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 I
Remaining Facilities Plan
(Amended December 15, 2021)

PUBLIC VERSION
Lower Klamath Project
FERC Project no. 14803

Remaining Facilities Plan

Klamath River Renewal Corporation
2001 Addison Street, Suite 317
Berkeley, CA 94704

December 2021
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1.0 Introduction

The 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 Klamath River Renewal Corporation (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 (ALSA). 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 and restoration related activities associated with the Proposed Action. The Limits of Work may extend beyond the Federal Energy Regulatory Commission (Commission) boundary associated with the Lower Klamath Project where specifically noted.

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 cofferdams, portions of the Iron Gate Fish Hatchery, residential facilities, and warehouses. Facility removal will be completed within an approximately 20-month period.

This Remaining Facilities Plan describes the measures that the Renewal Corporation will implement to protect water quality conditions associated with non-operational structures that will remain on-site following completion of the Proposed Action. The Renewal Corporation has prepared 16 Management Plans for the Commission’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.

In February 2021, the Renewal Corporation filed the 16 Management Plans with the Commission. Since that time, the Renewal Corporation has undertaken further consultation, resulting in material revisions to certain management plans. There were no material revisions to the February 2021 version of this Remaining Facilities Plan. An updated Consultation Record for the Remaining Facilities Plan is included as Appendix C.
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 1-4. Copco No.2 Development Facility Details
Figure 1-5. Iron Gate Development Facility Details
2.0 Regulatory Context

As described in Table 2-1, the Remaining Facilities Plan is one of 16 Management Plans implementing the DDP.

Table 2-1. Lower Klamath River Management Plans

| 3. Erosion and Sediment Control Plan | 11. Reservoir Drawdown and Diversion Plan |

2.1 Organizational Structure

The Remaining Facilities Plan identifies non-operational remaining structures and the measures the Renewal Corporation will implement to protect water quality conditions associated with these structures. These proposed measures are part of the Proposed Action. Specifically, the Remaining Facilities Plan includes an updated Consultation Record and two sub-plans, included amongst the Appendices identified below.

- Appendix A: California Remaining Facilities Plan
- Appendix B: Oregon Remaining Facilities and Operations Plan
- Appendix C: Consultation Record

2.2 Specific Regulatory Interests

The Renewal Corporation considered the following regulatory interests in the development of the Remaining Facilities Plan:

- California Section 401 Water Quality Certification
- Oregon Section 401 Water Quality Certification
- California Department of Fish and Wildlife Memorandum of Understanding
- California Environmental Quality Act, Final Environmental Impact Report
- Oregon Memorandum of Understanding
2.3 Results of Consultation since February 2021
The Renewal Corporation has revised the February 2021 version of this plan. No material revisions were made to this plan.

2.4 Regulatory Approval Process
The Renewal Corporation will implement the Remaining Facilities Plan as approved by the Commission in the License Surrender Order. The Renewal Corporation will obtain and report to the Commission any approvals required by other agencies.

3.0 Reporting
By April 15 of each year, the Renewal Corporation will prepare and submit to the Commission an Annual Report which will include information pertaining to implementation of the Remaining Facilities Plan.
Appendix A

California Remaining Facilities Plan
Lower Klamath Project
FERC Project No. 14803

California Remaining Facilities Plan

Klamath River Renewal Corporation
2001 Addison Street, Suite 317
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Prepared by:
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680 G Street, Suite C
Jacksonville, OR 97530

December 2021
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1.0 Introduction

This California Remaining Facilities Plan is a subplan of the Remaining Facilities Plan that will be implemented as part of the Proposed Action for the Lower Klamath Project.

1.1 Purpose of Management Plan

The purpose of the California Remaining Facilities Plan is to identify the non-operational structures that will remain on-site following completion of the Proposed Action, identify potential water quality impacts associated with the presence of these structures, and state the measures the Renewal Corporation will implement to protect water quality from potential impacts associated with the presence of these structures.

1.2 Relationship to Other Management Plans

The California Remaining Facilities Plan is supported by elements of the following management plans for effective implementation: Erosion and Sediment Control Plan and the 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 California Remaining Facilities Plan.

2.0 Potential Water Quality Impact and Proposed Measures

2.1 Identification of Remaining Facilities

For the purposes of this plan, remaining structures are defined as structures or features affiliated with the Lower Klamath Project within the Limits of Work. These facilities remaining may or may not be non-operational following completion of the Proposed Action based upon the direction by the State of California, as the successor landowner, requesting facilities to remain for the State’s future use. These structures may consist of buildings, utilities, portions of foundations, and other non-operational structural components associated with the dams. This plan discusses waste disposal sites only to the extent they overlap with remaining structures (e.g., spillways, powerhouse tailrace); all other future placement and management of material will be implemented in accordance with related management plans including the Waste Disposal and Hazardous Materials Management Plan.

2.1.1 Structures

The structures to remain on-site following completion of the Proposed Action at Copco No. 1, Copco No. 2, and Iron Gate Developments are presented in Tables 2.2, 2.3, and 2.4. The tables include the following information pertaining to the structures that will remain on-site: project structure name, type of material to be left on-site, and the permanent measures that will be taken to reduce water quality impacts based on the condition in which it will be left (buried,
Overview maps of Copco No. 1, Copco No. 2, and Iron Gate developments are included as Figures A-1, A-7, and A-16, respectively.

### 2.2 Measures to Protect Water Quality Impacts

The Renewal Corporation evaluated the potential for erosion or sediment runoff to surface waters and identified the presence of hazardous materials associated with structures to remain on-site.

#### 2.2.1 Erosion and Sediment Control Protection

Erosion and sediment control temporary best management practices (BMPs) installed during construction are presented in the site-specific Stormwater Pollution Prevention Plan required as part of the National Pollutant Discharge Elimination System California State Water Resources Control Board Construction General Permit.

Following demolition and the final placement of material within remaining facilities (if applicable), permanent BMPs will be installed for final stabilization. Final stabilization consists of capping by placing native rock borrowed from within the limits of work as specified in the Definite Decommissioning Plan (Section 4.1.2) and in accordance with regulatory requirements. The Renewal Corporation may add a limited soil topping and may plant native vegetation, subject to consultation with the State of California. Monitoring and reporting required as part of the Stormwater Pollution Prevention Plan will be conducted to achieve final stabilization.

As part of the permanent BMPs, drainage swales may be constructed. Swales will be lined with Type E8 Bedding Material and/or Type E7a Erosion Protection in areas where the slope is greater than 5% and will be unlined and hydroseeded in areas where the slope is less than or equal to 5% (Knight Piésold and Kiewit 2020).

#### 2.2.1.1 Fill Materials Definitions

Table 2.1 contains definitions of the material types used by the Renewal Corporation throughout the Project as fill and cap materials.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>DESCRIPTION</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E4</td>
<td>Select Fill</td>
<td>Cobbles, Gravel, and Sand, particles ranging from 4 in. to the #200 Sieve (0.0030 in.), low to no fines content, sourced from offsite.</td>
</tr>
<tr>
<td>E6</td>
<td>Bedding</td>
<td>Cobbles and Gravel, particles ranging from 3 in. to 3/8 in., low to no fines content, sourced from offsite.</td>
</tr>
<tr>
<td>E7</td>
<td>Erosion Protection</td>
<td>Boulders and Cobbles, particles ranging from +50 in. to 3 in., material subdivided into three classifications E7a/b/c, each with minimum D85, D50 and D15 values, sourced from existing erosion protection at the dam sites, or talus material from nearby borrow areas within limits of work.</td>
</tr>
<tr>
<td>TYPE</td>
<td>DESCRIPTION</td>
<td>DEFINITION</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>E8</td>
<td>Bedding Material</td>
<td>Cobbles and Gravel, particles ranging from 12 in. to 1 in., low to no fines content, sourced from offsite.</td>
</tr>
<tr>
<td>E9</td>
<td>General Fill</td>
<td>Boulders, Cobbles, Gravel, Sand and Fines, particles ranging from 20 in. to the #200 Sieve (0.0030 in.), up to 30% fines content, sourced from on-site excavations or nearby borrow areas within limits of work.</td>
</tr>
<tr>
<td>E9a</td>
<td>General Fill</td>
<td>Boulders, Cobbles, Gravel, Sand and Fines, particles ranging from 20 in. to the #200 Sieve (0.0030 in.), up to 40% fines content, sourced from excavations or nearby borrow areas within limits of work.</td>
</tr>
<tr>
<td>E10</td>
<td>Random Fill</td>
<td>Overburden, Rocks or Organics, no gradation requirements, sourced from on-site excavations.</td>
</tr>
<tr>
<td>CR1</td>
<td>Concrete Rubble</td>
<td>Particles ranging from 36 in. to the #200 Sieve (0.0030 in.), with up to 30% fines content, steel reinforcement to remain in concrete, sourced from demolition of on-site concrete structures.</td>
</tr>
<tr>
<td>CR2</td>
<td>Concrete Rubble</td>
<td>Particles ranging from 24 in. to the #200 Sieve (0.0030 in.), with up to 30% fines content, steel reinforcement to remain in concrete, sourced from demolition of on-site concrete structures.</td>
</tr>
</tbody>
</table>

Notes:
- The proposed offsite source is the Knife River Corporation.
- Definitions provided by Knight Pi ésold (C. Vos), December 4, 2020.

2.2.2 Hazardous Material Survey

In April 2019, Hazardous Material Building Surveys (HMBS) were conducted for the Copco No. 1 (AECOM 2019a), Copco No. 2 (AECOM 2019b), and Iron Gate Developments (AECOM 2019c). Surveys were also conducted in October 2020 (Entek 2020a, 2020b, 2020c) to supplement and confirm the April 2019 HMBS, and are included in the Waste Disposal and Hazardous Materials Management Plan.

Hazardous materials, including but not limited to asbestos, lead-based paint, fuel, lubricating oil, and batteries, identified as part of these evaluations will be removed by the Renewal Corporation from structures that will remain on-site, unless otherwise directed by the State of California as the final landowner. Non-friable asbestos is not considered a hazardous waste and not subject to handling procedures under Title 22, Division 4.5, of the California Code of Regulations. Asbestos that is considered non-friable and attached to a structure that will be entombed will be buried in place. Non-hazardous and hazardous materials will be disposed of in accordance with the Waste Disposal and Hazardous Materials Management Plan, following the abatement specifications as presented by Entek (Entek 2020a, 2020b, 2020c).
Table 2.2. Copco No. 1 Remaining Structures

<table>
<thead>
<tr>
<th>PROJECT STRUCTURE</th>
<th>MATERIAL TO REMAIN</th>
<th>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</th>
<th>FIGURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative and Residential Structures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• House near the access gate</td>
<td>• Complete structure</td>
<td>The removal of this structure is subject to consultation with the State of California as successor landowner. If not removed, this structure will be transferred to the State of California for active usage and maintenance. If removed, portions of the foundation and decommissioned buried utilities will be left in place and the surrounding ground will be graded to cover the remaining foundation and promote down-slope drainage. The Renewal Corporation may add a limited soil topping and may plant native vegetation, subject to consultation with the State of California.</td>
<td>Figure A-2</td>
</tr>
<tr>
<td>• Historic operator building foundation</td>
<td>• Concrete foundation</td>
<td>This concrete foundation has no negative impact on water quality and no further measures are proposed.</td>
<td>Figure A-2</td>
</tr>
<tr>
<td>Diversion Tunnel</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Diversion tunnel</td>
<td>• Concrete and embedded steel</td>
<td>The diversion intake approach tunnel will be removed to the level of the adjacent bedrock. The diversion intake and outlet portals will be filled and sealed with Type E7a Erosion Protection and armored with 10 ft of Type E7b Erosion Protection. The intake portal will have an additional layer of impermeable concrete material surrounded by 1 ft of Type E6 bedding.</td>
<td>Figure A-3</td>
</tr>
<tr>
<td>PROJECT STRUCTURE</td>
<td>MATERIAL TO REMAIN</td>
<td>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</td>
<td>FIGURES</td>
</tr>
<tr>
<td>-------------------</td>
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</tr>
<tr>
<td><strong>Dam Structure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Copco No. 1 Dam</td>
<td>• Concrete and embedded steel below El. 2,472.1 ft</td>
<td>All remaining concrete or concrete rubble below the 100-year flood level will be covered with a minimum of 10 ft of riverbed material with an upper particle size of 36 in and a 15% maximum of material smaller than 6 in, graded to the riverbed slope. Where concrete is keyed into the bedrock on slopes, the concrete will be removed to match the adjacent bedrock surface.</td>
<td>Figure A-4</td>
</tr>
<tr>
<td></td>
<td>• Concrete attached to bedrock on west canyon wall</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Penstock No. 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Penstock No. 3</td>
<td>• Underground portion of existing steel penstock</td>
<td>The portion of Penstock No. 3 that is already underground will be filled with Type E6 Bedding and the entrance will be blocked with Type E9 General Fill. All disturbed areas will be graded and will undergo final stabilization as specified in Section 2.2.1 of this plan.</td>
<td>Figure A-5</td>
</tr>
<tr>
<td><strong>Powerhouse and Tailrace</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Powerhouse</td>
<td>• Concrete north wall</td>
<td>All void spaces within the powerhouse basement will be filled to the extent possible with Type E9 General Fill and Type CR2 Concrete Rubble. The fill material will be capped with 4 ft of Type E4 Select Fill. The area adjacent to the river channel will be armored with Type E7 Erosion Protection, 60” rock, class 10 ton. A Type I drainage swale will be constructed on the uphill side of the powerhouse area. The tailrace will be filled with Type CR2 Concrete Rubble and Type E9 General Fill, graded to 2H:1V, and capped with 1 ft of Type E6 Bedding and 4 ft of Type E7c Erosion Protection. Disposal site details are further elaborated in the California Waste Disposal Plan.</td>
<td>Figure A-6</td>
</tr>
<tr>
<td>• Tailrace</td>
<td>• Concrete and embedded steel below El. 2,488 ft</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Knight Piérola and Kiewit 2020
### Table 2.3. Copco No. 2 Remaining Structures

<table>
<thead>
<tr>
<th>PROJECT STRUCTURE</th>
<th>MATERIAL TO REMAIN</th>
<th>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</th>
<th>FIGURES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Copco Village</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Residential houses</td>
<td>• Complete structures</td>
<td>The removal of these structures is subject to consultation with the State of California as the successor landowner. If not removed, these structures will be transferred to the State of California for active usage and maintenance. If removed, portions of the foundations and decommissioned buried utilities will be left in place and the surrounding ground will be graded to cover the remaining foundations and promote down-slope drainage. The Renewal Corporation may add a limited soil topping and may plant native vegetation, subject to consultation with the State of California.</td>
<td>Figure A-8</td>
</tr>
<tr>
<td>• Asphalt roadway</td>
<td>• Asphalt</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Diversion Dam</strong></td>
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</tr>
<tr>
<td>• Diversion dam</td>
<td>• Concrete and embedded steel</td>
<td>The diversion dam will be removed to approximately El. 2453.5 ft. to be flush with the remaining bedrock. Remaining concrete will be covered with a minimum of 3.5 ft of Type E7b and E7c Erosion Protection.</td>
<td>Figure A-9</td>
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</tr>
<tr>
<td><strong>Wood Stave Penstock</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Wood stave penstock and conveyance tunnels</td>
<td>• Concrete footings • Conveyance tunnels</td>
<td>The wood-stave penstock between Copco No. 2 dam and powerhouse will be deconstructed and the timber planks will be removed. The concrete footings will be buried in place by a minimum of 2 ft of Type E9 General Fill, and the slope will be graded to 0.5%. The tunnel portals connecting to the wood-stave penstock will be plugged by backfilling with Type E9 General Fill. A drain will be installed in the upstream conveyance tunnel (tunnel #1) by placing a non-woven geotextile wrapped drain in the bottom of the tunnel prior to backfilling, which will allow tunnel seepage without eroding the backfill material. The final grading of the tunnel portals will be 2.5H:1V. A Type I drainage swale will be installed at each tunnel portal and in two locations along the former penstock span, each leading to an energy dissipater. The disturbed area will undergo final stabilization as specified in Section 2.2.1 of this plan.</td>
<td>Figures A-10</td>
</tr>
</tbody>
</table>
### Lower Klamath Project – FERC No. 14803

**App. A - California Remaining Facilities Plan 7**

<table>
<thead>
<tr>
<th>PROJECT STRUCTURE</th>
<th>MATERIAL TO REMAIN</th>
<th>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</th>
<th>FIGURES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Powerhouse Penstock Surge Tank</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| • Powerhouse penstock surge tank | • Below ground steel surge tank  
• Steel plate barricades | The surge vent will be barricaded with 8 ft x 8 ft steel plates to prevent human access and water ingress. | Figure A-11 |
| **Overflow Spillway** | | | |
| • Overflow spillway | • Steel plate barricades  
• Concrete spillway | The overflow spillway tunnel will be barricaded with steel plates cut to fit the opening and all remaining openings larger than 6” will be filled with grout or a concrete curb. The concrete spillway will remain in place. | Figure A-12 |
<p>| <strong>Powerhouse Penstock</strong> | | | |
| • Powerhouse penstock | • Concrete anchor blocks | All remaining concrete will be covered by a minimum of 2 ft of Type E9 General Fill. The outlet of the conveyance tunnel (discussed above) will be backfilled with Type E9 General Fill and covered with gravel mulch which is comprised of the courser limit of Type E4 Select Fill and washed of fines to qualify as a non-vegetative stabilization method allowing seepage through the barrier without eroding the backfill. The area will be graded to 2.5H:1V, and Type I drainage swales will be constructed along the penstock area parallel to the slope and along the uphill side of the disturbed area perpendicular to the slope. All disturbed areas will undergo final stabilization as specified in Section 2.2.1 of this plan. | Figure A-13 |</p>
<table>
<thead>
<tr>
<th>PROJECT STRUCTURE</th>
<th>MATERIAL TO REMAIN</th>
<th>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</th>
<th>FIGURES</th>
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<tbody>
<tr>
<td><strong>Powerhouse</strong></td>
<td></td>
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</tr>
<tr>
<td>• Powerhouse</td>
<td>• Powerhouse</td>
<td>Void spaces in the concrete powerhouse basement areas will be filled to the extent possible with Type E7 Erosion Protection and CR1 Concrete Rubble and mixed with Type E9a General Fill to reduce interstitial spaces. The remaining materials will be covered by a minimum of 2 ft of Type E9 General Fill and graded to 2.5H:1V toward the tailrace area. The tailrace will be partially filled with Type CR2 Concrete Rubble and/or Type E9a General Fill and protected from river erosion with 2 ft of Type E8 Bedding Material.</td>
<td>Figure A-14</td>
</tr>
<tr>
<td></td>
<td>concrete, embedded steel, and attached steel (conduit, trays, etc.) below EL 2,344.5 ft</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intake Structure Disposal Site</strong></td>
<td></td>
<td>The caterpillar gate will be lowered, and a concrete plug will be poured against it. The concrete will then be covered by a minimum of 2 ft of Type E9 General Fill and graded to 1.5H:1V (temporary), 2H:1V (permanent) slope to match final channel grade.</td>
<td>Figure A-15</td>
</tr>
<tr>
<td>• Intake Structure</td>
<td>• Concrete from intake</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Caterpillar gate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Knight Piésold and Kiewit 2020*
### Table 2.4. Iron Gate Remaining Structures

<table>
<thead>
<tr>
<th>PROJECT STRUCTURE</th>
<th>MATERIAL TO REMAIN</th>
<th>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</th>
<th>FIGURES</th>
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<tbody>
<tr>
<td>Gate Shaft</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Gate shaft</td>
<td>• Concrete and embedded steel</td>
<td>The gate controlling the diversion tunnel will be removed to the level of the natural bedrock. All concrete and embedded steel below El. 2,254.3 ft will remain in place. The gate shaft will be filled with Type E10 Random Fill or CR1 Concrete Rubble and then buried under a minimum of 3 ft of Type E9 General Fill.</td>
<td>Figure A-17</td>
</tr>
<tr>
<td>Diversion Tunnel Intake Structure</td>
<td>• Concrete base slab of the intake structure</td>
<td>The tunnel inlet will be plugged with Type E9a General Fill and/or CR1 Concrete Rubble to permanently block the tunnel opening. The fill will be covered with a minimum of 3 ft of cover material consisting of washed Type E9 General Fill.</td>
<td>Figure A-18a</td>
</tr>
<tr>
<td>Diversion Tunnel Outlet Structure</td>
<td>• Concrete apron of diversion tunnel</td>
<td>The diversion tunnel outlet will be plugged with Type E9a General Fill and/or CR1 Concrete Rubble to permanently block the tunnel opening. The concrete apron of the diversion tunnel outlet structure will be left in place but will be modified as necessary to appear natural during the final grading activities. Any concrete portions of the outlet structure will be covered by a minimum of 3 ft of Type E9 General Fill to match the final grading of the former dam area.</td>
<td>Figure A-18b</td>
</tr>
</tbody>
</table>
| Powerhouse Penstock | • Concrete anchor block #3  
• Penstock between anchor block #3 and powerhouse | The portion of the penstock that is already underground will be buried in place. All remaining concrete will be below the final grade and will be covered with Type E9 General Fill. | Figure A-19 |
### Permanent Measures to Reduce Water Quality Impacts

#### Powerhouse and Tailrace Disposal Site

<table>
<thead>
<tr>
<th>PROJECT STRUCTURE</th>
<th>MATERIAL TO REMAIN</th>
<th>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</th>
<th>FIGURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powerhouse and Tailrace</td>
<td>Concrete and embedded steel</td>
<td>Concrete and embedded steel below El. 2186.33 ft will be backfilled using Type E9 General Fill, Type CR1 Concrete Rubble, and/or Type CR2 Concrete Rubble. The powerhouse area and tailrace will be graded to 2.5H:1V and covered with Type E9 General Fill or E7 Erosion Protection, depending on erosion potential. Riprap from the downstream face of the dam will be used to armor the areas within the river channel. Disposal site details are further elaborated in the California Waste Disposal Plan.</td>
<td>Figure A-20</td>
</tr>
</tbody>
</table>

#### Spillway Disposal Site

<table>
<thead>
<tr>
<th>PROJECT STRUCTURE</th>
<th>MATERIAL TO REMAIN</th>
<th>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</th>
<th>FIGURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spillway</td>
<td>Earthen material from dam structure</td>
<td>The spillway will be backfilled with earthen material generated from the dam structure removal. The spillway area will be graded to a slope range of 2.5H:1V to 5H:1V. The earthen material will be covered by Type E9 General Fill and E7 Erosion Protection will be placed on the downstream toe of the spillway. Disposal site details are further elaborated in the California Waste Disposal Plan.</td>
<td>Figure A-21</td>
</tr>
</tbody>
</table>

Source: Knight Piésold and Kiewit 2020
3.0 Reporting

By April 1 and April 15 of each year, the Renewal Corporation will prepare and submit to the California State Water Resources Control Board and the Federal Energy Regulatory Commission, respectively, an Annual Report which will include information pertaining to implementation of the California Remaining Facilities Plan.

4.0 References


Appendix A

Figures
Figure A-1
Overview Map of the Copco No. 1 Development

December 2020

PRELIMINARY DESIGN
(NOT FOR CONSTRUCTION)
Notes
2. Data Sources: Main Drawing: Knight Piesold 100 Design
Notes
1. Coordinate System: NAD83 HARN StatePlane California I FIPS 0401 Feet
2. Data Sources: Main Drawing: Knight Piesold 100 Design
   Background: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCan, GEBCO, NOAA, increment P Corp.

Lower Klamath Project
Figure A-3
Copco No. 1 Diversion Tunnel

February, 2021

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Notes
1. Coordinate System: NAD83 HARN StatePlane California I FIPS 0401 Feet
2. Data Sources: Main Drawing: Knight Piesold 100 Design

LEGEND:
- Demolition / Removal
- Concrete to Remain
  Elev. 2472.1 ft

Lower Klamath Project
Figure A-4
Copco No. 1 Dam Structure

February, 2021

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CRITICAL ENERGY/ELECTRIC INFRASTRUCTURE INFORMATION (CEII)

REDACTED

APPENDIX A: FIGURE A-5 COPCO NO. 1 PENSTOCK NO. 3

FIGURE A-6 COPCO NO. 1 POWERHOUSE AND TAILRACE
Lower Klamath Project

Figure A-7
Overview Map of the Copco No. 2 Development
December, 2020

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Lower Klamath Project
Figure A-8
Copco Village

February, 2021

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CRITICAL ENERGY/ELECTRIC INFRASTRUCTURE INFORMATION
(CEII)
REDACTED
APPENDIX A: FIGURE A-9 COPCO NO.2 DIVERSION DAM
Lower Klamath Project

Figure A-10

Copco No. 2 Wood Stave Penstock and Conveyance Tunnels

February, 2021

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CRITICAL ENERGY/ELECTRIC INFRASTRUCTURE INFORMATION
(CEII)
REDACTED
APPENDIX A: FIGURE A-11 COPCO NO.2 POWERHOUSE PENSTOCK SURGE TANK
Notes
1. Coordinate System: NAD83 HARN StatePlane California I FIPS 0401 Feet
2. Background: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

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Lower Klamath Project
Figure A-12
Copco No. 2 Overflow Spillway
February, 2021

Legend
CONCRETE TO REMAIN
CRITICAL ENERGY/ELECTRIC INFRASTRUCTURE INFORMATION (CEII)

REDACTED

APPENDIX A: FIGURE A-13 COPCO NO.2 POWERHOUSE PENSTOCK

FIGURE A-14 COPCO NO.2 POWERHOUSE

FIGURE A-15 COPCO NO. 2 INTAKE STRUCTURE DISPOSAL SITE
Notes
1. Coordinate System: NAD83 HARN StatePlane California I FIPS 0401 Feet
2. Main Figure Imagery: GMA Hydrology; Inset Background: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

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CRITICAL ENERGY/ELECTRIC INFRASTRUCTURE INFORMATION
(CEII)
REDACTED
APPENDIX A: FIGURE A-17 IRON GATE DIVERSION TUNNEL AND GATE SHAFT

FIGURE A-18A IRON GATE DIVERSION TUNNEL INTAKE STRUCTURE

FIGURE A-18B IRON GATE DIVERSION TUNNEL INTAKE STRUCTURE
Notes
1. Coordinate System: NAD83 HARN StatePlane California IFIPS 0401 Feet
2. Data Sources: Main Drawing: Knight Piesold 100 Design

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. McMillen Jacobs Associates has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. McMillen Jacobs Associates assumes no responsibility for data

LEGEND:

EROSION PROTECTION (E7b)

Portion of Penstock to be Buried in Place
CRITICAL ENERGY/ELECTRIC INFRASTRUCTURE INFORMATION (CEII)

REDACTED

APPENDIX A: FIGURE A-20 IRON GATE POWERHOUSE AND TAILRACE
Notes
1. Coordinate System: NAD83 HARN StatePlane California I FIPS 0401 Feet
2. Data Sources: Main Drawing: Knight Piesold 100 Design

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. McMillen Jacobs Associates has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. McMillen Jacobs Associates assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.
Appendix B

Oregon Remaining Facilities and Operations Plan
Lower Klamath Project
FERC Project No. 14803

Oregon Remaining Facilities and Operations Plan

Klamath River Renewal Corporation
2001 Addison Street, Suite 317
Berkeley, CA 94704

Prepared by:
Camas LLC
680 G Street, Suite C
Jacksonville, OR 97530

December 2021
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  1.2 Relationship to Other Management Plans ................................................................. 1

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  2.1 Identification of Remaining Facilities .......................................................................... 1
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  2.2 Measures to Protect Water Quality Impacts ............................................................... 2
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- Figure A-2: Topsy Campground
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- Figure A-6: J.C. Boyle Power Canal Headgate Structure
- Figure A-7: J.C. Boyle Power Canal
- Figure A-8: J.C. Boyle Forebay
- Figure A-9a: J.C. Boyle Powerhouse Penstocks
- Figure A-9b: J.C. Boyle Powerhouse Penstocks
- Figure A-10: J.C. Boyle Powerhouse and Tailrace
1.0 Introduction

This Oregon Remaining Facilities and Operations Plan is a subplan of the Remaining Facilities Plan that will be implemented as part of the Proposed Action for the Lower Klamath Project.

1.1 Purpose of Management Plan

The purpose of the Oregon Remaining Facilities and Operations Plan is to identify the non-operational structures that will remain on-site following completion of the Proposed Action, identify potential water quality impacts associated with the presence of these structures, and state the measures the Renewal Corporation will implement to protect water quality from potential impacts associated with the presence of these structures.

1.2 Relationship to Other Management Plans

The Oregon Remaining Facilities and Operations Plan is supported by elements of the following management plans for effective implementation: Recreation Facilities Plan, Erosion and Sediment Control Plan, 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 Remaining Facilities and Operations Plan.

2.0 Potential Water Quality Impact and Proposed Measures

2.1 Identification of Remaining Facilities

For the purposes of this plan, remaining structures are defined as structures or features affiliated with the Lower Klamath Project within the Limits of Work. These facilities remaining may or may not be non-operational following completion of the Proposed Action based upon the direction by the State of Oregon, as the final landowner, requesting facilities to remain for the State’s future use. These structures may consist of buildings, utilities, portions of foundations, and other non-operational structural components associated with the dams. This plan discusses waste disposal sites only to the extent they overlap with remaining structures (e.g., powerhouse tailrace); all other future placement and management of material will be implemented in accordance with related management plans including the Waste Disposal and Hazardous Materials Management Plan.

2.1.1 Structures

The structures to remain on-site following completion of the Proposed Action at the J.C. Boyle Development are presented in Table 2.2. The table includes the following information pertaining to the structures to remain on-site: project structure name, type of material left on-site, and the permanent measures taken by the Renewal Corporation to reduce water quality impacts based
on the condition it was left in (buried, capped, graded, etc.). An overview map of the J.C. Boyle Development is included in Figure A-1.

2.1.2 Recreation Facilities

Topsy Campground (operated by the Bureau of Land Management) will remain within the J.C. Boyle Development. The day use and camping areas will be retained, while the water-based facilities including the boat ramp, dock, and fishing pier will be removed (Figure A-2). A detailed description of the Topsy Campground is included in the Recreation Facilities Plan.

2.2 Measures to Protect Water Quality Impacts

The Renewal Corporation evaluated the potential for erosion or sediment runoff to surface waters and identified the presence of hazardous materials associated with structures to remain on-site.

2.2.1 Erosion and Sediment Control Protection

Erosion and sediment control temporary best management practices (BMPs) installed during construction are presented in the site-specific Erosion and Sediment Control Plan required as part of the Oregon Department of Environmental Quality National Pollutant Discharge Elimination System Construction Stormwater General Permit No. 1200-C.

Following demolition and the final placement of material with remaining facilities (if applicable), permanent BMPs will be installed for final stabilization. Final stabilization consists of capping by placing native rock borrowed from within the limits of work as specified in the Definite Decommissioning Plan (Section 4.1.2) and in accordance with regulatory requirements. The Renewal Corporation may add a limited soil topping and may plant native vegetation, subject to consultation with the State of Oregon and the Bureau of Land Management.

As part of the permanent BMPs, drainage swales may be constructed. Swales will be lined with Type E8 Bedding Material and/or Type E7a Erosion Protection in areas where the slope is greater than 5% and will be unlined and hydroteased in areas where the slope is less than or equal to 5% (Knight Piésold and Kiewit 2020).

2.2.1.1 Fill Materials Definitions

Table 2.1 contains definitions of the material types used throughout the Project as fill and cap materials.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>DESCRIPTION</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>E2</td>
<td>Pipe Zone</td>
<td>Gravel and sand, particles ranging from 1.5 in. to the #200 Sieve (0.0030 in.), low to no fines content, sourced offsite.</td>
</tr>
<tr>
<td>TYPE</td>
<td>DESCRIPTION</td>
<td>DEFINITION</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>E4</td>
<td>Select Fill</td>
<td>Cobbles, Gravel, and Sand, particles ranging from 4 in. to the #200 Sieve (0.0030 in.), low to no fines content, sourced offsite.</td>
</tr>
<tr>
<td>E7</td>
<td>Erosion Protection</td>
<td>Boulders and Cobbles, particles ranging from +50 in. to 3 in., material subdivided into three classifications E7a/b/c, each with minimum D85, D50 and D15 values, sourced from existing erosion protection at the dam sites, or talus material from nearby borrow areas within limits of work.</td>
</tr>
<tr>
<td>E8</td>
<td>Bedding Material</td>
<td>Cobbles and Gravel, particles ranging from 12 in. to 1 in., low to no fines content, sourced from offsite.</td>
</tr>
<tr>
<td>E9</td>
<td>General Fill</td>
<td>Boulders, Cobbles, Gravel, Sand and Fines, particles ranging from 20 in. to silt and clay, up to 30% fines content, sourced from on-site excavations or nearby borrow areas within limits of work.</td>
</tr>
<tr>
<td>E10</td>
<td>Random Fill</td>
<td>Overburden, Rocks or Organics, no gradation requirements, sourced from on-site excavations.</td>
</tr>
<tr>
<td>CR1</td>
<td>Concrete Rubble</td>
<td>Particles ranging from 36 in. to the #200 Sieve (0.0030 in.), with up to 30% fines content, steel reinforcement to remain concrete, sourced from demolition of on-site concrete structures.</td>
</tr>
</tbody>
</table>

**Notes:**
- The proposed offsite source is the Knife River Corporation.
- Definitions provided by Knight Piésold (C. Vos), December 4, 2020.

**2.2.2 Hazardous Material Survey**

In April 2019, a Hazardous Material Building Survey (HMBS) was conducted for the J.C. Boyle Development (AECOM 2019). Another survey was conducted in October 2020 (Entek 2020) to supplement and confirm the April 2019 HMBS and is included in the Waste Disposal and Hazardous Materials Management Plan.

Hazardous materials, including but not limited to asbestos, lead-based paint, fuel, lubricating oil, and batteries, identified as part of these evaluations will be removed by the Renewal Corporation from structures that will remain on-site, unless otherwise directed by the State of Oregon as the final landowner. Non-friable asbestos is not considered a hazardous waste and if it is attached to a structure that will be entombed, it will be buried in place. Non-hazardous and hazardous materials will be disposed of by the Renewal Corporation in accordance with the Waste Disposal and Hazardous Materials Management Plan, following the abatement specifications as presented by Entek (2020).
### Table 2.2. J.C. Boyle Remaining Structures

<table>
<thead>
<tr>
<th>PROJECT STRUCTURE</th>
<th>MATERIAL TO REMAIN</th>
<th>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</th>
<th>FIGURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Topsy Campground</td>
<td>• Day Use and Camping areas (BLM)</td>
<td>These structures will not be disturbed as part of the Proposed Action. They will remain in their current use, maintained and operated by the Bureau of Land Management, and therefore do not require permanent measures. Water-dependent structures (boat ramp, floating dock, fishing pier) will be removed and disturbed land will undergo final stabilization as described in Section 2.2.1 of this plan.</td>
<td>Figure A-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative and Residential Structures</td>
<td>• Maintenance shed</td>
<td>The removal of these structures and associated asphalt surfaces is subject to consultation with the State of Oregon as the successor landowner. If not removed, these structures will be transferred to the State of Oregon for active usage and maintenance. If removed, portions of the foundations and decommissioned buried utilities will be left in place and the surrounding ground will be graded to cover remaining foundations and promote down-slope drainage, as specified in the Definite Decommissioning Plan (Section 3.1.1.3). The Renewal Corporation may add a limited soil topping and may plant native vegetation, subject to consultation with the State of Oregon.</td>
<td>Figure A-3</td>
</tr>
<tr>
<td>PROJECT STRUCTURE</td>
<td>MATERIAL TO REMAIN</td>
<td>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</td>
<td>FIGURES</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------</td>
<td>--------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>Dam Spillway and Intake Structure</strong></td>
<td>• Dam spillway and intake&lt;br&gt;• Concrete and embedded steel below El. 3,785.2 ft</td>
<td>All concrete and embedded steel below El. 3785.2 ft will be buried using Type E9 General Fill and E10 Random Fill. The surrounding area will be graded at 3.5H:1V toward the river to the northeast and to 4H:1V toward the river to the northwest. Type II and Type II drainage swales will be used at the top of the slope and mid-slope to divert drainage off the graded slope. Drainage swales will have energy dissipaters on the ends to prevent erosion, and all disturbed areas will undergo final stabilization as described in Section 2.2.1 of this plan.</td>
<td>Figure A-4</td>
</tr>
<tr>
<td><strong>Timber Bridge</strong></td>
<td>• Timber bridge&lt;br&gt;• Steel sheet piles</td>
<td>The timber bridge will be removed, and the sheet piles in the abutments will be cut to a minimum of 2 ft below grade and covered with local fill.</td>
<td>Figure A-5</td>
</tr>
<tr>
<td><strong>Power Canal Headgate Structure</strong></td>
<td>• Power canal headgate&lt;br&gt;• Concrete and embedded steel below El. 3,772 ft</td>
<td>All concrete and embedded steel as well as the siphon pipe below El. 3,772 ft will be buried by at least 2 ft using Type E9 General Fill. The drainage ditch below the spillway siphon leading to the Klamath River will be filled with Type E9 General Fill, and the hillslope below the headgate will be graded to 3H:1V and will undergo final stabilization as described in Section 2.2.1 of this plan.</td>
<td>Figure A-6</td>
</tr>
<tr>
<td>PROJECT STRUCTURE</td>
<td>MATERIAL TO REMAIN</td>
<td>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</td>
<td>FIGURES</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
<td>--------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Power Canal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Power canal</td>
<td>- Concrete canal walls and floor</td>
<td>Free-standing concrete walls on the uphill side of the power canal will be laid down and covered with a minimum of 2 ft of Type E9 General Fill as specified in the Definite Decommissioning Plan (Section 3.1.1.2). The Renewal Corporation may add a limited soil topping and may plant native vegetation, subject to consultation with the U.S. Bureau of Land Management as the federal land manager. The free-standing concrete walls on the downhill side will be removed. Shotcrete concrete walls will be left in place. Small (1.5 ft diameter) and large (3 ft diameter) culverts will be placed at topographic low points for drainage, with energy dissipators on the downhill (outlet) end of each culvert. Energy dissipators will be made of Type E8 Bedding Material for small culverts and Type E7a Erosion Protection for large culverts. The canal area will be graded to a 2% slope and will undergo final stabilization as described in Section 2.2.1 of this plan.</td>
<td>Figure A-7</td>
</tr>
<tr>
<td>Forebay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Forebay</td>
<td>- Concrete and embedded steel below El. 3,777 ft</td>
<td>All concrete and attached steel below El. 3,777 ft will be buried with at least 3 ft of Type E9 General Fill, which will block the tunnel entrance on the inlet (forebay) side. The area will be graded to create a final surface that will drain away from the upstream power canal area and downstream powerhouse tunnel to the forebay spillway, to direct surface drainage to the backfilled spillway scour hole (see Oregon Waste Disposal and Management Plan for scour hole details). All graded areas will undergo final stabilization as described in Section 2.2.1 of this plan.</td>
<td>Figure A-8</td>
</tr>
<tr>
<td>PROJECT STRUCTURE</td>
<td>MATERIAL TO REMAIN</td>
<td>PERMANENT MEASURES TO REDUCE WATER QUALITY IMPACTS</td>
<td>FIGURES</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------</td>
<td>-----------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Powerhouse Penstocks</strong></td>
<td>• Powerhouse penstocks</td>
<td>• Concrete footings of the penstocks below the penstock spring line</td>
<td>The outlet of the tunnel leading to the powerhouse penstocks will be blocked with Type CR1 Concrete Rubble and capped with Type E9 General Fill. All concrete below the penstock spring line will be buried using local fill material to meet the Type E4 Select Fill material specifications. Each footing area will be graded to the natural slope and will undergo final stabilization as described in Section 2.2.1 of this plan. The Renewal Corporation may decommission and restore the powerhouse penstock access roads subject to consultation with the U.S. Bureau of Land Management as the federal land manager.</td>
</tr>
</tbody>
</table>
|                    |                    |                                              | Figure A-9a  
|                    |                    |                                              | Figure A-9b |
| **Powerhouse and Tailrace** | • Powerhouse • Tailrace | • Powerhouse concrete, embedded steel, and attached steel (conduit, trays, etc.) below El. 3,340 ft  
• Concrete of lowest penstock anchor below El. 3,450 ft  
• Penstock access roads  
• Asphalt road surface | All concrete below El. 3,340 ft will be left in place, filled to the extent possible with Type E9 General Fill and covered with a minimum of 2 ft of Type E9/E9b General Fill. Disturbed areas will be graded with a 0.5% slope toward the Klamath River and will undergo final stabilization as described in Section 2.2.1 of this plan and as specified in the Definite Decommissioning Plan (Section 3.1.2.3). The Renewal Corporation may plant vegetation in the filled tailrace area and adjacent areas, subject to consultation with the U.S. Bureau of Land Management as the federal land manager. Existing access road swales will be inspected and rehabilitated to convey runoff to the existing culverts. |
|                    |                    |                                              | Figure A-10 |

Source: Knight Piésold and Kiewit 2020
3.0 Reporting

By April 1 and April 15 of each year, the Renewal Corporation will prepare and submit to the Oregon Department of Water Quality and the Federal Energy Regulatory Commission, respectively, an Annual Compliance Report which will include information pertaining to implementation of the Oregon Remaining Facilities and Operations Plan.

4.0 References


Appendix A

Figures
Lower Klamath Project
Figure A-1:
Overview Map of the J.C. Boyle Development
November, 2021

Notes
1. Coordinate System: NAD83 HARN StatePlane California I FIPS 0401 Feet
2. Background: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. McMillen Jacobs Associates has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. McMillen Jacobs Associates assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.
Lower Klamath Project

Figure A-2:
Topsy Campground
November 2021

Legend

- Features to be Removed
- Topsy Campground (to be Retained)

Notes
2. Data Sources: Topsy Campground: 100 Design Drawings
   - Main Map Imagery: GMA Hydrology Inc.; Inset Background: USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed August, 2021.

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Figure A-3:
J.C. Boyle Administrative and Residential Structures

November 2021

Legend

Asphalt to Remain

Notes
2. Data Sources: Main Drawing: Knight Piesold 100 Design
3. Main Map Imagery: GMA Hydrology Inc.; Inset Background: USGS The National Map; National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, National Transportation Dataset, USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USGS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed August, 2021.
CRITICAL ENERGY/ELECTRIC INFRASTRUCTURE INFORMATION

(CEII)

REDACTED

APPENDIX A: FIGURE A-4 J.C. BOYLE DAM SPILLWAY AND INTAKE STRUCTURE
J.C. Boyle Timber Bridge

Figure A-5:
November 2021

PRELIMINARY DESIGN
(NOT FOR CONSTRUCTION)

Legend

- J.C. Boyle Timber Bridge

Notes
2. Main Map Imagery: GMA Hydrology Inc.; Inset Background: USGS The National Map; National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed August, 2021.
CRITICAL ENERGY/ELECTRIC INFRASTRUCTURE INFORMATION
(CEII)
REDACTED
APPENDIX A: FIGURE A-6: J.C. BOYLE POWER CANAL HEADGATE STRUCTURE
FIGURE A-7: J.C. BOYLE POWER CANAL
FIGURE A-8: J.C. BOYLE FOREBAY
FIGURE A-9A: J.C. BOYLE POWERHOUSE PENSTOCKS
FIGURE A-9B: J.C. BOYLE POWERHOUSE PENSTOCKS
FIGURE A-10: J.C. BOYLE POWERHOUSE AND TAILRACE
Appendix C

Consultation Record
## Consultation Record

### Remaining Facilities Plan

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