

ESP UPDATE



Summer 2009 Edition



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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

esp.sdcwa.org

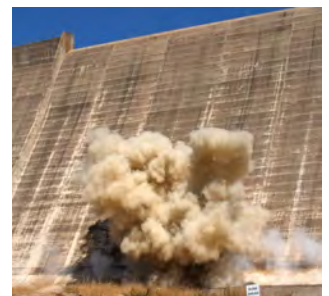


At the groundbreaking event, Mayor Sanders addressed more than 200 people, and the speakers posed in front of the dam.

San Vicente Dam Raise Starts With a Blast

Construction on the San Vicente Dam Raise project began with a blast at a groundbreaking ceremony on July 9. The San Diego County Water Authority celebrated the beginning of the last major phase of the Emergency Storage Project with more than 200 local business and community leaders, elected officials and their representatives, Water Authority board members, and the project team and consultants. The event concluded when General Manager Maureen Stapleton invited the contractor to set off a ceremonial blast to break ground on this historic and important project.

California Secretary for Natural Resources Mike Chrisman joined the Water Authority at the event to celebrate the occasion. Chrisman said, "This project is an excellent example of the kind of new infrastructure California needs to respond to our water supply challenges."



A ceremonial blast marked the start of construction.



Crews remove concrete sections of the dam to prepare for the raise.

City of San Diego Mayor Jerry Sanders also spoke at the event. He applauded the Water Authority's partnership with the city to expand San Vicente Reservoir. The city of San Diego owns and operates San Vicente Dam.

The contractor for the first phase of construction, Barnard Construction Company Inc., began work in July. For the next year, crews will prepare the existing 220-foot-tall dam to be raised 117 feet. The contractor will excavate the foundation for the raised dam, fill crevices with concrete, and prepare the face of the existing dam to create a

*See **GROUNDBREAKING** on page 2*



San Diego County Water Authority

Capital Improvement Program

Groundbreaking *continued from page 1*

good bonding surface for the new concrete. This work will not affect the integrity of the existing dam and is expected to be complete in summer 2010.

Dam Raise Facts

- **Tallest dam raise ever in the United States**
- **Tallest roller-compacted concrete dam raise in the world**
- **Greatest single increase of water storage in San Diego County's history**

Installing the new concrete to raise the dam is the next phase of construction, starting in spring 2010. The dam raise is expected to be complete in late 2012.

Once the dam raise is complete, the Water Authority will be able to store an additional 152,000 acre-feet of water in San Vicente Reservoir, more than doubling the reservoir's capacity. The city of San Diego will continue to manage the reservoir and its current water storage of 90,000 acre-feet. 💧

Pumping Facilities Work Wraps Up

The San Vicente Pumping Facilities will ensure that water can be transported from San Vicente Reservoir to the Water Authority's aqueduct system and, ultimately, to San Diego County residents in an emergency. After more than two years of construction, this critical portion of the Emergency Storage Project will be completed soon. The contractor is putting finishing touches on electrical work at the pump station, paving the access road, and testing the newly installed equipment.



The pump station will help move water from San Vicente Reservoir in an emergency.

The pumping facilities will take water from San Vicente Reservoir and give it a "boost" into the San Vicente Pipeline. The surge control facility will help maintain a safe water pressure level in the system, as the water moves from the reservoir into the pipeline. 💧

Pipe Installation Moves Ahead

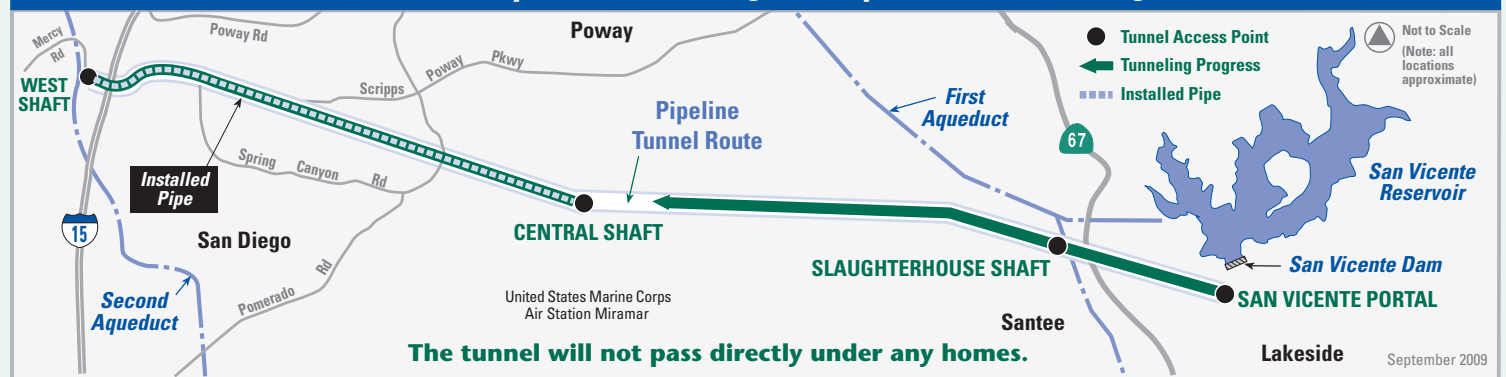
The contractor for the San Vicente Pipeline has installed five miles of pipe in the tunnel between the West and Central shafts. The next step is pumping in grout to fill the space between the pipe exterior and the tunnel walls to ensure the steel pipe remains in place and is protected from corrosion. To further prevent corrosion, the contractor will apply a cement mortar lining to the inside of the pipe. All work on this western section of the pipeline is expected to be complete by the end of 2009.

While these final steps of pipe work are being completed on the western half, other workers are using a tunneling machine to finish excavating the last half mile of the tunnel to the east. When tunneling excavation is complete, workers will start to install steel pipe between the San Vicente Portal and Central Shaft. The entire 11-mile-long pipeline is expected to be complete in 2010. 💧



To protect the pipe during grout work, eight-foot-tall aluminum beams are placed in a crossed position inside the pipe.

San Vicente Pipeline: Tunneling and Pipe Installation Progress



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.

Water Authority Declares Drought Alert and Mandatory Conservation

Effective July 1, the Water Authority reduced water deliveries to member agencies in San Diego County by 8 percent. The Water Authority's board voted in April to activate a Level 2 Drought Alert for San Diego County after the wholesale supplier announced water cutbacks for much of Southern California would begin in July. These restrictions will be in place until June 30, 2010.

The Level 2 alert means that local retail water agencies can use the tools necessary to ensure their customers stay within the new water cutbacks. This can be achieved in a variety of ways, such as water use restrictions and water rates that encourage conservation. Residents and businesses should check with their specific water agency to learn what measures apply to them. Information on mandatory conservation measures by water agency is also available at www.sdcwa.org.

Since the early 1990s, the Water Authority and its member agencies have been preparing for water cutbacks like the one we face now. Together, they created a regional drought management plan, which is now guiding the agencies' actions to respond to the reduction in water deliveries to the San Diego region.

The Level 2 alert means that local retail water agencies can use the tools necessary to ensure their customers stay within the new water cutbacks.

Reducing Outdoor Water Use Helps Conservation Effort

Studies show that watering outdoor lawns and gardens can account for 60 percent of a residential customer's water use. To reduce this water use, some agencies are implementing mandatory watering schedules and restrictions on watering times. Residents should also test their irrigation systems to make sure they are efficient and functioning properly. For landscaping tips and to sign up for water conservation newsletters, visit www.20gallonchallenge.com.

Emergency Storage Project Provides Cushion

The ability to store more water locally and move it around the region where it is needed will help the Water Authority cope with water supply challenges created by emergencies, such as an earthquake or a prolonged drought. The Emergency Storage Project will provide a vital water supply "cushion" for the future. 💧



Survey Indicates Support for Conservation

A March 2009 public opinion survey sponsored by the Water Authority indicated strong support for mandatory water conservation measures and mandatory restrictions. Key findings include:



- 92 percent feel that using water efficiently is a civic responsibility, equal to preventing pollution and recycling used materials.
- 82 percent recall seeing, hearing, or reading messages asking them to take extra steps to conserve water – up from 59 percent in a similar survey last year.
- Nearly three-fifths of all respondents support government action to impose mandatory water cutbacks.

The full survey and report are available at www.sdcwa.org/about/pdf/PublicOpinionSurvey/2009_SurveyReport.pdf. 💧

Speakers Bureau

The Water Authority's speakers bureau has more than 25 members ready to address community groups and organizations. Topics include current water supplies and conservation measures, recycled water, elements of the Emergency Storage Project, and other topics.



Visit www.sdcwa.org/education/speakers.phtml, call (858) 522-6708, or email speakersbureau@sdca.org. 💧



“We like this one!”



Members of the Lake Hodges Community Landscape Committee, Del Dios community, and other nearby communities posed with their varnish choice for the Lake Hodges pump station exterior. Whenever possible, the Water Authority incorporates community input on projects. The varnish, similar to what was used on Olivenhain Dam, will help the pump station blend in with its surroundings. The pump station contains equipment to help move water between the Hodges and Olivenhain reservoirs. It will also generate enough power to annually sustain nearly 26,000 homes through water transfers from Olivenhain Reservoir. The Lake Hodges Projects are expected to be complete in fall 2010.

Got 5 Minutes? Check Out the ESP Video!

Learn more about the Emergency Storage Project by viewing a five-minute video available on the Water Authority’s website. Go to cip-esp.sdcwa.org.

Click on “ESP Video – Protecting Our Future.” The video explains each phase of the multiyear Emergency Storage Project and shows footage of the Lake Hodges and San Vicente Pipeline construction projects.

To view this and other important Water Authority videos, please also visit www.youtube.com/sdcwavideo.



Olivenhain Dam and Reservoir

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 cip-esp.sdcwa.org.

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