

## LOWER KLAMATH PROJECT

Siskiyou County Board of Supervisors
Special Meeting Klamath Dam Removal
March 28, 2023



### Introductions

- Klamath River Renewal Corporation
  - McMillen Corporation
  - Camas, LLC

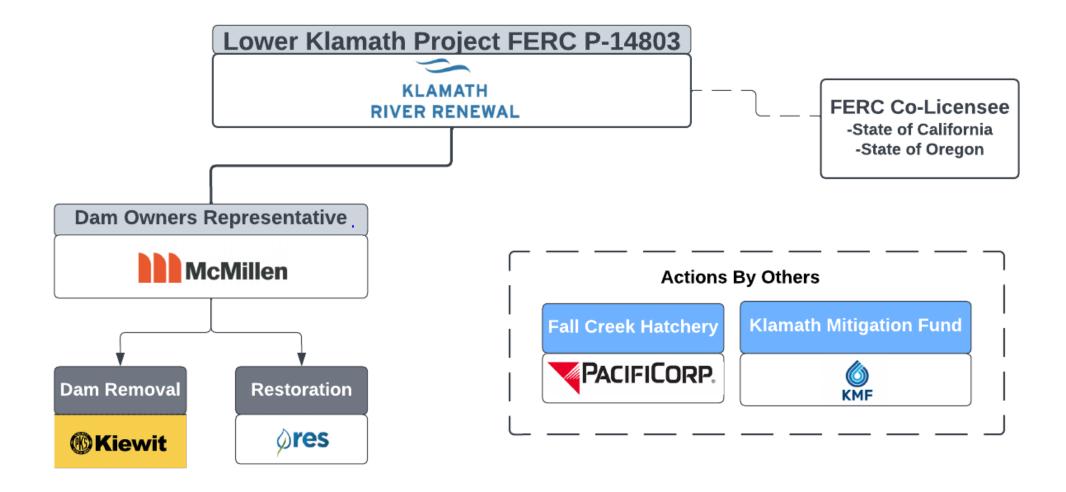


### **Meeting Objective**

- Provide Lower Klamath Dam Removal Project Overview
- Provide Lower Klamath Dam Removal Regulatory Overview
- Q/A



### **Lower Klamath Project Decommissioning**





## **Key Project Elements**

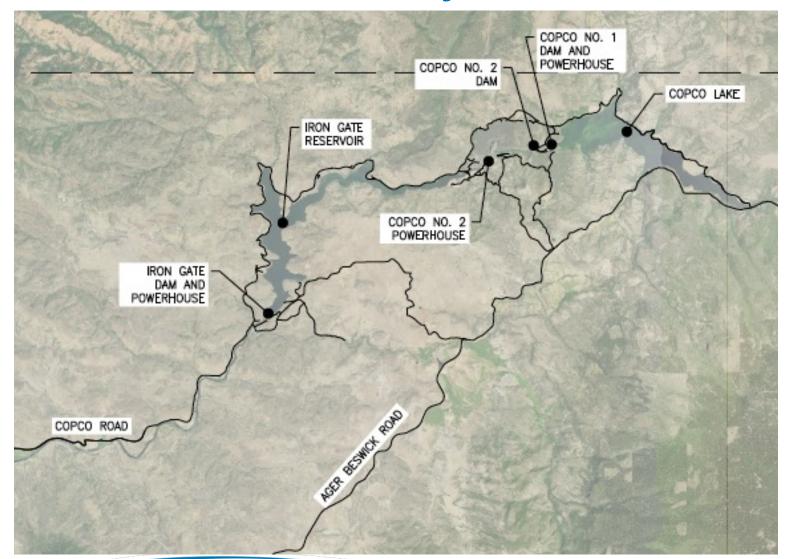
- FERC is the Regulatory Agency with oversight authority
- State of CA and OR are FERC Co-licensees with the Renewal Corporation
- PacifiCorp no longer owns the hydro project or lands.
- PacifiCorp is under contract to Renewal Corporation for existing dam operations until early 2024.
- JC Boyle, Copco No 1, and Iron Gate drawdown and removal begins Jan 1, 2024 and will occur at the same time.
- PacifiCorp and CDFW will support the operations of Fall Creek Hatchery
- Lands will be transferred to CA and OR at end of project for management.



# Lower Klamath Dam Project Overview



## **Lower Klamath Project California Dams**









### **Prep Construction**

- Roads/Bridges
- CoY Waterline
- Dam Modifications
- Construction Camps
- Copco No. 2 Removal

## **Dam Removal Timeline**

2023

### Drawdown/Dam Facility Removal

- Drawdown
- Dam & Facility Removal
- Initial Restoration

2024

### Restoration

- Reservoir Restoration
- Stream Reconnections
- Adaptive Managment

2025~2030

**FERC Final Surrender Order** 

CA/OR Land Transfer

~2030



## Stages of Controlled Reservoir Drawdown



## 1. Operational Drawdown:

Minimum operating level

## 2. Initial Drawdown:

Reservoir water initial controlled release.

# 3. Reservoir Refilling and Releasing Period:

Inflows may exceed outflow capacity periodically, causing reservoir levels to rise and fall

### 4. Dam Demolition:

Reservoir inflow water=min fluctuations

## 5. Klamath River Reconnection:

Breaching of the historic cofferdam, Klamath River to permanently flow in original channel



# **Regulatory Overview**



### **Permits and Approvals**

- Federal, State and Local Approvals (>50)
  - ✓ NEPA, ESA, NHPA
  - ✓ Water Quality
    - √ 401 Certifications
    - √ 402 NPDES, SWPPP (storm water)
    - √ 404 Wetlands (Removal Fill)
  - ✓ Air Quality
  - ✓ Hazardous Materials Management
  - ✓ FEMA Flood
  - ✓ MOUs (County and State legal agreements)



## FEDERAL ENERGY REGULATORY COMMISSION LKP Surrender Order Conditions

#### FEDERAL APPROVALS

- NEPA-Env Impact Statement
- NMFS/USFWS: Endangered Species Act
- US Army Corps: (404) Removal/Fill Wetlands
- Cultural Resources, Nat. Presvation Act, S106 (State Delegated)
- EPA
- 401 Clean Water (State Delegated),
- 402 Polution Discharge (SWPPP) (State Delegated)
- Clean Air Act (State Delegated)

**State Delegated Authorities** 

- Drinking water (State Delegated)
- Haz. Materials/Waste-Title 40 Ch 260-270 (State Delegated)
- FEMA Flood

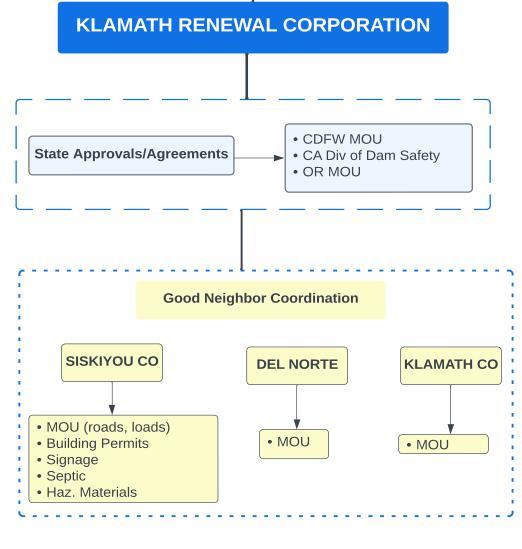
#### CALIFORNIA

- 401/402
- CEQA
- SHPO
- Drinking water
- Haz Materials (County)
- Air Res. Board

#### **OREGON**

- 401/402
- SHPO
- Haz Materials
- Air Quality (DEQ)

### **Regulatory Authority\***



\* Slide represents major regulatory/permits but is not comprehensive of all approvals..



### Compliance

- Dedicated Compliance Team for oversight
- Field Environmental Compliance Managers
- Field Monitors
- Tribal Monitors



### **Public Safety and Protection**

- FERC Required Dam and Public Safety Program
- Emergency Action Plans and Coordination
- Public Safety Programs with local/state/federal law enforcement
- Controlled dam flow releases (not Condit)
- Multi-agency engineering oversite
- Sediment load is less than annual sediment input to the Klamath River



# **Questions and Answers**



## **Extra Slides**



### **Dam Removal Timeline**

	2022	2023 Pre- Drawdown	2024 Drawdown/ Removal	2025	2026	2027	2028	2029	2030
Regulatory Approval Acquisition	PERMITS								
Pre-Drawdown Year Activities		PREP CONST							
Drawdown Year Activities			DAM REMOVAL						
Post-Drawdown Activities				RESTORATION					
Final License Surender Order									

#### **Pre-Drawdown Year:**

- Dam/tunnel modifications
- Road/Bridge improvements
- CoY Waterline Replacement
- Fall Crk Hatchery Construction
- Water Quality/Quantity Monitoring
- Copco No. 2 Dam Removal

#### **Drawdown Year:**

- Dam and infrastructure removal
- Initial reservoir restoration

#### **Post-Drawdown Years:**

- Site Restoration
- Monitoring/Adaptive Management

