



San Diego County Water Authority

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- City of Del Mar
- City of Escondido
- City of National City
- City of Oceanside
- City of Poway
- City of San Diego
- Fallbrook Public Utility District
- Helix Water District
- Olivenhain Municipal Water District
- Otay Water District
- Padre Dam Municipal Water District
- Camp Pendleton Marine Corps Base
- Rainbow Municipal Water District
- Ramona Municipal Water District
- Rincon del Diablo Municipal Water District
- San Dieguito Water District
- Santa Fe Irrigation District
- South Bay Irrigation District
- Vallecitos Water District
- Valley Center Municipal Water District
- Vista Irrigation District
- Yuima Municipal Water District

Honorable Janis Sammartino
 Presiding Judge
 Superior Court of California
 County of San Diego
 220 West Broadway
 P.O. Box 122724
 San Diego, CA 92112-2724

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 SAN DIEGO
 COUNTY GRAND JURY
CLM

RE: Comments of Findings and Recommendations 07-023 in the 2006-2007 San Diego County Grand Jury Report, "San Diego County Water Authority Emergency Storage Project"

Dear Honorable Janis Sammartino:

On behalf of the San Diego County Water Authority, I am pleased to forward the enclosed comments on Findings and Recommendations in the 2006-2007 San Diego County Grand Jury Report, "San Diego County Water Authority Emergency Storage Project."

We appreciate the Grand Jury's efforts in reviewing the Emergency Storage Project and thank you for the opportunity to comment on this report.

Sincerely,


 Maureen A. Stapleton
 General Manager

OTHER REPRESENTATIVE

- County of San Diego

MAS:lw
 Enclosure



San Diego County Water Authority’s Comments in Response to the San Diego County Grand Jury 2006-2007 Report, “San Diego County Water Authority Emergency Storage Project”

Fact/Finding 1 (page 10)

Fact: The Capacity of the ESP is established as approximately 92,000 acre-feet of water stored as follows:

- San Vicente: 52,000+ acre-feet*
- Hodges: 20,000 acre-feet*
- Olivenhain: 20,280 acre-feet*

Finding: The capacity was established as a best estimate of the water required to provide usable service to the County for up to 6 months. Two months is thought to be adequate for emergency repair of earthquake damaged supply lines.

Comment

The Water Authority agrees with the finding.

Fact/ Finding 2 (page 10)

Fact: The San Vicente pipeline connection between Aqueduct One (the eastern 71.1 mile branch) and Aqueduct Two (the western branch), plus the associated pumps and controls, will allow water to be transferred throughout the region instead of gravity flow from the north to the south.

Finding: The current aqueduct system is gravity-fed and can only deliver water from high elevations in the north to lower elevations in the south. The San Vicente pipeline and associated pumps and controls should allow water to be transferred throughout the system. This pipeline and pump system also makes it possible to use the San Vicente Reservoir for additional storage. (Carryover Storage Project)

Comment

The San Vicente Pipeline does not connect the First Aqueduct with the Second Aqueduct. The San Vicente Pipeline connects the San Vicente Reservoir in the community of Lakeside with the Water Authority’s Second Aqueduct just west of Interstate 15.

The Water Authority generally agrees with the finding, but provides the following clarifying information. The second sentence should be revised to read, “The San Vicente

pipeline and associated pumps and controls when completed, along with other facilities, are intended to allow water to be transferred throughout the untreated water system.”

In addition, the sentence, “This pipeline and pump system also makes it possible to use the San Vicente Reservoir for additional storage,” should be revised to reflect that in addition, the San Vicente Dam must be increased in height to use the San Vicente Reservoir for additional storage. With the Emergency Storage Project, the San Vicente Dam Raise project was approved with a 54-foot increase in dam height. The Carryover Storage Project modifies the San Vicente Dam Raise project by increasing the dam height by an additional 63 feet.

Fact/Finding 3 (page 10)

Fact: The Olivenhain Dam is the first Roller Compacted Concrete (RCC) dam in California. At a height of 318 feet, it is taller than any other RCC in the United States. The Olivenhain Dam is also the first new dam in California in 50 years.

Finding: The thorough testing and analysis program that preceded the construction of the Olivenhain Dam cleared the RCC method for use in this large structure. Not only did the test confirm the usability of the granite quarried on site, it also reduced the requirement to interrupt work to allow for concrete bonding. The RCC process saved both time and money and is expected to be used for the San Vicente Dam raise.

Comment

The Olivenhain Dam is the first Roller Compacted Concrete (RCC) dam to be permitted and constructed in California. The Olivenhain Dam is the first major concrete dam to be built in San Diego County in 50 years.

The Water Authority agrees with the finding.

Fact/ Finding 4 (page 11)

Fact: The pipeline that connects Lake Hodges with the Olivenhain Reservoir allows local supplies of water collected in the lake, in addition to the 20,000 acre-feet stored in the lake to be used to meet emergency demands.

Finding: The Lake Hodges Dam, originally completed in 1918, captures the drainage area of 303 square miles. The water collected in heavy rain years has exceeded the capacity and escaped over the spillway. The interconnecting pipeline should allow any captured water to be transferred to the Olivenhain Reservoir and then to the aqueduct system rather than being lost over the spillway. The condition of the water currently in the Lake Hodges is of concern to the residents of the Olivenhain water district. Some treatment or filtering process will probably be necessary before actual water transfer can proceed.

Comment

The pipeline that connects Lake Hodges with the Olivenhain Reservoir allows the use of the local supplies stored in Lake Hodges and 20,000 acre-feet of Water Authority emergency storage.

The Water Authority generally agrees with the finding, but provides the following clarifying information. The Lake Hodges Dam was completed in 1917. The pipeline that connects Lake Hodges and the Olivenhain Reservoir allows water to move between the two reservoirs and links Lake Hodges with the Water Authority’s water delivery system. The last two sentences should be revised to read, “The Olivenhain Municipal Water District has expressed concern about the condition of the water currently in Lake Hodges. The Water Authority has formed a Technical Advisory Committee comprised of representatives from the Water Authority, Olivenhain Municipal Water District, Sweetwater Authority, Helix Water District, San Dieguito Water District, city of San Diego, CH2M Hill OMI (the Water Authority’s contract operator for the Twin Oaks Valley Water Treatment Plant), and California Department of Health Services, to review the water quality data and recommend possible mitigation measures, if necessary.”

Fact/Finding 5 (page 11)

Fact: The pipeline and pump/generator system being installed between Lake Hodges and the Olivenhain Reservoir allow Lake Hodges to store 20,000 acre-feet of water that can be transferred to Olivenhain Reservoir for distribution throughout the aqueduct system.

Finding: In addition to stabilizing the level of Lake Hodges the pump system can move water to the Olivenhain Reservoir during low electrical power usage at night and generate electricity when the water is returned to Lake Hodges. Thus, the pump system acts as both a base load for the power grid and a 40 megawatt peaking plant. The revenue from hydroelectric power generated will help to cover the cost of installation as well as maintenance of the system.

Comment

The Water Authority agrees with the finding.

Fact/ Finding 6 (page 11)

Fact: The San Vicente Dam raise will use the same RCC technique applied in the construction the Olivenhain Dam. The current plan is aimed at accommodating the volume increase required for both the ESP and the CSP for a total of 152,000 acre-feet, an increase of 100,000 acre-feet.

Finding: In October 2006 the Water Authority and the U.S. Army Corps of Engineers as co-leads began the process of preparing the environmental impact report and the environmental impact statement (EIR/EIS) for the carryover storage project at San Vicente. The proposed action would raise the San Vicente Dam 63 feet higher than the

approved emergency storage project dam raise. The construction, if approved, would raise the dam 117 feet as a single project. The work is schedule to begin in 2009 and completed in 2012.

Comment

The Water Authority agrees with the finding.

Fact/Finding 7 (page 11)

Fact: The construction of the 11 mile long San Vicente pipeline tunnel is underway. The large-diameter pipeline connects the San Vicente Reservoir in Lakeside to the Water Authority's second aqueduct west of Interstate 15. The construction is scheduled to be completed in early 2009.

Finding: The pipeline is being built in a tunnel, using state of the art tunneling machines, at a depth ranging from 50 feet to 600 feet underground. The tunnel will not pass directly under any homes. Tunneling, rather than cut-and-cover trenching, enables the Water Authority to build the pipeline with fewer impacts to land surfaces and the surrounding communities.

Comment

The Water Authority generally agrees with the finding, but provides the following clarifying information. The tunnel depth ranges from 50 feet to 550 feet underground.

Recommendation 07-23 (page 12)

Continue to refine the cost estimating process on all of the ongoing and future projects to provide reasonable "should cost" figures for purposes of finance planning and bid review.

Comment

The recommendation has been implemented. The Water Authority instituted best "estimating" business practices in 2006 and will continue to refine these practices in the future, as necessary.