



Lake Hodges Projects

San Diego
County
Water
Authority

Building Water Reliability Through the Emergency Storage Project



The Lake Hodges 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 24 member agencies to provide a safe, reliable water supply to support the region's \$171 billion economy and the quality of life of 3 million residents.



San Diego County
Water Authority

Capital Improvement
Program



Improving Water and Energy Reliability

Over the years, the San Diego County Water Authority has imported up to 90 percent of the county's water supplies to meet the region's needs. The Lake Hodges Projects will help keep water flowing throughout the region if catastrophic events such as an earthquake or prolonged drought were to cut off these imported water deliveries.

The Lake Hodges Projects will connect the city of San Diego's Hodges Reservoir with the Water Authority's Olivenhain Reservoir. The connection will provide the ability to store 20,000 acre-feet of water at Hodges Reservoir for emergency use. The connection will also allow water from Hodges, which can currently serve only the Santa Fe Irrigation and San Dieguito Water districts, to be made available for use throughout the region.

Additionally, the projects will help keep Hodges Reservoir at a more consistent level during dry seasons, and provide the ability to capture water before it spills over the Hodges Dam during rainy seasons.



Construction of the Lake Hodges Projects is anticipated to be complete in late 2010.

Project Benefits

- Provides emergency water storage for up to 40,000 homes
- Makes water from Hodges Reservoir available for distribution throughout the county
- Annually generates enough electricity for 26,000 homes

During the transfer of water from Olivenhain Reservoir downhill to Hodges Reservoir, the Lake Hodges Projects will also generate 40 megawatts of peak hydroelectric energy – enough power to annually sustain nearly 26,000 homes.

Construction Components

Construction of the Lake Hodges Projects began in 2005 and is anticipated to be complete in late 2010. The projects' components include an underground pipeline, a pump station, an electrical switchyard, and an inlet-outlet structure.

Completed in spring 2007, the pipeline tunnel is 1.25 miles long and contains a 10-foot diameter steel pipeline that rises 770 feet in elevation from Hodges Reservoir to Olivenhain Reservoir.



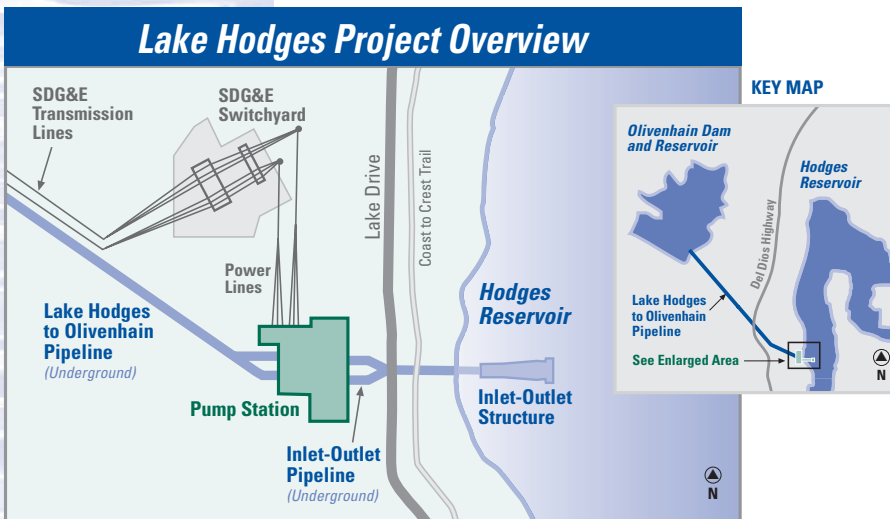
The Hodges Pump Station will extend 10 stories underground. It will house two 28,000 horsepower pump turbines that will generate 40 megawatts of electricity as water flows down the pipeline from Olivenhain Reservoir into Hodges Reservoir. The energy created will provide approximately \$5.4 million in revenue each year, defraying operating costs at the Hodges Reservoir facilities and of other Water Authority programs that ensure a reliable water supply for the county.

Electricity generated by the pump turbines will be transmitted to an outdoor switchyard, then to a 69 kilovolt power line that will connect to the existing local transmission system.



Photograph © Ace Aerial Photography

Once the construction projects are complete, community input will be incorporated to restore the native landscape on the project site.



The Hodges Inlet-Outlet Structure will be located below the surface of Hodges Reservoir. Linked to the pump station through a 200-foot-long tunnel, it will draw or discharge water back and forth between the reservoir and the pump station.

Avoiding and Minimizing Impacts

The Water Authority strives to avoid and minimize impacts to the environment and the community. Once the construction projects are complete, a landscape architect will incorporate community input in a landscape plan to restore the land temporarily impacted by the construction project.

The Water Authority will also monitor the site for up to five years after construction is complete to preserve the valuable habitat of sensitive plants and wildlife species.

The Water Authority also works with recreational users and communities surrounding Hodges Reservoir to provide information on the project and respond to questions and concerns. The Water Authority uses newsletters, community meetings, and mailings to update stakeholders. If you would like to be added to the Water Authority's mailing list, please call the project information line at **(877) 426-2010** or email **ESPinfo@sdcwa.org**.



For more information about the San Diego County Water Authority's Emergency Storage Project or the Lake Hodges Projects, please call toll free (877) 426-2010, email ESPinfo@sdcwa.org, or visit our website at cip-esp.sdcwa.org.