

# Frequently Asked Questions

## Lower Klamath Hydroelectric Dam Decommissioning Project

Provided by: County of Siskiyou

Siskiyou County is home to three of the four Klamath River dams that the Klamath River Renewal Corporation (KRRC) will be removing. KRRC, along with the states of California and Oregon, have been participating in proceedings before the Federal Energy Regulatory Commission (FERC) to take ownership of four PacifiCorp dams comprising the Lower Klamath Project (P-14803), and propose to remove the Lower Klamath Dams. On November, 17, 2022, FERC issued its order approving the surrender of the license for, and removal of the facilities of, the Lower Klamath Project subject to terms and conditions that are discussed in FERC's Order.

Below is a list of Frequently Asked Questions, which provides detailed information on the Project, and includes link to key Project materials.

### **Question (Q): Who is the Klamath River Renewal Corporation (KRRC)?**

Answer (A): KRRC is an independent nonprofit organization, formed in 2016, as part of the amended Klamath Hydroelectric Settlement Agreement (KHSA). KRRC, along with the State of Oregon and California, will take ownership and remove the four lower hydroelectric dams on the Klamath River. KRRC's work is funded by PacifiCorp customer surcharges and California Proposition 1 water bond funds. Any outstanding funding needs will be addressed by the State of Oregon and California.

### **Q: Where can I find KRRC's website for the Project?**

A: <https://klamathrenewal.org/>

### **Q: What dams are being removed?**

A: PacifiCorp's Klamath Hydroelectric Project consists of seven dams built between 1903 and 1962. As approved by FERC's order on November 17, 2022, KRRC will remove the four lower dams in the Project: Iron Gate, Copco No. 1, Copco No. 2, and J.C. Boyle.

### **Q: When will dam removal take place?**

A: According to KRRC, they expect dam removal to commence in 2023 and be completed in 2024. Restoration activities will immediately follow dam removal and continue for several years.

As detailed by KRRC "The drawdown schedule is heavily dependent on the snowpack and watershed hydrology during that specific year. Our analysis included a detailed look at three representative hydrologic years from the entire 60-year flow record review: Wet, Average, and Dry. For all three, we have two drawdown periods. The initial drawdown occurs from January to March of the drawdown year. The spring freshet (spring thaw) then occurs where the reservoirs will partly or completely fill due to runoff resulting from snow and ice melt.

We will then draw the reservoirs down again following the spring freshet. We will reach the final drawdown elevations (where the historic river channel is exposed) in May-June

(depending on the dam) and July (which depends in some part on the hydrologic year) and we will then start the dam removal process. Drawdowns will be carefully controlled, and we will keep flows confined to the existing river channel below Iron Gate dam.

Copco No. 2 will be removed first. Deconstruction of the remaining three dams would occur essentially at the same time. Iron Gate Dam will be the last one to be fully removed due to the size of the dam and amount of material that must be removed.”

County staff will continue to keep the public up to date regarding dam removal activities.

**Q: Where can I find KRRC’s plans for the Project?**

A: The KRRC’s Definite Plan and associated documents for dam removal is available at the following link: <https://klamathrenewal.org/definite-decommissioning-plan-overview/>

**Q: Where can I find the official approval for dam removal?**

A: On November 17, 2022, FERC voted unanimously to issue an Order Modifying and Approving Surrender License and Removal of Project Facilities Order for the Lower Klamath Project. This order, through the Federal Power Act, also serves as the Record of Decision for the Final Environmental Impact Statement. The Order allows the dams’ private operator to surrender its operating license and allows for KRRC and its contractors to proceed with dam removal.

FERC’s November 17, 2022 Order Modifying and Approving Surrender of License and Removal of Project Facilities is available at the following link: [https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural\\_resources/page/29457/attachment\\_1.pdf](https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural_resources/page/29457/attachment_1.pdf)

**Q: What is the Amended Klamath Hydroelectric Settlement Agreement?**

A: The Amended Klamath Hydroelectric Settlement Agreement (KHSA) established a process for dam removal that does not rely on congressional approval, and rather allows the parties to apply for dam removal through FERC. Below is a brief background of the Amended KHSA.

In the early 2000s, PacifiCorp began proceedings before FERC to relicense its operation of its Klamath River facilities. In 2007, FERC issued a Final Environmental Impact Statement that included mitigation measures requiring the installation of new fish passage facilities or the consideration of dam removal. Thereafter, PacifiCorp engaged with federal, state and local governments, tribal entities, and various stakeholders, and, in 2010, executed the Klamath Hydroelectric Settlement Agreement (2010 KHSA), which established a process for facilities removal outside of the Federal Power Act. This framework for dam removal was dependent on Congressional legislation, which legislation was never passed.

In early 2016, some parties to the 2010 KHSA entered into the Amended KHSA, which did not rely on congressional approval for dam removal, rather PacifiCorp would apply to FERC to transfer ownership of J.C. Boyle, Copco No. 1, Copco No. 2, and Iron Gate to a

Dam Removal Entity (“DRE”), which would thereafter surrender and decommission the facilities.

In September 2016, KRRC, acting as the DRE, filed two applications with FERC, one application filed jointly with PacifiCorp to transfer ownership of the four Lower Klamath River dams to KRRC and the second, to decommission and remove the dams. In June 2018, KRRC submitted to FERC its Definite Plan for dam removal. The County intervened in FERC’s proceedings in opposition to the transfer application.

**Q: What is the Definite Plan?**

A: The Definite Plan is a 2,300-page document that provides analysis and detail on project design, dam removal, reservoir restoration, and other post-deconstruction activities. KRRC filed this plan with FERC as part of its application to transfer the license and remove the four lower Klamath River dams. The Definite Plan also fulfills one of KRRC’s duties under the Amended KHSA. The full plan is available at: <http://www.klamathrenewal.org/definite-plan>

**Q: What actions has the County taken to mitigate the impacts of dam removal?**

A: In 2021, the County entered into a Memorandum of Understanding (MOU) with KRRC related to the roads and bridges that will be utilized by the Project Proponents and their contractors during dam removal.

To address protection for irrigators along the Shasta and Scott Rivers, staff and outside counsel are meeting with the State, including the Secretary of the Department of Natural Resources and the Director of Fish and Wildlife.

On November 30<sup>th</sup>, the California Department of Fish and Wildlife announced the availability of new grant funding, totaling \$20 Million (link this announcement). \$10 million has been dedicated to the Scott River and its tributaries, and \$10 million has been dedicated to the Shasta River and its tributaries.

The County has entered an additional Memorandum of Understanding (MOU) with PacifiCorp to fund a contracted Project Manager to perform project management activities related to the Project. This would include assistance in the issuance and administration of county permits, organizing and planning various coordination, drafting of required documents, preparing reports, organizing and evaluating the Project information, and coordination regarding the Local Impact Mitigation Fund, among other activities.

County staff is currently working with KRRC and the State of California regarding local permitting and licensing for the Project that falls under the County’s jurisdiction. FERC did not make local permitting a required condition of their Order, but encouraged KRRC to endeavor to comply with local ordinances and permits. However, to the extent that

local permitting requirements make compliance with FERC's Order impossible or unduly difficult, FERC concluded that such requirements are preempted.

**Q: How can I stay up to date on the Project?**

A: The County has recently developed an email address for members of the public to submit any questions, comments, and concerns. This email address is [lkinfo@co.siskiyou.ca.us](mailto:lkinfo@co.siskiyou.ca.us)

The County has developed a webpage on the County's website where members of the public can keep up to date regarding the County's activities related to the Project. Please visit: <https://www.co.siskiyou.ca.us/naturalresources/page/lower-klamath-hydroelectric-dam-decommissioning-project>

The Board of Supervisors will be holding monthly special meetings specific to the Project. The scheduled dates for these meetings are as follows:

- January 24, 2023
- February 28, 2023
- March 28, 2023
- April 25, 2023
- May 23, 2023
- June 27, 2023
- July 25, 2023
- August 22, 2023
- September 26, 2023
- October 24, 2023
- November 28, 2023
- December 19, 2023

**Q: Where can I find Siskiyou County's comment on the Project?**

A: Please refer to the below links for the County's comments on the Project:

- Comments on KRRC's Definite Plan:  
[https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural\\_resources/page/29457/attachment\\_2.pdf](https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural_resources/page/29457/attachment_2.pdf)
- Comments on the Draft Environmental Impact Report:  
[https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural\\_resources/page/29457/attachment\\_3.pdf](https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural_resources/page/29457/attachment_3.pdf)
- Comments on the Draft Environmental Impact Statement:  
[https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural\\_resources/page/29457/attachment\\_4.pdf](https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural_resources/page/29457/attachment_4.pdf)
- Comments on the Final Environmental Impact Statement:  
[https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural\\_resources/page/29457/attachment\\_5.pdf](https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural_resources/page/29457/attachment_5.pdf)

**Q: How will potential flooding issues be addresses following dam removal?**

A: KRRC’s plans and mapping following dam removal can be found at Section 7.7 of the Definite Plan, starting at page 269. <https://klamathrenewal.org/wp-content/uploads/2020/03/LKP-FERC-Definite-Plan.pdf>

As detailed in KRRC’s Definite Plan, “A total of 34 habitable structures are located within the preliminary 100-year floodplain for current conditions between Iron Gate Dam and Humbug Creek. These 34 structures will be subject to an increased risk of flooding following dam removal when compared to existing flood elevations. An estimated 2 additional habitable structures would be subject to flooding during a 100-year event following dam removal when compared to the existing floodplain (see Figure 7.7-1). A total of 36 habitable structures would be located within the preliminary altered 100-year floodplain between Iron Gate Dam and Humbug Creek following dam removal. KRRC will work with the owners of these structures to move or elevate legally established structures, where feasible. FEMA will make the final determination of the future 100-year floodplain after dam removal, and KRRC is coordinating with FEMA to initiate the map revision process.” *Definite Plan Section 7.7 at page 270.*

The County will continue to work with KRRC to address outstanding concerns related to flooding, and will engage in any efforts regarding mitigation, including plans related to the Local Impact Mitigation Fund (LIMF). County staff will keep the public up to date via correspondence, the County’s Klamath Dams webpage, and presentation’s to the Siskiyou County Board of Supervisors.

**Q: How will impacts to groundwater wells be addressed?**

A: KRRC’s plans related to groundwater well management can be found at Appendix N of the Definite Plan. <https://klamathrenewal.org/wp-content/uploads/2020/03/LKP-FERC-Definite-Plan-App-F-through-O.pdf>

As detailed in KRRC’s Definite Plan, “The Project may impact groundwater levels in the immediate vicinity of the reservoirs. The United States Bureau of Reclamation (USBR) performed a desktop review of wells located within a 2.5-mile radius of the three main reservoirs (Iron Gate, Copco, and J.C. Boyle) of the Project and reported these well locations in the 2012 Final Environmental Impact Statement/Environmental Impact Report for dam decommissioning (USBR and CDFW 2012).”

If the Project adversely impacts groundwater wells, KRRC will take steps (e.g., well deepening) to return the production rate of any affected domestic or irrigation groundwater supply well to conditions prior to dam decommissioning.

The KRRC describes at Section 2.4 of Appendix N that they “will monitor sentinel wells belonging to participating landowners including any monitoring wells installed by the KRRC pre- and post-dam decommissioning to identify seasonal fluctuations in groundwater levels and any groundwater level changes that may be attributable to reservoir removal. KRRC will also monitor sentinel wells for general water quality parameters including pH, conductivity, and major anions and cations. To establish baseline conditions, the KRRC plans to monitor sentinel wells monthly for a minimum of one year prior to dam decommissioning.”

If KRRC identifies changes attributable to reservoir removal to water levels or quality that might indicate potential supply problems, “KRRC will provide temporary water supplies until long-term measures such as motor replacement, well deepening, or full well replacement are identified and implemented as needed to return the production rate of any affected domestic or irrigation groundwater supply well to conditions prior to dam decommissioning”. *Section 2.6 of Appendix N.*

The County will continue to work with KRRC to address outstanding concerns related to impacts to groundwater wells, and will engage in any efforts regarding mitigation, including plans related to the Local Impact Mitigation Fund (LIMF). County staff will keep the public up to date via correspondence, the County’s Klamath Dams webpage, and presentation’s to the Siskiyou County Board of Supervisors.

**Q: How will impacts to roads and bridges be addressed during dam removal activities?**

A: On May 19, 2021, the County entered a Memorandum of Understanding (MOU) with KRRC related to roads and bridges that will be utilized by the Project Proponents and their contractors during dam removal. The MOU aims to mitigate harms to the County’s road system and to reimburse the County for certain staff costs. The MOU can be accessed at the link below:

[https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural\\_resources/page/29457/attachment\\_7.pdf](https://www.co.siskiyou.ca.us/sites/default/files/fileattachments/natural_resources/page/29457/attachment_7.pdf)

Section 7.4 of the Definite Plan describes KRRC’s actions related to roads and bridges. In general: “Several road, intersection, structure and culvert improvements are proposed as part of the Project to:

- Facilitate access for project-related vehicles and equipment associated with dam removal
- Provide safety measures for both public and project roads used during the dam removals
- Return roads used by project-related vehicles to the respective owners and users in a state that equals or exceeds existing condition/function the KRRC performed a site visit and desktop study to assess the state of road infrastructure expected to be used throughout the Project.”

KRRC “will implement the improvements at various phases throughout the Project. Some will require completion prior to the dam removals, and others will be contingent on a future assessment of road elements once reservoir drawdown or hauling activities are complete. There will also be ongoing activities throughout the Project to maintain roads heavily trafficked by project construction vehicles”. *Section 7.4 of the Definite Plan starting at page 244.*

<https://klamathrenewal.org/wp-content/uploads/2020/03/LKP-FERC-Definite-Plan.pdf>

**Q: Where can I find information regarding firefighting mitigation following dam removal?**

A: KRRC has developed a Fire Management Plan, which can be accessed at:  
<https://klamathrenewal.org/wp-content/uploads/2021/12/Fire-Management-Plan-20211210-SUBMITTED-VERSION.pdf>

Below are specific details of the actions KRRC will take:

“Installation of a ‘Monitored Detection System’”.

This state-of-the-art camera technology will improve early fire detection capabilities by using high definition imagery and video transmitted from cameras strategically placed at fire lookouts. The system is monitored by fire personnel at a detection center. This cutting-edge technology has already proven to increase detection and reduce response times by firefighters, potentially saving minutes to hours of time from ignition to the arrival of initial attack resources relative to detections from 911 calls. This type of early-alert system can considerably improve local firefighter response times as compared to current resources.

Installation of five permanent dry hydrants.

Dry hydrants provide a simple and reliable water supply for ground-based firefighting crews to fill fire engines and water tenders and will be located at or near road crossings of large tributaries to provide additional water sources. The five dry hydrants in the Fire Plan will be designed to provide a minimum flow of 1,000 gallons per minute, which is a small fraction of the low flow discharges of the perennial tributaries selected for the hydrants.

Staging of self-supporting water tanks.

These tanks will supplement aerial and ground-based water supplies. They hold up to 5,000 gallons of water and could be stored, erected, and filled rapidly for initial attack activities.

Identification of aerial river access points (ARAP’s).

These ARAP’s will be identified in the former reservoirs (two per reservoir) that meet specific suitability performance criteria to be used by Type 1 helicopters with snorkels. An analysis of the currently free-flowing sections of the river located in the dam removal project area yielded dozens of locations that meet the necessary width and depth criteria, and channel dimensions in the reservoir footprints are expected to be comparable. Although the reservoirs will no longer be available to firefighting aircraft, the river itself will provide multiple opportunities for firefighting helicopters.”

The County will continue to work with KRRC to address outstanding concerns related to wildfires and firefighting and will engage in any efforts regarding mitigation. County staff will keep the public up to date via correspondence, the County’s Klamath Dams webpage, and presentation’s to the Siskiyou County Board of Supervisors.

**Q: Will KRRC replace the City of Yreka’s water supply?**

A: KRRC will replace the City of Yreka waterline in the footprint of Iron Gate Reservoir with substantially upgraded infrastructure. This will happen well in advance of dam removal.

**Q: How will impacts to private property be addressed?**

A: Siskiyou County anticipates that impacts to private property related, but not limited to, impacts on groundwater wells or impacts resulting from flooding/flooding risk will be addressed through KRRC's Local Impact Mitigation Fund (LIMF).

KRRC has stated that specific details for the LIMF will be announced in early 2023, however, preliminarily, the LIMF will be administered by an independent third party. Similar funding structures have been used with other complex projects elsewhere, resolving damage claims in a fair, transparent, and timely manner.

However, as KRRC has previously stated, it is not authorized to use its public funds to compensate for claims that do not involve property damages, such as temporary loss.