

Notice of Preparation of Environmental Impact Report to Support a Water Reduction Program Agreement Between the Sacramento River Settlement Contractors Corporation, Individual Sacramento River Settlement Contractors, and the U.S. Bureau of Reclamation

May 17, 2024

The Glenn-Colusa Irrigation District (GCID), serving as Lead Agency under the California Environmental Quality Act (CEQA), is publishing this Notice of Preparation (NOP) to prepare an Environmental Impact Report (EIR) for the proposed Water Reduction Program Agreement (Project) between the Sacramento River Settlement Contractors Corporation, individual Sacramento River Settlement Contractors, and the U.S. Bureau of Reclamation (Reclamation), in accordance with Public Resources Code §§ 21000-21189.57 and CEQA Guidelines §§ 15000-15387. This NOP has been prepared to inform responsible and trustee agencies, public agencies, and interested organizations that GCID has independently determined that there are potentially significant environmental impacts associated with the proposed Project as well as to obtain input regarding the scope, content, and environmental issues relevant to the EIR. GCID is preparing this document pursuant to its obligations as a state agency. Reclamation will separately prepare its National Environmental Policy Act compliance documentation.

This NOP provides a summary of the proposed Project description, the proposed Project location, and the expected scope of environmental analysis in the EIR, including potential project alternatives. **A virtual public scoping meeting will be held for the proposed Project at 4:30 p.m. on June 5, 2024.** The meeting can be accessed using the link, call-in number, or one tap mobile access options described in the box on the bottom right.

Please submit your comments, concerns, or suggestions for project alternatives or other pertinent information that may enable GCID to prepare a comprehensive and meaningful EIR for the proposed Project.

Comments should be submitted to:

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Virtual Public Scoping Meeting Access Options

1. Zoom link:
<https://us02web.zoom.us/j/89783481441?pwd=M1doQUJXQjdYNUVzVjBPbzdKVE5BQT09>
2. Call-in number: (888) 475-4499
 - Meeting ID: 897 8348 1441
 - Passcode: 647848
3. One tap mobile access:
+16692192599,,89783481441#,,,,*647848#

The public scoping period is from May 17 to June 17, 2024. Comment letters must be postmarked by June 17, 2024, or transmitted electronically by midnight on June 17, 2024. If you have any questions, please contact Greg Krzys by email (above) or by phone at (530) 934-8881.

1 Introduction

The Sacramento River Settlement Contractors (SRSC) is composed of 145 agricultural and municipal senior water rights holders that manage water resources for cities, rural communities, farms, as well as fish and wildlife and their habitats in California's Sacramento Valley (SRSC 2024a). The SRSC includes irrigation and reclamation districts, mutual water companies, partnerships, corporations, and individuals representing approximately 450,000 acres of irrigated agriculture in the western Sacramento Valley. The SRSC also funds environmental improvement projects that support wildlife and their habitat, including habitat enhancement for salmon spawning and rearing, fish screens, and fish food production. The SRSC holds senior water rights that are the basis for contracts with Reclamation that identify how much water the SRSC can divert from the Sacramento River, which comes from water supplies held in Shasta Lake.

Water usage in California is managed under a complicated network of state and federal laws. These laws provide different types of water rights, dependent on the nature and timing of a claim. Claims made prior to 1914 and diversions by riparian landowners are considered "senior water rights". Senior water right holders have priority access to available water supplies.

Water supply and usage in California is highly managed through an integrated system of federal, state, and locally owned water projects including dams, reservoirs, pumping plants, and aqueducts to link water supplies (primarily originating north of Sacramento) with demand (primarily located in the middle and southern portions of the state). Hydrologic conditions, climatic variability, consumptive use within watersheds, and regulatory requirements for operation of water projects routinely affect water supply in California. This variability makes advanced planning for water shortages necessary and routine.

The proposed Project is an Agreement between Reclamation and the SRSC to implement a drought mitigation, voluntary water conservation, and water reduction program. Under the proposed Project, the SRSC Corporation and individual SRSC contractors would enter into an Agreement with Reclamation to forego a larger percentage of their contract supply in specified drought years under two phases. In addition, the SRSC will engage in drought-resiliency projects to address potential agricultural loss due to reduced contract supply.

The term of the Agreement will consist of two phases:

- Phase 1 (2025-2035): the SRSC would reduce contract supply by up to 500,000 acre-feet during specified drought years.
- Phase 2 (2036-2045): the SRSC would reduce contract supply by up to 100,000 acre-feet during specified drought years.

Reduced contract supply would be accomplished through various actions by SRSC including groundwater substitution, cropland idling, cropland shifting, conservation, and through implementing the drought-resiliency projects. By reducing the amount of water that is released from Shasta Lake and diverted by the SRSC, the proposed Project would consequently allow for additional

flexibility in Reclamation's management of operation of the Central Valley Project (CVP) during drought conditions.

1.1 Project Location and Environmental Setting

CEQA Guidelines Section 15082(1)(b) requires that an NOP identify the project location and setting. This setting is used to determine the geographic extent of environmental impacts.

1.1.1 Regional Setting

California's Central Valley encompasses almost 20,000 square miles in the center of the state (Figure 1). It is bound by the Cascade Range to the north, the Sierra Nevada to the east, the Tehachapi Mountains to the south, and the Coast Ranges and San Francisco Bay to the west. The valley is close to sea level and its land surface has very low relief. Historically, this area was home to significant fish and wildlife populations but is now a vast agricultural region (USGS 2024).

The Central Valley watershed comprises 60,000 square miles. The northern third of the valley is drained by the Sacramento River, and the southern two-thirds of the valley are drained by the San Joaquin River. The Sacramento and San Joaquin River systems meet to form the Sacramento-San Joaquin River Delta (Delta), a large expanse of interconnected canals, stream beds, sloughs, marshes, and peat islands. The Delta empties into the San Francisco Bay, and into the Pacific Ocean (Congressional Research Service 2024).

1.1.2 Project Setting

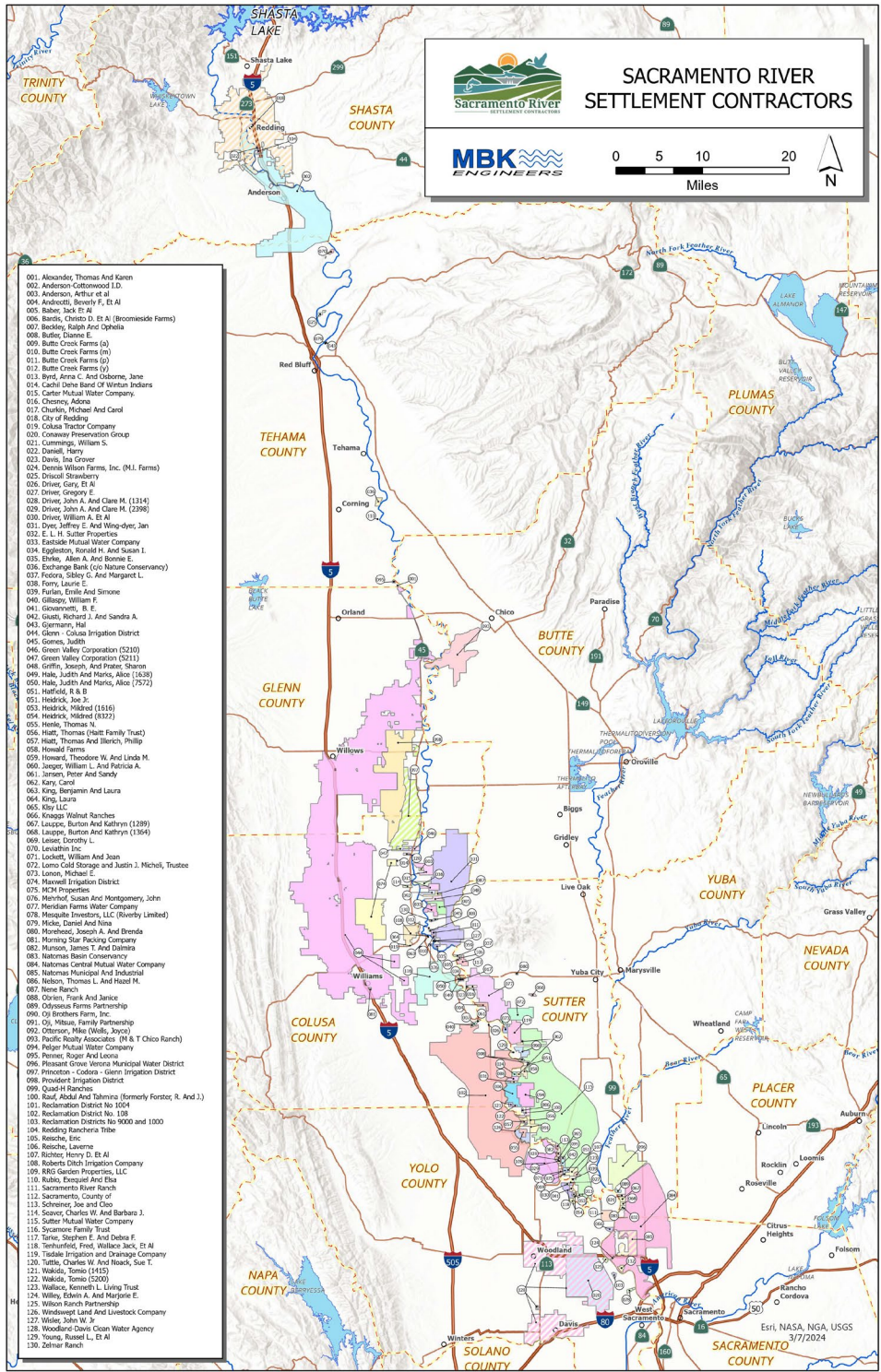
The proposed Project setting includes the service areas for SRSC as shown on Figure 2. As noted above, the SRSC is various irrigation districts, reclamation districts, mutual water companies, partnerships, corporations, and individuals that operate within the Sacramento Valley. The Sacramento Valley is the area of the Central Valley that lies north of the Delta and is drained by the Sacramento River.

Figure 1
Four Major Regions of the Central Valley

Source: <https://ca.water.usgs.gov/projects/central-valley/about-central-valley.html>



Figure 2
SRSC Service Area
 Source: MBK Engineers



1.2 Background

As agriculture grew in the Sacramento Valley, the first settlers began using water from the Sacramento River to irrigate farms across the region. Since before 1914, individual property owners, irrigation and reclamation districts, and mutual water companies throughout the region exercised water rights from the Sacramento River (SRSC 2024a). In the 1930s, Reclamation began exploring the need for canals to deliver much-needed water to sustain people and farms in the Central Valley. The federal CVP, managed by Reclamation, was authorized in 1935. Recognized as one of the world's largest water supply projects, the CVP covers a complex, multi-purpose network of dams (including the Shasta Dam), reservoirs, canals, hydroelectric powerplants and other facilities over an area of approximately 400 miles from Redding to Bakersfield (USBR 2024). The CVP draws from two large river basins: the Sacramento and the San Joaquin. CVP water supports a variety of human uses and fish and wildlife needs and provides a major source of support for California agriculture, including irrigating more than 3 million acres of land. In addition to fisheries habitat, CVP flows support wetlands and wildlife refuges, which provide habitat for migrating birds. The CVP is operated in coordination with the State Water Project (SWP), which provides much of its water to municipal users in Southern California (Congressional Research Service 2024).

Because the SRSC holds rights to divert water from the Sacramento River that are senior to the CVP, the SRSC protested the issuance of CVP water rights. In those protests, the contractors contended that construction and operation of the CVP would reduce their ability to divert water from the Sacramento River under their senior rights. Agreements were reached with Reclamation to protect these senior water rights (SRSC 2024b) and since then, SRSC diverts their water supplies in accordance with their "Settlement Contracts" with Reclamation, which identify how much water contractors can divert from the Sacramento River and when. By specifying the monthly amount and timing of SRSC diversions, the contracts allow Reclamation to adjust its releases and deliveries of water from the CVP based on forecasted demand, and contractors are more certain of their water supplies in the summer and during drought conditions. . The Settlement Contracts were first signed in 1964 for a 40-year term and were renewed in 2005 for another 40 years (through 2045). The five largest rights holders on the Sacramento River under the contracts are GCID, Reclamation District 108, Sutter Mutual Water Company, Anderson-Cottonwood Irrigation District, and Natomas Central Mutual Water Company (SRSC 2024b). SRSC-contracted water is fulfilled by Reclamation through releases from Shasta Lake. Under Settlement Contracts, contractors are entitled to divert 2.1 million acre-feet of water per year from the Sacramento River from April to October, which is reduced to 1,575,000 acre-feet in Shasta Critical Years. A "Shasta Critical Year" is any year in which either of the following eventualities exists:

- The forecasted full natural inflow to Shasta Lake for the current Water Year, as such forecast is made by Reclamation on or before February 15 and reviewed as frequently thereafter as conditions and information warrant, is equal to or less than 3.2 million acre-feet.

- The total accumulated actual deficiencies below 4.0 million acre-feet in the immediately prior Water Year or series of successive prior Water Years, each of which had inflows of less than 4.0 million acre-feet, together with the forecasted deficiency for the current Water Year, exceed 800,000 acre-feet.

The SRSC are typically entitled to receive and divert 100% of their contracted water quantities in most water-year types.

In addition to providing contracted water to SRSC and other users with water rights, Reclamation actively supports ecosystem management with releases from Shasta Lake to control water flow and temperature to support endangered fish species, which are impacted by critically dry conditions that reduce river flow and increase water temperatures. Salmonids and other fish of primary management concern in the project area include winter-, spring-, and fall-/late fall-run Chinook salmon (*Oncorhynchus tshawytscha*), Central Valley steelhead (*O. mykiss*), Sacramento splittail (*Pogonichthys macrolepidotus*), American shad (*Alosa sapidissima*), striped bass (*Morone saxatilis*), white sturgeon (*Acipenser transmontanus*), and green sturgeon (*A. medirostris*). Many of these species rely upon water releases to provide cold water for spawning and incubation over the summer months.

Salmonids are a fish family that includes salmon, trout, char, and whitefishes. They are important game fish and food sources to many animals. Salmonids are freshwater spawners with several species migrating from the ocean to freshwater rivers to spawn. Several species of salmonids are protected under the Endangered Species Act (ESA).

2 Project Need and Overview

The purpose of the proposed Project is to approve and facilitate reduced water contract supply to the SRSC during specified drought years to address water shortages at Shasta Lake. Reduced SRSC contract supply allows for response to shortages in water supplies due to normal hydrologic conditions, climatic variability, climate change, and regulatory requirements. Currently, Reclamation operates Shasta Lake to meet SRSC-contracted diversion amounts while also managing releases of water for fish and wildlife purposes. The proposed Project would develop immediately implementable and supplemental water supplies to address water shortage impacts and meet existing municipal, agricultural, and habitat demands during two phases: 2025 to 2035 and 2036 to 2045.

Under the proposed Project, the SRSC Corporation and individual SRSC contractors would enter into an Agreement with Reclamation to forego a larger percentage of their contract supply in specified drought years under two phases. In addition, the SRSC will engage in drought-resiliency projects to address potential agricultural loss due to reduced contract supply.

2.1 Program Phases

Under Phase 1 of the Water Reduction Program (2025 to 2035), the contractors would collectively incur a reduced contract supply of up to 500,000 acre-feet under their aggregated contracts during certain years (defined as Phase 1 Program Years) if the following four conditions are met:

- Forecasted end-of-April Shasta Lake storage is less than 3.0 million acre-feet.
- Forecasted end-of-September Shasta Lake storage is less than 2.0 million acre-feet.
- Combined actual and forecasted natural inflow to Shasta Lake from October 1 through April 30 is less than 2.5 million acre-feet.
- Reclamation forecasts a Critical Year under the Settlement Contracts.

Under Phase 2 (2036 to 2045), the contractors would agree to incur a reduced contract supply of up to 100,000 acre-feet under their aggregated contracts collectively during certain years (defined as Phase 2 Program Years) if the following two conditions are met:

- Combined actual and forecasted natural inflow to Shasta Lake from October 1 through April 30 is less than 2.5 million acre-feet.
- Reclamation forecasts a Critical Year under the Settlement Contracts.

Table 1 presents the total expected reductions in each phase including existing agreements and the proposed Project Agreement.

**Table 1
Total Water Reductions in Program Years including Existing Contracts and Proposed Agreement**

Program Year	Total Contracted Water Amount	Maximum Annual Existing Contract Reductions	Proposed Additional Reductions	Total SRSC Contract Amounts in Program Years ²
Phase 1 Program Year	2,100,000 million acre-feet ¹	-525,000 acre-feet (25%)	Up to -500,000 acre-feet	1,075,000 acre-feet
Phase 2 Program Year			Up to -100,000 acre-feet	1,475,000 acre-feet

Note:

1. Contracted water amount rounded based on normal fluctuations.
2. Assuming maximum additional reduction under the proposed Agreement occurs in a single year.

2.2 Water Reductions

The contract supply (and surface water diversion) reductions to be implemented in Phases 1 and 2 would be achieved by implementing water reduction activities and drought-resiliency projects, which are further described in the following sections.

2.2.1 *Water Reduction Activities*

The contract supply reductions to be implemented in Phases 1 and 2 would be achieved by implementing a variety of activities, including those described below.

- **Cropland idling** includes idling agricultural land that would have been planted in the absence of the proposed Agreement. Cropland idling occurs when no crops are planted during a specific time, making water available that would have otherwise been used for agricultural production. Water that is made available would remain in Shasta Lake. Water is made available on the same pattern throughout the growing season as it would have otherwise been consumed, had a crop been planted. The irrigation season lasts from April or May through September for most crops in the Sacramento Valley.
- **Crop shifting** includes shifting from historically planted higher-water-intensive crops (like rice) to lower-water-using crops. It does not include land fallowed as part of normal farm operations, which does not make new water available. Crop shifting makes water available by reducing the amount of surface water applied for irrigation. Water that is made available would remain in Shasta Lake.
- **Conservation** includes actions to reduce the diversion of surface water by reducing irrecoverable water losses. The amount of reduction in irrecoverable losses determines the amount of conserved water that would remain in Shasta Lake. Irrecoverable losses include water that would not be usable because it currently flows to a salt sink, enters an inaccessible or degraded aquifer, or escapes to the atmosphere.
- **Groundwater substitution** occurs when a contractor chooses to pump groundwater in lieu of diverting surface water supplies, thereby making the surface water available. Water that is made available would remain in Shasta Lake.

2.2.2 *Drought-Resiliency Projects*

Drought-resiliency projects are expected to be constructed and implemented during Phase 1 of the proposed Project, but it is possible some may still be constructed in Phase 2.

The following are examples of drought-resiliency projects:

- Piping open ditches or canals
- Seepage capture and reuse
- On-farm improvements to irrigation systems
- Small on-farm reservoirs
- Canal lining and modernization
- Canal automation through Supervisory Control and Data and Acquisition systems
- Automated gates installation
- New groundwater or deep aquifer wells
- Weirs or check structures
- Pipeline recirculation programs
- Conjunctive use programs

It is anticipated that with implementing drought-resiliency projects, the need for the water reduction activities described in Section 2.2.1 may reduce over time. Because specific locations, design, and scope of drought-resiliency projects have not yet been determined, project-level analysis of those projects would be speculative. Accordingly, the Draft EIR will provide a general description of drought-resiliency projects that could be undertaken, and will analyze these projects on a programmatic level.

3 Expected Environmental Effects

The proposed Project includes a mix of actions that range from well-defined to conceptual in both scope and time. Conceptual projects are expected to be better defined as they progress through preliminary and final design, and, therefore, will likely be evaluated in the Draft EIR at a high level based on currently available information.

The following is a list of the resource areas that will be considered as part of the Draft EIR:

- Agricultural/Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Recreation
- Tribal Cultural Resources
- Utilities/Service Systems
- Wildfire

The following resource areas are not expected to result in environmental impacts from implementation of the proposed Project. However, because the Draft EIR will include a programmatic assessment, these resource areas will also be considered as part of the Draft EIR:

- Aesthetics
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Transportation

4 References

Congressional Research Service, 2024. *Central Valley Project: Issues and Legislation*. Updated April 29, 2024. Accessible at: <https://sgp.fas.org/crs/misc/R45342.pdf>.

SRSC (Sacramento River Settlement Contractors), 2024a. Sacramento River Settlement Contractors: Managing Water Resources and Habitat in the Sacramento Valley. Accessible at: <https://www.sacvalleywater.com/>.

SRSC, 2024b. Who We Are. Accessible at: <https://www.sacvalleywater.com/who-we-are>.

USBR (U.S. Bureau of Reclamation) and San Luis & Delta Mendota Water Authority 2019. *Long-Term Water Transfers Environmental Impact Statement/ Environmental Impact Report Final*. September 2019. Accessible at:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=40932.

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USGS (U.S. Geological Survey), 2024. California's Central Valley. Accessible at:
<https://ca.water.usgs.gov/projects/central-valley/about-central-valley.html>.