



COMMITTEE REPORT

TO: Butte County Water Commission
FROM: Sites Reservoir Investigation Subcommittee
SUBJECT: Update on Activities
DATE: September 23, 2014

BACKGROUND

At the August 7, 2013 meeting of the Butte County Water Commission, the Chair appointed members of the Commission to a subcommittee charged with investigating the proposed Sites Reservoir storage project. Members of the subcommittee include Commissioners Grundmann, Schohr, Scott, and Chair Barber. The subcommittee has investigated the project through a tour (November 21, 2013) and three meetings (January 8, 2014, August 11, 2014 and September 23, 2014). This report is designed to update the full Commission on the subcommittee's findings.

If approved for construction, this reservoir would be located in the Sites Valley, which is in Colusa County about 10 miles west of the town of Maxwell. Per the design modeling this off-stream reservoir would provide up to 1.8 million acre feet of storage within the Sacramento Valley, depending upon the selected alternative implemented.

DISCUSSION

November 21, 2013 – Project Site Tour

In order to greater understand the project, on November 21, 2013, the subcommittee toured the project site and heard testimony from experts that have been working on the design, environmental review and potential financing for the project. These experts included: Thad Bettner, Manager - Glenn-Colusa Irrigation District (GCID); Ted Trimble, Manager - Western

Canal Water District (WCWD); Curtis Anderson, Chief - Northern Region California Department of Water Resources (DWR); Amy Lyons, Environmental Scientist and CEQA lead - DWR; Sean Sou, Supervising Engineer and Project Manager for the North-of-the-Delta Offstream Storage Investigation – DWR.

On the trip over to the west side of the valley, Thad Bettner explained the makeup and origin of the Sites Reservoir Joint Powers Authority (JPA). This entity is comprised of GCID, Reclamation District 108, Tehama-Colusa Canal Authority (TCCA), Maxwell irrigation District (MID), Yolo County Flood Control and Water Conservation District (YCFC&WCD), County of Glenn and County of Colusa. The mission of the JPA is to be a proponent and facilitator, which will potentially acquire, design, construct, manage, govern and operate Sites Reservoir and related facilities to improve the operation of the State's water system and to provide a net improvement in ecosystem and water quality conditions in the Sacramento River system and the Delta.

The foundational principles identified by the JPA include:

- Sites should meet multiple objectives and needs
- California's large water systems have become inflexible and Sites should be operated to provide increased flexibility back into the system
- Sites should be integrated with existing storage projects
- Sites must be able to perform in current and post Bay Delta Conservation Plan (BDCP) scenarios
- Sites should maximize existing infrastructure to help minimize capital costs
- Sites should minimize the environmental footprint of the reservoir location

The JPA is currently working with the United States Bureau of Reclamation (USBR) and the DWR to complete a feasibility study and an Environmental Impact Study/Report for the project, which would quantify benefits, identify beneficiaries and meet other requirements as set out in SB7x_2 (Water Bond legislation). The goals set forth by the USBR and DWR for Sites include:

- Increasing water supply and reliability out of the system
- Helping to improve water quality in the Delta
- Increasing fish survival rates within the Sacramento River system
- Providing flexible hydropower generation to increase and complement other renewable energy sources

Although these two sets of goals are not incompatible, the basic premise behind the formation of the JPA was to bring the project back under the control of the locals. The goal is to ensure that local benefits could be identified and realized and that the system flexibility for local benefits would not be compromised.

Currently the JPA is conducting outreach to landowners within the footprint of the project to determine the feasibility of constructing and operating the project. In addition, they are contacting local entities, such as local governments and special districts to determine potential impacts and/or benefits of the project to local jurisdictions.

The subcommittee learned that there are three primary project alternatives, which produce different volumes of water ranging from 1.2 million acre feet to 1.8 million acre feet (maf) depending mostly on the amount of land inundated. The larger volume would result in additional land at the southern tip of the project footprint.

The USBR and DWR are looking at the associated cost of the project. However, the JPA is also addressing the affordability component of the project. Essentially, in addition to the costing of the project, they are determining who are the potential beneficiaries of the project and what are they willing to pay for the additional water or the associated operational flexibility.

January 8, 2014 – Review of Potential Benefits and Impacts of Project

Amy Lyons is the DWR lead on the California Environmental Quality Act (CEQA) process. She is responsible for determining potential impacts of the project so that they can be evaluated during the environmental review process. Sean Sou is the DWR lead on the identification or the range of benefits associated with the project. Due to high winds at the project site during the tour, the subcommittee met again with Amy Lyons and Sean Sou on January 8, 2014.

At this meeting Sean and Amy walked through the key features of the project alternatives and discussed the benefits of North of Delta Storage (NODOS), specifically Sites Reservoir and how this project would contribute to the attainment of the USBR and DWR goals as set forth above.

They explained that one of the biggest challenges facing California water resources management is having water in the right place at the right time. This challenge is greatest during dry periods, when surface water is curtailed and less water is available for the environmental, municipal and agricultural needs. Less surface water forces higher reliance on groundwater resources. This alternative is not sustainable on a long term basis and is also more costly to the consumer. Sean explained that one of the primary advantages of Sites is the added flexibility that it brings into both the CVP and SWP systems both for water supply and environmental needs.

The NODOS team explained that a NOD off-stream storage facility such as Sites, could potentially increase water supply reliability for delivery to municipal, industrial, agricultural and environmental uses through this added flexibility, but also through the addition of 1.2 to 1.8 maf of new water. This new water could be used as an alternative source of water for increased refuge supply demands established through the Central Valley Project Improvement Act (CVPIA), but it could also supply water in the event of levee failures in the Delta that might otherwise cause highly saline water to surge into the Delta from the Pacific Ocean contaminating the State's water supply.

Amy Lyons added that NODOS could also benefit anadromous fish populations by improving the reliability of cold-water carry-over storage in Shasta Lake, Lake Oroville, Trinity Lake and Folsom Lake. Water released at various temperatures for fisheries needs could be recaptured in a NODOS facility and used for local farming needs.

Another potential benefit discussed by the NODOS team would be the development of renewable energy by incorporating pumped storage capabilities built into the facility. Electricity to supply high-peak demands could be produced and water could be pumped into the reservoir during low demand periods when the energy cost is significantly reduced.

One objective of the project is to improve the water quality in the Delta for drinking water, agriculture, and environmental restoration. The Sites project could improve water quality by providing increased flows of high-quality water during periods when the water quality is impaired. The key is the flexibility that the off-stream storage facility provides to the timing of these flows.

August 11, 2014 – Review of findings and report to Commission

Due to scheduling conflicts, the subcommittee did not meet again until August 11, 2014. At this meeting the group discussed their concerns related to the project. The primary unanswered questions expressed by the group were:

- Will the facility will be publicly owned and managed?
- How will it be financed?
- If it is paid for by downstream entities, can they take excess water out of the system and possibly impact the water rights of users in the Sacramento Valley?
- What are the benefits to the Sacramento Valley and do they outweigh the risks?
- Do the environmental benefits for the Delta have the potential to degrade the environment of the Sacramento Valley?

The group discussed the core issue that increased storage is important to the water supply equation, but there are other critical issues that need to be addressed as expressed in the questions presented above. Committee members felt it was premature to provide a final opinion on the project. If the Sites Reservoir were to be constructed, additional information on any reoperation of Lake Oroville is needed in light of Butte County's experiences regarding the Lake Oroville Project.

CONCLUSIONS:

While the subcommittee supports the further development of the project and recognize the value of additional storage to the system, they are not prepared to endorse the project at this time.

The subcommittee identified these critical concepts that need to be addressed:

- Safeguards need to be incorporated into the operation and management of the project to protect the current water rights system and water users within the Sacramento Valley.

- The project should be built to provide flexibility for local users before the needs of the Delta.
- Financing needs to be secured for the project prior to construction
- Ownership, management and beneficiaries need to be clearly identified and solidified
- Environmental benefits for the Delta should not degrade the environment of the Sacramento Valley.
- While storage is a positive in the water equation in general, the subcommittee did not identify any positive economic or other specific benefits that accrued directly to Butte County from the project.