Condit Hydroelectric Project Decommissioning
FERC Project No. 2342

Final Decommissioning Report

Prepared by:

PacifiCorp
A BERKSHIRE HATHAWAY ENERGY COMPANY

May 10, 2019
Final Condit Hydroelectric Project Decommissioning Report


This report is organized to present the individual requirements of the Surrender Order of December 16, 2010 along with modifications prescribed by the Order on Rehearing, Denying Stay, and Dismissing Extension of Time Request ("Order on Rehearing") issued by the FERC on April 21, 2011. For each requirement of these orders, actions taken by PacifiCorp and the results are described to provide a comprehensive review of the completion of all required actions, many of which have been documented in individual reports filed with the FERC.

1. BACKGROUND

On October 21, 1999, PacifiCorp filed with the Federal Energy Regulatory Commission an application for amendment of license and approval of offer of settlement ("Surrender Application") to surrender the Condit Hydroelectric Project (P-2342) license and decommission the project. On December 16, 2010, the FERC issued the Surrender Order. On January 14, 2011, PacifiCorp filed with the FERC a Request for Clarification and Rehearing and Motion for Stay. The FERC responded to the request issuing the Order on Rehearing on April 21, 2011.

In the Surrender Order and Order on Rehearing, the FERC set forth a number of conditions that PacifiCorp was to undertake and complete to remove Condit dam and restore the project area. Upon receipt of Orders, PacifiCorp worked diligently to complete each article requirement.

In summary, required project management plans were prepared and submitted to the FERC for approval in the spring of 2011. Each plan was approved by the FERC shortly thereafter. On-site project work to prepare for the breach of Condit dam began June 27, 2011. On October 26, 2011, Condit dam was breached resulting in the evacuation of the upstream reservoir ("Northwestern Lake"). On September 14, 2012, less than one year after the breach, demolition of the dam and removal of all materials from the White Salmon River were completed. Concurrent with demolition of the dam, the former reservoir area was graded to stabilize upland slopes and drainages and to create riparian benches to promote vegetation establishment to achieve a more natural state. Revegetation of the graded areas and recreation measures were completed thereafter.

Post-dam breach monitoring now finds the White Salmon River within the project site in a natural state. River form and function processes are observed; water quality meets state standards, gravel and large woody debris are transported into and through the reach, and salmon and steelhead are populating project and upstream habitat. For riparian and upland areas, grass cover and the planted trees help stabilize the former reservoir bed, prevent erosion, and accelerate natural succession to promote habitat that is similar to the surrounding landscape. Recreation access at Northwestern Park is providing benefits to whitewater boaters (commercial and private), fishermen and those exploring the restored area. Throughout the decommissioning and evaluation period, cultural
resources have been monitored and protected in consultation with the Yakama Nation and the Washington Department of Archaeology and Historic Preservation.

2. PROJECT REQUIREMENTS, RESULTS AND REPORTS

**FERC Surrender Order (B)** -- Surrender of the license for the Condit Project No. 2342 is accepted, subject to the conditions set forth in ordering paragraphs (C) through (Y). The surrender shall not be effective until PacifiCorp has fulfilled these conditions and the Commission's Regional Engineer, Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO), has issued a letter stating that all conditions of the surrender order have been satisfied.

Results: PacifiCorp has completed conditions (C) through (Y) set forth in the December 16, 2010 FERC Order Accepting Surrender and as modified by the April 21, 2011 FERC Order on Rehearing, Denying Stay, and Dismissing Extension of Time Request. This Final Report has been prepared to demonstrate that all conditions of the orders have been fulfilled.

**FERC Surrender Order (C)** -- The licensee shall cease project operations no later than October 1, 2011, and shall commence dam and facility removal in October 2011.

**FERC Order on Rehearing (F)** -- Ordering Paragraph (C) of the Commission’s December 16, 2010 order is modified to read as follows:

The licensee shall commence breaching Condit dam and draining Northwestern Lake in October 2011 and may continue project operations until breaching the dam”.

Results: On October 26, 2011 PacifiCorp breached Condit dam resulting in the draining of Northwestern Lake. To manage water inflows to the Project, the powerhouse operated until 12:05 PM when generation was shutdown. At 12:11pm a single blast resulted in the breaching of the dam. This event was recorded and can be viewed online by visiting http://www.pacificorp.com/about/newsroom/2011nrl/cdbmntirf.html

**FERC Surrender Order (D)** -- The licensee shall conduct all in-water work only in the months of October and November 2011 and July and August 2012. All in-water work, including excavation of the drain tunnel and removal of the lowest portions of the dam, shall be completed by August 31, 2012.

**FERC Order on Rehearing (G)** -- Ordering Paragraph (D) of the Commission’s December 16, 2010 order is modified to read as follows:

The licensee shall remove the lowest portions of Condit dam in the river channel only during July and August 2012. The licensee may conduct in-water work beginning in June 2011 and extending through December 2015 in order to implement any protection, mitigation, and enhancement requirements contained in Commission-approved plans.
Results: On August 23, 2012 PacifiCorp, following consultation with the Washington Department of Ecology, National Marine Fisheries Service, U.S. Fish and Wildlife Service and the U.S. Army Corps of engineers, PacifiCorp submitted to the FERC a request for extension of the in-water work period through September 15, 2012. While PacifiCorp was close to completing the removal of the dam, difficult access conditions at the bottom of the dam resulted in lower than anticipated production. On August 29, 2012, the FERC granted such an extension. PacifiCorp concluded in-water work on September 14, 2012. At that point in time, all material associated with the Condit dam had been removed from the White Salmon River. Please see PacifiCorp’s September 2012 progress report noting the last of the concrete from the dam and spill structures had been removed from the White Salmon River.

FERC Surrender Order (E) -- Project Removal Plan. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a project removal plan. The plan shall include: (1) final contract plans and specifications and supporting design report for removal of the project dam and appurtenant facilities, (2) a blasting plan for all proposed blasting activities; (3) a detailed description of the sequencing of all construction activities; (4) a disposal plan; (5) a public safety plan for the period during removal activities; (6) a plan to protect or replace the existing water and gas line crossings of Northwestern Lake, construct a new pump intake and install a pump for the Mount Adams Orchard water supply, and stabilize (before the reservoir is drained) Northwestern Lake Bridge to the specifications of the Klickitat County Department of Public Works, Office of the County Engineer, to mitigate the effects of dam removal and the resulting change from reservoir to riverine conditions; and (7) a road impact assessment for Klickitat County roads used during project removal to ascertain the extent of road design issues and probable damage to the roads, and to mitigate those impacts, due to project removal activities.

A proposed drainage tunnel is to be constructed through the base of the dam to evacuate the reservoir. The drainage tunnel design shall ensure that the structural integrity of the dam is maintained following removal of the final 15 feet of the tunnel by drilling and blasting. The project removal plan should also address the possibility of the drainage tunnel being plugged with sediment during evacuation of the reservoir.

The licensee shall prepare items (2), (3), (4), and (6) of the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, U.S. Army Corps of Engineers, and Klickitat and Skamania Counties. The licensee shall prepare item (5) of the plan in consultation with Klickitat and Skamania Counties and item (7) of the plan in consultation with Klickitat County. The licensee shall include with the items documentation of consultation, copies of consulted entities’ comments and recommendations on the items, and specific descriptions of how the entities’ comments are accommodated. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee’s reasons, based on project-specific information.
The Commission may require changes to the project removal plan. Project removal may not commence until authorized by the D2SI-PRO Regional Engineer. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A courtesy copy of the filed plan shall be sent to the Commission’s Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and to the Director, Division of Dam Safety and Inspections.

FERC Order on Rehearing (H) -- Ordering Paragraph (E) of the Commission’s December 16, 2010 order is modified to read as follows:

Project Removal Plan. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a project removal plan. The plan shall include: (1) final contract plans and specifications and supporting design report for removal of the project dam and appurtenant facilities; (2) a blasting plan for all proposed blasting activities; (3) a detailed description of the sequencing of all construction activities; (4) a disposal plan; (5) a public safety plan for the period during removal activities; (6) a plan to construct a new pump intake and install a pump for the Mount Adams Orchard water supply; and (7) a road impact assessment for Klickitat County roads used during project removal to ascertain the extent of road design issues and probable damage to the roads, and to mitigate those impacts, due to project removal activities.

A proposed drainage tunnel is to be constructed through the base of the dam to evacuate the reservoir. The drainage tunnel design shall ensure that the structural integrity of the dam is maintained following removal of the final 15 feet of the tunnel by drilling and blasting. The project removal plan should also address the possibility of the drainage tunnel being plugged with sediment during evacuation of the reservoir.

The licensee shall prepare items (2), (3), (4), and (6) of the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, U.S. Army Corps of Engineers, and Klickitat and Skamania Counties. The licensee shall prepare item (5) of the plan in consultation with Klickitat and Skamania Counties and item (7) of the plan in consultation with Klickitat County. The licensee shall include with the items documentation of consultation, copies of consulted entities’ comments and recommendations on the items, and specific descriptions of how the entities’ comments are accommodated. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee’s reasons, based on project-specific information.

The Commission may require changes to the project removal plan. Project removal may not commence until authorized by the D2SI-PRO Regional Engineer. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.
A courtesy copy of the filed plan shall be sent to the Commission’s Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and to the Director, Division of Dam Safety and Inspections.

Results:

In accordance with the above requirements, PacifiCorp prepared a series of plans, consulted with identified entities then filed the project removal plans with the FERC. Individual plans and filing dates and the corresponding FERC approval dates include:

<table>
<thead>
<tr>
<th>Plan</th>
<th>File Date</th>
<th>Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Impact Assessment Plan</td>
<td>March 9, 2011</td>
<td>May 20, 2011</td>
</tr>
<tr>
<td>Construction Schedule</td>
<td>March 15, 2011</td>
<td>May 20, 2011</td>
</tr>
<tr>
<td>Specifications for Project Removal</td>
<td>March 15, 2011</td>
<td>June 8, 2011</td>
</tr>
<tr>
<td>Plans for Project Removal</td>
<td>March 15, 2017</td>
<td>June 8, 2011</td>
</tr>
<tr>
<td>Disposal Plan</td>
<td>March 15, 2017</td>
<td>June 8, 2011</td>
</tr>
</tbody>
</table>

All plan actions were completed per the FERC approved timeline. As previously mentioned, the last of the materials from the dam and spillway were removed from the White Salmon River on September 14, 2012. Material disposal also concluded on September 14, 2012. By September 30, 2012, topsoil had been placed and spread on disposal areas. On June 22, 2012 a new pump intake system went into operation for the Mt. Adams Orchard. All key activities over the removal period are recorded in monthly progress reports PacifiCorp submitted to the FERC over the period of June 2011 to September 2012.

**FERC Order on Rehearing** (I) -- *Northwestern Lake Bridge Stabilization Plan*. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a plan to stabilize (before the reservoir is drained) Northwestern Lake Bridge to the specifications of the Klickitat County Department of Public Works, Office of the County Engineer. The bridge stabilization plan shall include a detailed erosion and sediment control plan.

The erosion and sediment control plan for bridge stabilization activities shall, at a minimum, include provisions:
(1) to confine construction impacts to the minimum area necessary to complete the bridge stabilization activities;

(2) to flag the boundaries of clearing limits at construction sites to prevent the disturbance of critical riparian vegetation and wetlands;

(3) to ensure sediment control materials are present on site, as well as an oil-absorbing, floating boom whenever surface water is present;

(4) to utilize existing roadways or travel paths whenever possible and to minimize ground disturbance and compaction by clearing vegetation to ground level and placing clean gravel over geotextile fabric when a new temporary road is necessary within 150 feet of a water body;

(5) to ensure all temporary erosion controls are in place and appropriately installed downslope of any bridge stabilization activity within the riparian area until construction at the specific site is complete;

(6) for an implementation schedule, to include daily inspections of erosion control measures during the rainy season and weekly inspections during the dry season to ensure that erosion control measures during bridge stabilization activities are effective;

(7) to immediately repair ineffective erosion control measures, install replacements, or install additional controls as necessary;

(8) to remove and properly dispose of captured sediment on the upslope side of the erosion control measure once it has reached one-third of the designed height of the control; and

(9) to ensure that when the bridge stabilization is completed, all temporary access roads and work bridges (if constructed) be obliterated, the soil stabilized and the site revegetated with all newly exposed slopes and work areas stabilized and revegetated as soon as possible.

The licensee shall prepare the erosion and sediment control plan for bridge stabilization activities after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, Yakama Indian Nation, U.S. Army Corps of Engineers, and Klickitat and Skamania Counties. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the plan, and specific descriptions of how the entities’ comments are accommodated. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee’s reasons, based on project-specific information.
The Commission may require changes to the plan. Bridge stabilization activities may not commence until authorized by the Commission’s Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A courtesy copy of the filed plan shall be sent to the D2SI-PRO Regional Engineer and to the Director, Division of Dam Safety and Inspections.

Results:
In accordance with the above requirements, PacifiCorp filed the Northwestern Lake Bridge Stabilization Plan with the FERC on March 15, 2011. On May 20, 2011, the FERC approved the plan. Bridge work commenced on site with set-up activities on June 27, 2011. On October 17, 2011 PacifiCorp completed bridge pier installation. In its December 2011 Monthly Decommissioning Progress Report, PacifiCorp notified the FERC that erosion of sediment along the White Salmon River raised concern for the stability of the bridge abutments. Short-term actions were taken with the strategic placement of riprap blankets and long-term protection alternatives were explored. A soil nail wall treatment was selected. Following approval and Section 404 permit modification from the U.S. Army Corps of Engineers, and similar approval from the Washington Department of Ecology under the 401 Water Quality Certificate, the wall was constructed. Work was completed on July 30, 2012.

FERC Surrender Order (F) -- Quality Control Inspection Program. At least 90 days before starting removal activities, the licensee shall submit one copy to the Commission's D2SI-PRO Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI) of the Quality Control and Inspection Program (QCIP) for the Commission's review and approval. The QCIP shall include an erosion and sediment control plan as specified in ordering paragraph (K).

Results:
In accordance with the above requirements, PacifiCorp prepared and on March 18, 2011, filed the Quality Control Inspection Program with the FERC. On May 11, 2011, PacifiCorp filed with the FERC a revised QCIP in response to additional information requested by the FERC. On May 20, 2011, the FERC approved the plan.

The QCIP was in effect from start of on-site work through completion of demolition activities (June 2011 – November 2012). Per program, on-site personnel received natural and cultural resource training, inspections were conducted throughout the work and reports documented and submitted.
FERC Surrender Order (G) -- *Cofferdam Construction Drawings and Specifications*. Before starting removal activities, the licensee shall review and approve the design of any new contractor-designed cofferdams and deep excavations. At least 30 days before starting construction of the cofferdams, the licensee shall submit one copy to the Commission's D2SI-PRO Regional Engineer and two copies to the Commission (one of these copies shall be a courtesy copy to the Commission's Director, D2SI) of the approved cofferdam construction drawings and specifications and the letters of approval.

Results:

While an early consideration as a construction method to be used to isolate work areas within the White Salmon River, ultimately no cofferdams were employed by the demolition contractor.

FERC Surrender Order (H) -- *Temporary Emergency Action Plan*. At least 90 days before starting removal activities, the licensee shall submit one copy to the Commission's D2SI-PRO Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI) of the Temporary Emergency Action Plan (TEAP) for the Commission's review and approval. The TEAP shall describe emergency procedures in the case of failure of the dam during construction of the drainage tunnel and draining of the reservoir, any large sediment control structure, or any other water retaining structure that could endanger construction workers or the public. The TEAP shall include a notification list of emergency response agencies; a plan drawing of the proposed cofferdam arrangement; the location of safety devices, escape routes, and informational and warning signage; a brief description of testing procedures; and measures for managing traffic in the project area to ensure public safety during dam removal.

Results:

In accordance with the above requirements, PacifiCorp submitted to the FERC on March 15, 2011 a project Temporary Construction Emergency Action Plan. On May 20, 2011, the FERC approved the plan.

All actions of the TCEAP were implemented throughout the work period associated with dam removal. All workers on the site received training on the procedures and elements described in the TCEAP. At the start of each job day, the crew reviewed the daily work activities and the specific safety measures of the TCEAP, such as the nearest, escape routes that applied to the work location.

FERC Surrender Order (I) -- *Monthly Progress Report*. During the entire period of removal and post-removal activities, the licensee shall submit one copy to the Commission’s D2SI-PRO Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI) of a monthly progress report.

Results:

In accordance with the above requirement, PacifiCorp submitted to the FERC monthly reports throughout the life of the project removal and post-removal activities. The first monthly report was submitted July 13, 2011 (reporting on June 2011 activities) and the last on April 15, 2013. Each
report identified status of progress of work, status of construction, construction difficulties, contract status, critical events and dates, foundations, sources of major construction materials, material testing and results, instrumentation, photographs, erosion control and other environmental measures and other items of interest.

**FERC Surrender Order (J) -- Final Report.** Within 90 days after completion of the activities required by this surrender order, the licensee shall submit one copy to the Commission's D2SI-PRO Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, D2SI) of a final report that demonstrates all the conditions of the surrender have been fulfilled.

**Results:**
On June 28, 2013, PacifiCorp notified the FERC that all project removal actions had been completed. At that time, PacifiCorp’s obligations related to site restoration, vegetation monitoring, cultural and historic site protection, and erosion monitoring would continue as per related management plans, Washington Department of Ecology 401 Clean Water Act Certificate and the US Army Corps of Engineers 404 permit.

On September 21, 2017, PacifiCorp provided the Washington Department of (Ecology) with the Draft Revegetation and Wetland Management Plan Final Report. On February 15, 2018 Ecology notified PacifiCorp that per site visit observations, the Revegetation and Wetland Management Plan report dated September 21, 2017, previous monitoring reports and site visits, and the overall ecological development of the site, the agency had determined that the project met the intent of all the conditions of Ecology’s Condit Dam Decommissioning Project Section 401 Water Quality Certification Order No. 8049.

On April 11, 2019, PacifiCorp sought the U.S. Army Corps of Engineers recognition that the company had completed all authorized work in accordance with the terms and conditions of the U.S. Army Corps of Engineers Permit No. NWP-2004-523. On April 19, 2019, the U.S. Army Corps of Engineers acknowledged all conditions of the project 404 permit have been met.

**FERC Surrender Order (K) -- Erosion and Sediment Control Plan.** At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a detailed erosion and sediment control plan based on the final selection and design of construction staging areas, access locations, and debris and spoil disposal areas. The plan shall cover all phases of dam removal and related construction activities, including work associated with mitigating the effects of dam removal on the existing water supply and natural gas pipeline crossings of Northwestern Lake, Northwestern Lake bridge piers, and the Mount Adams Orchard water supply. The plan shall also address practices to prevent sedimentation and erosion associated with access roads, stream crossings, construction sites, borrow pit operations, haul roads, equipment and material storage sites, fueling operations, and equipment staging areas.

Except for activities that are associated with promoting the downstream transport of Northwestern Lake sediments in accordance with a Commission-approved project removal plan
and drawings as required by ordering paragraph (E), the plan shall, at a minimum, include provisions:

1. to stabilize any disturbed areas (including valley sidewalls exposed by dewatering of Northwestern Lake and adjoining upland areas) by grading to a geomorphologically appropriate slope, followed by armoring or vegetating as appropriate, to prevent erosion and sedimentation into surrounding water bodies;

2. to confine construction impacts to the minimum area necessary to complete the project;

3. to minimize soil disturbance and provide appropriate grading and temporary revegetation of stockpiles and other disturbed areas to minimize erosion/sedimentation potential;

4. to flag the boundaries of clearing limits at construction sites to prevent the disturbance of critical riparian vegetation and wetlands;

5. to ensure sediment control materials are present on-site, as well as an oil-absorbing, floating boom whenever surface water is present;

6. to utilize existing roadways or travel paths whenever possible and to minimize ground disturbance and compaction by clearing vegetation to ground level and placing clean gravel over geotextile fabric when a new temporary road is necessary within 150 feet of a water body;

7. to ensure complete removal of all dredged and excavated materials, as well as debris or excess materials from construction, from the bed and banks of all water areas to an approved upland disposal site;

8. to ensure that all temporary fill and other materials placed in the waters of the river are completely removed immediately upon completion of construction activities;

9. for an implementation schedule, to include daily inspections of erosion control measures during the rainy season and weekly inspections during the dry season to ensure that erosion control measures during removal activities are effective;

10. to immediately repair ineffective erosion control measures, install replacements, or install additional controls as necessary; and

11. to remove and properly dispose of captured sediment on the upslope side of the erosion control measure once it has reached one-third of the designed height of the control.
The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, Yakama Nation, and U.S. Army Corps of Engineers. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A courtesy copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and Director, Division of Dam Safety and Inspections.

FERC Order on Rehearing (K) -- Ordering Paragraph (K) of the Commission’s December 16, 2010 order is modified to read as follows:

Erosion and Sediment Control Plan. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a detailed erosion and sediment control plan based on the final selection and design of construction staging areas, access locations, and debris and spoil disposal areas. The plan shall cover all phases of dam removal and related construction activities, including work associated with mitigating the effects of dam removal on the Mount Adams Orchard water supply. The plan shall also address practices to prevent sedimentation and erosion associated with access roads, stream crossings, construction sites, borrow pit operations, haul roads, equipment and material storage sites, fueling operations, and equipment staging areas.

Except for activities that are associated with promoting the downstream transport of Northwestern Lake sediments in accordance with a Commission-approved project removal plan and drawings as required by Ordering Paragraph (E), the plan shall, at a minimum, include provisions:

(1) to confine construction impacts to the minimum area necessary to complete the project;

(2) to minimize soil disturbance and provide appropriate grading and temporary revegetation of stockpiles and other disturbed areas to minimize erosion/sedimentation potential;

(3) to flag the boundaries of clearing limits at construction sites to prevent the
disturbance of critical riparian vegetation and wetlands;

(4) to ensure sediment control materials are present on-site, as well as an oil-absorbing, floating boom whenever surface water is present;

(5) to utilize existing roadways or travel paths whenever possible and to minimize ground disturbance and compaction by clearing vegetation to ground level and placing clean gravel over geotextile fabric when a new temporary road is necessary within 150 feet of a water body;

(6) to ensure all temporary erosion controls are in-place and appropriately installed downslope of project activity within the riparian area until construction at the specific site is complete;

(7) for an implementation schedule, to include daily inspections of erosion control measures during the rainy season and weekly inspections during the dry season to ensure that erosion control measures during removal activities are effective;

(8) to immediately repair ineffective erosion control measures, install replacements, or install additional controls as necessary;

(9) to remove and properly dispose of captured sediment on the upslope side of the erosion control measure once it has reached one-third of the designed height of the control; and

(10) to ensure that when the project is completed, all temporary access roads and work bridges (if constructed) be obliterated, the soil stabilized and the site revegetated with all newly exposed slopes and work areas stabilized and revegetated as soon as possible.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, Yakama Nation, U.S. Army Corps of Engineers, and Klickitat and Skamania Counties. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan, and specific descriptions of how the entities’ comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.
A courtesy copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and Director, Division of Dam Safety and Inspections.

Results:

On March 18, 2011 PacifiCorp submitted to the FERC a project Erosion Control Plan. The plan was prepared in consideration of items identified by the FERC in the December 16, 2010 FERC Order on Rehearing -- Ordering Paragraph (K). The FERC approved PacifiCorp’s Erosion Control Plan upon PacifiCorp’s acceptance and incorporation of comments May 20, 2011.

Throughout the construction and demolition phase of the project, PacifiCorp implemented the Erosion Control Plan including the comments provided by the FERC May 20, 2011. PacifiCorp filed for coverage under the State of Washington Department of Ecology Construction Stormwater General Permit and coverage was granted effective June 3, 2011 under permit number WAR-125011. Routine periodic site inspections were conducted by Certified Erosion and Sediment Control Leads and monitoring reports were filed with the department. As of August 5, 2013, the site had undergone final stabilization, temporary best management practices had been removed and all stormwater discharges associated with construction activity had been eliminated.

FERC Surrender Order (L) -- Woody Debris Management Plan. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a woody debris management plan describing measures to be taken before, during, and after initial reservoir dewatering to minimize any adverse effects from woody debris washed out of the reservoir or dislodged from the canyon downstream of the dam.

The plan shall, at a minimum, include:

1. a provision to remove woody debris and fallen timber from the reservoir and the canyon downstream of the dam only to the extent necessary for public safety and sediment management during project removal;

2. a provision to relocate and utilize woody debris for habitat restoration within the former lakebed and downstream reach after removal is complete; and

3. an implementation schedule.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, U.S. Army Corps of Engineers, and Klickitat and Skamania Counties. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations by consulted entities on the completed plan, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before
filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A courtesy copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and Director, Division of Dam Safety and Inspections.

FERC Order on Rehearing (L) -- Ordering Paragraph (L) of the Commission’s December 16, 2010 order is deleted.

Results:
Please see the FERC Order on Rehearing (Q). Throughout project removal activities, the river channel within the project and downstream areas was monitored for woody debris accumulations as per the Washington Department of Ecology approved Woody Debris Management Plan. During the removal period, a river-spanning logjam formed in a steep-walled canyon located between the dam site and the powerhouse known as “The Narrows”. After receiving approval from the FERC for an extension of time to perform in-water work, efforts to remove the logjam commenced on October 22, 2012 using a cable yarder. Log removal work continued through October 31, 2012. A news release was issued on November 5, 2012 announcing the lifting of river access restrictions in the project area. Annual reports were submitted in 2012 and 2013, with the 2013 report stating that the actions of the Woody Debris Management Plan had been completed.

FERC Surrender Order (M) Reservoir Sediment Assessment and Stabilization Plan. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a plan to assess the quantity and condition of remaining reservoir sediments, including those exposed immediately following the initial dewatering of Northwestern Lake, and to stabilize the dewatered reservoir bed and provide fish passage through the former reservoir area.

The plan shall, at a minimum, include:

(1) an analysis to determine the impact of lowering the reservoir to stream level over a six-hour period on the stability of the banks of Northwestern Lake;

(2) a description of geotechnical testing and analysis methods of the remaining sediments, including sediments at the reservoir tributary mouths;

(3) a provision to prepare maps showing the location, thickness, and geotechnical
characteristics of remaining sediments in the reservoir, including at the reservoir tributary mouths;

(4) a description of the methods of managing residual sediments and restoring the White Salmon River valley in the former reservoir area to a stable, free-flowing condition;

(5) a provision to assess whether accumulated reservoir sediments affect anadromous fish passage into Northwestern Lake tributaries, including Mill and Buck creeks, and, if so, a description of measures to mitigate these effects;

(6) a schedule for consultation with the entities identified below concerning the results of geotechnical testing and analysis of the remaining sediments;

(7) a provision for filing with the Commission, within 90 days of the commencement of reservoir dewatering: (a) the results of the analysis, (b) comments of consulted entities, (c) licensee's response to entities’ comments, and (d) any measures proposed by the licensee to manage residual sediments and restore the White Salmon River valley in the reservoir area to a stable, free-flowing condition. If these measures include blasting of the remaining exposed reservoir sediments, then the filing shall include a blasting plan that includes a description of the type of blasting to be performed, expected explosive strength, proposed blast locations and timing, and mitigation measures to protect the valley from environmental damage related to blasting;

(8) a three-year monitoring program, including performance standards and success criteria;

(9) procedures to be implemented if monitoring demonstrates that sediment stabilization measures are not successful or areas of unstable sediment are identified, including the need for additional monitoring; and

(10) a reporting and implementation schedule.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, Yakama Nation, and U.S. Army Corps of Engineers. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.
A courtesy copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and Director, Division of Dam Safety and Inspections.

If the results of the geotechnical testing and analysis indicate that management, removal, or stabilization (vegetative or structural) of the residual sediments would be necessary in order to protect fish and wildlife resources or maintain public safety, the Commission may direct the licensee to implement such measures.

**FERC Order on Rehearing (M)** -- Ordering Paragraph (M) of the Commission’s December 16, 2010 order is modified to read as follows:

*Reservoir Sediment Assessment and Stabilization Plan.* At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a plan to assess the quantity and condition of remaining reservoir sediments, including those exposed immediately following the initial dewatering of Northwestern Lake, and to stabilize the dewatered reservoir bed and provide fish passage through the former reservoir area.

The plan shall, at a minimum, include:

1. an analysis to determine the impact of lowering the reservoir to stream level over a six-hour period on the stability of the banks of Northwestern Lake;

2. a plan to conduct aerial mapping using LiDAR and pedestrian surveys to prepare maps showing the location, thickness, and characteristics of remaining sediments in the reservoir, including at the reservoir tributary mouths;

3. a description of the methods of managing residual sediments and restoring the White Salmon River valley in the former reservoir area to a stable, free-flowing condition;

4. a provision to assess whether accumulated reservoir sediments affect anadromous fish passage into Northwestern Lake tributaries, including Mill and Buck creeks, and, if so, a description of measures to mitigate these effects;

5. a schedule for consultation with the entities identified below concerning the results of mapping and analysis of the remaining sediments;

6. a provision for filing with the Commission, within 90 days of the commencement of reservoir dewatering: (a) the results of the analysis, (b) comments of consulted entities, (c) licensee's response to entities’ comments, and (d) any measures proposed by the licensee to manage residual sediments and restore the White Salmon River valley in the reservoir area to a stable, free-flowing condition. If these measures include blasting of the remaining exposed reservoir sediments, then the filing shall include a blasting plan that includes a description of the type of blasting to be performed, expected explosive strength, proposed blast locations and timing, and mitigation measures to protect the
valley from environmental damage related to blasting;

7. a three-year monitoring program, including performance standards and success criteria;

8. procedures to be implemented if monitoring demonstrates that sediment stabilization measures are not successful or areas of unstable sediment are identified, including the need for additional monitoring; and

9. a reporting and implementation schedule.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, Yakama Nation, and U.S. Army Corps of Engineers. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A courtesy copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and Director, Division of Dam Safety and Inspections.

If the results of the mapping and analysis indicate that management, removal, or stabilization (vegetative or structural) of the residual sediments would be necessary in order to protect fish and wildlife resources or maintain public safety, the Commission may direct the licensee to implement such measures.

Results:

Upon the breach of Condit dam on October 26, 2011, accumulated sediment in the reservoir immediately mobilized downstream consistent with anticipated results. Initial observations of this event were described in PacifiCorp’s Preliminary Sediment Behavior Report filed with the FERC on December 18, 2011. The Post-Reservoir-Dewatering Assessment Report of February 22, 2012 further described conditions and estimated remaining sediment quantities using LiDAR survey maps of the former reservoir. The report included plans for grading remaining sediments in order to achieve criteria for stable conditions in the project area. Active grading using earth-moving equipment commenced during February 2012 and continued through August 2012. The finished contours of the river banks were documented with a LiDAR survey supplemented by
ground-level topographic surveys of areas that were still being graded at the time of the aerial survey. The graded slopes were hydroseeded with grasses and forbes during September 2012. The stability of the slopes in the project area were monitored during periodic inspections and by a LiDAR survey conducted during August 2013. As documented in the 2013 Annual Sediment Assessment Report filed on September 30, 2013, a comparison of surface elevations between the July 2012 survey and the August 2013 survey showed minimal difference in topography. Over subsequent months, occasional high river flows associated with storms resulted in localized sloughing in riparian zones. One area of riverbank upstream of Northwestern Lake Bridge required measures to improve stability. This area was initially graded to a slope close to the observed angle of repose, but erosion at the toe led to sloughing during subsequent high flows. The slope was graded during August 2016 to a slope of 2H:1V and planted with willow stakes and seeded with herbaceous cover. The slope has since been stable. A final Annual Sediment Assessment Report filed on September 30, 2016 noted the criteria established for slope stability in the project area had been attained. From the breach of the dam through June 2017, reports were submitted following each storm event where White Salmon River flows exceeded a 5-year recurrence interval. These storm event reports described stable slope conditions in the project area with only limited erosion at the river’s edges.

**FERC Surrender Order (N) -- Drain Tunnel Protective Pockets Plan.** At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a plan to allow anadromous fish to safely pass the site of the dam during removal by excavating a series of fish protective pockets in each of the walls of the drain tunnel to allow fish to rest during upstream passage. The plan, at a minimum, shall include detailed design drawings of the drain tunnel and fish protective pockets, together with a schedule to construct the pockets.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, and Washington Department of Ecology. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan, and specific descriptions of how the entities’ comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A courtesy copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and Director, Division of Dam Safety and Inspections.
Anadromous Fish Upstream Passage Plan. At least 90 days before starting dam removal activities, the licensee shall file, for Commission approval, a plan to allow anadromous fish to safely pass the site of the dam during project removal. The plan, at a minimum, shall include a detailed methodology of how anadromous fish will be passed upstream of the dam site and a schedule for implementation. Alternatively, in the event the consulting agencies identified below collectively support no action to be taken on the part of the licensee to aid in the upstream passage of anadromous fish during dam removal, the licensee’s plan shall provide a detailed description of why no action is preferred, including the benefits of no action to anadromous fish in the White Salmon River.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Yakama Nation, and Washington Department of Ecology. The licensee shall include with the plan or its proposal for no action, documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan or proposal for no action, and specific descriptions of how the entities’ comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan or its proposal for no action with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan and schedule. No removal activities shall begin until the licensee is notified by the Commission that the plan and schedule, or its proposal for no action is approved. Upon Commission approval, the licensee shall implement the plan and schedule, including any changes required by the Commission.

A courtesy copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and Director, Division of Dam Safety and Inspections.

Results:
In response to the above requirement, PacifiCorp prepared the Anadromous Fish Upstream Passage Plan (May 27, 2011) which was submitted to the FERC May 27, 2011. The plan was developed in consultation with the White Salmon Fisheries Working Group which included representatives from National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Yakama Nation and Washington Department of Ecology. Ultimately, the plan called for no action. As noted in the conclusion of the plan, the primary reason for no action is related to timing and extraneous conditions related to the dam removal process. For timing, the one species likely to benefit from fish protective pockets or any other means of transporting fish around the dam would be steelhead. For the most part, these fish are primarily dip-ins that will eventually migrate to Columbia upriver reaches later in the year. However, because elevated turbidity levels in the White Salmon River were expected due to
deconstruction activities and sediment cutting, the dip-in fish may choose to migrate to another river with more hospitable conditions. The general thinking was that there would be very few fish in the White Salmon River until the dam removal process was complete. On June 3, 2011, the FERC approved the plan.

**FERC Surrender Order (O) -- Reservoir Cofferdams Removal Plan.** At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a plan to remove cofferdams in the reservoir by no later than May 1, 2012. The plan shall include a detailed description of how the licensee will remove the cofferdams, including measures to control sedimentation and erosion, and an implementation schedule.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Washington Department of Fish and Wildlife, and Washington Department of Ecology. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations of consulted entities on the completed plan, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A courtesy copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and Director, Division of Dam Safety and Inspections.

**FERC Order on Rehearing (O) --** Ordering Paragraph (O) of the Commission’s December 16, 2010 order is deleted.

**Results:**

Removal of the original timber crib cofferdam was completed on April 24, 2012. To complete this task, temporary access to the river was constructed adjacent to Condit Creek. A rockfill work pad was placed at the river’s edge and an excavator was used to dislodge and remove the timbers.

**FERC Surrender Order (P) -- Underwood In Lieu Site Mitigation.** The licensee shall provide a one-time payment of $500,000 (in 1999 dollars, as adjusted pursuant to the settlement agreement filed October 21, 1999) to an account established by, collectively, the Yakama Nation, the
Confederated Tribes of the Warm Springs Reservation, the Confederated Tribes of the Umatilla Reservation, and the Nez Perce Tribe (collectively the Tribes) for the enhancement or maintenance of the Underwood In Lieu Site located near the confluence of the White Salmon and Columbia Rivers or other in lieu sites owned and managed by the United States for the use of the Tribes for fishing purposes, as provided for in the October 1999 settlement agreement. The licensee shall make the payment within 30 days of receiving written notice from the Tribes of the location of the account, but no later than the completion of project removal activities. Within 30 days after providing the contribution, the licensee shall file with the Commission documentation of the payment.

Results:

On February 17, 2011 Yakama Nation staff provided PacifiCorp with a request for the Underwood In Lieu Site Mitigation payment as identified in the October 1999 Condit Hydroelectric Project Settlement Agreement. On March 1, 2011, the Yakama Nation Tribal Council confirmed the request for payment. PacifiCorp provided the funds to the Yakama Nation by check dated March 29, 2011. The tribe received the funds on April 8, 2011. On May 26, 2011 a Yakama Nation representative acknowledged receipt of funds via email to PacifiCorp. PacifiCorp filed with FERC documentation of the payment on May 26, 2011.

FERC Surrender Order (Q) -- Raceways Protection Plan. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a plan to protect the U.S. Fish and Wildlife Service's raceways, located at about river mile 1.4 on the White Salmon River, during dam removal activities. The plan shall include a detailed description of the proposed protection measures and an implementation schedule.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Washington Department of Fish and Wildlife, and Washington Department of Ecology. The licensee shall include with the plan documentation of consultation, copies of consulted entities' comments and recommendations on the completed plan, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Results:

Per the requirement above, PacifiCorp filed with the FERC March 21, 2011 an Aquatic Resources Protection Plan. The Plan was developed in consultation with requisite parties and described a
management strategy intended to reduce impacts to fish and wildlife, with specific strategies for minimizing impacts to salmon, steelhead, bull trout and western pond turtles, and for protecting hatchery facilities during dam decommissioning. On May 10, 2011 the FERC issued an Order Approving the Aquatic Resources Plan.

Prior to dam breach, in September of 2011, plywood covers were installed over the intakes and pipeline at the U.S. Fish and Wildlife Service White Salmon River raceways located downstream of Condit dam. As expected, the site was inundated by sediment-laden water in the aftermath of the breach and the raceways were filled with sediment. The protective measures were removed and the raceways were cleared of sediment during May 2012. Additional clean-up of the raceways was completed during September 2012.

FERC Surrender Order (R) -- Petroleum and Hazardous Substances Control Plan. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a petroleum and hazardous substances control plan to protect all waters during dam removal activities from the contamination of deleterious materials such as wet concrete, gasoline, solvents, epoxy resins, or other materials. The plan shall include, at a minimum:

1. a description of any hazardous products or materials that will be used, including procedures for inventory, storage, handling, and monitoring;

2. provisions for spill containment and control with notification procedures, specific clean-up and disposal instructions for different products, quick response containment and clean-up measures to be available on site, methods for disposal of spilled materials, and employee training;

3. a provision to design, build, and maintain facilities to collect and treat all construction and drilling discharge water, using the best available technology applicable to site conditions, to remove any pollutants present;

4. a provision that if any construction discharge water is released via an outfall or diffuser port, velocities may not exceed 4 feet per second, and the maximum size of any aperture may not exceed 1 inch;

5. a provision to not allow pollutants such as green concrete, contaminated water, sediment, welding slag, sandblasting abrasive, or grout cured less than 24 hours to contact any water body, wetland, or stream channel below ordinary high water;

6. practices to prevent construction debris from dropping into any body of water, and a provision to remove any material that does drop with a minimum disturbance to the streambed and water quality;

7. a provision that vehicle staging, cleaning, maintenance, refueling, and fuel storage must take place 150 feet or more from any stream, waterbody, or wetland, or have suitable spill prevention measures at the refueling site if it must be closer;
(8) a provision for all vehicles operated within 150 feet of any stream, waterbody, or wetland to be inspected daily for fluid leaks before leaving the vehicle staging area, leaks to be repaired prior to subsequent operations, and an inspection report to be available for agency review;

(9) a provision that all equipment operated instream be cleaned before beginning operations below the bank full elevation to remove all external oil, and grease; and

(10) a provision for all stationary power equipment operated within 150 feet of any stream, waterbody, or wetland to be diapered to contain leaks.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, and Washington Department of Ecology. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No dam removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Results:

A Spill Prevention, Control and Countermeasures Plan was prepared for the project and filed with the FERC on March 16, 2011. The plan was approved by the FERC on May 6, 2011. The plan covered safe handling of fuels, hydraulic fluids and other hazardous materials and described measures to be taken in the event of an incident. The plan was in place and implemented throughout the construction period of the project. During site work, there were nine contractor spill events. One of these spills, approximately one (1) gallon of hydraulic fluid, was to water. All other spills were to upland areas in volumes of less than five (5) gallons. In all cases, contractor immediately stopped the leak, cleaned the site and notified PacifiCorp who then immediately notified the appropriate agencies.

FERC Surrender Order (S) -- Adult Lower Columbia River Fall Chinook Salmon Salvage Plan. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a plan to salvage adult Lower Columbia River fall Chinook salmon in the late summer/early fall of 2011 downstream of Condit dam, to transport individuals collected to areas upstream of Condit
dam, and, if necessary, to spawn adults in a hatchery with progeny to be released upstream of Condit dam to supplement natural spawning.

The plan shall include, at a minimum:

(1) a description of proposed methods that will be used to collect Lower Columbia River fall Chinook salmon adults in the White Salmon River, including the results of any previous pilot fish salvage studies used to evaluate the effectiveness of potential salvage methods such as use of a removable weir at river mile 1.4 of the White Salmon River to direct adults to the U.S. Fish and Wildlife Service raceways or a resistant board weir;

(2) a provision to identify and utilize contingency capture methods and/or locations should flow conditions not allow the use of proposed collection methods identified in (1) above;

(3) a provision to transport and release adult Lower Columbia River fall Chinook salmon upstream of Condit dam, including a description of the proposed release locations;

(4) a provision to artificially spawn captured adult Lower Columbia River fall Chinook salmon, raise the progeny in a hatchery, and release the juveniles upstream of Condit dam in the spring of 2012 to supplement natural spawning if agreed upon and deemed necessary by the stakeholders identified below;

(5) a provision to use standard hatchery protocols for the collection, holding, transport, and spawning of adult Lower Columbia River fall Chinook salmon; and

(6) an implementation schedule.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, Spring Creek National Fish Hatchery, and Yakama Nation. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan, and specific descriptions of how the entities’ comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.
Results:

Per the requirement above, PacifiCorp filed with the FERC March 21, 2011 a plan to salvage adult Lower Columbia River fall Chinook salmon (Capture Plan) in the later summer/early fall of 2011 downstream of Condit dam and relocate fish to upstream of the project area. Following the submittal, the FERC granted an Order Modifying and Approving Columbia River Fall Chinook Salmon Capture and Transport Plan May 24, 2011. In response to a requirement of this Order, PacifiCorp, on July 27, 2011, filed a supplement to the Capture Plan. Each of PacifiCorp’s submittals were prepared after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, Spring Creek National Fish Hatchery, and Yakama Nation. On August 17, 2011, FERC issued an Order Approving Supplement to Columbia River Fall Chinook Salmon Capture and Transport Plan.

In the year of dam breaching, tule fall Chinook Salmon were collected using active seining and a resistance board weir and trap at US Fish and Wildlife Service White Salmon River rearing ponds. In September and October 2011, 679 Tule fall Chinook Salmon (85% of which were natural origin) were translocated from the lower White Salmon River to sites upstream of the Condit dam in hopes that they would spawn in an area not affected by sediment movement resulting from dam breaching. During post-transport monitoring, a total of 191 salmon redds were observed from the 310 female fall Chinook Salmon that were translocated. Of these redds 24% were affected by streambed downcutting resulting from the dam breach. Overall, the 2011 translocation effort was considered a success and met the mitigation requirement outlined as a Reasonable and Prudent Measure within the NMFS 2006 Biological Opinion (NMFS 2006), for brood year impacts to ESA-listed Tule fall Chinook Salmon caused by Condit Dam removal. For additional project information please see “Translocation of Lower Columbia River Fall Chinook Salmon (Oncorhynchus tshawytscha) In the Year of Condit Dam Removal and Year One Post-Removal Assessments; 2011 and 2012 Report (Engle, R., J. Skalicky and J. Poirier. 2013)

FERC Surrender Order (T) -- Western Pond Turtle Plan. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a plan to protect any western pond turtles that may be present at Northwestern Lake.

The plan shall, at a minimum:

1. describe the methods used to survey for and, if present, trap pond turtles;
2. identify suitable habitat for relocating any turtles trapped;
3. describe the methods for transporting any turtles found; and
4. include an implementation schedule.
The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service, Washington Department of Ecology, and Washington Department of Fish and Wildlife. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Results:

Pursuant to the requirement above, PacifiCorp filed with the FERC on March 21, 2011, an Aquatic Resources Protection Plan (ARPP) that described specific strategies for minimizing impacts to aquatic species including western pond turtles (Actinemys marmorata = Clemmys marmorata, Emys marmorata) during dam decommissioning. The ARPP was developed in consultation with requisite parties. Previous survey and trapping efforts were described and measures for protection of western pond turtles were described in section 4.0 of the plan. A turtle survey and trapping effort was conducted in Northwestern Lake in the summer of 2004 by a local turtle expert. The 2004 trapping attempt did not find any evidence that turtles were still present in the reservoir despite 34 days of trapping. Based on these results and previous survey efforts which did not document any turtles, the Washington Department of Fish and Wildlife (WDFW) concluded that while it was possible that individual turtles may still exist in the reservoir, there was probably not a viable population and additional trapping effort was not necessary to document their presence. WDFW considered the reservoir to be poor habitat for pond turtles due to its cold water temperatures. Rather than conducting another full season of trapping, PacifiCorp proposed to coordinate with WDFW to capture and relocate turtles if any were found during decommissioning activities. The ARPP included procedures for educating project staff in identification of turtles, reporting observations, and procedures for capture and relocation of any western pond turtles that were observed in the reservoir. A turtle identification guide was included in Appendix C of the ARPP and was distributed to project staff for use throughout the dam removal period. On May 10, 2011 the FERC issued an Order Approving the Aquatic Resources Protection Plan.

During the dam removal period and subsequent activities, no western pond turtles were observed in the project area.

FERC Surrender Order (U) -- Reservoir Wetland Creation and Upland and Riparian Revegetation Plan. At least 90 days before starting removal activities, the licensee shall file a final reservoir wetland creation and upland and riparian revegetation plan for Commission approval. The plan shall provide for natural and managed revegetation of upland, wetland, and riparian
habitat affected by removal of the project facilities, including mitigation for the loss of 4.8 acres of emergent wetland vegetation.

The plan, at a minimum, shall include:

1. site preparation and design details;
2. provisions for site stabilization;
3. a description of plant species to be used, source of plant materials, densities, planting methods, and fertilization and irrigation requirements;
4. a description of methods to control noxious weeds for 3 years after dam removal;
5. a description of a 3-year monitoring program, including performance standards and success criteria;
6. procedures to be implemented if monitoring reveals that establishment of vegetation is not successful or areas of erosion are identified, including the need for additional monitoring; and
7. an implementation schedule.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, and Yakama Nation. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A courtesy copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and Director, Division of Dam Safety and Inspections.

Results:

In accordance with FERC Surrender Order (U) described above, the Revegetation and Wetlands Management Plan (RWMP) was prepared to guide revegetation of upland and riparian habitat and establishment of 4.8 acres of wetlands. The RWMP was developed in consultation with requisite
parties and a final version dated March 15, 2011, was filed with the FERC on March 16, 2011. The RWMP described site design details, planting materials and methods, noxious weed management, vegetation monitoring and performance criteria, and provided an anticipated implementation schedule. The RWMP also included a provision to develop a wetland contingency plan to construct or acquire additional wetlands if 4.8 acres of wetlands did not develop naturally. An order approving the plan was issued by the FERC on May 9, 2011. The order included a provision to include the USDA Forest Service in further consultations with local agencies on the final seed mix and woody plant species, and a requirement to file a wetland mitigation and establishment report by September 30 in years one, three, and five following wetland establishment.

Following the breaching of Condit dam on October 26, 2011, PacifiCorp implemented actions to promote vegetation growth and wetland establishment consistent with objectives of the project’s RWMP and 401 Water Quality Certification. Approximately 48 acres within the former reservoir and 6.2 acres of decommissioning construction areas were seeded with grasses and shrubs and planted with over 19,000 trees. Vegetation monitoring was conducted over a five-year period and results reported in PacifiCorp’s Revegetation and Wetland Management Plan Final Report (2012-2016) indicate that while there are areas within individual planting locations that have gaps in cover or tree density, the planted areas in the former reservoir area are all predominately vegetated and the herbaceous ground cover is functioning to resist erosion. The average herbaceous cover essentially meets the 80% ground cover performance criteria and the average tree density of 202 trees/acre exceeds the 150 tree/acre criteria. Riparian areas continue to mature and canopy cover for willows and other woody vegetation has been increasing annually. Noxious weed have been controlled annually. These monitoring results indicate that the overall project area is exhibiting the desired advances in natural succession.

Wetland establishment was monitored for a five-year period and wetland site conditions reports were filed with the FERC and the Washington Department of Ecology by September 30 of 2012, 2014, and 2016 as required. Wetland delineations, conducted in 2014 and 2016, confirmed that there were 5.7 acres of wetlands in the former reservoir and downstream areas which exceed the 4.8-acre minimum threshold that would have necessitate the development of a wetland contingency plan to consider alternative mitigation options. As noted in PacifiCorp’s most recent submittal of the wetland site conditions report to the FERC and the Washington Department of Ecology on September 30, 2016, the RWMP objective and 401 Water Quality Certification requirement for establishment of 4.8 acres of wetlands has been met.

The implementation and monitoring activities specified in the RWMP have been completed. Vegetation in the project areas continues to mature and move toward the vegetation succession long-term goal of establishing wetland, riparian, and upland forest habitats that are similar in form and function to nearby terrestrial habitats within the White Salmon River watershed.

FERC Surrender Order (V) -- Spoil Disposal Area Revegetation Plan. At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a plan to revegetate areas used for the disposal of spoil materials and equipment staging.

The plan, at a minimum, shall include:
(1) a description of plant species used and planting densities;

(2) fertilization and irrigation requirements;

(3) methods to control noxious weeds for 3 years after revegetation;

(4) a 3-year monitoring program, including procedures to implement if monitoring reveals that establishment of vegetation is not successful;

(5) a provision to stabilize and revegetate all newly exposed slopes and work areas as soon as possible;

(6) a provision to remove all temporary access roads and work bridges (if constructed) when the project is complete, stabilize the soil, and revegetate the site; and

(7) an implementation schedule.

The licensee shall prepare the plan after consultation with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, and Yakama Nation. The licensee shall include with the plan documentation of consultation, copies of consulted entities’ comments and recommendations on the completed plan, and specific descriptions of how the entities' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the entities to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

A courtesy copy of the filed plan shall be sent to the Commission's Division of Dam Safety and Inspections-Portland Regional Office (D2SI-PRO) Regional Engineer and Director, Division of Dam Safety and Inspections.

**FERC Order on Rehearing** (P) -- Ordering Paragraph (V) of the Commission’s December 16, 2010 order is deleted.

**Results:**

The provisions described above for Ordering Paragraph V for revegetating spoils and staging areas were addressed through implementation of the Revegetation and Wetland Management Plan (RWMP; see previous section **FERC Surrender Order** (U)).
Areas that were disturbed by decommissioning activities including staging areas (2.8 acres), flowline concrete spoil disposal areas (2.6 acres), and temporary access roads (0.8 acres) were revegetated. Short-term revegetation of these areas was conducted in accordance with the Erosion Control Plan. Long-term revegetation of these areas was conducted according to the methods described in the RWMP. By October 31, 2012, removal of access roads, and placement of topsoil and the seeding of the flowline alignment were complete. The flowline seed mix was applied by hydroseeding in October 2012 and tree planting on the flowline and other areas was completed by March 20, 2013. The planted herbaceous vegetation was established on most areas of the flowline by 2013. PacifiCorp’s monthly progress reports to FERC describe the restoration of the construction areas and indicate that the last road used for accessing the reservoir for tree planting was restored by March 21, 2013. The Washington Department of Ecology was notified in an email dated April 25, 2013, that the restoration of temporary roads had been completed.

Noxious weed control and vegetation monitoring was conducted as part of the RWMP and results were reported in the RWMP Final Report (2012-2016). The flowline, access roads, and staging areas are predominately vegetated and the herbaceous ground cover is functioning to resist erosion. Tree seedlings have been established on sections of the former flowline pathway.

**FERC Surrender Order** (W) -- *Recreation Facilities Plan.* At least 90 days before starting dam removal activities, the licensee shall file, for Commission approval, a plan to: (1) remove four existing community boat docks from the project reservoir; (2) remove the boat dock and extend an existing boat launch at Northwestern Lake Park to the river channel; and (3) post informational and interpretive signage at Northwestern Lake Park. The plan shall include a detailed description of how the licensee will remove any existing facilities and shall include drawings or schematics of any new features, including signage.

The licensee shall prepare the plan and include an implementation schedule after consultation with the Washington Department of Ecology and the Washington Department of Fish and Wildlife. The licensee shall include with the plan documentation of consultation, copies of the agencies’ comments and recommendations, and specific descriptions of how the agencies’ comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No removal activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

**Results:**

Pursuant to the requirement above, PacifiCorp filed with the FERC on March 16, 2011 and supplemented filing on May 27, 2011, a Recreation Facilities Removal and Improvements Plan. On June 3, 2011 the FERC approved the plan. The plan identified 16 tasks to be completed for
the purpose of protecting and enhancing recreation resources in the project area. As individual tasks were completed, such action was noted in PacifiCorp’s monthly construction reports. On July 21, 2015, PacifiCorp submitted notice to FERC that the final two tasks had been completed.

In summary, to prevent boat traffic through the bridge stabilization construction area prior to breaching of Condit dam, a temporary boater take-out upstream of Northwestern Lake Bridge was constructed and available for use on July 5, 2011. All boaters were directed to take out at the temporary take-out. With the commencement of work on the drain tunnel at the base of the dam, Northwestern Lake was closed to recreational use on August 1, 2011 as a public safety measure. After the reservoir closure, community boat docks were removed. Following the breach of the dam on October 26, 2011, there was no feasible boater take-out in the vicinity of Northwestern Park due to unstable banks. On April 20, 2012, a river access ramp was established at the downstream end of Northwestern Park. Local commercial rafting outfitters started using the take-out immediately. Following the completion of measures to stabilize the right abutment of Northwestern Lake Bridge at the end of July 2012, a permanent boater take-out ramp was completed adjacent to the bridge. As per the plan, additional recreation measures were completed within Northwestern Lake Park to improve site facilities. These include such items as upgrading a message board, replacing picnic tables, reconfiguring parking areas, demarcating parking areas with pole bollards, and enhancing understory vegetation.

**FERC Surrender Order (X) -- Historic Preservation.** The licensee shall implement the "Memorandum of Agreement Among the Federal Energy Regulatory Commission and the Washington State Historic Preservation Officer for Managing Historic Properties that May be Affected by PacifiCorp's Surrender for the Condit Hydroelectric Project in Klickitat and Skamania Counties, Washington (FERC Project No. 2342)," filed with the Commission February 27, 2003, including but not limited to the Historic Properties Management Plan (HPMP) for the project. In the event that the Memorandum of Agreement (MOA) is terminated, the licensee shall implement the provisions of its approved HPMP. The Commission reserves the authority to require changes to the HPMP at any time during the term of the license. If the MOA is terminated prior to Commission approval of the HPMP, the licensee shall obtain approval from the Commission and the Washington State Historic Preservation Officer before engaging in any ground-disturbing activities or taking any other action that may affect any historic properties within the project’s area of potential effect.

**Results:**

Immediately following the breaching of the dam on October 26, 2011, Northwestern Lake drained through the dam mobilizing a significant portion of the sediments trapped behind the dam. The subsequent exposure of the lakebed and the rapid down-cutting of the river through the reservoir sediments exposed cultural material. In compliance with the Historic Properties and Cultural Resources Management Plan (HPCRMP), a series of surveys, resource inventories, resource evaluations, interpretive activities, and construction monitoring were reported on between 2011 and 2017. This work is summarized in the annual Historic Properties and Cultural
Resources Management Plan Activities Reports filed with the FERC and the Washington State Historic Preservation Officer for the years 2011 through 2018. The reports describe the following:

~ Project activities impacting historic properties.
~ Actions requiring consultation and the results.
~ Any inadvertent discoveries and actions taken, including consultation.

PacifiCorp has completed all of the specific mitigation measures identified in the HPCRMP; all activities required under the HPCRMP are complete. On April 2, 2019 the Washington Department of Archaeology and Historic Preservation, provided concurrence that PacifiCorp has satisfied all project obligations related to historic and cultural resource protection as described in the HPCRMP, under the provisions of Section 106 of the National Historic Preservation Act of 1966, and no further action is needed.

**FERC Surrender Order (Y) -- Notification Regarding Threatened or Endangered Species.** The licensee shall notify the U.S. Fish and Wildlife Service (FWS) and National Marine Fisheries Service (NMFS) within two days upon locating a dead, injured, or sick endangered or threatened species while operating the project until October 2011, during project removal activities, and during restoration activities. Initial notification must be made to the nearest FWS and NMFS Law Enforcement Offices and to the Commission. Notification must include the species, date, time, precise location of the injured animal or carcass, a description of the causative event (if known), a description of any resultant corrective actions taken (if any) to reduce the likelihood of future mortalities and injuries, and any other pertinent information. Care should be taken in handling sick or injured specimens to preserve biological materials in the best possible state for later analysis of cause of death. In conjunction with the care of the sick or injured endangered or threatened species or preservation of biological materials from a dead animal, the licensee has the responsibility to ensure that evidence associated with the specimen is not unnecessarily disturbed.

**Results:**

As previously noted, on-site decommissioning activities were initiated June 27, 2010. Prior to work, contractors were notified that there was the potential for occurrence of endangered or threatened species within the project area. Project personnel were trained to immediately notify PacifiCorp upon locating a dead, injured, or sick endangered or threatened species. Upon any location or observation, personnel were to note the species, date, time, precise location of the injured animal or carcass, a description of the causative event (if known), a description of any resultant corrective actions taken (if any) to reduce the likelihood of future mortalities and injuries, and any other pertinent information. For the period of project work (June 27, 2011 through August 26, 2016), no endangered or threatened species were ever observed to be dead, injured or sick. Accordingly, no notifications were made to the U.S. Fish and Wildlife Service or National Marine Fisheries Service per above requirement.
(a) Requirement to File Plans for Commission Approval

Various conditions of this order found in the Washington Department of Ecology’s (Washington DOE) final section 401 Water Quality Certification (WQC) conditions (Appendix A) require the licensee to prepare plans in consultation with other entities for approval by Washington DOE and to implement specific measures or modifications to these plans without prior Commission approval. Each such plan and any proposed modification to Commission-approved plans shall be submitted to the Commission for approval. The following table indicates the agencies that the licensee shall consult before preparing the plans, or proposing modifications to Commission-approved plans, along with the deadline for filing the plans with the Commission for approval.

Continued on subsequent pages.
<table>
<thead>
<tr>
<th><strong>WQC condition no.</strong></th>
<th><strong>Plan name</strong></th>
<th><strong>Consulting Agencies</strong></th>
<th><strong>Due date</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2(3)</td>
<td>Any changes to erosion and sediment control plan that occur as a result of the adaptive management approach</td>
<td>National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (FWS), U.S. Forest Service (Forest Service), Washington Department of Fish and Wildlife (Washington DFW), Washington DOE, Yakama Nation, U.S. Army Corps of Engineers (Corps)</td>
<td>As needed</td>
</tr>
<tr>
<td>4.3.2(1)</td>
<td>Revisions to the Project Removal Design Report</td>
<td></td>
<td>As needed</td>
</tr>
<tr>
<td>4.3.2(4)</td>
<td>Dam Removal Blasting Plan</td>
<td></td>
<td>90 days prior to starting dam removal activities</td>
</tr>
<tr>
<td>4.3.2(8)</td>
<td>Any changes to the disposal location of demolition and waste debris</td>
<td></td>
<td>As needed</td>
</tr>
<tr>
<td>4.3.2(9)</td>
<td>Final design reports, plans and specifications for concrete rubble disposal in the flowline area</td>
<td></td>
<td>90 days prior to starting dam removal activities</td>
</tr>
<tr>
<td>4.3.3(1)</td>
<td>Any changes to the reservoir sediment assessment and stabilization plan</td>
<td>NMFS, FWS, Forest Service, Washington DFW, Washington DOE, Yakama Nation, Corps</td>
<td>As needed</td>
</tr>
</tbody>
</table>
4.3.3(3), (5) Implementing proposed reservoir sediment stabilization measures or corrective actions

| Implementing proposed reservoir sediment stabilization measures or corrective actions | NMFS, FWS, Forest Service, Washington DFW, Washington DOE, Yakama Nation, Corps | As needed |

4.3.3(4) Reservoir Sediment Blasting Plan

| Reservoir Sediment Blasting Plan | NMFS, FWS, Forest Service, Washington DFW, Washington DOE, Yakama Nation, Corps | As needed |

4.3.4(1) Woody Debris Management Plan; and any subsequent revisions

| Woody Debris Management Plan; and any subsequent revisions | NMFS, FWS, Forest Service, Washington DFW, Washington DOE, Corps, Klickitat and Skamania Counties | 90 days prior to starting dam removal activities; as needed |

4.3.5(1), (2), (10) Revisions to Revegetation and Wetland Management Plan

| Revisions to Revegetation and Wetland Management Plan | NMFS, FWS, Forest Service, Washington DFW, Washington DOE, Yakima Nation | 90 days prior to starting dam removal activities; as needed |

The licensee shall submit to the Commission documentation of its consultation, copies of comments and recommendations made in connection with the plan, and a description of how the plan accommodates the comments and recommendations. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. The Commission reserves the right to make changes to any plan submitted. Upon Commission approval, the plan becomes a condition of the surrender, and the licensee shall implement the plan or changes in project removal measures, including any changes required by the Commission.

(b) Requirement to File Reports and As-Built Plans

Certain conditions of the Washington DOE’s final section 401 WQC conditions (Appendix A) require the licensee to file reports and as-built plans with Washington DOE. These reports and as-built plans document compliance with requirements of this order and may have bearing on future actions. Each such report and as-built plan shall also be submitted to the Commission. These reports and as-built plans are listed in the following table:
<table>
<thead>
<tr>
<th>WQC condition no.</th>
<th>Description</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3.2 (9)(a)</td>
<td>Final Design Report for concrete rubble disposal</td>
<td>90 days prior to rubble disposal into the flowline</td>
</tr>
<tr>
<td>4.3.2(9)(d)</td>
<td>As-built plans for concrete rubble disposal that include impermeable barrier and culvert locations</td>
<td>Within 60 days of completing final cover of concrete rubble disposal area</td>
</tr>
<tr>
<td>4.3.3(3)</td>
<td>Post-reservoir-dewatering assessment progress report</td>
<td>120 days after dam breaching</td>
</tr>
<tr>
<td>4.3.3(5)</td>
<td>Stabilization inspection reports of dewatered reservoir</td>
<td>Within 14 days of any inspection</td>
</tr>
<tr>
<td>4.3.3(7)</td>
<td>LiDAR survey progress and monitoring reports</td>
<td>By September 30 of each year</td>
</tr>
<tr>
<td>4.3.4(1)</td>
<td>Woody debris monitoring reports</td>
<td>By December 31 of each year</td>
</tr>
<tr>
<td>4.3.5(9)</td>
<td>Mitigation wetland establishment reports</td>
<td>By September 30 in years one, three, and five after establishing wetlands</td>
</tr>
<tr>
<td>5.0 (6)</td>
<td>Hazardous substances spill report</td>
<td>Within five days of a hazardous substances spill</td>
</tr>
</tbody>
</table>

The licensee shall submit to the Commission documentation of any consultation, and copies of any comments and recommendations made by any consulted entity in connection with each report. The Commission reserves the right to require changes to project removal measures based on the information contained in the report and any other available information.

Results:
Throughout the life of the project, PacifiCorp has complied with the two conditions above: Requirement to File Plans for Commission Approval and Requirement to File Reports and As-Built Plans. Per Washington DOE’s letter of February 15, 2018, the agency has acknowledged that all project section 401 Water Quality Certification conditions have been met and PacifiCorp has no remaining obligations. On April 2, 2019 the Washington Department of Archaeology and Historic Preservation provided concurrence that PacifiCorp has satisfied all project obligations related to historic and cultural resource protection as described in the HPCRMP. On April 19, 2019, the U.S. Army Corps of Engineers acknowledged all conditions of the project 404 permit have been met.
3. CITATIONS