



BUREAU OF RECLAMATION

# SHASTA LAKE WATER RESOURCES INVESTIGATION

## Draft Supplemental EIS ~ Virtual Open House

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## Welcome

### Welcome to the Shasta Lake Water Resources Investigation Draft Supplemental Environmental Impact Statement Virtual Open House

Reclamation released the Draft Supplemental Environmental Impact Statement (Draft SEIS) on August 6, 2020 to augment the Final Environmental Impact Statement (FEIS) that was released in 2015. The Draft SEIS provides information relevant to Reclamation's application



of Clean Water Act section 404(r), updates modeling to be reflective of the 2019 Biological Opinions, and provides updated analysis on effects to the McCloud River.

Reclamation appreciates your participation. Please take a moment to sign in and let us know that you were here.

First Name

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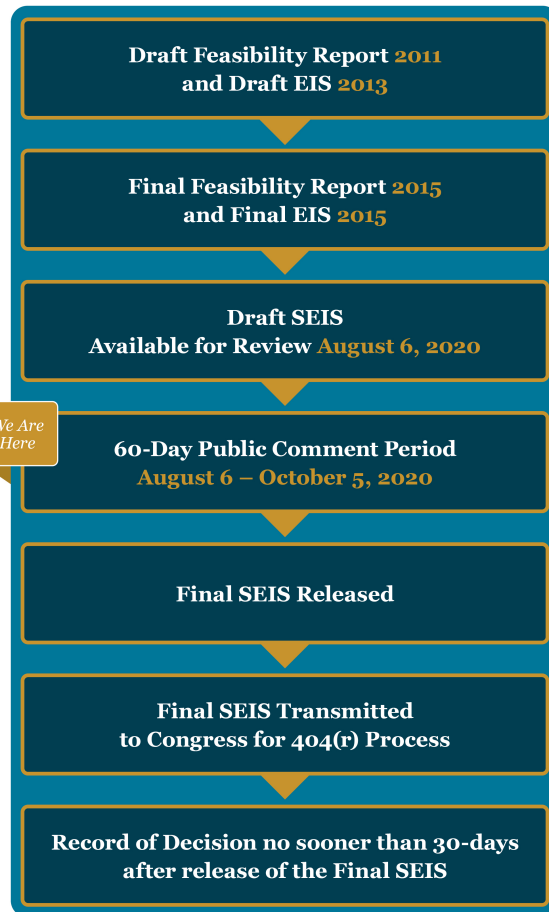
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## NEPA and Public Involvement

Reclamation prepared a Draft SEIS for the SLWRI consistent with the requirements of NEPA. The requirements state that an agency must prepare an SEIS if the agency makes substantial changes in the proposed action relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns that have a bearing on the proposed action or its impacts. An agency may also prepare a supplemental analysis if it determines that the purposes of NEPA will be furthered by doing so. 40 C.F.R. § 1502.9(c). NEPA requires that a Draft SEIS be made available for public review and comment for a minimum of 45-days.



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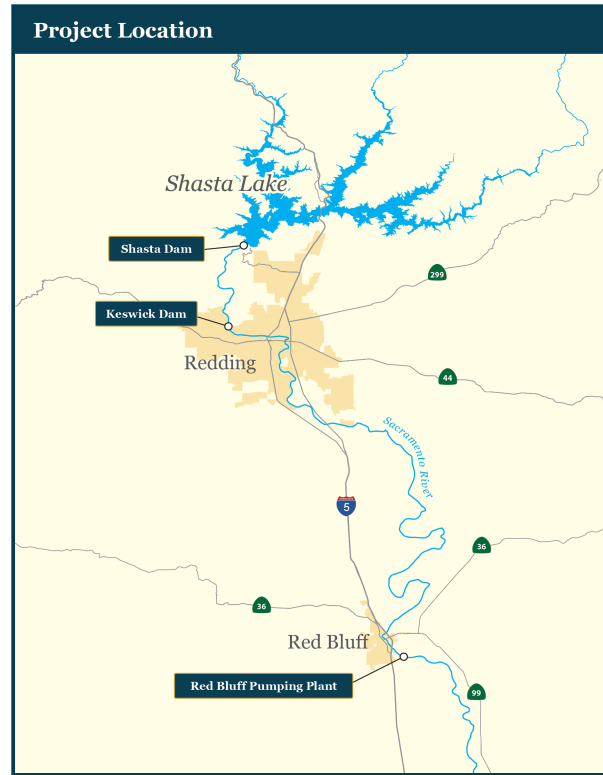
## Project Overview

The proposed project would raise the existing 600-foot-tall-Shasta Dam by 18.5 feet (3%). This would result in an increase of water storage capacity in the Shasta Lake Reservoir by 634,000 acre-feet per year or enough water to support two million people a year.



Raising the dam and increasing storage capacity will improve operational flexibility of the Sacramento-San Joaquin Delta (Delta) watershed system and provide important benefits that include:

- Increased survival of anadromous fish populations in the Sacramento River, primarily upstream from Red Bluff Pumping Plant (RBPP)
- Increased water supply and water supply reliability for agricultural, municipal, and industrial, and environmental purposes, to help meet current and future water demands
- Conservation, restoration, and enhanced ecosystem resources in the Shasta Lake area and along the upper Sacramento River
- Reduced flood damage along the Sacramento River
- Development of additional hydropower generation capabilities at Shasta Dam
- Maintaining and increasing recreation opportunities at Shasta Lake
- Maintaining or improving water quality conditions in the Sacramento River downstream from Shasta Dam and in the Delta



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## Historical Context and Alternatives

Reclamation released the SLWRI FEIS, and accompanying Feasibility Report in July 2015. In August 2015 both the FEIS and the Feasibility Report were transmitted to Congress. Both documents evaluated the potential of raising Shasta Dam to increase the following as Project benefits:



- Anadromous fish survival
- Water supply reliability
- Flood damage reduction
- Water quality
- Hydropower generation
- Recreation opportunities

The FEIS and Feasibility Report looked at the benefits for the No-Action and several alternatives.

Alternatives CP-4, CP-4A and CP-5, while similar to CP-3, focus on maximizing different environmental benefits. Ultimately CP-4A was chosen as the Preferred Alternative in both the 2015 FEIS and the Feasibility Report. The information in the SLWRI Draft SEIS does NOT change the alternatives studied under the 2015 FEIS. Instead, the Draft SEIS utilizes the same alternatives, specifically the No-Action and CP-4A Alternatives and updates the environmental benefits analysis for each.

Alternatives Evaluated in the FEIS and Feasibility Report			
Alternative	Dam Raise	Reservoir Level Increase	Storage Capacity Increase
Alternative No-Action Alternative	No Change	No Change	No Change
Comprehensive Plan (Cp) 1	6.5-Feet	8.5-Feet	256,000 Acre-Feet
Comprehensive Plan (Cp) 2	12.5-Feet	14.5-Feet	443,000 Acre-Feet
Comprehensive Plan (Cp) 3	18.5-Feet	20.5-Feet	634,000 Acre-Feet
Comprehensive Plan (Cp) 4 & Comprehensive Plan (Cp) 4a	18.5-Feet	20.5-Feet	634,000 Acre-Feet
Comprehensive Plan (Cp) 5	18.5-Feet	20.5-Feet	634,000 Acre-Feet

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## Scope of Draft SEIS

**The Draft SEIS is limited in scope. Reclamation is releasing the SEIS to:**

- Provide information relevant to the application of Section 404(r) of the Clean Water Act (CWA) for the SLWRI to satisfy the CWA 404, 402 and 401 project permit requirements.
- Respond to issues identified by USACE and EPA on the 2015 SLWRI FEIS.
  - USACE and EPA are cooperating agencies under NEPA to the Draft SEIS.
- Update operations and modeling for CP-4A to the latest regulatory requirements.
- Update information included in the 2015 SLWRI FEIS that is relevant to environmental concerns, specifically in regard to the McCloud River impacts.



### Information related to the Application of 404(r) includes:

- Updated description of the discharges to wetlands and other Waters of the United States (WOTUS) resulting from the relocations of infrastructure and recreation structures.
  - Infrastructure includes bridges and roadways impacted by the increased reservoir levels. Recreation structures include campgrounds, boat launches, and concession stands.
- A programmatic approach to conducting alternatives analyses and the determination of the Least Environmentally Damaging Practical Alternative for relocation activities to minimize impacts to wetlands and other WOTUS.
- Outline of a compensatory wetland mitigation plan.

### Responses to issues identified by USACE and EPA include:

- Responses to comments that the USACE and EPA made on the EIS that were not adequately addressed.

**Updates to operations and benefits modeling for CP-4A include:**

- The 2020 Draft SEIS has been updated with the 2019 Biological Opinion and the 2018 Coordinated Operation Agreement. The 2015 SLWRI EIS was based on the 2008/2009 Biological Opinion and the 1986 Coordinated Operation Agreement.

**Updates related to McCloud River Environmental Concerns include:**

- Clarified the status of the McCloud River in relation to Federal Wild & Scenic Rivers Act as a Wild and Scenic River.
- Clarified the associated wild and scenic river values.
- Clarified the impacts to the McCloud river.

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← [Station 4. Historical Context and Alternatives](#) | [Station 6. Draft SEIS Key Points](#) →



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## Draft SEIS Key Points

As discussed in Station 5, *Scope of the Draft SEIS*, the Draft SEIS is narrow in focus and evaluates the same alternatives that were evaluated in the FEIS. Readers are encouraged to focus their review and comments on Chapters 2-5 of the Draft SEIS. The following provides a summary of the key points found in Chapters 2-5:

### Chapter 2: Supplemental Information on Impacts to Wetlands and other Waters of the U.S.



- To qualify under the 404(r) analysis requirements, Reclamation provided the following in the Draft SEIS:
  - To accurately categorize wetlands and other Waters of the U.S. in the Project Area, Reclamation submitted a Preliminary Jurisdictional Decision to the USACE December 2019 and received a Preliminary Jurisdictional Determination April 2020.
    - 51 acres of jurisdictional wetlands and 103 acres of other jurisdictional waters reside in the Project area.
  - Created an avoidance and minimization procedure to follow when selecting each recreation and infrastructure relocation to eliminate or decrease adverse impacts to wetlands or other waters.
  - Reclamation committed to developing a Wetland Mitigation Plan detailing the mitigation measures taken when adverse impacts to wetlands and other waters cannot be avoided.

### Chapter 3: Supplemental Information on Stormwater and Other Point-Source Discharges

- Reclamation concluded that projects with the potential to discharge into Waters of the U.S. must obtain a CWA 402 Permit.

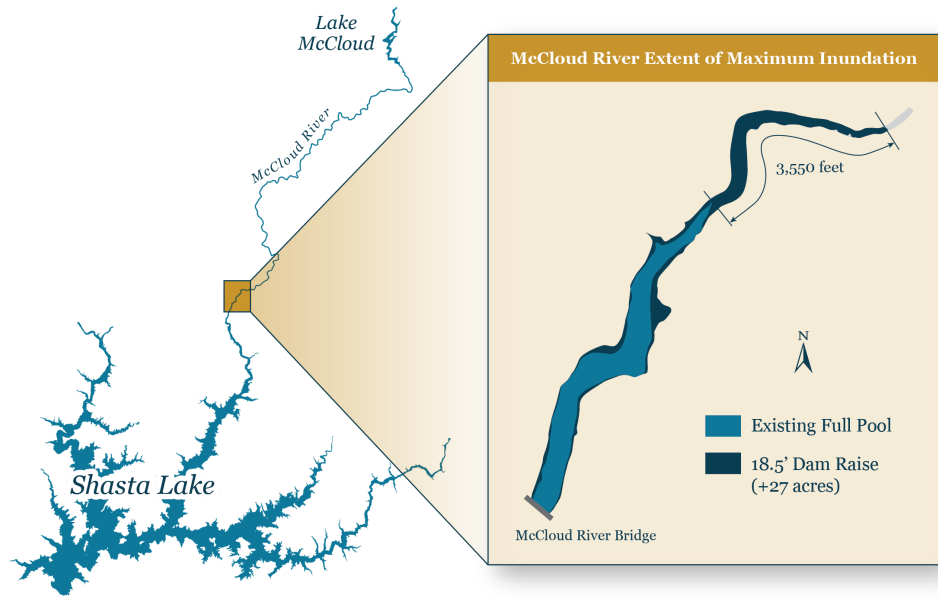
- Under 404(r), if information on anticipated discharges are included in an EIS, the Project does not need to apply for separate CWA 402 permits for the Project and subprojects.
- Reclamation will develop a Stormwater Pollution Prevention Plan, in accordance with the General Permit requirements, for the Project and subprojects.

#### **Chapter 4: Supplemental Information on Shasta Dam Operations and Modeling**

- The Draft SEIS incorporates operational changes for Shasta Dam as a result of the 2019 Biological Opinions issued by US Fish and Wildlife Service and the National Marine Fisheries.
- When modeled the new operational changes resulted in a slight increase in reservoir storage. This increase results in a larger cold-water pool which allows Reclamation to extend the temperature management season with greater flexibility for cold water releases.
- These benefits are extremely favorable to several species including Winter-run Chinook Salmon, Central Valley steelhead, and Western Yellow-billed Cuckoo.

#### **Chapter 5: Wild and Scenic River Considerations for McCloud River**

- The information in Chapter 5 updates information provided in Chapter 25 in the 2015 SLWRI FEIS pertaining only to the McCloud River impacts.
- The McCloud River does not currently hold a designation as a Wild and Scenic River by either the Federal or State of California governments.
  - California did take legislative measures to protect the River's wild trout fishery below McCloud Dam from the construction of new dams. The enlargement of Shasta Dam was exempt.
- An 18.5-foot raise of Shasta Dam would impact 3,550 feet of the lower McCloud River. This equates to less than 3% of the entire river. The impacts would be recognized in the transition reach between the reservoir and the river.
- Reclamation has committed to the development and implementation of a program to identify and mitigate to the extent possible the adverse effects of the additional impacted area on the overall watershed, the wild trout fisheries, and the cultural resources along the river.



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← [Station 5. Scope of Draft SEIS](#) | [Station 7. Submit Comments](#) →



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## Submit Comments

Reclamation is seeking comments on the Draft SEIS. Comments on the FEIS or other previously released planning documents will be considered but may not be responded to in writing. Comments should be specific to the content and analysis contained in the Draft SEIS.

Comments can be submitted via email, mail, or the form below.

- Email: [dbrick@usbr.gov](mailto:dbrick@usbr.gov)
- Mail: David Brick  
Bureau of Reclamation CGB-152  
2800 Cottage Way  
Sacramento, CA 95825

## Comment Form

First Name (required)  Last Name

Affiliation

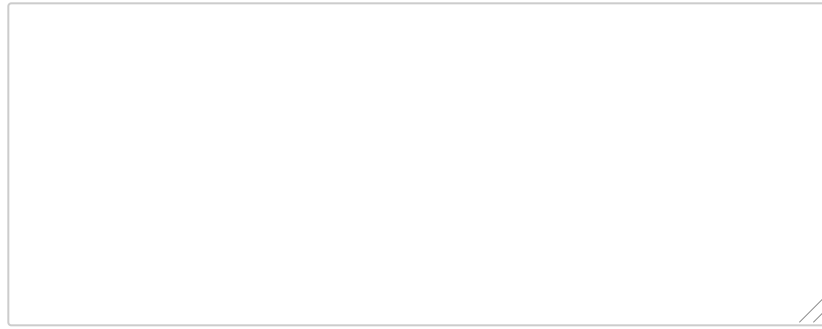
Email

Address

City

State  Zip

Comment



Submit

***PLEASE NOTE:** By submitting your personal contact information for the Shasta Lake Water Resources Investigation Draft Supplemental EIS you consent to having your information shared publicly without additional authorization.*

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← [Station 6. Draft SEIS Key Points](#) | [Station 8. Frequently Asked Questions](#) →



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## Frequently Asked Questions

### What are the goals of the Shasta Dam and Reservoir Expansion project?

The proposed 18.5 raise of Shasta Dam would:

- Increase Shasta Dam's water storage capacity by 634,000 acre-feet for water users and the environment
- Improve water supply reliability for agricultural, municipal and industrial, and environmental uses
- Reduce flood risk
- Improve Sacramento River temperatures and water quality below Shasta Dam for anadromous fish survival by enlarging the cold-water pool and increasing the seasonal carryover storage in Shasta Reservoir. The increased volume of cold water would increase the ability of the dam to make cold water releases to improve upper Sacramento River water temperatures - 192,000 acre-feet of water supply will be dedicated to Shasta's cold-water pool for anadromous fish.
- Provide an additional 125,000-megawatt hours per year of hydropower generation for electrical grid reliability with an existing renewable and carbon-free resource.

The increased volume of cold water would increase the ability of Shasta Dam to make cold water releases to improve water temperatures in the upper Sacramento River for anadromous fish.

### Where is the project located?

Shasta Dam and Reservoir are located about 9 miles northwest of Redding on the Sacramento River in Shasta County in Northern California. Built during the seven-year period between 1938 and 1945, the dam is a 602-foot-high concrete gravity dam, which provides flood control, power and water supply benefits. The reservoir is also used extensively for recreation.

Shasta Reservoir is fed by the Sacramento, Pit and McCloud rivers, with additional water coming from Squaw Creek. This drainage area receives an average of 62 inches of annual precipitation, which in pre-dam years was a major contributor to frequent floods in the valley below.

### What communities and stakeholders will be impacted?



An 18.5-foot raise would inundate an additional 2,500 acres. About 100 parcels of non-federal land would be acquired, mostly in the Lakehead community.

### **What phase is this project in and what is currently occurring?**

The project is in the pre-construction and design phase. Activities include:

- Completing environmental and cultural review, culminating in a Record of Decision for the entire project
- Engineering designs
- Real estate planning
- Gathering design data for the project

### **How is this project being funded?**

Congress passed the Water Infrastructure Improvements Act for the Nation (WIIN) Public Law 114-322 in December 2016. The Act includes Section 4007, which addresses water storage, and Section 4008, which addresses recreational facilities. Those sections also discuss federally owned facilities criteria for construction, and cost-share opportunities. Congress appropriated \$20 million for Shasta pre-construction activities in March 2018.

### **When will the dam raise be completed?**

Reclamation's schedule targets completion of the Shasta Dam and Reservoir Enlargement Project in 2025.

### **Will there be any adverse impacts to the environment, including air quality?**

The simple answer is that most projects have impacts. The project's environmental impacts, including air quality impacts, were identified in the final Environmental Impact Statement released in 2015. This report's air quality finding states that short-term emissions of criteria air pollutants and precursors will occur during project construction.

Learn more about air quality impacts by viewing the SLWRI [Final Environmental Impact Statement](#).

### **Why was a Supplemental Draft Environmental Impact Statement prepared?**

Since the 2015 Final Environmental Impact Report was released, Reclamation identified several key areas that required updating. The new or updated information available included in the Shasta Draft Supplemental Environmental Impact Statement includes:

- Updated information relevant to the application of Clean Water Act 404(r) to the project, including amounts and types of fill to waters of the United States and additional details for the wetland mitigation plan
- A revision of the wild and scenic river considerations for the McCloud River to re-focus on federal requirements.

- Updated modeling to reflect the operational changes in the 2019 Biological Opinions

### **What federal agencies are involved and what are their roles?**

Reclamation is the lead agency for designing and overseeing the dam raise's construction. The U.S. Forest Service (USFS) is involved due to National Forest System lands and recreational residences that will be affected by the dam raise.

Cooperating agencies, in addition to Reclamation and the USFS that were involved in preparing and providing information for the project's impacts, include: Bureau of Indian Affairs, Colusa Indian Community Council of the Cachil Dehe Band of Wintun Indians and U.S. Army Corps of Engineers.

### **Who are the agency contacts for acquisition processes, contracting opportunities, or other questions?**

**Reclamation** - Mary Lee Knecht, Public Affairs Officer, 916-978-5100

**U.S. Forest Service** - Lesley Yen, District Ranger, 530-275-1587

**Reclamation lands and acquisition processes** - Scott Springer, 916-978-5266

### **How will the federal government compensate or mitigate impacts to local businesses during dam raise construction? Will the marinas be relocated?**

Since this project falls under the Water Infrastructure Improvements for the Nation Act, the following considerations apply:

Any new or modified Reclamation water storage project construction that destroys or otherwise adversely affects any existing marina, recreational facility or other water-dependent business will be compensated by the appropriate Secretary of Interior (if Reclamation) or Agriculture (if USFS).

The owner of the affected marina, recreational facility or other water-dependent business, under mutually agreeable terms and conditions, will be afforded the right of first refusal to construct and operate a replacement marina, recreational facility or other water-dependent business, on United States land associated with the new or modified water storage project.

### **What are some examples of cost-share partners?**

According to the WIIN Act, the federal government can cover up to 50 % of the cost of the project, and a non-federal cost share partner is required to come up with the rest of the funding. A non-federal cost share partner could be water agencies, groups of water users, state agencies or private entities.

### **What is the project's effect on the McCloud River?**

Chapter 5 of the Draft Supplemental Environmental Impact Report was revised to reflect and refocus the analysis on the federal requirements.

The State of California has not designated the McCloud River as Wild and Scenic under the State Wild and Scenic Rivers Act. Instead, portions of the river were designated in the California Public Resources Code Section 5093.542 as supporting a

wild trout fishery. Reclamation's view is that there is a question as to whether the legislature intended to prohibit the Shasta Dam raise by enacting section 5093.542 given its support for studying the proposal.

**What is the project's effect on tribal lands? How does Reclamation plan to address those effects?**

Reclamation has been consulting with the Winnemem Wintu Tribe through the National Historic Preservation Act Section 106 process and they have been involved in the development of a Programmatic Agreement to guide compliance and minimize/mitigate effects to cultural resources where possible.

**What is the easiest way to learn more about the Shasta Dam raise project?**

Visit Reclamation websites to read about the project's history, timeline, maps and the acquisition process:

- [Shasta Dam and Reservoir Enlargement Project](#)
- [Shasta Lake Water Resources Investigation](#)

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← [Station 7. Submit Comments](#) | [Lobby](#) →