

# ESP UPDATE



Summer 2008 Edition



*The Emergency Storage Project is 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 Emergency Storage Project is part of the San Diego County Water Authority's Capital Improvement Program to enhance and increase the operational flexibility of its water delivery system.*

*This newsletter is one way the San Diego County Water Authority is keeping communities like yours informed about the project's progress.*

*For more information, please call toll free*

**(877) 426-2010**

*or visit our website at*

**[www.sdcwa.org](http://www.sdcwa.org)**



San Diego County Water Authority

Capital Improvement Program

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## San Vicente Dam Will be Raised 117 Feet

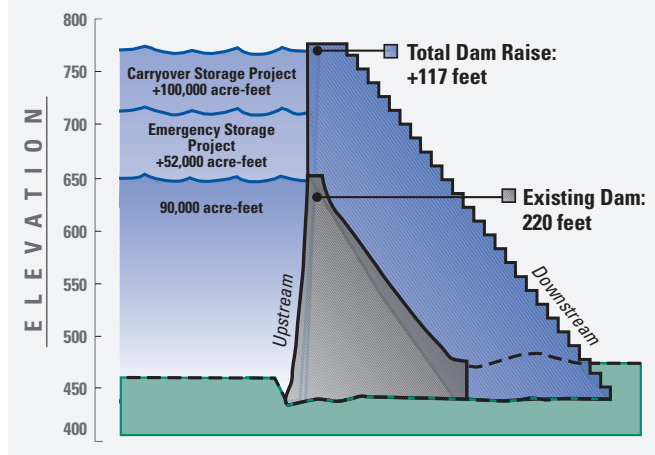
It's official – San Vicente Dam will be raised 117 feet, which will make the new dam 337 feet high when the San Vicente Dam Raise project is complete. The Water Authority's board of directors approved the project and certified the environmental document at its April 2008 board meeting.

The new reservoir will store an additional 152,000 acre-feet of water for two different purposes. The first 52,000 acre-feet of water is for the Emergency Storage Project and will be held in reserve for use if the region's imported water supply is cut off during an emergency. The additional 100,000 acre-feet of water is for the Carryover Storage Project, which will allow the Water Authority to store surplus water during wet years for use during dry years.



*San Vicente Dam currently stands at 220 feet.*

### Cross Section of San Vicente Dam Raise



One acre-foot of water is the approximate amount of water two families of four use in one year. The additional water stored in San Vicente Reservoir as a result of the dam raise will be enough water to serve approximately 40 percent of San Diego County's population for one year.

Construction of the San Vicente Dam Raise project is scheduled to start in early 2009. The first construction task is to excavate the dam foundation and prepare the existing dam for the new concrete to be placed. The next phase of construction is scheduled to begin in early 2010 and will include laying the concrete to raise the dam and constructing the new marina. Construction is expected to be complete in late 2012. 💧

## San Vicente Reservoir Closed to Recreation

San Vicente Reservoir is now closed to all recreation for the duration of the San Vicente Dam Raise project to ensure public safety during construction. It is anticipated that the reservoir will be closed for six to nine years.

In preparation for the San Vicente Dam Raise project, the reservoir's water level needs to be significantly lowered to release the pressure on the dam during construction work. The city of San Diego, the owner and operator of San Vicente Reservoir, began lowering the water level in April. The city projects it will reach the water elevation required for construction by January 2009.

Water taken out of the reservoir is supplying the city of San Diego's customers,



*See RECREATION on page 2*

## RECREATION *continued from page 1*

as normal. The water level has already dropped to a point where the existing boat launch ramp is not safe for recreational use.

The Water Authority and the city of San Diego understand that closing San Vicente Reservoir is a significant loss to recreational users. However, the main purpose of the region's man-made reservoirs is to provide a safe and reliable water supply for residents and businesses. The San Vicente Dam Raise project is critically important for the future water reliability of San Diego County.

While San Vicente Reservoir is closed, water skiers and wakeboarders can use the city of San Diego's El Capitan Reservoir. Fishing is allowed at the city's other reservoirs throughout the county. For more information, please visit the city of San Diego's website at [www.sandiego.gov/water/recreation](http://www.sandiego.gov/water/recreation).

San Vicente Reservoir is expected to reopen to recreation sometime between 2014 and 2017, as soon as the water level reaches the new boat launch ramp. Filling the expanded reservoir will be a lengthy process, and the time required will depend on rainfall, water supply, and demand. The Water Authority is working with the city of San Diego to reopen the reservoir to recreation as soon as possible.

If you would like to stay updated on the progress of the San Vicente Dam Raise construction and the timing of the reservoir's reopening, please join the project email list. Simply visit the project website at [www.sdcwa.org](http://www.sdcwa.org), click on "Infrastructure," then "ESP," then "San Vicente Dam Raise." 💧

## Improved Accessibility at New Marina

The raising of San Vicente Dam provides some exciting opportunities. One is a new and improved marina, since the current marina and parking area will be under water once construction and refilling are complete. The new marina will reduce boat launching wait times, provide picnic and shade areas, and increase the parking spaces and areas for boat preparation. It will also improve the accessibility of the reservoir for all potential users.

To better understand the needs of the disabled community, the Water Authority assembled an accessibility working group, composed of members of the disabled community who have



*Working group members review design plans for the new marina.*

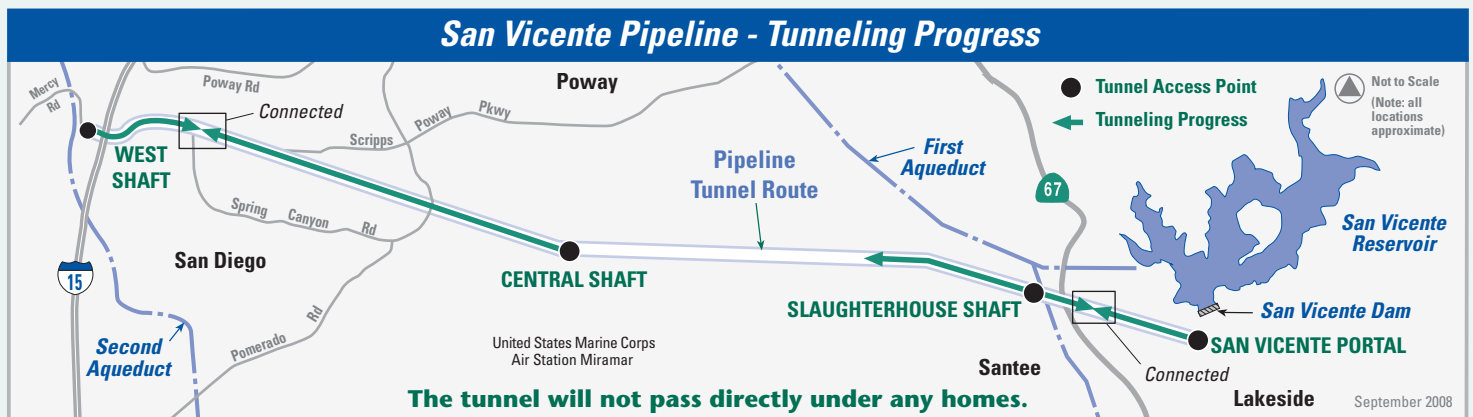
experience working on access issues. In addition to participating in meetings, the volunteer working group spent many hours studying the accessibility features at other reservoir sites. By identifying the accessibility elements that function well and those that need improvement, members were able to provide the Water Authority and the city of San Diego with helpful suggestions that are being incorporated into the marina design.

Thank you to all the working group members for their dedication and hard work as they helped ensure the new marina at San Vicente Reservoir will be accessible to everyone. 💧

## Two More Tunnel Sections Connected for San Vicente Pipeline

Another significant milestone for the San Vicente Pipeline project was achieved recently when tunnel segments from the Central Shaft and West Shaft were connected using a tunneling machine. The western half of the tunnel – nearly five miles – is now complete and the next major component of the project, pipe delivery and installation, will begin soon. After the contractor has prepared the tunnel for the pipe, installation will begin out of the Central Shaft in the late fall. It will take approximately one year to complete pipe installation in the tunnel section between the West and Central shafts.

West of the Slaughterhouse Shaft, another tunneling machine is excavating westward toward the Central Shaft and has about three miles left to tunnel. This machine has hit hard ground and is taking longer to excavate than originally expected. All work for the pipeline is anticipated to be complete in 2010. 💧



*The San Vicente Pipeline is an 11-mile tunnel and a large-diameter pipeline that will connect San Vicente Reservoir in Lakeside to the Water Authority's Second Aqueduct. The pipeline will function with other Water Authority facilities to provide water to the region in an emergency.*

## Lake Hodges Projects Received Super-Sized Delivery

An enormous section of pipe, weighing 98 tons and measuring 21 feet in width and length, was delivered to the Lake Hodges Projects construction site in May. This super-sized pipe took more than three days to make a 90-mile journey from Fontana, Calif. Escorts from the California Highway Patrol led the delivery truck along Interstate 15 during off-peak traffic hours. High winds and nighttime driving added to the complications of delivering this massive piece of equipment.

Once in Del Dios, the delivery truck waited in a parking lot on Lake Drive until the pipe could be transferred to a smaller truck for transport to the site. The Water Authority kept the local community informed about the parking lot closure and the nighttime delivery of this unusual pipe.

The Y-shaped pipe will connect the pump station to the 1.25-mile pipeline between the Hodges and Olivenhain reservoirs. The pipe divides the water flow as it enters the pump station to supply two pump turbines that can generate enough electricity to annually sustain nearly 26,000 homes.



*A crane prepares to lower the large Y-shaped pipe.*

The contractor is continuing to install pipe and mechanical equipment in the pump station. This structure extends 10 stories underground, with one story visible above ground.

Work also continues on the inlet-outlet structure inside the reinforced cofferdam. When completed, the structure will be submerged on the lake bottom, and a buoy system will prevent boaters from getting too close. Construction on the Lake Hodges Projects is anticipated to be complete by late 2009. 💧

## San Vicente Pumping Facilities Over Half Way Done!

The San Vicente Pumping Facilities project is now approximately 65 percent complete. The contractor has constructed the pump station walls and is currently installing the pumps inside the structure. The concrete walls of the surge tank are complete and pipe will soon connect the pump station and surge control facility.

The pumping facilities will allow water to move from San Vicente Reservoir through the San Vicente Pipeline, when completed. The project is expected to be done in summer 2009. 💧

## Tijuana River Valley Wetlands Environmental Document Released

The draft Environmental Impact Report for the proposed Tijuana River Valley Wetlands Mitigation Project was released for public review in July. The report includes a detailed assessment of the project. It also describes alternatives to the project and lists the potential adverse environmental effects, as well as measures to reduce those effects. The report is available for review on the Water Authority's website at [www.sdcwa.org](http://www.sdcwa.org).

As part of the environmental review process, the public is invited to comment on the document during a 45-day review period ending on September 8. An open house and public hearing were held in August. Water Authority board members heard comments on the draft EIR during the public hearing.

<i>EIR and Construction Schedule</i>	
<b>Sept. 8, 2008</b>	<b>45-day public review and comment period ends</b>
<b>Dec. 2008/ Jan. 2009</b>	<b>Water Authority board considers certifying the EIR and approving project</b>
<b>Late 2009</b>	<b>Construction scheduled to begin if EIR is approved</b>

This proposed wetlands project will create about 40 acres of native wetlands in the Tijuana River Valley to compensate for the construction of Water Authority projects. Up to 8.9 acres of wetlands are needed to address the construction impacts of the Emergency Storage Project. The remaining acres will compensate for construction of future Water Authority infrastructure projects. Wetlands are low-lying areas of land that become saturated or flooded during heavy rains. They filter water pollutants, replenish the ground water table, and provide flood control and important wildlife habitat. 💧

## Preparing for the Next Big Earthquake with the Emergency Storage Project

California has a 99.7 percent chance of having a magnitude 6.7 or larger earthquake in the next 30 years, according to new estimates by the U.S. Geological Survey. While scientists cannot predict exactly where or when an earthquake like this will occur, they say it is most likely to happen along the southern San Andreas fault. The USGS report also said the San Jacinto fault in Southern California could also produce a similar magnitude earthquake.

Protecting the region's water supply from the effects of an earthquake is exactly why the San Diego County Water Authority is implementing the Emergency Storage Project. Up to 90 percent of the water used by San Diego County residents and businesses travels hundreds of miles from Northern California and the Colorado River. The pipelines bringing imported water to the San Diego region cross several major faults, including both the San Andreas and San Jacinto faults.



*See EARTHQUAKE on page 4*

## EARTHQUAKE *continued from page 3*

If one of the aqueducts importing water to San Diego County were severed by a major earthquake, some communities in the county could be without water within three to four days. The Emergency Storage Project will increase the amount of water stored locally and reduce this threat.



Water aqueducts serving San Diego County cross three major earthquake fault lines in Southern California.

In 2012 when the Emergency Storage Project is slated for completion, up to six months of water supply for the region will be stored for emergency use within San Diego County. The Water Authority is committed to ensuring San Diego County will continue to have a reliable supply of water even when the big earthquake hits. 💧

# For more information

about the San Diego County Water Authority's  
Emergency Storage Project,  
please call toll free **(877) 426-2010**,  
email **ESPinfo@sdcwa.org**,  
or visit our website at: **www.sdcwa.org**.

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San Diego County  
Water Authority

Attn: Public Affairs  
4677 Overland Ave.  
San Diego, CA 92123

*The Water Authority is a public agency serving the San Diego region as a wholesale supplier of water. The Water Authority works through its 24 member agencies to provide a safe, reliable water supply to support the region's \$163 billion economy and the quality of life of 3 million residents.*

### State Water Supply Gets Drought Status

California is officially in a drought, according to a June announcement by Governor Arnold Schwarzenegger, which has prompted intensified water conservation measures by San Diego County water agencies. Both the Water Authority's



imported water sources, the Colorado River and the State Water Project, have dramatically low amounts of water in storage. For more information on water conservation programs, visit [www.20gallonchallenge.com](http://www.20gallonchallenge.com).

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