

# Condit Dam Decommissioning Frequently Asked Questions

## What is happening at the Condit Dam and where is it located?

The Condit Dam is located on the White Salmon River in south central Washington State, in Skamania and Klickitat Counties. The dam is approximately 3.3 miles upstream from the confluence of the White Salmon and Columbia rivers, in the Columbia Gorge. The dam is scheduled for removal beginning in late August 2011.

## What is the history of the Condit Dam?

The Condit Dam is an important part of PacifiCorp's history and its electricity production has powered thousands of homes for many generations. Condit was supplying renewable, emission-free and cost-effective power before any of these phrases became popular. The Condit Dam was originally constructed in 1912 – 1913 to support the Crown Willamette Paper Co. in Camas, Wash. and the growing municipal market from Washougal, Wash. to Portland, Ore.

## What facilities make up the Condit Dam project and what will be removed?

The Condit Dam facilities consist of the 125-foot high, 471-foot long concrete gravity diversion dam, an intake structure that directs the water into a 13.5 foot diameter by 5,100-foot long wood-stave flowline (wooden barrel-like pipeline), and through a 40-foot diameter concrete surge tank. The flowline splits into two 9-foot diameter penstocks inside the surge tank that directs water to the turbines in the powerhouse. The dam creates the reservoir, Northwestern Lake, which extends 1.8-miles upstream of the dam and covers approximately 92 acres. All facilities, with the exception of the powerhouse, will be removed.

## Why is PacifiCorp removing the Condit Dam now?

In November 1996, the Federal Energy Regulatory Commission issued a final Environmental Impact Statement that required PacifiCorp to install fish ladders and screens for a state-of-the-art fish passage system. FERC, the regulating agency charged with licensing hydroelectric dams, also required higher in-stream flows that would have reduced Condit's overall energy production. Combined, the new requirements would have rendered the longstanding project uneconomical for PacifiCorp's customers.

## What is the Settlement Agreement?

PacifiCorp joined with 22 other parties to determine the future of the dam as part of a 1999 settlement negotiation regarding the federal relicensing of the project. After two years of negotiation, the participants reached an agreement to shut down power generation at a future date and remove the dam. In reaching this agreement, settlement parties balanced the short-term impacts of dam removal with the long-term gains provided by restoration of a natural river environment and a cost-effective plan for PacifiCorp's customers.

## Who are the parties to the Settlement Agreement?

Settlement parties include: American Rivers, American Whitewater Association, Columbia Gorge Audubon Society, Columbia Gorge Coalition, Columbia River United, Federation of Fly Fishers, Friends of the Columbia River Gorge, Friends of the Earth, Friends of the White Salmon, The Mountaineers, Rivers Council of Washington, The Sierra Club, Trout Unlimited, Washington Trout, Washington Wilderness Coalition, the Columbia River Inter-Tribal Fish Commission, the Yakama Nation, the U.S. Forest Service, the U.S. Department of the Interior, the National Marine Fisheries Service, the Washington Department of Ecology, the Washington Department of Fish and Wildlife and PacifiCorp.

## What regulatory approvals were needed to decommission the dam?

PacifiCorp has regulatory approvals to remove the project in accordance with the amended Condit Dam Settlement Agreement and the Project Removal Design Report. Regulatory approvals include Clean Water Act permits issued under Section 401 by the Washington Department of Ecology, and issued under Section 404 by the U.S. Army Corps of Engineers; Biological Opinions from the U.S. Fish and Wildlife Service and National Marine Fisheries Service, and a Surrender Order from FERC.

## How much power is generated at the Condit Dam and how will PacifiCorp replace this power?

The powerhouse contains two turbines with an installed capacity of 13.7 megawatts – enough to power approximately 7,000 average homes for a year. PacifiCorp is looking into options regarding

how to replace this relatively small amount of power, consistent with its long-term resource planning. Potential options include upgrades at existing projects and new energy resources.

### **What work was done this summer near the Condit Dam?**

Earlier this summer, PacifiCorp initiated efforts to stabilize the Northwestern Lake Bridge and began the funding of the relocation of the City of White Salmon's water supply line, which previously was located under Northwestern Lake.

The work at the Northwestern Lake Bridge consists of drilling new piers into the river bottom to further stabilize the bridge. Additional trusses are being added to the bridge in order to provide support for the river crossing of the City of White Salmon's water supply line.

In late August 2011, contractors began pre-demolition work and tunnel boring for the actual breach to take place in late October.

### **Is the White Salmon River currently closed to boaters?**

Parts of the river are closed, but boaters will continue to have access to the river upstream of the reservoir during decommissioning activities. To protect the public, the White Salmon River was closed beginning in July 2011, from the Northwestern Lake Bridge downstream to the White Salmon Ponds fish facility. PacifiCorp communicated these closures with local commercial recreation companies and the public through direct notification and through navigation signs, buoys and signage at access points and on the river. The river closure will continue until the completion of the dam removal process and channel restoration work in August 2012.

### **Is Northwestern Lake currently closed?**

Yes. In early August 2011, Northwestern Lake and its associated boat ramps were posted and closed to all on-water activities as work at the dam site intensified in preparation for the October breaching.

### **What benefits to the environment will be seen when the Condit Dam is removed?**

The dam is the only man-made impoundment between Mt. Adams and the Columbia River and its removal will open approximately 33 miles of new spawning and rearing grounds for steelhead and 15 miles of new habitat for salmon in the White Salmon River basin. Since as much as 2.4 million cubic yards of reservoir sediment is estimated to rest behind the dam, removal will occur during periods when fisheries are expected to be minimally affected.

### **Do Northwest tribes approve of the dam's removal?**

The cultural benefits associated with the restoration of the White Salmon River fish runs and traditional fishery are important to Northwest tribes. The Yakama Nation was a party to the settlement agreement and in statements released in June 2011 said that restoration of the river habitat is an essential step in welcoming home the salmon, steelhead and lamprey that have been absent from the White Salmon River over the last century.

### **What will happen on the day the dam is breached?**

Initial action to remove the dam began in late August 2011. Blasting work is creating a 13-foot high by 18-foot wide drain tunnel near the base of the dam. When the final section of the dam is removed by blasting in the fall, the drain tunnel will discharge water at a rate of approximately 10,000 cubic feet-per-second. For perspective, the flow rate will be approximately one-quarter of the estimated peak discharge during the February 1996 flood event on the White Salmon River. It is anticipated that Northwestern Lake will drain in approximately six hours.

### **What river closures will be in effect on the day the dam is breached?**

Additional river closures will be in effect during the actual breaching event in late October 2011, to protect the public. These closures will be communicated to local communities, the public and the media. Updates on closures can be found online at [pacificorp.com/condit](http://pacificorp.com/condit).

### **What happens after the dam is breached in late October?**

Once Northwestern Lake is drained, activity will focus on addressing accumulated sediment and slope stability within the area of the former lake. In spring 2012, the dam will be removed along with the wood-stave flowline, surge tank and penstocks. Concrete from the dam will be broken into rubble and buried onsite; other materials will be salvaged or transported to the Klickitat County waste facility. The powerhouse will be left intact.

### **How long will it take to complete the dam removal process and reclamation of the area?**

PacifiCorp expects the dam removal process to take approximately one year. Additionally, in fall 2012, work will begin on re-vegetation of the former lake bottom with native trees and grasses and restoration of the wetlands. Long-term monitoring and work to control invasive plants is also planned to ensure a successful reclamation of the riverside areas. The temporary

upstream dam (cofferdam) that was used during the initial construction of the dam will be removed from the White Salmon River as soon as practicable after the breaching.

### **How long after completion of the removal project do you anticipate the sediment concentrations to drop and the White Salmon River to form a stable river channel?**

Sediment concentrations in the river will be high at the time of breaching in late October 2011. Erosion will continue thereafter as the river forms a channel in the area where Northwestern Lake was previously, but sediment from deposits will gradually decline and cease after a stable river channel forms. Surface runoff from rain and melting snow is expected to erode upland sediment intermittently for three to five years until vegetation is re-established. After this period, the only sediment contributions to the river are expected to be from higher and rarer floods that erode embankments and surfaces not reached by previous floods.

### **What will the White Salmon River offer in terms of recreation in the years to come?**

The 92-acre Northwestern Lake will be lost as a recreation area as the lake drains after the dam is breached in late October. In time, however, new recreation opportunities will present themselves. New stretches of white water rapids are expected on the river and could become a playground for kayakers and rafters. The former reservoir area, once it is deemed safe for access, will be available for angling as determined by the state of Washington.

### **What will PacifiCorp do with the land and the powerhouse after decommissioning?**

After the removal is complete, ownership of the land along the river and the powerhouse structure will be retained by PacifiCorp. The company has no firm plans at this time concerning the future of the lands and powerhouse; however PacifiCorp will continue to honor the many land leases for cabins in the area.

### **Did PacifiCorp hire a local contractor to perform the construction work?**

Yes. PacifiCorp hired JR Merit Industrial Contractors, a local contractor from Vancouver, Wash.

### **How will PacifiCorp protect the public during the decommissioning process?**

Protecting the public from hazards is vital to a successful decommissioning of the dam facilities. Access restrictions have been communicated to the local community and will be in place throughout the dam decommissioning project. Fencing, construction signs, barricades and no trespassing signs

have been placed to notify and protect the public. PacifiCorp asks for the public's patience and appreciates the cooperation of all parties during this process.

### **How will PacifiCorp communicate with the local community and the public during the decommissioning process?**

Local residents, communities and other interested parties will receive regular updates about the decommissioning process via direct mailings, a project newsletter and website postings. As the process progresses, we encourage you to bring questions or issues to PacifiCorp's attention as quickly as possible so they can be resolved.

### **Where can I find updates or contact PacifiCorp staff about this project?**

You can email the project team at [Condit.Decommissioning@PacifiCorp.com](mailto:Condit.Decommissioning@PacifiCorp.com) or call us at **1-503-331-4361**. Updates will also be available on the Condit page of PacifiCorp's website at [pacificorp.com/condit](http://pacificorp.com/condit).



**Scan code here with your smart phone to link to PacifiCorp's Condit Dam page or go to [pacificorp.com/condit](http://pacificorp.com/condit)**