

EMERGENCY & CARRYOVER STORAGE PROJECT

The Emergency & Carryover Storage Project is a system of reservoirs, interconnected pipelines and pumping stations designed to make water available to the San Diego region if imported water deliveries are interrupted. The E&CSP added 90,100 acre-feet of water storage capacity for emergency use, and more than 105,000 acre-feet of carryover storage capacity as a hedge against dry years.

The E&CSP won an Award of Merit in the 2016 Global Best Projects competition held by the industry publication Engineering News-Record. It also was named the Project of the Year by the American Public Works Association and won the American Society of Civil Engineers' 2017 International Outstanding Civil Engineering Achievement Award.

More than 68 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 E&CSP protects 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 can distribute water throughout the region if imported water supplies are cut off. The E&CSP is expected to meet the county's emergency water needs through 2045.

Construction of the first facilities began in 2000 and the last major component, the San Vicente Dam Raise, was completed in 2014. To minimize water rate impacts, the project cost – \$1.5 billion – is spread over several decades.

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



Olivenhain Dam and Lake Hodges

KEY FACILITIES

■ Olivenhain Dam/Reservoir, Pipeline and Pump Station

- 318-foot-tall dam added 24,000 acre-feet of emergency water storage (completed 2003)
- Pipeline connected Olivenhain Reservoir to the Water Authority's Second Aqueduct (completed 2002) and water transfer pump station (completed 2005)

■ Lake Hodges Pipeline and Pump Station

- Pipeline connected Olivenhain Reservoir to Hodges Reservoir, providing access to 20,000 acre-feet of emergency water in Hodges Reservoir (completed 2007)
- Electrical substation and line to deliver power locally (completed 2008)
- Pump station to generate power and move water between Hodges and Olivenhain reservoirs (completed and operational in 2012)

6 months of emergency water storage provided by E&CSP

■ San Vicente Pipeline and Pump Station

- 11-mile pipeline connected San Vicente Reservoir to the Water Authority's Second Aqueduct (completed 2011)
- Pump station and surge control facility to move water from San Vicente Reservoir to the Water Authority's Second Aqueduct (completed 2010)

■ San Vicente Dam Raise

- Raising the San Vicente Dam by 117 feet created 52,000 acre-feet of water storage capacity for emergency use, plus more than 105,000 acre-feet of carryover storage capacity for periods of water scarcity (completed in 2014)

FUTURE ENHANCEMENT Future enhancements include pipeline improvements and two new pump stations in the North County.



MORE INFO



San Vicente Dam and Reservoir