

NO LEAKS ALLOWED

NEW WATER LOSS CONTROL PROGRAM HELPS AGENCIES FIX PROBLEMS AND KEEP COSTS LOW

BY CATHI DOUGLAS

Cities and water agencies will learn how leak detection on public and private properties can save money, ensure safety and build a longer-lasting water system, thanks to a collective cost-sharing program launched earlier this year by the Municipal Water District of Orange County.

MWDOC's three-year, regional water loss-control program will raise awareness and provide technical assistance to Orange County's 31 city-operated utilities and water districts about effective water loss-control methods, said Joe Berg, MWDOC director of water use efficiency.

"This program benefits residential and commercial consumers in two ways," Berg said. "One aspect is leak detection. When an agency detects leaks, it can inform property owners so that the leaks can be repaired. And if there's water loss, repairs recover water and help keep water rates reasonable."



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As the county's wholesale water supplier and resource planning agency, MWDOC is leading the regional effort as part of its focus on sound planning and water use efficiency. Water customers don't need to do anything to participate in the leak-detection efforts unless leaks are discovered on their property, in which case they will be required to make repairs. Leaks can be as small as pinholes in pipes or leaky faucets or as large as broken pipes.

Berg noted that several OC water agencies already operate leak-detection efforts. For those that don't, a monthly work group meeting informs member agencies about effective leak-detection methods and specialists from an independent consulting group, Water Systems Optimization, are available for technical assistance.

Working under the joint program with MWDOC saves local agencies money through economies of scale, and also saved the agencies the time and cost of developing and awarding individual contracts.

Many factors can cause water systems to leak, Berg explained, including the age of the system, the materials used to construct its pipes, the age and accuracy of meters and the area's geographic and topographic characteristics. Systems in flat, level communities maintain more constant water pressure, while areas with hills and canyons require higher pressure to pump water to higher elevations.

Still, Orange County's agencies have one advantage. "Because systems in Southern California are newer, what we're seeing is a level of leakage that is significantly lower than in older communities, such as those in the Northeast," Berg said. "In Philadelphia

before they got deeper into water loss control they had as much as 30 percent leakage."

Locally, the city of Westminster's field survey determined that its leakage levels are so low that closer study isn't necessary, Berg said.

The data required to accurately detect leaks comes from various departments in each agency, Berg noted, including operations, customer service, billing and others, that must work closely to share information. Leak detection involves pipes, water tanks, water meters and pumping stations – and each must be measured and assessed.

Fortunately, leak-detection methods have improved dramatically in recent years, Berg said, thanks to efforts by the American Water Works Association and the International Water Association. New methodology can account precisely all the water moving in and out of a given system.

"With this information, water agencies will get a good feel for how tight their system is," Berg said. "They can identify missing data or questionable data and then put controls in place to ensure good information to make economically based decisions." ■

Welcome to Orange County's Water Wise Lifestyle, an ongoing series to help you navigate the new normal of California's water resources. Various water districts will be offering important information and tips along with rebates and cost-saving incentives for homeowners and businesses.

Learn More about the Water Wise Lifestyle at the OC Register's Knowledge Café:
ocregister.com/sections/knowledge-café

WATER PARTNER PROFILE: YORBA LINDA WATER DISTRICT

Founded in 1909, the Yorba Linda Water District serves about 24,000 residential and commercial customers in Yorba Linda, part of unincorporated Orange County and small portions of Brea, Placentia and Anaheim.

Operations Manager John DeCriscio noted the district maintains a complex delivery system due to the area's geographic characteristics. "Because the terrain is diverse with a lot of hills and canyons, we have to bring the water from the 200-foot elevation to its highest point at 1,350 feet," he explained. "Because of the topography we have 21 pressure zones and 44 pressure-reducing stations where pressure is hydraulically controlled."

Because the area is prone to Santa Ana winds and increased fire danger, the

district maintains higher reservoir levels of water to be used in emergencies, he said.

Although Yorba Linda Water District imports water from the Colorado River and State Water Project, DeCriscio said, "our goal is to maximize groundwater use, so we are continuing to build the infrastructure to do that. Capital improvements will allow us to use 100 percent groundwater and to bring imported water in if we need to. We will have two completely separate sources of water when we are finished within two more years."

Water conservation efforts include a unique leak detection program, in which a full-time inspector hunts leaks using a listening device and probe. "It's been very successful and we've found about 140 leaks," DeCriscio said, many of which are pinhole leaks under slabs on customer properties.

For more info, visit ylwd.com



CALENDAR OF EVENTS

OC GARDEN FRIENDLY EVENTS:

Free events where you can learn about **DROUGHT-TOLERANT LANDSCAPE**, efficient irrigation and how to save water and eliminate runoff.

APRIL 30: 8AM - 12PM
Home Depot - Costa Mesa
2300 S. Harbor Blvd.

CALIFORNIA LANDSCAPE TRAINING CLASS:

Learn Six Ways to Make Your Garden California Friendly.® Join us for an evening of **LANDSCAPING TIPS, DO'S AND DON'TS** of water wise gardening. RSVP Required: Call 949-644-3195

APRIL 21: 6 - 9PM
Newport Beach
100 Civic Center Dr.

Orange County's Water Wise Lifestyle page is brought to you weekly by the family of OC water providers, including the cities of Brea, Buena Park, Fountain Valley, Garden Grove, Huntington Beach, La Habra, Newport Beach, Orange, San Clemente, Seal Beach and Tustin, and the East Orange County, El Toro, Irvine Ranch, Santa Margarita, Serrano, South Coast, Trabuco Canyon and Yorba Linda water districts. The Municipal Water District of OC and the OC Stormwater Program are also participating.