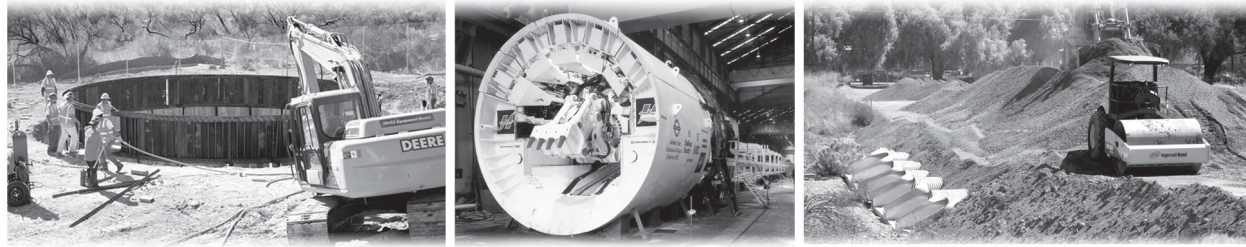




# San Vicente Pipeline Projects

San Diego  
County  
Water  
Authority

*Building Water Reliability Through the Emergency Storage Project*



*The San Vicente Pipeline Projects are part of the Emergency Storage Project, a system of reservoirs, interconnected pipelines and pumping stations designed to make water available to the San Diego region in the event of an interruption in imported water deliveries.*

*The Water Authority is a public agency serving the San Diego region as a wholesale supplier of water. The Water Authority works through its 23 member agencies to provide a safe, reliable water supply to support the region's economy, job base and quality of life for more than 3 million residents.*

## Piping In Water Reliability

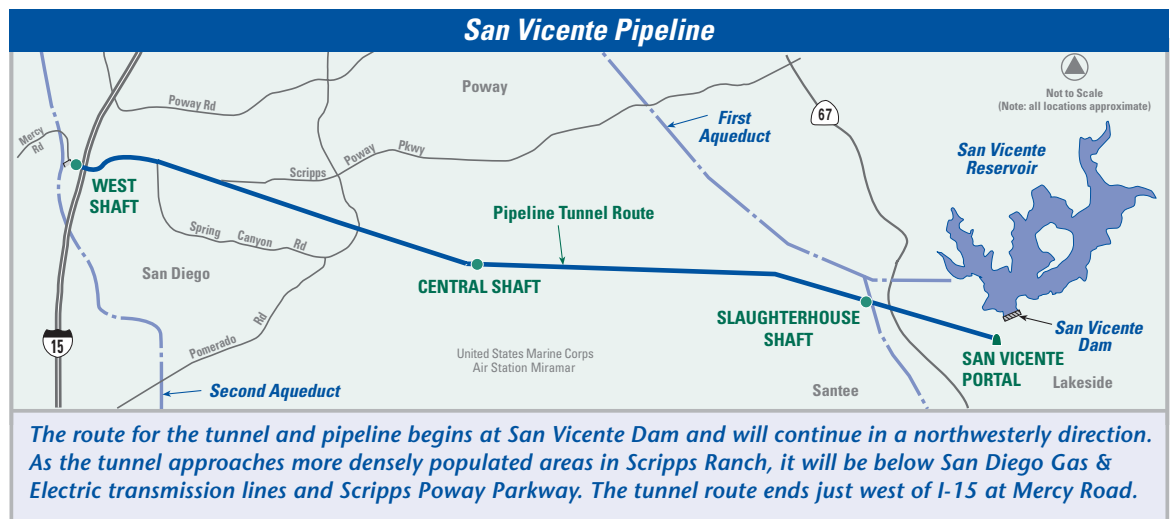
The San Vicente Pipeline projects are key components of the Water Authority's Emergency Storage Project and are important investments in the future reliability of San Diego County's water supply. The Emergency Storage Project will protect San Diego County by increasing the amount of water available for use during emergencies.

A prolonged drought or major earthquake could interrupt the delivery of imported water to the county for up to six months, and some communities could be without water within three to four days. The San Vicente Pipeline projects will provide access to water set aside for such emergencies. The projects will also improve the Water Authority's ability to move water around the county.

## Tunnel Access and Construction

Four access points will be used to dig the San Vicente Pipeline tunnel and to install the pipe (see map). Work at these sites will include inserting and extracting the tunnel boring machines; removing excavated materials from the tunnel; circulating air; and delivering equipment, liner segments, pipe sections, and concrete.

**The tunnel and pipeline will not pass directly under any homes.**



*The route for the tunnel and pipeline begins at San Vicente Dam and will continue in a northwesterly direction. As the tunnel approaches more densely populated areas in Scripps Ranch, it will be below San Diego Gas & Electric transmission lines and Scripps Poway Parkway. The tunnel route ends just west of I-15 at Mercy Road.*

Excavated materials from the tunnel will primarily come from the San Vicente Portal and Central Shaft, with a limited amount from the West Shaft. Materials excavated from the Central Shaft will be placed and graded on site and will not be hauled off the property. Materials excavated from the San Vicente Portal and the Slaughterhouse and West shafts will likely be hauled to nearby commercial quarries.



San Diego County  
Water Authority

Capital Improvement  
Program



## Do You Boat or Fish at San Vicente?

Construction activity for the surge control facility will require the reservoir to be temporarily closed during weekdays from fall 2006 through spring 2007. Boating will be allowed on weekends and holidays only during this time.

## Keeping Our Environmental Promises

The Water Authority is committed to avoiding impacts to the community and the environment whenever possible, and to minimizing unavoidable impacts. The work sites will be monitored to enforce the conditions and restrictions of the environmental reports and project permits.

## Providing Project Updates to the Community

The Water Authority will use newsletters, community meetings, and mailings to provide updates to stakeholders. Additional information is available on the Water Authority's website, [www.sdcwa.org](http://www.sdcwa.org).

## Tunnel Facts

- The tunnel will be 11 miles in length and approximately 12 feet in diameter.
- The finished pipeline will be 8 1/2 feet in diameter.
- The project budget is \$273 million.
- The tunnel depth ranges between 50 and 600 feet underground.
- Construction is scheduled from 2005 - 2008.

**San Vicente Interconnect Pipeline** - Will transport water from the San Vicente Surge Control Facility to the Moreno-Lakeside Pipeline.

## How Tunneling the San Vicente Pipeline Will Work

At 102 inches, this large-diameter pipeline will be built in a tunnel at a depth ranging from 50 to 600 feet underground. Tunneling, rather than cut-and-cover trenching, will enable the Water Authority to build the pipeline with fewer impacts to land surfaces and the surrounding communities.

The Water Authority's contractor will use three tunnel boring machines to excavate the majority of the tunnel. One of the machines will excavate rock using a rotating cutterhead to break the rock into small pieces. The other two will use a digging arm equipped with a bucket or rotary cutter.

Rock and dirt exit behind the boring machines and are removed from the tunnel by haul trains. The machines can excavate at a rate of 50 to 130 feet a day, depending on rock or soil conditions. Some short sections of the tunnel may contain rocks too hard for the digger shields to mine, and controlled blasting may be needed. Residents and property owners within 400 feet of blasting will be notified in advance.

People near the tunnel route may perceive a subtle, low-level vibration for several days as a tunnel boring machine approaches and proceeds past their location. This low-level vibration during tunneling will not impact surface structures such as homes, swimming pools or patios.

When tunnel and pipeline construction is complete, some permanent facilities will remain at the San Vicente Portal and the Central and West shafts to allow Water Authority personnel access to the pipeline for future inspection and maintenance.

## More Than A Pipeline

The San Vicente Pipeline will be an 11-mile-long tunneled pipeline connecting the San Vicente Reservoir in Lakeside to the Water Authority's Second Aqueduct west of Interstate 15. To provide water during emergencies, the pipeline will function together with other Water Authority facilities and connecting pipelines near the reservoir. These projects include the following:

**San Vicente Pump Station** - Will pump water from the San Vicente Reservoir to the Second Aqueduct for distribution during an extended emergency or when San Vicente Reservoir water is needed.

**San Vicente Surge Control Facility** - Will protect the San Vicente and Moreno-Lakeside pipelines from extreme pressure fluctuations.

**Reservoir Interconnect Pipeline** - Will transport water from San Vicente Reservoir to the San Vicente Pump Station.



*For more information about the San Diego County Water Authority's Emergency Storage Project or the San Vicente Pipeline Projects, please call toll free (877) 426-2010 or visit our website at [www.sdcwa.org](http://www.sdcwa.org).*

