Preparing for a Water Emergency

Up to 80 percent of the water used by San Diego County residents and businesses travels hundreds of miles from Northern California and the Colorado River. Prolonged drought or earthquake damage could disrupt the delivery of imported water into the San Diego region.

New Storage and Distribution Facilities

The Emergency Storage Project will protect the San Diego region from potential disruptions to the water delivery system by increasing the amount of water stored locally. New water storage and pipeline connections will distribute water throughout the region if imported water supplies are cut off. The Emergency Storage Project is expected to meet the county’s emergency water needs through 2030.

Construction of the first facilities began in 2000, and the last will be complete in 2012. To minimize water rate impacts, the project cost – slightly over $1.5 billion – is spread over several decades.

The Water Authority is addressing the environmental impacts of constructing the Emergency Storage Project by creating new wetlands, restoring habitat at project sites, and preserving sensitive habitat at other locations.

Faults Cross Our Pipelines

The pipelines that bring imported water to the San Diego region cross earthquake faults on the way. Earthquake damage is one example of how our water supply could be jeopardized.

Emergency Storage Project Highlights

- Provides up to six months of emergency water storage in the San Diego region
- Establishes emergency water storage at Hodges, Olivenhain, and San Vicente reservoirs for use throughout the county
- Expands the pipeline system to allow region-wide emergency water distribution

The Emergency Storage Project will add 90,100 acre-feet of water storage for emergency use.

An acre-foot is:
- Approximately 326,000 gallons of water
- Enough water to cover a football field one foot deep
- The approximate amount of water two families of four use in one year
Emergency Storage Project – Key Facilities

Olivenhain Dam/Reservoir, Pipeline and Pump Station
- 318-foot-tall new dam adding 18,100 acre-feet of emergency water storage (completed 2003)
- Pipeline connecting Olivenhain Reservoir to the Water Authority's Second Aqueduct and water transfer pump station (pipeline completed 2002, pump station completed 2005)

Lake Hodges Pipeline and Pump Station
- Pipeline connecting Olivenhain Reservoir to Hodges Reservoir, providing ability to store 20,000 acre-feet of emergency water in Hodges Reservoir (completed 2007)
- Pump station to generate power and move water between Hodges and Olivenhain reservoirs (under construction through 2010)
- Electrical substation and line to deliver power locally (completed 2008)

San Vicente Pipeline and Pump Station
- 11-mile pipeline to connect San Vicente Reservoir to the Water Authority’s Second Aqueduct (under construction through 2010)
- Pump station and surge control facility to move water from San Vicente Reservoir to the Water Authority's Second Aqueduct (under construction through 2010)

San Vicente Dam Raise
- An additional 117 feet added to San Vicente Dam providing 52,000 acre-feet of water stored for emergency use, plus 100,000 acre-feet of storage available for use when needed (under construction through 2013)

Water Conservation - Urgent and Ongoing
The completion of the Emergency Storage Project will not change the fact that San Diego County has a semiarid climate and relies on imported water for the majority of its water needs.

Years of drought in the regions that supply imported water to San Diego have reduced supplies. Regulatory restrictions in response to environmental concerns have further limited water deliveries. Conservation is needed now and must be ongoing.

The San Diego County Water Authority urges residents and businesses to increase their water conservation efforts. Water-saving tips, incentive programs, water-smart landscaping ideas, and other resources are available at www.20gallonchallenge.com.