

Lower Klamath Hydroelectric Decommissioning Project September 2023

The purpose of this staff report is to inform the Board of Supervisors and the public of the Lower Klamath Hydroelectric Decommissioning Project's (Project) progress every month. The report also includes an update on the County Staff's involvement in the Project, as well as an outline of upcoming activities. While not all areas of interest or concern may be addressed in this report, any questions, comments, or concerns can be directed to the County's email address for the project: lkdinfo@co.siskiyou.ca.us.

Project Progress

As a reminder, the Federal Energy Regulatory Commission (FERC) has encouraged KRRC and their contractors to endeavor to comply with local ordinances and permits, although this was not a requirement through the FERC Order. To the extent that local laws or permitting requirements make compliance with FERC's Order impossible or unduly difficult, FERC concluded that such local requirements are preempted. County Staff have been working closely with KRRC and their contractors to urge permit application submittals and good neighbor policies, particularly for those permits that are related to public safety (such as transportation and encroachment permits). For those activities that may be exempt through the FERC Order, County Staff has asked for a written factual/legal justification for why County permits are preempted.

Below is an outline of the major Project activities that occurred in September 2023. Photos of recent Project Activities are included in Appendix A.

- Tree removal in Wards Canyon, just below Copco 2 Dam structure began in September. Removal of the trees is necessary for worker and public safety during the drawdown process that's scheduled to begin in January. All trees are being removed by hand from the canyon, and moved by helicopter to an onsite staging area. The trees will be reused in the restoration efforts.
- Cultural and biological site surveys continuing within the Project Area.
- Flow management coordination for pre-drawdown period is ongoing.
- Maintain temporary best management practices throughout the Project Area.
- Continued ground water well monitoring.
- FERC Dam safety preparedness actions are on-going.
- Advance City of Yreka water pipeline construction over Daggett Bridge.
- Completed the following construction activities at Copco 1:
 - o Low level adit construction ongoing through November.
 - Dredging upstream debris at Adit and Diversion Tunnel Plug ongoing through October.
- Completed the following construction activities at Copco 2:
 - o Removal of the remaining abutment and foundation.
 - o Intake caterpillar gate closed.
 - o Concrete portal plug to be completed in October.
 - Demo wood stave flowline completed.
 - o Completed steel penstock removal
- Completed the following construction activities at Copco 2 Village Area:



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- Penstock demolition and site restoration complete.
- Fall Creek culvert replacement installation complete.
- Advance City of Yreka pipeline installation over the culvert.
- o Dry hydrant installations. Completed Iron Gate fire ramp and hydrant.
- Completed the following construction activities at Iron Gate Dam:
 - Installation of energy dissipation baffles and removal of the access road and pad were delayed. Construction of these items will occur in November.

In September, KRRC updated their flow and reservoir management calendar, which outlines the anticipated Copco Reservoir Levels. The calendars for September and October can be found in Appendix B.

Recent FERC Actions

FERC filings related to the Project that occurred at the end of May through the end of July are summarized in Table 1 and included in Appendix C of this report.

County Actions

As a reminder, The Klamath Project Manager (PM) position was contracted at the end of February 2023 to help support the County with the Project. The PM has been working with County Staff to reduce their workload on the project by establishing herself as the County's main point-of-contract (POC) for KRRC, their contractors, and stakeholders (such as the California Department of Fish and Wildlife) for the Project. The County continues to have regularly scheduled update meetings with KRRC and their contractors. Specific topic meetings (i.e., roads and bridges, etc.) have been scheduled for August, and will continue throughout the life of the Project as the need arises. Table 2 outlines the County Project activities performed in August 2023.

Table 2. County Project Activities - August 2023

Dept. / Staff	Activity	Involved Parties	Status
Community Development & PM	Review of updated signage permit and coordination with McMillen.	Project Wide	September
PM	Maintenance of County Permit Table that tracks the submittal, review, and approval (or denial) of each local permit.	nittal, review, and approval (or denial) of each PM	
PM	Project-wide permit table updates to the County. This is in lieu of Camas and McMillen providing on a biweekly call.	PM	Ongoing
PM	Weekly project/permit update calls with McMillen	PM	Ongoing
PM	Attending agency update meetings hosted by McMillen	PM	Ongoing
PM & Community Development	Working with RES on proper permitting for installation of fuel tanks.	PM & County Staff	Ongoing
PM, County Administration & PIO	Working together to assist the public and Board of Supervisors in receiving information and communication from KRRC & Contractors (i.e., information on new boat ramp below Iron Gate).	PM & County Staff	Ongoing



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PM, PIO	Creation of Project public information materials	PM & County Staff	Ongoing
PM, PIO	Planning of public outreach meetings in Copco and at Klamath River Community.	PM & County Staff	September
PM & Public Works	Coordination with KRRC contractors on road damage and maintenance.	PM & County Staff	Ongoing
PM & Public Works	Development of dispute resolution letter for Fall and Dry Creek Bridges	PM & County Staff	September
Public Works	Continuing to review and approve transportation permits, only if the over-dimension loads and extralegal weight loads fall within the un-shored capacity of both Fall Creek and Dry Creek Bridges. Those in excess (i.e., what the shored bridges are designed to), will not be approved until the bridges are updated.	Public Works	Ongoing

Upcoming Activities - October 2023

Table 3 summarizes the upcoming Project-level and County-specific activities that are proposed to occur in October 2023.

Table 3. Upcoming Project & County Activities – October 2023

Responsible Party	Activity	Location	Date
KRRC Contractors	Project signage to be installed along roadways within the Project boundary once signage plan is approved by the County.	Project Wide	October
KRRC Contractors	Cultural and biological site surveys for construction activities	Project Wide	Ongoing
KRRC Contractors	Water Quality Monitoring	Project Wide	Ongoing
KRRC Contractors	Advance construction of adit steel pipe and access pad	Copco 1	October
KRRC Contractors	Continue Dam Safety & Vibration Monitoring	Copco 1	October
KRRC Contractors	Complete Copco Reservoir dredging	Copco Lake	October
PacifiCorp	Advance flow line site cleanup	Copco 2	October
KRRC Contractors	Complete Demo on the Penstock	Copco 2	October
KRRC Contractors	Complete Penstock Concrete Plug Installation	Copco 2	October
KRRC Contractors	Advance Powerhouse Decommissioning	Copco 2	October
KRRC Contractors	Advance Powerhouse Tailrace Fill Placement	Copco 2	October
KRRC Contractors	Maintain temporary BMPs	Copco 2 Village	Ongoing
KRRC Contractors	Maintain temporary RV park	Copco 2 Village	Ongoing
KRRC Contractors	Advance City of Yreka Pipeline across the Fall Creek culvert	Copco 2 Village	October
KRRC Contractors	Advance City of Yreka Waterline construction over Daggett Bridge	Copco 2 Village	October
KRRC Contractors	Water quality monitoring during in water work	Copco 2 Village	Ongoing
KRRC Contractors	Complete access platform and pad removal	Iron Gate	November
KRRC Contractors	Complete construction of super-cavitating baffles	Iron Gate	November
KRRC Contractors	Install new boat ramp below Iron Gate and at Fall Creek confluence.	Iron Gate	November
KRRC Contractors	Private docks removal deadline	Copco Reservoir	October 30



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KRRC Contractors	Continued discussions on mitigation/fixes to the Fall and Dry Creek bridges	Fall/Dry Creek Bridges	October - November
PM	Weekly update calls with KRRC Contractors	Project Wide	Ongoing
PM	PM to schedule regular update meetings with CDFW	Project Wide	October
PM & Community Development	Work with RES on fuel tank installation permitting	Project Wide	September - December
PM, Public Information Officer (PIO) & Supervisors	Bi-weekly update call with Supervisor Criss & Supervisor Haupt	Project Wide	Ongoing
PM, PIO, and KRRC PIO	Bi-weekly call to discuss upcoming public announcements	Project Wide	Ongoing
Community Development	Approval of Project signage plan.	Project Wide	October
Public Works	Comments on Fall and Dry Creek Bridge reinforcement calculations	Fall/Dry Creek Bridges	October
Public Works, PM, KRRC Contractors	Ongoing meetings to discuss Fall and Dry Creek Bridges & rating calculations	Fall/Dry Creek Bridges	Ongoing
Public Works & PM	Global Transportation Permit development	Project Wide	September - Nov
OES, PM, PIO, McMillen & Kiewit	initial emergency action high meeting		October
Community Development	Approval of wastewater holding and transport		October

Fish Hatchery Project Progress

As a reminder, the construction activities that are occurring as part of the relocation of the Iron Gate Fish Hatchery to the Fall Creek location, while associated with the Project, are not being completed by KRRC or their contractors. Per the FERC Order, the removal of the facilities at Iron Gate, and new build at Fall Creek is the responsibility of PacifiCorp. PacifiCorp will retain ownership of the lands occupied by the Fall Creek Hatchery, with the California Department of Fish and Wildlife (CDFW) leasing the lands and facilities need to operate the hatchery (see FERC Order, page 61, Section HH, Subsection II).

Below is an outline of the major activities that have occurred as part of the fish hatchery relocation project over the past month:

- Site excavation continued for pipe trenches and place piping and electrical.
- Connecting downstream piping at the meter vault.
- Pre-Engineered Metal Building (PEMB) installation at the Coho Building site in progress. Began placing piping from building to the raceways.
- Placed concrete for new Coho Raceways.
- Placed backfill around the Chinook Incubation building and continued electrical installations. The water utilities were installed, and PacifiCorp began installation of the skylights.
- Completed the foundation of the Spawning building.



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- Completed slab on grade rebar and formwork and began placing concrete at the adult holding ponds.
- Completed placement of concrete at the fish barrier and fish ladder.
- Cofferdam is in place at the intake.
- Placed concrete walls around Dam A, and began cofferdam placement at Dam B.

Upcoming Fish Hatchery Activities

- Continue to excavate pipe trenches and place piping.
- · Place piping from intake to meter vault.
- Finish PEMB installation and begin electrical install at the Coho Building.
- Strip concrete framework and finish raceway coating at the new Coho Raceways.
- Continue electrical and HVAC installation at the Incubation Building.
- Strip concrete formwork and finish raceway coating in the Chinook Raceways.
- Begin PEMB erection at the Spawning Building.
- Complete the framework and place concrete at the Adult Holding Ponds.
- Complete Dam A velocity barrier construction and begin construction of intake cutoff wall.
- Begin concrete work for Dam B Velocity Barrier.

Additional Information:

- Initiation of reservoir drawdown is on track for January 2024
- Klamath Dam Removal Special Meetings will be on hold until September 2023.
 - Information can still be found on the County's Klamath Dam Decommissioning Website (https://www.co.siskiyou.ca.us/naturalresources/page/klamath-dam-decommissioning-project).
- We will continue to create staff reports for the Board and the Public which can be accessed on the website.
- Additional important project information (such as upcoming activities, anticipated heavy traffic, etc.) will be communicated through social media, posted in public locations (such as community centers, grocery stores, etc.).
- Any questions or concerns related to the project, please reach out to us via email: *lkdinfo@co.siskiyou.ca.us.*

Previous information about the Project, including prior Special Board Meeting Staff Reports are available at the <u>County's Klamath Dam Decommissioning Website</u>. For ease of use, a quick link button directing users to the Project page has been added to the County's main landing page.



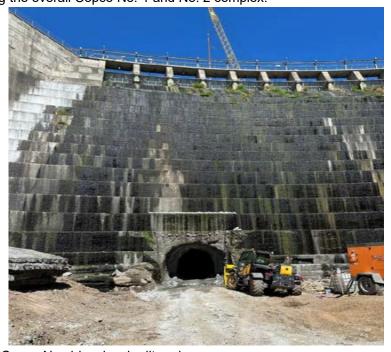
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Appendix A. Project Photos





Aerial view showing the overall Copco No. 1 and No. 2 complex.



Construction of the Copco No. 1 low-level adit underway.





Dredging at Copco 1 Dam.



Offloading debris barge in dredging disposal area, Copco Lake.





Copco No. 2 dam demolition has resumed. The left abutment and intake structure are being demolished and prepared for the intake gate concrete plug. The dam foundation is being drilled in preparation for blasting to remove concrete down to final grade.



Aerial view showing Copco No. 2 wood stave flow line demolition. Wood staves and steel bands have all been demolished and are being hauled off.





Aerial view showing Copco No. 2 steel penstock demolition progress.



Thrust block at Copco No. 2 that will receive a concrete plug.





City of Yreka Waterline excavation began at downstream tie-in.



City of Yreka Waterline pipe laying.





City of Yreka Waterline crossing Daggett Road.



Helicopter flying trees from Ward's Canyon to the staging and storage area.





Upstream end of Ward's Canyon after tree clearing. Viewed from above Copco No. 2 dam.



Blind flange closed and new HDPE vent line installed in the tunnel ceiling of Iron Gate.





New HDPE vent line transition from lined to unlined tunnel at Iron Gate.



Crew working to hang the new HDPE vent line.





Installing pre-cast concrete panels at the Iron Gate boat ramp



Fall Creek Hatchery progress. Chinook raceways banks #5 through #8 complete. Chinook Raceways #1 through #4 wall forms completed. Began erecting Coho Building PEMB. Began Adult Holding Pond formwork and rebar.





Dam A Construction



Adult Holding SOG Construction. Fish Ladder and Barrier concrete complete.





Chinook Raceways & Pipe Install



Coho Building and Coho Raceways



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Appendix B. Flow and Reservoir Management Calendars for Copco



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Anticipated Copco Reservoir Level Cycling Calendar September 2023

Specifics Dates Subject to Change

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
KLAMAT RIVER REN CORPORATIO	EWAL	R	Key eservoir Levels Risi eservoir Levels Lov		1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	. 19	20	21	22	2
24	25	26	27	28	29	3(

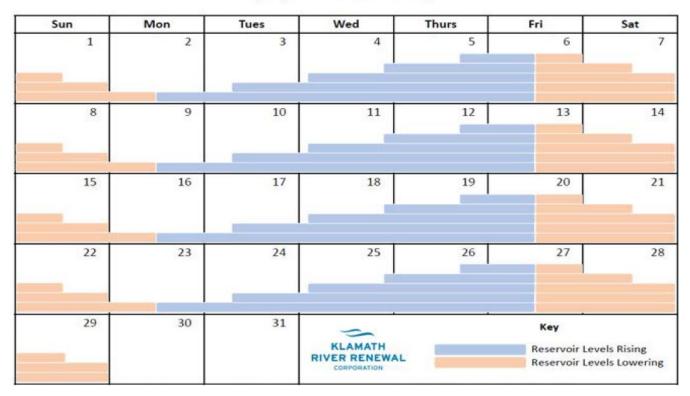
Subject to change; please visit the KRRC website to find the most current schedule: klamathrenewal.org/local-public-notices/



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Anticipated Copco Reservoir Level Cycling Calendar October 2023

Specifics Dates Subject to Change





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Appendix C. Recent FERC Filings



Table 1. Recent Project Actions Submitted Through FERC's eLibrary

Date	Filing Type	Filer	Description	Link
9/01/2023	Environmental and Recreational Compliance Report	KRRC	Klamath River Renewal Corporation submits Final Monthly Report for May 2023, re California Water Quality Management Plan for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230901-5036
9/05/2023	Answer/Response to a Pleading/Motion	PacifiCorp	Motion to Seek Leave to Answer and Answer of PacifiCorp to Motion to Intervene and Protest filed August 18, 2023, by the Klamath Water Users Association under P-2082	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230905-5067
9/05/2023	Answer/Response to a Pleading/Motion	US BOR	Motion to Seek Leave to Answer and Answer of Bureau of Reclamation re Klamath Water Users Association's Protest filed on August 18, 2023, under P-2082.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230905-5166
9/07/2023	Approval of Water Quality Monitoring and Protection Plan for Amended Outlet Tunnel Access at Iron Gate Dam.	CA SWRCB	California State Water Resources Control Board submits Approved Water Quality Monitoring and Protection Plan for the Lower Klamath Project License Surrender under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230907-5137
9/08/2023	Environmental and Recreational Compliance Report	KRRC	Klamath River Renewal Corporation submits Amended Water Quality Monitoring and Protection Plan for Outlet Tunnel Access at Iron Gate Dam for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230908-5019
9/08/2023	Environmental and Recreational Compliance Report	KRRC	Klamath River Renewal Corporation submits August 2023 Monthly Report for the Oregon Terrestrial and Wildlife Management Plan for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230908-5020
9/08/2023	Environmental and Recreational Compliance Report	KRRC	Klamath River Renewal Corporation submits August 2023 Monthly Report for the California Terrestrial and Wildlife Management Plan for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230908-5021
9/15/2023	Biological Exclusion Maps and Technical Memorandum	KRRC	Klamath River Renewal Corporation submits Biological and Cultural Exclusion Maps for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230915-5061
9/15/2023	Environmental and Recreational Compliance Report	KRRC	Klamath River Renewal Corporation submits Initial August 2023 Monthly Report for the California Water Quality Monitoring Plan for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230915-5060



Date	Filing Type	Filer	Description	Link
9/15/2023	Project Operations Compliance Report	KRRC	Klamath River Renewal Corporation submits Historic Properties Management Plan Progress Report for the Lower Klamath Hydroelectric Project under P-14803	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230915-5070
9/15/2023	Dam Safety Compliance Report	KRRC	Klamath River Renewal Corporation submits Responses to FERC's July 19, 2023, Comments re Plan and Schedule for the 2020 Tainter Gate Inspection Report, et al. for the Iron Gate Development, et al. of the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230915-5156
9/18/2023	Compliance Directive	FERC	Letter to Klamath River Renewal Corporation et al. acknowledging receipt of the Historic Properties Management Plan progress report filed on 06/30/2023, as supplemented on 09/15/2023, etc. for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230918-3000
9/20/2023	Government Agency Submittal	CA SWRCB	CA State Water Resources Control Board submits a notice of approval of Amended Fall Creek Fish Hatchery Construction Water Quality Monitoring and Protection Plan for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230920-5060
9/20/2023	Environmental and Recreational Compliance Report	KRRC	Klamath River Renewal Corporation submits Amended Water Quality Monitoring and Protection Plan for the Fall Creek Fish Hatchery Construction for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230920-5141
9/21/2023	Government Agency Submittal	CA SHPO	Comments of California State Historic Preservation Office (CA SHPO) re: Klamath River Renewal Corporation's August 17, 2023, Draft Adaptive Reuse Plan for the Lower Klamath Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accessi on_num=20230921-5088
9/21/2023	Progress Report	KRRC	Klamath River Renewal Corporation submits Monthly Construction Progress Report for August 2023, for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230921-5157
9/21/2023	Progress Report	KRRC	Klamath River Renewal Corporation submits Monthly Construction Progress Report for August 2023, for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230921-5156
9/22/2023	Project Operations Compliance Report	KRRC	Klamath River Renewal Corporation submits Copco No. 2 Powerhouse Facility Termination Plan for the Lower Klamath Hydroelectric Project under P-14803.	https://elibrary.ferc.gov/eLibrary/filelist?accession_num=20230922-5184