosis, and oxidation with ultraviolet light and hydrogen peroxide. This process will make the water near distilled quality, exceeding all drinking water standards.

What is the effect of this water on water quality in the Seaside Aquifer?

The quality of water produced by a groundwater replenishment system produces ultra-pure water. By adding this water into the groundwater it will, over time, increase the quality of the water.

Who supports the Monterey Peninsula Groundwater Replenishment Project?

The Monterey Peninsula Groundwater Replenishment Project has been studied and was supported by the Monterey Regional Water Supply Reliability Collaboration, Division of Ratepayer Advocates. This group consisted of representatives from environmental, business, civic, and ratepayer associations who gathered to discuss and recommend the most cost-effective, environmentally beneficial and productive water supply options for the Monterey region.

Where will the funding come from?

MRWPCA is seeking funding from various sources including state and federal grants, low-interest loans from the Bureau of Reclamation, and the State Revolving Loan Program. The Monterey Peninsula Water Management District is interested in helping fund the GWR project in the future.

Who will pay for the water?

Most likely, MRWPCA will wholesale the groundwater replenishment water to either California American Water Company or the Monterey Peninsula Water Management District.

What agency will own this water?

Legally, MRWPCA has water rights to the GWR Project water until it enters the Seaside Basin. Landowners and water purveyors have rights to pump from the basin with proper permitting.

Is this project in competition with the Regional Desalination Project?

No. The MRWPCA Board of Directors and management believe it is important for the Monterey Peninsula to have multiple sources of water to address the overdraft situation and provide reliable water supplies for existing residents and businesses. The Monterey Peninsula Groundwater Replenishment Project (GWR) will supply a portion of those needs.

Will this project increase growth on the Monterey Peninsula?

Currently, the Monterey Peninsula is in a deficit situation with its water supply. More water is being removed from the groundwater supply than is being replaced. Therefore, the water from the Monterey Peninsula Groundwater Replenishment Project (GWR) will help provide a portion of what is needed to meet demand.

Can we have a presentation given to our community group?

Please call (831) 645-4604 to arrange for a presentation.

Can we take a tour of the wastewater treatment plant and recycled water facilities?

Please call (831) 645-4604 to arrange a tour.

For more information contact:



Monterey Regional Water Pollution Control Agency

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www.mrwpc.org • www.mpwatereplenishment.org