

Condit Dam breach successful

PacifiCorp successfully breached the Condit Dam in White Salmon, Wash. on October 26, 2011 and the White Salmon River is running unimpeded for the first time in nearly a century. Immediately after the final blast removed the remaining wall of the drain tunnel at 12:08 p.m., the waters of Northwestern Lake began flowing through the dam's 90-foot wide base en route to the Columbia River. PacifiCorp and prime contractor JR Merit, along with the detonation crew from Kiewit Infrastructure West, both of Vancouver, Wash., surveyed the blast zone, took readings from sensing devices on the dam and flew over the vicinity via helicopter before declaring the breach a success and the remaining dam structures safe. Approximately 150 representatives of the settlement parties, contractors and local leaders gathered at a safe distance away from the dam to commemorate the event and watch a live webcast of the final blast.

As Northwestern Lake drained quickly after the breach, much of the estimated 2.4 million cubic feet of sediment that had built up behind the dam over the years began to move downstream toward the Columbia River. As expected, logs and other debris that had sunk to the bottom of the lake also flowed downstream. Northwestern Lake drained in less than two hours and revealed the river canyon for the first time since April 1913. As the lake drained, the river came to life and began cutting through the sediment, creating a new river channel with steep slopes and exposing the old cofferdam just upstream of Condit Dam.

PacifiCorp performed a hydrographic survey as part of the permit granted by the U.S. Army Corps of Engineers on October 30. The survey showed a significant amount of sediment had already been deposited in the Columbia River. Some of the sediment is in the shipping channel, but being a deep channel to begin with, the additional sediment is not considered a detriment to navigation. PacifiCorp is communicating frequently with the Corps as the winter rains continue to sculpt the river and move sediment downstream. In late December 2011 PacifiCorp conducted a Light Detection and Ranging Survey (LIDAR) to determine how much sediment remains behind the Condit Dam; data is currently being analyzed. This survey is part of a required report due the Federal Energy Regulatory Commission (FERC) in late February 2012.



Before Condit Dam breach



After Condit Dam breach



Safety remains our top priority

Following the breach of the Condit Dam and draining of Northwestern Lake, the White Salmon River remains a quickly changing and unsafe place both upstream and downstream of the dam. PacifiCorp, local law enforcement and experienced river experts are reminding the public to stay away from the area. PacifiCorp is constantly monitoring the dynamic situation as the White Salmon River continues to cut through sediment to the rock riverbed, creating unstable slopes and carrying debris downriver. The company's options for clearing debris should the breach tunnel start to be clogged, include using cranes and yarders, and in some instances explosives. The entire area from the Northwestern Lake Bridge to the mouth of the White Salmon remains an active construction zone and a dangerous area for the public. Until the channel restoration work, slope stabilization and hazard removal work is completed in September 2012, the White Salmon River will continue to be an unsafe area. PacifiCorp will continue to post updates on closures and restrictions in the Condit area as work proceeds. Signs will remain in the immediate area to remind the public about the closures.



Removing the Condit Dam from the White Salmon River

The White Salmon River is beginning to resemble its pre 1913 form, but the Condit Dam removal project has really only just begun. Removing the dam itself from the White Salmon will begin in the spring of 2012 and is anticipated to take approximately four months. The upstream cofferdam will also be removed by May 2012 to benefit fish migrating to their spawning grounds.

Removing Condit Dam will take less time than it took to construct the facility in 1912-13. The dam was built with non-reinforced concrete and will be removed using several demolition excavators equipped with large hydraulic hammers. The process will begin at the top on the east side of the dam. The dam will be demolished in three to four large steps down to the bottom of the structure and it is anticipated that the dam will be removed without blasting, although contingency plans for blasting will be maintained. Strict effort will be made to keep concrete pieces from falling into the river. It is estimated that approximately 34,000 cubic yards of concrete rubble will be produced. This concrete debris will be spread onto the area where the existing flow line currently is and will be capped with 18 inches of soil cover, some of which may come from the sediment that is still behind the dam. Other non-concrete materials removed from the dam, the wood-stave flow line, surge tank and penstocks will be salvaged or transported to the Klickitat County waste facility. Removal activities throughout the year will make 2012 a busy year at the dam site. Through it all, PacifiCorp will continue to keep the stakeholders and the public updated on the latest developments via our website at pacificorp.com/condit.



Scan code here with your smart phone to link to PacifiCorp's Condit Dam page or go to pacificorp.com/condit