

**FILED**

**NOTICE OF PREPARATION**  
**Draft Supplemental Environmental Impact Report**  
**for the**  
**Pulse Flows Component**  
**of the**  
**Water Storage Investment Program Groundwater Projects**

**AUG 16 2022**

Bill Emlen, Clerk of the  
Board of Supervisors of  
the County of Solano,  
State of California

Deputy Aimee Galison

**Date:** August 10, 2022

**To:** Public Agencies and Interested Parties

**Subject:** Notice of Preparation of a Draft Supplemental Environmental Impact Report

**Project Title:** Pulse Flows Component of the Water Storage Investment Program Groundwater Projects

**Introduction**

The three independent Water Storage Investment Program (WSIP) projects referenced in the title of this NOP are the:

- 1) Chino Basin Program (The Inland Empire Utilities Agency)
- 2) Kern Fan Groundwater Storage Project (The Groundwater Banking Joint Powers Authority, comprised of the Rosedale–Rio Bravo Water Storage District and Irvine Ranch Water District), and
- 3) Willow Springs Water Bank Project<sup>1</sup> (Rosamund Community Services District)

Collectively, these three projects will be referred to as the “WSIP groundwater projects.”

The lead agencies (indicated in parentheses above) previously completed the CEQA review process for each of the WSIP groundwater projects. The projects involve groundwater storage and water exchange to enable pulse flows in the Feather River Watershed from Oroville Dam.

The California Department of Water Resources (DWR) will prepare a Supplemental Environmental Impact Report (SEIR) to supplement the existing environmental review for these three WSIP groundwater projects and to provide CEQA coverage for DWR’s proposed action to facilitate a portion of the three projects: the Pulse Flows Component of the WSIP Groundwater Projects (Pulse Flows Component).

DWR, California Department of Fish and Wildlife (CDFW), and the State Water Resources Control Board (State Water Board) are responsible agencies (and/or trustee agency, in the case of CDFW) pursuant to CEQA for the WSIP groundwater projects. DWR, in conjunction with CDFW, will prepare the SEIR to analyze the environmental impacts of the Pulse Flows Component, and will conduct the associated CEQA public review process.

**Water Storage Investment Program Background**

WSIP is a \$2.7 billion program for investments in water storage projects in California that was approved by voters in 2014 as part of Proposition 1. Storage projects eligible for WSIP funding include expanding

<sup>1</sup> The Willow Springs Water Bank Project was formerly known as the Antelope Valley Water Bank Project.



existing reservoirs, increasing groundwater storage, and building modern surface storage facilities. WSIP directs the California Water Commission to administer the program and distribute funding to potential projects through a competitive public process based on the projects' ability to deliver defined public benefits, including ecosystem improvements, water quality improvements, flood control benefits, emergency response, and recreation. After a rigorous review process, the California Water Commission awarded conditional funding to eight proposed projects in 2018. Following one project's withdrawal, seven projects continue to proceed towards completing the remaining WSIP requirements. These seven projects include the three WSIP groundwater projects that involve a water exchange and a pulse flow component that collectively is the subject of this Notice of Preparation (NOP).

The WSIP groundwater projects provide ecosystem benefits that will aid fish migration through the release of pulse flows from Lake Oroville by DWR. A "pulse flow" is an amount of water released above all regulatory requirements, creating flowrates for a specified period that exceed those that would have otherwise occurred. Generally, pulse flows would provide improved conditions related to (1) flow-dependent habitat availability, by affecting wetted area, depth, and velocity; (2) turbidity; (3) migration cues for juvenile and adult anadromous fishes; and (4) water temperature. Flowrates including pulse flows would not exceed those of a typical range of operational flows.

The WSIP groundwater projects would store new water supplies in groundwater facilities and distribute those supplies to partner contractors, for use in lieu of a portion of their deliveries from DWR's State Water Project (SWP) from Lake Oroville. SWP water that would have been released from Lake Oroville for deliveries to the partner contractors would be used for the pulse flows. The WSIP groundwater projects are independent of each other, and DWR would make pulse flow releases based on water made available to DWR by the WSIP groundwater projects that proceed to implementation.

The three WSIP groundwater projects' environmental documentation evaluated the impacts associated with construction and operation of the WSIP groundwater projects and are available at the following locations:

- Chino Basin Program (State Clearinghouse [SCH] #2021090310): <https://www.ieua.org/chino-basin-program-ceqa-documents/>.
- Kern Fan Groundwater Storage Project (SCH #2020049019): <https://www.kernfanproject.com/environmental-review/>
- Willow Springs Water Bank Project (SCH #2005091117): <https://aquiferpumpedhydro.com/eir>

The following description of the Pulse Flows Component details the pulse flow releases from Lake Oroville to aid fish migration as one of the benefit requirements of the WSIP groundwater projects.

#### **Description of the Pulse Flows Component of the WSIP Groundwater Projects**

The Pulse Flows Component of the WSIP groundwater projects, the subject of the SEIR DWR will prepare, would provide additional dedicated flows from Oroville Dam for fish enhancement for three WSIP groundwater projects that propose local supply improvements in their respective service areas in southern California.

To help achieve a return on the public funding they received, the WSIP groundwater projects would exchange water with the SWP to generate benefits for fish native to the Sacramento–San Joaquin Delta (Delta). The Pulse Flows Component of the WSIP groundwater projects would not involve construction;



rather, DWR in coordination with CDFW would make operational adjustments. DWR would release pulse flows from Lake Oroville at ecologically important times, to achieve higher instream flows for the benefit of native juvenile salmonid out-migration. In their applications for WSIP funding to the California Water Commission, the Chino Basin Program and Willow Springs Water Bank Project demonstrated improved emigration of juvenile Chinook Salmon, and the Kern Fan Groundwater Storage Project demonstrated benefits to Spring- and Winter-Run Chinook Salmon survival.

Through collaboration and adaptive management, in years selected based on environmental conditions and input from CDFW, DWR would release pulse flows of up to 100,000 acre-feet from Lake Oroville over a period of several days or weeks, as requested and as feasible. Volumes used for pulse flows at any given time will be limited by the amount of water stored specifically for this ecosystem purpose by one or more of the WSIP groundwater projects and available for exchange with SWP supplies stored in Lake Oroville.

Based on modeling, some level of pulse flow releases from Lake Oroville are projected to occur sporadically over a term of approximately 50 years, typically between March and May. The estimated term of the Chino Basin Program is 25 years. After the Chino Basin Program completes its contribution to environmental benefits, the water supplies available for pulse flows would be from the remaining two WSIP groundwater projects only. The pulse flows would not exceed the typical range of operational flows resulting from DWR's historic operation of Lake Oroville up to the time this NOP is published.

DWR would use this SEIR for CEQA coverage for any approvals needed for the WSIP groundwater projects, including for any agreements and water right changes needed for their implementation. For example, DWR is developing an agreement with CDFW to specify the criteria for the timing and volume of the pulse flow releases. The pulse flow releases from Lake Oroville would be in addition to releases necessary to meet regulatory requirements, as required by Proposition 1. DWR is also developing agreements with the WSIP groundwater project proponents, and agreements and/or contract amendments with SWP contractors involved in the WSIP groundwater projects. DWR will also seek an instream flow dedication (Water Code section 1707) from the State Water Board for the pulse flows to ensure that pulse flows are not improperly diverted from the Feather River, Sacramento River, or Delta by third parties.

#### **Pulse Flows Component Location**

The pulse flows component area, shown in Figure 1, extends along the Feather River (extending 0.5 mile from each bank of the river) from directly downstream of the Oroville Dam to its confluence with the Sacramento River (extending 0.5 mile from each bank of the river). It then follows the Sacramento River (extending 0.5 mile from each bank of the river) downstream of the Oroville Dam to the Delta, continues through the Delta and Suisun Marsh, and includes the SWP facilities from the Delta to the three WSIP groundwater projects. The primary SWP facilities associated with the pulse flows are Lake Oroville, the Harvey O. Banks Pumping Plant, and San Luis Reservoir. Water from San Luis Reservoir is released into the California Aqueduct, which conveys water supplies southward to the Central Coast, San Joaquin Valley, the Antelope Valley, and Southern California.



### **Pulse Flows Component Objectives**

The objectives of the Pulse Flows Component are as follows:

- Provide for releases of pulse flows from Lake Oroville to facilitate fish migration without detrimentally affecting operation of the SWP, including water supply deliveries to SWP contractors. These pulse flows are in addition to any flows required by regulatory permits.
- Enhance conditions for salmonid and other fish species below Lake Oroville and farther downstream, especially during drier water year types.

### **Purpose of the Supplemental Environmental Impact Report**

As explained in CEQA Guidelines Section 15163, a SEIR may be prepared when only minor additions or changes would be necessary to make the previously certified EIR adequately apply to the project in the changed situation. The SEIR needs to contain only the information necessary to make the previous CEQA documents adequate for the project as revised. Here, the changed situation is DWR refining the Pulse Flows Component originally proposed by the WSIP groundwater projects. When the CEQA lead agencies for the WSIP groundwater projects decide whether to make any discretionary approvals related to the WSIP groundwater projects, the decision-making bodies may consider the previous CEQA documents and this SEIR.

The SEIR will analyze environmental resources that may be affected by the Pulse Flows Component and will include regional setting information, regulatory background, identified thresholds of significance, an impact analysis, appropriate mitigation measures or alternatives to avoid or reduce any significant effects where feasible, and significance conclusions, as well as an assessment of project alternatives and cumulative and growth-inducing effects.

As stated above, the existing CEQA documents for the three WSIP groundwater projects evaluated the impacts of construction and operations of the WSIP groundwater projects, including local storage and management of exchange water, but could not provide a detailed analysis of the changes to SWP operations necessary to complete water exchanges, nor the release of the pulse flows from Lake Oroville. Thus, this SEIR will supplement the existing CEQA documents previously prepared for the three WSIP groundwater projects by evaluating the potential impact of the pulse flow releases on existing SWP operations and the affected environment.

### **Potential Environmental Effects**

The SEIR will describe and analyze the potential environmental effects—both cumulative and project specific—of the Pulse Flows Component. It will summarize environmental issues for which potential impacts of the Pulse Flows Component are anticipated to be adequately addressed in the WSIP groundwater projects' environmental documentation, or for which the Pulse Flows Component is anticipated to have no impact(s): aesthetics; agriculture and forestry resources; growth inducement; land use; noise; population and housing; public safety and environmental hazards; transportation; and utilities and public services. The following resource areas are anticipated to be discussed in greater detail with additional impact analysis, because of the probability of environmental effects: air quality and greenhouse gas emissions; biological resources (vegetation, wildlife, and fisheries); cultural resources; tribal cultural resources; energy; geology, seismicity, soils, and mineral resources; hydrology and water quality (surface water and groundwater); recreation; and wildfire.



### **CEQA Scoping Meeting**

DWR will host a virtual public scoping meeting to provide a brief presentation on the Pulse Flows Component with time for public comments on the scope and content of the SEIR. The scoping meeting will be held via remote teleconference on the Zoom platform on Monday, August 22nd, 2022 at 4:00 p.m. Please register in advance of the meeting at the following link:

<https://us02web.zoom.us/join/join?pwd=Z0lufuorTgoEtPNqbicnao7T1maFfD7nlR>. Registration will be open until the start of the meeting on August 22nd, 2022.

### **Written Comments**

DWR is circulating this notice to solicit the views of interested persons, organizations, agencies, and California Native American Tribes, regarding the scope and content of the environmental information in connection with the Pulse Flows Component. The primary purpose of the scoping process is to identify important issues raised by the public, Tribal Governments, and responsible and trustee public agencies related to the issuance of regulatory permits and authorizations and natural resource protection. Written comments from interested parties are invited to ensure that the full range of environmental issues related to the development of the SEIR are identified.

As required by the CEQA Guidelines, within 30 days after receiving the Notice of Preparation, each responsible agency and trustee agency shall provide DWR with specific detail about the scope, significant environmental issues, reasonable alternatives, and mitigation measures related to each responsible or trustee agency's area of statutory responsibility that should be explored in the SEIR. In their responses, responsible and trustee agencies should indicate their respective level of responsibility for the project. DWR has commenced the Tribal consultation process regarding the SEIR.

This Notice of Preparation will be circulated for a 30-day public notice period beginning August 10, 2022, and ending September 9, 2022. At the end of the public notice period, DWR will consider all written comments received from interested persons, organizations, agencies, and Tribal Governments, in preparing the environmental analysis.

Written comments on the scope of the SEIR are due no later than 5 p.m. on September 9, 2022. Please submit your written comments via mail or email to:

Marianne Kirkland

California Department of Water Resources

P.O. Box 942836

Sacramento, CA 94236-0001

Email address: [PulseFlowsComponent@water.ca.gov](mailto:PulseFlowsComponent@water.ca.gov)

If comments are provided via email, please include the project title in the subject line, attach comments in Microsoft Word format if possible, and include the commenter's U.S. Postal Service mailing address.

PLEASE NOTE: All comments received will be made available for public review in their entirety in the final EIR, including the names and addresses of the respondents. Individual commenters may request

that DWR withhold their name and/or home addresses, but commenters who wish DWR to consider withholding this information must state this prominently at the beginning of their comments.

*Jacob McQuirk*

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**Jacob McQuirk, PE**

**Manager, Division of Operations and Maintenance, Water Projects Planning and Management Branch**

**Attachment**

Figure 1: Pulse Flows Component Location





SOURCE: Esri, 2022; AECOM, 2021; DWR, 2016; ESA, 2022

**Figure 1**  
Pulse Flows Component Location