

## Condit Dam FAQs

### Anadromous Fish Habitat Before and After Dam Removal

*1. How much additional fish habitat will the White Salmon and its tributaries offer above the dam?*

The National Marine Fisheries Service Oct 2006 BiOp reports that dam removal will open up 33 miles of rearing habitat for steelhead and 14 miles for salmon (p. 44).

*2. What 's the contribution of each of the tributaries to the total available anadromous spawning habitat?*

The White Salmon mainstem contributes approximately 13 miles above the dam, Buck Creek >2 miles, Mill Creek >1, Rattlesnake Creek >7, Indian Creek >1 and Spring Creek < 1/2 mile.

*3. Following dam removal, how many fish are expected to spawn in the White Salmon River?*



The Washington Department of Fish and Wildlife estimates that dam removal could reestablish runs of about 700 steelhead adults, 4,000 spring chinook adults, 1,100 fall Chinook adults, and 2,000 coho adults.

*4. Why does the White Salmon have high prospects for healthy salmon and steelhead runs?*

Only one dam, Bonneville, separates the White Salmon River from the Pacific, thus prospects for recovery of full, productive salmon runs are very high. Each dam in the mainstem Columbia River typically removes 10% of ocean-bound juveniles. (Wenatchee Subbasin Plan, BioAnalysts April 2004). Mortality is generally higher for dams on tributaries.

*5. What else about the White Salmon River makes it especially hospitable to fish spawning and rearing?*

The river's many gravel beds, cool pools and 'large woody debris' provide spawning sites and refuge for fry.

*6. Are water temperatures between the barrier falls and Northwestern Lake too low to support steelhead and salmon?*

Salmon and steelhead are adapted to water as cold as 32° F, though their metabolism, growth and activity slow. Water temperatures at Fordyce Road were found by the USGS to range from 40 to 50° F through the year. Temperatures as high as 54° F occurred below the dam.

*7. Will reintroducing steelhead threaten existing rainbow and bull trout populations above dam?*

The Forest Service – charged with managing the Wild and Scenic Rivers stretch of the White Salmon River – concluded that salmon and steelhead reintroduction “will not result in unreasonable diminishment of the resident trout outstandingly remarkable values (ORV).” (Effects of the Proposed Condit Dam Removal on Fish Populations and Habitat in the White Salmon Wild and Scenic River, USDA Forest Service, March 15, 2002). ORV resident trout would likely persist and coexist with steelhead in the designated wild and scenic river (FSFEIS, p. 165). Steelhead and trout co-existed for thousands of years before the dam was built.

Since fish passage is a requirement of dam licensing and operation, this issue exists whether the dam is removed or not.

*8. Will the high flow rate during dam breaching damage the river down stream?*

High flows during dam breaching will last only 6 to 8 hours. For perspective, flows during breaching will be one quarter that during the 1996 floods when 43,000 cubic feet per second was observed (USGS).

*9. Will the initial flush of sediment seriously affect salmon populations?*

According to the National Marine Fisheries Service (NMFS), initial sediment releases would likely be lethal to any salmon in the lower White Salmon River, most likely Lower Columbia River Chinook. But trapping and holding fish found in the lower river prior to the suggested October 2008 dam removal would preserve the next generation of the fish and reduce mortality. Most steelhead now spawning in the river's lower reaches are believed to be non-listed strays.

*10. How will fall Chinook be protected during dam breaching?*

PacifiCorp will lessen the impact by capturing returning fall Chinook salmon before the dam is breached and transporting them to a hatchery for harvest of their eggs and milt to preserve the 2008 run. (NMFS BiOp.)

'A removable weir would be placed in the river before dam removal to redirect some returning adult Chinook salmon into ponds, where they would be held until they spawned. Their eggs would be harvested, preserving the genetic identity of the run and assuring survival to the next generation.' (Vancouver Columbian 10 Oct 2006.)



Photos courtesy of PacifiCorp

*11. Will silt above the former dam continue to enter the stream and affect downstream habitat?*

Most of sediment behind the dam will wash downstream during and just after breaching of the dam. Sediment concentrations in the river will gradually decline and cease, and a stable river channel will form.

*12. How will the lower White Salmon River change after dam removal?*

The October 2006 BiOp from NMFS said 'fish likely would have access to the new upstream habitat within a year and that habitat on the lower reach below the dam site would be useable within two years'. Recent adult salmon radio telemetry studies have indicated that very few salmon and steelhead reside in the lower White Salmon. As a result of gravel loss and low flows caused by the dam, very little natural salmon production currently occurs downstream of Condit Dam. Dam removal will restore natural river processes, such as the transport of spawning gravel and large woody debris, and lower the water temperature downstream from the dam.

Support provided by:

American Rivers  
American Whitewater Affiliation  
Columbia Riverkeeper  
Friends of the Columbia Gorge

Friends of the White Salmon River  
Gifford Pinchot Task Force  
The Mountaineers  
Trout Unlimited

**Visit [WhiteSalmonRiver.org](http://WhiteSalmonRiver.org) for more information.**