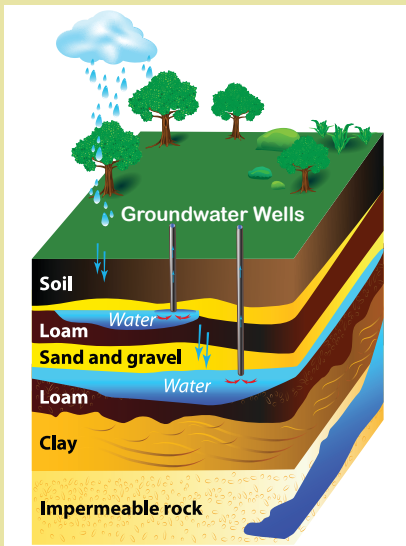


RESOURCE

MANAGING COMMUNITY RESOURCES FOR THE FUTURE



Groundwater: Promoting Continued Resiliency

Water supply resiliency is the overall ability of water sources to continually supply the City with water, even if one source becomes temporarily unavailable for use. Resiliency also refers to the ability of water sources to bounce back or recover quickly.

The City's surface water resources demonstrated resiliency last year when reservoirs were significantly replenished after winter and spring rainfall. In addition to surface water, the City overlays a groundwater basin that offers another source of clean, safe drinking water to the community. We are all aware of the value of clean water, but some of us may not realize that much of California's water supply comes from water that has soaked into the ground and is stored in the small spaces between rocks and soils beneath our feet. Today, three quarters of California's residents rely on groundwater for at least part of their annual water supply. On average, groundwater accounts for about 40% of the water used in California, and more than 60% in years of drought.

Turn the page to read about the benefits of this important water source!

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1. GROUNDWATER: PROMOTING CONTINUED RESILIENCY
2. VOLUNTEER TO KEEP LOCAL CREEKS CLEAN
3. WATER METERS IN THE 21ST CENTURY
4. RETURNING DRINKING WATER SUPPLY TO MONTECITO



Groundwater, Continued

THE BENEFITS OF GROUNDWATER



Due to the earth's natural filtration, in most of the U.S., groundwater requires less treatment than surface water. Along with the reduced electrical cost from a lower need for treatment, groundwater requires little energy demand since it is locally sourced and isn't pumped long distances like most surface water sources across the state. This decrease in energy usage is directly correlated to less carbon emissions. Additionally, because it is stored underground, groundwater does not experience the evaporation losses that are seen in surface water storage reservoirs.

GROUNDWATER RECHARGE



Just as a lake is filled from rainfall and runoff, groundwater basins can also be recharged to fill depleted sources. Groundwater basins are commonly recharged from water that soaks into aquifers from surface waters such as creeks and rivers, from man-made recharge efforts, and naturally from precipitation.

Increasing the amount of groundwater being recharged can be achieved in many ways and can have varying degrees of cost and rates of return. The most common method is to naturally percolate captured stormwater or recycled water into the groundwater basin through streambeds or percolation basins. Another method involves bypassing the earth's natural filtration by directly injecting water into the groundwater basin. Due to the removal of the natural filtration ability of the earth, direct injection requires a higher degree of treatment than percolation.

RECENT WORK ON LOCAL GROUNDWATER



The City is nearing completion of a study that is critical to sustainable operation of the groundwater basin. This study will yield information on how much water can be safely withdrawn from the basin annually, along with locations where groundwater recharge projects could be sited if in order to recharge the basin. Locally, groundwater will play an important role in ensuring continued resiliency in our City's water supply portfolio.



Volunteer to Keep Local Creeks Clean



Every year, the City sponsors a local event known as Creek Day. This event brings community members together to remove trash from local creeks while raising awareness about how we all have an impact on the health of our local watersheds. In 2017, 48 community members volunteered to help with the event. In total, these volunteers cleaned 12

different sites across the city and removed more than 3,000 pounds of trash from our local creeks!

In 2018, help make this event the most successful ever by helping get the word out early. Our local creeks improve the visual attractiveness of our community, provide habitat for local wildlife, influence the quality and quantity of water in the groundwater basin, and improve quality of life for us all. If you would like to be notified when the 2018 Creek Day event is scheduled, sign up at slocity.org/creekcleanup.

To see photos from last year's clean-up efforts, visit facebook.com/creekcleanup/.

12
Clean-Up Sites
Across the City

More than
3,000
Pounds
Trash Collected

Water Meters in the 21st Century

While water has always been a treasured resource in the arid west, the last drought emphasized the need to accurately account for the water we use. The most important tool we use to measure water use is the water meter.

It is believed the first water meter was produced in the United States around 1857. The City has been metering its water use since the early 1900's. Today, the Utilities Department is responsible for maintaining more than 15,000 water meters ranging in size from 5/8 to 12 inches in diameter. Most of the meters in the ground today are similar to the original 1857 model that uses mechanical parts to measure how much water is consumed.

Fast forward over a hundred years: technology has come a long way to help us increase meter accuracy. The City recently standardized on an ultrasonic meter that uses sensitive electronics to measure the flowing water instead of a spinning measurement device. The technology used by these meters is highly accurate, especially at low flows which mechanical meters do not accurately register. Low flows are here to stay, and the proper meter needs to be used to measure flow generated by modern water efficient fixtures. Over the next few years, as the older-style meters are replaced, you may see a slight increase in your bill since flows will now be more accurately measured.





Utilities Department
 879 Morro Street, San Luis Obispo, CA 93401

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SLO City and County Employees Aid in Returning Drinking Water Supply to Montecito

Early this year, the Thomas Fire burned much of the area above Montecito and Carpinteria. Subsequently, the first major winter storm in the area caused mudslides and debris flows causing widespread damage. Mudslides also heavily damaged the 3-mile long water pipeline from the Jameson reservoir to the Montecito Water Treatment Plant, leaving the community without potable water.

On Friday, January 12, the City of San Luis Obispo Utilities Department was called upon to provide urgent assistance.

City employee John Millar (Whale Rock Supply Operator) stepped up to volunteer with a team of SLO County engineers to assess the damaged pipeline. The team met with a group from Montecito Water District at the Office of Emergency Management to receive a briefing and an initial assessment of the damage, which had been documented by helicopter earlier that day. To make matters worse, it was also reported that the 8-mile access road was inundated with rock flows and mud slides and rendered impassable by vehicle.

The team spent the next two days clearing roads using heavy equipment until they were able to gain access and accurately assess the damage to the entire pipeline. It was determined there were actually two major repairs necessary, each at approximately 100 feet in length. Within a week, the pipeline was repaired and water delivery from the reservoir to the water treatment plant resumed.

This was a huge step towards Montecito's recovery, and a great example of how our local mutual aid program, administered by the State of California Office of Emergency Services, works to assist our neighboring communities in need.

EMERGENCY NUMBERS

Water & Sewer Problems
 8 AM to 5 PM
 (805) 781-7215

After Hours & Weekends
 (805) 781-7312

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