



Klamath River Renewal Project

Draft Klamath River Recreation Facilities Plan

September 2019



Prepared for:

Klamath River Renewal Corporation

Prepared by:

KRRC Technical Representatives:

AECOM Technical Services, Inc.
300 Lakeside Drive, Suite 400
Oakland, California 94612

Anne Ferguson
Jordan Sector
Chris Hargreaves
Dick Rol
Alex Remar

CDM Smith
2295 Gateway Oaks Drive, Suite 250
Sacramento, California 95833

Chris Park
Terichael Office

Table of Contents

1. Introduction.....	10
1.1 Background.....	10
1.2 Recreation Facilities Plan Goal and Objectives	11
1.3 Relationship to Other Plans	12
1.4 Recreation Facilities Plan Organization.....	13
2. Existing Conditions.....	15
2.1 Klamath River Area.....	15
2.2 Lower Klamath Project	17
2.3 Keno Development.....	18
2.4 J.C. Boyle Development.....	20
2.4.1 J.C. Boyle Reservoir	20
2.4.2 J.C. Boyle Bypass Reach	21
2.4.3 Hell’s Corner Reach.....	24
2.5 Copco No. 1 and No. 2 Development.....	26
2.5.1 Copco Lake	26
2.5.2 Copco No. 2 Reservoir.....	28
2.5.3 Copco No. 2 Bypass Reach.....	28
2.6 Iron Gate Development	29
2.6.1 Iron Gate Reservoir	29
3. Project Description and Anticipated River Conditions	33
3.1 Project Description	33
3.2 Anticipated River Conditions.....	33
3.2.1 Keno Development.....	34
3.2.2 J.C. Boyle Development.....	36
3.2.3 Copco No. 1 and No. 2 Development.....	38
3.2.4 Iron Gate Development.....	38
4. Approach to Existing Recreation Facilities	41
4.1 Proposed Recreation Site Removal or Modification within the FERC Project Boundary.....	41
4.2 Anticipated Recreation Site Disposition Outside the FERC Project Boundary.....	45
5. Recreation User Safety During Deconstruction	49

5.1	Visitor Safety Measures During Deconstruction Activities	49
5.2	Communication Protocols	49
5.3	Recreational Access During Deconstruction	50
6.	Planning Direction for Potential River Recreation Sites	52
7.	Recreation Site Modifications, New Sites and Amenities, and Other Ideas: Identification and Screening	55
7.1	Identification of Potential Recreation Site Modifications, New Sites and Amenities, and Other Ideas.....	55
7.2	Screening and Evaluation Process	56
7.3	Evaluation Results	57
8.	Potential Modified and New Recreation Sites	66
8.1	Design Principles	67
8.2	Design Program Objectives	69
8.3	Pioneer Park West River Access Site.....	69
8.3.1	Setting.....	69
8.3.2	Description.....	70
8.3.3	Conceptual Design	73
8.4	Moonshine Falls River Access Site	74
8.4.1	Setting.....	74
8.4.2	Description.....	74
8.4.3	Conceptual Design	78
8.5	Copco Valley River Access Site	79
8.5.1	Setting.....	79
8.5.2	Description.....	79
8.5.3	Conceptual Design	83
8.6	Copco No. 2 Powerhouse River Access Site	84
8.6.1	Setting.....	84
8.6.2	Description.....	84
8.6.3	Conceptual Design	88
8.7	Camp Creek River Access Site	89
8.7.1	Setting.....	89
8.7.2	Description.....	89
8.7.3	Conceptual Design	92
8.8	Iron Gate River Access Site	93

8.8.1	Setting.....	93
8.8.2	Description.....	93
8.8.3	Conceptual Design	96
9.	References	98
	Appendix A – Recreation Modification Idea Identification	100
A.1	Summary of Identified Recreation Site Modifications, New Sites and Amenities, and Other Ideas.....	100
A.2	Identification of Recreation Site Modifications, New Sites and Amenities, and Other Ideas	105
A.2.1	2011 Detailed Plan	105
A.2.2	KRRC Stakeholder Outreach.....	106
A.3	Identified Recreation Opportunities	110
A.3.1	Retention and/or Modifications to Existing Public Recreation Sites.....	110
A.3.2	New Sites and Amenities.....	113
A.3.3	Modifications to Existing Private Recreation Sites	120
	Appendix B – Preliminary Screening of Recreation Site Modifications, New Sites and Amenities, and Other Ideas in the Draft Recreation Plan.....	123
B.1	Whitewater Boating Put-in/Take-out Access Sites	123
B.2	Fishing Access Sites	124
B.3	Other Recreation Sites	125
B.4	Concerns Related to Future Recreation Development	125
	Appendix C – Non-Project River Recreation Sites	127
C.1	Keno	127
C.1.1	Setting	127
C.1.2	Description	127
C.1.3	Conceptual Design	129
C.2	Turtle Camp.....	130
C.2.1	Setting	130
C.2.2	Description	130
C.2.3	Conceptual Design	132

List of Tables

Table 2-1:	Estimated Recreation Use and Cost from 2015 PacifiCorp Form 80s	17
Table 2-2:	Estimated Capacity Utilization from 2015 PacifiCorp Form 80s	18
Table 2-3:	J.C. Boyle Reservoir Developed Public Recreation Sites	20
Table 2-4:	Hell’s Corner Reach Developed Public Recreation Sites	24
Table 2-5:	Copco Lake Developed Public Recreation Sites	27
Table 2-6:	Iron Gate Reservoir Developed Public Recreation Sites	29
Table 4-1:	Proposed Removal or Modification of Existing Recreation Sites within the FERC Project Boundary	42
Table 4-2:	Anticipated Disposition of Existing Recreation Sites outside the FERC Project Boundary	46
Table 7-1:	Summary of Potential Modified and New Recreation Sites and Amenities	58
Table 7-2:	Put-in and Take-out Locations for Whitewater Boating Runs on the Klamath River within the Project Area	62

List of Figures

Figure 2-1:	Project Area within Greater California and Washington	16
Figure 2-2:	View of Keno Reach Downstream of Keno Dam	19
Figure 2-3:	Looking Downstream at the J.C. Boyle Bypass Reach from the Power Tunnel Crossing	22
Figure 2-4:	View of J.C. Boyle Bypass Reach, Klamath River Canyon and Power Canal	22
Figure 2-5:	Existing Recreation Sites	23
Figure 2-6:	Looking downstream from Turtle Camp	26
Figure 2-7:	View of Copco Lake	27
Figure 2-8:	View of upstream end of Copco No. 2 Bypass Reach/Ward’s Canyon	28
Figure 2-9:	View of Iron Gate Reservoir	31
Figure 3-1:	Anticipated Whitewater Boating Runs between Keno Dam and Iron Gate Hatchery	35
Figure 4-1:	Recreation Sites Anticipated to be Removed, Modified, or Retained	47
Figure 7-1:	Potential Modified and New Recreation Sites	63
Figure 7-2:	Anticipated Whitewater Boating Runs with Potential Modified and New Recreation Sites	64
Figure 8-1:	Potential Pioneer Park West River Access Site	71
Figure 8-2:	Pioneer Park West River Access Site Conceptual Design	73
Figure 8-3:	Potential Moonshine Falls River Access Site	75
Figure 8-4:	Potential Moonshine Falls River Access Site – Existing Conditions at Timber Bridge	77
Figure 8-5:	Moonshine Falls River Access Site Conceptual Design	78
Figure 8-6:	Potential Copco Valley River Access Site	80
Figure 8-7:	Copco Valley River Access Site Conceptual Design	83
Figure 8-8:	Potential Copco No. 2 Powerhouse River Access Site	85
Figure 8-9:	Copco No. 2 Powerhouse River Access Site Conceptual Design	88
Figure 8-10:	Potential Camp Creek River Access Site	90
Figure 8-11:	Camp Creek River Access Site Conceptual Design	92
Figure 8-12:	Existing Iron Gate Hatchery Day Use Area and Boat Ramp, and Potential Iron Gate River Access Site	94
Figure 8-13:	Iron Gate River Access Site Conceptual Design	96

Acronyms and Abbreviations

ADA	Americans with Disabilities Act
ATV	all-terrain vehicle
BLM	Bureau of Land Management
CDFW	California Department of Fish and Wildlife
cfs	cubic feet per second
FERC	Federal Energy Regulatory Commission
KHSA	Klamath Hydroelectric Settlement Agreement
KRRC	Klamath River Renewal Corporation
NEPA	National Environmental Policy Act
OHV	off-highway vehicle
RV	recreational vehicle



Chapter 1: Introduction

1. INTRODUCTION

The Klamath River Renewal Corporation (KRRRC) developed this Recreation Facilities Plan to: 1) provide information on the existing recreation sites within the Lower Klamath Project (herein referred to as the Project); 2) describe the disposition approach to these recreation sites as part of the license surrender for the Project; 3) describe measures to assure recreation user safety during dam removal; and 4) identify potential facilities and amenities for river-based recreation post-dam removal, to be implemented by the States of Oregon and California or other successor owners of Parcel B lands after license surrender is effective.

1.1 Background

The KRRRC developed a Draft Recreation Plan that was submitted to the Federal Energy Regulatory Commission (FERC) in June 2018 as an appendix to the *Definite Plan for the Lower Klamath Project*¹. The Draft Recreation Plan addressed anticipated impacts to recreation at a programmatic level. Since release of the Definite Plan, the development of the Recreation Facilities Plan has focused on identifying and designing potential river-related recreation sites and amenities.

Stakeholders provided extensive input during plan development, including tribal nations, state and federal agencies, local agencies, chambers of commerce, residents, and public interest groups. The potential recreation sites and amenities included in this Recreation Facilities Plan were culled from a larger list of stakeholder suggestions. These potential recreation sites and amenities could be integrated into planned river restoration activities, facilitate anticipated recreation uses post dam removal, protect cultural and natural resources, and contribute to the local economy.

This Recreation Facilities Plan addresses the changes to the recreation setting; how restoration may influence the setting, site placement, and resulting recreation opportunities and experiences; and what measures could be taken to provide a recreation setting that supports desired future recreation opportunities. The design and location of the potential recreation sites in the Recreation Facilities Plan incorporate feedback and minimize environmental, cultural, and economic concerns related to site placement, recreation use, as well as future recreation opportunities and experiences.

The Recreation Facilities Plan relates to KRRRC's application for license surrender pursuant to the Amended Klamath Hydroelectric Settlement Agreement (KHSA). KRRRC is seeking FERC's approval to remove four dams in the Lower Klamath Project in order to restore free-flowing conditions in the Project reaches. FERC will approve license surrender if it determines that dam removal as proposed is in the public interest. KRRRC will comply with all conditions of license surrender, including those related to recreation facilities.

¹ Definite Plan for the Lower Klamath Project, Appendix Q – Draft Recreation Plan is available at <http://www.klamathrenewal.org/wp-content/uploads/2018/06/LKP-FERC-Definite-Plan-App-P-through-Q.pdf>,

FERC’s jurisdiction in this context is limited to addressing the direct impacts of dam removal, and this would include impacts to recreation facilities within the FERC Project Boundary. As a general matter, KRRC does not propose to construct new facilities as a condition of any license surrender. Under the terms of the KHSA, KRRC will transfer fee title to Project lands (known as “Parcel B” lands) to the States of Oregon and California, as successor owners. Thus, any recreation facilities that remain on Parcel B lands, after license surrender is effective, will be developed, owned, and operated by the states or their designated successors. As of this date, KRRC is undertaking discussions with the states regarding their interest in the development, operation, and maintenance of such recreation facilities. Any recreation facilities outside of the FERC Project Boundary would be outside of FERC’s purview under the license surrender and therefore any new recreation facilities outside the FERC Project Boundary would be provided at the discretion and expense of the underlying landowners.

1.2 Recreation Facilities Plan Goal and Objectives

The goal of the Recreation Facilities Plan is to address recreational impacts of dam removal as proposed in KRRC’s license surrender application, as required by FERC’s public interest determination.

The objectives of this Recreation Facilities Plan are to:

1. Provide for modification or removal of existing recreation facilities that PacifiCorp operates at Project reservoirs pursuant to the existing Project license;
2. Assure recreation user safety during dam removal; and
3. Identify potential facilities and amenities for river-based recreation that could be implemented by the States of Oregon and California or other successor owners of Parcel B lands after license surrender is effective.

The feasibility of potential recreation sites and associated amenities related to objective #3 has been determined by reviewing site topography, safety issues associated with potential recreation activities, cultural resources, environmental resources, and maintenance requirements. The long-term feasibility of recreation sites has also been taken into account, specifically underlying land ownership and funding and maintenance issues, to the extent feasible at this point in the Project. As described in Section 1.1, potential recreation site locations have been limited to areas within the FERC Project Boundary on PacifiCorp Parcel B lands.

Though potential recreation sites and amenities cannot and are not intended to replace the existing recreation sites and experiences currently available at the reservoirs, they could help enhance whitewater boating opportunities after license surrender. Therefore, the focus of this Recreation Facilities Plan is to identify recreation sites and amenities that facilitate whitewater boating on the river, while concurrently providing fishing access and river-related day use opportunities that other entities could pursue to leverage new river conditions post dam removal.

Dam removal would provide an array of opportunities to enhance recreation throughout the Project area, such as access to the newly connected Klamath River for fishing, day use, and water-based recreation. However, this Recreation Facilities Plan focuses on Project impacts and not general enhancement of recreation within the Project area as the Project is decommissioning of facilities. Therefore, this Recreation Facilities Plan does not address camping, trails, interpretation themes/facilities, or extensive new day use opportunities. The Recreation Facilities Plan does not preclude such additional enhancements to recreation within the Upper Klamath River area, but the KRRC itself will not develop or modify sites beyond the requirements of the FERC license surrender.

The Project includes lands that will be transferred to the States of Oregon and California, respectively, after license surrender is effective. Some of these lands may also be transferred to counties or private entities at the direction of the States. Because future landowners and managing entities for potential recreation sites have not been finalized prior to completion of this Recreation Facilities Plan, this plan does not address the management of potential recreation sites or recreation within the broader Upper Klamath River, but rather the program and site amenity requirements for each potential recreation site discussed in Section 8, and how these sites have been configured to complement each other and the broader recreation experience within the Upper Klamath River area.

Under Section 7.6 of the Amended KHSA, following decommissioning of the four lower dams on the Klamath River, PacifiCorp will retain ownership of Parcel A lands. It is unknown if the existing recreation sites (Stateline Take-out and Fishing Access Sites 1 through 6) on Parcel A lands will continue to be managed by PacifiCorp as public recreation sites. This Recreation Facilities Plan does not propose any changes to the existing recreation sites on Parcel A lands.

KRRC anticipates that FERC will use this Recreation Facilities Plan as part of their National Environmental Policy Act (NEPA) review and in preparation for a Surrender Order to decommission the Lower Klamath Project.

1.3 Relationship to Other Plans

This Recreation Facilities Plan will continue to be coordinated with other Project plans as they are developed and/or revised including plans related to cultural resources (vandalism and looting, historic properties, etc.), reservoir drawdown, restoration, public safety, and traffic management. KRRC will update its license surrender application after FERC notices the proceeding. This update will include the Definite Plan and its appendices, such as the Recreation Facilities Plan, as well as others.

Both the Final Clean Water Act Section 401 Certification for the Lower Klamath Project in Oregon and the Draft Water Quality Certification for the Lower Klamath Project in California call for a Remaining Facilities Plan and the Draft Water Quality Certification for the Lower Klamath Project in California also calls for a Recreation Facilities Plan. This Recreation Facilities Plan is not intended to meet the requirements of the Remaining Facilities Plan and does not include all of the elements necessary to meet the requirements of the Recreation Facilities Plan described in the Draft Water Quality Certification for the Lower Klamath Project

in California, such as an analysis of potential water quality impacts associated with remaining facilities or a description of all Project facilities and structures that will not be removed including facilities buried in place.

1.4 Recreation Facilities Plan Organization

This Recreation Facilities Plan is organized into the following sections:

- **Section 1 Introduction:** Includes plan goals and objectives.
- **Section 2 Existing Conditions:** Describes the greater Klamath River area, existing public recreation sites, as well as opportunities and settings for both reservoir- and river-related recreation within the Project area.
- **Section 3 Project Description and Anticipated River Conditions:** Summarizes the Project and describes the anticipated river conditions post dam removal.
- **Section 4 Approach to Existing Recreation Facilities:** Summarizes the proposed disposition of existing recreation sites within the FERC Project Boundary as part of license surrender for the Project, as well as the anticipated disposition of recreation sites outside of the FERC Project Boundary.
- **Section 5 Recreation User Safety During Deconstruction:** Provides information on how visitor safety will be protected during deconstruction, communications protocols, and where recreation will be allowed during deconstruction.
- **Section 6 Planning Direction for Potential River Recreation Sites:** Outlines guiding principles used in evaluating river-related recreation sites and amenities within the Project area.
- **Section 7 Recreation Site Modifications, New Sites and Amenities, and Other Ideas: Identification and Screening:** Describes the process used to identify potential recreation modifications, as well as the screening and evaluation process used to refine site modifications, new sites and amenities, and other ideas.
- **Section 8 Potential Modified and New Recreation Sites:** Provides an in-depth description of potential recreation sites, including a discussion of individual recreation site locations and existing conditions, and a conceptual design for each potential site.
- **Section 9 References:** Citations for references used throughout the plan.
- **Appendix A Recreation Modification Idea Identification:** Describes the entire suite of recreation modification ideas taken from the 2011 Detailed Plan and stakeholder recommendations.
- **Appendix B Preliminary Screening of Recreation Site Modifications, New Sites and Amenities, and Other Ideas in the Draft Recreation Plan:** Describes the initial screening of recreation modification ideas presented in the Draft Recreation Plan.
- **Appendix C Non-Project River Recreation Sites:** Provides conceptual design and information for two key river recreation sites that would be located outside the FERC Project Boundary and therefore would not be implemented by the KRRC.



Chapter 2: Existing Conditions

2. EXISTING CONDITIONS

The following sections describe the general Klamath River region, existing recreation resources between J.C. Boyle Reservoir and Iron Gate Dam that the Project would impact, as well as existing recreation resources between J.C. Boyle Reservoir and Keno Dam. While the recreation resources between J.C. Boyle Reservoir and Keno Dam are not directly affected by the Project, stakeholders identified potential locations for access sites in this area. The description of recreation resources is organized by hydropower development (Keno, J.C. Boyle, Copco No. 1 and No. 2, and Iron Gate) and includes a description of the existing public recreation sites, opportunities, and settings for both reservoir- and river-related recreation. Figure 2-1 presents a map of the existing recreation sites between Keno Dam and Iron Gate Dam.

2.1 Klamath River Area

The Klamath River runs from southern Oregon through northern California and out to the Pacific Ocean at the town of Klamath. The Project area portion of the Klamath River is located around the Oregon/California border. The northern portion of the Project (in Oregon) is located near the town of Keno along Highway 66 (J.C. Boyle Reservoir) and runs south to the California border. The southern portion of the Project (in California) is located from the state line to Iron Gate Dam.

The setting of the Klamath River draws residents and non-local visitors to the Project area to experience the remote character and valued scenery within the Klamath River Basin. Though there is no immediate large resident population within the Project area, the Project area is readily accessible and near a large population in southern Oregon and about a half-day drive from Sacramento, California. The Upper Klamath River recreation area is located about 60 miles from the local population centers of Ashland within the Rogue Valley in Oregon and Yreka, California off the Interstate 5 corridor. The northern section of the Project area is located within 35 miles of the City of Klamath Falls and within 80 miles of Ashland, Oregon. The middle portion of the Project is difficult to access by land due to unimproved roads, and remote location within the Hell's Canyon reach of the Klamath River.

Currently, the Klamath River within the Project area is a source of water for agriculture users upstream of Keno Dam and is very popular for recreation throughout the watershed. With its rugged setting and difficult rapids, the river within the Project area is used extensively by private kayakers, river rafters and commercial whitewater boating companies. Fishing is also popular in many forms along the river; including drift boat fishing, fly fishing, bank fishing, etc.

The Klamath River is very important for anadromous fish migration, which was a major food source for Native Americans who have lived in the Klamath River Basin for thousands of years. The Klamath River Canyon, particularly from Spencer Creek downstream, was a major center for settlement, salmon procurement, and trade for the Klamath and Modoc Indians. The entire river corridor is identified as a “riverscape”—a type of cultural or ethnographic landscape—because of the relationship between the Klamath Tribes, Shasta, Karuk, Hoopa, and Yurok and the river and its resources. The riverscape includes village, hunting, gathering, fishing, and spiritual locations on terraces and benches along the river, as well as the river itself and its natural resources. Several ceremonies along the river were, and continue to be, conducted to honor earth and creator and to insure harvest of fish and are attended by more than one Tribe.

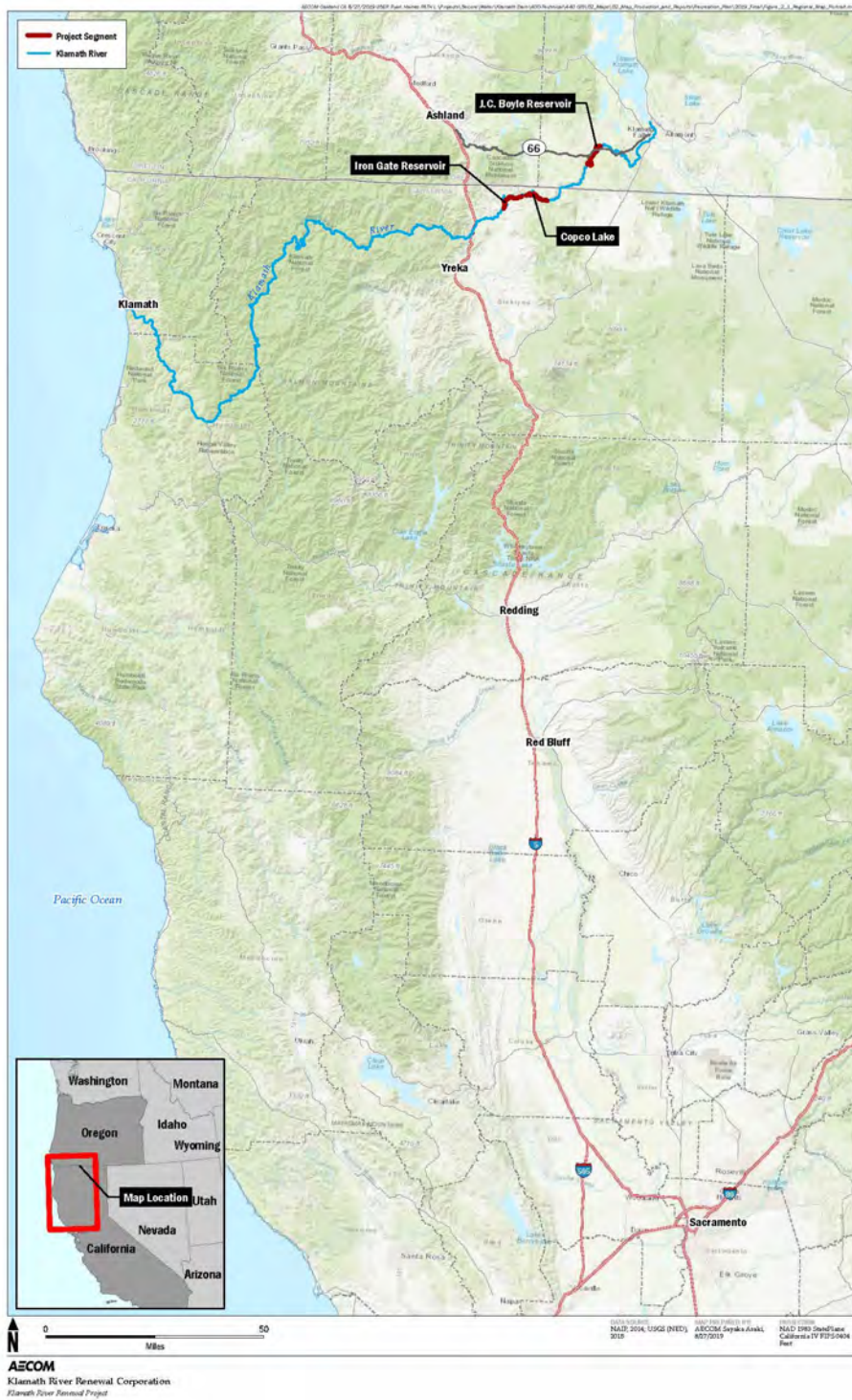


Figure 2-1: Project Area within Greater California and Washington

EuroAmerican settlement in the Klamath River watershed increased in the late 1800s when mining and logging attracted settlers to the area. Hydroelectric development began in 1891 in the Klamath Basin. Hydropower supported the increasing power needs of irrigation and lumber mills and an influx of military personnel stationed at Medford and Klamath Falls. The historic sites within the Project area are generally related to hydropower and agricultural development (DOI and DFG 2012).

2.2 Lower Klamath Project

Under the license for the Lower Klamath Project, PacifiCorp operates recreation facilities in the Lower Klamath Project. Other agencies, including the Bureau of Land Management (BLM), also operate facilities in the vicinity, under their own authorities. These facilities are described in the following subsections of Section 2. The 2015 FERC Form 80s for the Klamath Project provide the most recent data by hydropower development on recreation use levels, operations and maintenance costs, as well as the current utilization of recreation sites as both the number of days of visitor use and a percentage of site capacity utilized by visitors. This information is summarized in the following two tables. FERC Form 80s are submitted by the licensee (PacifiCorp) to FERC to provide recreation data for the hydroelectric project. The data is from a combination of staff observations, estimates, and visitor counts (PacifiCorp 2015a-e).

Table 2-1: Estimated Recreation Use and Cost from 2015 PacifiCorp Form 80s

Hydro Development	Recreation Days ¹ – Annual Total		Recreation Days - Peak Weekend Average ²		Operations and Maintenance Cost ³
	Daytime	Nighttime	Daytime	Nighttime	
Keno	7,200	1,700	500	200	\$30,000
J.C. Boyle	15,500	1,700	800	90	\$15,000
Copco 1	3,300	0	300	0	\$10,000
Copco 2	450	0	130	0	\$0 ⁴
Iron Gate	8,300	3,600	1,300	600	\$60,000

Notes

- 1 A Recreation Day is each visit by a person to a development (i.e., the portion of a project which includes: (a) a reservoir; or (b) a generating station and its specifically-related waterways) for recreational purposes during any portion of a 24-hour period.
- 2 Peak Use Weekends are weekends when recreational use is at its peak for the season (typically Memorial Day, July 4th and Labor Day). On these weekends, recreational use may exceed the capacity of the area to handle such use. Use for all three days in the holiday weekends are included in calculations for Peak Weekend Average.
- 3 This is listed as the Licensee’s Construction, Operation and Maintenance Costs in the Form 80; however, since the recreation facilities already exist, this is listed as only operations and maintenance cost in this table.
- 4 There is no operations and maintenance cost as there are no recreation facilities in this hydro development.

Sources: PacifiCorp 2015a-e

Table 2-2: Estimated Capacity Utilization from 2015 PacifiCorp Form 80s

Facility	Capacity Utilization by Hydro Development				
	Keno	J.C. Boyle	Copco 1	Copco 2	Iron Gate
Access Points ¹		55%	10%	5%	15%
Boat Launch Areas ²	30%	50%	15%		25%
Campsites ³	17%	40%			20%
Dispersed Camping Areas ⁴					15%
Fishing Platform ⁵					5%
Picnic Areas ⁶	17%	65%			15%
Visitor Center ⁷					20%
Whitewater Boating Put-in/ Take-Out ⁸		50%			

Notes

- 1 Defined on FERC Form 80 as well-used sites (not accounted for elsewhere on the form) for visitors entering project lands or waters, without trespassing, for recreational purposes (may have limited development such as parking, restrooms, signage).
- 2 Defined on FERC Form 80 as improved areas having one or more boat launch lanes and are usually marked with signs, have hardened surfaces, and typically have adjacent parking.
- 3 Defined on FERC Form 80 sites as for tents, trailers, recreational vehicles [RVs], yurts, cabins, or a combination of temporary uses.
- 4 Defined on FERC Form 80 as places visitors are allowed to camp outside of a developed campground.
- 5 Defined on FERC Form 80 as platforms, walkways, or similar structures to facilitate fishing in the reservoir pool or feeder streams.
- 6 Defined on FERC Form 80 as locations containing one or more picnic sites (each of which may include tables, grills, trash cans, and parking).
- 7 Defined on FERC Form 80 as buildings where the public can gather information about the development/project, its operation, nearby historic, natural, cultural, recreational resources, and other items of interest.
- 8 Defined on FERC Form 80 as put-ins/take-outs specifically designated for whitewater access.

Sources: PacifiCorp 2015a-e

2.3 Keno Development

The Keno Development, including Keno Camp, is not part of the Lower Klamath Project; the following text is provided for informational purposes only.

Keno Camp, located adjacent to Keno Dam, is a public recreation site owned and operated by PacifiCorp. The site is open seasonally from mid-May through early-October. Developed amenities at Keno Camp include 26 campsites, picnic areas, a boat ramp and dock, restrooms, showers, a recreational vehicle (RV) dump station, and interpretive kiosk. Activities enjoyed by visitors include: camping, RV camping, picnicking, bank and lake fishing, boating (motorized and paddle craft), swimming, and sightseeing.

The Keno Development's setting consists of scrub pine and grassland plant communities with narrow views of rolling forested hillsides across the reservoir. Views downstream are enclosed within a mostly natural setting along the river corridor. The strong line of Wagon Road exposes the brown disturbed earth above the right bank of the river above and below the dam. Upstream views from below the dam are highlighted by the concrete dam and associated facilities. The area surrounding the dam is located away from rural residential

development, including the community of Keno, while the remainder of the reservoir is surrounded by development, particularly near Highway 66.

Keno Wave is a specific “park and play” surf wave feature located less than one half mile downstream of Keno Dam and Keno Camp. The wave is a river feature used by whitewater kayakers who paddle downriver from the dam to surf the wave during the spring when flows are over 1,100 cubic feet per second (cfs). This feature is accessed by users parking at the entrance to Keno Camp and walking and either carrying or dragging their boats along informal trails to the river’s edge. Keno Camp is closed to visitor use during the spring when the wave is at its peak for whitewater boating use. During this time, visitors must park along Highway 66 and carry their boats in to Keno Camp and then walk down the informal trails to the river’s edge.

Vehicular access below the dam is also available by four-wheel-drive vehicle via the unpaved Wagon Road on the river right; however, this road is currently in poor condition. Currently, after boaters use the surf wave, they take-out on the right river bank and walk their boat along the dirt road on this side of the river back up to the dam where they put in again and either cross the river to the informal trails on the river’s edge by Keno Camp (to take-out) or run the river again to the wave.



Figure 2-2: View of Keno Reach Downstream of Keno Dam

2.4 J.C. Boyle Development

2.4.1 J.C. Boyle Reservoir

J.C. Boyle Reservoir encompasses about 350 surface acres and is about 3.6 miles long. Developed public recreation sites at the reservoir include Pioneer Park, Sportsman’s Park, and Topsy Campground (Table 2-3). Visitors to this reservoir enjoy swimming, fishing, boating, day and overnight camping, target shooting, and off-highway vehicle (OHV) use. Table 2-3 summarizes the J.C. Boyle Reservoir sites, recreation opportunities, and settings. The landowner listed in Table 2-3 at each site is also responsible for management, maintenance and funding for the site.

Table 2-3: J.C. Boyle Reservoir Developed Public Recreation Sites

Site Name (Land Owner)	Site Amenities	Available Recreation Opportunities	Site Setting
Pioneer Park (East and West) (PacifiCorp – Parcel B Lands)	<ul style="list-style-type: none"> • Picnic areas • Boat launches • Interpretive signs • Restrooms 	<ul style="list-style-type: none"> • Picnicking • Fishing • Boating • Sightseeing • Swimming 	Consists of pine grassland areas, groupings of pine trees and small shrubs with brown hued rock out-croppings next to Highway 66 bridge
Topsy Campground (BLM)	<ul style="list-style-type: none"> • Campsites (16) • RV dump station • Day use areas (2) • Boat launch with dock • Accessible fishing pier • Restrooms 	<ul style="list-style-type: none"> • Camping • RV camping • Boating • Fishing • Picnicking 	Large flat area with pine trees and riparian vegetation interspersed with native grasslands, and brown hue rock out-croppings
Sportsman’s Park (Klamath County)	<ul style="list-style-type: none"> • Shooting ranges • Dirt racetracks • Archery ranges • Model aircraft flying field • OHV area • Restrooms 	<ul style="list-style-type: none"> • Shooting • Racing • OHV use • Archery • Model aircraft flying • RV camping • Camping • Reservoir fishing 	Large open grassland areas, groupings of pine trees and shrub areas, several buildings, large paved area, grassed model aircraft landing fields, and OHV earthen mounds and trails

Source: PacifiCorp 2004b

The J.C. Boyle Reservoir area is largely rural in nature with opportunities for reservoir-based recreation. The setting consists of flat grasslands and scrub pine areas. Existing views of the reservoir are of open expanses of relatively flat water with moderately distinctive landforms in the foreground and middle ground. However, reduced water clarity and discoloration from algae blooms occur seasonally during the late summer to early fall.

The gentle sloping land on the north and west side of J.C. Boyle Reservoir enables vehicular access to the shoreline. Although the area is posted to prohibit overnight use, such unregulated dispersed use exists. PacifiCorp identified 17 dispersed use sites along the reservoir shoreline and immediately below the dam along the river. These sites have documented resource effects from recreation use including shoreline erosion, trash accumulation, human waste sanitation problems, and vegetation removal (FERC 2007).

2.4.2 J.C. Boyle Bypass Reach

The J.C. Boyle Bypass Reach includes about 5 miles of the Klamath River downstream from J.C. Boyle Dam and upstream of the J.C. Boyle Powerhouse. The J.C. Boyle Bypass Reach consists of a de-watered deeply incised canyon. The riverbed is in sharp contrast to the flatter plateau grassland and deep-green stands of conifer forested areas on either side of the riverbed. The canyon sides are predominately vegetated with pines and shrubs with notable brown hued rock out-croppings. Near the end of the bypass reach, the river makes a sharp turn around a predominant landform (a.k.a. Big Bend).

The J.C. Boyle Bypass Reach could provide Class III to IV+ rapids for whitewater boating (FERC 2007). However, due to operations of the hydroelectric project, this reach is typically dewatered and only has a 100 to 300 cfs base flow (acceptable whitewater boating flows range from 1,300 cfs to 1,800 cfs). Therefore, the majority of the year there is almost no boating use on this stretch of the river (DOI and CDFG 2012). Signage at the J.C. Boyle Powerhouse discourages parking and shoreline use in the vicinity of the powerhouse (FERC 2007).

PacifiCorp conducted a visitor use survey in 2002 to obtain information on existing visitor demand, needs, and recreational activities within the area between J.C. Boyle Reservoir and Iron Gate Dam. The results of the survey indicated that 33 percent of visitors to the area participate in bank fishing, both along the river and reservoirs. Survey respondents also indicated that trout fishing on river reaches in this area is considered very good, and the two most popular reaches for fishing opportunities are Keno Reach downstream from Keno Dam and J.C. Boyle Bypass Reach downstream from J.C. Boyle Dam (PacifiCorp 2004b).



Figure 2-3: Looking Downstream at the J.C. Boyle Bypass Reach from the Power Tunnel Crossing



Figure 2-4: View of J.C. Boyle Bypass Reach, Klamath River Canyon and Power Canal

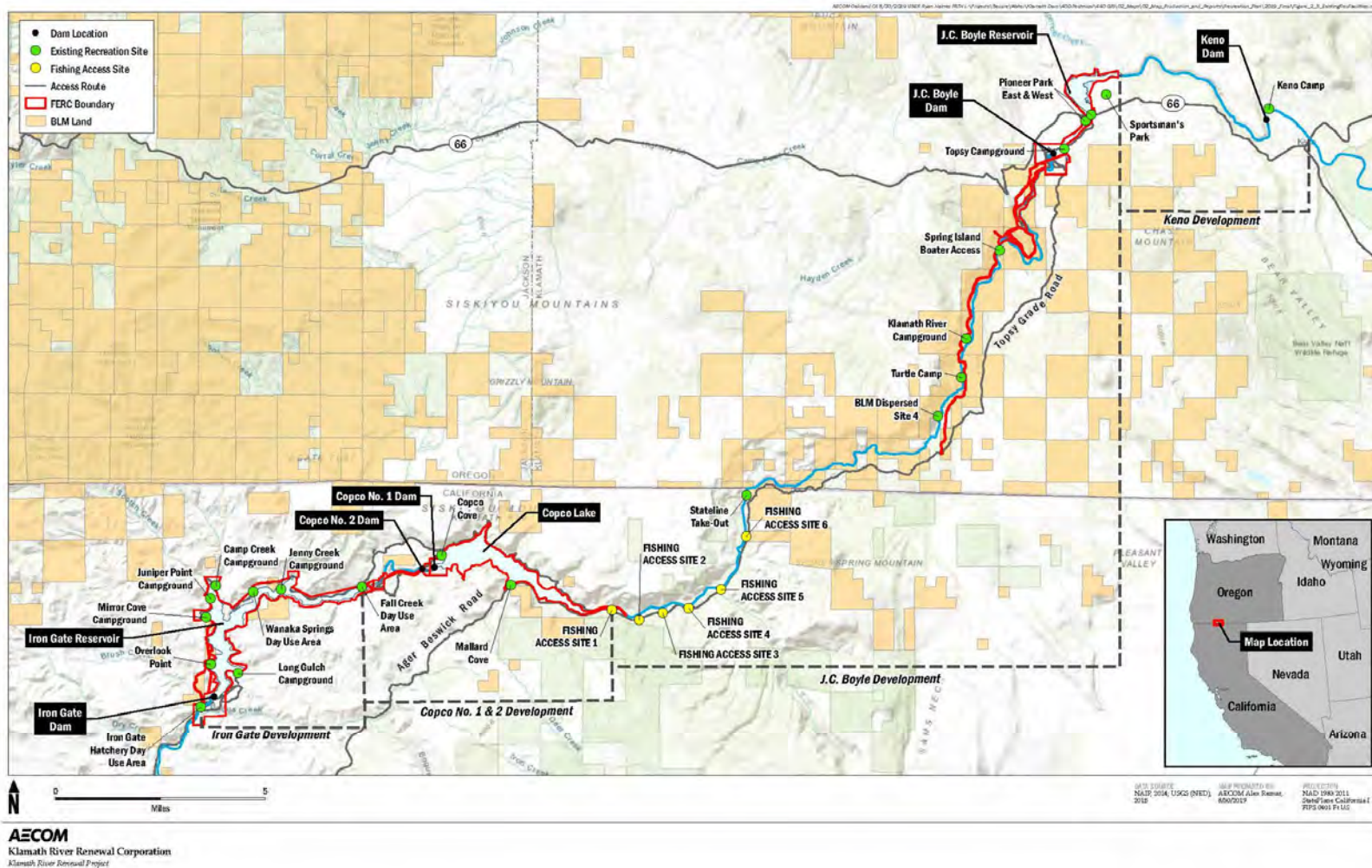


Figure 2-5: Existing Recreation Sites

2.4.3 Hell’s Corner Reach

The Hell’s Corner Reach of the Klamath River is the stretch of river between J.C. Boyle Powerhouse and Copco Lake and has free flowing flows from dam releases and J.C. Boyle Powerhouse releases. This reach extends for about 16.4 river miles and crosses into California at the Stateline Take-out. In this reach, the FERC Project Boundary only includes the J.C. Boyle Powerhouse Road from the powerhouse to the intersection with Topsy Grade Road. The reach is well vegetated with conifer and oak trees, a colorful palette of shrubs, and grasslands. The reach also has some notable brown colored rock out-croppings and dense colorful vegetated river banks within the canyon. Table 2-4 summarizes the Hell’s Corner Reach sites, recreation opportunities, and settings. BLM is responsible for management, maintenance and funding for the sites on their property (see Table 2-4), while PacifiCorp is responsible for management, maintenance and funding for Fishing Access Sites 1. Stateline Take-out is located on both BLM and PacifiCorp lands.

Table 2-4: Hell’s Corner Reach Developed Public Recreation Sites

Site Name (Land Owner)	Site Amenities	Available Recreation Opportunities	Site Setting
Spring Island Boater Access (BLM)	<ul style="list-style-type: none"> • Boat launch area • Shoreline fishing access • Vault toilet restrooms • Interpretive signs 	<ul style="list-style-type: none"> • Boating • Fishing • Day use 	Setting includes rock out-croppings, relatively fast-moving water along the narrow river channel, and relatively steep canyon walls in foreground
Klamath River Campground (BLM)	<ul style="list-style-type: none"> • Campsites (3) • Shoreline fishing and boating access • Vault toilet restrooms 	<ul style="list-style-type: none"> • Camping • Fishing • Boating 	Small flat area within a conifer/oak forest and colorful palette of riparian vegetation with views of the river
Turtle Camp (BLM)	<ul style="list-style-type: none"> • Picnic tables • Fire pits 	<ul style="list-style-type: none"> • Semi-primitive camping 	Small flat grassy area within pine/oak forest along the shoreline with views of the canyon across the river
Bureau of Land Management (BLM) Dispersed Site 4	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Dispersed recreation • Primitive camping 	Provides an open expansive view of the river and its associated riparian vegetation
Stateline Take-out (BLM and PacifiCorp – Parcel A Lands)	<ul style="list-style-type: none"> • Boat launch • Boat put-in/take-out • Shoreline fishing access • Portable restroom 	<ul style="list-style-type: none"> • Boating • Fishing • Dispersed recreation and camping 	Setting is dominated by riparian vegetation and mountain views. Pine/oak forest with grassy understory above the riparian area. Scarred brown open areas affected by dispersed recreation, irrigation ditch parallels the river at the top of the bank.
Fishing Access Sites 1 through 6 (PacifiCorp - Parcel A Lands)	<ul style="list-style-type: none"> • Shoreline fishing access • Parking • Portable restroom • Boat take-out at Site 1 	<ul style="list-style-type: none"> • Fishing • Boating 	Setting contains riparian multi-colored vegetation

Source: PacifiCorp 2004b; FERC 2007, CDM Smith 2018

Vehicular access into the Klamath River Canyon, which includes both the J.C. Boyle Bypass and Hell's Corner Reaches, is possible only from the right bank (north side) of the river below J.C. Boyle Reservoir until Frain Ranch where access from Topsy Grade Road to the left bank (south side) of the river is possible. The north side has better roads and is where most recreation users enter the canyon. The fishing, dispersed camping, day use opportunities and boat launch access below the J.C. Boyle Powerhouse on the north side of the river are all reached by a dirt- and gravel-surfaced access road that connects to Highway 66 near J.C. Boyle Dam; as the road proceeds downstream from the J.C. Boyle Powerhouse, it is best suited for high clearance vehicles.

Access on the south side of the river is by a more difficult travel route—Topsy Grade Road. Most of this road is located upslope from the river, and access to the river does not generally exist except near Frain Ranch and downstream from the Stateline Take-out where there are access roads to the river that connect to Topsy Grade and Ager-Beswick Roads. Roads on the south side of the river are rough and best suited for high-clearance or four-wheel drive vehicles (FERC 2007). BLM issued an Environmental Assessment in 2017 to conduct road closure treatments in the Frain Ranch area on the south/east side of the river due to user-created travel routes that are causing resource damage (opposite side of the river from Klamath River Campground, Turtle Camp, and BLM Dispersed Site 4) (BLM 2017).

In 1974, a 6-mile reach of the Klamath River, from the California/Oregon State line to Copco Lake, was designated as Wild Trout water by the State of California and is managed under the Wild Trout Program (CDFW 2005). This section of the Klamath River is very popular for fishing. Based on field observations, PacifiCorp reports that fishing use between J.C. Boyle Powerhouse and the California-Oregon State line, upstream of the Wild Trout water, appears low and may be related to difficult access to the river (FERC 2007).

This reach provides Class III to IV+ rapids during daily peaking flows from the J.C. Boyle Powerhouse (between 10 AM and 2 PM). Standard whitewater boating opportunities begin at about 1,000 cfs, reach acceptable levels at about 1,300 to 1,400 cfs, and become optimal for commercial trips at about 1,500 cfs, offering mostly Class IV rapids. Big water whitewater boating opportunities exist at flows exceeding 2,000 cfs, offering Class IV and IV+ rapids, during runoff events. Outside of the daily peaking flows, flow rates within this reach do not meet the acceptable range to support whitewater boating opportunities (DOI and CDFG 2012). Whitewater boating use occurs typically during April through October, with about 80 percent of the commercial rafting use occurring during July through September (FERC 2007).

The BLM manages whitewater boating use in the Hell's Corner Reach; commercial boating use is allowed by permit only. There is a set commercial capacity of 10 outfitters or 200 clients per day on this reach. There is no limit for private boating capacity, although the BLM has established 250 persons per day as the overall whitewater boating carrying capacity of the reach. Factors that constrain the carrying capacity of the reach are vehicle congestion at the take-out locations near Copco Lake and the limited size and number of areas that are available to scout rapids (FERC 2007). Summer rafting use in this area, above Copco Lake in particular, depends upon operation of the J.C. Boyle Powerhouse upstream (FERC 2007).

PacifiCorp identified four dispersed use sites in this reach between J.C. Boyle Powerhouse and the Stateline Take-out and documented resource effects at these areas related to recreation use (FERC 2007).



Figure 2-6: Looking downstream from Turtle Camp

2.5 Copco No. 1 and No. 2 Development

2.5.1 Copco Lake

Copco Lake, which covers about 972 surface acres and is about 4.5 miles long, has two day use sites - Mallard Cove and Copco Cove that each contain a picnic area, two restrooms, and a boat launch with dock (Mallard Cove only). These sites provide opportunities for picnicking, boating, fishing, and although they are not official campgrounds, dispersed camping occasionally occurs at both locations (PacifiCorp 2004b). Table 2-5 summarizes the Copco Lake sites, recreation opportunities, and settings. PacifiCorp is responsible for management, maintenance and funding for all of the sites listed in Table 2-5.

PacifiCorp identified two dispersed use sites with excessive bare ground potentially related to both recreation use and cattle grazing. The sites are on the north shoreline in the vicinity of Beaver Creek Cove and Raymond Gulch (FERC 2007).

In addition to the public recreation uses of Copco Lake, there are also dozens of private homes with docks that use the reservoir for recreation.

Copco Lake is surrounded by a sparsely vegetated plateau area including several unique landforms, such as Lennox Rock, Bloomingcamp Peak, and Daggett Mountain. Views include the large open water areas of the reservoir, views of Lennox Rock, Bloomingcamp Peak, and Daggett Mountain, and several small clusters of private homes around the reservoir. The homes dominate the views in the several areas where they are located contrasting in color, line form, and texture with the natural setting. There are also broad views of open reservoir water seen from these sites.

Table 2-5: Copco Lake Developed Public Recreation Sites

Site Name (Land Owner)	Site Amenities	Available Recreation Opportunities	Site Setting
Mallard Cove (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Picnic area • Restrooms • Boat launch with boarding dock • Interpretive signs • User-created camp sites 	<ul style="list-style-type: none"> • Picnicking • Boating • Fishing • Informal camping 	Sparsely vegetated with expansive open water views of the reservoir
Copco Cove (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Picnic area • Restrooms • Boat launch • Interpretive signs 	<ul style="list-style-type: none"> • Picnicking • Boating • Fishing • Informal camping 	Within oak/conifer woodland with expansive open water views of the reservoir and across the reservoir to the home sites

Sources: PacifiCorp 2004b; FERC 2007



Figure 2-7: View of Copco Lake

2.5.2 Copco No. 2 Reservoir

Copco No. 2 Reservoir is relatively small (approximately five surface acres and about 0.3 mile long) and has a narrow configuration with steep shoreline topography, resulting in difficult access to the water. Access to the reservoir is restricted by PacifiCorp due to the adjacent Copco No. 1 and No. 2 dam operations. Therefore, Copco No. 2 Reservoir is not suitable for recreation use (FERC 2007).

2.5.3 Copco No. 2 Bypass Reach

The Klamath River downstream of Copco No. 2 Dam extends 1.5 miles to the Copco No. 2 Powerhouse and the backwater of Iron Gate Reservoir. The Copco No. 2 Bypass Reach is located within a steep-walled canyon with significant basalt rock out-croppings and well-defined riparian vegetation. The canyon is called Ward's Canyon after a ranching family that homesteaded near the canyon entrance. The only access to this river reach is by a steep gravel road that leads to Copco No. 1 and No. 2 Dams that is closed to public vehicular access. This reach may offer undocumented boating and fishing opportunities. PacifiCorp determined that the reach provides high quality rapids and scenery. However, it is a short reach and boating requires flows in excess of 200 cfs for kayaks and 600 cfs for standard whitewater boating (FERC 2007). Though whitewater boating opportunities are currently limited due to lack of flow (PacifiCorp 2004a), the reach could provide Class IV whitewater opportunities at acceptable flows ranging from 600 to 1,500 cfs (FERC 2007).

The Klamath River is sensitive to present-day tribes and is an integral part of their traditional cultural practices. This is particularly true for Ward's Canyon, which has extensive cultural significance and is currently used for traditional cultural practices.



Figure 2-8: View of upstream end of Copco No. 2 Bypass Reach/Ward's Canyon

2.6 Iron Gate Development

2.6.1 Iron Gate Reservoir

Iron Gate Reservoir is approximately 944 surface acres and 6.8 miles long. The reservoir has the highest concentration of recreation sites within the Project and includes the sites and amenities at Fall Creek. The developed sites at Iron Gate Reservoir include a trail (Fall Creek Trail), five combination day use and campground areas (Jenny Creek, Camp Creek, Juniper Point, Mirror Cove, and Long Gulch), three day use areas (Fall Creek, Overlook Point, and Wanaka Springs), and a fish hatchery and associated day use area (Iron Gate Hatchery). Recreation opportunities include sightseeing, swimming, fishing, boating, camping, and picnicking. Among all of the Project reservoirs, Iron Gate Reservoir is the most popular for waterskiing and powerboating. Table 2-6 summarizes the Iron Gate Reservoir sites, recreation opportunities, and settings. PacifiCorp is responsible for management, maintenance and funding for all of the sites listed in Table 2-6.

Table 2-6: Iron Gate Reservoir Developed Public Recreation Sites

Site Name (Land Owner)	Site Amenities	Available Recreation Opportunities	Site Setting
Fall Creek Day Use Area and Fall Creek Trail (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Picnic area • Boat launch • Restrooms • Hiking trail • Interpretive signs and kiosk • Trash receptacles 	<ul style="list-style-type: none"> • Picnicking • Boating • Hiking 	Sparse vegetation with views of the reservoir’s open water and riparian vegetation on the other side of the reservoir
Overlook Point (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Restrooms • Picnic sites 	<ul style="list-style-type: none"> • Picnicking • Sightseeing (of reservoir) 	Moderately steep topography that provides expansive views of the reservoir and surrounding multi-colored landscape
Wanaka Springs Day Use Area (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Picnic areas • Fishing dock • Restrooms • Trail to the site of Wanaka Springs • Interpretive signs • Trash receptacles 	<ul style="list-style-type: none"> • Picnicking • Fishing • Hiking • Informal camping 	Sparse vegetation with views of the reservoir’s open water
Jenny Creek Day Use Area and Campground (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Campsites • Restrooms • Hiking trails • Boat launch • Interpretive kiosk 	<ul style="list-style-type: none"> • Picnicking • Fishing • Developed camping 	Multi-colored creekside setting

Site Name (Land Owner)	Site Amenities	Available Recreation Opportunities	Site Setting
Camp Creek Day Use Area and Campground (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Campsites • Boat launch • Boarding and fishing docks • Swimming area • RV dump station • Interpretive display • Restrooms 	<ul style="list-style-type: none"> • Developed camping • RV camping • Boating • Fishing • Education • Swimming 	Semi-arid grasslands located along a narrow arm of the reservoir
Juniper Point Day Use Area and Campground (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Campsites • Fishing dock • Restrooms • Interpretive signs and kiosk • Boat launch 	<ul style="list-style-type: none"> • Developed camping • Fishing 	Sparse vegetation with views of the reservoir's open water and across to the other side of the reservoir
Mirror Cove Day Use Area and Campground (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Campsites • Picnic sites • Boat launch • Restroom • Fishing dock • Interpretive kiosk 	<ul style="list-style-type: none"> • Picnicking • Developed camping • Boating • Group camping • Waterskiing • Fishing 	Sparsely vegetated with a commanding view of the open water reservoir and the rolling topography surrounding the reservoir
Long Gulch Day Use Area and Campground (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Picnic sites • Boat launch • Restrooms 	<ul style="list-style-type: none"> • Picnicking • Boating • Informal camping 	Relatively flat and dominated by grasslands, dirt roads and a few dark green conifer clusters with commanding view of the open water reservoir
Iron Gate Hatchery Day Use Area (PacifiCorp - Parcel B Lands)	<ul style="list-style-type: none"> • Picnic area • Visitor center/interpretive kiosk • Restrooms • Trail to river • Undeveloped boat launch across the river 	<ul style="list-style-type: none"> • Picnicking • Education • Hiking • Touring • Boating 	Setting is dominated by the fish hatchery and associated buildings which contrast sharply with the natural landscape

Sources: PacifiCorp 2004b; FERC 2007

The river canyon is characterized by columnar basalt outcrops, cliffs, steep slopes, upland benches, alluvial terraces, and the meandering river channel. The unique landforms, water, and vegetation create an ever-changing landscape from desert to more mountainous terrain, and steep canyons and vertical cliffs with diverse colorful vegetation. The area just downstream of the Iron Gate Reservoir consists mainly of grasslands and well established multi-colored riparian vegetation. The fish hatchery and its associated buildings and paved areas dominate the views, and while still hilly in nature, the area does not have the canyon-like feeling of the upper reaches of the Klamath River.

There are two undeveloped dispersed sites along the shoreline of Iron Gate Reservoir, which are primarily used for fishing access and appear to receive moderate use. Another dispersed recreation site is located across the river from the Iron Gate Fish Hatchery. This site is used primarily to launch smaller watercraft such as tubes, rafts, and drift boats. The launch site does receive some trailered boat use. It is used by recreationists in the summer for fishing access, swimming, and tube floating on the river. It is also a popular boat launch during the late summer and fall for salmon fishing and drift boat use (PacifiCorp 2004a).



Figure 2-9: View of Iron Gate Reservoir



Chapter 3: Project Description and Anticipated River Conditions

3. PROJECT DESCRIPTION AND ANTICIPATED RIVER CONDITIONS

The following sections provide a brief description of the Project and anticipated river conditions following Project implementation.

3.1 Project Description

The Project includes drawdown of four reservoirs and removal of four dams and the associated power generation facilities, water intake structures, canals, pipelines, and ancillary buildings, including most reservoir-based recreation sites. These recreation sites, parking areas, and access trails would be regraded and revegetated. The formerly inundated areas would be exposed after reservoir drawdown and would be restored by stabilizing and revegetating newly exposed areas with various herbaceous and woody species. The hard lines of the dams and large expanses of reservoir water would be changed to a more historic, characteristic scenery of natural river canyon landforms with vegetation along a continuous river.

It is anticipated that herbaceous species on formerly submerged areas exposed during drawdown may be visible in one to three years, though this vegetation would not be consistent with natural vegetation appearing below and above the former reservoir line. During restoration, sediment may erode and slump, followed by drying, cracking, and hardening of the sediment prior to vegetation establishment. Restoration objectives include revegetation of 75 percent of the exposed reservoir area within three years following dam removal. Woody vegetation cover and density similar to adjacent natural woodlands would take longer to attain.

3.2 Anticipated River Conditions

Under the Project, removal of four dams on the Klamath River would result in different river conditions compared to existing conditions, particularly for dewatered bypass reaches and sections of the river currently inundated by reservoirs. The anticipated river conditions play a large part in what recreation opportunities and experiences are expected to be available post dam removal and therefore in the recreation sites needed to support these opportunities and experiences and provide access to the river in appropriate and safe locations.

To be consistent with Section 2 of this plan, the anticipated river conditions are described by hydropower development and include the anticipated whitewater boating runs, major rapids, any potential known safety issues, and changes in flow, use season, and users. Most of the information presented below is based on Bill Cross and Pete Wallstrom's document *Whitewater Recreation on the Upper Klamath River* (undated).

Figure 3-1 depicts the anticipated whitewater boating runs on the Klamath River once the Project is implemented and the river becomes free flowing within the Project area. Figure 3-1 shows the anticipated beginning and end points of each run, the name of the run, and its anticipated whitewater difficulty class rating based on information within the *Whitewater Recreation on the Upper Klamath River* document. The recreation sites to be retained (green), modified (yellow) or unknown disposition (white) are also delineated on the map. As demonstrated in Figure 3-1, there are several runs that would lack river access points either for put-in, take-out, or both.

A flow study is anticipated to be conducted in 2020 and may result in new information for certain sections of the river regarding navigability in the summer, anticipated difficulty class, expected users, potential river features, and boating hazards. Thus, the information presented below is preliminary and may require revision after the flow study is conducted.

3.2.1 Keno Development

Because Keno Dam would not be removed, the river below the dam up to the existing J.C. Boyle Reservoir would not be expected to change. The Keno Run extends from Keno Dam downstream to the Highway 66 Bridge over the existing J.C. Boyle Reservoir. This is an existing Class III run with an estimated gradient of 40 feet/mile. According to the *Whitewater Recreation on the Upper Klamath River* document, it is anticipated that after Project implementation, flows would remain boatable in spring and continue to be less boatable in summer when flows tend to decline (Cross and Wallstrom undated).

Once J.C. Boyle Reservoir is drawn down, boating use of the Keno Run may increase due to the elimination of the existing two-mile flatwater paddle across J.C. Boyle Reservoir, which may be an existing deterrent from using this run. Increased water quality may also assist with increasing use of the run as water quality currently is poor during the summer downstream of Keno Dam. Another existing deterrent to using this run when the flows are typically best for using the wave feature is that access to the river is from Keno Camp, which is closed in early spring due to snow conditions. As stated previously, Keno Camp is not part of the Lower Klamath Project.

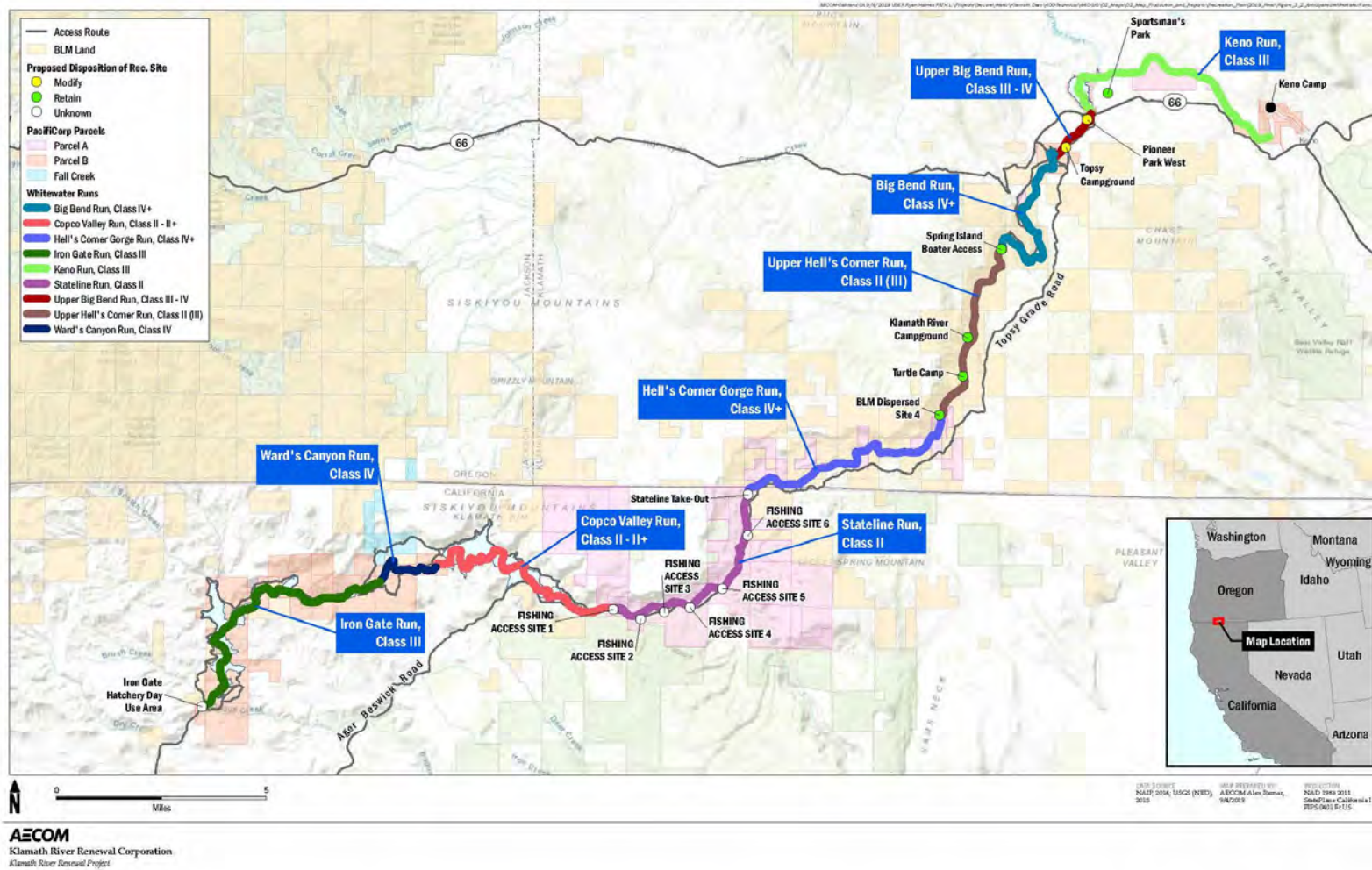


Figure 3-1: Anticipated Whitewater Boating Runs between Keno Dam and Iron Gate Hatchery

The Highway 66 Bridge area, an historic ford across the river, is the general location of a significant gradient change in the river from 10 feet/mile (over the last 2 miles of the run that are currently inundated) to an estimated 45 feet/mile. The run downstream of the Keno Run (the Upper Big Bend Run) is projected to have a higher difficulty class due to this steeper gradient.

3.2.2 J.C. Boyle Development

Several whitewater boating runs would be in the river stretch between the Highway 66 Bridge over the existing J.C. Boyle Reservoir and Copco No. 1 Reservoir. These are described from north to south in a downstream flow order below.

Upper Big Bend Run

Following the Keno Run would be the Upper Big Bend Run from the Highway 66 Bridge to the Moonshine Falls area at the existing J.C. Boyle Dam site. Project implementation would allow whitewater boating use on this run as it is currently inundated by J.C. Boyle Reservoir. The river drops 500 vertical feet in 6 miles below the Highway 66 Bridge with an estimated gradient of 45 feet/mile. Although rapids currently inundated by J.C. Boyle Reservoir are unknown, based on the river's gradient, the run would be expected to have a difficulty of Class III – IV, with the potential for more difficult rapids. One historic rapid that may pose a safety hazard is Moonshine Falls, which was located at or near the J.C. Boyle Dam site. Because the dam is located at or near the rapid, it is unclear if the rapid was altered by dam construction or not. Therefore, the difficulty and navigability of this rapid is unknown. The rapid appears to be a significant vertical drop in historical photos.

Big Bend Run

Downstream of Moonshine Falls and the Upper Big Bend Run would be the Big Bend Run, which would encompass the J.C. Boyle Bypass Reach - the river section between J.C. Boyle Dam and the existing Spring Island Boater Access. The river within the Big Bend Run passes through a narrow canyon around a horseshoe bend at an estimated gradient of 81 feet/mile and an estimated difficulty of Class IV+ with the potential for Class V at high flows.

Currently, this run passes through a dewatered section of the river that is generally not boatable. Project implementation would provide river flows necessary to boat on this run. A significant amount of groundwater enters the river (240 cfs) within the first mile of this run. It is anticipated that the infusion of this groundwater into the river's flow (post dam removal) would allow the run to be boated during the summer at least by small rafts and kayaks, even when river flows typically decrease such that upstream runs may not be usable. It is unclear which boat types would be able to use this run in the summer, particularly if larger commercial rafts would be able to use the run in the summer.

A known safety issue on this run is the Sidecast Slide, which is expected to be the most difficult rapid on the run. The slide is a long, shallow washboard resulting from sharp boulders that fell into the river during blasting for construction of the Power Canal, which is located upslope of the river. During a flow study in

2002, rafts were unable to run this rapid at moderate flows (1,000 cfs). The slide has been modified since 2002 to improve fish passage; however, it is unknown if these changes improved the navigability of this rapid. The 2020 flow study aims to determine if the rapid is now navigable for a variety of craft and if commercial rafts would be able to use the run in the summer.

Upper Hell's Corner Run

Following the Big Bend Run is a significantly less difficult run, the Upper Hell's Corner Run. This is an existing run that starts at the Spring Island Boater Access and ends prior to the Hell's Corner Gorge Run. Due to the more moderate gradient of the river, this section is accessed by rafters, kayakers and drift boaters. Access continues downstream to the Caldera rapid, which is located near BLM Dispersed Site 4. The Upper Hell's Corner Run is a Class II (III) run with a gradient of 25 feet/mile, with the first 5 miles of the run having a more moderate gradient and difficulty. Although Project implementation would remove the peaking flows that provide higher river flows in the summer when normal river flows would decline, it is anticipated that this run would be boatable in the summer even at normal summer river flows due to the lower difficulty and moderate gradient of this run. This run is also currently popular for drift boat fishing. Commercial whitewater boating currently occurs on this run in conjunction with the more difficult downstream run, the Hell's Corner Gorge Run.

Hell's Corner Gorge Run

From the Caldera rapid downstream to the Stateline Take-out is the Hell's Corner Gorge Run. This existing run is rated as Class IV+ with a gradient of 83 feet/mile. This run includes many difficult rapids and receives extensive commercial whitewater boating use in conjunction with the upstream Upper Hell's Corner Run. Project implementation would reduce the number of boatable days on this run due to removal of peaking flows that provide regular, high boatable flows in the summer when normal river flows would be reduced. Flows are expected to be high enough in the spring for whitewater boating use of this run; however, flows during the summer are expected to be too low for whitewater boating use, particularly by larger commercial rafts, which require flows between 1,500 and 3,400 cfs. Though the run may be usable by commercial rafts in the spring, high spring snowmelt flows may not be suitable for less experienced boaters and thus commercial use of this run may substantially decline post dam removal.

Stateline Run

The run downstream of the Hell's Corner Gorge Run is the Stateline Run. The Stateline Run is substantially less difficult than the Hell's Corner Gorge Run at Class II with a gradient of 26 feet/mile (compared to Class IV+ with a gradient of 83 feet/mile on Hell's Corner Gorge). The Stateline Run begins at the Stateline Take-out and continues downstream to Fishing Access Site 1. This is an existing run that is particularly popular with drift boaters. Project implementation is not expected to change the difficulty of this run.

3.2.3 Copco No. 1 and No. 2 Development

There would be two runs available within the Copco No. 1 and 2 development post dam removal due to restored river flows and reservoir draw down. These are described from north to south in a downstream flow order below.

Copco Valley Run

Continuing from the Stateline Run is the Copco Valley Run. This run would be exposed once Copco Lake was drawn down and the river recedes to its historic channel alignment. The Copco Valley Run would begin at Fishing Access Site 1 and continue until the Copco Valley/Copco No. 1 Dam area. Similar to the Stateline Run, the Copco Valley Run is estimated to be a Class II to II+ in difficulty with a relatively low gradient of 18 feet/mile. Due to the low difficulty rapids and riffles expected on this run, it may be suitable for drift boat fishing. However, the Ward's Canyon Run, the next run downstream, would not be suitable for drift boat fishing.

Ward's Canyon Run

Downstream of the Copco Valley Run, near the existing Copco No. 1 Dam, is the entrance to Ward's Canyon and the beginning of the Ward's Canyon Run, which continues downstream through the canyon to the existing Copco No. 2 Powerhouse. The Ward's Canyon Run is estimated to be Class IV with a gradient of 85 feet/mile. The river has carved a gorge through lava flow within the canyon, creating many bedrock rapids. It is believed that the river section from the canyon entrance to the existing Copco No. 2 Dam site may contain very difficult rapids, potentially the most difficult rapids on the run, including a potential waterfall. These rapids could potentially exceed Class IV difficulty.

Post dam removal, this currently dewatered stretch would contain flows that are believed to be boatable during the summer, potentially including for commercial rafts. In the 2002 flow study, boaters encountered Class IV rapids through the entire length of Ward's Canyon; however, the flows in this study were an estimate at the time of the potential flows and do not match the flows currently expected during the summer.

Due to the relative closeness of the Ward's Canyon Run to major roads and population centers, short shuttle distance (between take-out and put-in), difficulty of the run, summer flows, and outstanding scenery, stakeholders have communicated that this "new" run is anticipated to be the most used run on the river within the Project area and is expected to be heavily used by both commercial and private boaters. Use of this run may even exceed current use of the Hell's Corner Gorge Run. In addition, it is anticipated that tribes would continue to use Ward's Canyon for traditional cultural practices, as the canyon is considered a very significant spiritual place with visual and auditory religious and ceremonial affiliation.

3.2.4 Iron Gate Development

Project implementation would result in draw down of Iron Gate Reservoir and removal of Iron Gate Dam, which would allow use of the Iron Gate Run. The Iron Gate Run would begin at the existing Copco No. 2

Powerhouse and continue downstream to the Iron Gate Fish Hatchery. This run is estimated to be Class III for the first 4 miles with a gradient of 30 feet/mile and then Class II with a gradient of 15 feet/mile for the last 2 miles of the run, though it is anticipated that there may be more difficult rapids revealed once the reservoir is drawn down. Due to the relative closeness of the run, particularly the take-out, to major roads (Interstate 5), population centers (Ashland, Rogue Valley), and the moderate gradient of the river, this run has the potential to receive a high level of recreation use. Use of this run may also be combined with the Ward's Canyon Run, particularly for commercial outfitters. Due to the lower difficulty of this run, it may also be suitable for drift boat fishing, though potentially only in the Class II section as drift boating on Class III rapids is subject to operator experience and comfort.



Chapter 4: Approach to Existing Recreation Facilities

4. APPROACH TO EXISTING RECREATION FACILITIES

The following sections describe the proposed disposition (removal or modification) of recreation facilities at existing recreation sites within the FERC Project Boundary, as well as anticipated disposition (removal, modification, or retention) of recreation sites outside of the FERC Project Boundary. KRRC would be responsible for removal or modification of existing recreation sites and facilities within the FERC Project Boundary. The KRRC would not be responsible for removal, modification or retention of existing recreation sites outside of the FERC Project Boundary.

4.1 Proposed Recreation Site Removal or Modification within the FERC Project Boundary

The recreation sites that would be removed as part of the Project have been documented in the 2012 Klamath Facilities Removal Final EIS/EIR (Table 2-14), the Final Clean Water Act Section 401 Certification for the KRRC's License Surrender and Removal of the Lower Klamath Project (Oregon Department of Environmental Quality 2018), and in the California State Water Resources Control Board's Draft Environmental Impact Report for the Lower Klamath Project License Surrender (December 2018). In addition, KRRC's analysis, as well as KRRC's outreach and stakeholder input process has further refined the sites within the FERC Project Boundary that are proposed for modification or removal.

Table 4-1 below summarizes the existing recreation sites and facilities within the FERC Project Boundary (organized by hydropower development) that are proposed for removal or modification due to implementation of the Project. These sites are also shown in Figure 4-1 (at the end of this chapter) in red (remove) and yellow (modify). The recreation sites proposed for removal would be located a substantial distance from the river once the reservoirs are drawn down. Pioneer Park West was previously proposed for removal under the Final Clean Water Act Section 401 Certification for the KRRC's License Surrender and Removal of the Lower Klamath Project (Oregon Department of Environmental Quality 2018), but is now a potential river recreation site. Modification of this site would require amending the Final Clean Water Act Section 401 Certification from the State of Oregon. Modifications to Pioneer Park West are further described in Sections 7 and 8 of this Recreation Facilities Plan.

There are 11 sites that are proposed for removal, consisting of five combination day use area/campground sites and six day use areas. Site amenities that would be removed include: picnic areas, boat launches, restrooms, fishing docks, campsites, interpretive signs, hiking trails, dump station, and swimming areas. These amenities currently provide opportunities for picnicking, boating, fishing, camping, hiking, swimming, sightseeing, recreational vehicle (RV) camping, and group camping. One campground (Topsy) would be modified to remove water-related amenities (i.e., boat launches, floating dock, fishing pier) and affected areas would be restored.

Table 4-1: Proposed Removal or Modification of Existing Recreation Sites within the FERC Project Boundary

Site Name (Land Owner)	Project or Non-Project Recreation Site	Site Amenities	Available Recreation Opportunities	Proposed Site Disposition	Schedule for Modification/ Removal
J.C. Boyle Development					
Pioneer Park East (PacifiCorp - Parcel B lands)	Project Recreation Site	<ul style="list-style-type: none"> • Interpretive signs • Car-top boat launch 	<ul style="list-style-type: none"> • Fishing • Boating 	Remove	Remove after reservoir drawdown
Pioneer Park West (PacifiCorp - Parcel B lands)	Project Recreation Site	<ul style="list-style-type: none"> • Picnic areas • Car-top boat launch • Informational signs • Restrooms 	<ul style="list-style-type: none"> • Picnicking • Fishing • Boating 	Modify as a potential river recreation site	Modify after reservoir drawdown
Topsy Campground (BLM)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Campsites • RV dump station • Day use areas • Boat launch with dock • Accessible fishing pier • Restrooms 	<ul style="list-style-type: none"> • Camping • RV camping • Boating • Fishing • Picnicking 	Modify – remove all permanent water-based improvements (boat launches, floating dock, fishing pier) ¹	Remove boat ramp prior to reservoir drawdown
Copco No. 1 and No. 2 Development					
Mallard Cove (PacifiCorp - Parcel B Lands)	Project Recreation Site	<ul style="list-style-type: none"> • Picnic area • Restrooms • Boat launch with boarding dock • Interpretive signs 	<ul style="list-style-type: none"> • Picnicking • Boating • Fishing • Informal camping 	Remove	Remove after reservoir drawdown
Copco Cove (PacifiCorp - Parcel B Lands)	Project Recreation Site	<ul style="list-style-type: none"> • Picnic area • Restrooms • Boat launch with boarding dock • Interpretive signs 	<ul style="list-style-type: none"> • Picnicking • Boating • Fishing • Informal camping 	Remove	Remove after reservoir drawdown

Site Name (Land Owner)	Project or Non-Project Recreation Site	Site Amenities	Available Recreation Opportunities	Proposed Site Disposition	Schedule for Modification/Removal
Iron Gate Reservoir Recreation					
Overlook Point (PacifiCorp - Parcel B Lands)	Project Recreation Site	<ul style="list-style-type: none"> • Restrooms • Picnic sites 	<ul style="list-style-type: none"> • Picnicking • Sightseeing (of reservoir) 	Remove	Remove after reservoir drawdown
Wanaka Springs Day Use Area (PacifiCorp - Parcel B Lands)	Project Recreation Site	<ul style="list-style-type: none"> • Picnic areas • Fishing dock • Restrooms • Trail to the site of Wanaka Springs • Interpretive signs 	<ul style="list-style-type: none"> • Picnicking • Fishing • Hiking • Informal camping 	Remove	Remove after reservoir drawdown
Camp Creek Day Use Area and Campground (PacifiCorp - Parcel B Lands)	Project Recreation Site	<ul style="list-style-type: none"> • Campsites • Boat launch • Boarding and fishing docks • Swimming area • RV dump station • Interpretive display • Restrooms 	<ul style="list-style-type: none"> • Developed camping • RV camping • Boating • Fishing • Education • Swimming 	Remove	Remove after reservoir drawdown
Juniper Point Day Use Area and Campground (PacifiCorp - Parcel B Lands)	Project Recreation Site	<ul style="list-style-type: none"> • Campsites • Fishing dock • Restrooms • Interpretive signs 	<ul style="list-style-type: none"> • Developed camping • Fishing 	Remove	Remove after reservoir drawdown
Mirror Cove Day Use Area and Campground (PacifiCorp - Parcel B Lands)	Project Recreation Site	<ul style="list-style-type: none"> • Campsites • Picnic sites • Boat launch • Restroom • Fishing dock 	<ul style="list-style-type: none"> • Picnicking • Developed camping • Boating • Group camping • Waterskiing • Fishing 	Remove	Remove after reservoir drawdown
Fall Creek Day Use Area (PacifiCorp - Parcel B Lands)	Project Recreation Site	<ul style="list-style-type: none"> • Picnic area • Boat launch access • Restrooms 	<ul style="list-style-type: none"> • Picnicking • Boating 	Remove	Remove after reservoir drawdown

Site Name (Land Owner)	Project or Non-Project Recreation Site	Site Amenities	Available Recreation Opportunities	Proposed Site Disposition	Schedule for Modification/ Removal
Fall Creek Trail (PacifiCorp - Parcel B Lands)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Hiking trail 	<ul style="list-style-type: none"> • Hiking 	Remain as this would be associated with the Fall Creek License	Remove after reservoir drawdown
Jenny Creek Day Use Area and Campground (PacifiCorp - Parcel B Lands)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Campsites (6) • Restrooms • Hiking trails 	<ul style="list-style-type: none"> • Picnicking • Fishing, • Developed camping 	Remove	Remove after reservoir drawdown
Long Gulch Day Use Area and Campground (PacifiCorp - Parcel B Lands)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Picnic sites • Boat launch • Restrooms 	<ul style="list-style-type: none"> • Picnicking • Boating • Informal camping 	Remove	Remove after reservoir drawdown
Iron Gate Hatchery Day Use Area (PacifiCorp - Parcel B Lands)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Picnic area • Visitor center/ interpretive kiosk • Restrooms • Trail to river, undeveloped boat launch across the river 	<ul style="list-style-type: none"> • Picnicking • Education • Hiking • Touring • Boating 	Unknown - subject to ongoing discussions with the California Department of Fish and Wildlife and PacifiCorp	Unknown

Notes

1. The proposed boat ramp modification at Topsy Campground identified in the 2012 Klamath Facilities Removal Final EIS/EIR has been shifted downstream of the existing J.C. Boyle Dam in response to stakeholder input during the development of the Draft Recreation Plan.

Even though the Jenny Creek Day Use Area/Campground and Long Gulch Day Use Area/Campground are non-Project recreation sites, because they are located within the FERC Project Boundary, the KRRRC would remove the recreation facilities at these sites. The Fall Creek Trail would remain as this facility would be associated with the Fall Creek hydroelectric project license.

The schedule for modification or removal of recreation facilities at existing recreation sites within the FERC Project Boundary is also included in Table 4-1. Generally, facilities would be removed prior to reservoir draw down. Modifications at Topsy Campground would be conducted prior to drawdown while modification to Pioneer Park West would be conducted after drawdown to allow the river to recede to its former channel before river-related facilities were constructed.

Under the KHSA, ownership of the facility would be transferred to the CDFW. However, long-term plans for operation of the recreation amenities at the Iron Gate Hatchery Day Use Area following Project implementation and the eight-year period identified in the KHSA are unknown. Therefore, the proposed disposition of the Iron Gate Hatchery Day Use Area is considered unknown at this time and is subject to ongoing discussions between the KRRC, CDFW and PacifiCorp.

4.2 Anticipated Recreation Site Disposition Outside the FERC Project Boundary

There are many recreation sites located along the Klamath River between J.C. Boyle Reservoir and Iron Gate Reservoir. Some of these sites are non-Project recreation sites that are located outside of the FERC Project Boundary. All of the recreation sites outside of the FERC Project Boundary are not located on reservoirs and thus would not be affected by dam removal and reservoir drawdown. Table 4-2 lists the existing recreation sites located outside the FERC Project Boundary and the anticipated disposition of these sites. The sites to be retained/unchanged are shown in Figure 4-1 (at the end of this chapter) in green and the sites with unknown disposition are in white. KRRC includes this section for information only, not for incorporation into the license Surrender Order or other regulatory approval. KRRC will not develop or modify these sites.

It is anticipated that sites that would be retained or unchanged by the Project would continue to be managed as they are currently and by the same entities that are currently managing these sites. It is assumed that Sportsman's Park, located on Klamath County lands, would continue to be managed by the Klamath Sportsman's Park Association and the sites within the Klamath River Canyon on BLM property (Spring Island Boater Access, Klamath River Campground, Turtle Camp, and BLM Dispersed Site 4) would continue to be managed by the BLM under the direction of the BLM's 2016 Southwestern Oregon Resource Management Plan.

As noted previously in Section 1.2, under Section 7.6 of the KHSA, following decommissioning of the four dams on the Klamath River, PacifiCorp will retain ownership of Parcel A lands. It is unknown if existing recreation sites (Stateline Take-out and Fishing Access Sites 1 through 6) on Parcel A lands will continue to be managed by PacifiCorp as public recreation sites. Therefore, the disposition of the Stateline Take-out and Fishing Access Sites 1 through 6 is unknown at this time.

Table 4-2: Anticipated Disposition of Existing Recreation Sites outside the FERC Project Boundary

Site Name (Land Owner)	Project or Non-Project Recreation Site	Site Amenities	Available Recreation Opportunities	Proposed Site Disposition
J.C. Boyle Development				
Sportsman's Park (Klamath County)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Shooting ranges • Dirt racetracks • Archery ranges • Model aircraft flying field • OHV area • Restrooms 	<ul style="list-style-type: none"> • River fishing • Shooting • Racing • OHV use • Archery • Model aircraft flying • RV camping • Camping 	Unchanged
Spring Island Boater Access (BLM)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Boat launch area • Shoreline fishing access • Restrooms • Interpretive signs 	<ul style="list-style-type: none"> • Boating • Fishing • Day use 	Unchanged
Klamath River Campground (BLM)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Campsites • Shoreline fishing and boating access • Restrooms 	<ul style="list-style-type: none"> • Camping • Fishing • Boating 	Unchanged
Turtle Camp (BLM)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Picnic tables • Fire pits 	<ul style="list-style-type: none"> • Semi-primitive camping 	Unchanged
BLM Dispersed Site 4 (BLM)	Non-Project Recreation Site	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Primitive camping • Dispersed recreation 	Unchanged
Stateline Take-out (BLM and PacifiCorp – Parcel A Lands)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Boat put-in/take-out • Shoreline fishing access • Restrooms 	<ul style="list-style-type: none"> • Boating • Fishing • Dispersed recreation and camping 	Unknown (Parcel A land - PacifiCorp would retain ownership of the land; not transferred to KRRC)
Fishing Access Sites 1 through 6 (PacifiCorp - Parcel A Lands)	Non-Project Recreation Site	<ul style="list-style-type: none"> • Shoreline fishing access • Parking • Restrooms • Boat take-out at Site 1 	<ul style="list-style-type: none"> • Fishing • Boating 	Unknown (Parcel A land - PacifiCorp would retain ownership of the land; not transferred to KRRC)

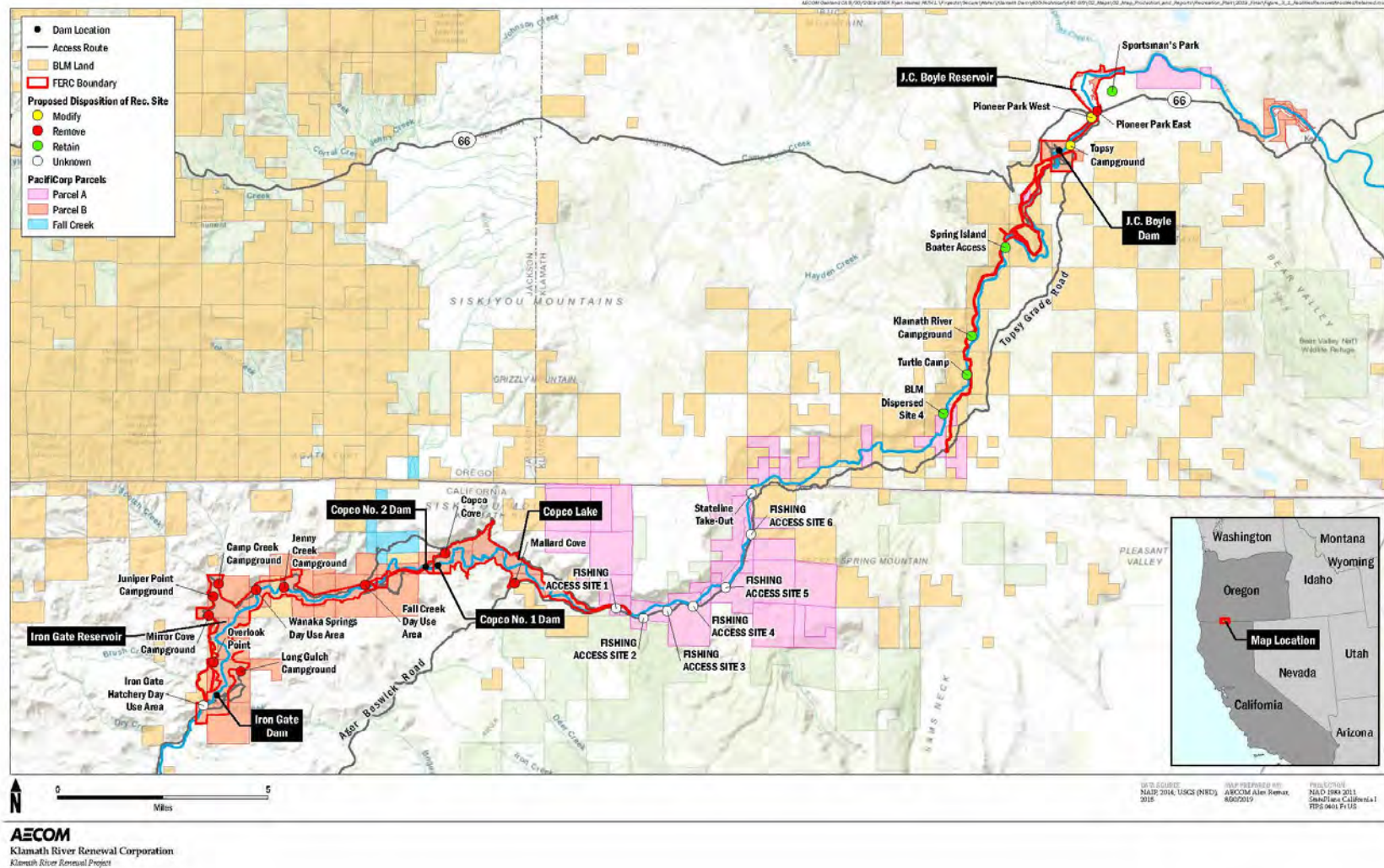


Figure 4-1: Recreation Sites Anticipated to be Removed, Modified, or Retained



Chapter 5: Recreation User Safety During Deconstruction

5. RECREATION USER SAFETY DURING DECONSTRUCTION

The following sections describe how visitor safety will be protected during deconstruction activities.

5.1 Visitor Safety Measures During Deconstruction Activities

The FERC Surrender Order is anticipated to include a Public Safety Plan. This Plan, subject to FERC approval, will provide a comprehensive approach to protecting the public during deconstruction. It will provide the necessary details on access, signage and methods to ensure that the public is restricted from areas that may be dangerous.

A Traffic Management Plan will outline interim signage and temporary access controls during deconstruction to provide safe access. The Plan will identify locations where access to existing recreation facilities is eliminated to allow for their decommissioning. The Plan will include appropriate advance signage at existing recreation facilities identified for removal. A community notification procedure will be implemented as part of implementation of this Plan.

5.2 Communication Protocols

KRRC or its contractor will provide notice of closures to the Klamath County sheriff, BLM, and Siskiyou County sheriff to coordinate any emergency service routes as necessary. KRRC or its contractor will place warning signs at all existing recreation facilities informing users of the closure. The content of these signs will describe the dangers associated with the altered reservoir landscape after the drawdown, including the potential collapse of unstable slopes, ongoing deconstruction activities, and potentially dangerous debris that could be encountered. Signs will direct visitors to stay out of areas that are fenced off or currently closed. Additional text that briefly describes the efforts, goals, and outcomes of the Project and a contact number for questions and potential concerns will also be supplied. Details on signage location and content and/or floating barriers pertaining to deconstruction activities will be further described in the Public Safety and Traffic Management Plans.

Public access will be allowed upon completion of dam decommissioning activities. KRRC or its contractor will provide the schedule for this access through outreach to stakeholder group(s), the KRRC website, and signage. Whitewater boating will be allowed in the newly created free flowing reaches once the reaches have been surveyed post deconstruction to determine that boating access is safe from deconstruction materials or woody debris related to dam breaching activity. KRRC or its contractor will communicate the access status directly with the professional outfitters. KRRC or its contractor will complete outreach to local recreation groups via social media, newspapers, and other forums necessary to inform the public of safe access conditions.

5.3 Recreational Access During Deconstruction

Public recreation access to J.C. Boyle, Copco and Iron Gate reservoirs will vary during decommissioning activities. Beginning in April, preceding drawdown year, deconstruction will begin on roads, bridges and Project dam features to prepare for the dam removal. These actions may temporarily delay vehicular access to existing day use and camping areas. The whitewater boating put-in below J.C. Boyle Powerhouse (Spring Island Boater Access) and the take-out at Fishing Access Site 1 may experience occasional vehicular access delays related to road improvement and/or deconstruction equipment mobilization. From April to July, access improvements are scheduled at the “scour hole”, which will create potentially longer delays for outfitters reaching the Spring Island Boater Access whitewater boating put-in. KRRC or its contractor will communicate any scheduled changes to flow releases from J.C. Boyle Reservoir related to pre-drawdown deconstruction in advance to the outfitters. KRRC or its contractor will place warning signs at all existing recreation sites informing users of the future closure.

Once dam removal deconstruction commences in January of the drawdown year, KRRC or its contractor will close the reservoirs and reservoir recreation sites, and access will not be permitted for public safety. This will restrict whitewater boating, camping and day use within the affected Project deconstruction areas and river reaches between J.C. Boyle Powerhouse and approximately Iron Gate Dam at Lakeview Bridge. KRRC or its contractor will install barriers restricting the public at all recreation access points. Residential traffic will be allowed over Lakeview Bridge to Irongate Estates. Deconstruction access to the J.C. Boyle Bypass Reach or the Copco 2 Bypass Reach for commercial boating will not be allowed due to safety concerns given the deconstruction work occurring near access points and along the river.

KRRC or its contractor will note and remove all existing boat docks along Copco Lake and Iron Gate Reservoir, with owner’s consent on Copco Lake, or securely anchored prior to drawdown of the reservoir. KRRC or its contractor will remove any signage associated with these dock facilities as well. KRRC or its contractor will contact dock owners and provide a one-month period to remove or secure docks. KRRC or its contractor will remove or securely anchor any docks remaining after the one-month period.

As noted above, whitewater boater access will not be allowed in the year of drawdown. KRRC or its contractor will place signage at Topsy Grade Road and J.C. Boyle Powerhouse Road notifying all users of the conditions. In general, throughout the Project area, KRRC or its contractor will place signage at locations that will provide the greatest exposure for public viewing in proximity to road use restrictions. KRRC or its contractor will also place signs at locations that provide adequate space for vehicle turnaround. (Refer to future Public Safety and Traffic Management Plans for additional information.)

The installation of signage and fencing will be coordinated with the Public Safety and Traffic Management Plans. Areas to be used for deconstruction staging will be completely fenced from April of the pre drawdown year through October of the drawdown year.



Chapter 6: Planning Direction for Potential River Recreation Sites


6. PLANNING DIRECTION FOR POTENTIAL RIVER RECREATION SITES

As noted in Chapter 1, one objective of the Recreation Facilities Plan is to identify potential recreation sites and amenities that could be developed by entities other than KRRC to support river recreation after dam removal. The potential recreation sites and amenities in this plan can assist in supporting new whitewater boating opportunities. The potential recreation sites and amenities described in this Recreation Facilities Plan would be configured to take advantage of new river conditions and the anticipated new recreation opportunities available post dam removal. However, KRRC cannot own or manage these potential recreation sites in the long term. Thus, for any potential recreation site to ultimately be constructed, a long-term owner and operator must be confirmed as well as long-term funding identified for the construction, operation and maintenance of the site.

The KRRC used the following guiding principles in evaluating river-related recreation sites and amenities as guidance for use by successor owners of Parcel B lands:

- Provide whitewater boating access to “new” sections of the river (i.e., free flowing, no longer inundated sections). Providing additional whitewater boating access would also provide new whitewater boating opportunities. The new whitewater boating access/opportunities would not be the same or be available at the same time of year as existing whitewater boating opportunities. However, new access points would allow boaters to take advantage of new opportunities on newly exposed portions of the river.
- Provide fishing access to “new” sections of the river. New fishing access locations would also assist in enhancing fishing opportunities.
- Locate new whitewater boating and fishing access sites to take advantage of the new river conditions and provide a variety of recreation experiences and opportunities, such as providing a range of whitewater boating opportunities based on projected river difficulty class.
- Take advantage of existing sites that can be modified to provide river-based, rather than reservoir-based, recreation opportunities to reduce impacts from development of new sites. When considering modifications to existing sites, the quality of recreation opportunities and experiences would be considered, for instance the relative closeness of the river to the site.
- Take advantage of existing access sites where feasible. These sites have an established recreation setting (i.e., mature vegetation, natural river corridor vegetation, and a similar appearance to surrounding areas), and would maintain continuity for recreation users. Additional improvements to existing access sites may be needed to address anticipated increased recreational visitation and uses.

- Consider sites with existing road access when locating new sites as this would reduce site development impacts and long-term maintenance costs.
- Take into consideration environmentally and culturally sensitive areas when locating new recreation sites and their amenities, such as wetlands and cultural resource features. Consider how site amenities may be located to avoid impacts to environmental/cultural resources and/or how the design of sites could offer protection or enhancement to, and interpretation of, these resources.
- Locate recreation sites and associated amenities to provide a variety of recreation experiences and opportunities. For example, provide varying levels of development for day use visitation and river access (e.g., commercial, private, half-day, multi-day, boating, fishing). Development at a site should consider the setting, the level of use, and difficulty associated with the recreation activities.
- Consider projected recreation use when sizing new amenities, as well as projected users (e.g., private versus commercial, short-term versus long-term) to ensure sites can accommodate expected use and therefore reduce potential user conflicts and resource damage due to overflow use.
- Consider safety issues when determining the location of new sites to ensure that users of lower skill levels have options to avoid difficult river conditions or instream obstacles and that there are safe areas at sites to provide viewing opportunities of river features.
- Consider restoration activities to be conducted at the location of new recreation sites and how site design can best be integrated with, and support, restoration goals.
- Design new sites or modifications of existing sites to be aesthetically beneficial to the local environment and to reduce light and glare.



**Chapter 7: Recreation Site
Modifications, New Sites and
Amenities, and Other Ideas:
Identification and Screening**

7. RECREATION SITE MODIFICATIONS, NEW SITES AND AMENITIES, AND OTHER IDEAS: IDENTIFICATION AND SCREENING

The following sections describe the process KRRC used to identify the potential river-related recreation sites included in this informational part of the plan. Following a description of the process, the six potential recreation sites that were selected are described. Five of the six potential recreation sites would be new recreation sites and one, Pioneer Park West, would be a modification to an existing recreation site currently operated by PacifiCorp. The KRRC proposes not to develop the six sites and includes this and the following section (Section 8) for consideration by successor owners of Parcel B lands.

7.1 Identification of Potential Recreation Site Modifications, New Sites and Amenities, and Other Ideas

KRRC reviewed the Bureau of Reclamation's 2011 Detailed Plan for Dam Removal – Klamath River Dams (2011 Detailed Plan) and conducted stakeholder outreach to understand desired recreation opportunities and experiences and to solicit potential recreation modification ideas. KRRC's stakeholder outreach process started in early 2018 and sought input from recreation users, operators, managers and administrators, including Tribal nations, state and federal agencies, local agencies and chambers of commerce, local residents, recreation businesses, and public interest groups. KRRC held multiple webinars and in-person meetings, as well as conference calls with interested individuals to share and solicit feedback on the Draft Recreation Plan, existing and future uses of existing recreation sites, potential new recreation sites, and desired amenities.

The recreation ideas identified during this process consisted of modifications to existing recreation sites, new recreation sites, and other ideas that would provide recreation benefits. In total, 35 recreation modification ideas were identified and discussed in the Draft Recreation Plan. An updated and detailed description of these recreation modification ideas can also be found in Sections A.1 and A.2 of Appendix A. The 2011 Detailed Plan identified camping, day use, boating and trail modifications along with roadway improvements. Stakeholders identified establishing additional river access points, removing in-channel vegetation from bypassed river reaches, funding tourism campaigns, promoting regional recreation, and developing commercial recreation establishments on the river. Stakeholders also suggested retaining and/or improving existing sites. To the extent that the locations of the 35 recreation modification ideas are known, they are shown in Figure A-1 in Appendix A.

KRRC continued stakeholder outreach after release of the Draft Recreation Plan (see Appendix B) and received more input regarding potential recreation site modifications, new sites and amenities, and other ideas. Following the release of the Draft Recreation Plan, KRRC held webinars and meetings with stakeholders to discuss the plan and collect feedback, including on the future disposition of existing recreation sites and desired amenities. KRRC also participated in a site visit with representatives from several stakeholder groups to gain a better understanding of site conditions, stakeholder requests, and general feasibility of the requested river access sites. KRRC also met with the Cultural Resources Working Group to provide an update on potential sites and collect feedback.

Input received during these stakeholder outreach activities included specific locations for sites and additional detail regarding amenities at each site, as well as new recreation modifications beyond the access sites identified in the Draft Recreation Plan. Using this new stakeholder input and the recreation modification ideas provided in the Draft Recreation Plan, KRRC conducted a screening and evaluation process to identify which recreation site modifications, new sites and amenities, and other ideas would best achieve KRRC's recreation planning goal (described in Section 1.2), and follow the principles described in Section 6 of this Recreation Facilities Plan. The following sections describe the screening and evaluation process and results.

7.2 Screening and Evaluation Process

The screening and evaluation process developed screening criteria and evaluated how well each recreation modification idea fulfilled each criterion. The screening criteria were developed to evaluate if the proposed ideas: 1) are durable and feasible recreation sites, opportunities, and experiences, and 2) enhance river-based public recreation opportunities and experiences after license surrender. The screening criteria also evaluated if proposed recreation sites and/or settings are appropriate for the anticipated hydrologic and other natural resource conditions post-Project removal, fulfill stakeholder desired recreation opportunities and experiences, and provided the recreation resources needed for commercial recreation economic vitality of the area. The criteria are listed below. For each proposed idea, the screening criteria ask, will it:

- A. Directly supplement the recreation facilities within the FERC Project Boundary that will remain after license surrender?
- B. Directly address changes in landscape character at the localized reservoir recreation sites or that effect boating and other water-based recreation opportunities by improving access to or usability of an existing recreation resource?
- C. Provide long-term sustainable recreation improvements by avoiding new or substantially increased operations and maintenance demands?
- D. Result in impacts to sensitive river and riparian habitats including important river spawning areas in and adjacent to any river channel?
- E. Avoid, minimize, and/or mitigate any impacts to culturally sensitive areas?
- F. Integrate into the existing communities and infrastructure with a design that reflects the setting and cultural history of the area?

- G. Contribute to regional recreation objectives for the Klamath River?
- H. Be acceptable to law enforcement?
- I. Stimulate local economies?
- J. Be implemented with available funding?
- K. Considers underlying land ownership and funding and maintenance issues to the extent feasible at this point in the Project?

7.3 Evaluation Results

The 35 identified recreation modification ideas were screened and categorized as potential, deferred, or not recommended for further analysis. An idea was labelled as “potential” if it addressed Recreation Facilities Plan objectives and fulfilled a majority of the criteria. Recreation site modifications, new sites and amenities, or other ideas that did not directly address Recreation Facilities Plan objectives but fulfilled several of the criteria were categorized as “deferred.” These ideas were not considered for implementation by KRRC in this Recreation Facilities Plan, but could be considered for implementation by others as a separate action. “Not recommended for further analysis” ideas did not address the Recreation Facilities Plan objectives.

Continued stakeholder engagement and coordination with resource specialists and tribal governments occurred during development of the Recreation Facilities Plan and contributed to the ongoing screening and modification of recreation ideas. In some cases, this resulted in the shifting of locations for recreation modification ideas, and in other instances, resulted in the screening out of ideas to avoid known areas of potential aquatic and terrestrial resource sensitivity as well as cultural resource sensitivity.

The focus of this part of the Recreation Facilities Plan is to identify recreation sites and amenities that facilitate whitewater boating on the river, while concurrently providing fishing access and river-related day use opportunities in an effort to leverage new river conditions post dam removal. To support whitewater boating use, put-in and take-out sites need to be provided at locations adjacent to the start and/or end of each whitewater boating run. Locating these access sites along the river as a coordinated system was done in part to reduce redundancy and ensure the safety of boaters (and anglers) as the river changes in difficulty.

Table 7-1 summarizes the results of the screening effort and lists the six potential modified and new recreation sites and vegetation removal actions. The potential projects provide a mix of recreation opportunities at 1) existing recreation sites to leverage the established recreation setting, 2) sites that provide access to newly exposed portions of the river to leverage the new recreation opportunities presented within these river reaches, and 3) removal of vegetation from portions of the river currently bypassed by the hydroelectric project that are currently overgrown and would represent a recreation safety hazard after dam removal. The potential projects were developed based on stakeholder input and fulfill stakeholder desired recreation opportunities and experiences to the extent practicable. The potential new and modified access sites would support continued commercial recreation access and use of the river for whitewater boating and fishing, as well as support other recreation opportunities including birding, wildlife viewing, and nature photography.

Table 7-1: Summary of Potential Modified and New Recreation Sites and Amenities

Site	Added or Modified Amenities	Expected Recreation Opportunities
Modifications to Existing Public Recreation Sites		
Pioneer Park West	<ul style="list-style-type: none"> • Improve existing access road • Parking area for 21 vehicles (including 2 spaces for Americans with Disabilities Act (ADA) accessible parking) • 4 commercial vehicle pull-through parking spaces • Universally accessible vault toilet • Garbage facilities • Water spigot • Kiosk with angler box • Informational kiosk • 6 picnic sites • 2 river viewing areas • Trail to the boat launch from parking area • Boat launch staging area and vehicle turnaround • 2-lane boat launch • Removal of in-water concrete piers 	<ul style="list-style-type: none"> • Whitewater boating • Fishing • Boating • Picnicking/Day use • Informal shoreline recreation
New River Access Sites		
Moonshine Falls	<ul style="list-style-type: none"> • Access road improvements • Parking area for 15 vehicles (including 1 space for ADA-accessible parking) • 3 commercial vehicle pull-through parking spaces • Universally accessible vault toilet • Garbage facilities • Water spigot • Kiosk with angler box • 1 picnic site • River view point with benches • Trail to the boat launch • Boat launch staging area and vehicle turnaround • Boat launch drop off/staging area • Boat slide and accompanying ramp down to the river's edge • Gravel beach 	<ul style="list-style-type: none"> • Whitewater boating • Fishing • Boating • Picnicking/Day use

Site	Added or Modified Amenities	Expected Recreation Opportunities
Copco Valley	<ul style="list-style-type: none"> • New access road off the existing Copco Cove access road • Parking area for 54 vehicles (including 2 spaces for ADA-accessible parking) and 7 trailer pull-outs • Universally accessible vault toilet • Garbage facilities • Kiosk with angler box • Water spigot • 5 picnic sites • 2 designated dispersed river access sites and gravel connector trail • 4-lane paved boat ramp • Boat launch staging area • Hand-launching area/beach 	<ul style="list-style-type: none"> • Whitewater boating • Fishing • Boating • Picnicking/Day use • Informal shoreline recreation
Copco No. 2 Powerhouse	<ul style="list-style-type: none"> • Widened access road off Daggett Road • Parking area for 40 vehicles (including 2 spaces for ADA-accessible parking) and 4 pull-through spaces for vehicles with trailers • Universally accessible vault toilet • Garbage facilities • Water spigot • 4 picnic sites • View point with bench • Staging area with bench and kiosk with angler box • Shoreline trail from boat slide to Daggett Road • Boat slide to launch at edge of river • Boat slide staging area 	<ul style="list-style-type: none"> • Whitewater boating • Fishing • Boating • Picnicking/Day use • Informal shoreline recreation

Site	Added or Modified Amenities	Expected Recreation Opportunities
Camp Creek	<ul style="list-style-type: none"> • New short access road • Parking area for 14 vehicles (including one space for ADA-accessible parking) • Trail leading downslope to the riverbank • Universally accessible vault toilet • Garbage facilities • Kiosk with angler box • 4 picnic sites • 4 gravel river access areas 	<ul style="list-style-type: none"> • Fishing • Informal shoreline recreation • Picnicking/Day use • Whitewater boating
Iron Gate	<ul style="list-style-type: none"> • Parking area for 18 vehicles (including 2 spaces for ADA-accessible parking) and 5 vehicles with trailers • Universally accessible vault toilet • Garbage facilities • Kiosk with angler box • Water spigot • 5 picnic sites • Trails to picnic sites • Re-grade river's edge/beach • Paved 4-lane boat launch • Launch staging area • Retain existing vegetation 	<ul style="list-style-type: none"> • Whitewater boating • Fishing • Boating • Informal shoreline recreation
Vegetation Removal		
Copco No. 2 Bypass Reach	<ul style="list-style-type: none"> • In-channel vegetation removal 	<ul style="list-style-type: none"> • Whitewater boating

The potential recreation sites include five new access sites and one modified river access site. New river access sites include: Moonshine Falls, Copco Valley, Copco No. 2 Powerhouse, Camp Creek, and Iron Gate. River access would be modified at one existing site: Pioneer Park West.

Figure 7-1 presents the locations of the six new river access sites (in purple), in addition to the recreation sites that are anticipated to be retained (in green), modified (in yellow), or whose status is currently unknown (in white).

The potential recreation projects would provide day use, whitewater boating, fishing, and general boating opportunities and access, particularly on newly exposed whitewater boating runs. As shown in Figure 7-1, access would be missing to several sections of the river based on recreation sites anticipated to be retained outside the FERC Project Boundary or modified within the FERC Project Boundary. Table 7-2 shows each of the anticipated whitewater boating runs on the Klamath River after Project implementation as well as the put-in and take-out location for each run. In combination with existing recreation sites and the potential recreation sites included in this Recreation Facilities Plan, a put-in and take-out location could be available for each run. However, it is unknown if the Stateline Take-Out and Fishing Access Site 1 locations will be maintained as public recreation sites by PacifiCorp after Project implementation as these sites are located, or partially located, on Parcel A lands. If these sites are removed by PacifiCorp, there will be no take-out for the Hell's Corner Gorge Run, put-in or take-out for the Stateline Run, or put-in for the Copco Valley Run. Boaters would be required to boat from Turtle Camp all the way to the potential Copco Valley site, which would include Class IV+ and Class II-II+ sections.

In addition, though there are existing recreation sites at Keno Camp, Turtle Camp, and BLM Dispersed Site 4, these sites are not developed for boating use and do not contain boat ramps or formal river access. Keno Camp currently contains parking and informal walk-in access to the river's edge and is only open seasonally. Turtle Camp only contains a few picnic tables and BLM Dispersed Site 4 does not have any facilities. Therefore, while a recreation site exists at these locations, these sites are not functional as put-in and take-out locations. A draft design of a river access site at both Keno Camp and Turtle Camp is included in Appendix C in an effort to complete the system of put-in and take-out sites along the river. However, both locations are outside the FERC Project Boundary and therefore the KRRRC would not implement development of facilities at either location.

Figure 7-2 shows potential recreation sites in purple, retained recreation sites outside the FERC Project Boundary in green, modified sites within the FERC Project Boundary in yellow, and sites whose disposition is currently unknown in white (note these projects are listed in Tables 4-3 and 4-4 above).

Table 7-2: Put-in and Take-out Locations for Whitewater Boating Runs on the Klamath River within the Project Area

Name of Run	Put-in Location	Take-Out Location
Keno	Keno Camp ¹	Pioneer Park West
Upper Big Bend	Pioneer Park West	Moonshine Falls
Big Bend	Moonshine Falls	Spring Island Boater Access
Upper Hell's Corner	Spring Island Boater Access	Turtle Camp or BLM Dispersed Site 4 ¹
Hell's Corner Gorge	Turtle Camp or BLM Dispersed Site 4 ¹	Stateline Take-Out ²
Stateline	Stateline Take-Out ²	Fishing Access Site 1 ²
Copco Valley	Fishing Access Site 1 ²	Copco Valley
Ward's Canyon	Copco Valley	Copco No. 2 Powerhouse
Iron Gate	Copco No. 2 Powerhouse, Camp Creek	Camp Creek, Iron Gate

Notes

- 1 A draft design of a river access site at this location is included in Appendix C to complete the system of put-in and take-out sites along the river. However, this site is located outside of the FERC Project Boundary and therefore is not considered for implementation by the KRRC.
- 2 The disposition of this site is unknown at this time as it is located, or partially located, on PacifiCorp Parcel A lands.

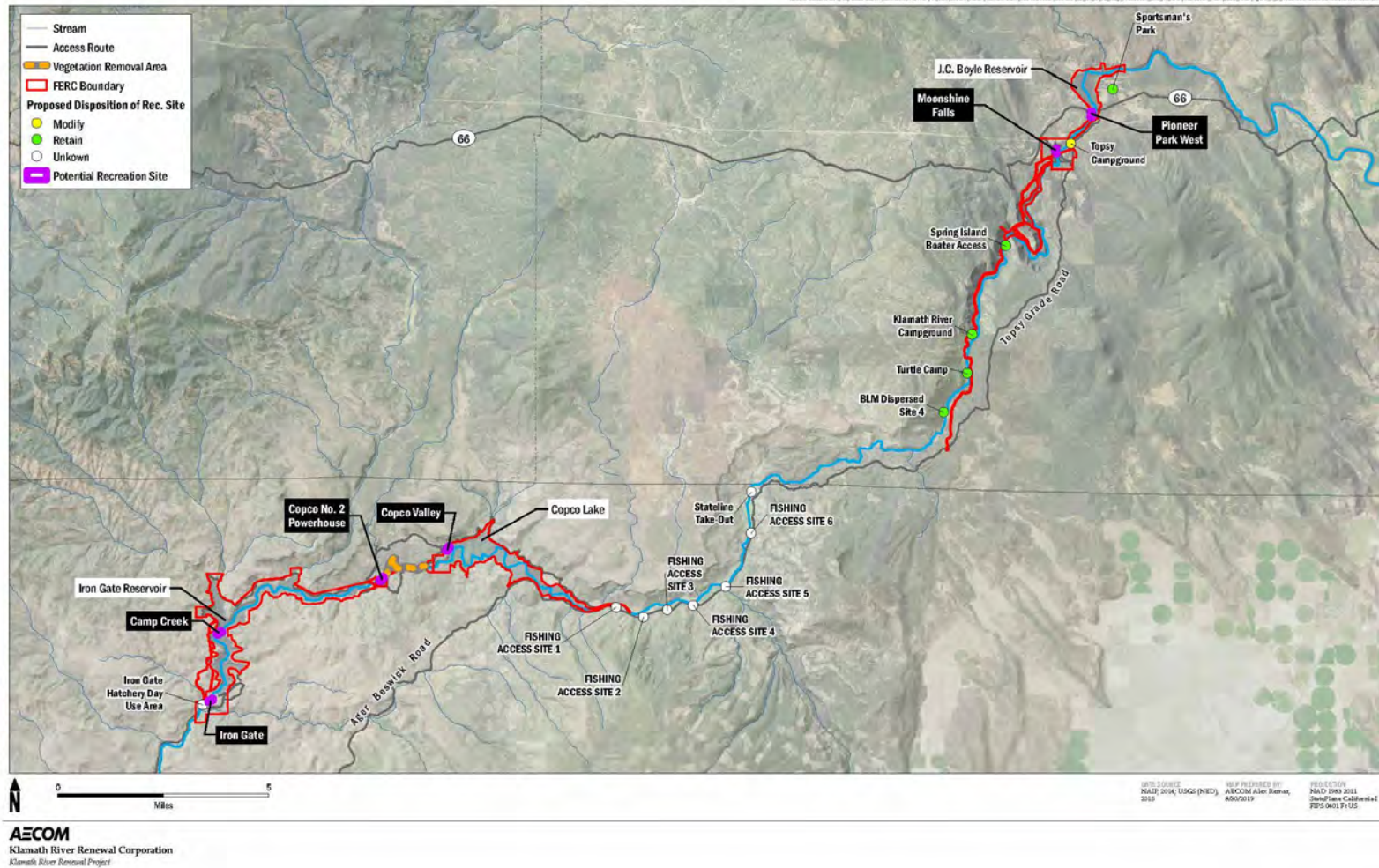
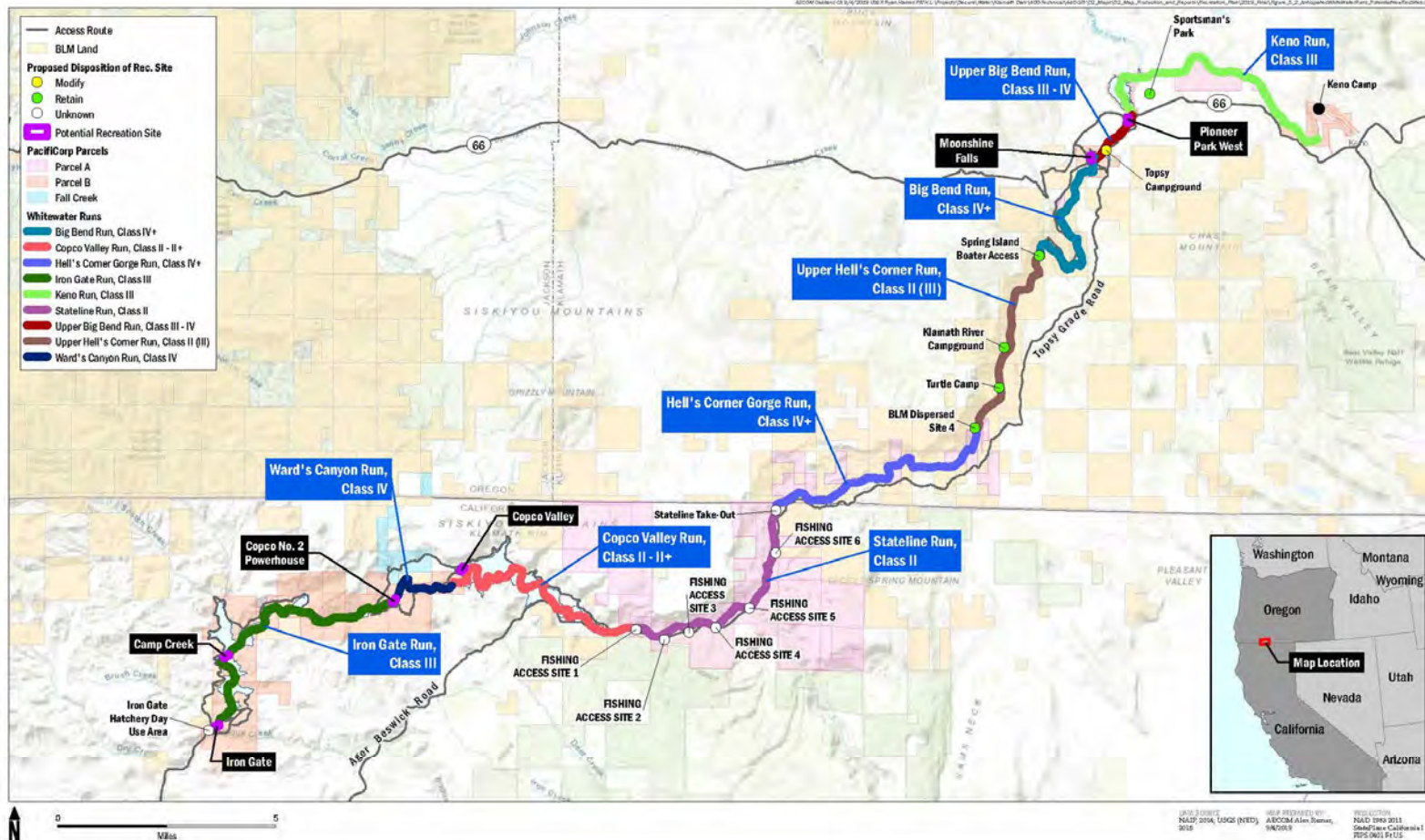


Figure 7-1: Potential Modified and New Recreation Sites



AECOM
Klamath River Renewal Corporation
Klamath River Renewal Project

DATE SOURCE: NAIP 2014, USGS (NEED) 2015
MAP PREPARED BY: AECOM/Alan Samay, 9/2019
REVISION: NAD 1983 2015, 2019
DRAWN BY: C. Colwell/1
RPS (04) 15115

Figure 7-2: Anticipated Whitewater Boating Runs with Potential Class Modified and New Recreation Sites



Chapter 8: Potential Modified and New Recreation Sites

8. POTENTIAL MODIFIED AND NEW RECREATION SITES

The following sections describe the potential sites for modification or development described in Section 7.3 (in an upstream to downstream order), the recreation opportunities and experiences that would be available at each site, the recreation setting of the site, and the modifications and/or new amenities to be added to each site at a conceptual level of detail. Specific information is provided below regarding existing site conditions and is based on the observed conditions in the summer of 2018 and spring of 2019, historic data, and stakeholder feedback. KRRC will continue to refine the site descriptions and site designs with new information from ongoing coordination with resource specialists and tribal governments, the 2020 flow study, and stakeholder input. In addition, biological resource surveys and ongoing tribal consultation, will be conducted in 2019 and 2020 that may alter the location and design of potential sites.

The Klamath River is anticipated to return to its historic channel following dam removal; however, slumping and erosion may occur on the banks of the historical river channel as well as erosion or differential settling in the historic upland terrace. In addition, channel morphology, such as the locations of pools and riffles, rapids and waterfalls, would not be apparent until after drawdown is complete. Therefore, the layout and amenities at some sites may need to be adjusted as the Project is implemented and site conditions change/become apparent, particularly for sites that are located within existing reservoir footprints. Amenities at the potential recreation sites would also consider potential flooding impacts in their design as some amenities would be located within the floodplain. In addition, the exact location of these potential sites and amenities may be shifted to improve access or minimize impacts to cultural or environmental resources. The location of sites may also be shifted due to the revealing of river hydraulics that alter the river difficulty for boating. It is understood that the timing of the availability of potential recreation sites for public use after Project implementation would affect the ability of outfitters to use the river, particularly new sections of the river, for commercial boating use.

After license surrender is effective, the KRRC will not own, operate, or fund operation of the potential recreation sites. Under the Amended KHSA, following dam decommissioning and removal, KRRC would surrender the FERC license and Parcel B lands would be transferred to their respective states. However, California and Oregon have not yet determined the final disposition of Parcel B lands. The ultimate Parcel B landowners, would be responsible for management, operation, and maintenance of the potential recreation sites identified in this plan and may provide additional input into their design and location in the future, including which amenities they would be able to maintain and/or prefer. At this time, fees are not being considered for use of the potential recreation sites; however, the final decision on fees would be up to the ultimate Parcel B landowners.

Thus, whether these potential sites are constructed depends on the identification of the agency or entity that ultimately owns the underlying land (e.g., Parcel B lands). The final designs would therefore be determined

by the ultimate ownership of PacifiCorp's Parcel B lands and the requirements of agencies or organizations that ultimately own, operate, and maintain these sites.

Prior to construction of potential recreation sites, particularly those sites located within existing reservoir footprints, it is anticipated that cultural resource surveys would be conducted to ensure that the potential recreation sites would not contribute to significant impacts to these resources. Identification of cultural resources within the potential recreation sites may result in relocation or redesign of the sites, and/or mitigation related to protection of cultural resources.

Ultimately, the ownership, management program, operation, and ongoing maintenance of the potential recreation sites included in this plan would be the responsibility of the parties that the lands are transferred to. Due to the uncertainty regarding future landownership, this Recreation Facilities Plan discusses the maintenance requirements for each site rather than the management of the potential sites.

Restoration within the FERC Project Boundary would occur as part of Project implementation and would affect both the short-term and long-term setting of the potential recreation sites. As discussed in the *Definite Plan for the Lower Klamath Project*, restoration of reservoir areas would begin with seeding and planting during the reservoir drawdown period. During dam removal, active restoration of floodplain areas would occur, including grading, large wood installation and habitat features.

After dam removal, additional seeding in underperforming areas, maintenance of existing and previously planted vegetation, and continued installation of pole cuttings and seed plantings would occur. Restoration of the reservoir areas would consider elevation, reservoir depth, plant communities, and soils and would include wetland, riparian and upland area restoration. The long-term setting at the potential recreation sites would eventually generally reflect the surrounding non-restored river corridor areas. The description of each potential recreation site below includes a discussion of whether restoration would occur at the site and how the setting may change with Project implementation.

It is understood that while the KRRC is only focused on recreation facilities within the FERC Project Boundary (as presented in this section), the potential recreation sites included in this Recreation Facilities Plan would be part of a larger system of river access sites that provide key put-in and take-out access for boaters. Discontinuing public use at existing recreation sites on PacifiCorp Parcel A lands, not developing recreation access sites at Keno Camp and Turtle Camp (see Appendix C), as well as not developing any of the potential recreation sites discussed in this section, could limit future boating and fishing access, opportunities, and use of the Upper Klamath River. In addition, resulting gaps in access and lack of facilities may lead to unauthorized use of riverside areas and impacts to natural and cultural resources along the riverbank, as well as potential safety issues for boaters and anglers.

8.1 Design Principles

The design program for the potential recreation sites focused on producing site designs that maintain a natural, largely undeveloped feel and improve the visitor's experience within the context of the resource setting while protecting sensitive cultural resources and enhancing ecological resources. The potential

recreation sites support improved recreation programs, limit operations and maintenance costs, and improve access to the river. Careful consideration has been given to the existing natural character of the area during site design, including restoration and enhancement of the natural features whenever possible. Site design has accounted for issues affecting potential recreation activities, such as river hydrology and gradient and potential safety hazards related to access.

To reduce potential impacts to habitat and vegetation, site designs were developed that limited the clearing of mature vegetation as much as possible and potential site amenities and features would be field fitted to reduce site disturbance. By guiding visitors to a few specific programmed areas for recreation, construction impacts to mature vegetation would be minimized. It is anticipated that construction of the potential recreation sites would be done in coordination with sensitive species temporal and spatial constraints, vegetation management guidelines, invasive non-native plant prevention and control measures, and revegetation measures as outlined in the Surrender Order and related plans. It is assumed that construction materials, equipment, and timing would follow specifications set within the Basis of Design document.

In many locations, understory plant communities have been impacted by past site disturbance caused by the Project, dispersed recreation and/or management practices such as grazing. Improvements that would occur as part of potential recreation site development consist of improving soil conditions where there are impacts from past disturbance and replanting native tree and shrub plant communities following the restoration protocols outlined within the Surrender Order and related plans. Restoration of native plant communities would not only improve habitat, but would provide value-added benefits, such as improved site aesthetics and delineation of boundaries around potential recreation sites.

Potential recreation site locations were chosen based on the predicted results of Project implementation and return of the river system back to its original alignment. Consideration was given to slope and gradient of the river channel, the relationship of the site to potential whitewater boating runs, and the site's potential to support development of infrastructure to enhance recreation experiences within specific setting characteristics for day use recreation, whitewater boating access, and fishing. Sites were also vetted for their viability by stakeholders and ability to accommodate assumed levels of use.

The following design principles were considered in site planning and design of the potential river access sites to understand how the river is being used and by whom.

- System and Location: the location, geomorphology, and physical characteristics of a site within the continuum of the river system.
- Landscape Setting: the site-specific features as well as the site conditions characterized as natural, enhanced, or constructed and the site-specific features that define setting.
- Temporal Dependence: the seasonal nature of on-site activities and how variability of water levels may affect timing and types of uses.
- Frequency: when and how often activities occur at a site and how that site activity integrates or impacts the biological setting and natural resources.

- Density: the number of individuals who will use a site and the site's spatial constraints that define how well desired uses can be accommodated.
- Use Type and Challenge Level: the activity types and challenge levels occurring at the site.
- Management: the needs and challenges available to support resource managers in operations and maintenance activities.
- Scenic Integrity: protection of aesthetic resources through thoughtful design.

8.2 Design Program Objectives

In addition to the design principles described above, the KRRC developed a set of program objectives to guide the configuration of each site. The program objectives for the potential recreation sites are:

- Conserve, protect, and enhance habitat;
- Avoid user conflicts between boat ramp, trails crossings, parking and general day use activities;
- Provide designated launching areas;
- Offer group staging areas for commercial operators and private groups;
- Provide adequate waste facilities;
- Support the health, safety and welfare of the visitor;
- Provide opportunities for interpretation and education information;
- Provide additional vegetation enhancements;
- Provide opportunities for day use/picnicking;
- Improve fishing access;
- Provide pedestrian circulation paths that take advantage of scenic viewing areas;
- Provide universal accessibility at all sites; and
- Plan and schedule all work to be consistent with other applicable plans under the Surrender Order and in coordination with other working groups (i.e., Restoration, Cultural Resources, Engineering etc.).

8.3 Pioneer Park West River Access Site

8.3.1 Setting

The potential Pioneer Park West River Access Site is located in a stretch of the Klamath River currently inundated by J.C. Boyle Reservoir. Therefore, existing conditions at this location would change and restoration would occur after drawdown of the reservoir and the river retreats back to its historic alignment. A potential river access site at this location would include modifying the existing Pioneer Park West recreation site to provide river access as the site would no longer provide shoreline access after reservoir draw down.

The setting of the site would continue to provide open views of the river corridor with mature vegetation and trees consistent with surrounding vegetation in the middleground to background along the green-sided slopes of the surrounding hillsides and mountains. However, the water surface would narrow and the views north and south of the site would be constricted with the increase in riparian vegetation within the formerly inundated portions of the reservoir.

The modified natural river setting would provide boating and fishing recreation experiences anticipated to be similar to the historic naturally functioning river in this region, particularly after restoration goals are achieved. Recreation experience quality may be slightly degraded until restoration and revegetation goals are achieved. Scenic impacts from draw down of the reservoir would leave a contrast in color between the sediment laden side slopes providing different scenery than expected in a natural river corridor. However, with establishment of riparian vegetation, over time naturalization would occur and the contrast would lessen.

8.3.2 Description

The Pioneer Park West River Access Site would be located along the right bank of the Klamath River just south of the Highway 66 road crossing at the existing Pioneer Park West recreation site. Figure 8-1 shows the general vicinity/location of the potential river access site. This site is accessed via Highway 66 and an existing road connecting the highway to the site. A site at this location would provide river access for whitewater boating, fishing, general boating, and informal shoreline recreation opportunities. Stakeholders identified this site as a highly valuable take-out location for the Keno Run and a put-in for the Upper Big Bend Run. This location is important because the site would be located at a significant gradient change in the river, with the Keno Run at Class III upstream and the Upper Big Bend Run downstream at Class III-IV. Thus, this site would provide a safe exit point for less experienced boaters before continuing downstream on a more difficult run. Removal of J.C. Boyle Dam would remove the flatwater paddle required above the dam, which currently limits boating use of the Keno Run, and would also expose the entire Upper Big Ben Run, which is currently entirely inundated by J.C. Boyle Reservoir. The location of this site fulfills the guiding principles related to new whitewater boating and fishing opportunities, leveraging new river conditions, leveraging an existing recreation setting, using existing road infrastructure, and consideration of safety issues.



Figure 8-1: Potential Pioneer Park West River Access Site

The existing access road would be improved and lead directly to a paved 2-lane boat launch and vehicle turnaround. A boat launch staging area would be located adjacent to the turnaround. The existing information signs, restrooms and picnic areas at the Pioneer Park West site would be removed in order to provide new facilities. A new formal parking area would be located east of the existing access road. The parking area would include parking spaces for up to 21 vehicles (including 2 spaces for ADA-accessible parking) and four commercial vehicle pull-through parking spaces. Located adjacent to the parking area would be a universally accessible vault toilet, kiosk with angler box, garbage facilities, water spigot, and paved trail connection to the ADA parking spaces.

At the west end of the parking area, a paved trail would lead to two picnic areas and a river viewing area within the existing vegetation, uphill of the former inundation area. An informational kiosk would be located at the beginning of the trail. East of the parking area would be a paved trail connecting to four picnic sites within the former inundation area, as well as a river viewing area along the new river's edge. The paved trail would also continue over to the boat launch.

Use of the existing Pioneer Park West site would reduce the need for a new access road and would reduce grading needs as well. Development of this potential site would also include removal of the concrete piers located within the historic river channel at this site as these piers could become a significant boating hazard if they were to remain within the river channel. Removal of the piers would require consultation with the State Historic Preservation Officer.

It is currently unknown who will own, operate, and maintain this site because it would be located on PacifiCorp Parcel B lands, the disposition of which is currently unknown. Maintenance of Highway 66 would continue to be performed by the County.

8.3.3 Conceptual Design

Figure 8-2 shows the initial conceptual design for the potential Pioneer Park West River Access Site.

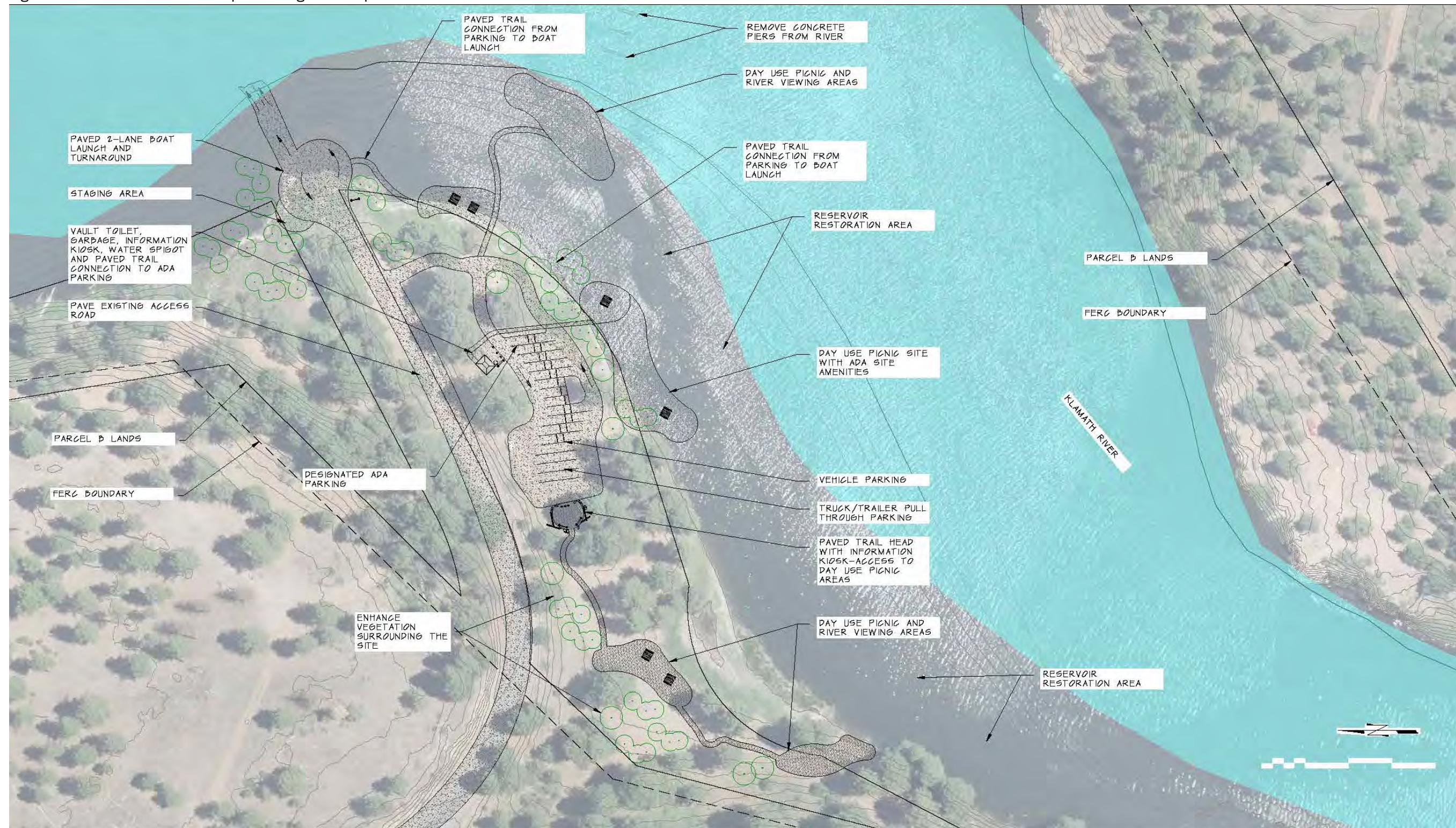


Figure 8-2: Pioneer Park West River Access Site Conceptual Design

8.4 Moonshine Falls River Access Site

8.4.1 Setting

The potential Moonshine Falls River Access Site would be located in a stretch of the Klamath River right below a dam that would be removed, in a bypass reach that is typically dewatered. Therefore, the existing conditions of the site would change and restoration would occur near this location, in the area surrounding the former dam site; the remainder of the bypass reach would not need restoration.

The setting of the site would continue to provide river views of upland mature vegetation and trees consistent with surrounding vegetation in the foreground to background; however, the removal of the dam and associated hydroelectric facilities may result in impacts to the landscape affecting form, line, texture and color within foreground and middle ground views from the potential recreation river access site. Contrasting lines from exposed brown soils from deconstruction and irregular edges within the river canyon from dam construction would be evident from key viewing areas. The upper portions of the J.C. Boyle Disposal Stockpile, which would be restored with native habitat, may be visible from the potential recreation site. As ecological restoration and revegetation take hold at the former hydropower facility locations, views in the foreground and middleground of the site would improve, eventually reaching a point of naturalization.

The river itself would also appear different with increased flows. With the addition of increased flows in this section of the river, water quality would increase, improving water clarity and color. A slightly larger, clearer river would be visible from viewpoints along the entire bypass reach and from the potential river access site. The naturalized river setting would provide the boating and fishing recreation experiences anticipated for a naturally functioning river in this region, particularly after restoration goals are achieved at former hydropower facility locations.

8.4.2 Description

The potential Moonshine Falls River Access Site would be situated below the dam, at the power canal and south of the timber bridge crossing on the river right. Figure 8-3 shows the general vicinity/location of the potential river access site. The site is accessed via Highway 66 and an existing gravel road connecting the highway and the site. A site at this location would provide whitewater boating, fishing, general boating, and picnicking/day use opportunities with upstream views of Moonshine Falls and downstream river views of the riparian corridor.

Stakeholders identified this site as a highly valuable put-in location for the Big Bend Run, which would be located in the former J.C. Boyle Bypass Reach, and a take-out location for the upstream Upper Big Bend Run following dam removal. Stakeholders would prefer access to this site during dam removal to facilitate use of the Big Bend Run. Such access is not allowable due to safety concerns given the deconstruction work occurring near access points and along the river.

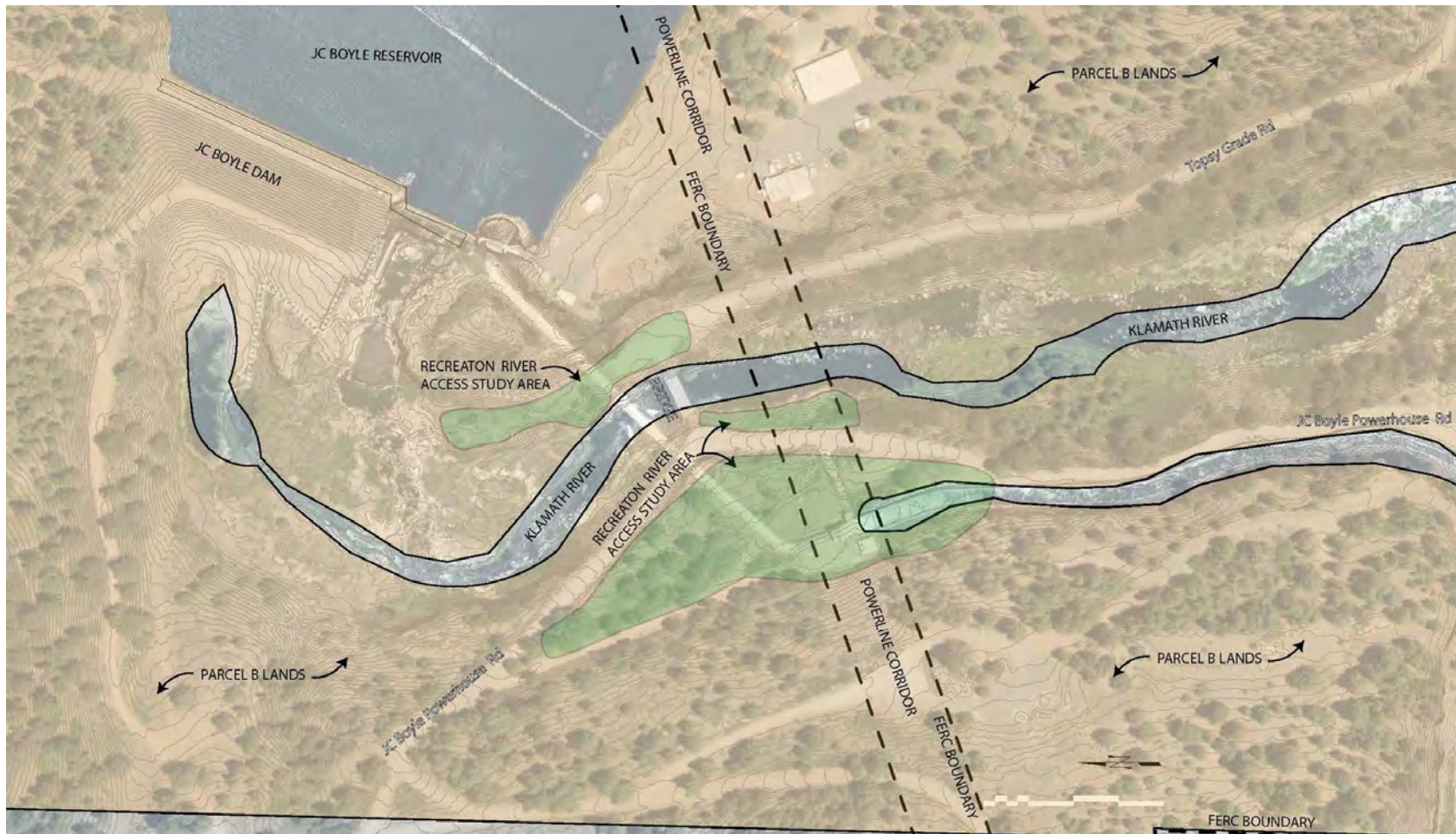


Figure 8-3: Potential Moonshine Falls River Access Site

Changes in river flows from Project implementation would result in a substantial increase in the number of days with acceptable flows for whitewater boating in the J.C. Boyle Bypass Reach (Big Bend Run). The location of this potential recreation site fulfills the guiding principles related to new whitewater boating and fishing opportunities, leveraging new river conditions, using existing road infrastructure, and consideration of safety issues.

As noted in Section 3.2.2, the historic Moonshine Falls rapid may pose a safety hazard because it is unclear if the rapid was altered by J.C. Boyle Dam construction or not, as it was located at or near the dam site. Therefore, the level of difficulty and potential navigability of this rapid is unknown. Once the dam is removed, revealing of the Moonshine Falls rapid may require the relocation of the Moonshine Falls site, development of a second site as an upstream take-out, and/or a portage route around the falls maybe needed, depending on the navigability and safety of that rapid. Depending on the navigability of the Sidecast Slide rapid downstream of the potential recreation site, a portage may also need to be created around this rapid. The navigability of this rapid for a variety of boat types will be better understood after the 2020 flow study. The flow study also aims to determine the usability of the Big Bend Run by a variety of boat types at the flows expected to be present during the summer season after Project implementation.

There is currently no existing recreation site at this location. The closest recreation site is Topsy Campground, which is located approximately 0.3 mile east of the site on the shoreline of the existing J.C. Boyle Reservoir. Topsy Campground is anticipated to be retained as part of the Project, though modified to remove the boat ramp that would no longer be connected to the reservoir. Figure 8-4 shows the existing conditions at the potential river access site.

The potential river access site would be located on the upper terrace on the river right of the corridor due to the steepness at this site. The parking area would be located in an area where former Power Canal facilities would be removed, resulting in less earthwork and disturbance needed. The parking area would include access road improvements, a paved path leading to a picnic site and a river view point with benches, as well as the universally accessible vault toilet and garbage facilities. The parking area would be designed to support 15 vehicles (including 1 space for ADA-accessible parking) and would include three commercial vehicle pull through spaces. An information kiosk with angler box would also be located at the site.

Vehicular circulation would be directed from the upper road through the new parking area to the staging area at the top of the river bank. From the staging area, boats would be lowered down a boat slide to the edge of the river where there would be a gravel beach for launching. Next to the boat slide would be an ADA-graded path cut into the side slope of the bank leading to the edge of the river/gravel beach. The river bank would be retained by gabion baskets or concrete blocks. A second staging area and vehicle turnaround would also be available just uphill from the boat slide staging area. After dropping off boats, commercial and private boaters would continue back up to the upper road and parking area to secure their vehicles. A trail would lead from the parking area down to the road to access the boat slide and staging area.

It is currently unknown who will own, operate, and maintain this site because it would be located on PacifiCorp Parcel B lands, the disposition of which is currently unknown. Maintenance of Highway 66 would continue to be performed by the County. The entity responsible for continued maintenance of the gravel access road, however, is unknown.



Figure 8-4: Potential Moonshine Falls River Access Site – Existing Conditions at Timber Bridge

8.4.3 Conceptual Design

Figure 8-5 shows the initial conceptual design for the potential Moonshine Falls River Access Site.

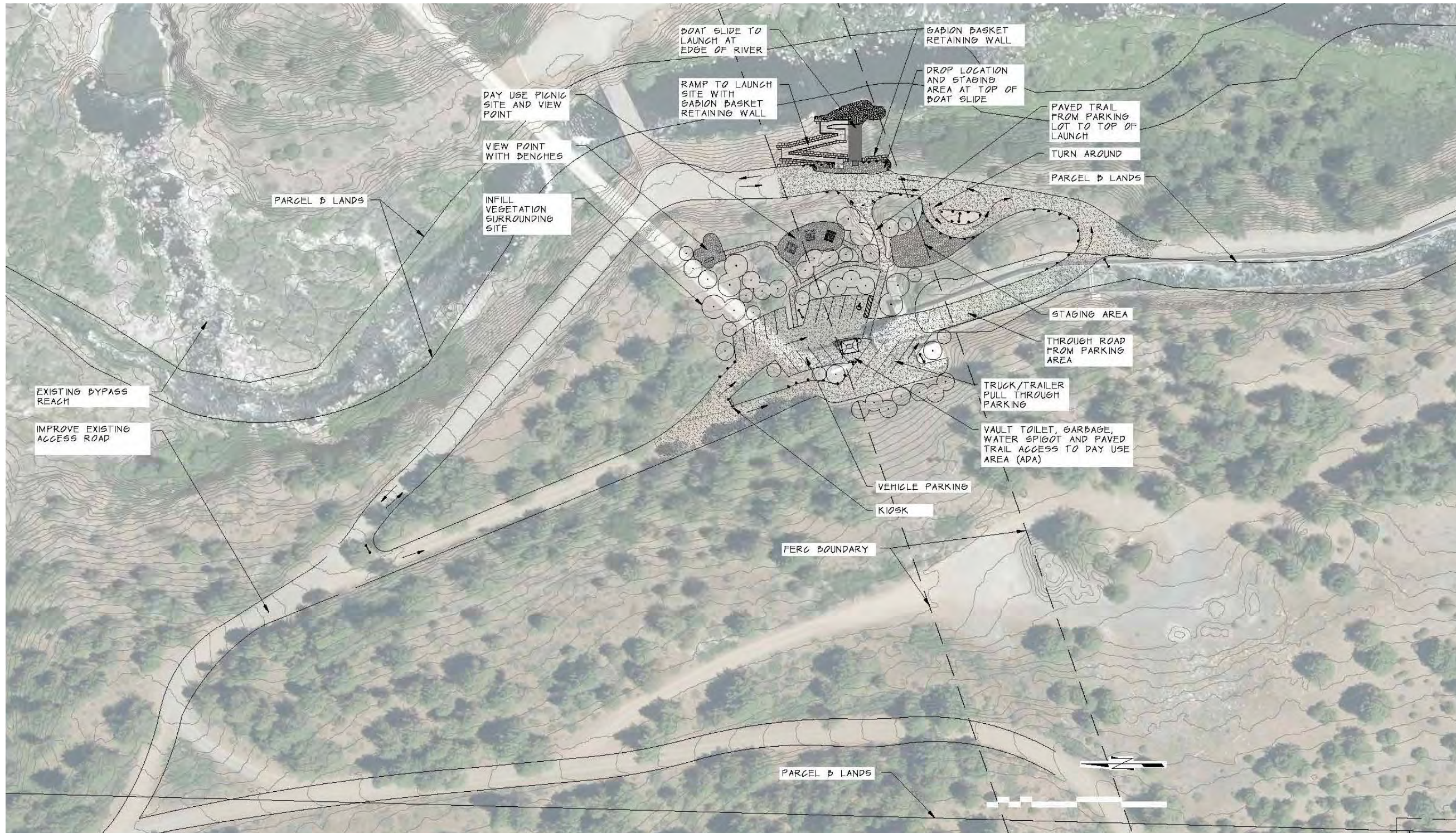


Figure 8-5: Moonshine Falls River Access Site Conceptual Design

8.5 Copco Valley River Access Site

8.5.1 Setting

The potential Copco Valley River Access Site would be located in a stretch of the Klamath River currently inundated by Copco Lake. Therefore, the setting of the site would change from existing conditions and restoration of the former inundation area would occur at this location. The existing background setting provides long sustained views of green to brown pine oak hillsides with tan and yellow understory grasslands. Scattered gray linear basalt outcrops are visible at intervals at the tops of the steep hill from the shoreline.

With restoration of the former reservoir area, the foreground and middleground views would contrast the natural composition of the background conditions. It is expected that this contrast would be reduced as revegetation is established. Once vegetation is established, naturalization of the setting would start to take place, thus minimizing the contrast in color and texture between the foreground, middleground and the existing background setting.

The extent of restoration at this site would be significantly more than at the other previously described sites because this site would be located at a wide area of the former Copco Lake. Similar restored river views would occur upstream of the site and slightly downstream of the site until after passing the former Copco No. 1 Dam site. The former Copco No. 2 Reservoir is narrower and is situated within the confines of the historic river channel. Restoration and revegetation are expected only where impacts from removal of dam facilities are required. The restoration and enhancement of the historic river channel would support the river corridor returning to its native course and naturalized river setting downstream of the site. After revegetation, the eventual naturalized river setting would provide the boating and fishing recreation experiences anticipated for a naturally functioning river in this region.

8.5.2 Description

The potential Copco Valley River Access Site would be located on the right bank of the Klamath River in an area currently inundated by Copco Lake and near the existing Copco Cove recreation site, which would be removed during Project implementation. Figure 8-6 shows the general vicinity in which the potential river access site would be located. The site would be accessed via Copco Road through the existing Copco Cove recreation site. A site at this location would provide river access for whitewater boating, fishing, picnicking/day use, and informal shoreline recreation opportunities.

Stakeholders identified this site as a highly valuable take-out for the Copco Valley Run and put-in for the new Ward's Canyon Run, which would become available after the removal of Copco No. 1 and No. 2 Dams and increased flows within the Copco No. 2 Bypass Reach. This potential river access site would be located at a point where the whitewater boating difficulty would change from Class II within the former Copco Lake area on the Copco Valley Run to Class IV within the Ward's Canyon Run (currently inundated by Copco No. 2

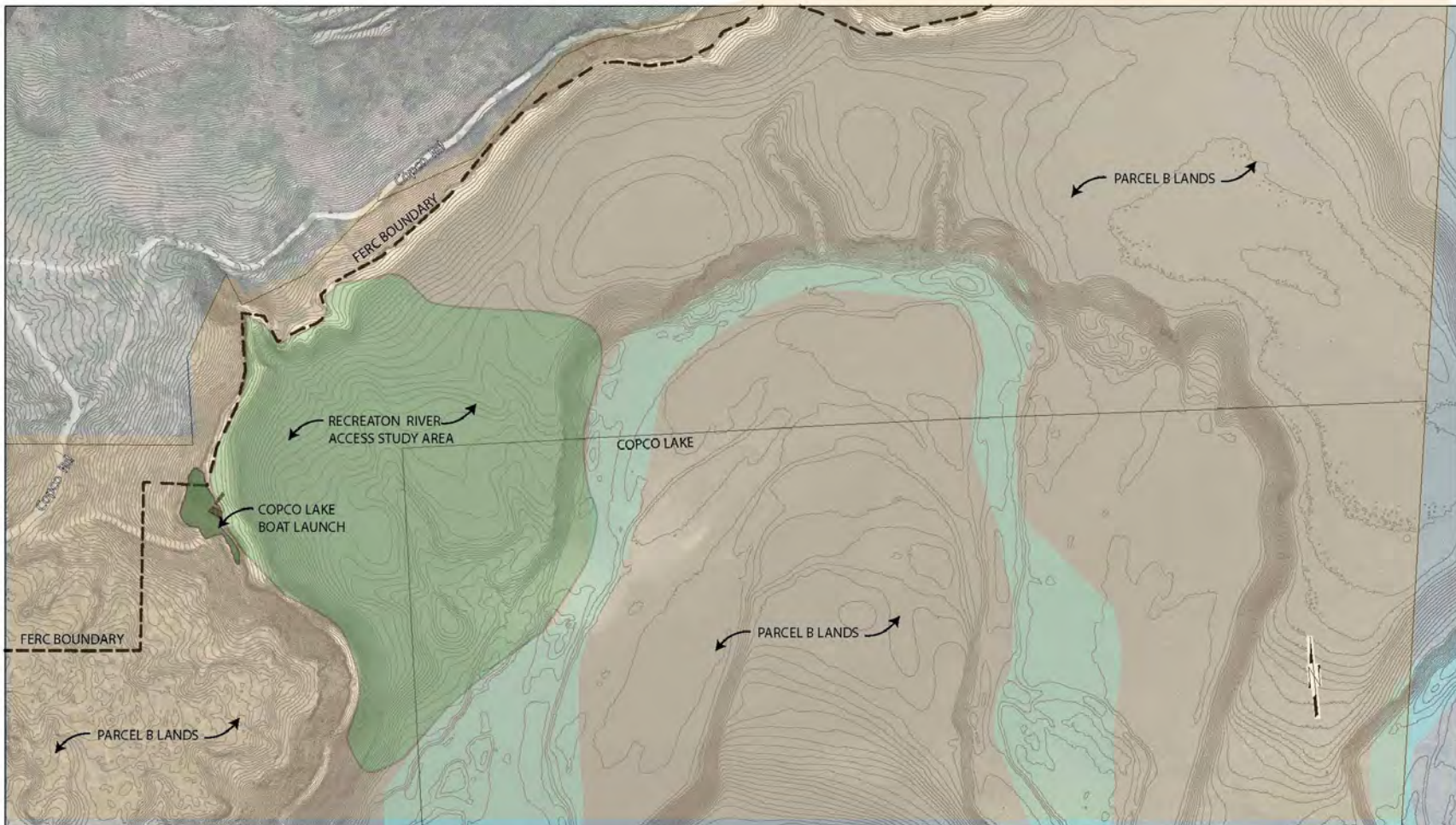


Figure 8-6: Potential Copco Valley River Access Site

Reservoir and within the Copco No. 2 Bypass Reach). As described in Section 3.2.3, due to the low difficulty rapids and riffles on the Copco Valley Run, it may be suitable for drift boat fishing. However, just downstream of the potential Copco Valley River Access Site at the entrance to Ward's Canyon, the gradient changes significantly and there may be the most difficult rapids on the Ward's Canyon Run. Thus, the Copco Valley River Access Site would provide a safe exit point for drift boater anglers and less experienced boaters before continuing downstream where advance skill would be necessary to navigate the challenges presented in the run.

The Copco No. 2 Bypass Reach currently has limited whitewater boating opportunities due to lack of flow and vegetation encroachment, and the changes in river flows with Project implementation would result in a substantial increase in the number of days with acceptable flows for whitewater boating in the Copco No. 2 Bypass Reach. Stakeholders believe the Ward's Canyon Run may experience heavy recreation use by both private and commercial boaters warranting a more developed site to support a higher level of visitation. Therefore, providing this potential recreation site would enhance whitewater boating and fishing by providing access to new whitewater boating opportunities and support of fishing opportunities. The location of this site fulfills guiding principles related to new whitewater boating and fishing opportunities, leveraging new river conditions, using existing road infrastructure, and consideration of safety issues.

The Ward's Canyon Run would be a newly exposed whitewater boating run that is currently inundated by Copco No. 2 Reservoir and within the Copco No. 2 Bypass Reach. Stakeholders identified riparian vegetation that has grown into the historic river channel in the Copco No. 2 Bypass Reach (due to low flows) as a substantial safety hazard for future water-based recreation in that stretch of the river. Removal of this vegetation prior to drawdown to improve recreation conditions is included as part of this Recreation Facilities Plan. The 2020 flow study will determine where vegetation growth within the Ward's Canyon run affects navigability to assist with determining where riparian vegetation needs to be removed. The flow study also aims to determine the usability of the Big Bend Run by a variety of boat types at the flows expected to be present during the summer season after Project implementation.

There is no existing recreation site at this location. Copco Cove is the closest existing recreation site, located less than a mile southwest of the potential river access site, and would be removed as part of the Project due to the distance of this site from the future river's edge.

As this site is projected to receive substantial recreation use after Project implementation due to the availability and potential popularity of the Ward's Canyon Run, the potential recreation site includes extensive parking areas for private and commercial boaters, as well as day use facilities and a large paved boat launch. The potential site would be accessible via a new access road off the existing Copco Cove access road (to the existing boat launch that would be removed). This new access road would lead down the site slope and provide counterclockwise access to a paved boat ramp and parking for vehicles and vehicles with trailers within the restoration area (of the former inundation area). Revegetation would occur within, around and through the site to create a naturalized setting. Parking at the site would support up to 54 vehicles (including two spaces for ADA-accessible parking) and include seven trailer spaces. Paved paths would lead from the ADA parking spaces to a universally accessible vault toilet, water spigot, and information kiosk with angler box. Paved paths would also connect the parking area with five picnic sites. Garbage facilities would be located at the universally accessible vault toilet and picnic sites.

Downstream of the picnic sites, the site would include two designated dispersed river access sites and a gravel trail connecting these sites to each other. The boat launching portion of the site would include a four-lane paved boat launch and vehicle turnaround area accessed from the site entrance road. A launch staging area would be located to the side of the boat ramp and a hand-launching area/beach would be located just upstream of the paved boat ramp.

It is currently unknown who will own, operate, and maintain this site, as the potential river access site would be located on PacifiCorp Parcel B lands, the disposition of which is currently unknown. Maintenance of Copco Road would continue to be performed by Siskiyou County and any other entity currently responsible for road maintenance.

8.5.3 Conceptual Design

Figure 8-7 shows the initial conceptual design for the potential Copco Valley River Access Site.

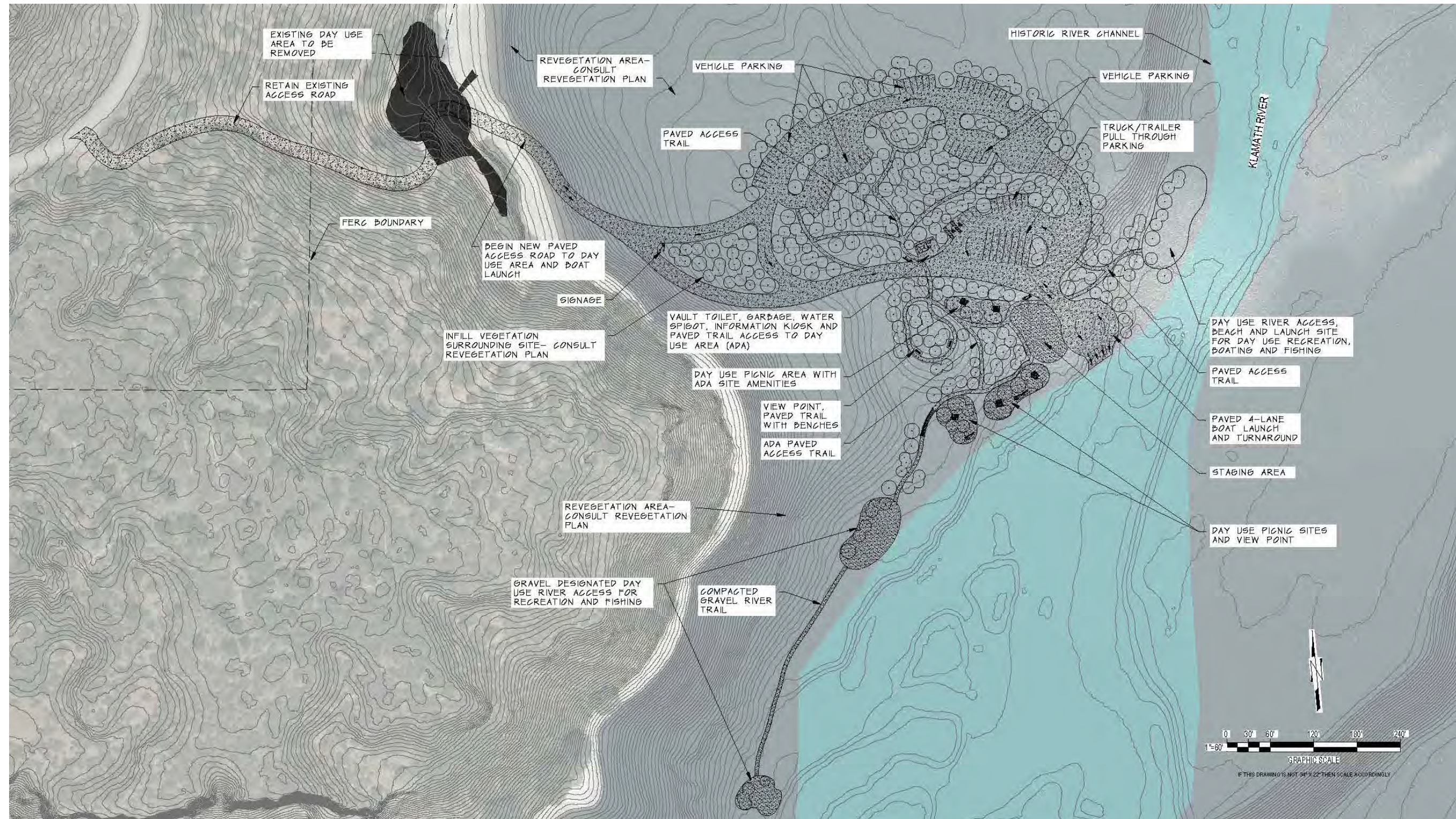


Figure 8-7: Copco Valley River Access Site Conceptual Design

8.6 Copco No. 2 Powerhouse River Access Site

8.6.1 Setting

The potential Copco No. 2 Powerhouse River Access Site would be located in a stretch of the Klamath River beyond the end of Ward's Canyon that is not currently inundated as it is located just upstream of the upper end of Iron Gate Reservoir. The built environment consists of an historic powerhouse, basalt stacked retaining walls, asphalt roads and parking along with existing hydropower facilities such as a regional electrical grid substation, maintenance buildings and penstocks. To the west of the site is a gravel apron used to stage equipment associated with the Project. Adjacent to the site are single family homes, a school, and play yard used in the past by employees of the hydropower facility. The site is accessed across a single lane bridge connecting Copco Road to the site. The setting surrounding the site provides views of scattered pine/oak savanna forest with grassland understory. Patches of riparian vegetation follow along the riverbank surrounding the site while vertical basalt columns face the narrow river at the tops of the canyon walls. The basalt outcroppings have deep cultural meaning to the tribes of the Klamath region.

While most of the hydropower facilities at the site would be removed, the majority of the on-site substation would remain as it serves the regional grid; the existing fenced substation footprint would remain. At this point in time, a decision regarding removal of the historic powerhouse has not been finalized. Potentially apart from the powerhouse, existing hydropower facilities (e.g., maintenance buildings, etc.) would be removed and revegetation of the site would occur as part of Project implementation.

The view surrounding the site to the east would be of a restored area in the foreground, middleground and, to some extent, the background due to the potential restoration of the powerhouse facilities and penstocks. The extent of restoration at the Copco No. 2 Powerhouse site would be less than at the Copco Valley site due to the small facilities restoration area and lack of reservoir inundation area to be restored.

Downstream of the potential Copco No. 2 Powerhouse River Access Site, there would be restoration of the former Iron Gate Reservoir area. These restored river views and views of the restored area at the potential river access site may result in slightly degraded recreation experiences until restoration goals are achieved due to slightly different scenery than expected in a natural river corridor; however, for many visitors the change in scenery may be expected and therefore have less influence over their recreation experiences.

8.6.2 Description

The potential Copco No. 2 Powerhouse River Access Site would be located on the river left on both the north and south ends of the existing powerhouse area near the existing powerhouse (north end) and maintenance buildings (south end). The site would be located on land currently owned and operated by PacifiCorp (Parcel B). Figure 8-8 shows the general location of this potential site.

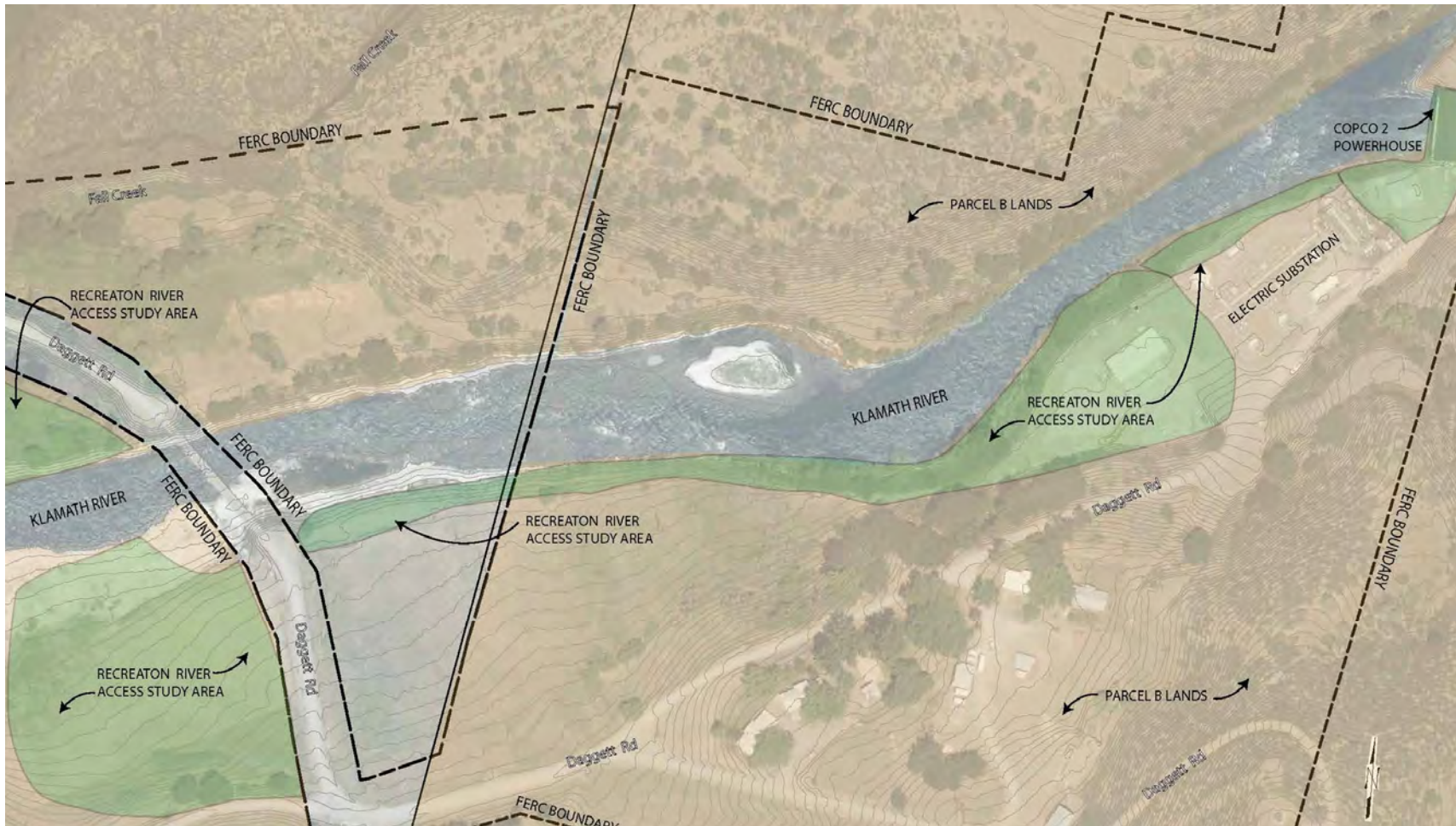


Figure 8-8: Potential Copco No. 2 Powerhouse River Access Site

The site is accessed from Daggett Road via Copco Road. Daggett Road is a private gravel road that is currently owned and maintained by PacifiCorp; future maintenance of the road by PacifiCorp after Project implementation is unknown. Post-dam removal, this segment of road would need to be publicly accessible year-round to provide recreational access to the potential river access site. A site at this location would provide whitewater boating, fishing, general boating, picnicking/day use, and informal shoreline recreation opportunities. Stakeholders identified this site as a highly valuable take-out for the new Ward's Canyon Run and as a put-in for the Iron Gate Run.

This potential river access site would be located at a point where the whitewater boating difficulty would change from Class IV on the Ward's Canyon Run to Class III on the Iron Gate Run. As stated in Section 3.2.3, stakeholders believe the Ward's Canyon Run may experience heavy recreation use by private and commercial boaters. The Iron Gate Run may also receive high recreation use due to the closeness of the run to major roads and population centers and the moderate gradient of the run. Therefore, providing this potential recreation site would enhance whitewater boating and fishing by providing access to new whitewater boating and fishing opportunities. The location of this site fulfills guiding principles related to new whitewater boating and fishing opportunities, leveraging new river conditions, and using existing road infrastructure.

There are no existing recreation amenities at this site. It is expected that the majority of the existing on-site substation would remain after Project implementation while other Project facilities would be removed. The substation is currently fenced; any fencing removed during facility removal would be replaced to ensure the substation continues to be fenced for public safety. As previously stated, it is unknown at this time if the powerhouse building would remain.

The north end of the site near the existing powerhouse would contain the boating-related facilities, including a boat slide to a launch at the edge of the river, a vehicle turnaround, staging area, and picnic site. The tailrace of the powerhouse, where the boat slide would be located, is anticipated to be filled in; however, grading of the tailrace could accommodate a side channel here for the boat slide. The south end of the site would contain parking and day use facilities, including three picnic sites, a staging area with bench and kiosk, universally accessible vault toilet, garbage facilities, water spigot, and view point with a bench. The site would include parking for up to 40 vehicles (including two spaces for ADA-accessible parking) and four vehicles with trailers. In addition, the existing access road within the site would be widened to at least 20 feet and a shoreline trail (part gravel and part paved) would be developed from the boat slide downstream to Daggett Road. This shoreline trail would connect both the north and south ends of the site, i.e., from the boat slide to the day use area and parking.

The existing site is already flat and compacted, thus requiring minimal earthwork. The parking area would be located where maintenance buildings would be removed as part of Project implementation, thus reducing potential disturbance at the site and potential impacts to the river. The existing access road to the powerhouse/maintenance area would be improved and continue to be the primary access road to the potential recreation site, thus reducing the need for constructing a new road.

It is currently unknown who will own, operate, and maintain this site, as the potential river access site would be located on PacifiCorp Parcel B lands, the disposition of which is currently unknown. Maintenance of Copco

Road would continue to be performed by Siskiyou County and/or the entity (or entities) currently responsible for maintenance of this road. The entity responsible for continued maintenance of Daggett Road, however, is unknown.

Stakeholders identified this site as an alternative to the boat ramp at the existing Fall Creek Day Use Area that would be decommissioned.

8.6.3 Conceptual Design

Figure 8-9 shows the initial conceptual design for the potential Copco No. 2 Powerhouse River Access Site.

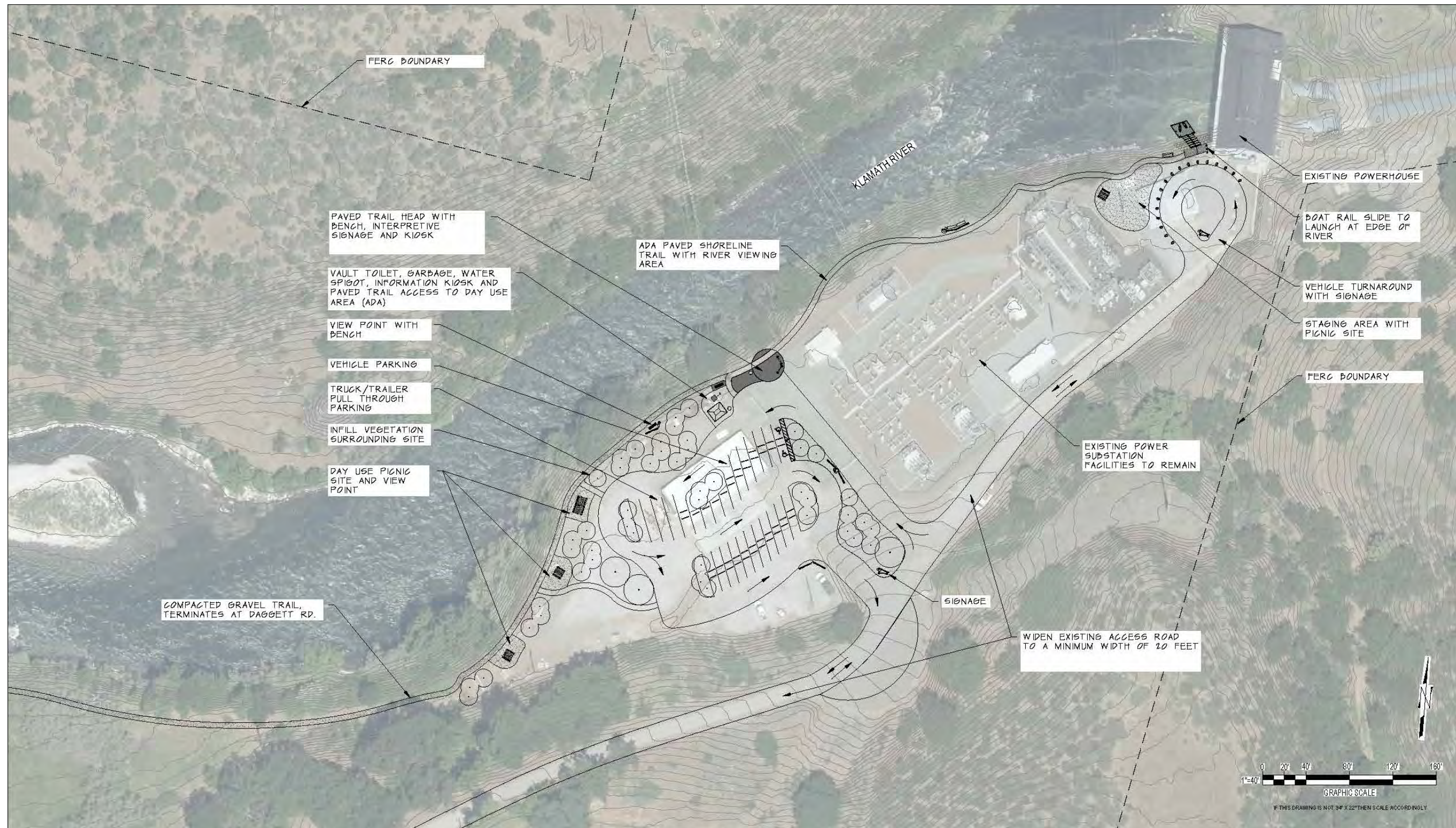


Figure 8-9: Copco No. 2 Powerhouse River Access Site Conceptual Design

8.7 Camp Creek River Access Site

8.7.1 Setting

The potential Camp Creek River Access Site would be located in a stretch of the Klamath River currently inundated by Iron Gate Reservoir. Therefore, the setting of the site would change from existing conditions and restoration of the inundation area would occur at this location. The setting of the site provides views of low hills with mature pine/oak savanna with grassland understory vegetation and trees to the north and west (away from the river); however, the contrasting view toward the river and across from the site (across the river) would be of a large swath of restored former reservoir area in the foreground, middle ground and background. Contrast between the restoration area and the surrounding hillsides would be high until restoration reaches a level of naturalization commensurate with the surrounding landscape conditions.

The extent of restoration at this site would be similar to the Copco Valley site and significantly more than at sites upstream of Copco Valley because this site would be located at a wide area of the former Iron Gate Reservoir. Similar restored river views would occur upstream and downstream of the site. These restored river views may result in slightly degraded recreation experiences until restoration goals are achieved due to different scenery than expected in a natural river corridor; however, for many visitors the change in scenery may be expected and therefore have less influence over their recreation experiences.

8.7.2 Description

The potential Camp Creek River Access Site would be located on the right bank of the Klamath River in an existing user-created area above and within the area currently inundated by Iron Gate Reservoir, near the existing Iron Gate Dispersed Site 3. Figure 8-10 shows the general vicinity in which the potential river access site would be located. The site is accessed via Copco Road. A site at this location would provide whitewater boating, fishing, and informal shoreline recreation opportunities.

Stakeholders identified this as a site that they could use as an alternative walk-in access area; very steep topography would make it difficult to develop vehicle access to the river at this location. The close proximity of the Camp Creek site to the potential Iron Gate River Access Site makes it a low priority as a take-out. The potential Camp Creek site would be located on the newly exposed Iron Gate Run, which is projected to have a moderate gradient with the upper portion of the run estimated at Class III and the lower portion at Class II. This section of river would be exposed after the drawdown of Iron Gate Reservoir. Due to the closeness of the Iron Gate Run to major roads and population centers and the moderate gradient of the run, the Iron Gate Run has the potential for a high level of recreation use. The location of this site fulfills guiding principles related to new whitewater boating and fishing opportunities and using existing road infrastructure.

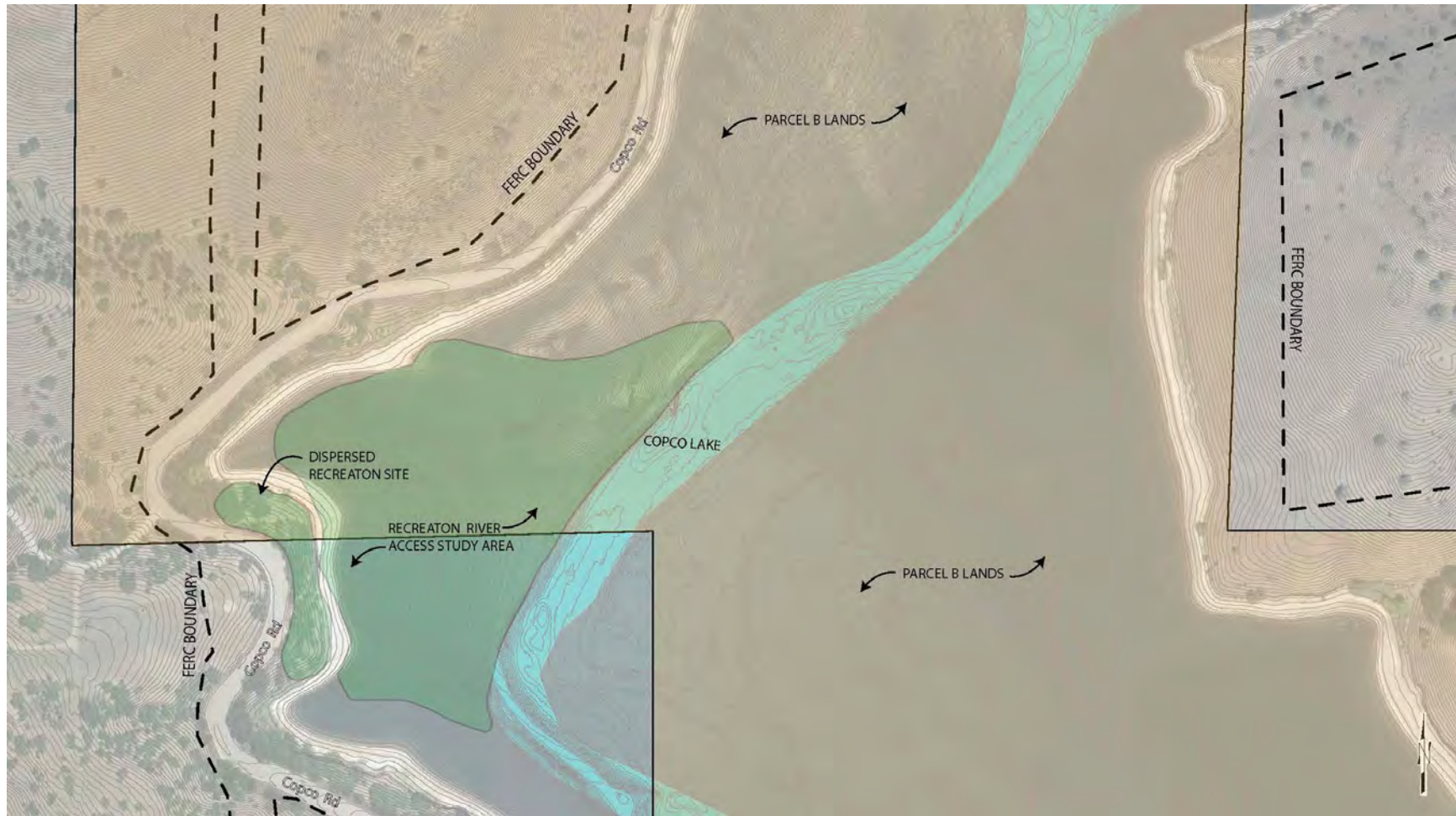


Figure 8-10: Potential Camp Creek River Access Site

There is no existing recreation site at this location; there are no amenities at the existing nearby Iron Gate Dispersed Site 3. As most use of the Iron Gate Run is expected to continue downstream to the Iron Gate Hatchery site, this site is primarily expected to be a walk-in fishing access location. Boaters could use the site as a walk-out take-out site; however, the trail to the river would navigate steep grades down to the river. Boaters on the Iron Gate Run could also stop at this potential site for a rest, lunch or to use the restroom. The potential site includes improving an existing access road and field fitting a parking area for up to 14 vehicles (including one space for ADA-accessible parking), with a trail leading downslope to the riverbank. Site amenities would include a trailhead and information kiosk with angler box, garbage facilities, universally accessible vault toilet, trailhead, trail to four picnic sites, and compacted gravel surface trail to four designated dispersed gravel river access areas for day use and fishing. The gravel walking trail down to the river would include switch backs down the slope and would bifurcate to other gravel trails leading to the dispersed river access areas. The parking area and picnic sites would be located on an existing hill while the trail to the river and four designated dispersed river access areas would be located within the reservoir drawdown area along the banks of the historic river channel.

It is currently unknown who will own, operate, and maintain this site, as the potential river access site is located on PacifiCorp Parcel B lands, the disposition of which is currently unknown. Maintenance of Copco Road would continue to be performed by Siskiyou County and/or the entity (or entities) currently responsible for maintenance of this road.

8.7.3 Conceptual Design

Figure 8-11 shows the initial conceptual design for the potential Camp Creek River Access Site.

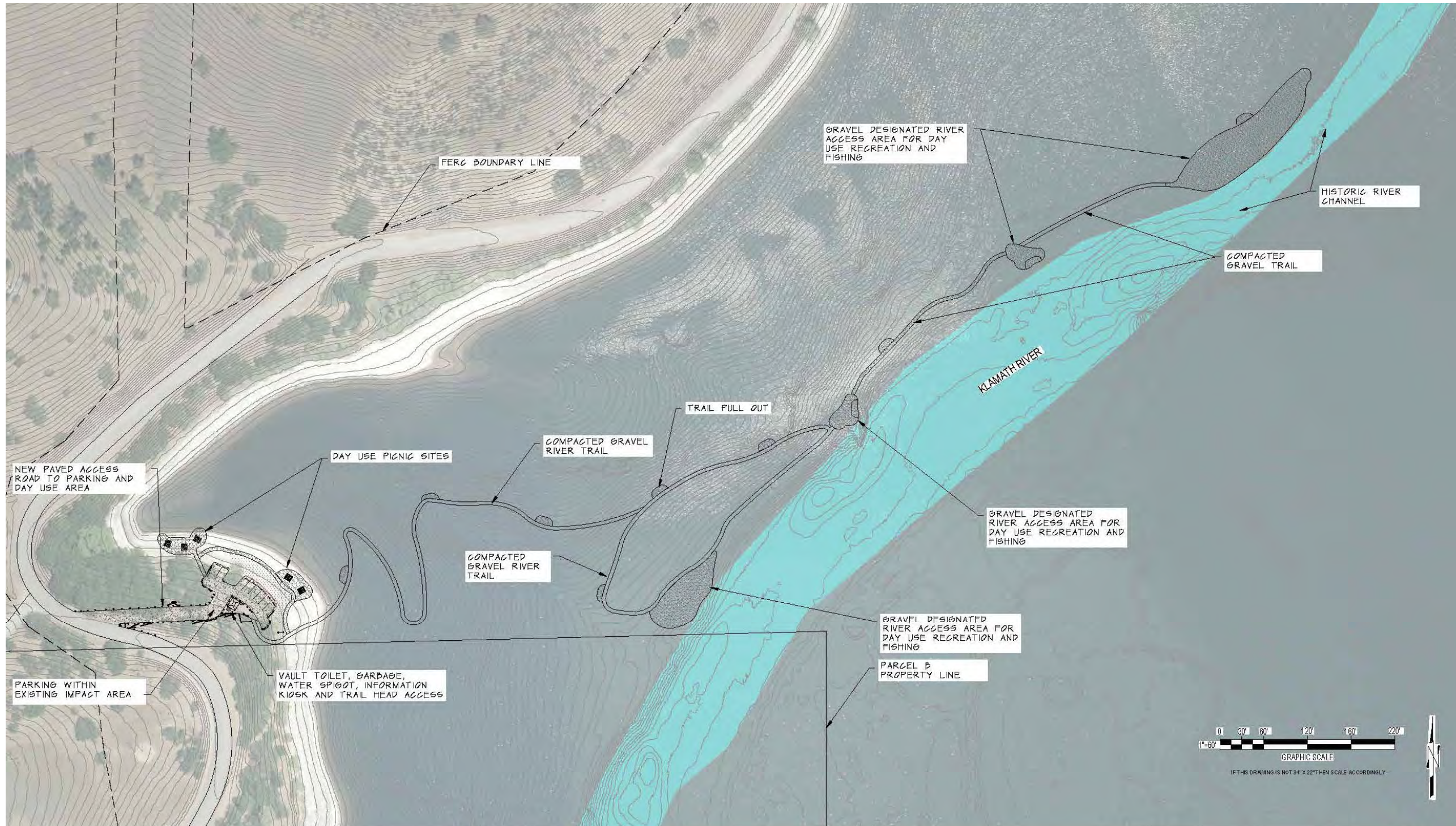


Figure 8-11: Camp Creek River Access Site Conceptual Design

8.8 Iron Gate River Access Site

8.8.1 Setting

The potential Iron Gate River Access Site would be located in a stretch of the Klamath River right below where a dam and two residences would be removed. Therefore, the setting of the site would change from existing conditions and restoration of the facilities locations would occur; the remainder of river downstream of the dam would not need restoration. Restoration of the dam site and other infrastructure associated with the dam would provide a naturalized setting within the background and middleground views from the site. The location of the former residences would be converted into parking access within the foreground of the site.

It is anticipated that the spillway would not be removed, but covered with rock from dam removal. Removal of the dam facility and covering of the spillway would improve the overall naturalness of the view from this site in the long term. The river would appear slightly different as water quality would increase, improving water clarity and color. The slightly modified natural river setting at the site would provide boating and fishing recreation experiences anticipated for a naturally functioning river in this region, particularly after restoration goals are achieved at the former dam site. Recreation experience quality may be slightly degraded in the dam area until restoration goals are achieved due to slightly different scenery than expected in a natural river corridor; however, for many visitors the change in scenery may be expected and therefore have less influence over their recreation experiences.

8.8.2 Description

The Iron Gate Hatchery Day Use Area is an existing recreation site located downstream of Iron Gate Dam and includes an undeveloped boat launch. The existing undeveloped boat launch is used to launch smaller watercraft such as tubes, rafts and drift boats primarily, but does receive some trailered use. This boat launch is used by recreationists in the summer for fishing access, swimming, and tube floating on the river and is also popular during the late summer and fall for salmon fishing and drift boat use. Figure 8-12 shows the location of the existing Iron Gate Hatchery Day Use Area and the undeveloped boat launch across the river.

Stakeholders indicated that the Iron Gate Hatchery Day Use Area is a highly valuable site that should be retained and could provide a take-out location for whitewater boaters on the new Iron Gate Run, which is currently inundated by Iron Gate Reservoir. Due to the closeness of the Iron Gate Run to major roads and population centers and the moderate gradient of the run, the Iron Gate Run has the potential for a high level of recreation use. In addition, as the last run on the Upper Klamath River, there may be some boaters that use the Iron Gate Run take-out as a long-term parking area while they run the entire Upper Klamath River over a few days.



Figure 8-12: Existing Iron Gate Hatchery Day Use Area and Boat Ramp, and Potential Iron Gate River Access Site

After further review of the site and additional stakeholder input, it was determined that modification of boating facilities at the existing undeveloped boat launch site across from the existing day use area would result in undesirable impacts to other resources. Therefore, as shown in Figure 8-12, the potential Iron Gate River Access Site would be located in an area approximately 0.25 mile upstream of the existing day use area on the river right. The potential river access site is accessed via Copco Road and an unnamed road to the existing Iron Gate Dam residences. Providing boating amenities at this site would assist with enhancing whitewater boating as the site would also function as a take-out for the new Iron Gate Run. The location of this site fulfills guiding principles related to new whitewater boating and fishing opportunities, leveraging new river conditions, and using existing road infrastructure. A site at this location would provide whitewater boating, fishing, general boating, and informal shoreline recreation opportunities.

Because there are no amenities at the potential site, which is expected to receive substantial recreation use due to its location, the site would include a boat launch and a large parking area for 18 vehicles (including two spaces for ADA-accessible parking) and five vehicles with trailers. The potential site would also include garbage facilities, universally accessible vault toilet, a water spigot, an information kiosk with angler box, five picnic sites, and trails to the picnic sites. The boat launch portion of the potential site would include a paved four-lane boat launch, staging area, and a paved launch access road. The four-lane boat launch would be located behind an eddy. Within the site, vegetation would be retained and the existing beach and river's edge would be regraded to create a more natural riverbank.

The existing site location is already fairly flat and compacted, thus requiring minimal earthwork. The parking area would be located where the two existing residences would be removed as part of Project implementation (at the toe of the slope away from the edge of the river), thus reducing potential disturbance at the site and potential impacts to the river. The existing access road to the residences would be improved and continue to be the primary access road to the potential recreation site, thus reducing the need for constructing a new road. The boat launch area would utilize the existing backwater area in front of the existing spillway as an eddy. Remnants of the deconstructed dam could be utilized to maintain the existing eddy at the launch location.

It is currently unknown who will own, operate, and maintain this site, as the potential river access site is located on PacifiCorp Parcel B lands, the disposition of which is currently unknown. Maintenance of Copco Road would continue to be performed by Siskiyou County and/or the entity (or entities) currently responsible for maintenance of this facility.

It is anticipated that the potential river access site would be built after dam removal is complete due to the close proximity of construction activity during facilities removal. To reduce potential impacts to recreation access on this section of the river, the existing boat ramp at the Iron Gate Hatchery Day Use Area would remain open during this time. There may be limited periods when access to this existing launch site and the day use area would be congested or restricted by construction work at Lakeview Bridge, which connects Copco Road and the day use area. Once the potential river access site was operational, the existing boat launch site across from the day use area could be closed.

8.8.3 Conceptual Design

Figure 8-13 shows the initial conceptual design for the potential Iron Gate River Access Site.

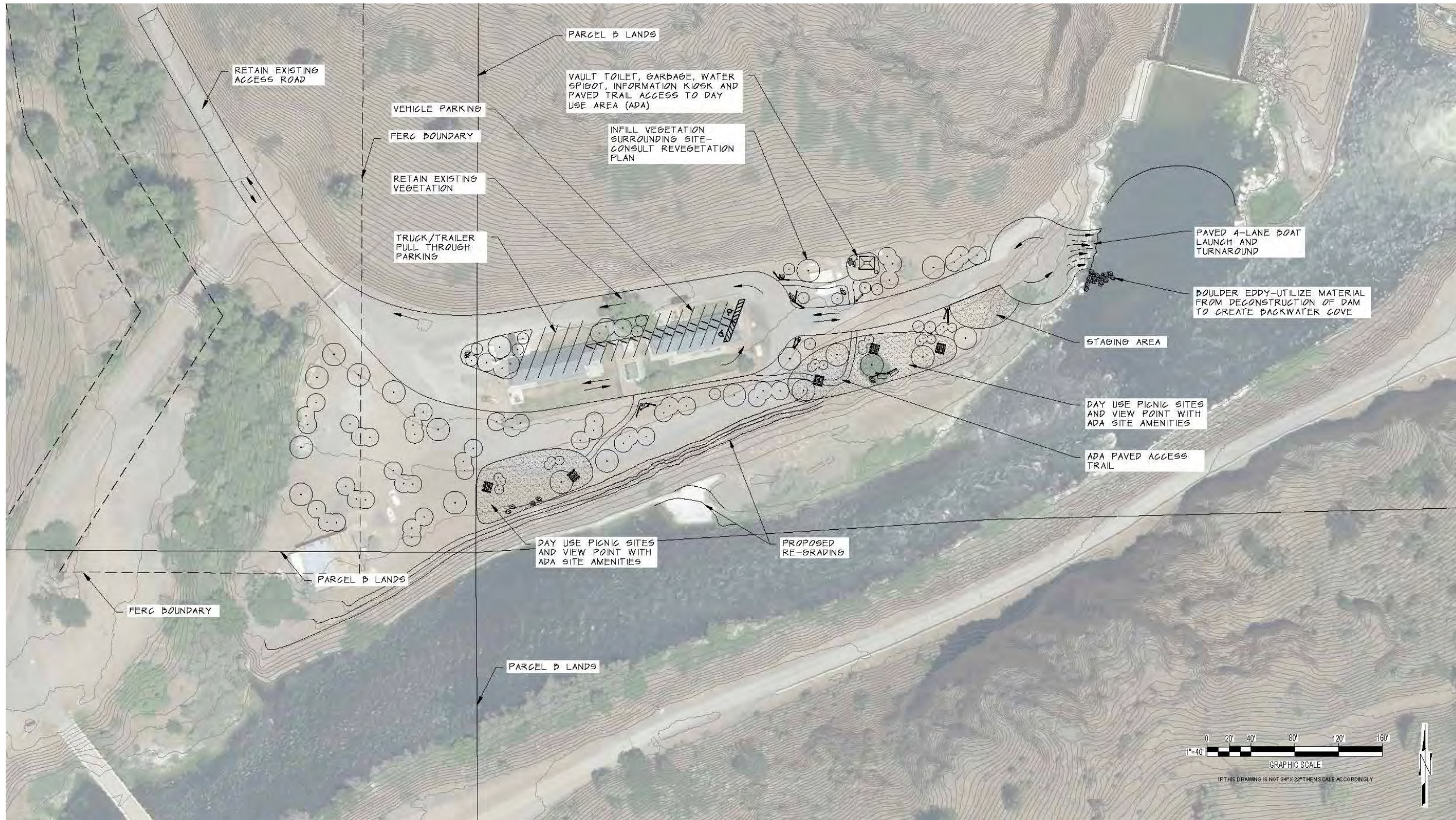


Figure 8-13: Iron Gate River Access Site Conceptual Design



Chapter 9: References

9. REFERENCES

Bureau of Land Management (BLM). 2017. Frain Ranch Resource Protection Environmental Assessment. #DOI-BLM-ORWA-L040-2017-001-EA. April 2017.

California Department of Fish and Wildlife. 2005. Upper Klamath River Wild Trout Area Fisheries Management Plan 2005-2009. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=56382&inline=1>.

Cross, Bill and Pete Wallstrom. Undated. Whitewater Recreation on the Upper Klamath River. Planning and Priorities for Dam Removal.

Federal Energy Regulatory Commission (FERC). 2007. Final Environmental Impact Statement for Hydropower License, Klamath Hydroelectric Project, FERC Project No. 2082-027, FERC/EIS-0201F. Washington, DC, Federal Energy Regulatory Commission, Office of Energy Projects, Division of Hydropower Licensing.

Oregon Department of Environmental Quality. 2018. Clean Water Act Section 401 Certification for the Klamath River Renewal Corporation License Surrender and Removal of the Lower Klamath Project (FERC No. 14803) Klamath County, Oregon. September 7, 2018.

PacifiCorp. 2004a. Exhibit E7.0 Recreation Resources. February.

PacifiCorp. 2004b. Final Technical Report, Klamath Hydroelectric Project (FERC Project No. 2082), Recreation Resources PacifiCorp, February 2004.

PacifiCorp. 2015a. Copco 1 Form 80. March 27, 2015. Reporting Year 2014.

PacifiCorp. 2015b. Copco 2 Form 80. March 27, 2015. Reporting Year 2014.

PacifiCorp. 2015c. Iron Gate Form 80. March 27, 2015. Reporting Year 2014.

PacifiCorp. 2015d. J.C. Boyle Form 80. March 27, 2015. Reporting Year 2014.

PacifiCorp. 2015e. Keno Form 80. March 27, 2015. Reporting Year 2014.

State Water Resources Control Board (SWRCB) 2018. Lower Klamath Project – Draft Environmental Impact Report. December 27, 2018. Available at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/lower_klamath_ferc14803_deir.html.

U.S. Department of the Interior (DOI) and California Department of Fish and Game (CDFG). 2012. Klamath Facilities Removal Final EIS/EIR. December 2012.

U.S. Department of the Interior (DOI). 2011. Detailed Plan for Dam Removal – Klamath River Dams. September 15, 2011.



**Appendix A: Recreation
Modification Idea Identification**

APPENDIX A – RECREATION MODIFICATION IDEA IDENTIFICATION

This appendix provides descriptions of the 35 recreation modification ideas that were screened as part of the development of the Recreation Facilities Plan. These recreation ideas were gathered from the 2011 Detailed Plan and KRRC stakeholder outreach. The recreation modification ideas consist of modifications to existing recreation sites, new recreation sites and amenities, and other ideas that would provide recreation benefits. The recreation site modifications, new sites and amenities, and other ideas identified in this appendix are presented at a programmatic or planning level of detail. Several of the recreation modification ideas presented below include details from previous work and other studies, as available. The descriptions of the 35 recreation modification ideas presented in Section A.3 provide at a minimum, sufficient detail to give reviewers an indication of the specific recreation impact the potential action would improve, the general location of the site, the source that identified the project, and, in the case of new sites, the future potential owner/operator (if known). The recreation site modifications, new sites and amenities, and other ideas presented below were then compared against screening criteria to determine potential recreation site modifications and new sites and amenities that could be implemented by the States of Oregon and California or other successor owners of Parcel B lands after license surrender is effective. The screening process is described in Section 7 of the Recreation Facilities Plan and the resulting potential recreation site modifications and new sites and amenities are described in Section 8 of the Recreation Facilities Plan.

A.1 Summary of Identified Recreation Site Modifications, New Sites and Amenities, and Other Ideas

Table A-1 provides a summary of the recreation site modifications, new sites and amenities, and other ideas discussed in the 2011 Detailed Plan and suggested by stakeholders. The ideas are separated into three groups: modifications to existing public recreation sites, new sites and amenities, and modifications to existing private recreation sites.

Table A-1 Identified Recreation Site Modifications, New Sites and Amenities and Other Ideas

Feature	Proposed Recreation Development	Current Owner/Operator	Origin
Modifications to Existing Public Recreation Sites			
Topsy Campground	Remove and replace or redesign boat ramp and dock for river access and revegetate the reservoir rim in the vicinity of the campground. Develop new camping areas and bathrooms next to the new water's edge.	Owned and operated by the BLM on J.C. Boyle Reservoir	Detailed Plan; BLM
Spring Island Boater Access	Retain/enhance existing Spring Island boater put-in below J.C. Boyle Powerhouse on the Klamath River and provide additional parking and day use amenities	BLM	American Whitewater and BLM
Campground South of J.C. Boyle Powerhouse	Enhance and develop a new campground near J.C. Boyle Powerhouse; Klamath River Campground (primitive), Dispersed Site 1 and Turtle Camp could be modified or improved	BLM operates Klamath River Campground (primitive), Dispersed Site 1 and Turtle Camp	American Whitewater
Klamath River Campground and [Turtle] Camp	Increase the number of campsites and increase the day use area parking and related infrastructure. Existing road would need to be enhanced.	BLM	BLM
Frain Ranch	Enhance and develop a campground and improve Topsy Grade Road to Frain Ranch; Frain Ranch is a dispersed recreation site used by boaters and campers	Operated by the BLM on PacifiCorp (Parcel A) land between Copco and J.C. Boyle Powerhouse	American Whitewater
Stateline Take-out	Retain/enhance existing boater take-out to accommodate multiple parties in the take-out area and provide additional campsites	Operated by the BLM on PacifiCorp (Parcel A) land	American Whitewater and BLM

Feature	Proposed Recreation Development	Current Owner/Operator	Origin
Fishing Access Sites 1 through 6	Maintain or enhance fishing access sites on Parcel A land between Copco Lake and Stateline Take-out. Sites include signage, restrooms, and trash receptacles	Owned/operated by PacifiCorp (Parcel A); these sites are not part of the FERC Lower Klamath Project	American Whitewater and Fishing Interests
Fall Creek Day Use Area	Upgrade amenities and reconstruct trail leading to Fall Creek waterfall	Owned/operated by PacifiCorp (Parcel B); located on Copco Road which is maintained by PacifiCorp	Detailed Plan
Jenny Creek Day Use Area and Campground	Expand campground and upgrade amenities to provide Jenny Creek and Klamath River recreation	Owned/operated by PacifiCorp (Parcel B) adjacent to Jenny Creek and upstream of Iron Gate Reservoir	Detailed Plan
Iron Gate Hatchery Day Use Area	Reconstruct day use area to provide additional amenities and a boat ramp	Owned by PacifiCorp (Parcel B) and operated by CDFW	Detailed Plan
New Sites and Amenities			
New Campgrounds	Two small to medium campgrounds in an unidentified location	N/A	Detailed Plan
New Routes/Roads	Provide routes on each side of the river that could be retained permanently to provide public recreation access to the river at defined locations	N/A	Detailed Plan
Non-Motorized Trail	Construct trail to provide fishing, biking, and hiking access from J.C. Boyle Dam to Iron Gate Fish Hatchery	New trail would need to cross PacifiCorp (Parcel A and B), BLM, private lands and potentially USFS land	Detailed Plan
Fishing Access Upstream of J.C. Boyle Powerhouse	Provide fishing access along the river near the powerhouse approximately 1 mile up stream	BLM is the landowner	BLM
Day Use and River Access at J.C. Boyle Powerhouse	Provide recreation use/access in the large flat area on the river by the powerhouse and substation	BLM is the landowner	BLM

Feature	Proposed Recreation Development	Current Owner/Operator	Origin
New River Access Locations	Develop river boating access with amenities (restrooms, road access, parking) in areas where the difficulty of river navigation changes	BLM and PacifiCorp-owned land (Parcel A and B)	American Whitewater
Copco No. 2 Bypass Reach	Remove riverine vegetation to provide safe boating through the Copco No. 2 Bypass Reach	Owned and operated by PacifiCorp (Parcel B)	American Whitewater
Road Improvement	Improvements to the existing roads, including, but not limited to, Topsy Grade Road and Copco Big Bend Road	Various	Multiple stakeholders
Access During Deconstruction	Provide access to roads that lead to river access points for boaters to use during drawdown and deconstruction periods. Access could be granted by flagger or established time intervals for public use	N/A	Upper Klamath Outfitters Association and American Whitewater
Frain Ranch Bridge ²	Construct a replacement bridge that crosses the Klamath River at Frain Ranch to provide continuous access to both sides of the river	N/A	BLM
RV Park in Seiad Valley or Happy Camp	Develop an RV park with full hookups that would generate revenue and tourism	N/A	SWCA ¹
Walking Trails/ Wildlife Viewing/ Interpretive Trails	Retain portions of the dam structures, provide interpretive signage, and develop a walking trail around it. Trails could also incorporate wildlife viewing. Construct trails around Copco Village residential areas to provide recreation opportunities for residents.	PacifiCorp-owned land (Parcel B)	SWCA ¹

Feature	Proposed Recreation Development	Current Owner/Operator	Origin
Flatwater Lake-Based Recreation in Siskiyou County	Develop day use and/or camping sites in unidentified locations for public recreation use to replace lost flatwater lake-based recreation opportunities. Locations could include Lake Shastina and Medicine Lake	N/A	SWCA ¹
Fishing Access Upstream or Downstream of J.C. Boyle Powerhouse	Develop fishing access sites in the J.C. Boyle Powerhouse footprint and bypass reach	BLM and PacifiCorp-owned land (Parcel A and B)	BLM and ODFW
Whitewater Park	Develop an in-river or off-river whitewater park	N/A	SWCA ¹
Recreational Gold Panning	Establish gold panning recreation opportunities in Siskiyou County	N/A	SWCA ¹
New ADA Facilities	Provide at least one ADA-accessible facility to retain the current ratio of ADA-accessible opportunities in the area	N/A	Detailed Plan, SWCA ¹ , Oregon Council, Copco Village Residents
Fishing Lodges	Provide up to five public fishing lodges that could support fly fishing tourism along the river. These could be developed on Parcel B land under public/private ownership	N/A	John Jacques
River-side Commercial Recreation Development	Develop commercial recreation uses at points along the river	N/A	John Jacques
Siskiyou Tourism Plan	Provide funding to establish a tourism campaign that would point people to other recreation sites within Siskiyou County. This could include strategically placed signage.	N/A	SWCA ¹ , Siskiyou Economic Development Council/Discover Siskiyou

Feature	Proposed Recreation Development	Current Owner/Operator	Origin
Transportation Plan	Develop a transportation plan that identifies appropriate roads and trails that could provide access to recreation sites	N/A	BLM
Modifications to Existing Private Recreation Sites			
Upgrade Private Campgrounds	Improve existing private campgrounds in the area	Unidentified private owners	Siskiyou Economic Development Council/Discover Siskiyou
Expand R-Ranch	Expand the recreation opportunities provided at R-Ranch; could include the development of a water park	Bruce Kinseth	Bruce Kinseth
Enhance Private Docks	Enhance private docks that are currently on the reservoir to provide river access	Various private owners	Copco Village Resident
Klamath Hot Springs	Develop structure with restrooms and shelter at the Klamath Hot Springs near the Klamath River's confluence with Shovel Creek	N/A	K. Bermel

Notes

1. Consultant for Siskiyou County
2. Frain Ranch Bridge does not currently exist. Current ownership of the lands where the bridge could be developed is divided between PacifiCorp (Parcel A) and the BLM.

A.2 Identification of Recreation Site Modifications, New Sites and Amenities, and Other Ideas

This section describes the sources from which recreation site modification, new sites and amenities, and other ideas with the potential to avoid or reduce recreational impacts from the Project were identified.

A.2.1 2011 Detailed Plan

The 2011 Detailed Plan was developed by staff from the Bureau of Reclamation's Technical Services Center. The 2011 Detailed Plan was consistent with the requirements outlined in the 2010 KHSA and provided additional information to the Secretarial Determination process, including a discussion of the existing recreation site modification or removal and recreation impact mitigation. In some instances, the planned types and configuration of recreation sites proposed in the 2011 Detailed Plan have changed during development of the Recreation Facilities Plan in response to stakeholder input received during its

development. Section A.3 presents the descriptions of recreation modifications that are consistent with the 2011 Detailed Plan as well as those that reflect the changes made to address stakeholder feedback.

The 2011 Detailed Plan identified multiple new recreation sites and river access points that could be implemented under Mitigation Measure REC-1 to provide camping and hiking, and river access for boating and fishing along the river channel between J.C. Boyle Reservoir and Iron Gate Dam to replace the function of the existing sites to be removed or modified due to reservoir drawdown. These features were assumed to support cost estimates developed for the 2011 Detailed Plan. The 2011 Detailed Plan indicated that these opportunities were not assumed to be the only opportunities that would be considered. The recreation site modifications and new recreation sites and amenities proposed in the 2011 Detailed Plan are described below and shown in Figure A-1 to the extent the locations of proposed sites are known; ideas that are not location specific or do not have an identified location in the 2011 Detailed Plan are listed in the table in Figure A-1. For all of the sites discussed below, the 2011 Detailed Plan proposed completion of modifications and/or construction the year following dam removal and reservoir/river restoration, except for new roads, which would be incorporated into the overall reservoir/river restoration design as appropriate to complement its success.

A.2.2 KRRC Stakeholder Outreach

KRRC initiated a stakeholder outreach process to seek input on the recreation modification ideas previously identified during development of the 2011 Detailed Plan, as well as support the identification of new ideas that had not previously been identified. This ongoing outreach effort has included coordination with California and Oregon state officials, Siskiyou County, Klamath County, the BLM, PacifiCorp, economic development organizations including chambers of commerce, tourism organizations, recreation businesses, local communities (e.g., Copco, Hornbrook), and the general public. Table A-2 identifies the stakeholders that participated in this outreach effort.

The recreation modifications identified during this process varied in levels of detail depending on what was provided by the stakeholders at the outreach meetings they participated in and, in some cases, in follow up submittals provided to KRRC in writing. In some instances, stakeholders identified ideas that had already been evaluated as a part of the 2011 Detailed Plan effort described above in Section A.2.1; those ideas are not duplicated in the descriptions in Section A.3. The ideas identified by stakeholders included the establishment of additional river access points, the funding of tourism campaigns, promoting regional recreation, and the development of commercial recreation establishments on the river. Suggestions were also made regarding the retention and/or improvement of existing sites, in addition to the development of new sites. Sites proposed for modification and new recreation sites are shown in Figure A-2 to the extent the location of new sites is known; ideas that are not location specific or do not have an identified location at this time are listed in the table in Figure A-1.

The outreach effort also focused on the identification of evaluation criteria for these recreation modification ideas to refine the list of ideas identified for potential implementation by KRRC. The results of this feedback are described in greater detail in Section 7 of the Recreation Facilities Plan.

Table A-2 Stakeholder Outreach Participants

Stakeholder Name	Stakeholder Name	Stakeholder Name
All-Outdoors	Hornbrook Residents ¹	Oregon Parks and Recreation Department
American Whitewater	Indigo Creek Outfitters ²	PacifiCorp
Bruce Kinseth (R-Ranch)	Jack Trout ³	Quartz Valley Indian Tribe
Bureau of Land Management	Jeff Stone	River Dancers
California Department of Fish and Wildlife	John Jacques (Klamathon Lodge)	Rogue Riverkeeper
California Natural Resources Agency	K. Bermel	Shasta Indian Nation
California Trout	Karuk Tribe	Shasta Nation
Carl and Linda Ebert (Copco Village Residents)	Klamath County Chamber of Commerce	Siskiyou Economic Development Council
Copco Village Residents ¹	Klamath County Economic Development	SWCA ⁴
Discover Klamath	Momentum River Expeditions ²	Trout Unlimited
Discover Siskiyou	Noah’s Rafting Adventures ²	
Fly Fishers International - Oregon Council	Oregon Fish and Wildlife	

Notes

1. Participants at public meetings held by KRRC in Copco Village and Hornbrook in June 2018 to seek input on recreation improvements to be considered in the Recreation Facilities Plan
2. Member of the Upper Klamath Outfitters Association
3. Unaffiliated representatives from local (Klamath River Basin) recreational fishing industry
4. Consultant for Siskiyou County

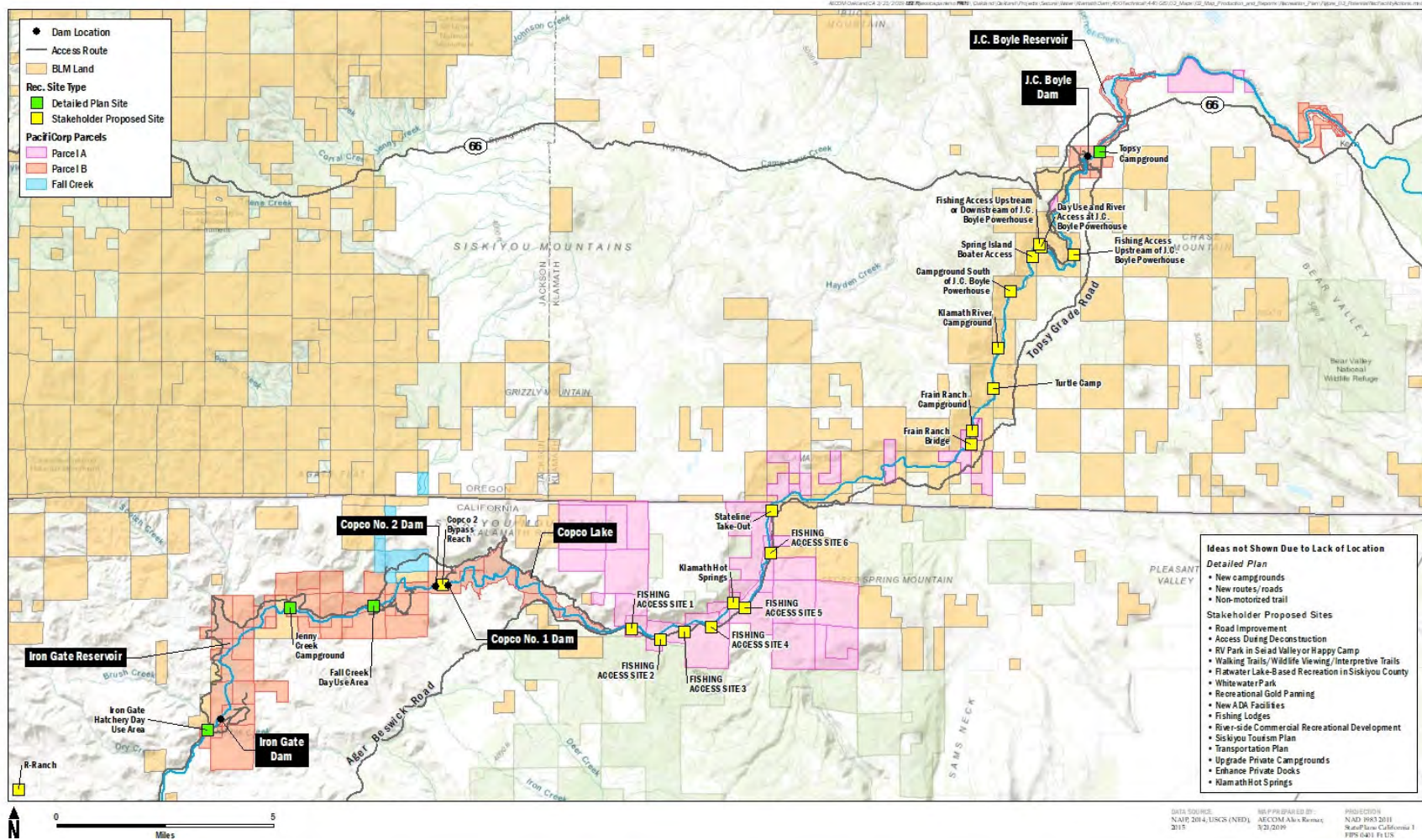


Figure A- 1. Potential Recreation Site Modifications, New Sites and Amenities, and Other Ideas



Figure A- 2. Stakeholder Proposed River Access Sites

A.3 Identified Recreation Opportunities

The following subsections present the identified recreation modification ideas, separated into modifications to existing sites and development of new sites and access.

A.3.1 Retention and/or Modifications to Existing Public Recreation Sites

The suggested disposition of existing public recreation sites in the Project area, as described in the 2011 Detailed Plan and by stakeholders is provided below. It is assumed that any of the modifications to existing sites would be scheduled for the year following facility removal and reservoir/river restoration.

A.3.1.1 Topsy Campground

Topsy Campground is an existing site owned and operated by the BLM, located on the southeastern shoreline of J.C. Boyle Reservoir. The 2011 Detailed Plan proposed modifications to accommodate river-based recreation as opposed to its current reservoir-based recreation use. This would include removal and replacement of the current boat ramp to support river access. In addition, the 2011 Detailed Plan proposed revegetation of the area around the existing campground. These modifications were identified to provide continued recreational access to the area for camping, hiking, boating, and fishing. The BLM would continue to be the owner and operator of this modified site. The BLM suggested during initial stakeholder outreach completed during the development of the Draft Recreation Plan that new camping areas and restrooms be developed at this site next to the new water's edge. Development of additional campsites and parking would provide additional opportunities for camping, fishing, and hiking in this reach.

A.3.1.2 Spring Island Boater Access

Spring Island Boater Access is owned and operated by the BLM and is located downstream of J.C. Boyle Dam. The site currently provides river access for boating. Stakeholders requested that the site be retained and enhanced to improve the site's conditions, if possible. Suggested modifications included an improved boat launch, access road, day use area, and/or restrooms and additional parking. Stakeholders indicated that the Spring Island Boater Access is important to boaters as a location where a clear shift in difficulty would occur on the whitewater boating run upstream and downstream. Retention of this site would allow the continued use of an established boater access site. The BLM would continue to be the owner and operator of the access site.

A.3.1.3 Klamath River Campground and Turtle Camp

Klamath River Campground and Turtle Camp are owned and operated by the BLM and are located south of J.C. Boyle Powerhouse. Klamath River Campground and Turtle Camp currently allow campfires and access for kayaks and small rafts. The BLM suggested KRRC increase the number of campsites and provide additional day use parking at these campgrounds to accommodate additional users. Improvements to Copco Big Bend Road would be necessary. Development of additional campsites and parking would provide

additional opportunities for camping, fishing, and hiking in this reach. The BLM would continue to be the owner and operator of this modified site.

A.3.1.4 Frain Ranch

Frain Ranch is an existing dispersed recreation area and undeveloped campground in Oregon located between J.C. Boyle Reservoir and Copco Lake and operated by the BLM. Ownership of the land is divided between PacifiCorp (Parcel A) and the BLM. This site is mainly used by boaters, campers, and all-terrain vehicle (ATV) users. Stakeholders requested that the site be enhanced to provide a developed campground on lands owned by the BLM with defined campsites, restrooms, picnic tables, and fire rings. Development at this site would require improvements to Topsy Grade Road, the main access road for the site. These modifications were identified to provide additional opportunities for camping, boating, and hiking. The BLM would continue to be the owner and operator of this modified site. The entity responsible for long-term maintenance of the improved road was not identified.

A.3.1.5 Stateline Take-out

Stateline Take-out is located between J.C. Boyle Reservoir and Copco Lake, just below the state line. Ownership of the lands at this site is divided between the BLM and PacifiCorp (Parcel A) and the site is currently operated by the BLM. Stakeholders requested that the site be retained and modified to allow future boating access and shoreline fishing. The portion of this access point owned by PacifiCorp is on Parcel A property, which would be retained by PacifiCorp after license surrender. It is anticipated that this existing recreation site on Parcel A lands will continue to be managed by PacifiCorp as a public recreation site, but this has not been confirmed by PacifiCorp. To improve river access following facility removal, stakeholders suggested the portion of the access point on BLM property could be upgraded to support additional use. Retention and modifications at this site would allow the continued use of a recreation site that offers river access for boating, fishing, and day use. The BLM would continue to be the owner and operator of the modified site.

A.3.1.6 Fishing Access Sites 1 through 6

Fishing Access Sites 1 through 6 are located just upstream of Copco Lake. These sites are owned and operated by PacifiCorp (on Parcel A), but they are not part of the FERC license for the hydroelectric developments. The sites currently provide river access for fishing (and whitewater boating at sites 1 and 6) along with some amenities for users. Stakeholders requested that access to these sites be maintained and, if possible, improved. PacifiCorp would retain ownership of these sites following license surrender for the hydroelectric developments. It is anticipated that these existing recreation sites on Parcel A lands will continue to be managed by PacifiCorp as public recreation sites, but this has not been confirmed by PacifiCorp. If these sites remain accessible, they will continue to provide important river access for recreational fishing and boating uses.

A.3.1.7 Fall Creek Day Use Area

Fall Creek Day Use Area is an existing site located on the far northeast shore of Iron Gate Reservoir. The site is currently owned and operated by PacifiCorp on Parcel B land, except for the Fall Creek Trail. The Fall Creek Trail is an existing recreational trail that leads up to Fall Creek Falls. This trail is owned and managed by PacifiCorp and located on “Fall Creek – Excluded” lands (neither Parcel A or Parcel B lands, and therefore not included in the transfer of lands to the KRRC). The 2011 Detailed Plan proposed that the site be retained and modified to support day use activities and hiking at Fall Creek. Upgrades identified in the plan included the reconstruction of the trail on PacifiCorp-retained (non-Parcel B) lands leading to the waterfall and other upgrades to support continued and improved recreational access in the area. The future owner and operator of the Fall Creek Day Use Area was not identified; PacifiCorp is and would continue to be the owner of the Fall Creek Trail.

In addition to PacifiCorp’s continued operations at the Fall Creek Hydroelectric Facility, the Project, as described in the Definite Plan submitted to FERC in June 2018, includes development in close proximity to the Fall Creek Day Use Area, including the Fall Creek Hatchery and changes to the Yreka water supply line. Therefore, this area may be unsupportive of additional recreation opportunities.

A.3.1.8 Jenny Creek Day Use Area and Campground

The existing recreation site at Jenny Creek is located on the northern shoreline of Iron Gate Reservoir, between Copco Road and Jenny Creek. This site includes six campsite/day use sites and several user-defined trails. The Jenny Creek site is currently owned and operated by PacifiCorp on Parcel B land. The 2011 Detailed Plan proposed the site be expanded and upgraded to accommodate additional campsites and improved amenities. These modifications and upgrades to the Jenny Creek Day Use Area and Campground were proposed to increase recreation opportunities for camping, hiking, and fishing at this location. The future owner and operator of the Jenny Creek site was not identified.

A.3.1.9 Iron Gate Hatchery Day Use Area

The Iron Gate Hatchery Day Use Area is located just downstream of Iron Gate Dam, adjacent to Iron Gate Fish Hatchery. The day use area is owned by PacifiCorp on Parcel B land and operated by the CDFW. The site currently includes a covered picnic area, a visitor center/interpretive kiosk, and an ADA-accessible trail to the river shoreline. There is also a boat launch on the river shoreline across from the hatchery. The 2011 Detailed Plan proposed that the site be retained and modified to provide additional amenities and a reconstructed boat ramp to support continued and improved recreational access in the area. The KHSA includes funding by PacifiCorp for the continued operation of the Iron Gate Fish Hatchery by CDFW for up to eight years following facility removal and the transfer of ownership of the facility to CDFW. However, long-term plans for operation of the recreation amenities at the Iron Gate Hatchery Day Use Area following facilities removal and the eight-year period identified in the KHSA are unknown.

A.3.2 New Sites and Amenities

This section describes sites and access locations that were not directly linked to the retention or modification of an existing site. It is assumed that any of the new sites or amenities would be scheduled for the year following facility removal and reservoir/river restoration unless otherwise noted.

A.3.2.1 New Campgrounds

Two small to medium campgrounds were identified for development in the 2011 Detailed Plan. These campgrounds would accommodate a total of 20 campsites and include parking, day use facilities and a boat launch. If implemented, these newly developed campgrounds would provide river access, parking, and day use amenities, essentially offsetting the loss of combination campground/day use area sites at other locations as part of Project implementation. The specific location of these sites was not identified in the 2011 Detailed Plan. The future owner and operator of these sites was also not identified.

A.3.2.2 New Routes/Roads

The 2011 Detailed Plan identified the development of two potential routes/roads up to 5 miles in total, with one route on each side of the river to provide public recreation access to existing and newly developed sites on the river. These routes would be developed in coordination with the appropriate federal, state, and local agencies along with any private landowners because of their need to cross land held by multiple owners. These new roadways were identified in the 2011 Detailed Plan as permanent features. These roads were proposed in the 2011 Detailed Plan to improve access for recreation uses as well as improve law enforcement's ability to police the area. The specific configuration/layout of these proposed roadways was not provided in the 2011 Detailed Plan and no proposed owner/operator for the roadways was identified.

A.3.2.3 Non-Motorized Trail

The 2011 Detailed Plan also identified the development of a new non-motorized trail to provide fishing, biking, and hiking access along the river bank from the current J.C. Boyle Dam site to the Iron Gate Fish Hatchery. This new trail would be developed in coordination with the appropriate federal, state, and local agencies along with any private landowners because of its need to cross land held by multiple owners. This new trail was identified in the 2011 Detailed Plan as a permanent feature. The specific configuration/layout of this new trail was not provided in the 2011 Detailed Plan and no proposed owner/operator for the trail was identified. This trail would be developed to be connected to any existing and developed recreation sites developed as part of a Recreation Facilities Plan or in coordination with other regional efforts.

A.3.2.4 Fishing Access Upstream of J.C. Boyle Powerhouse

Fishing access could be provided along the river approximately 1 mile upstream of the J.C. Boyle Powerhouse, though the specific location of this access site was not identified by the stakeholders that suggested it. Currently, there is no trail next to river in this area, but there is a power canal access road that runs parallel to the river that could be connected to this new site. If the power canal access road would be closed to vehicles after dam removal, it could be converted to a trail and used for river access in this area.

This new feature would provide river access for recreation uses such as fishing and hiking. The future owner and operator of this site was not identified.

A.3.2.5 Campground South of J.C. Boyle Powerhouse

Stakeholders requested a campground be developed south of J.C. Boyle Powerhouse or modifications be made to one of the three existing river-side campgrounds operated by the BLM (BLM Dispersed Site 1, Klamath River Campground, and Turtle Camp). Klamath River Campground and Turtle Camp currently allow campfires and access for kayaks and small rafts. These existing sites could be enhanced to include defined campsites and improved boat launches, access roads, day use facilities, and/or restrooms. Modifications to these existing campgrounds or the development of a new site that would provide improved river access and river-side camping would provide additional opportunities for camping, boating, and hiking in this reach. The BLM would continue to be the owner and operator of this modified site.

A.3.2.6 Day Use and River Access at J.C. Boyle Powerhouse

Stakeholders recommended consideration of a day use site to provide river access at the J.C. Boyle Powerhouse. The land directly surrounding J.C. Boyle Powerhouse and substation was identified by stakeholders as a large, flat area that could serve as an effective location for a day use facility and/or campground. This land is currently owned by the BLM, and the BLM would continue to own the land following facilities removal and could potentially operate any new recreation site developed on this land. Development of recreation amenities at this site could increase recreation use and provide additional river access for hiking, fishing, and boating.

A.3.2.7 New River Access Locations

Multiple whitewater boating access locations were suggested by stakeholders between Keno Dam and the Iron Gate Hatchery. These locations were chosen based on known or expected changes in river conditions (boating difficulty levels) and are described in Table A-3 and shown in Figure A-2. Some of the locations identified were recommended for development prior to dam deconstruction to allow the continued use of existing river whitewater boating runs and reduce the loss of boating access during dam decommissioning. No boating access would be allowed in the reservoirs themselves during drawdown and dam removal because conditions would constantly be changing, and it would be unsafe to allow boating in the former reservoir areas due to the operation of the diversion facilities (e.g., large gates and tunnels at the dams) as well as the potential for mass movements of reservoir sediment into the river. Non-reservoir portions of the Klamath River system would remain accessible to boating during drawdown and dam removal. If included in the Recreation Facilities Plan, development of these pre-construction access sites would need to be located outside of the existing reservoir footprints and scheduled for completion prior to the initiation of reservoir drawdown. The future owner and operator of these sites was not identified.

Table A-3 Stakeholder Suggested Access Points (Retention of Existing Access Points and Development of New Access Points)

Location	Suggested Recreation Development	Proposed Timing
Keno Dam	Proposed access on the river left. There is no existing access point for the run from Keno to J.C. Boyle. This would provide an additional river access point.	Unknown
Highway 66 Bridge Crossing	Proposed access on the river left. The current reservoir boat ramp could become a good location for a boating access point. This point could serve as a take-out for the Keno Run and a put-in for the reach currently inundated by J.C. Boyle Reservoir, which would become available after dam removal.	1 year after dam removal
Below J.C. Boyle Dam	Proposed on the river left. This site would serve as a put-in for the Big Bend Run during dam removal and future take-out for the Upper Big Bend Run post dam removal. Depending on river conditions post drawdown, this site might be exchangeable with access at Topsy Campground (if Topsy Campground is retained).	1 year after dam removal
At J.C. Boyle Powerhouse	Proposed on flat land directly surrounding J.C. Boyle Powerhouse and substation. This site would serve as a day use facility and/or campground with river access. As noted above, this site could provide additional hiking, fishing, and boating access.	1 year after dam removal
Spring Island Boater Access	Existing boater access site suggested for retention. This site is important to boaters as a location where the difficulty of the river changes.	N/A
Above Caldera	Proposed on the river right, opposite to Frain Ranch. This would serve as an important access point for boaters as the river difficulty changes from Class III to Class IV at this location. The location opposite to the existing access site at Frain Ranch would provide boaters the opportunity to run the Big Bend Run and have shuttle access on the north side of the river. Currently, boaters can only be shuttled on the south side, which restricts accessibility and reduces potential recreation use. This location would serve as a take-out for the Upper Hell's Corner Run or put-in for the Hell's Corner Gorge Run. There is an existing road on the north side of the river that goes from the former Frain Ranch Bridge location down to Caldera that could serve as an access road for this access point.	1 year after dam removal
Stateline Take-out	Existing boater access site suggested for retention.	N/A
PacifiCorp Fishing Access Site 6	Existing boater access site suggested for retention. As noted above, this site is located on PacifiCorp Parcel A lands and the ability to preserve public access to this site in the future is uncertain.	N/A
PacifiCorp Fishing Access Sites 2-5	Existing fishing access sites suggested for retention. These sites support fishing access and are not currently suitable for boater access. As noted above, these sites are located on PacifiCorp Parcel A lands and the ability to preserve public access to these sites in the future is uncertain.	N/A
PacifiCorp Fishing Access Site 1	Existing boater access site suggested for retention. As noted above, this site is located on PacifiCorp Parcel A lands and the ability to preserve public access to this site in the future is uncertain.	N/A

Location	Suggested Recreation Development	Proposed Timing
Above Copco No. 1 Dam	Proposed on the river right. This access point would serve as a take-out for the run currently inundated by Copco Lake (Copco Valley Run) and a future put-in for the Ward's Canyon and Iron Gate Runs. This area is anticipated to break up a Class II run (inundated by Copco Lake) and a Class IV run (Ward's Canyon).	1 year after dam removal
Copco No. 2 Dam (Ward's Canyon)	Proposed on the river right, approximately 1,500 feet downstream of Copco No. 1 Dam. During drawdown and dam decommissioning activities, stakeholders indicated that this point could serve as an important access site for boaters, providing a put-in for the Ward's Canyon Run immediately downstream of Copco No. 2 Dam. Given this site's close proximity to both Copco No. 1 Dam and Copco No. 2 Dam, it would be located in an active construction area during dam removal. Stakeholders requested limited access to this site on a schedule coordinated with KRRC and contractors on-site. The intensity of construction activity on site during dam deconstruction has been determined to make this request infeasible. After dam removal is complete, the site would serve as a put-in for the Ward's Canyon and Iron Gate Runs. There is an existing dirt road that could provide access to this site, this site has been identified as an alternative to the Copco Valley Access site proposed upstream in the event that resource concerns prevent its development.	Requested to be accessible during dam removal, 1 year after dam removal
Copco No. 2 Powerhouse	Proposed on the river left. This site would serve as a take-out for the Ward's Canyon Run or a put-in for the future Iron Gate Run. This site would be located at a point where there is a shift in difficulty of the runs from a Class IV run (Ward's Canyon) to a Class III/II run (Iron Gate). This site is interchangeable with the existing site at Fall Creek Day Use Area.	1 year after dam removal
Fall Creek	Proposed on the river right. This access point could serve as a take-out for upstream runs and a put-in for the run currently inundated by Iron Gate Dam. This existing site is interchangeable with the Copco No. 2 Powerhouse location.	1 year after dam removal
Jenny Creek Confluence	Proposed on the river right. Stakeholders indicated that this site could allow boating following drawdown and serve as a take-out for the upper portion of the run currently inundated by Iron Gate Reservoir and a future put-in for runs to Iron Gate and beyond. This site is interchangeable with the Camp Creek Confluence location.	1 year after dam removal
Camp Creek Confluence	Proposed on the river right. Stakeholders indicated that this site could allow boating following drawdown and serve as a take-out for the upper portion of the run currently inundated by Iron Gate Reservoir and a future put-in for runs to Iron Gate and beyond. This site is interchangeable with the Jenny Creek Confluence location, but may be a better location based on bathymetry and pre-dam topographic maps.	1 year after dam removal
Iron Gate Hatchery	Existing boater access site suggested for retention. Improvements to the existing amenities offered at Iron Gate Hatchery could provide needed access for boaters and serve as a take-out for the future Iron Gate Run following dam removal.	N/A

A.3.2.8 Copco No. 2 Bypass Reach

Stakeholders identified riparian vegetation that has grown into the historic river channel in the Copco No. 2 Bypass Reach due to low flows as a substantial safety hazard for future water-based recreation in that stretch of the river. The stakeholders indicated that the complete removal of this woody vegetation in the historic river channel *prior* to facilities removal would be more effective in avoiding complications generated by removing vegetation *after* the reach is inundated. Vegetation removal would make the reach navigable for boaters, thus providing an additional whitewater boating run that would increase recreational boating use in the restored river. If included in the Recreation Facilities Plan, completion of vegetation removal would be scheduled for the year prior to reservoir drawdown.

A.3.2.9 Road Improvement

Stakeholders suggested that improvements could be made to some of the existing roadways that provide access to the Klamath River. Stakeholders indicated that many of the existing access roads in the area between Keno Dam and Iron Gate Dam are in need of improvement and long-term maintenance. Some of the roads have become unnavigable and inadequate for use to access recreation sites. Poor road conditions also contribute to difficulties experienced by law enforcement personnel that need to access these areas. Stakeholders proposed that improvements be made to existing roads, such as Topsy Grade Road and Copco Big Bend Road, to improve accessibility and policing, which could result in increased recreation use in the area. Specific stretches of roadways that need improvements were not identified. It is assumed that roadways would continue to be owned and maintained by their current owners following any improvements.

A.3.2.10 Access During Deconstruction

Stakeholders suggested that, where possible, access to roads currently used for river access be retained during the drawdown and deconstruction periods. These roads include, but are not limited to, the access road leading past J.C. Boyle Powerhouse to Spring Island Boater Access. Road access could involve placing a flagger in established areas to direct traffic or establishing time intervals during which roads could be available to the public. Providing road access would allow continued use of the river for boaters during deconstruction periods, thus reducing the impact of the Project on whitewater boating in the Hell's Corner Reach during this time. Access requests would be coordinated with the contractor responsible for dam deconstruction activities and the BLM. The terms of the access agreement would be determined and shared prior to facility removal and reservoir/river restoration. Stakeholders also requested access to the dirt road near Copco No. 2 Dam, on the river right; however, this road is not currently publicly accessible, nor is it currently used for river and boating access.

A.3.2.11 Frain Ranch Bridge

Stakeholders suggested that a new bridge could be constructed to replace an old bridge that crossed the Klamath River at Frain Ranch. Reconstruction of this bridge would provide a point of access to either side of the river, increasing accessibility and recreation use in the area. The future owner and operator responsible for maintenance of the new bridge was not identified.

A.3.2.12 RV Park in Seiad Valley or Happy Camp

An RV park with full hookups and amenities to be developed in Seiad Valley or Happy Camp was identified as a potential recreation site by stakeholders. The RV park could generate revenue and tourism within the county, potentially offsetting lost tax revenue due to dam removal. The location of this park and its proposed owner and operator were not identified.

A.3.2.13 Walking Trails/Wildlife Viewing/Interpretive Trails

Stakeholders also suggested the development of educational sites and interpretive exhibits in the area. It was suggested that instead of full removal of dam infrastructure, some infrastructure (e.g., fish ladders, powerhouses, etc.) could be retained and signage added to promote educational tourism. Trails could be developed and routed to take recreation users through or by some of these remaining structures (preferably those with historic backgrounds). Signage promoting wildlife viewing could also be provided along these trails.

Locations for these trails were not determined, but could include areas around Copco residential areas or in the reservoir footprints of J.C. Boyle, Copco, and Iron Gate Reservoirs. Development of recreational opportunities close to residential areas at Copco could provide residents with beneficial uses to offset the loss of reservoir-based recreation opportunities. Interpretive trails could provide additional recreational experiences and opportunities for hiking and tourism and as well as utilize local services. Future owners and operators of the remaining infrastructure were not identified.

A.3.2.14 Flatwater Lake-Based Recreation in Siskiyou County

New or enhanced day use and/or camping sites could be developed in Siskiyou County to replace lost flatwater lake-based recreation opportunities. Locations were not determined, but could include the modification of existing recreation amenities and/or the development of new amenities at Lake Shastina or Medicine Lake. Specific amenities that would be available at these sites were not specified. The future owner and operator of these amenities was not identified. The development of additional day use and/or camping sites could promote recreation use and potentially offset lost flatwater lake-based recreation opportunities due to facility removal.

A.3.2.15 Fishing Access Upstream or Downstream of J.C. Boyle Powerhouse

Fishing access sites could be developed upstream or downstream of J.C. Boyle Powerhouse in the powerhouse footprint and bypass reach. Stakeholders did not identify specific locations for these new access sites. With the removal of dam facilities, an increase in steelhead is expected in this reach of the river, benefitting fishing recreation experiences and resulting in additional fishing opportunities. Development of fishing access sites in this area would accommodate increased fishing activity and recreation use in the J.C. Boyle Bypass Reach. The future owner and operator of these sites was not identified.

A.3.2.16 Whitewater Park

Stakeholders identified the development of an in-river or off-river whitewater park along the river as a potential site that could help offset impacts to whitewater boating in the Hell's Corner Reach by Project implementation. The proposed site could be established by diverting water from the river to provide whitewater conditions for recreation users to practice whitewater boating. The site could include day use areas and various amenities. A whitewater park would provide additional recreational opportunities for boating and could be a newly established tourist attraction, which could provide economic benefits for the county. The location of this park and future owner and operator were not identified.

A.3.2.17 Recreational Gold Panning

Recreational gold panning opportunities could be established in areas on the river in Siskiyou County where users could participate in the county's history and culture. Specific locations where gold panning might be supported were not identified. These locations could provide interpretive signage for the activity, including information on the history of gold mining in the county. Stakeholders indicated that the establishment of gold panning opportunities along the river could attract tourists and contribute to recreation use and available activities in the area. The future owner and operator of these opportunities was not identified.

A.3.2.18 New ADA Facilities

The Project would result in the removal of recreation sites that offer ADA-accessible facilities (for example, Camp Creek). It was proposed that at least one of the recreation sites retained or developed along the Klamath River between J.C. Boyle Dam and Iron Gate Dam be upgraded to an ADA-accessible facility to offset this lost facility. Stakeholders noted during outreach meetings that shifting demographics for recreation users in the area could warrant the development additional ADA-accessible facilities. These facilities could include, but are not limited to, fishing access sites, boat ramps, and restrooms. The specific location of this replacement facility was not previously determined. The future owner and operator of this facility was not identified.

A.3.2.19 Fishing Lodges

Stakeholders identified the development of two to five public fishing lodges to support fly fishing tourism along river as recreation sites that should be considered. The fishing lodges could provide year-round guided drift boat fishing opportunities, both fly and conventional, for salmon, steelhead, and trout. Locations for the lodges were not identified, but could be developed on Parcel B lands. Stakeholders suggested that these fishing lodges could be owned and operated under public/private partnerships, but the specific future owners and operators of these developments were not identified. Fees for facility use may be collected, but exclusive membership would not be permitted, and open access to the public would be required. Fishing lodges could provide additional fishing access, increase recreation use in the area, provide additional jobs, and serve as a revenue generator to help offset lost tax revenue resulting from facilities removal.

A.3.2.20 River-side Commercial Recreational Development

Stakeholders suggested that commercial recreation sites could be developed on the river to support recreational tourism. The types of recreation uses for these developments were not specified. Potential locations were also not identified, but sites could be developed on Parcel B lands adjacent to the river. Similar to the fishing lodges described above, stakeholders suggested that these commercial developments could be owned and operated under public/private partnerships, but the specific future owners and operators of these developments were not identified. Fees for facility use may be collected, but exclusive membership would not be permitted, and open access to the public would be required. River-side commercial recreation development could provide additional recreation opportunities such as fishing, hiking, and boating among other opportunities, as well as serve as a revenue generator to help offset lost tax revenue due to facilities removal.

A.3.2.21 Siskiyou Tourism Plan

The Siskiyou County County-wide Tourism Marketing Plan (Siskiyou Tourism Plan) includes a variety of ideas intended to promote tourism within the county by reaching a broader audience. Stakeholders proposed that some elements in the Siskiyou Tourism Plan be implemented as part of the Recreation Facilities Plan. The Siskiyou Tourism Plan highlights a lack of available tourism promotion funding, which poses a significant challenge for the county. Through either direct funding or partnering to develop destination awareness for attractions and outdoor recreation opportunities within the county, this opportunity could promote existing recreation uses such as hiking, fishing, hunting, biking, and boating, which could help reduce the loss of recreation opportunities due to reservoir removal. If included in the Recreation Facilities Plan, implementation of this plan could be scheduled to coincide with facility removal and continue for an undetermined period following completion of river and reservoir restoration.

A.3.2.22 Transportation Plan

Development of a Transportation Plan that identifies appropriate roads and trails that could provide access to existing and newly developed recreation sites was identified by stakeholders as important for planning potential recreation sites and road improvements. Stakeholders suggested that the plan also identify land ownership within roadways and the entity or entities with current and future responsibility for road maintenance. The Transportation Plan would help inform the identification of new access routes for development in the future, along with potential existing roadways that could be repurposed for trail use. The timeline for the plan was not specified. If included in the Recreation Facilities Plan, efforts developing the plan could begin prior to reservoir drawdown.

A.3.3 Modifications to Existing Private Recreation Sites

This section presents descriptions of potential modifications to private recreation sites that stakeholders identified during outreach. It is assumed that any of the modifications to existing private sites would be scheduled for the year following facility removal and reservoir/river restoration unless otherwise noted.

A.3.3.1 Upgrade Private Campgrounds

Numerous private campgrounds were identified in the region by stakeholders as being important recreational resources. These sites are owned and operated by a variety of private owners and operators. Modifications and/or upgrades to these sites were suggested by stakeholders as a way to provide continued and improved recreation use in the area. Ownership of these sites would not change.

R-Ranch

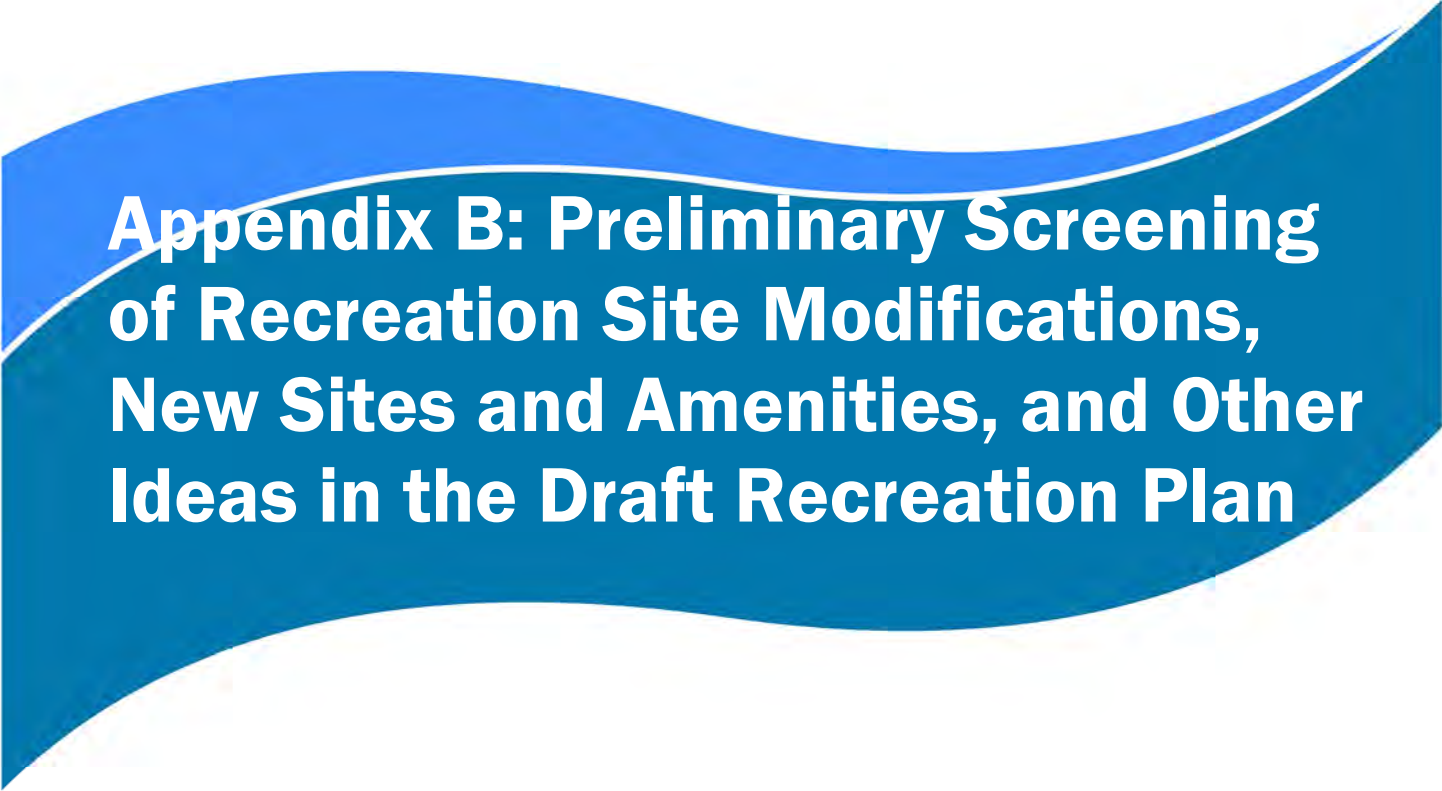
The R-Ranch is located downstream of Iron Gate Reservoir in Hornbrook, California. The ranch currently provides camping, dirt bike and ATV riding, fishing, hiking, hunting, swimming, and horseback riding opportunities. Stakeholders suggested the ranch be expanded or enhanced to provide additional recreation opportunities. This expansion could include the development of a waterpark or similar attraction. The R-Ranch is privately owned and operated. Future ownership and operations would remain unchanged. An expansion of the R-Ranch would provide additional recreation opportunities, potentially reducing the impact from the loss of reservoir recreation.

A.3.3.2 Enhance Private Docks

Several homeowners use private docks to access Copco Lake for fishing. Stakeholders from the Copco Village community suggested these private docks be extended to the newly formed river. The extension of private docks post dam removal would provide continued river access for residents.

A.3.3.3 Klamath Hot Springs

Stakeholders suggested that a recreation site near the historic Klamath Hot Springs Resort could be developed as a commercial recreation site. Development of a structure with restrooms and shelter for visitors could increase access to the existing hot springs near Shovel Creek. The potential future owner and operator of this site was not identified.



**Appendix B: Preliminary Screening
of Recreation Site Modifications,
New Sites and Amenities, and Other
Ideas in the Draft Recreation Plan**

APPENDIX B – PRELIMINARY SCREENING OF RECREATION SITE MODIFICATIONS, NEW SITES AND AMENITIES, AND OTHER IDEAS IN THE DRAFT RECREATION PLAN

Based on the anticipated removal of reservoir recreation sites and reduced whitewater boating days under the Project, KRRC identified the need to implement, in the Klamath River Basin, recreation site upgrades and/or new sites to provide, at a minimum, two types of amenities – whitewater boating river access and fishing access. Providing these types of access would help enhance recreation after license surrender.

The following text describes the initial screening of recreation modification ideas presented in the Draft Recreation Plan. That initial screening was informed by stakeholder input on the types, desired locations, and amenities provided on site. The screening completed during development of the Draft Recreation Plan resulted in shifts in the configuration and number of sites that were identified for implementation.

Subsequent to the release of the Draft Recreation Plan, KRRC continued to collect stakeholder input to refine recreation site ideas, identify specific locations, and solicit additional detail on the desired amenities at each site. KRRC also collected stakeholder input on new recreation ideas beyond the new and upgraded access sites identified in the Draft Recreation Plan. The results of this stakeholder input are discussed in Section 7 of the Recreation Facilities Plan.

B.1 Whitewater Boating Put-in/Take-out Access Sites

KRRC identified the development of river access sites that would support whitewater boating activities as a way of enhancing boating opportunities on the Klamath River after license surrender. Developing put-in/take-out amenities at or near the upstream and downstream ends of J.C. Boyle Reservoir, Copco Lake, and Iron Gate Reservoir would provide whitewater boating access to “new” sections of the river, i.e., those sections not currently accessible with the existing flow regime and reservoirs in place.

Continued stakeholder engagement during development of the Recreation Facilities Plan sought to identify site preferences, including input from future users on the specific locations anticipated to provide the best recreation experience, in-river and river-adjacent habitat areas, as well as sections of the river with specific environmental sensitivities to avoid and/or protect from future use. Input on environmental sensitivity was

received during coordination efforts with resource specialists from regulatory agencies as well as representatives from tribal governments. This resulted in the shifting in some locations of potential new river access sites, and in other locations, the screening out of sites to avoid known areas of potential aquatic and terrestrial resource sensitivity as well as cultural resource sensitivity. Preliminary feedback provided by stakeholders in the whitewater boating community on boating access preferences focused on identifying locations along the river with known or anticipated changes in future boating difficulty levels to better facilitate use of these sections by whitewater boaters of varying skill levels.

These whitewater boating access sites would include at a minimum:

- An area near or along the adjacent roadway for the parking of trucks with trailers used to transport whitewater rafts, large passenger vans and buses for transporting commercial whitewater rafters,
- If necessary, an access road between any new parking areas and the adjacent existing roadway, and
- If necessary, developed paths from the area designated for parking to the river's edge wide enough to support the portage of rafts.

Development of these whitewater boating access sites would be assumed to require slope stabilization, drainage improvement, grading activities, gravel and/or asphalt paving, and vegetation removal where necessary to develop parking areas, access roads and paths down to the river, if necessary, for boat portage.

B.2 Fishing Access Sites

KRRC identified the development or improvement of access sites that would support fishing opportunities on the river as a way to enhance recreation opportunities after license surrender. The fishing access sites could also support other recreation opportunities such as swimming or picnicking and may overlap in location with whitewater boating access sites. The new fishing access sites could be developed along the river near or in the existing footprints of J.C. Boyle Reservoir, Copco Lake, Copco No. 2 Reservoir, and Iron Gate Reservoir.

Similar to the whitewater boating access sites described above, continued stakeholder engagement during development of the Recreation Facilities Plan sought to identify site preferences, potential amenities, along with stakeholder concerns for resources including biological and/or cultural resources.

These fishing access sites would include at a minimum:

- An area near or on a road shoulder for the parking of personal vehicles,
- If necessary, an access road between any new parking areas and the adjacent existing roadway, and
- If necessary, developed trails from the area designated for parking to the river's edge.

Similar to the whitewater boating access sites, development of these fishing access sites would be assumed to require slope stabilization, drainage improvement, grading activities, gravel and/or asphalt paving, and vegetation removal where necessary to develop parking areas and, if necessary, access trails leading down to the river.

B.3 Other Recreation Sites

In addition to continued input regarding whitewater boating and fishing access sites, KRRC has continued, since completion of the Draft Recreation Plan, to collect input on other recreation sites in the Klamath River Basin from stakeholders that could be developed in addition to, or potentially in place of, the sites identified for implementation in Sections A.1 and A.2 to enhance recreation opportunities after license surrender.

B.4 Concerns Related to Future Recreation Development

KRRC continued its stakeholder outreach program after the Draft Recreation Plan was released in June 2018 and continued to receive input on recreation sites and amenities. Input received from stakeholders also demonstrated some concerns regarding potential site modifications or new sites and amenities and their location relative to known areas of environmental sensitivity where resources may be exposed after reservoir drawdown. In response to these concerns and comments, KRRC incorporated the avoidance of environmentally sensitive areas as a screening criterion to ensure that potential recreation site modifications and new sites would avoid or minimize any impacts to sensitive areas (see Section 7 of the Recreation Facilities Plan).

After the Draft Recreation Plan was released, KRRC also received comments from stakeholders discussing concerns regarding the recreation setting and what the scenery would be along the river at new recreation sites in conjunction with the restoration activities. Stakeholders were interested in what the recreation setting of the potential recreation sites would be and the expected recreation opportunities and experiences that would be provided at the potential recreation sites. Therefore, a description of the recreation setting of the potential recreation sites is discussed in Section 8 of the Recreation Facilities Plan.



Appendix C: Non-Project River Recreation Sites

APPENDIX C – NON-PROJECT RIVER RECREATION SITES

This appendix includes designs and descriptions of two river access sites (Keno and Turtle Camp) that could be developed by parties other than the KRRC because these sites would be located outside of the FERC boundary. As noted in Section 1.1 of this Recreation Facilities Plan, FERC’s jurisdiction in the context of the Lower Klamath Project license surrender is limited to addressing the direct impacts of dam removal, and this would include impacts to recreation facilities within the FERC Project Boundary. Any recreation facilities outside of the FERC Project Boundary would therefore be provided at the discretion and expense of the underlying landowners. Therefore, development of these two river access sites would not be implemented by the KRRC, but could be implemented by the landowners (Bureau of Reclamation and BLM).

Draft designs of river access sites at Keno and Turtle Camp are included in this Recreation Facilities Plan in an effort to indicate how access could be enhanced at these locations to improve recreation opportunities and complete the system of put-in and take-out locations along the Upper Klamath River (assuming existing PacifiCorp recreation sites on Parcel A lands continue to be maintained as public recreation sites).

C.1 Keno

C.1.1 Setting

The Keno site could be located in the stretch of the Klamath River just below Keno Dam. Project implementation does not affect this portion of the river as Keno Dam remains in place. Therefore, existing conditions would remain, and no restoration activities would occur at this location.

The current setting provides river views with mature vegetation and trees consistent with surrounding vegetation. The views from the river’s edge are limited due to the steep topography along the river. Similar views would persist until boaters reached the former J.C. Boyle Reservoir, where boaters would see the restored reservoir area. The natural river setting (from the put-in until the former reservoir inundation area) would provide boating and fishing recreation experiences anticipated for a naturally functioning river in this region (e.g., risk-taking, introspection, enjoying nature, achievement, physical exercise). Upon reaching the restoration area, recreation experience quality may degrade slightly until restoration goals are achieved due to slightly different scenery. However, for many visitors the change in scenery may be expected and therefore have less influence over their recreation experiences.

C.1.2 Description

The Keno site could be located just downstream of Keno Dam on the river left. The site is accessed via Highway 66 and the dirt access road leading to Keno Dam, P and L Park Road. This access site could be

located adjacent to an existing recreation area on land owned by the United States Federal Government (administered by the Bureau of Reclamation) with adjacent lands owned and operated by PacifiCorp. Securing access to this site year-around would be essential to providing a river access site at this location as the Keno Camp Day Use Area is currently closed from autumn through spring.

A river access launch site at this location could provide whitewater boating, fishing, general boating and informal shoreline recreation opportunities. Stakeholders identified this site as a valuable put-in location for the Keno Run from Keno Dam to Highway 66 at J.C. Boyle Reservoir and access to the Keno Wave, a play wave located 0.5 mile downstream from the existing dam facility.

Currently, boaters and anglers cannot access this run as Keno Camp does not provide access below Keno Dam and downstream sections of this river reach are partially inundated by J.C. Boyle Reservoir. In addition, removal of J.C. Boyle Dam would remove the flatwater paddle presently required above the dam, which currently limits whitewater boating use of this run.

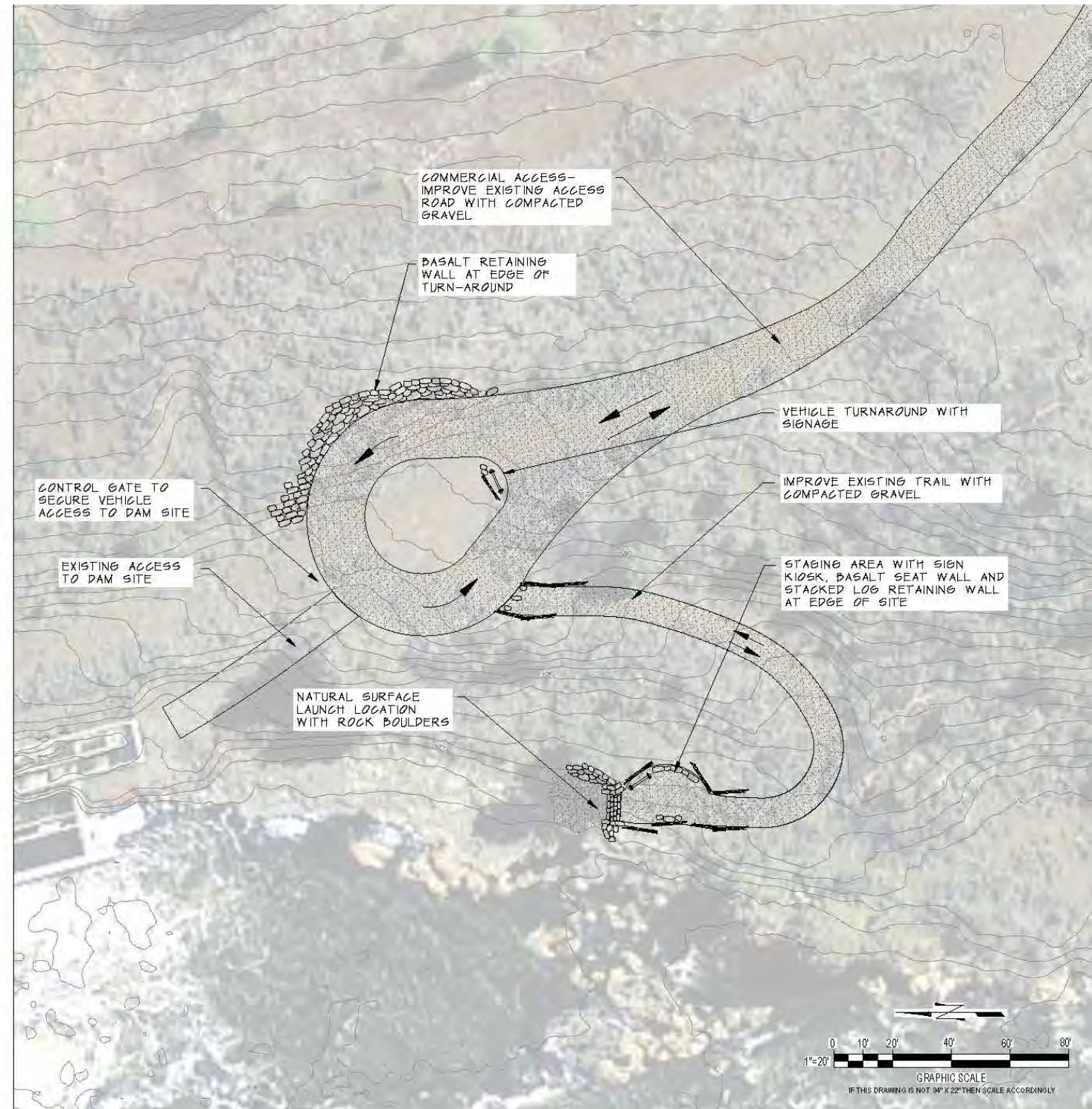
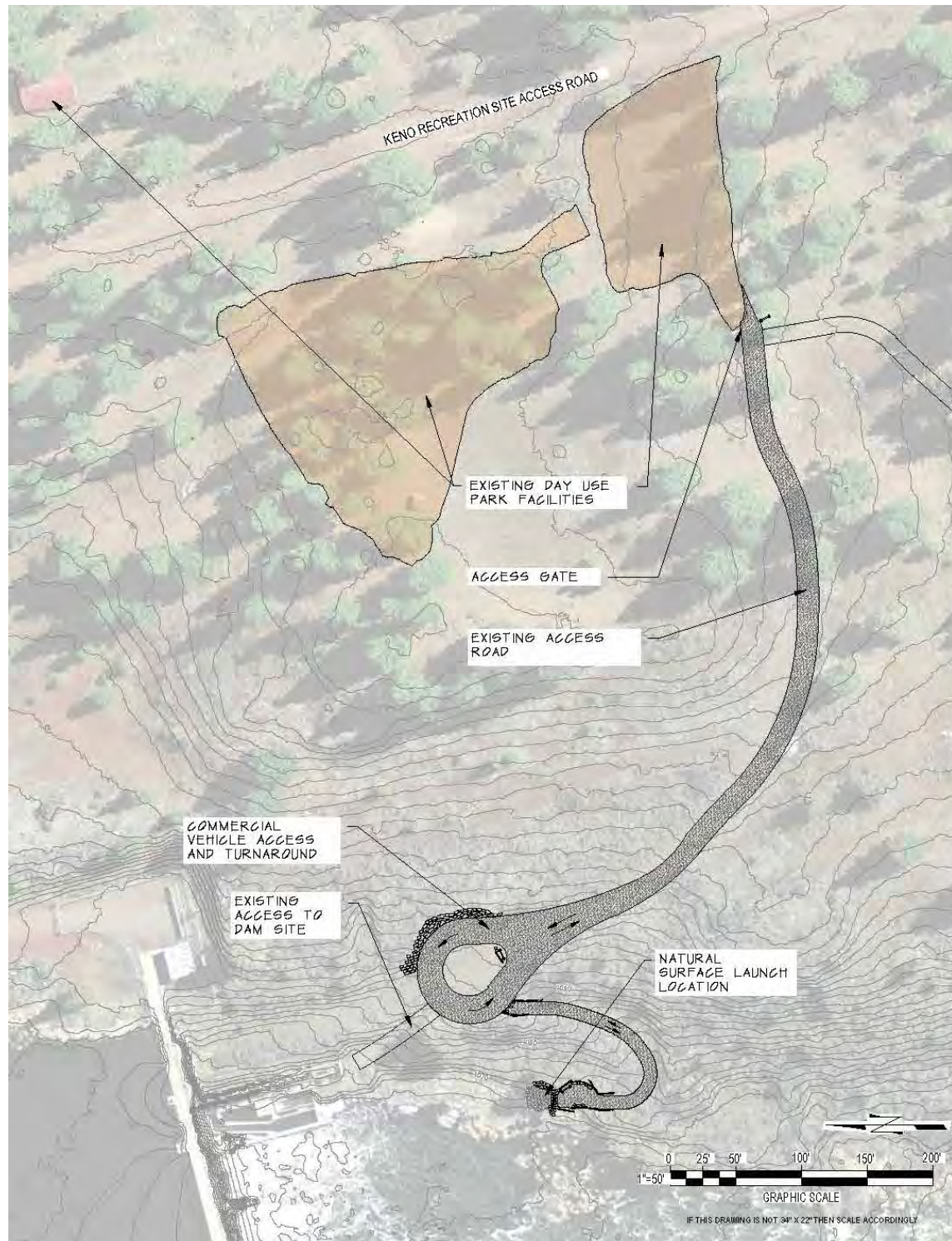
The Keno site could tie into the Keno Camp site located approximately 0.4 mile to the east. Keno Camp provides day use facilities, day use parking, and informal walk-in river access for boaters and anglers. The river access site could share the existing Keno Camp day use parking area and access road (P and L Road). The existing parking area is located approximately 800 feet from the shoreline.

The river access launch (put-in) site could include an extension of the dam access road through the end of the existing Keno Camp parking area and an eight-foot-wide, compacted gravel trail to a river side staging area and natural surface boat launch. This access trail would be wide enough for a raft to be carried down to the water with two people on each side of the raft. The conceptual design (see design in Section C.1.3 below) includes a gate at the entry of the access road extension to allow commercial users to enter the new roadway to access a turnaround and drop-off area located at the top of the new launch trail. Private boaters would walk-in along the new access road and then down the trail to the put-in.

In addition to the new access road improvements, trail, and gate, the site could include a staging area for commercial users at the bottom of the trail, an information kiosk with angler box, a basalt retaining and seat wall, and basalt steps leading down the embankment to the river's edge. Earthwork would be required to develop the launch point and associated features. These features could be field fit to minimize resource impacts and utilize and improve existing infrastructure where possible.

Following license surrender and dam removal downstream, Keno Dam and the land where this access site could be developed will be owned and managed by the Bureau of Reclamation. Maintenance of Highway 66 would continue to be performed Klamath County; however, it is unknown if PacifiCorp would continue road maintenance on P and L Park Road or if the Bureau of Reclamation would assume maintenance of the road.

C.1.3 Conceptual Design



C.2 Turtle Camp

C.2.1 Setting

The Turtle Camp recreation area is located along a stretch of the Klamath River that is not currently impacted by Project infrastructure or inundated by a reservoir. Thus, the setting of the site would generally not change due to dam removal. However, with increased flows, there is potential for the water quality to improve, changing the clarity and color of the river. The natural river setting would continue to provide for boating and fishing recreation experiences anticipated for a naturally functioning river in this region.

The recreation site could be located in an existing undeveloped campground within the riparian corridor next to the river. The setting of the existing site consists of river views with a variety of mature vegetation and trees in a canyon with understory grassland meadows. This composition of vegetation communities is consistent with surrounding vegetation in the foreground to background. On the upper terrace above the existing undeveloped campground site is a break line in the hillside caused by the existing access road. Views of the brown and gray gravel road are evident through the understory vegetation contrasting with the green canopy of the surrounding conifer forests.

C.2.2 Description

The Turtle Camp site is located along the right bank of the Klamath River within the Hell's Corner Reach of the river. This site is accessed via Highway 66 and Copco Big Bend Road. Modifying this site could provide river access for whitewater and drift boating, fishing, and informal shoreline recreation opportunities. Development of this site may result in the encroachment at the northern campsite; however, existing campsites are not officially delineated. In addition, there may be wetlands and cultural resource concerns regarding development of a river access site at Turtle Camp.

Stakeholders identified this site as a highly valuable put-in and take-out location for the Hell's Corner runs where the difficulty would transition from Class II (III) on the Upper Hell's Corner Run to Class IV on the Hell's Corner Gorge Run. Thus, this site would provide a safe exit point for drift boater anglers and less experienced boaters before continuing downstream on a more difficult run. Providing this recreation site would improve access for whitewater boating on the Hell's Corner Reach. Despite the removal of peaking flows, commercial whitewater boating on both the Upper Hell's Corner and Hell's Corner Gorge Runs may still occur, but to a lesser extent.

The Turtle Camp site currently contains three undefined dispersed campsites and picnic areas with fire pits (see Figure C-1). Facilities at this site could be located just upstream of the existing campsites. Modifications to this site could include a new access road off Copco Big Bend Road that leads to a boat launch and turnaround and separate parking area. Additional site amenities could include one picnic site, trail to the picnic site, garbage facilities, a universally accessible vault toilet, information kiosk with angler box, and parking for 12 vehicles (including one space for ADA-accessible parking) and four parking spaces for large vehicles and trailers. The boat launch could include three lanes, a turnaround and a launch staging area.



Figure C-1: Turtle Camp River Access Site - Existing Conditions

The draft river access site conceptual design has been setback 300 feet from the edge of the river and above the ordinary high water line. This design would meet BLM requirements that vault toilets be setback a minimum of 250 feet from the top of the river bank and above the high-water mark.

The BLM is the current owner and operator of the site and will continue to be the manager of the site. Maintenance of Highway 66 would continue to be performed by Klamath County. Maintenance of Copco Big Bend Road is currently shared by PacifiCorp and the BLM; PacifiCorp provides funding and maintenance of Copco Big Bend Road along the river to the Spring Island Boater Access. PacifiCorp's continued maintenance of this road following facility removal is uncertain.

C.2.3 Conceptual Design

