The San Vicente Reservoir and Dam is a vital component of the San Diego County Water Authority’s Emergency & Carryover Storage Project – an important investment in the region’s water reliability. The E&CSP is a system of reservoirs, interconnected pipelines and pumping stations designed to make water available to the San Diego region if imported water supplies are disrupted by drought or other emergency. Raising the height of San Vicente Dam was one of the last major components of the E&CSP.

Nearly all the concrete was produced on-site with rocks mined from hillsides circling the old marina, avoiding 100,000 delivery truck trips through the community. Daily laboratory tests confirmed that each batch of concrete met strength and performance specifications. Working up from the new foundation, the contractor placed roller-compacted concrete in front of the original dam in a process that resembles road construction. Roller-compacted concrete is just as strong as conventional concrete but takes less time and water.

San Vicente Dam raise
- 117 feet added, making it the tallest dam raise in the United States and the tallest dam raise of its type in the world
- 300 parking spaces in the new marina for recreational users
- 157,000 acre-feet of Storage added with the San Vicente Dam Raise Project
- Total cost of dam raise: $396 million
- Total cost of pipeline system: $415 million
- 90,000 acre-feet of capacity retained by the city of San Diego
- 9 years of construction for the dam, starting with the foundation in 2009 and concluding in 2014
- $1.5 billion

Emergency & Carryover Storage Project, 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 San Vicente Tunnel and Pipeline System creates a link from the San Vicente Reservoir to the Water Authority’s Second Aqueduct and includes the pipeline and reservoir interconnect, a pump station, and surge control facility. The facilities also improve the Water Authority’s ability to move large quantities of water into storage in San Vicente Reservoir during periods when water is abundant. This large-diameter pipeline was built in a tunnel, allowing the Water Authority to reduce environmental and other impacts to surrounding communities during construction.

Water flows through the pipeline by gravity from the Second Aqueduct to the reservoir. The San Vicente pump station is needed to deliver water in the opposite direction, from the reservoir up to the Second Aqueduct.