

Water Storage Investment Program Commission Determinations and Additional Eligibility Requirement

Los Vaqueros Reservoir Expansion Project

Contra Costa Water District

Contra Costa Water District (CCWD) is proposing a surface storage project, the Los Vaqueros Reservoir Expansion Project (LVE Project). The LVE Project would enlarge the existing reservoir, an offstream reservoir located in southeastern Contra Costa County, from 160 thousand acre-feet (TAF) to 275 TAF. The LVE Project would upgrade existing conveyance facilities, construct new conveyance, and re-operate existing facilities to achieve the intended objectives. The LVE Project would divert water from the Sacramento-San Joaquin Delta at CCWD's Rock Slough, Old River, and Middle River intakes, and at the Freeport Intake on the Sacramento River. The LVE Project would deliver water to agencies within CCWD's service area, the Bay Area, the Delta, neighboring regions, and the south-of-Delta wildlife refuges.

The California Water Commission (Commission) accepted the following monetized public benefits for this project:

- Ecosystem Improvement— Reduced Salmonid Entrainment
- Ecosystem Improvement—Refuge water supply
- Emergency Response—Delta outage
- Emergency Response—Drought emergency
- Recreation

The Department of Water Resources considered the Emergency Response as a non-monetized benefit.

Introduction

This document addresses the following components of the Commission's Water Storage Investment Program (WSIP) project evaluation process:

- **Determinations:** The Commission must make nine (9) determinations by before assigning a maximum conditional eligibility amount.
- Additional Eligibility Requirement: The Commission must consider the eligibility requirement related to wild and scenic rivers.

Part 1: Discussion of Commission Determinations

Regulation section 6011(c) states that before the Commission assigns a maximum conditional eligibility amount to a project, the Commission shall make all nine determinations based on the technical review and appeal information. The determinations are the following items:

- The proposed project is cost effective;
- The proposed project improves the operations of the State water system;
- The proposed project provides a net improvement in ecosystem and water quality conditions;



- The proposed project provides measurable improvements to the Delta ecosystem or to the tributaries to the Delta;
- The Program cost share is less than or equal to 50 percent of the proposed project's total capital costs, with the exception of conjunctive use projects and reservoir reoperation projects;
- The Program funded ecosystem improvement benefits make up at least 50 percent of the total public benefits funded by the Program;
- The proposed project appears to be feasible;
- The proposed project will advance the long-term objectives of restoring ecological health and improving water management for beneficial uses of the Delta; and
- The proposed project is consistent with all applicable laws and regulations.

If, for a project, the Commission cannot make any single determination then a maximum conditional eligibility determination (MCED) cannot be made for that project.

Relationship Between Determinations and Eligibility

These determinations are made before projects have completed all project formulation efforts. Regulations section 6013(c) states that additional requirements (such as completed feasibility studies, final environmental documents, contracts for the non-WSIP cost share, contracts for administration of public benefits, and permits) must be obtained by applicants after the MCEDs are made, but before the Commission makes a final award to the project. Those additional requirements may result in changes to the project that was proposed to the Commission in the August 2017 Application. Such changes may positively or negatively affect project eligibility and in turn one or more of the Commission's determinations. The Commission will consider such changes in determining a project's final award (section 6013(f)(3-5)). Additionally, regulations section 6013(f)(2) sets January 1, 2022, as the deadline for completing feasibility documents.

Table 1 presents Staff's assessment of whether each of the nine determinations conditions has been met. This assessment is based on the technical review and the appeal.

 Table 1 - Staff Recommendations – Commission Determinations

1. The proposed project is cost effective.

The quantified costs and benefits may have changed since the submission of the application in August 2017 and the February 2018 appeal. Staff recommends the Commission discuss with the applicant, consistent with the requirements of the Bagley-Keene Act, any changes that relate to cost effectiveness. The Commission may determine the project to be cost-effective based on the following factors:

- Monetized and non-monetized benefits and costs as described in the application
- A discussion with the applicant, consistent with the requirements of the Bagley-Keene Act, about any changes in benefits and costs related to cost effectiveness (Regulations section 6004(a)(4)(E)) that may have arisen since the submission of the application

Any changes that arise from such a discussion would need to be documented and supported as part of the ongoing WSIP regulatory process.

2. The proposed project improves the operations of the state water system. YES

Table 1 - Staff Recommendations – Commission Determinations

The applicant described how the project would be integrated into the local, regional, state, or federal systems that provide water resources benefits within California. Such integration would improve the operations of the state water system. The proposed LVE Project would be integrated with the Central Valley Project (CVP) and State Water Project (SWP) systems as well as regional and local water systems. The proposed LVE Project would provide operational flexibility by providing an additional way to store available CVP and SWP supply for local agency partners and wildlife refuges during wetter times for use later, conveying water to local agency partners and wildlife refuges when Delta exports are constrained. The increased operational flexibility would be effective for delivering water supplies during a drought.

3. The proposed project provides a net improvement in ecosystem and water quality YES conditions.

The ecosystem public benefits accepted by the Commission for this project are:

- Ecosystem Improvement— Reduced Salmonid Entrainment
- Ecosystem Improvement—Refuge water supply

The California Department of Fish and Wildlife (CDFW) found that the monetized ecosystem benefits, as described in the application, meets the requirements of Chapter 8, as related to matters within its purview. The LVE project proposes to improve the Rock Slough Fish Screen to reduce entrainment and impingement for the benefit of fall-run Chinook salmon. Consistent with the Central Valley Project Improvement Act, the Project also proposes to provide Incremental Level 4 water to south-of-Delta wildlife refuges for habitat enhancement.

Staff concludes that the proposed project appears to contribute to the restoration of aquatic ecosystems and native fish and wildlife, including those ecosystems and fish and wildlife in the Delta (Water Code section 79753(a)(1). This project also appears to contribute to ecosystem-related water quality improvements by providing water to enhance wetland habitat.

4. The proposed project provides measurable improvement to the Delta ecosystem or to the tributaries to the Delta.

The ecosystem public benefits accepted by the Commission for this project are:

- Ecosystem Improvement— Reduced Salmonid Entrainment
- Ecosystem Improvement—Refuge water supply

Based on CDFW findings that the reduced salmonid entrapment and refuge water supply are ecosystem public benefits meet the requirements of Chapter 8, Staff conclude that the project will provide measurable improvements to the Delta ecosystem or to the tributaries to the Delta.

These ecosystem public benefits will likely provide changes in the physical, chemical, or biological conditions that provide public benefits which can be quantified at a specific location and time (Water Code section 79752; WSIP Regulations section 6001(a)(48)).



Table 1 - Staff Recommendations – Commission Determinations	
5. The proposed project's program cost share is less than or equal to 50 percent of the proposed project's total capital costs, with the exception of conjunctive use projects and reservoir reoperation projects.	YES
The project contains a reoperation project element and is eligible for more than 50 percent of the project's total capital cost, for that project element. The maximum eligibility amount for this project is \$459.00 million and the project's total capital cost is \$845.24 million.	
 The proposed project's program-funded ecosystem improvement benefits make up at least 50 percent of the total public benefits funded by WSIP. 	YES
The Commission's decision on May 3, 2018 determined the public benefit amount for each project, which necessarily included consideration and determination of the project's ecosystem benefits. Based on that decision, the project's public benefits consist of at least 50 percent ecosystem improvements, as required by Water Code section 79756(b).	
7. The proposed project appears to be feasible.	YES
Notwithstanding the implementation risks documented in the Technical Review, on whole the project appears to be feasible. The applicant demonstrated that the project can be constructed with existing technology and available construction materials, work force, and equipment. The applicant also demonstrated that the project is technically feasible consistent with the preliminary operations plan.	
8. The proposed project will advance the long-term objectives of restoring ecological health and improving water management for beneficial uses of the Delta.	YES
Section 6001(a)(7) of the Regulations defines "beneficial uses of the Delta" as those:	
"identified in the State Water Board's 'Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary' (December 2006)."	
The LVE project proposes to improve the Rock Slough Fish Screen to reduce entrainment and impingement for the benefit of fall-run Chinook salmon. Consistent with the Central Valley Project Improvement Act, the Project also proposes to provide Incremental Level 4 water to south-of-Delta wildlife refuges for habitat enhancement. CDFW found that implementation of physical improvements at the Rock Slough Fish Screen Facility, expansion of an aquatic week management program at Rock Slough, and deliveries of Incremental Level 4 water to south-of-Delta wildlife refuges are substantiated ecosystem benefits that constitute an ecosystem improvement.	
These identified public benefits appear to advance ecological beneficial uses of the Delta, including: Migration of Aquatic Organisms; and, Estuarine Habitat; Wildlife Habitat; and Rare, Threatened, or Endangered Species. The advancement of beneficial uses resulting from the project would aid in restoring healthy wildlife corridors, and ecologically diverse habitats that support the Delta ecosystem complex.	
9. The proposed project is consistent with all applicable laws and regulations	YES
The applicant stated in the application that the project will comply with all applicable laws and regulations. Such compliance is a requirement for WSIP funding.	



Part 2: Additional Eligibility Requirement

Wild and Scenic Rivers

Regulations section 6006(c)(2) identifies six additional eligibility items that require the Commission's consideration as part of the technical review. Five of the additional eligibility items are included in the determinations discussed above. One additional eligibility item (Wild and Scenic Rivers) is not included in the determinations. Water Code sections 79711(e) and 79751(a) prohibit the use of WSIP funds by any project that could have an adverse effect on the values upon which a Wild and Scenic River or any other river is afforded protections pursuant to the California Wild and Scenic Rivers Act or the federal Wild and Scenic Rivers Act.

The LVE Project is unlikely to adversely affect a Wild and Scenic River, including its free-flowing character. The American River, which is located over 50 miles north of the proposed project area, is the nearest designated Wild and Scenic River, and the project does not propose a hydrologic connection to this watershed. The proposed project is an off-stream reservoir in the Los Vaqueros watershed, which does not include, and does not provide hydrologic connectivity to any designated Wild and Scenic Rivers. The project also proposes water deliveries to the San Luis Reservoir watershed, which does not include, and does not provide hydrologic connectivity to any designated Wild and Scenic Rivers.