

---

# Condit Hydroelectric Project Decommissioning FERC Project No. 2342

---

## RECREATION FACILITY REMOVAL AND IMPROVEMENTS PLAN



Prepared by



Prepared for



May 26, 2011

## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	PROJECT DESCRIPTION.....	1
1.2	BACKGROUND.....	1
1.3	PROJECT REMOVAL DESCRIPTION.....	3
1.4	MANAGEMENT PLAN BACKGROUND.....	4
1.5	REGULATORY AND OTHER REQUIREMENTS .....	4
1.6	PLAN OBJECTIVES.....	5
1.7	RELATIONSHIP WITH OTHER MANAGEMENT PLANS.....	5
1.7.1	Project Removal Design Report.....	5
1.7.2	Public Safety and Traffic Control Plan.....	5
<b>2</b>	<b>RECREATION SITE MODIFICATIONS DURING REMOVAL.....</b>	<b>6</b>
2.1	SUMMARY.....	6
2.2	POWERHOUSE ROAD.....	6
2.3	NORTHWESTERN LAKE PARK.....	6
2.3.1	Access During Construction.....	7
2.3.2	Access Post Construction.....	8
2.4	OTHER LOCATIONS.....	8
<b>3</b>	<b>NORTHWESTERN LAKE PARK MODIFICATIONS.....</b>	<b>10</b>
3.1	SUMMARY.....	10
3.2	PRELIMINARY MODIFICATIONS.....	10
3.2.1	Boater Take-Out.....	10
3.2.2	Signage for Traffic Management.....	11
3.2.3	Fenced Construction/Staging Area.....	11
3.3	POST-CONSTRUCTION IMPROVEMENTS.....	11
3.3.1	Demarcating Parking Areas.....	11
3.3.2	Enhance Park Understory Plantings.....	11
3.3.3	Furnishings.....	12
3.3.4	Park Signage.....	12
<b>4</b>	<b>SCHEDULE.....</b>	<b>13</b>
<b>5</b>	<b>REFERENCES.....</b>	<b>15</b>
<b>FIGURES</b>		
	Figure 1-1 Site Location Map.....	2
	Figure 2-1 Proposed Sign Design.....	7
<b>TABLES</b>		
	Table 4-1 Schedule for Recreation Facility Removal and Improvements Plan.....	13
<b>APPENDICES</b>		
A.	Recreation Facility Removal and Improvements Drawings	
A1	Northwestern Lake Park Bridge Construction Pre-Breach	
A2	Northwestern Park Boat Access Construction Post-Breach	

## **1 INTRODUCTION**

### **1.1 PROJECT DESCRIPTION**

PacifiCorp Energy owns and operates the Condit Hydroelectric Project, which was completed in 1913 on the White Salmon River in Skamania County and Klickitat County, Washington. The project is regulated by the Federal Energy Regulatory Commission (FERC) as project number 2342. The project is located approximately 3.3-miles upstream from the confluence of the White Salmon and Columbia Rivers. Project facilities consist of a 125-foot high, 471-foot long concrete gravity diversion dam, an intake structure that directs water into a 13.5-foot diameter by 5,100-foot long wood stave flowline, and through a 40-foot diameter concrete surge tank. The flowline bifurcates inside the surge tank into two 9-foot diameter penstocks that supply water to the powerhouse. The powerhouse contains two double horizontal Francis turbines with an installed capacity of 14,700 kilowatts. The project creates a reservoir, Northwestern Lake, which extends 1.8-miles upstream of the dam and covers approximately 92 acres. The project area is shown in Figure 1-1.

### **1.2 BACKGROUND**

In 1968, a new license was issued by the Federal Energy Regulatory Commission for a 25-year term, which expired on December 31, 1993. In 1991, PacifiCorp Energy filed an application with the FERC for a new license authorizing the continued operation and maintenance of the project. PacifiCorp Energy has since been operating the project pursuant to annual licenses, pending determination by the FERC on the status of PacifiCorp Energy's new license issuance. In 1996, the FERC issued a Final Environmental Impact Statement (FEIS) that analyzed the environmental and economic effects of various relicensing alternatives for the project. The FEIS included a recommendation to approve licensing with mandatory conditions, including provisions for establishing fish passage facilities at the project.

PacifiCorp Energy evaluated the economic impacts of the FERC recommendations contained within the FEIS and determined that the mandatory conditions would render the project uneconomic to operate. In 1997, PacifiCorp Energy requested a temporary abeyance of the relicensing procedure in order to investigate the feasibility of various removal alternatives in collaboration with project stakeholders. PacifiCorp Energy and project stakeholders then commissioned the consulting firm of R.W. Beck, Incorporated, to evaluate removal alternatives. In 1998, R.W. Beck, Incorporated, prepared a summary report of project removal engineering considerations that identified the preferred method and schedule for project removal as well as the expected costs and associated environmental and permit issues. In 1999, the Condit Settlement Agreement was signed by PacifiCorp Energy and project stakeholders. The settlement agreement provides for project removal upon the expiration of an extended license term in accordance with the preferred method identified in the R.W. Beck, Incorporated, summary report. The settlement agreement was amended in 2005 to extend the dates for project removal.



In 2002, the FERC prepared a Final Supplemental FEIS addressing project removal, which updated the 1996 FEIS and assessed the effects associated with approval and implementation of the Condit Settlement Agreement. In March 2007, the Washington Department of Ecology (Ecology) issued the Final SEPA Supplemental Environmental Impact Statement (FSEIS) for the project.

In September 2002, the U.S. Fish and Wildlife Service issued a Biological Opinion finding no jeopardy to bull trout for ongoing project operations and implementation of the Condit Settlement Agreement. In October 2006, the National Marine Fisheries Services issued a Biological Opinion finding that the proposed dam removal action is not likely to jeopardize the continued existence of salmon and steelhead or destroy or adversely modify designated critical habitat.

### **1.3 PROJECT REMOVAL DESCRIPTION**

PacifiCorp Energy proposes to remove the project in accordance with the amended Condit Settlement Agreement and the Project Removal Design Report. Prior to removing the dam, the City of White Salmon's water supply line that crosses the reservoir needs to be relocated and potential impacts to the Northwestern Lake Bridge which is owned by Klickitat County and is at the upper end of the reservoir need to be addressed.

The proposed method for dam removal involves clearing sediment and debris immediately upstream from the tunnel and then drilling and blasting a 12-foot by 18-foot drain tunnel in the base of the dam to within a few feet of the dam's face. During the month of October, sediment and debris immediately upstream from the dam will be cleared to form a pathway and then the remainder of the tunnel will be blasted to drain the reservoir and flush impounded sediments out of the reservoir as rapidly as possible. Following the final tunnel blast, the drain tunnel will discharge at a rate of 10,000 cubic feet-per-second – approximately 25 percent of the estimated peak discharge during the February 1996 flood event on the White Salmon River. This will drain the reservoir in approximately six hours. Rapid draining of the reservoir is expected to mobilize much of the estimated 2.3-million cubic yards of sediment that have accumulated behind the dam since its construction. Previous modeling has indicated that between 1.6 million to 2.2-million cubic yards of sediment will be discharged into the White Salmon River immediately following dam removal and over a number of years as successive high flow events mobilize overbank sediments.

Once the reservoir is drained, the dam will then be excavated and removed along with the flowline, surge tank, and penstocks. Concrete from the dam will either be buried onsite or removed from the site for recycling or disposal. The powerhouse will be left intact. The upstream cofferdam in the White Salmon River present from original dam construction will be removed from the river as soon as practicable after the breach. PacifiCorp Energy expects to complete the dam removal process within one year.

Following project removal, the irrigation water supply intake for the Mount Adams Orchard to the east of the dam will be reconfigured to accommodate a new intake.

Removal of Condit dam is expected to provide the following benefits:

- Anadromous salmonids will be provided access of up to 18 miles of White Salmon River mainstem and tributary habitats that have been inaccessible since the early 1900s. Restoration of natural runs of anadromous fish upstream of the project dam is consistent with the fishery management goals of the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, and the Yakama Nation.
- Dam removal offers the greatest potential for full utilization of anadromous fish habitat, including habitat inundated by Northwestern Lake and, therefore, full restoration of anadromous salmonids within the White Salmon River basin.
- Dam removal will benefit wildlife dependent upon anadromous fish in the area of the river reach upstream of river mile (RM) 3.3.
- Dam removal will provide increased whitewater recreation opportunities. Whitewater recreation is an important and popular use of the White Salmon River and provides income for the local area.

#### **1.4 MANAGEMENT PLAN BACKGROUND**

The Condit Dam Project Description dated June 4, 2004 identified two requisite mitigation tasks related to public recreation and Northwestern Lake Park within Section 2.12, Other Mitigation Measures:

- Remove the existing boat dock at Northwestern Lake Park, and once the reservoir is drained, extend the boat launch to the river channel. In addition, there are three additional community docks owned by PacifiCorp Energy that will be removed prior to the deconstruction of the Condit dam.
- Post additional signs and an interpretative display at Northwestern Lake Park. Additional signage information is cited below and in the Public Safety and Traffic Control Plan.

#### **1.5 REGULATORY AND OTHER REQUIREMENTS**

##### Clean Water Act Section 401 Certification

Washington Department of Ecology issued the 401 Water Quality Certification on October 12, 2010.

##### Clean Water Act Section 404 Permit

The US Army Corps of Engineers issued the Section 404 Permit on May 13, 2011.

##### Federal Energy Regulatory Commission Surrender Order

On December 16, 2010, the FERC issued an Order Accepting Surrender of License, Authorizing Removal of Project Facilities, and Dismissing Application for New License. On January 14, 2011, PacifiCorp Energy filed a Request for Clarification and Rehearing and

Motion for Stay to the Commission. On April 21, 2011, the FERC issued an Order on Rehearing, Denying Stay, and Dismissing Extension of the Time Request.

## **1.6 PLAN OBJECTIVES**

The Condit Dam Supplementary Environmental Impact Statement prepared by the State of Washington Department of Ecology (2007) states that the purpose of these tasks are to: “Provide post-dam public recreation and education opportunities to mitigate for loss of aesthetic/scenic resources” (4.10.1). Research of other completed dam removal projects have confirmed the need to mitigate for the public sense of loss of scenic and aesthetic resources:

“One of the most consistent issues raised in discussions of dam removal is concern about the appearance of a drained reservoir after dam removal. Some of these concerns reflect personal preference one person’s appreciation of still water views over a flowing river or vice versa. Other concerns may reflect a lack of understanding about how river systems function. These concerns can be addressed by developing restoration options and public education efforts as part of the removal planning process (Lane, 2006).”

Additional task goals include ensuring public safety within and near park areas during the deconstruction and sediment removal process in conjunction with the Public Safety and Traffic Control Plan.

## **1.7 RELATIONSHIP WITH OTHER MANAGEMENT PLANS**

### **1.7.1 Project Removal Design Report**

The specific scope and impact of the project removal will have impacts on the overall direction and detail of recreation strategies – determining the amount and location of particular recreation elements. This also impacts the overall timeline and use of Northwestern Lake Park as a construction staging area.

### **1.7.2 Public Safety and Traffic Control Plan**

This task is related due to the need for interim signage during construction that will provide safe access to available areas and eliminate access to recreation areas that were previously accessible. In addition, the final location of warning and access signage is related to public safety and traffic for the ongoing and completed project.

## **2 RECREATION SITE MODIFICATIONS DURING REMOVAL**

### **2.1 SUMMARY**

Both prior to and during the transitional period of dam removal, a set of actions will be carried out to ensure public safety and the success of the decommissioning project. These actions include the removal and/or secure anchoring of existing boat docks along the reservoir, partial closure of Powerhouse Road, site alterations and partial closure of Northwestern Lake Park, and the removal and addition of area signage. All signage related to public safety should be coordinated with the Public Safety and Traffic Control Plan. A schedule for these actions is provided in Section 4.

### **2.2 POWERHOUSE ROAD**

Powerhouse Road will be closed off near its juncture with the dam and the boat launch site to allow for deconstruction activities. Powerhouse Road will be closed at or before its junction with the boat launch area in order to keep the public and passers-by away from hazards associated with the deconstruction site. A sign reading “Road Closed Ahead” will be posted approximately 100 to 200 feet prior to the road closure, with another sign at the road’s new termination point. The content of the second sign should include “Road Closed Due To Construction” (or dam deconstruction). A second sign with the following will also be posted “Questions ? Please contact PacifiCorp at 503-331-4361”. Adequate space will be provided at the termination point to enable cars and trucks to easily turn around. (Refer to Public Safety and Traffic Control Plan for specific language and location of signage.)

Powerhouse Road will be closed in mid-July, 2011. At this time JR Merit will mobilize equipment to the dam site preparing for the construction of the drain tunnel at the base of the dam.

### **2.3 NORTHWESTERN LAKE PARK**

Prior to breach of the dam and after the lake level is lowered, the existing docks at Northwestern Lake Park will be removed in late July and early August, 2011 using hand tools.

Once the reservoir has been drained and stream contours have been established, the concrete boat ramp will be removed and a small, shallow semi-circular water cove boat launch and exit area extending to the new waterline will be constructed. The cove will be surfaced to allow for safe boater take-out from upstream locations. It is anticipated that the new boat launch will be completed during the summer of 2012.

All existing wood signs for the park will be removed and updated with similar wood signs in November 2011. The content of park signage will be updated to reflect current conditions. The entry sign to the park currently states “Northwestern Lake Resort – Boat Ramp.” This text will be changed to state “Northwestern Park – White Salmon River Access.” Similarly, the Northwestern Lake Park sign located on Route 141 reads “Northwestern Lake Resort.” This language will be altered to read “Northwestern Park – White Salmon River Access.”

An example of the sign design is illustrated on Figure 2-1. Existing signposts will be reused when possible. Any posts no longer utilized will be cut flush at ground level.

Figure 2-1 Proposed Sign Design



### 2.3.1 Access During Construction

Public access to Northwestern Lake Park for picnicking and boating will vary during the decommissioning project. In June 2011, construction equipment will be staged at the park and construction will begin on new foundations for Northwestern Lake Bridge. The road access to the park will be left open, and Northwestern Lake Park will be divided with temporary fencing and gate. Construction staging will occupy a portion of the park (Figure A-1) and will be accessible to authorized personnel only. The southwestern end of the park will remain open for picnicking. Flatwater boat access to the lake will be allowed from the park until the lowering of the lake level approximately August 1, 2011. At this point, the lake will be closed to boating, and a floating barrier will be placed across the river downstream of the boater take-out.

Bridge construction will be conducted from mid-June through mid-October, 2011. During the construction period, boating access under the bridge will be closed, and whitewater boater take-outs at the park will not be permitted. Floating barriers will be placed across the river upstream and downstream of the bridge. In early August, 2011 after the lake water level has been adequately lowered, the docks at the park and around the lake will be removed.

In mid-October, 2011 after bridge foundation construction is completed and equipment has been removed from the park, whitewater boater take-outs at the park will be permitted,

however the lake will continue to be closed to boating. Whitewater take-out access at the park will generally be permitted during the remainder of the decommissioning project. However, the dam breach and full draining of Northwestern Lake is scheduled for mid- to late-October, 2011. The floating barrier placed just downstream of the boater take-out in mid-July, 2011 will remain to restrict all boating further downstream. River conditions and the former reservoir will be monitored after the dam breach and, if conditions develop that pose a threat to public safety, the boater take-out at the park will be temporarily closed until conditions are deemed safe by JR Merit and PacifiCorp Energy. Notification of closures will be made to the U.S. Forest Service.

During the 2011-2012 winter, the park will be used to access upper areas of the former reservoir for sediment management and riverbank restoration. The park and whitewater boater take-out will remain open. During lower water in the summer 2012 following the draining of the reservoir, the boater take-out will be modified, as needed, to improve access to the river channel in the vicinity of the park. During this period, the boater take-out will temporarily be blocked by construction (Figure A-2); however the park will otherwise remain open. It is anticipated that the new boat launch will be completed after Labor Day weekend, 2012.

Warning signs will be placed at the park entry and within the park near the water's edge in mid-June, 2011 (see Public Safety and Traffic Control Plan for all signage related to public safety during decommissioning). 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, given the park will be partially closed during deconstruction. Signage and/or floating barriers pertaining to deconstruction activities are further described in the Public Safety and Traffic Control Plan.

### **2.3.2 Access Post Construction**

It is expected that Northwestern Park will continue to function in much the same capacity after project removal efforts have been completed. The boat access point will be configured based on final contours in the vicinity of Northwestern Park during the 2012 summer. The purpose for the new boat launch is to provide both take out and launch capability for whitewater boats.

## **2.4 OTHER LOCATIONS**

Northwestern Lake has two public boat launching areas: one adjacent to the east end of the dam along Powerhouse Road and the other in Northwestern Lake Park near the upstream end of the reservoir. The boat launch adjacent to the east end of the dam will be permanently closed to public use in mid-July, 2011 when the decommissioning contractor mobilizes to the dam area for construction of the drain tunnel. The lake will be closed for boating when it is drawn down around August 1, 2011. Two existing signs will be removed from the dam

area: a “No Camping” sign and a “PacifiCorp Energy Notice of Warning” sign. The existing PacifiCorp Energy sign describes the hazards involved in fluctuating water levels associated with normal dam operation and thus will no longer be applicable. (Refer to Public Safety and Traffic Control Plan for specific language and location of signage.)

All existing boat docks along Northwestern Lake (which have been indicated on the project’s current survey) will be noted and removed or securely anchored prior to the drawdown of the reservoir. Any signage associated with these dock facilities will be removed as well. PacifiCorp Energy will contact dock owners and provide a one-month period to remove or secure docks. Any docks remaining will be removed or securely anchored, after the one-month period, by PacifiCorp Energy.

### **3 NORTHWESTERN LAKE PARK MODIFICATIONS**

#### **3.1 SUMMARY**

As noted in Section 2.3.1, Northwestern Lake Park is expected to remain partially open for picnicking, as a whitewater boater take-out, and put-in for flatwater boating during certain decommissioning time periods. Section 3.2.1 describes the schedule and restrictions associated with Northwestern Lake Park and these uses. The final use of the park will likely contain a mix of water-based recreational opportunities as well as picnic use.

#### **3.2 PRELIMINARY MODIFICATIONS**

Due to the expected uses of the park for construction staging, whitewater boater take-out, and flatwater boating, measures have been developed that will address modifications to occur concurrent with decommissioning activities. This section outlines the scope of these modifications.

##### **3.2.1 Whitewater Boater Take-Out, Flatwater Boater Access, and Picnicing**

In mid-June, 2011 JR Merit will fence off a portion of the park and stage construction equipment for constructing new pier foundations for Northwestern Lake Bridge (Figure A-1). At that time, floating barriers will be placed across the water upstream and downstream of the bridge to control whitewater boat access and flatwater boat access passing under the bridge. The park will be closed to whitewater boater take-outs until the bridge construction is complete in mid-October, 2011. In mid-October, 2011 the floating barrier upstream of the bridge will be removed, however a floating barrier will stay in-place downstream of the boater take-out to restrict whitewater boaters from going downstream into the project area.

During the early portion of bridge construction, the park will remain open to flatwater boater access until the lake level is lowered around August 1, 2011. the lake will then be closed to boating of any type until conditions are deemed safe by JR Merit and PacifiCorp Energy during the summer of 2012. The park will remain open to picnicking during the entire duration of the project. The picnicking area will be smaller to accommodate the bridge construction staging from mid-June to mid-October, 2011 but opened up again after the bridge work is completed. Additional equipment will be staged at the park (Figure A-2) during the winter months for sediment management and riverbank restoration.

Due to the draining of the lake when the dam is breached in late October, 2011 and additional distance from the edge of the existing concrete boat ramp to new water edge, a small, shallow water cove will be provided to allow for safe boater take-out for trips originating from upstream locations. It is anticipated that the concrete ramp will be removed. The new take-out will be constructed after Labor Day weekend, 2012. When the river downstream of the park is deemed safe for whitewater use by JR Merit and PacifiCorp Energy the take-out will also be available as a put-in. A floating barrier across the river downstream of the take-out will remain in place until the lower river is deemed safe.

### **3.2.2 Signage for Traffic Management**

As noted in Section 3.2.1, the park will continue to be used as a boater take-out after bridge construction is complete in mid-October, 2011 and will stay open throughout the decommissioning project to allow safe access for picnicking. Signage will be placed at the park in mid-June, 2011 to identify the construction staging area and assist with directing the flow of non-construction traffic in the park.

Powerhouse Road will be closed in mid-July, 2011 when equipment is staged at the dam to begin construction of the drain tunnel. Signage will be placed at locations that will provide the greatest exposure for public viewing in proximity to road use restrictions. Signs will also be placed at locations that provide traffic adequate space for turnaround. (Refer to Public Safety and Traffic Control Plan for additional information.)

### **3.2.3 Fenced Construction/Staging Area**

The installation of signage and fencing will be coordinated with the Public Safety and Traffic Control Plan. Areas to be used for construction staging will be completely fenced from mid-June to mid-October, 2011 and have a gate at the primary access point to limit access to authorized personnel only (Figure A-1). JR Merit will be responsible for Best Management Practices (BMPs) to prevent erosion and damage to existing areas. Areas within driplines of existing trees to remain shall be protected with temporary tree protection fencing to avoid compaction and damage during construction. Upon completion of bridge construction activities the fencing will be removed. The area currently used for parking and roadway will be configured for temporary parking of boater shuttle cars. Due to reduction in day-use activities, the current area should be sufficient to accommodate the amount of use predicted during normal usage periods.

## **3.3 POST-CONSTRUCTION IMPROVEMENTS**

After the hydroelectric project removal is complete, park uses will return to those similar to current uses, except the park will provide access to the free flowing river, rather than to a lake. Picnic uses will continue.

### **3.3.1 Demarcating Parking Areas**

Currently, parking areas lack clear definition or edges, often blending into planted areas and leading to the compaction of soil around existing trees. The existing parking areas will be made more efficient to provide for more parking spaces within the same amount of space during the summer of 2012.

### **3.3.2 Enhance Park Understory Plantings**

The majority of the park is characterized by large coniferous tree cover with relatively bare ground underneath. A few isolated plants (*Mahonia* spp. – Oregon grape) occur near the base of some of these trees. Additional planting of pockets of small shrubs and groundcover would help to guide visitor circulation through the park and add more definition to the different picnic areas—creating the feeling of smaller scaled rooms, rather than a completely

open, undefined space. Native, low growing shrubs (less than 3 feet in height) can be planted to assure that overall visibility in the park is maintained and to minimize maintenance and irrigation requirements (some irrigation will be required for these plantings). The revegetation of these areas will generate continuity with the revegetation efforts occurring on the extended bank area along the White Salmon River.

### **3.3.3 Furnishings**

Picnic Tables. There appears to be an adequate number of picnic tables currently placed within the park. Tables will be replaced, as needed, under the routine maintenance program.

Trash Receptacles. In the summer months, several dumpsters are placed on site for trash disposal. Quantity and placement of receptacles will be routinely evaluated as an ongoing maintenance program.

Barbeque/Fire Pit Maintenance. Several of the barbeque pits have been bent or damaged and would benefit from repair or replacement. Barbeque pits will be replaced, as needed, under a routine maintenance program.

### **3.3.4 Park Signage**

All existing wood signs for the park will be removed and replaced with similar updated signs to reflect current conditions in November 2011 after the lake is drained.

The entry sign to the park currently states “Northwestern Lake Resort - Boat Ramp.” This text will be changed to state “Northwestern Park - White Salmon River Access.” Similarly, the Northwestern Lake Park sign located on Route 141 reads “Northwestern Lake Resort.” This language will be altered to read “Northwestern Park – White Salmon River Access” (see Figure 2-1).

## 4 SCHEDULE

The following table provides an implementation schedule for the recreational facility modifications and improvements described in this plan.

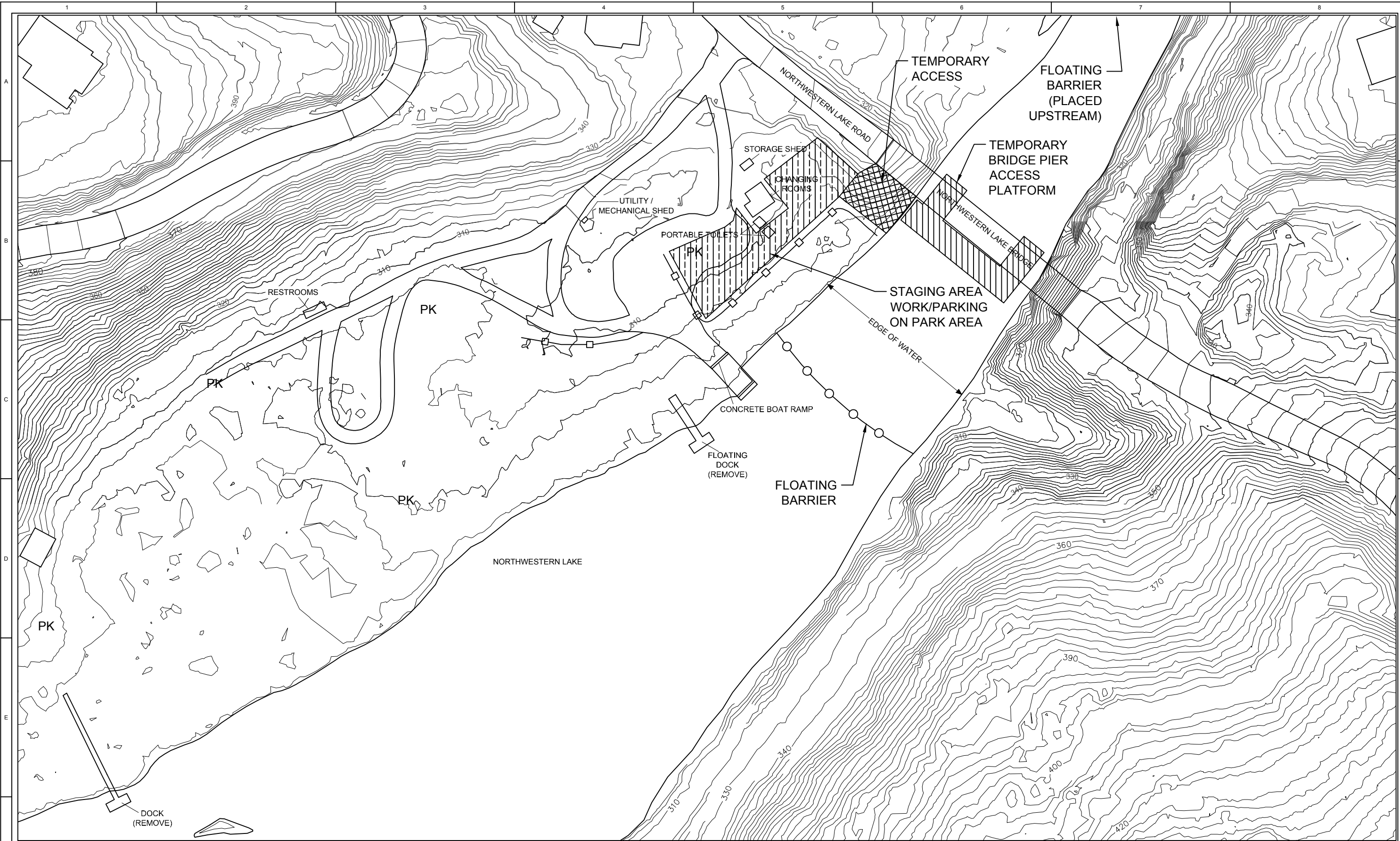
**Table 4-1 Schedule for Recreation Facility Removal and Improvements Plan**

<b>Recreational Facility Modifications</b>	
Placement of signage and fencing at Northwestern Lake Park for the bridge construction staging area. (Sections 2 and 3)	June 13, 2011
Placement of floating barriers upstream and downstream of bridge construction area. (Sections 2 and 3)	June 13, 2011
Whitewater boater takeout at Northwestern Lake Park closed. (Sections 2 and 3)	June 13, 2011
Placement of floating barrier downstream of Northwestern Lake Park boater take-out. (Section 2)	August 1, 2011
Close Powerhouse Road near dam. (Sections 2 and 3)	July 18, 2011
Close boat ramp at dam. (Section 2)	July 18, 2011
Northwestern Lake closed to all boat use. (Sections 2 and 3)	August 1, 2011
Existing docks at Northwestern Lake Park removed and docks around lake removed or secured. (Section 2)	July 25 – August 8, 2011
Removal of floating barriers immediately upstream and downstream of Northwestern Lake Bridge construction area. (Section 3)	October 14, 2011
Removal of fencing at Northwestern Lake Park (Section 3)	October 14, 2011
Whitewater boater take-out at Northwestern Lake Park opens for upstream users. (Section 3)	October 14, 2011

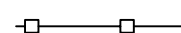

Signage at Northwestern Park updated. (Sections 2 and 3)	November, 2011
New boater takeout at Northwestern Park constructed. (Sections 2 and 3)	After Labor Day weekend, 2012
Demarcating Parking Areas. (Section 3)	Summer of 2012
Provide Furnishings (picnic tables, trash receptacles, barbeque pits). (Section 3)	These items will be replaced as needed as part of the annual maintenance program.
Enhance Park Understory Plantings. (Section 3)	Plantings will occur during revegetation of the former reservoir area in year 1 following dam removal.




## 5 REFERENCES

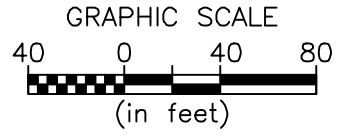
- Federal Energy Regulatory Commission, 2002. Final Supplemental Final Environmental Impact Statement - Condit Hydroelectric Project, Washington (FERC Project No. 2342).
- JR Merit, 2011. Recreational Facility Removal and Improvements Plan Addendum, Prepared for PacifiCorp Energy. FERC Project No. 2342.
- Lane, Nic, 2006. Dam removal: Issues, Considerations, Controversies. The Library of Congress Congressional Research Service.
- National Marine Fisheries Service, 2006. Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Consultation. Interim Operation, Decommissioning, and Removal of the Condit Hydroelectric Project FERC No. 2342, Skamania and Klickitat Counties, Washington. NMFS Log Number: 2002/00977, US Government Printing Office. Washington, D.C., October.
- R. W. Beck, 1998. Condit Hydroelectric Project Removal, Summary Report Engineering Considerations.
- Washington State Department of Ecology, 2007. Condit Dam Removal Final SEPA Supplemental Environmental Impact Statement. Ecology Publication # 07-06-012.
- Washington State Department of Ecology, 2004. Stormwater Management Manual for Eastern Washington. Ecology Publication # 04-10-0.



**LEGEND**

-  SILT FENCE
-  FLOATING BARRIER

-  TEMPORARY ACCESS
-  TEMPORARY STAGING AREA
-  TEMPORARY BRIDGE PIER ACCESS PLATFORM




**KLEINFELDER**  
Bright People. Right Solutions.  
15050 S.W. Koll Parkway, Suite L  
Beaverton, OR 97006  
(503) 644-9447  
www.kleinfelder.com

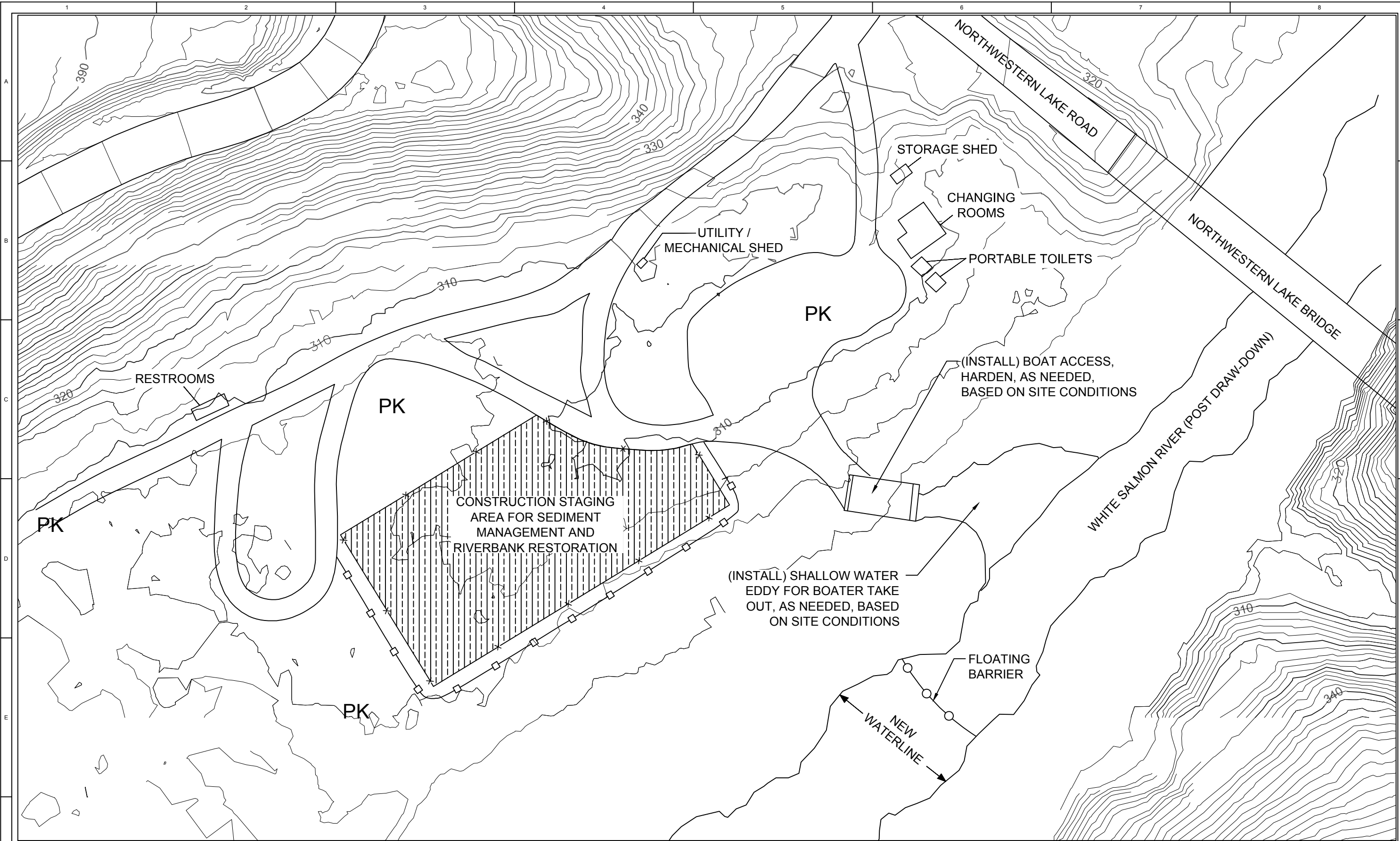


CONDIT DAM DECOMMISSIONING  
NORTHWESTERN LAKE PARK  
BRIDGE FOUNDATION CONSTRUCTION  
PRE-BREACH

**PACIFICORP ENERGY**  
A DIVISION OF PACIFICORP

FIGURE A-1 REV. XX

PROJECT NUMBER	
CAD No.:	CAD
PLANT SCALE:	1" = 1'
DATE	
REVISION	
BY	CHK / APP
DRAWING No.	REFERENCE DRAWINGS
DRAWING No.	REFERENCE DRAWINGS



**LEGEND**

- SILT FENCE
- FLOATING BARRIER

TEMPORARY STAGING AREA




CONDIT DAM DECOMMISSIONING  
 NORTHWESTERN PARK  
 BOAT ACCESS CONSTRUCTION  
 POST-BREACH  
**PACIFICORP ENERGY**  
A DIVISION OF PACIFICORP

FIGURE A-2 REV. XX

PROJECT NUMBER	
PLANT SCALE	
DATE	
REVISION	
BY	
CHK / APP	
DRAWING No.	
REFERENCE DRAWINGS	
DRAWING No.	
REFERENCE DRAWINGS	
DRAWING No.	
PROJECT NUMBER	
PLANT SCALE	
DATE	
REVISION	
BY	
CHK / APP	
DRAWING No.	
REFERENCE DRAWINGS	
DRAWING No.	
REFERENCE DRAWINGS	
DRAWING No.	