#### UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Klamath River Renewal Corporation PacifiCorp

Project Nos. 14803-001; 2082-063

#### AMENDED APPLICATION FOR SURRENDER OF LICENSE FOR MAJOR PROJECT AND REMOVAL OF PROJECT WORKS

EXHIBIT C Erosion and Sediment Control Plan

KLAMATH RIVER RENEWAL CORPORATION	Lower Klamath Project FERC Project No. 14803
	Erosion and Sediment Control Plan
	Klamath River Renewal Corporation 2001 Addison Street, Suite 317 Berkeley, CA 94704
	February 2021

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# 1.0 Introduction

The Lower Klamath River Project (Lower Klamath Project) (FERC No. 14803) consists of four hydroelectric developments on the Klamath River: J.C. Boyle, Copco No. 1, Copco No. 2, and Iron Gate (Figure 1-1). Specifically, the reach between J.C. Boyle dam and Iron Gate dam is known as the Hydroelectric Reach. In September of 2016, the Renewal Corporation filed an *Application for Surrender of License for Major Project and Removal of Project Works*, FERC Project Nos. 2082-063 & 14803-001 (License Surrender). The Renewal Corporation filed the License Surrender application as the dam removal entity for the purpose of implementing the Klamath River Hydroelectric Settlement (KHSA). In November of 2020, the Renewal Corporation filed its Definite Decommissioning Plan (DDP) as Exhibits A-1 and A-2 to its amended License Surrender application. The DDP is the Renewal Corporation's comprehensive plan to physically remove the Lower Klamath Project and achieve a free-flowing condition and volitional fish passage, site remediation and restoration, and avoidance of adverse downstream impacts (Proposed Action). The Limits of Work is a geographic area that encompasses dam removal related activities in the Proposed Action and may or may not expand beyond the FERC boundary associated with the Lower Klamath Project.

The Proposed Action includes the deconstruction of the J.C. Boyle Dam and Powerhouse (Figure 1-2), Copco No. 1 Dam and Powerhouse (Figure 1-3), Copco No. 2 Dam and Powerhouse (Figure 1-4), and Iron Gate Dam and Powerhouse (Figure 1-5), as well as associated features. Associated features vary by development, but generally include powerhouse intake structures, embankments, and sidewalls, penstocks and supports, decks, piers, gatehouses, fish ladders and holding facilities, pipes and pipe cradles, spillway gates and structures, diversion control structures, aprons, sills, tailrace channels, footbridges, powerhouse equipment, distribution lines, transmission lines, switchyards, original cofferdam, portions of the Iron Gate Fish Hatchery, residential facilities, and warehouses. Facility removal will be completed within an approximately 20-month period.

The Erosion and Sediment Control Plan identifies best management practices (BMPs) to address potential impacts associated with implementing the Proposed Action. The Renewal Corporation has established, and will implement, erosion and sediment control BMPs to minimize pollution from sediment erosion caused by facilities removal and restoration activities. The Renewal Corporation has prepared 16 Management Plans for FERC's review and approval as conditions of a license surrender order. These Management Plans were developed in consultation with federal, state and county governments and tribes.



Figure 1-1. Lower Klamath Project Location



Figure 1-2. J.C. Boyle Development Facility Details



Figure 1-3. Copco No.1 Development Facility Details







Figure 1-5. Iron Gate Development Facility Details

# 2.0 Regulatory Context

The Erosion and Sediment Control Plan is one of 16 Management Plans implementing the DDP.

1.	Aquatic Resources Management Plan	9. Remaining Facilities Plan
2.	Construction Management Plan	10. Reservoir Area Management Plan
3.	Erosion and Sediment Control Plan	11. Reservoir Drawdown and Diversion Plan
4.	Hatchery Management and Operations Plan	12. Sediment Deposit Remediation Plan
5.	Health and Safety Plan	13. Terrestrial and Wildlife Management Plan
6.	Historic Properties Management Plan	14. Waste Disposal and Hazardous Materials Plan
7.	Interim Hydropower Operations Plan	15. Water Quality Monitoring Management Plan
8.	Recreation Facilities Plan	16. Water Supply Management Plan

#### Table 2-1. Lower Klamath River Management Plans

## 2.1 Organizational Structure

The Erosion and Sediment Control Plan outlines the measures to minimize erosion and sediment runoff throughout implementation of the Proposed Action. The Plan describes that the Renewal Corporation will implement relevant measures as part of permitting under the California and Oregon National Pollutant Discharge Elimination System (NPDES) processes. In addition, this plan is supplemented by additional measures in a sub-plan, the Oregon Erosion and Sediment Control Plan (Appendix A).

#### 2.2 Specific Regulatory Interests

The Renewal Corporation considered the following regulatory interests in the development of the Erosion and Sediment Control Plan:

- California Section 401 Water Quality Certification
- California Department of Fish and Wildlife
- Oregon Section 401 Water Quality Certification
- Oregon MOU

#### 2.2.1 Oregon NPDES Stormwater Construction General Permit No. 1200-C

The Renewal Corporation will apply for, obtain and comply with the Oregon Department of Environmental Quality (DEQ) NPDES General Permit No. 1200-C (1200-C Permit). The 1200-C Permit includes temporary and permanent best management practices and monitoring to regulate stormwater runoff to surface waters. As part of the 1200-C Permit, an Erosion and Sediment Control Plan (1200-C ESCP) will be submitted and approved by DEQ.

### 2.2.2 California NPDES Construction General Permit

The Renewal Corporation will apply for, obtain, and comply with the California NPDES Construction General Permit (CGP). The CGP includes temporary and permanent best management practices and monitoring to regulate stormwater runoff to surface waters. As part of the CGP, the Renewal Corporation will develop a Stormwater Pollution Prevention.

### 2.3 Regulatory Review Process

The Renewal Corporation will implement the Erosion and Sediment Control Plan upon FERC approval, including any changes required in the FERC License Surrender Order. A consultation record for this Plan is included as Appendix B.

## 2.4 Reporting

The Renewal Corporation will prepare and submit an Annual Report by February 15<sup>th</sup> of each year which will include information pertaining to implementation of the Erosion and Sediment Control Plan.

Appendix A

**Oregon Erosion Sediment Control Plan** 



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# 1.0 Introduction

The Oregon Erosion and Sediment Control Plan described herein is a subplan of the Erosion and Sediment Control Plan to be implemented as part of the Proposed Action for the Lower Klamath Project (Project).

## 1.1 Purpose of Management Plan

The purpose of the Oregon Erosion and Sediment Control Plan is to state measures the Renewal Corporation will implement to minimize erosion and sediment runoff to protect water quality during land disturbing activities associated with the Proposed Action.

In addition, the Renewal Corporation will apply for, obtain, and comply with the Oregon Department of Environmental Quality (DEQ) National Pollutant Discharge Elimination System Stormwater Construction (NPDES) General Permit No. 1200-C (1200-C Permit). The 1200-C Permit includes temporary and permanent best management practices (BMPs) and monitoring to regulate stormwater runoff to surface waters associate with land disturbance activities. An Erosion and Sediment Control Plan (1200-C ESCP) is part of the 1200 C Permit.

## 1.2 Relationship to Other Management Plan Plans

The Oregon Erosion and Sediment Control Plan is supported by elements of the following management plan for effective implementation: Waste Disposal and Hazardous Materials Management Plan. So as to not duplicate information, elements from these other management plans are not repeated herein but are, where appropriate, referred to in this Oregon Erosion and Sediment Control Plan.

# 2.0 Erosion and Sediment Control Measures

The Renewal Corporation will implement the follow measures as part of the Oregon Erosion and Sediment Control Plan for land disturbing activities.

- Maintain an adequate supply of materials necessary to control erosion at the construction site;
- Deploy compost berms, impervious materials, or other effective methods during rain events or when stockpiles are not moved or reshaped for more than 48 hours (stockpile erosion should not occur);
- Inspect erosion control measures and maintain erosion control measures as often as necessary to verify the continued effectiveness of measures until exposed soil is stabilized;
- Make repairs, install replacements, or install additional controls, as necessary, if monitoring or inspections show the erosion and sediment controls are ineffective;
- Remove sediment to its original contour if it has reached 1/3 of the exposed height of a sediment or erosion control;

- Use removable pads or mats to reduce soil compaction at construction access points through, and staging areas in, riparian or wetland areas, unless otherwise authorized by DEQ;
- Flag or fence off wetlands the Renewal Corporation is not authorized to impact to protect from disturbance and/or erosion;
- Place dredged or other excavated material on upland areas with stable slopes to reduce materials from eroding back into waterways or wetlands; and
- Place clean aggregate and utilize other BMPs at construction entrances, including but not limited to truck or wheel washes, when earth-moving equipment is leaving the site and traveling on paved surfaces, in order to minimize vehicle tracking of sediment offsite.

# 3.0 Inspection and Maintenance

### 3.1 Disposal Sites

There are four disposal sites in Oregon that will be monitored for erosion and sediment runoff:

- Barrow Pit Disposal Site (Alternate Site)
- Scour Hole Disposal Site
- Left Bank Disposal Site
- Right Bank Disposal Site

#### 3.1.1 Monitoring

The Renewal Corporation will inspect the disposal sites annually following installation of permanent BMPs until stabilization is accomplished. Inspection records documenting the cover placement, evidence of erosive conditions or sediment run-off, and corrective actions performed or proposed for long-term stability will be included in an Annual Compliance Report submitted to the FERC and to DEQ by April 1 for the preceding year in which activities are performed.

#### 3.1.2 Maintenance

Following the first annual inspection of the disposal sites, the Renewal Corporation will implement corrective actions if significant erosion has occurred. Any corrective actions will vary depending on the erosive conditions and will be described in the Annual Compliance Report.

## 3.2 Implementation Schedule

The Renewal Corporation expects to complete the measures included here within three years following initial drawdown.

Appendix B

**Consultation Record** 

## **Consultation Record**

Erosion and Sediment Control Plan				
Sub-Plan	Agency	Date of Agency Plan Submittal	Agency Comments Received Date	Date of Call to Resolve Agency Comments
Oregon Erosion and Sediment Control Plan	Oregon Department of Environmental Quality	January 26, 2021	Pending	Pending