

DID YOU KNOW?

At the WRD, we are always working with various agencies and municipalities to share information and knowledge. We make every effort to stay on the cutting edge of water technology, to serve you, your family and all of our constituents to the best of our ability.

At our most recent learning endeavor, WRD hydrogeologist Nancy Matsumoto made a presentation at the Association of Ground Water Scientists and Engineers Conference held December 7-9 in Nashville, Tennessee. Matsumoto discussed the WRD's role in groundwater basin data management. She returned from the trip with an increased knowledge of the various best practices being utilized by the water municipalities countrywide, and will share this information with her colleagues in order to continue to optimize the basins in the most efficient and up-to-date manner.

Participating in the conference was a great opportunity for us to help educate groundwater professionals worldwide about our data management capabilities. The annual event is attended by some of the top scientists and engineers in the water industry and we were glad to participate.

MISSION

"To provide a sufficient supply of high quality groundwater in the Central and West Coast Basins through progressive, cost effective and environmentally sensitive basin management."

- Artesia • Bell • Bell Gardens • Bellflower • Carson
- Cerritos • Commerce • Compton • Cudahy
- Downey • El Segundo • Gardena • Hawaiian Gardens
- Hawthorne • Hermosa Beach • Huntington Park
- Inglewood • La Habra Heights • La Mirada
- Lakewood • Lawndale • Lomita • Long Beach
- Los Angeles • Lynwood • Manhattan Beach
- Maywood • Montebello • Monterey Park
- Norwalk • Palos Verdes Estates • Paramount
- Pico Rivera • Rancho Palos Verdes • Redondo Beach
- Rolling Hills • Rolling Hills Estates • Santa Fe Springs
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The WRD Board of Directors and staff wish everybody a Happy Holiday Season and a Prosperous New Year!

the Source



I N F O R M A T I O N U P D A T E S W I N T E R 2 0 0 1



GENERAL MANAGER'S MESSAGE

The troubled economic times of the late 1980s were difficult for the residents and cities in the WRD service area, but the region managed to recover. The current economic slowdown again threatens everyone's finances. At the same time, the Southland faces the possibility of drought and reduced available water from the Colorado River and Northern California. These pressures make it imperative that the WRD work with our cities, water companies and pumpers to keep water costs as low as possible while pursuing programs to optimize the basins.

A recent decision by a Los Angeles Superior Court judge provides the framework for future cooperative efforts with our constituent cities to minimize costs, maximize water availability and ensure the security of the region's water supply. The court ruling reaffirmed that the storage space in the basins belongs to the public (you and your family). In addition, the judge ruled that only the WRD has the legal authority to store and replenish groundwater. This means that we will manage the basin to optimize water availability in the most cost-efficient manner.

We will work with the cities and pumpers to implement a number of new initiatives enabling us to: purchase greater quantities of water when it is relatively less expensive and purchase smaller amounts when it is more costly; store more water in anticipation of droughts; provide greater flexibility to pumpers to utilize more of their water rights when supply is short; reduce dependence on imported water; and capture a greater proportion of stormwater for replenishing groundwater basins.

I am confident that these measures constitute significant progress toward our mission of managing the basins by maximizing the availability of groundwater at the lowest cost to our cities, pumpers and you.



Benny Chong, WRD assistant hydrologist, collects a water sample to ensure it is safe for drinking.

WRD Takes Water Safety Seriously

The tragic events of Sept. 11 have made many of us think a lot more about safety issues. At the WRD, water safety and quality have always been a top priority. We have several procedures in place to ensure quality water for you, your family and the other residents in our service area.

Nationwide, the American Water Works Association, an organization representing water agencies, is closely working with the federal government to coordinate increased security efforts to protect water supplies from contamination. The WRD is also working at the state level, and with other government agencies on water safety issues. The following are some examples of the various measures already in place to ensure the safety of your water:

- Drinking water in the Central and West Coast groundwater basins is protected by multiple clay layers, which retard and restrict the absorption of any contaminant.
- Soil acts as an effective natural filter to screen and purify contaminants.
- Groundwater travels slowly at a rate of 1-2 feet per day. Thus, should any contaminant enter the groundwater aquifer, localized pumping can be halted and the water can be treated to ensure its safety.

- Total groundwater supply in the Central and West Coast basins exceeds 7 trillion gallons. Contaminants would be diluted and rendered ineffective in this much water.
- Water systems are already designed to cleanse water before it reaches customers.
- Chlorine (a powerful disinfectant) is widely used to purify water. It deactivates virtually all biological contaminants.
- Wells used for drinking water purposes are monitored regularly.
- The WRD's regional network of monitoring wells regularly analyzes samples of groundwater, allowing us to test water before it reaches production wells.

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Highly Anticipated Desalter Project Dedicated in Torrance

Joined by several elected officials, members of the water industry and nearly 100 guests, the WRD Board of Directors officially dedicated the Robert W. Goldsworthy Desalter in Torrance on November 14. The desalter, which is the district's premiere project, removes intruding sea salt from groundwater. Guests included representatives from the offices of Congresswoman Grace Napolitano, and Assemblymembers George Nakano, Jenny Oropeza and Carl Washington.

The \$8 million desalination project is part of a comprehensive, large-scale program designed to accomplish three primary goals: 1) prevent further migration of seawater into the basin; 2) restore the affected aquifer to use; and 3) prevent deeper intrusion of seawater into the basins. Overpumping of groundwater caused a plume of seawater to intrude into some aquifers in the West Coast Basin. Studies conducted by the WRD showed that the most effective way to

remove salt from the groundwater and restore the aquifer system was to install wells to pump out the affected water, and remove the salt using reverse osmosis. This system equipment, known collectively as a "desalter," will remove and treat more than 2,000 gallons of salty water from the aquifer every minute. More than a billion gallons of clean, safe drinking water will be added to the water supply annually. WRD officials note, however, that extracting all the plume water may take 20 to 30 years.

One of the biggest advantages of the cleanup is that the more salt that is removed, the more storage capacity the aquifer has for fresh water, which will help Torrance and other South Bay cities as they plan for drought and other water emergencies. The treatment facility, which took 13 months to construct, is located in the Torrance City Yard on Madrona Avenue.

The next phase of this program includes expansion of the Goldsworthy

Desalter, doubling its capacity at a cost of approximately \$4 million, and the construction of another desalter facility, in which two groundwater production wells will be built. The new facility will treat 6,000 acre-feet of groundwater annually. Additionally, a brine pipeline to the ocean will be constructed.

The project was a joint venture between the WRD, the City of Torrance and the Metropolitan Water District, which provided financial support. This professional working relationship is an important component of the WRD's overall mission to ensure clean water for residents throughout the WRD's service area.

"We are very pleased to work with Torrance and the Metropolitan Water District on this very important water treatment project," said Dr. Bruce Mowry, WRD's general manager. "This unique partnership is another positive step toward protecting the basin's precious groundwater resource."

Working to Serve You Better WRD Continues Public Groundwater Tours

In our continuing effort to educate the public about our programs and facilities, the next WRD public groundwater tour will be held on January 16, 2002.

The free half-day program includes tours of the various groundwater projects and treatment facilities. You will visit the San Gabriel River or Rio Hondo spreading grounds, where water is released into the ground and eventually percolates into the groundwater basins. Additionally, you will have the opportunity to see a wellhead treatment facility that cleans contaminated groundwater, as well as the Robert W. Goldsworthy Desalter in Torrance, a WRD project that removes salt that has intruded into the groundwater through seawater, from the basins (see story on page 2).

The last tour, held on October 25, was very successful, "selling out" in a matter of days. So make sure you register early! Additional tours will be scheduled in February, March and April.

"[The tour] gave me an overall view of our water system," commented participant Enrique Chavez, an Inglewood public works employee. "Thanks for the invitation, and keep up the great work you are doing."

To register for the January 16 WRD groundwater tour, please call the Government and Public Affairs Department at (562)921-5521. The tour is limited to 45 guests, and reservations are made on a first-come, first-served basis. A complimentary lunch will be served.

cover story continued

Wells are sealed and protected against contamination. Any tampering would be obvious and quickly rectified.

The United States has the safest water in the world. Through the use of modern technology, waterborne diseases have virtually ceased to exist in our nation. When water does need to be treated, the latest technology serves to make the water safe to drink. With increased security precautions and safety measures in place, the WRD will remain vigilant in ensuring that the groundwater is as safe as possible, at all times, for you and your family.

Talking the Talk

Now that you have been educated on the various projects at the WRD, we thought it was time for you to learn a little bit more about us, our service area and our responsibilities:

- ♦ Voters established the WRD in 1959 for the purpose of protecting groundwater supply and quality.
- ♦ The WRD service area in southern Los Angeles County measures 420-square miles and includes 43 cities.
- ♦ WRD cities use more than 730,000 acre-feet, or nearly 240 billion gallons of water per year. About one-third is groundwater and two-thirds is imported water, which comes from the Colorado River and Northern California.

- ♦ An acre-foot of water, which equals 326,000 gallons, is the amount of water used by a household of five in a year.
- ♦ The WRD manages the Central and West Coast Basins--two of the most utilized groundwater basins in Southern California--that provide water to you, your family and the other 4 million residents in the district.
- ♦ The various programs that you have read about in *The Source* are only a few of the projects that the WRD is currently undertaking to keep your water safe and reliable. Continue to read about additional programs in upcoming issues of *The Source*.

The Source is a publication of the Water Replenishment District of Southern California. If you have any questions or comments about the WRD or *The Source*, please contact us: Telephone: 562-921-5521 Fax: 562-921-6101. Or visit our website at www.wrd.org.



Melinda Sperry, desalter project manager and senior WRD engineer, leads a tour of the recently dedicated desalter in Torrance.