

SAN VICENTE RESERVOIR, DAM AND PIPELINE



San Diego County
Water Authority

The San Vicente Dam and Reservoir are 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 TUNNEL AND PIPELINE

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.



MORE INFO

157,000

Acre-feet of Storage added with the San Vicente Dam Raise Project

\$396 MILLION

Total cost of dam raise

\$415 MILLION

Total cost of pipeline system

300

Parking spaces in the new marina for recreational users

117

Feet added to San Vicente Dam, making it the tallest dam raise in the United States and the tallest dam raise of its type in the world

6

Years of construction for the dam, starting with the foundation in 2009 and concluding in 2014

90,000

Acre-feet of the original capacity retained by the city of San Diego

\$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.

102

Inches in diameter of the San Vicente Pipeline

11

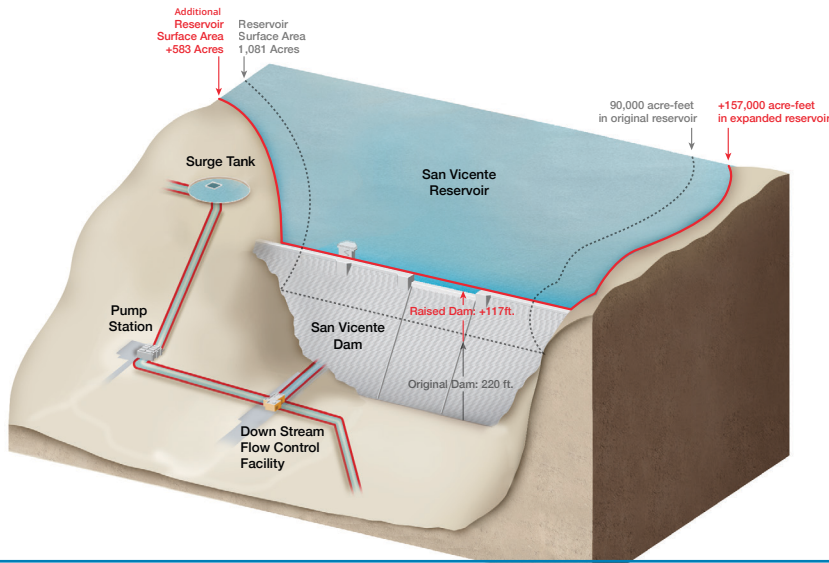
Miles of pipeline that deliver water in either direction between San Vicente Reservoir and the second aqueduct

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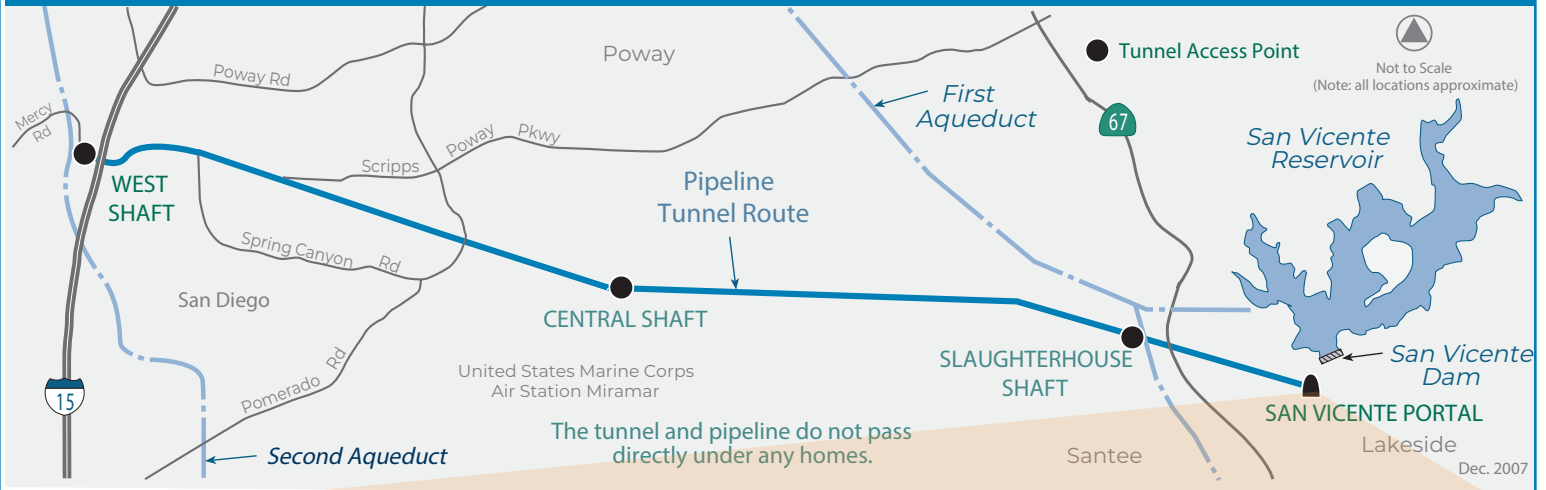


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The dam is owned and operated by the City of San Diego, which retains ownership of its original storage capacity, while the Water Authority manages the new storage capacity for use by the region.

San Vicente Pipeline



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.

