

135 FERC ¶ 61,064
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
John R. Norris, and Cheryl A. LaFleur.

PacifiCorp

Project No. 2342-021

ORDER ON REHEARING, DENYING STAY,
AND DISMISSING EXTENSION OF TIME REQUEST

(Issued April 21, 2011)

1. By order issued December 16, 2010,¹ we accepted the surrender of PacifiCorp's license for the Condit Project No. 2342, authorized the removal of most of the project facilities, and dismissed PacifiCorp's previously filed application for a new license. PacifiCorp has filed a request for clarification and rehearing, with a motion for stay of certain portions of the Surrender Order. Requests for rehearing have also been filed by the Washington Department of Ecology (Washington DOE) and jointly by American Rivers, American Whitewater, and Trout Unlimited (American Rivers). We grant rehearing and clarification to the extent discussed below, and we deny the motion for stay. We also dismiss a motion subsequently filed by PacifiCorp for an extension of time to comply with certain deadlines in the Surrender Order.

Background

2. A complete description of the history of this proceeding can be found in our Surrender Order. The following summary should suffice for addressing the issues raised on rehearing.

3. The Condit Project, constructed in 1913, consists of one development that diverts flows from 1.1 miles of the White Salmon River and returns them directly to that river. The project works include a dam that impounds the river, creating Northwestern Lake, as well as a water conveyance system, a powerhouse, and other facilities. The White Salmon River flows into the Columbia River 3.3 miles below Condit dam, while Northwestern Lake extends three miles upstream of the dam.

¹ *PacifiCorp*, 133 FERC ¶ 61,232 (2010) (Surrender Order).

4. The original license for this project expired at the end of 1993, and since then the project has been operating under annual licenses. PacifiCorp filed an application for a new license for the project in December 1991, and Commission staff prepared Draft and Final Environmental Impact Statements (EIS) addressing the relicensing proposal. In October 1999, PacifiCorp filed an application for amendment of license and approval of an offer of settlement that it had reached with various federal and state agencies, tribes, and conservation groups. The settlement agreement envisioned extending the existing license term to October 1, 2006, then ceasing project operations and commencing removal of the dam and all other project works except the powerhouse, a process expected to take about a year. The settlement also provided that PacifiCorp could request renewal of Commission processing of its relicense application if one of a number of conditions specified in the settlement were not met. The Commission determined that this filing was, in effect, an application to surrender the existing license and remove most of the project works.

5. The Commission issued public notice of the October 1999 filing. The Final EIS from the relicense proceeding was incorporated into the surrender proceeding by reference, and Commission staff issued Draft and Final Supplemental EISs addressing the surrender proposal in 2002. In the Final Supplemental EIS, staff recommended surrender of the license and removal of the project facilities in accordance with the surrender proposal, with additional staff recommendations. Subsequently, PacifiCorp submitted filings extending the intended time for ceasing project operations and commencing project removal, largely on the basis that it had not yet received all necessary approvals, notably issuance of water quality certification from Washington DOE and approval of its proposal by this Commission. In September 2010, PacifiCorp notified the Commission that it expected to begin project removal in October 2011, as long as all required permits and a Commission Surrender Order were obtained on terms consistent with the settlement and in final form by December 31, 2010.²

6. In our Surrender Order, we concluded that surrender of the license and removal of Condit dam would produce environmental benefits that would outweigh any costs associated with loss of the dam and Northwestern Lake. The benefits would consist primarily of providing anadromous salmonids access to up to 18 miles of White Salmon River mainstem and tributary habitats that have long been inaccessible, benefiting wildlife dependent on anadromous fish in these upstream river reaches, and providing increased whitewater recreation opportunities. We also concluded that, while the loss of Northwestern Lake would affect certain recreation opportunities, lake and wetland

² As noted in our Surrender Order, removal of the dam would have to begin in October, regardless of what year, to protect fish and other aquatic resources. *Id.* P 14 and n.21.

habitats for fish and wildlife, water supply, and other resources, those effects could be mitigated to varying degrees by measures proposed by PacifiCorp and additional requirements that we were adopting. In addition, we stated that we would reinstate PacifiCorp's relicense application if it decided not to accept our order, but that we would not reinstate that application based on any contingencies that might occur after PacifiCorp accepted the surrender on the terms of our order and the order became final and unappealable.

7. Consequently, we accepted surrender of the project license and, in accordance with PacifiCorp's proposal, required PacifiCorp to cease project operations no later than October 1, 2011, and to commence removal of the dam and other project facilities in October 2011. We also required PacifiCorp to file a number of plans, including a project removal plan, which was to include measures to address effects on existing water and gas line crossings of Northwestern Lake, existing water supply facilities, a bridge over Northwestern Lake (Northwestern Lake Bridge), and local roads.

8. None of the parties that filed rehearing requests object to our grant of the application for surrender and project removal. Their concerns go rather to the manner in which we have conditioned our action and to some subsequent changes in PacifiCorp's proposal to remove the project facilities that are not reflected in our Surrender Order.

Discussion

A. Water Quality Certification

9. Because the removal of Condit dam could result in a discharge into United States waters, under section 401(a)(1) of the Clean Water Act (CWA),³ the Commission could not authorize project removal unless and until the state certifying agency, Washington DOE, either issued water quality certification or waived certification by failing to act on a request for certification within one year. Section 401 provides specifically that the one-year period commences on the agency's "receipt" of a certification request. PacifiCorp initially filed a request for water quality certification in 2001 and thereafter withdrew and refiled its request each year before the one-year deadline for action by Washington DOE.

10. In due course, PacifiCorp resubmitted its application for certification on May 12, 2009, meaning that, to avoid waiver of certification, Washington DOE had until May 12, 2010, to act on that request. In response to a request from Commission staff to provide either a copy of issued certification or proof of the date Washington DOE

³ 33 U.S.C. § 1341(a)(1) (2006).

received a new certification request, PacifiCorp, by letter filed May 21, 2010, stated that it withdrew its previous request and filed a new one which “Washington DOE received . . . on May 13, 2010, as demonstrated by the date stamp in the upper right corner of the letter.”⁴ Indeed, the letter from PacifiCorp to Washington DOE and an apparently attached water quality certification processing request both are date-stamped by Washington DOE as having been received on May 13, 2010. Because the record demonstrated that Washington DOE had not acted on the May 12, 2009 certification request within the statutory one-year period, and the new request was received by the agency after the period expired, we concluded that certification had been waived. Accordingly, the Commission held that an October 12, 2010, certification for the surrender proposal issued by Washington DOE was untimely and thus ineffective. Nevertheless, we considered Washington DOE’s document, issued as Order No. 8049, as recommendations, and we included a number of measures in the Surrender Order designed to address Washington DOE’s concerns.

11. All of the parties seeking rehearing assert that Order No. 8049 was a timely issued water quality certification, and the rehearing requests of Washington DOE and American Rivers are confined to this issue. Washington DOE states that, although the hard copy of PacifiCorp’s withdrawal and reapplication was not received until May 13, 2010, PacifiCorp electronically filed a withdrawal and reapplication on May 10, 2010, and Washington DOE received it on the same day. Washington DOE adds that, in an e-mail to PacifiCorp, it acknowledged receipt of the electronic filing on May 10, 2010. Washington DOE attaches documentation to support the May 10, 2010 receipt date and contends that it was error for us to rely on the date stamp on the hard copy to conclude that PacifiCorp’s withdrawal and reapplication was not received until May 13, 2010. Washington DOE asks us to find that it did not waive certification and to modify our order to incorporate all of the conditions in its certification. PacifiCorp and American Rivers take virtually the same position.

12. We reasonably relied on the materials that PacifiCorp filed with us on May 21, 2010, including the company’s explicit statement that Washington DOE received the certification request on May 13, 2010, in finding that certification had been waived. However, the supporting materials furnished by Washington DOE with its rehearing request, which had not previously been provided to us, demonstrate that it did indeed receive PacifiCorp’s withdrawal and refiling requests on May 10, 2010. Therefore, we conclude that certification was in fact not waived, and we will incorporate the certification conditions as conditions of the Surrender Order. The certification is attached as Appendix A to this order and is incorporated by Ordering Paragraph (E).

⁴ See Letter from Todd Olson (PacifiCorp Energy) to Ms. Kimberly D. Bose (Commission Secretary) (May 21, 2010).

13. As we discussed in the Surrender Order, the water quality certification provides for a number of monitoring measures, including environmental monitoring that could extend as long as ten years after the dam and other facilities are removed. In considering the certification as recommendations, we indicated that we would not retain jurisdiction over the project for the entire ten-year post-removal monitoring period prescribed by Washington DOE's certification.⁵ PacifiCorp asks us to clarify or revise the order to make it clear that we will retain jurisdiction, and that the license surrender will not become effective, until we have determined that PacifiCorp has satisfied all of the conditions of our order, including all of the conditions of the water quality certification.

14. In acting on surrender applications involving removal of project works, the Commission imposes measures to ensure that the effects of project removal are adequately understood and mitigated. When the licensee has complied with those measures, we issue notice that license surrender is effective and our jurisdiction ceases. In the surrender order, we imposed conditions arising from the measures and timeframes recommended in the Final Supplemental EIS.⁶ We have now also incorporated the conditions included in the water quality certification. The Commission will retain jurisdiction over the project until required physical measures and the monitoring necessary to ensure their implementation have been completed. Then, the Commission will issue notice that surrender is effective. To the extent that conditions in the water quality certification require continued monitoring beyond that point, the company will be responsible for complying with those measures.

15. The water quality certification authorizes project removal measures that differ from those that were in the surrender application and were analyzed in the Commission staff's environmental documents. When PacifiCorp filed its settlement agreement with the Commission in October 1999, its project removal approach was set out in accompanying materials, including a Removal Plan Summary and the Beck Report prepared in 1998. PacifiCorp explains that, as it subsequently worked with Washington DOE and other resource agencies and stakeholders, it made changes to the original project removal approach, reflected in a series of management plans. The management plans were provided to Washington DOE in accordance with that agency's review under the Washington State Environmental Policy Act (SEPA), which review supplemented the Commission's own environmental analysis. During Washington DOE's environmental review process, resource agencies and other stakeholders had the opportunity to comment, and PacifiCorp continued to revise the management plans in

⁵ Surrender Order, 133 FERC ¶ 61,232 at P 51, 63, 67, 70, 75.

⁶ In the Surrender Order, *see, e.g., PacifiCorp*, 133 FERC ¶ 61,232 at P 49-51; 60-63; and 67-70, we did not adopt certain measures.

response to those comments. As a result, PacifiCorp states, the management plans reflect an extensive, collaboratively developed statement of the project removal proposal at a level of detail more refined than that provided by the Removal Plan Summary or the Beck Report. PacifiCorp filed these plans with the Commission on January 12, 2011.

16. PacifiCorp points out that, because Washington DOE's water quality certification provides for it to implement project removal through the management plans, compliance with the details of those plans will become requirements of our order. While PacifiCorp believes that our order and the management plans are largely consistent, there are a number of conflicts or inconsistencies that it urges us to resolve through clarification or revision of our order.

17. We will address these conflicts and inconsistencies in the discussion below. However, to the extent that these management plans overlap with plans or measures that we have found necessary as conditions of the surrender, the plans must be approved by the Commission before they may be implemented.

18. To the extent that requirements of the water quality certification overlap requirements in our ordering paragraphs, it will be necessary to delete or revise some of our earlier requirements to avoid duplicative or redundant requirements that would be confusing to administer. These changes will be described at the end of the following discussion of the various other issues raised on rehearing. Where we conclude that PacifiCorp needs to undertake additional measures that our Surrender Order requires but that are not required by the certification, we will continue to include such measures as surrender conditions. Ordering Paragraph (Q) of this order requires PacifiCorp to file for Commission approval plans or changes to plans previously approved by the Commission that are required by Washington DOE's water quality certification. Ordering Paragraph (Q) also requires PacifiCorp to file with the Commission reports required by the water quality certification. Finally, to the extent that PacifiCorp is now proposing a project removal approach that has not previously been presented for our consideration, it will be necessary here to assess the effectiveness and environmental effects of those new measures. We will discuss those situations as necessary below.

B. Commencement of Project Removal and Related Timing Issues

19. Ordering Paragraph (C) of the Surrender Order provides that PacifiCorp shall cease project operations no later than October 1, 2011, and shall commence the removal of project facilities in October 2011. However, as we noted in our Surrender Order, PacifiCorp had informed us that it will need about nine months after all project removal authorizations, including our order and a U.S. Army Corps of Engineers (Corps) permit under section 404 of the CWA, are issued and final before it can commence project

removal. This nine-month lead time would be necessary to accommodate procurement, contracting, planning, and mobilization.⁷

20. In its rehearing request, PacifiCorp states that, while it remains committed to commencing removal in 2011, it will not have received these authorizations in final form nine months before October 2011, so that it is foreseeable, and even likely, that it could not adhere to an October 2011 project removal date. Therefore, PacifiCorp requests that we clarify that the Surrender Order would allow for delay of project removal to October 2012 or later, or that we revise the order to expressly provide for such a delay. PacifiCorp asks us to recognize, in particular, that a delay until at least October 2012 will be necessary if it needs to relocate the natural gas pipeline crossing Northwestern Lake, if the plans required by the Surrender Order are not finalized and approved by April 30, 2011 (and April 1, 2011 in the case of its plan to relocate the water line crossing the lake), or if the Surrender Order remains subject to requests for rehearing or judicial review as of March 31, 2011.

21. With its rehearing request, PacifiCorp included a motion for a stay of the requirements of Ordering Paragraph (C) and a stay of all other actions that would be required under the Surrender Order after March 31, 2011, such stay to be effective if our order remains subject to rehearing or judicial review on March 31, 2011.

22. On April 1, 2011, PacifiCorp filed a motion for a one-year extension of the deadlines contained in several ordering paragraphs of our Surrender Order, so that it could begin undertaking activities in connection with project removal in the summer and fall of 2012 rather than of 2011.⁸ PacifiCorp explains that, because it must breach the dam in October or November, it must provide its demolition contractor with notice to proceed no later than May 1, 2011. PacifiCorp states that it would not have a “fully adjudicated order” as of that date, because the period would still be running in which parties could seek judicial review.⁹ Consequently, without an extension, PacifiCorp

⁷ *Id.* P 22.

⁸ PacifiCorp asks for this extension in respect to deadlines in Ordering Paragraphs (C), which sets a date for ceasing project operations and commencing project removal; (D), which specifies the months in which PacifiCorp can conduct in-water work; (O), which requires removal of reservoir cofferdams; (S), which requires a salvage plan for Lower Columbia River Fall Chinook Salmon; and (Y), which requires notification regarding threatened and endangered species.

⁹ Parties to a proceeding have 60 days after issuance of a final Commission order to seek review in the courts of appeals. Section 313 of the Federal Power Act, 16 U.S.C. § 8251 (2006).

would not have the opportunity to review the final Surrender Order and decide whether to accept it before having to authorize its contractor to proceed on work for 2011.

23. Despite requesting this extension, PacifiCorp acknowledges in its motion that it might still be possible to begin project removal activities in 2011 if the Commission issues an order on rehearing by April 30, 2011. PacifiCorp asks us to defer action on the motion if we intend to grant its rehearing request in full in April, in which case it would evaluate the rehearing order and consult with its contractor and stakeholders to determine whether commencement of project removal in 2011 is feasible. PacifiCorp states that it will withdraw the motion if it determines that it could begin project removal in 2011, but that it would ask us to resume consideration of the motion and grant the one-year extension if it determines that it could not begin project removal in 2011.

24. Because we are issuing this order in April 2011, it is not necessary to grant the extension requested in this motion. However, we will dismiss the motion rather than deferring action on it. If PacifiCorp determines that it would not be able to begin project removal activities in 2011, it can then file a new motion for an extension of time and provide supporting arguments for such an extension in that motion. Because PacifiCorp has this option to seek a future one-year extension request, we will also not modify the Surrender Order here to accommodate a later commencement of project removal, as PacifiCorp urges us to do in its rehearing request. Similarly we will deny the motion for stay that PacifiCorp included in its rehearing request, since PacifiCorp has not demonstrated that justice requires a stay, particularly given that the company can seek an extension of time as to specific deadlines if and when it becomes clear that those deadlines cannot be met.

25. PacifiCorp asks that we revise the length of consultation and Commission review associated with the various plans required by our order. PacifiCorp notes that, under Ordering Paragraphs (E), (K) through (O), and (Q) through (W) of the Surrender Order, it is required to develop 13 plans involving consultation with specified entities and file them for Commission review and approval. For all 13 plans, consulting entities are allowed 30 days for review and provision of comments, and PacifiCorp is required to submit the plans for Commission review and approval at least 90 days before starting removal activities. PacifiCorp argues that these time frames are too long to allow for development, consultation, and approval of all required plans in time to implement a 2011 breach of the dam.

26. PacifiCorp explains that it and its contractor need at least two months after receipt of final Commission-approved plans to prepare for their implementation. Some of the preliminary project removal activities, such as bridge stabilization, water line relocation, and staging for drain tunnel excavation, will need to begin by July 2011 or sooner. Therefore, PacifiCorp contends, it will need to have final Commission-approved plans by April 30, 2011, except in the case of the plan to relocate the City of

White Salmon water line, for which PacifiCorp must begin work no later than April 1, 2011. Accordingly, PacifiCorp asks that we revise the ordering paragraphs referred to above to provide for 21 days for consulting entities to comment on the plans and to require that PacifiCorp submit the plans to the Commission no later than March 16, 2011, so that the Commission will have 45 days to review and approve the plans by April 30. In the case of the water line relocation plan, PacifiCorp asks that we authorize a 21-day review and comment period for consulting entities followed by submission of the plan to the Commission no later than February 14, 2011, so that the Commission will have 45 days to review the plan by April 1. PacifiCorp adds that, if we decide that more time is required for consultation and review, it will be necessary to postpone dam removal until October 2012.

27. Consistent with its effort to adhere to a schedule that would permit project removal to commence in October 2011, PacifiCorp has filed most of the plans that we required in our Surrender Order. These filed plans indicate that PacifiCorp consulted with the necessary entities in the plans' development, but it is not apparent that PacifiCorp provided these entities with the required 30 days for consultation. However, we have as yet no reason to believe that any of the consulting entities think that they have been given inadequate time for consultation and comment.

28. PacifiCorp has filed these plans before we have had an opportunity to act on its rehearing request. Accordingly, some of the plans will not have reflected changes we are making in this order to some of the surrender requirements. Commission staff will consider these plans in the context of the present rehearing order and, in doing so, will evaluate whether consulted entities have been given sufficient opportunity for review and comment. While we appreciate PacifiCorp's desire for expeditious review and will make every effort to give prompt consideration to PacifiCorp's plans, our staff must have sufficient time to review the submitted plans, to ensure that public safety, environmental protection, and other relevant concerns are met. Therefore, we are not persuaded to adopt the review deadlines suggested by PacifiCorp.

C. In-water Work

29. Ordering Paragraph (D) of our Surrender Order provides that PacifiCorp shall conduct all in-water work only in the months of October and November 2011 and July and August 2012. It also provides that all in-water work, including excavation of the drain tunnel used to drain the reservoir and removal of the lowest portions of the dam, shall be completed by August 31, 2012.

30. PacifiCorp argues that these restrictions on in-water work will not accommodate all necessary project removal activity. For example, PacifiCorp states, in order to commence dam removal in October 2011, as scheduled, it will have to begin work on stabilizing Northwestern Lake Bridge in June 2011. PacifiCorp also states that it is committed to clearing obstructions to fish passage that may occur at any time and that it

proposes to engage in wetlands management from September 1, 2012, through August 31, 2015. All of these activities would involve in-water work. PacifiCorp indicates that it intends to do various types of in-water work from June 1, 2011, through August 31, 2012, with most of the in-water work to be completed by December 31, 2012. PacifiCorp adds that the biological opinions issued by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS), as well as the water quality certification, all considered the actions in PacifiCorp's management plans and authorized or approved those actions notwithstanding the necessary in-water work periods.

31. PacifiCorp asks us to revise Ordering Paragraph (D) of the Surrender Order to allow for in-water work beginning in June 2011 and extending through December 2015 as necessary to implement the management plans, as such plans may be approved and conditioned by the Commission. In the alternative, PacifiCorp asks us to revise Ordering Paragraph (D) by eliminating the four-month limitation on in-water work and indicating that PacifiCorp will be authorized to conduct in-water work as necessary to implement the Project Removal Plan required by Ordering Paragraph (E), the erosion and sediment control plan required by Ordering Paragraph (K), and such other plans as we might ultimately approve.

32. The time limitations of Ordering Paragraph (D) were based on the project removal proposal that was derived from the settlement and set out in PacifiCorp's surrender application. PacifiCorp proposed to excavate the drain tunnel in the dam and remove the lowest portions of the dam only from July through November, the time of seasonally low flows, to ensure that all concrete would be removed from the river bottom. It also proposed to complete all in-water work by August following commencement of dam removal, in order to lessen adverse effects on multiple year-classes of salmon and steelhead.¹⁰ In addition, it intended to perform work that affects water quality and quantity only after October 1, in the month in which the reservoir would be drained.¹¹ In the Final Supplemental EIS, Commission staff recommended adopting these in-water work timing proposals.¹²

33. Commission staff supported PacifiCorp's proposed timing restrictions because they would minimize adverse effects on water quality and anadromous fish species present within the project area. Staff concluded that in-water activities would likely disrupt spawning migrations of spring and summer-run salmon and steelhead due to fish

¹⁰ Final Supplemental EIS at 13.

¹¹ Project Removal Summary at 7.

¹² Final Supplemental EIS at 187.

avoiding areas of high activity or physically being prevented from passing work areas. Therefore, staff recommended that all project clean-up and removal activities be completed by August of the year following the commencement of dam removal to lessen any adverse effects of dam removal on multi-year classes of anadromous fish. Staff also recommended that excavation of the drain tunnel and removal of the lowest portion of the dam in the river channel occur only during the low flow period of July through November. This restriction would also ensure that debris would be removed from the river bottom.¹³ Further, staff recommended that dam and facility removal commence after October 1 to allow for the trapping and salvage of fall Chinook downstream of Condit dam.¹⁴ These recommendations collectively stemmed from an intention to confine major in-water disturbance activities related to dam removal to low-flow conditions and to minimize impacts to anadromous fish.

34. The project removal schedule proposed by PacifiCorp and analyzed by staff suggested that no in-water work would be done before the dam was to be breached in October and that no further in-water work would be done in that year after November.¹⁵ Because removal of low level concrete in the former river channel following draining of the reservoir could not take place until the low-flow period begins in July of the following year, and because PacifiCorp proposed to complete all in-water work by the end of August of that following year, the restrictions we imposed in Ordering Paragraph (D) were a reasonable reflection of PacifiCorp's proposal.

35. Section 4.5 of the water quality certification provides: that excavation of the drain tunnel shall occur only during July through November; that the drain tunnel shall only be breached between October 1 and November 30;¹⁶ that excavation of sediment and large woody debris from the upstream face of the tunnel shall occur prior to breaching the tunnel but not before September 15; that the cofferdam used during the construction of the dam shall be removed by May 1 of the year following the breaching of the dam; and that all in-water work associated with the installation of temporary and

¹³ *Id.* at 187.

¹⁴ *Id.* at 186.

¹⁵ PacifiCorp's surrender application indicated that construction of the drain tunnel would occur in September before the dam breach, but both the description of the work and PacifiCorp's commitment to delay work that would affect water quality until October 1 suggested that this would not involve in-water work. Project Removal Summary at 3 and 7, and attached schedule.

¹⁶ We understand this to mean that the tunnel shall breach the dam only during this period.

permanent replacements for the municipal water line that crosses the reservoir, the structural improvements to Northwestern Lake Bridge, and the relocation of the Mt. Adams Orchard water intake, as well as an extension of a boat launch at Northwestern Lake Park, shall be completed by August 31 following the breaching of the dam.

36. Ordering Paragraph (D), unlike the certification, would prohibit in-water work in connection with the Northwestern Lake Bridge improvements, the water and gas line crossings, the water intake structure, excavation of sediment and large woody debris from the upstream face of the tunnel, and excavation of the drain tunnel before October, the month in which the dam is to be breached. In addition, although the certification requires much of the in-water work to be completed by August 31 following the dam breach, it does not, unlike Ordering Paragraph (D), prohibit other in-water work, such as work done in connection with implementing management plans, from occurring later.

37. While we continue to agree with staff's assessment that the recommended limitations would minimize the harm to anadromous fish that in-water work related to project removal could cause, the restrictions we imposed would interfere with PacifiCorp's ability to take necessary actions before draining the reservoir and to implement post-removal restoration measures. These actions and measures will, in the long term, benefit anadromous fish and other resources, and they justify less rigid in-water work limitations than we have imposed. Moreover, very little of this in-water work would occur outside of low-flow months or beyond the two calendar years during which actual project removal would occur. A schedule of in-water work attached as Exhibit B to PacifiCorp's rehearing request indicates that: only bridge stabilization work would be done before July 2011; demolition of the dam should be completed by September 21, 2012; other work occurring in 2012 after September 21 would be limited to sediment management, woody debris management to clear obstructions to fish passage, and revegetation of stable areas of the former reservoir; and only wetlands management would involve in-water work after 2012. The in-water work done after September 21, 2012, would not involve removal of the remains of the project facilities and would likely not be of such a nature as to affect additional year-classes of anadromous fish.

38. We will revise Ordering Paragraph (D) of our Surrender Order to modify the restrictions on PacifiCorp's in-water work. The revised ordering paragraph will permit in-water work beginning in June 2011 and extending through December 2015 in order to implement the requirements of Commission approved plans contained in the Surrender Order. However, such activities as excavation of the drain tunnel and removal of the lowest portions of the dam should still be undertaken only during low flow months. Since section 4.5 of the water quality certification provides that excavation of the drain tunnel shall occur only in July through November, there is no need to include a similar requirement in Ordering Paragraph (D). On the other hand, the certification contains no time restriction on removal of the lowest portions of the dam.

We continue to believe that this work should be completed by the end of August 2012 to avoid impacts to multi-year classes of anadromous fish. Not only was this PacifiCorp's intention in its original proposal, but the biological opinions issued in 2006 by FWS and NMFS were based on the understanding that removal of the dam would be completed by the end of August in the year following dam breach.¹⁷ As PacifiCorp now anticipates that it would complete this work no later than September 21, 2012, this restriction will not significantly curtail its work time. Therefore, Ordering Paragraph (D) will be revised to provide that this activity shall occur only during July through August 2012.

D. Sediment Management

39. Under Ordering Paragraph (K) of the Surrender Order, PacifiCorp is required to prepare and file an erosion and sediment control plan with provisions to stabilize disturbed areas by grading to a slope and then armoring or vegetating the slope, to remove all dredged and excavated materials from the bed and banks of water areas to an approved upland disposal site, and to remove all temporary fill and other materials placed in the river. PacifiCorp is concerned that these requirements may conflict with the proposal for sediment management contained in two of its management plans, the August 8, 2010 Sediment Assessment, Stabilization, and Management Plan and the January 15, 2010 Project Removal Design Report.

40. PacifiCorp explains that the approach to sediment management in the Sediment Assessment, Stabilization, and Management Plan is a refinement of the approach outlined in the Removal Plan Summary and the Beck Report that were filed with the Commission. PacifiCorp, Washington DOE, and other stakeholders now acknowledge that much of the sediment accumulated in Northwestern Lake will ultimately erode and be transported down the White Salmon River and potentially into the Columbia River. Reflecting this, the refined sediment management approach does not seek to prevent this result through armoring or revegetating the banks but rather seeks to maximize sediment transport as rapidly as possible to speed the achievement of a stable riverine environment in the former reservoir area. Section 4.3.3 of the water quality certification requires PacifiCorp to implement this approach. PacifiCorp requests clarification that the requirements of Ordering Paragraph (K) do not preclude the actions proposed in the management plans. If the management plans are inconsistent with our order, PacifiCorp requests that we revise Ordering Paragraph (K) to make its requirements consistent with the new sediment management approach.

¹⁷ See FWS Biological Opinion, Filed January 23, 2006, at 2; NMFS Biological Opinion, Filed October 12, 2006, at 48-55.

41. In the Final Supplemental EIS, Commission staff concluded that draining Northwestern Lake as quickly as possible, which would involve eroding and transporting sediments trapped within the reservoir, would result in severe suspended sediment concentrations and degraded water quality; however within one year of draining the reservoir, water quality would return to background conditions.¹⁸ Overall, the environmental effects associated with the erosion and transport of sediment from within the reservoir would be minimized by facilitating the movement of sediment downstream as quickly as possible and by enabling the river to attain a stable, free-flowing condition in as short a time as possible. Therefore, we find that PacifiCorp's revised approach to sediment management is environmentally acceptable.

42. The erosion and sediment control plan required by Ordering Paragraph (K) is to include provisions 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 bodies; 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; and ensure that all temporary fill and other materials placed in the waters of the river are completely removed immediately upon completion of construction activities. These provisions are designated as items (1), (7), and (8), respectively, of Ordering Paragraph (K). As PacifiCorp notes, Ordering Paragraph (K) provides that the erosion and sediment control plan provisions are subject to an exception "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)." Arguably, this exception would allow PacifiCorp to pursue its revised sediment management approach without creating a conflict with items (1), (7), and (8), but, in that case, it is not clear that any purpose would be served by retaining those items. To avoid any ambiguity or extraneous requirements in the provisions of Ordering Paragraph (K), we will delete items (1), (7), and (8) as they appear in the Surrender Order and renumber the remaining provisions.

43. PacifiCorp previously proposed to dispose of dredged materials by removing them to an upland storage site, and, as noted, Ordering Paragraph (K)(7) provides that the erosion and sediment control plan include a provision for removal to an approved upland disposal site. PacifiCorp explains that it now plans to dredge sediment from the upstream face of the dam prior to breaching it and then to deposit the dredged material back into Northwestern Lake rather than dispose of it in an approved upland storage

¹⁸ Final Supplemental EIS at 159.

site. PacifiCorp seeks clarification that this sediment disposal method is consistent with the requirements of Ordering Paragraph (K) and, if it is not, asks that we revise our order to make the return of this dredged material to Northwestern Lake permissible. As noted above, we are deleting item (7) of Ordering Paragraph (K). Nevertheless, as PacifiCorp's revised proposal for removal of dredged materials is different from the proposal on which our Surrender Order was predicated, it is necessary to consider the revised proposal here.

44. The Beck Report states that there are approximately 2.42 million cubic yards of sediment trapped within Northwestern Lake, 1.6 million cubic yards of which would be flushed from Northwestern Lake in the first year after dam removal.¹⁹ PacifiCorp's Project Removal Design Report states that an area 40 feet deep, 50 feet wide, and extending 75 feet upstream of Condit dam would be excavated, for a total of 5,556 cubic yards of sediment to be deposited within Northwestern Lake.²⁰ Overall the amount of sediment proposed to be removed from the upstream face of the dam and deposited back into Northwestern Lake would contribute an insignificant amount of additional sediment to Northwestern Lake, compared to PacifiCorp's previous proposal. Therefore, although the proposal contained in the Project Removal Design Report differs from PacifiCorp's previous proposal, we conclude that implementing this revised approach would not be likely to have any significant environmental effects.

E. Natural Gas Pipeline Protection

45. Ordering Paragraph (E) of the Surrender Order requires PacifiCorp to file a Project Removal Plan, including a plan to protect or replace the natural gas pipeline that crosses the White Salmon River, about 2.1 miles north of Condit dam. The Erosion and Sediment Control Plan required by Ordering Paragraph (K) of the Surrender Order is to address, among other things, work associated with mitigating the effects of dam removal on the natural gas line. PacifiCorp states that the pipeline owner, Northwest Pipeline GP (Northwest), provided drawings in the Commission's record for this proceeding indicating that the gas pipeline is buried in bedrock beneath the surface of the river. PacifiCorp also notes that the Beck Report found that the existing pipeline design might be adequate to withstand dam removal without remediation, but PacifiCorp included a cost estimate for limited remediation in case it turned out that capping of the pipeline would be required. This Beck Report recommendation was included in PacifiCorp's application for project removal.

¹⁹ Beck Report at 3-4.

²⁰ Project Dam Removal Design Report at 12.

46. PacifiCorp objects to the inclusion in our order of the requirement to file a plan for remediation or relocation of the gas pipeline. It emphasizes that, in its application, it did not propose to take responsibility for the ultimate costs of pipeline remediation or maintain that relocation of the gas line would be necessary. Moreover, PacifiCorp states, Washington DOE, in its SEPA review, concluded that it would be unnecessary to require either PacifiCorp or Northwest to take any action to protect the pipeline prior to breaching the dam.

47. PacifiCorp requests that we eliminate the requirements to address the natural gas pipeline. It believes that Northwest is better suited than PacifiCorp to determine whether dam removal poses a credible threat to the safety of its pipeline and to develop a remediation plan if one is necessary but states that Northwest has declined PacifiCorp's requests that Northwest survey the pipeline. PacifiCorp requests that we order Northwest to prepare a pipeline protection plan, in consultation with PacifiCorp, to determine whether remediation is needed prior to dam removal and that we not require protection or relocation of the gas pipeline if the protection plan reasonably demonstrates that no remediation is necessary. In the alternative, PacifiCorp requests that we state that any Commission requirement for PacifiCorp to perform gas pipeline remediation shall not prejudice its right to seek contribution or indemnification from third parties.

48. It is unclear from the record that the removal of Condit dam and the draining of Northwestern Lake would have any adverse effects on the gas pipeline that would warrant requiring mitigation measures. Northwest itself has not appeared in this proceeding to express concern about such adverse effects. Moreover, as PacifiCorp points out, in other cases involving license surrender and dam removal, we have declined to require a licensee to mitigate impacts on third-party structures and have stated that responsibility for any such impacts would be determined by state law.²¹ Therefore, we will remove requirements that relate to measures for protection or replacement of the gas pipeline from Ordering Paragraphs (E) and (K) of the Surrender Order. Any future problems that may arise from the relationship between the gas pipeline and changed river conditions resulting from the draining of the lake will be a matter for PacifiCorp and Northwest to resolve.²²

²¹ See *Portland General Electric Company*, 107 FERC ¶ 61,158, at P 27-33 (2004); *FPL Energy Maine Hydro, LLC*, 106 FERC ¶ 61,038, at P 53-55 (2004).

²² In any case, we would decline to require Northwest to prepare a pipeline protection plan because jurisdiction over pipeline safety rests with the Department of Transportation. See, e.g., *Williams Gas Central Pipelines, Inc.*, 96 FERC ¶ 61,084, at 61,361 (2001) (stating that “the Department of Transportation (DOT) has exclusive jurisdiction over the safety of gas pipelines”).

F. Fish Protective Pockets

49. Ordering Paragraph (N) of the Surrender Order requires PacifiCorp to file a plan to allow anadromous fish to safely pass the dam site during removal by excavating a series of protective pockets in each of the walls of the drain tunnel to allow fish to rest during upstream passage. The protective pocket measure was proposed in the Project Removal Summary submitted as part of the surrender application. PacifiCorp explains that, in the intervening years, it, Washington DOE, and other members of a working group that includes the Washington Department of Fish and Wildlife (Washington DFW), the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (FWS), and the Yakama Indian Nation have reconsidered the use of these protective pockets. PacifiCorp and these entities have concluded that the protective pockets are not only unlikely to be effective but might actually interfere with upstream fish migration during project removal by providing irregularities in the drain tunnel that could lead to intermittent debris jams. Therefore, PacifiCorp requests that we revise Ordering Paragraph (N) to require it to file a plan addressing upstream passage of anadromous fish at the dam site during removal, with the provision that such a plan might involve taking no action if such a result is supported by the consulting agencies.

50. The intent of staff's recommendations in the Final Supplemental EIS was to minimize the effects of dam removal activities on anadromous fish species attempting to migrate past Condit dam after the tunnel had been excavated and the reservoir had been drained. As a result, to facilitate upstream fish passage, staff supported PacifiCorp's recommendations contained in the settlement agreement and Removal Plan Summary to install protective pockets and to remove the existing cofferdams located upstream of Condit dam. We have no reason to insist on this approach in light of further analysis by state and federal fisheries agencies indicating that fish protective pockets might be ineffective or harmful. Therefore, it would be beneficial to explore other options for providing upstream fish passage, as PacifiCorp suggests. Specifically, options that would avoid debris jams within the drain tunnel should be considered. Therefore, we have revised Ordering Paragraph (N) of our Surrender Order by eliminating the requirement for a plan to excavate fish protective pockets and replacing it with a requirement for an anadromous fish upstream passage plan. Revised Ordering Paragraph (N) also provides that, if the agencies to be consulted in the development of this plan collectively support the taking of no action by the licensee to aid in the upstream passage of anadromous fish, the 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.

G. Sediment Mapping and Testing

51. The Reservoir Sediment Assessment and Stabilization Plan required by Ordering Paragraph (M) of the Surrender Order is to contain a description of methods for the geotechnical testing and analysis of sediments remaining after lowering the reservoir to

stream level, including sediments at the reservoir tributary mouths ((M)(2)), and maps showing the location, thickness, and geotechnical characteristics of those remaining sediments ((M)(3)). Because PacifiCorp now seeks to quickly move downstream as much reservoir sediment as is practicable, and to allow the natural process of high water events to aid this effort, it does not expect significant quantities of sediment to remain in the former reservoir area or in the mouths of reservoir tributaries. PacifiCorp proposes topographic mapping of the reservoir after breach using Light Detection and Ranging (LiDAR) aerial survey data, which would be compared to 1912 topographical survey data to estimate the location, thickness, and volume of remaining sediments. Additional data would be gathered by visual observation documenting remaining sediment conditions. PacifiCorp is concerned that the requirements of Ordering Paragraph (M)(2) and (3) could require data that is unnecessary to mitigating the impacts of dam removal. It requests clarification whether it can satisfy provisions (2) and (3) using its revised approach rather than subsurface geotechnical testing. In the alternative, PacifiCorp asks us to revise those two elements to allow such an approach.

52. We believe that using LiDAR aerial mapping data and conducting visual observation through pedestrian surveys would suffice in documenting the characteristics, including location and thickness, of the remaining sediments. Accordingly, we have revised Ordering Paragraph (M) of the Surrender Order by deleting provision (M)(2) and by modifying provision (M)(3) to specify the development of a plan to conduct aerial mapping using LiDAR and pedestrian surveys to prepare the necessary maps. We have also deleted references to geotechnical characteristics and geotechnical testing in provisions (3) and (6).

H. Separate Plans for Bridge Stabilization and Water Line Relocation

53. A 14-inch-diameter water line owned by the City of White Salmon crosses the reservoir about 1 mile upstream from Condit dam, and Northwestern Lake Bridge crosses the project reservoir about 1.8 miles upstream from the dam. The restoration of riverine conditions through the river channel now inundated by the reservoir could cause scouring and abrasion of the bridge pilings and the sediments that support or bury the waterline. Ordering Paragraph (E) of the Surrender Order requires that the Project Removal Plan include a plan for stabilizing Northwestern Lake Bridge to the specifications of the Klickitat County Department of Public Works, Office of the County Engineer, and for relocating the City of White Salmon water line.

54. PacifiCorp requests that we revise the order to require separate plans for the bridge and water line work.²³ PacifiCorp notes that both the Project Removal Plan and

²³ As noted earlier, the Project Removal Plan required by Ordering Paragraph (E) also included protection or replacement of the natural gas pipeline. PacifiCorp also requests a separate plan for assessing impacts to the natural gas pipeline if we do not

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the Erosion and Sediment Control Plan of Ordering Paragraph (K), which also involves those activities, must be submitted to the Commission at least 90 days before PacifiCorp begins project removal activities. PacifiCorp explains that work on bridge stabilization and water line relocation will need to be complete before the dam is breached and therefore will need to begin significantly earlier than other project removal activities.

55. PacifiCorp requests that we require a separate Northwestern Lake Bridge Stabilization Plan that includes: a plan to stabilize the bridge before the reservoir is drained in accordance with the specifications approved by Klickitat County consistent with the November 2010 settlement agreement between PacifiCorp and Klickitat and Skamania Counties (the Counties); a detailed sediment and erosion control plan covering the work associated with mitigating the effects of dam removal on the bridge piers; submission of the plan to NMFS, FWS, Washington Fish and Wildlife, Washington DOE, the Corps, and the Counties for comment; and filing of the plan at least 45 days before commencing field work on bridge stabilization, which is to be based on the approach to bridge stabilization agreed to by PacifiCorp and the Counties in their November 2010 settlement agreement.²⁴

56. PacifiCorp requests that we require a separate White Salmon Waterline Relocation Plan that includes: a plan to protect or replace the existing water line crossing of Northwestern Lake; a sediment and erosion control plan covering the work associated with mitigating the effects of dam removal on the water line; consultation with the Counties and a 21-day period for them to comment and make recommendations on the plan; and filing of the plan for Commission approval at least 45 days before commencing work on water line relocation, with the plan for relocation based on the approach currently being pursued by PacifiCorp and the City of White Salmon as outlined in an October 2010 agreement reached by PacifiCorp and the City and attached to the rehearing request.²⁵

grant its request to eliminate the requirement for addressing these impacts. Since, as discussed above, we are eliminating the requirement for protection or replacement of the gas pipeline from the surrender conditions, no further discussion of a separate Natural Gas Pipeline Protection Plan is necessary here.

²⁴ PacifiCorp states that, because it would have to begin field work on bridge stabilization by June 1, 2011, to allow for a 2011 breach of the dam, it would have to submit the bridge stabilization plan for Commission review and approval by March 16, 2011.

²⁵ PacifiCorp states that, because it would have to begin construction on water line relocation by April 1, 2011, to allow for a 2011 breach of the dam, it would have to submit the water line relocation plan for Commission review and approval by
(continued)

57. Because this work must be scheduled and performed in advance of other project removal work, it is reasonable to place the requirements for bridge stabilization and waterline relocation in separate ordering paragraphs. Therefore, we are requiring a separate bridge stabilization plan and a separate water line relocation plan, and we are removing the bridge stabilization and water line relocation provisions from the Project Removal Plan required in Ordering Paragraph (E) of the Surrender Order. We will require both new plans to include an erosion and sediment control plan prepared after consultation with specified entities.²⁶

58. Consistent with its emphasis on the need for early commencement of bridge stabilization and water line work, PacifiCorp, on March 15, 2011, filed a Northwestern Lake Bridge Stabilization Plan and a Water Transmission Line Relocation Plan for Commission approval. Commission staff will review these plans in light of the requirements we have included here.

I. Permitting Generation Until Dam Breach

59. Ordering Paragraph (C) of the Surrender Order requires PacifiCorp to cease project operations no later than October 1, 2011. PacifiCorp requests rehearing of this requirement to allow it to continue project operations until the dam is breached. It explains that, as it and its contractor have progressed in their planning for project removal, it has become clear that it will be necessary to continue to move water through the flowline and to generate power until the dam is breached. PacifiCorp explains that, prior to dam breach, contractors will be engaged in developing the drain tunnel and will be staged on the apron at the toe of the downstream face of the dam in October. If generation ceases before the dam is breached, water will pass the project by way of the spill gate onto the downstream apron of the dam and will make this work impractical and unsafe.

60. The October 1, 2010 deadline for ceasing project operations was simply meant to reflect PacifiCorp's original proposal to cease generation on that date and then

February 14, 2011.

²⁶ PacifiCorp states that it and the City of White Salmon have agreed in principle to a plan to reroute the City's water line over Northwestern Lake Bridge. PacifiCorp argues that, because no in-water work will be done, only consultation with the City and the Counties is needed to prepare the erosion and sediment control plan for the waterline relocation. However, the state and federal fisheries agencies, state water quality agency, the Corps, and the Yakama Nation all have an interest in minimizing erosion and protecting water quality and aquatic resources during the installation of the relocated waterline and should be consulted.

commence dam removal. There is no reason why generation should not continue until the dam is breached, particularly in light of PacifiCorp's explanation of why generation needs to continue until then, and we will revise Ordering Paragraph (C) of the Surrender Order accordingly.

61. Ordering Paragraph (C) of the Surrender Order requires PacifiCorp to commence removal of the dam and other project facilities in October 2011. PacifiCorp requests clarification that this provision does not prohibit it from engaging in necessary preliminary activities such as stabilizing Northwestern Lake Bridge, relocating the water line, or constructing the drain tunnel before that time. PacifiCorp requests that Ordering Paragraph (C) be revised if it does in fact prohibit such activities.

62. Northwestern Lake Bridge and the City's water line are not licensed project works, and the proposed measures relating to them would not constitute removal of project facilities. We have already noted in our Surrender Order that construction of the drain tunnel and certain other work would be done before October 1.²⁷ Ordering Paragraph (C) does not prohibit these measures from being undertaken.

J. Other Modifications to the Surrender Order

63. In addition to the revisions to the conditions in our Surrender Order that have been described above, we are modifying other conditions in that order, principally to eliminate redundancies with the conditions of the water quality certification.

64. Ordering Paragraph (L) of the Surrender Order requires the licensee to file a woody debris management plan. Such a plan is also required by section 4.3.4 of the water quality certification. Therefore, we will delete Ordering Paragraph (L) to avoid a duplicative requirement. However, PacifiCorp will still be required to submit the plan required by the certification, as well as any subsequent changes to that plan, to the Commission for approval.

65. Ordering Paragraph (O) of our Surrender Order requires the licensee, after consultation with named entities, to file for Commission approval a plan for removal of the cofferdams in the reservoir that were used in the construction of the dam by no later than May 1, 2012. The plan is to include a detailed description of how the licensee will remove the cofferdams, including measures to control sedimentation and erosion, and an implementation schedule. Section 4.5 of the water quality certification provides that the cofferdam used during construction of the dam shall be removed by May 1 of the year following the breaching of the dam. Since this timing requirement is included in the certification, Ordering Paragraph (O) is unnecessary and will be eliminated.

²⁷ Surrender Order, 133 FERC ¶61,232 at P 14.

66. Ordering Paragraph (V) of the Surrender Order requires the filing of a plan to revegetate areas used for the disposal of spoil materials and equipment staging. Ordering Paragraph (U) of the Surrender Order requires a revegetation and wetlands creation plan for areas affected by removal of the project facilities. Because the requirements of Ordering Paragraph (U) cover the measures required by Ordering Paragraph (V), we will delete Ordering Paragraph (V) as redundant.

The Commission orders:

(A) The requests filed on January 14, 2011, by PacifiCorp for rehearing and clarification, on January 14, 2011, by Washington Department of Ecology for rehearing, and on January 18, 2011, by American Rivers, American Whitewater, and Trout Unlimited for rehearing of the Commission's December 16, 2010 order Accepting License, Authorizing Removal of Project Facilities, and Dismissing Application for New License are granted to the extent indicated in this order and denied in all other respects.

(B) PacifiCorp's motion for stay of certain portions of the Commission's December 16, 2010 order in this proceeding is denied.

(C) PacifiCorp's motion filed April 1, 2011, for an extension of time is dismissed.

(D) Surrender of the license for the Condit Project No. 2342 is made subject to the conditions set forth in Ordering Paragraphs (C) through (Y) of the Commission's December 16, 2010 order in this proceeding, as modified and supplemented by the conditions herein. 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) and Director, Division of Hydropower Administration and Compliance, Office of Energy Projects have issued letters stating that all conditions of the Surrender Order have been satisfied.

(E) This Surrender Order is subject to the conditions submitted by the Washington Department of Ecology under section 401(a)(1) of the Clean Water Act, 33 U.S.C. § 1431(a)(1) (2006), as those conditions are set forth in Appendix A to this order.

(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.

(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.

(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.

(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.

(J) *City of White Salmon Water Line Relocation Plan.* At least 90 days before starting removal activities, the licensee shall file, for Commission approval, a plan to relocate the existing City of White Salmon water line crossing Northwestern Lake to the specifications of the City of White Salmon. The plan shall include a detailed erosion and sediment control plan for any water line relocation activities within the project boundary.

The erosion and sediment control plan for any water line relocation activities within the project boundary shall, at a minimum, include provisions:

- (1) to confine construction impacts to the minimum area necessary to complete the relocation 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 relocation 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 relocation 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 water line relocation 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 water line relocation 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. Water line relocation 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.

(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.

(L) Ordering Paragraph (L) of the Commission's December 16, 2010 order is deleted.

(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.

(N) Ordering Paragraph (N) of the Commission's December 16, 2010 order is modified to read as follows:

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.

(O) Ordering Paragraph (O) of the Commission's December 16, 2010 order is deleted.

(P) Ordering Paragraph (V) of the Commission's December 16, 2010 order is deleted.

(Q) *Commission Approval, Notification, and Filing of Amendments.*

(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.

<i>WQC condition no.</i>	<i>Plan name</i>	<i>Consulting Agencies</i>	<i>Due date</i>
4.2(3)	Any changes to erosion and sediment control plan that occur as a result of the adaptive management approach	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)	As needed
4.3.2(1)	Revisions to the Project Removal Design Report		As needed
4.3.2(4)	Dam Removal Blasting Plan		90 days prior to starting dam removal activities
4.3.2(8)	Any changes to the disposal location of demolition and waste debris		As needed
4.3.2(9)	Final design reports, plans and specifications for concrete rubble disposal in the flowline area		90 days prior to starting dam removal activities

4.3.3(1)	Any changes to the reservoir sediment assessment and stabilization plan	NMFS, FWS, Forest Service, Washington DFW, Washington DOE, Yakama Nation, Corps	As needed
4.3.3(3), (5)	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	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	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	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:

<i>WQC condition no.</i>	<i>Description</i>	<i>Due Date</i>
4.3.2 (9)(a)	Final Design Report for concrete rubble disposal	90 days prior to rubble disposal into the flowline
4.3.2(9)(d)	As-built plans for concrete rubble disposal that include impermeable barrier and culvert locations	Within 60 days of completing final cover of concrete rubble disposal area
4.3.3(3)	Post-reservoir-dewatering assessment progress report	120 days after dam breaching
4.3.3(5)	Stabilization inspection reports of dewatered reservoir	Within 14 days of any inspection
4.3.3(7)	LiDAR survey progress and monitoring reports	By September 30 of each year
4.3.4(1)	Woody debris monitoring reports	By December 31 of each year
4.3.5(9)	Mitigation wetland establishment reports	By September 30 in years one, three, and five after establishing wetlands
5.0 (6)	Hazardous substances spill report	Within five days of a hazardous substances spill

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.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

APPENDIX A

Water Quality Certification Conditions from Order No. 8049, Condit Dam Decommissioning Project (FERC No. 2342) Issued October 12, 2010 by the Washington Department of Ecology

4.0 WATER QUALITY CERTIFICATION CONDITIONS

In view of the foregoing and in accordance with Section 401 of the Clean Water Act (33 U.S.C. §1341), RCW 90.48.260 and Chapter 173-201A, Ecology finds reasonable assurance the proposed project will comply with the applicable provisions of 33 U.S.C. Sections 1311, 1312, 1313, 1316, and 1317, state and federal water quality standards and other appropriate requirements of state law provided the following conditions of the Order are met.

Within this Certification, Ecology is requiring the use of an Adaptive Management process. Adaptive Management means an iterative and rigorous process is used to improve decision-making and achievement of objectives. It is intended to improve the management of natural resources affected by the project in order to achieve desired objectives as effectively and efficiently as possible. The project proponent has incorporated an adaptive management approach into its management plans (Table 1), and this Certification specifies that additional conditions for the project must be included in final plans and actions during the course of the project.

The project will cause brief exceedances of water quality criteria in the White Salmon River and the Columbia River. Longer duration exceedances of the turbidity criteria in the Columbia River, in the White Salmon River, and in the Columbia River adjacent to the mouth of the White Salmon River will occur. However, dam removal will provide permanent benefits to fish, other aquatic life, and recreational uses. Because the current project does not include fish passage facilities, the dam blocks fish access to several miles of habitat upstream of the dam.

In the White Salmon River, within and downstream of the former reservoir, sustained exceedances of the turbidity criterion and any other adverse water quality effects will occur for up to several months after the dam is breached. Brief, intermittent effects may occur thereafter with diminishing frequency for a period that cannot be precisely determined because the effects are dependent on the size and frequency of future flood events. The total duration of exceedances that will occur more than two years after the dam is breached, is unlikely to exceed more than a few days or weeks.

This Certification grants the Applicant a 10-year compliance schedule to attain compliance with water quality standards, as authorized by WAC 173-201A-510(4). Compliance with this Certification constitutes compliance with applicable water quality

standards. During this compliance schedule the Applicant will remove the existing dam structure and minimize the duration of any impacts to water quality, sediment quality, and wetlands. The compliance schedule is comprised of (1) interim limits in the form of requirements to minimize impacts and monitoring and reporting requirements, and (2) a final limit, requiring full compliance with all applicable water quality standards (WAC173-201A) that shall be met by the end of the ten-year compliance schedule. Removal of the dam and achievement of restoration performance criteria and other conditions of this Certification shall constitute the Applicant's compliance with applicable water quality standards. The interim limits include use of an adaptive management approach that will allow adjustments of monitoring and actions as needed during the ten-year compliance schedule and that will help ensure that effects on water quality are minimized and the final limit is met. Specific requirements of the compliance schedule are indicated in the text below and summarized in Attachment A.

4.1 General Conditions

- 1) The Project shall comply with all water quality standards (currently codified in WAC 173-201A), ground water standards (currently codified in WAC 173-200), and sediment quality standards (currently codified in WAC 173-204) and other appropriate requirements of state law that are related to compliance with such standards. Compliance with this Certification constitutes compliance with applicable water quality standards. The conditions in Section 4 provide a detailed strategy to achieve compliance with state water quality standards, as allowed under WAC 173-201A- 510(4), Compliance Schedules. The conditions in Section 4 provide reasonable assurance that the Project will meet water quality standards.
- 2) For purposes of this Order, the term "Applicant" shall mean PacifiCorp Energy and its agents, assignees and contractors.
- 3) For purposes of this Order, all submittals required as conditions shall be sent to Ecology's Headquarters Office Attn: Federal Project Coordinator, P.O. Box 47600, Olympia, WA 98504-7600 or via e-mail (preferred), if possible, to the Coordinator assigned to this project. Notifications shall be made via phone or e-mail (preferred). All submittals and notifications shall be identified with Order No. 8049 and include the Applicant's name, project name, project location, the project contact and the contact's phone number.
- 4) The Applicant shall notify Ecology's Federal Project Coordinator in accordance with condition 4.1(3) above for the following activities:
 - a. At least seven (7) days prior to the pre-construction meeting,
 - b. At least seven (7) days prior to the onset of initiating work on the project site,

- c. At least seven (7) days prior to the dam breaching,
- d. At least seven (7) days within project completion,
- e. Immediately when the project is out of compliance with any conditions of this Order,
- f. Immediately notify Ecology's Southwest Regional Office at 360-407-6300 and within 24 hours of spills to Ecology's Federal Project Coordinator for any spills to water or ground,
- g. Notify the National Response Center at 1-800-424-8802 for spills to water.

- 5) Work authorized by this Order is limited to the work described in the JARPA received by Ecology on July 14, 2009, Project Removal Design Report dated January 15, 2010 and the following Management Plans, unless otherwise authorized by Ecology.

Plan Name	Prepared By	Date
Aquatic Resources Protection Plan & Appendix B	Inter-fluve and Kleinfelder	May 29, 2009
Dust Control Plan	Mead & Hunt and Kleinfelder	May 27, 2009
Environmental Monitoring Plan	Mead & Hunt and Kleinfelder	September 22, 2010
Erosion Control Plan	Kleinfelder	January 6, 2010
Historic Properties Management Plan	Mead & Hunt	September 15, 2010
Public Safety and Traffic Control Plan	HDR and Kleinfelder	May 28, 2009
Quality Control and Inspection Program	Mead & Hunt and Kleinfelder	May 28, 2009
Recreation Facility Removal and Improvement Plan	Green Works and Kleinfelder	June 3, 2009
Revegetation and Wetlands Management Plan	Green Works and Kleinfelder	January 4, 2010

Sediment Assessment, Stabilization, and Management Plan	Inter-fluve and Kleinfelder	January 8, 2010
Spill Prevention, Control and Countermeasure Plan (SPCC Plan)	PacifiCorp Energy	June 8, 2009
Woody Debris Management Plan	Inter-fluve and Kleinfelder	May 29, 2009

- 6) The Applicant shall obtain Ecology review and approval before undertaking any change to the proposed project that might significantly and adversely affect water quality (other than project changes required or considered by this Order).
- 7) Within 30 days of receipt of updated information, Ecology will determine if the revised project requires a new water quality certification and public notice or if a modification to this Order is required.
- 8) This Order shall be rescinded if the Corps of Engineers does not issue a Section 404 Permit and/or FERC does not issue a FERC license.
- 9) Copies of this Order and associated permits, licenses, and approvals shall be kept on the project site and readily available for reference by Ecology personnel, the construction superintendent, construction managers and lead workers, and state and local government inspectors.
- 10) The Applicant shall provide access to the project site, all staging areas and all mitigation sites upon request by Ecology personnel for site inspections, monitoring, necessary data collection, and/or to ensure that conditions of this Order are being met.
- 11) Nothing in this Order waives Ecology's authority to issue additional orders if Ecology determines that further actions are necessary to implement the water quality laws of the State. Further, Ecology retains continuing jurisdiction to make modifications hereto through supplemental orders if additional impacts due to project construction or operation are identified (*e.g.*, violations of water quality standards, downstream erosion, etc.), or if additional conditions are necessary to further protect water quality. The Applicant reserves all rights to challenge Ecology's authority to issue additional orders or to make modifications to this order, and to challenge the substance of any additional orders or modifications to this Order.

- 12) In the event of changes or amendments to the state water quality, ground water quality, or sediment standards, or changes in or amendments to the state Water Pollution Control Act (RCW90.48), or changes in or amendments to the Clean Water Act, Ecology will issue an administrative order to incorporate any such changes or amendments applicable to this project. The Applicant reserves all rights to challenge Ecology's authority to issue an administrative order under this condition and to challenge the substance of any administrative order issued pursuant to this condition.
- 13) The Applicant shall ensure that all project engineers, contractors, and other workers at the project site with authority to direct work have read and understand relevant conditions of this Order. The Applicant shall provide Ecology a signed statement (see Attachment B for an example) from each signatory that she/he has read and understands the conditions of this Order. These statements shall be provided to Ecology 15 days prior to starting on-site work. For those project engineers, contractors and other workers that start working on the project after it has started, the signed statements shall be submitted to prior directing work.
- 14) Failure of any person or entity to comply with the Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

4.2 Upland Activities including Equipment and Staging Areas

- 1) The Applicant shall obtain and comply with the current National Pollutant Discharge Elimination System Construction Stormwater General Permit (NPDES Permit) for this project.
- 2) *Interim Limit.* The Applicant shall submit a final "Erosion Control Plan" which includes any changes and/or additions required by this Order to Ecology's Federal Project Coordinator for review and approval at least 90 days prior to initial project mobilization. Once approved by Ecology the Applicant shall implement the approved plan.
- 3) *Interim Limit.* If changes to the "Erosion Control Plan" occur as part of the Adaptive Management process the Applicant shall submit a revised plan to Ecology for review and approval prior to implementing the changes.
- 4) All environmental sensitive areas including but not limited to, wetlands, wetland buffers, and mitigation areas that are not to be disturbed shall be clearly marked (by site preservation line or flagging) prior to commencing construction and/or demolition activities. These areas shall be protected throughout construction of the project.

- 5) Extreme care shall be taken to ensure that no petroleum projects, hydraulic fluid, fresh cement, foreign sediments or chemicals, or any other toxic or deleterious construction materials are allowed to enter or leach into the river.
- 6) *Interim Limit.* All temporary roads and staging areas related to the construction and/or demolition work shall be removed within 1-year of the dam breach, unless access is needed to fulfill obligations of the revegetation and mitigation plan(s). The Applicant shall notify Ecology's Federal Project Coordinator within one week after the last area has been removed and restored.
- 7) All construction and/or demolition debris and materials temporarily stored on-site shall be placed in a manner that does not adversely affect waters of the state, including wetlands, unless otherwise authorized by Ecology.
- 8) Staging areas,²⁸ storage areas, and stockpile sites²⁹ shall be located a minimum of 50 feet and, where practicable 200 feet from waters of the state, including wetlands, unless otherwise conditioned in this Order. If any of these areas or sites must be located within 50 feet of a water of the state, then the Applicant shall notify Ecology's Federal Project Coordinator, per condition 4.1(4) for written approval prior to using those areas or sites.
- 9) Equipment and vehicle-fueling shall not occur within 50 feet of waters of the state, including wetlands, unless authorized by Ecology.
- 10) Fuel hoses, oil drums, oil fuel transfer valves and fittings, etc. shall be maintained on upland areas in order to prevent contamination of surface waters.
- 11) Wash water containing oils, grease, or other pollutants shall not be discharged into state waters. The Applicant shall set up a designated area for washing equipment.
- 12) Cleaning solvents or chemicals used for tool or equipment cleaning shall not be discharged to the ground or waters of the state, including wetlands.

²⁸ A staging area is a location on the project site where materials are brought from off-site or from a stockpile site or storage area to be cued up for near term use.

²⁹ A stockpile or storage area is a location where large amounts of material are stored for future use on a project.

4.3. General In-water Activities

- 1) For the purpose of the Order any work below the Ordinary High Water Mark (OHWM) of Northwestern Lake shall be considered in-water work, until a new OHWM is designated for the White Salmon River within the reservoir area.
- 2) The Applicant shall implement the following conditions for all in-water activities in addition to any activity specific condition within the Order, unless approved by Ecology.
 - a. Equipment authorized to work in flowing waters shall be free of any external petroleum products and all drive mechanisms (wheels, tracks, tires, etc.) shall be pressure-washed to remove accumulations of soil or other materials.
 - b. The Applicant shall use biodegradable hydraulic fluid for all equipment used below the Ordinary High Water Line.
 - c. The Applicant shall implement instream BMPs per the project management plans during these in-water activities (e.g., use of silt curtains).

4.3.1 Northwestern Lake Bridge

- 1) *Interim Limit.* Sixty (60) days prior to implementing either Alternatives 2 or 3 identified with PacifiCorp's letter dated August 27, 2010, PacifiCorps shall submit final design, plans and drawings to Ecology for review and approval.
- 2) The Applicant shall implement the following conditions for both the Sheet Pile Alternative 2 and the Drilled Shaft Piers Alternative 3:
 - a. Minimize disturbance of vegetation when constructing the temporary access road and work platforms. The Applicant shall install erosion control mats and/or silt fencing in work areas adjacent to the river.
 - b. The Applicant shall install silt curtains during sheet pile installation.
 - c. All forms for concrete shall be completely sealed to prevent the possibility of fresh concrete entering waters of the state.
 - d. All concrete shall be completely cured prior to coming into contact with water.
 - e. Concrete process water shall not enter waters of the state. Any concrete process/contact water discharged from a confined area with curing concrete shall be routed to upland areas to be treated and infiltrated or disposed of appropriately with no possible entry to state waters.
 - f. Turbid de-watering water associated with in-water work shall not be

discharged directly to waters of the state, including wetlands. Turbid de-watering water shall be routed to an upland area for on-site or off-site settling.

g. Clean de-watering water associated with in-water work that has been tested and confirmed to meet water quality standards may be discharged directly to waters of the state including wetlands. The discharge outfall method shall be designed and operated so as not to cause erosion or scour in the channel, banks, or vegetation.

h. No flocculants shall be used as a BMP for treatment of turbid water associated with in-water work, without prior authorization from Ecology.

- 3) The Applicant shall implement the following conditions for the Sheet Pile Alternative 2:
 - a. Backfill the cofferdam and concrete crib structures with granular fill to finish grade elevations.
 - b. Redirect existing drainage culverts to prevent scour near the base of the bridge supports.
 - c. Riprap and other structural material shall be free of fines or other extraneous material.

- 4) The Applicant shall implement the following conditions for the Drilled Shaft Piers Alternative 3:
 - a. No structural material may enter waters of the state during demolition of the old pier foundations.
 - b. All excavated material shall be placed in a manner that it does not enter waters of the state including wetlands.

4.3.2. Dam Decommissioning

- 1) The Applicant shall conduct dam decommission as described in "Project Removal Design Report" prepared by Mead & Hunt and Kleinfelder dated January 15, 2010, except as modified in this Order or revised and approved by Ecology.

- 2) The Applicant shall update the 2004 list of downstream water users and submit the updated list to Ecology 90 day's prior dam removal. The Applicant shall use the updated list to notify the downstream users at least 30 days prior to dam removal.

- 3) During activities to remove concrete, including drilling and blasting, containment measures shall be in place to minimize, to the extent feasible, the amount of

- concrete debris that inadvertently enters the reservoir, the White Salmon River, or other surface waters.
- 4) *Interim Limit.* The Applicant shall prepare and submit a Blasting Plan to Ecology for review and approval at least 90 days prior to commencing blasting activities. Once approved the Applicant shall implement the plan.
 - 5) The Applicant shall construct the drain tunnel with a slight bell shape with the largest diameter downstream.
 - 6) If water is used in drilling the drain tunnel the Applicant shall collect as much drill water as possible and remove it from the site. The Applicant shall notify Ecology where the drill water will be disposed of.
 - 7) The Applicant shall take measures to prevent clogging of the tunnel. If the tunnel becomes clogged the Applicant shall take immediate measures to clear the clog.
 - 8) All demolition debris and other waste material shall be properly managed and disposed of as described in the "Project Removal Design Report and Management Plans," unless otherwise approved by Ecology.
 - 9) The following conditions are required as part of the Ecology's approval to dispose of concrete rubble within the flowline area:
 - a. *Interim Limit.* The Applicant shall submit a final design report, plans and specification to Ecology for review and approval 90 days prior to disposing any concrete rubble into the flowline area.
 - b. The Applicant shall maintain daily records of the amount of concrete rubble that is disposed of within the flowline area. These records shall be provided to Ecology upon request.
 - c. *Interim Limit.* The Applicant shall notify Ecology 30 days prior to completing final grade and stabilization.
 - d. *Interim Limit.* Within 60 days of completing the final cover, the Applicant shall submit as-built plans that include locations of impermeable barriers and culverts.
 - e. *Interim Limit.* Within 90 days of completing the final cover the Applicant shall record maps and a statement of fact concerning the location of the concrete rubble as part of the deed with the county auditor.

4.3.3 Sediment Management and Monitoring

- 1) The Applicant shall manage and monitor the sediments as described in "Sediment Assessment, Stabilization, and Management Plan" prepared by Interfluve and Kleinfelder dated January 8, 2010, except as modified in this Order or revised and approved by Ecology.
- 2) The Applicant shall conduct a post-reservoir-dewatering assessment following the dewatering of Northwestern Lake. The assessment shall:
 - Map sediment remaining in the reservoir, including tributary mouths
 - Estimate the quantity of sediment remaining within the reservoir
 - Evaluate the stability of remaining slopes and banks in the reservoir and determine corrective actions if necessary,
 - Evaluate fish passage conditions through the former reservoir.
- 3) *Interim Limit.* The Applicant shall submit a post-reservoir-dewatering assessment progress report to Ecology for review within 120 days after breaching the dam. The report shall document progress achieved toward stabilizing the reservoir bed and removing sediment that may impede fish passage. The report shall also include a plan for additional measures that may be necessary to stabilize remaining sediments within the reservoir and any corrective actions taken or needed on unstable slopes. If additional measures or corrective actions are included in the progress report the Applicant shall not implement those measures or actions until approved by Ecology.
- 4) *Interim Limit.* If the Applicant determines that blasting is needed to collapse unstable slopes within the former reservoir area or to remove or dislodge debris from the reservoir, a blasting plan shall be prepared and submitted to Ecology for review and approval one week prior to the planned date of action. The blasting plan shall document the exact location and timing of blasting activities and the necessary safety measures to be employed during execution of the blasting plan. Blasting shall be confined to daylight hours.
- 5) *Interim Limit.* After the reservoir is drained and initial stabilization efforts are completed, the Applicant shall conduct routine field inspections of the reservoir area and of the downstream portion of the White Salmon River. These inspections shall be conducted initially after 1-2 year recurrence interval floods or rainfall events or less if determined to cause sediment mobilization or slope instability until stabilization efforts have become successfully established. After stabilization efforts are functioning successfully inspections shall occur after flood events greater than 5-year recurrence interval. These inspections shall identify unstable slopes, debris jams, fish passage problems, and develop

strategies to address the observed conditions. The Applicant shall submit an inspection report to Ecology within 14 days of the inspection; unless corrective action is needed. If corrective action is needed then the Applicant shall submit an inspection report and corrective action plan to Ecology for review and approval prior to implementing the corrective action.

- 6) *Interim Limit.* The Applicant shall prepare a report that compares observed sediment transport dynamics and geomorphic response to assumptions and modeling results presented in the 2004 Sediment Behavior Analysis. A preliminary report will be submitted 60 days after the breach or sooner if sediment transport and geomorphic response exceeds presumed conditions. The final report shall be submitted to Ecology 120 days after the dam is breached.
- 7) *Interim Limit.* The Applicant shall submit results of the LiDAR surveys including the LiDAR data or processed GIS files to Ecology in an annual progress and monitoring reports to be submitted to Ecology by September 30th of each year.
- 8) The data collected as part of the sediment monitoring program above will be used to determine when the reservoir has attained a stable condition. A stable condition will generally be attained when:
 - Remaining slopes and banks are stable and do not present a public safety risk,
 - The river within the former reservoir area has attained a stable course and channel width,
 - The amount of sediment released from the reservoir is no longer significant, as determined from water quality (turbidity) measurements and from LiDAR sediment mapping and sediment quantity calculations.
- 9) Upon determination by Ecology that the criteria in condition 4.3.3(8) above have been attained, the Applicant may cease monitoring of the project area for the purposes of sediment management. However, monitoring required as part of other management plans will continue based upon the criteria for those specific monitoring efforts.

4.3.4 Woody Debris Management and Monitoring

- 1) *Interim Limit.* The Applicant shall manage and monitor woody debris as described in 'Woody Debris Management Plan prepared by Inter-fluve and Kleinfelder dated May 29, 2009, except as modified in this Order or revised and

approved by Ecology. Monitoring reports shall be submitted to Ecology by the end of the calendar year, starting the calendar year after dam breaching.

- 2) Excavated large woody debris will be removed from the reservoir for offsite disposal and/or used for approved habitat enhancement projects.
- 3) The Applicant shall conduct surveys in the White Salmon River canyon below the dam to identify and dislodge woody debris that may be hindering fish passage or present a threat to public safety. Log jam removal shall only be conducted after consultation with Ecology, Washington State Department of Fish and Wildlife and National Marine Fisheries Service.

4.3.5 Wetland Impacts and Compensatory Mitigation

- 1) The Applicant shall mitigate wetland impacts as described in "Revegetation and Wetland Management Plan - Condit Hydroelectric Project Decommissioning (FERC PROJECT NO. 2342)" (hereafter called the "mitigation plan") prepared by Greenworks and Kleinfelder dated January 4, 2010, except as modified in this Order or revised and approved by Ecology.
- 2) The Applicant shall submit any changes to the mitigation plan due to project changes or adjustments made through the adaptive management process. These changes shall be submitted to Ecology in writing for review and approval before work begins.
- 3) To ensure proper evaluation of the establishment of riverine and slope wetlands, the Applicant's wetland professional must be present during all inspections focused on wetland mitigation. These inspections shall be documented and provided to Ecology upon request.
- 4) Seeding used as a temporary erosion control BMP must be a wetland mix consisting of native and non-invasive plant species.
- 5) The Applicant shall not use hay, straw, or Polyacrylamide as a temporary erosion control BMP on exposed or disturbed soil that are proposed to be riverine or slope wetland.
- 6) Upon completion of site-grading and prior to planting, the Applicant shall submit to Ecology written confirmation that the finished grades are consistent with the approved mitigation plan or subsequent Ecology-approved plan changes. Written confirmation can be a signed letter from the surveyor or project engineer indicating how final elevations were confirmed and whether they are consistent

with the plan. The required information shall be submitted to Ecology no later than 30 days after completion of the project.

- 7) The Applicant shall monitor the mitigation wetland establishment for a minimum of 5 years. The Applicant shall use the monitoring methods described on page(s) 37-42 and pg 45 of the mitigation plan except that the monitoring shall be for 5 years not 2 as mentioned in bullet #5 on pg 29. On page 45, the monitoring period shall be for a period of at least 5 years following dam removal and not "until performance standards have been met for two consecutive years." If contingency plans are needed then the 5 year monitoring period will begin once the contingency plan, as agreed to by Ecology, has been implemented.
- 8) The Applicant shall maintain all plantings at site to meet the mitigation plan's performance standards.
- 9) The Applicant shall submit monitoring reports (one as an electronic file and one hard copy) to Ecology, documenting site conditions at the mitigation site for the years 1, 3, and 5 or as listed in the mitigation plan, and the reports must contain, at a minimum, the information in Attachment C. Monitoring plans shall be submitted to Ecology by September 30th of a given year.
- 10) The Applicant shall revise the mitigation plan to reflect the requirements of condition 4.3.5(7) and 4.3.5(9) above. The revised mitigation plan shall be submitted to Ecology at least 60 days prior to the dam breach for review and formal approval. Dam breach shall not occur until formal approval of the plan.
- 11) When necessary to meet the performance standards, the Applicant shall replace dead or dying plants with the same species, or a native plant alternative appropriate for the location during the first available planting season and note species, numbers, and approximate locations of all replanted materials in the subsequent monitoring report.
- 12) For monitoring year 3, and any subsequent potential delineations, the Applicant shall use the 1997 "Washington State Wetlands Identification and Delineation Manual" (or as updated) to delineate all compensatory wetlands and include delineation information (e.g. data sheets, maps, etc.) in the monitoring reports.
- 13) At the end of the monitoring period, the Applicant shall use the August 2004 "Washington State Wetlands Rating System for {Western or Eastern} Washington" (or as updated) to rate all wetlands (except those that have been preserved), and include the information in the monitoring report.

- 14) If the Applicant has not met all the conditions and performance standards at the end of the monitoring period, Ecology may require additional monitoring and/or additional wetland compensatory mitigation.
- 15) The Applicant's responsibility to complete the required compensatory mitigation as set forth in Condition 4.3.5(1) of this order will not be considered fulfilled until they have received written verification from Ecology.
- 16) If by year 3 after dam breaching at least 4.8 acres of wetland have not naturally established at the former location of Northwestern Lake and downstream, the Applicant shall implement the following contingency plan:
 - Determine the area of wetlands still needed to achieve 4.8 acres through routine delineation,
 - Identify a suitable site within the vicinity of the project area (within the Northwestern Lake footprint, if possible) to be reviewed and approved by Ecology,
 - Develop the details and monitoring procedures in consultation with Ecology,
 - Submit a specific Contingency Plan for the Ecology approved site,
 - Implement actions to develop a wetland(s) on the site,
 - Monitor wetland to verify its establishment for 5 consecutive years.

4.4.0 Environmental Monitoring

- 1) The Applicant shall conduct all environmental monitoring as described in "Environmental Monitoring Plan - Condit Hydroelectric Project Decommissioning FERC PROJECT NO. 2342)" prepared by Kleinfelder, dated September 22, 2010, except as modified in this Order or revised and approved by Ecology.
- 2) *Interim Limit.* The Applicant shall submit a final Environmental Monitoring Plan which includes any changes and/or additions to environmental monitoring required by this Order to Ecology's Federal Project Coordinator for review and approval by Ecology at least 90 days prior to beginning the project. **Work below the OHWM is not authorized to begin until final Ecology approval is received.** Once approved the applicant shall implement the approved plan.

4.4.1 Water Quality Monitoring

- 1) The Applicant shall conduct Water Quality Monitoring per the table #2 below, unless otherwise approved by Ecology.

Table #2

Time Period	Parameter	Locations	Schedule
April – begin 6 months prior to breach, continue until long-term criteria are met	pH, turbidity, stream flow	(1) Confluence of Buck Creek and White Salmon River and (2) Powerhouse	Long-term monitoring with daily data points using fixed monitoring stations and data loggers
September – begin 1 month prior to breach, continue for 9 months (May)	pH	Powerhouse	Continuous in order to capture potential effects from blasting concrete
September – begin 1 month prior to breach, continue until bank stabilization performance criteria are met	Total Suspended Solids (TSS)	(1) Confluence of Buck Creek and White Salmon River and (2) Powerhouse	Weekly grab water sample
October – begin 2 days prior to dredging for drain tunnel, continue until dredging complete	Turbidity	Columbia River Bonneville Pool (mouths of White Salmon River, Little White Salmon River, and Wind River; and at Cascade Locks)	Continuous data logging for turbidity using a fixed monitoring location anchored by a bouy.
October – begin 1 day prior to dam breach, continue for 4 weeks after dam breach	Turbidity	Columbia River Bonneville Pool (mouths of White Salmon River, Little White Salmon River, and Wind River; and at Cascade Locks)	Continuous data logging for turbidity using a fixed monitoring location anchored by a bouy

- 2) *Interim Limit.* Water Quality Monitoring results shall be submitted as outlined below to the Ecology Federal Project Coordinator, per condition 4.1(4), unless otherwise requested by Ecology.

Time Period	Reporting Frequency
From 30 days prior to the dam breach	Weekly
Day of the dam breach	Within 24 hours of the breach
Week following the breach	Daily (submit the following morning)

1 st month following breach	Weekly
6 months following the breach	Monthly
Year(s) after the breach	September 30 th of each year for 10 years. (Note: This information can be part of the annual report required)

- 3) *Interim Limit.* If at any time changes to the Water Quality Monitoring Plan occur as part of the Adaptive Management process the Applicant shall submit a revised Environmental Monitoring Plan to Ecology for review and approval by Ecology. Once approved the applicant shall comply with the approved plan.

4.4.2 Sediment Quality Monitoring

- 1) *Interim Limit.* The Applicant shall prepare final Sampling and Analytical Plan(s) (SAP) to be submitted for review and approval to the Project Review Group (PRG) of the Regional Sediment Evaluation Team (RSET) a minimum of two months prior to sampling. The SAP(s) will encompass sediment testing (methyl mercury and total mercury) and bioaccumulation testing (total mercury). The SAP(s) shall be maintained and upgraded as necessary throughout the project. Sediment sampling field staff shall read the SAP(s) prior to conducting the monitoring activity and sign a sheet attached to the SAP that states the staff person has read the SAP(s). Sediment sampling equipment will be used in accordance with the SAP(s) and manufacturer's recommendations. Once approved the Applicant shall implement the SAP(s).
- 2) The Applicant shall monitor sediments in the Columbia River to evaluate sediment quality and mercury content as follows:
 - a. The Applicant shall collect sediment samples from four sites in the Columbia River. Three sites will be located downstream of the Condit dam, and one site is located upstream of the White Salmon River mouth (upstream control) at the mouth of the Klickitat River.
 - b. The Applicant shall ensure that fine-grained materials are collected from the four sediment sampling locations. Prior to collecting the sample the Applicant shall collect near-surface sediment and visually confirm the fine-grain nature of the materials. The sampling location will be adjusted,

as appropriate, based on field observations if needed. The location of the sediment sampling locations will be documented using GPS.

c. The applicant shall have sampling events prior to the dam removal, one month after dam removal, and one year after the initial post-dam removal sampling. Additional sampling events may be required if post-dam removal data indicate the system has not achieved pre-dam removal levels.

d. The Applicant shall have the sediment samples evaluated for grain size, mercury concentrations, and total organic carbon (TOC). Mercury content shall be evaluated both in the total sample collected (methylmercury) and a subsample that consists of only the fine-grained sediment portion (total mercury).

3) The Applicant shall run bioaccumulation tests from a single site in the Columbia River to evaluate mercury bioavailability.

a. The Applicant shall collect sufficient sediments from the mouth of the White Salmon River to obtain five (5) separate analyses for total mercury from laboratory bioaccumulation tests (*Lumbriculus*).

b. The Applicant shall ensure that fine-grained materials are collected from the sediment sampling locations. The sampling location will be adjusted, as appropriate, based on field observations if needed. The location of the sediment sampling locations will be documented Using GPS.

c. The applicant shall have sampling events prior to the dam removal, one month after dam removal, and one year after the initial post-dam removal sampling. Additional sampling events maybe required if post-dam removal data indicate the system has not achieved pre-dam removal levels.

d. The Applicant shall have *Lumbriculus* from the laboratory bioaccumulation assays evaluated for total mercury concentrations.

4) *Interim Limit.* Results from each sampling event shall be reported to Ecology within 45 days from sampling.

4.5 Timing Requirements

- 1) This Order and Compliance Schedule is valid ten years from the date of issuance of this Order.
- 2) Excavation of the drain tunnel shall occur only during July through November.
- 3) The tunnel shall only be breached between October 1 and November 30.
- 4) Excavation of sediment and large woody debris from the upstream face of the tunnel shall occur prior to breaching the tunnel, but not before September 15.
- 5) *Interim Limit.* The cofferdam used during the construction of the dam shall be removed by May 1 of the year following the breaching of the dam. The Applicant must notify Ecology's Federal Project Coordinator within one week of removal of the cofferdam.
- 6) *Interim Limit.* The installation of temporary and permanent replacements for the municipal water line that crosses the reservoir, the structural improvements to Northwestern Lake Bridge, and the relocation of the Mt. Adams Orchard water intake. All in-water work associated with these activities will be completed by the August 31 following the breaching of the dam. The applicant must notify Ecology's Federal Project Coordinator within one week of the required work that the task is complete.
- 7) *Interim Limit.* By August 31 following the breaching of the dam, PacifiCorp shall extend the boat launch at Northwestern Lake Park to the river channel and post additional signs and an interpretive display at the park. The applicant must notify Ecology's Federal Project Coordinator within one week of completion of these activities.
- 8) *Final Limit.* Ten years from the date of this Order the project shall comply with all applicable water quality standards.

5.0 Emergency/Contingency Measures

- 1) The Applicant shall implement actions described in "Spill Prevention, Control and Countermeasure Plan (SPCC Plan) - Condit Hydroelectric Project Decommissioning (FERC PROJECT NO. 2342) prepared by PacifiCorp Energy, dated June 8, 2009 except as modified in this Order or revised and approved by Ecology.

- 2) *Interim Limit.* The Applicant shall submit a final SPCC Plan which includes any changes and/or additions required by this Order to Ecology's Federal Project Coordinator for review and approval by Ecology at least 90 days prior to beginning the project. Once approved the applicant shall implement the approved plan.
- 3) The Applicant shall provide training to all on-site crew on the contents of the plan, assign a foreman to the site, and have the plan and emergency response equipment readily available on site.
- 4) In the event of a spill the Applicant shall immediately report the spill to Ecology's 24-Hour Spill Response Team at (509)575-2490, and within 24 hours to Ecology's Federal Permit Coordinator at (360)407-6068.
- 5) The Applicant shall immediately notify Ecology's Southwest Regional Spill Response office at (360)407- 6300 if chemical containers (e.g. drums), or any unusual conditions indicating disposal of chemicals are discovered on-site and within 24 hours to Ecology's Federal Permit Coordinator at (360)407-6068.
- 6) In the event the Applicant is unable to comply with any of the conditions of this Order due to any cause, the Applicant shall:
 - Cease operations at the location of noncompliance;
 - Assess the cause of the water quality problem and take appropriate measures to correct the problem and/or prevent further environmental damage;
 - Submit a detailed written report to Ecology within five days that describes the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.

Compliance with this condition does not relieve PacifiCorp from responsibility to maintain continuous compliance with the terms and conditions of this Order or the resulting liability from failure to comply.

6.0 Appeal Process

[omitted]