EMERALD KEEPERS

For an Emerald Green, Ocean Blue Coronado

Drought & Water Conservation

Continuing with our Emerald Keepers "age of Aquarius" focus on water, we turn our attention to drought and conservation. Californians are well aware of the chronic drought conditions that plague our state. The U.S. Geological Survey (USGS) defines drought as a period of drier-than-normal conditions often due to a lack of precipitation resulting in water-related problems such as reduced crop yields, seawater intrusion and damage to ecosystems.

Currently, the state is experiencing drought conditions ranging from moderate to extreme. The conditions in the San Diego region are listed as moderate, according to the U.S. Drought Monitor (droughtmonitor.unl.edu), but the majority of the state is under a severe drought.

There is much that we can do to adopt sustainable, drought-friendly behaviors given our increasing drought.

NASA

ALREADY BEHIND IN 2022

• Although December 2021 came with an abundance of storms, a dry January already eliminated those gains. To recover, California would need to experience 140% of the state's normal annual rainfall for the remainder of the year.

• Drought effects upon groundwater levels are less immediate, which translates into long-term impacts threatening agriculture and aquifer systems. According to the state's Department of Water Resources, 63% of groundwater monitoring wells are below normal, 28% are normal and 9% are above normal levels.

• To rebalance depleted aquifers and stymie seawater intrusion harmful to crops, California farmers over the next 20 years may have to leave 500,000 to 1 million acres of farmland fallow according to the Public Policy Institute of California.

• NASA's analysis of the southwestern U.S. reveals increasing acreage of dry vegetation, which not only escalates the risk of wildfire but also intensifies its destructive effects as forest canopies become likelier to catch fire, making the fire harder to control.

WHAT YOU CAN DO!

• Xeriscaping is a form of landscape transformation that reduces water use by selecting slow-growing, drought tolerant plants in place of lawns, which require about 44 gallons of water per square foot annually. Complementary features include decorative stone pathways, well-placed boulders that provide shade for perennials, and mulch, a cost-effective option that offers water retention, erosion control and weed suppression.

• Greywater Reuse recycles gently used water from sinks, showers, tubs and washing machines. It does not use "black water," which comes from the toilet or in some way has been in contact with human or pet waste. This practice includes catching "warm-up water"— the water flowing as you wait for it to warm up — to water your household plants or might be as sophisticated as installing a residential clothes washer system that redirects wash machine water to your irrigation system.

• Be mindful of water use around the house. Laundry and showering use approximately 196 gallons of water a day. Set a timer for the shower, fix leaks, install high-efficiency toilets, turn the water off when brushing teeth and shaving, and wash full loads of clothes and dishes.

Sources: USGS, The San Diego Union-Tribune, California's Groundwater Live, NASA, CalRecycle, San Diego Public Utilities, Save Our Water.

Photo by Brian Lippe