3.0 PROPOSED ACTION

PacifiCorp proposes to remove the Condit Hydroelectric Project on the White Salmon River in accordance with the Condit Hydroelectric Project Settlement Agreement, as amended. Restoring undammed river flow would provide access to as much as 15.3 to 32.4 miles of river and tributary habitat for anadromous salmon and steelhead, respectively, and would restore connectivity to foraging, spawning, rearing, and overwintering habitat for bull trout in the lower White Salmon River. Dam removal would result in increased salmonid (steelhead, salmon, and bull trout) production potential.

The existing Condit Hydroelectric Project includes a concrete dam, an approximately 1.8-mile-long reservoir, a 13.5-foot-diameter wood-stave pipeline of approximately one mile in length, a reinforced-concrete surge tower, two 650-foot-long penstocks (one steel and one wood), and a powerhouse structure. All of these except the powerhouse are proposed to be removed.

The proposed action includes draining the reservoir through a tunnel that would be constructed through the dam; removing the dam, wood stave pipeline, surge tower, and the two penstocks; and filling in the tail race at the power house. The drain tunnel through the dam has been redesigned to reduce the potential for it to clog with wood debris. Concrete from the dam would be disposed of in a new location: the existing flowline alignment between the dam and the surge tank (Figures 2 through 4). Also, wood and metal from the flowline would be temporarily stored at a location different than in the 2007 Final SEPA SEIS. Details of the proposed action are described in the Project Removal Design Report (PacifiCorp Energy 2009a).

3.1 DAM REMOVAL ACTIVITIES

In order to implement the terms of the Settlement Agreement and perform the removal and associated restoration work, temporary work areas, staging areas (SAs), and access roads (ARs) would need to be established and utilized. All locations were chosen to minimize potential impacts by establishing them in or near previously used access roads and work areas when possible.

3.1.1 Staging Areas and Disposal Areas

The concrete to be removed from the dam would be placed in the flowline alignment between the dam and the surge tank. The flowline location is essentially a bench cut into the hillside above the White Salmon River and is approximately 35 feet wide by 5,100 feet long (Figures 2 through 4). After the flowline is removed, small ephemeral streams would be culverted. The concrete blocks and rubble would be hauled along the flowline alignment as far as the northernmost flowline trestle (Figure 3) and placed there so that the overall shape of the hill would blend with the natural contours once the concrete is covered and vegetated. The concrete would be covered with sediment that would be hauled in from the drained reservoir, possibly supplemented with soil material originally removed from the flowline alignment and placed in adjacent berms. Concrete to be placed nearer the surge tank would

be hauled along the Powerhouse Road and on the access road to the surge tank, then along the flowline alignment as far as the northernmost trestle. Concrete from the surge tank also could be placed in this area or in the spillway below it. It would be covered with soil material, likely including sediment hauled from the reservoir. Because of the steep slope, specific erosion control measures would be implemented. The surface would be stabilized and revegetated according to specifications in the Erosion Control Plan (PacifiCorp Energy 2008b) and the Revegetation and Wetlands Management Plan (PacifiCorp Energy 2009b).

While concrete recycling is the preferred disposal method, it is unlikely to occur. If it does, it would occur at a recycling site not yet identified that is assumed to be independent of the Condit project and to have or acquire its own permits. For analysis purposes in the Final SEPA SEIS, the site was assumed to be within 30 miles of Condit Dam and to require hauling the concrete on SR 14 and SR 141. The concrete crushing for recycling would occur at the recycling site.

A temporary disposal/storage area for the wood and metal from the wood-stave flowline and penstock would be established on the site where the operator's houses would be removed (SA-6 on Figure 4), rather than on property owned by the Becker family located a few hundred feet east of the flowline. This site was designated SA-5 in the Final SEPA SEIS. This site will not be used and therefore there would be no associated impacts.

The wood from the flowline may go to a facility to be remilled for use in other wood-stave pipelines, remilled as lumber, or disposed of off site if not suitable for reuse. The steel from the flowline hoops and other facility components may be stored temporarily at the site where the operator's houses would be removed or other staging locations before it is hauled away for recycling. Under the new removal plan, SA-4 would not be used and therefore there would be no associated impacts.

At the conclusion of the proposed dam removal actions, all temporarily disturbed areas, including the staging areas, would be regraded and revegetated consistent with the proponent's revegetation plan.

3.1.2 Access Roads

Access roads (ARs) throughout the project area are necessary to perform the removal operations defined by the Settlement Agreement and the associated reclamation and monitoring activities. Although most of the work areas can be accessed using established roads, some areas would require reestablishing roads that have become overgrown and others where new segments of road would be built to access specific facilities. Most of the ARs were discussed in the Final SEPA SEIS. With the changes since the Final SEPA SEIS, AR-3 to SA-3 would be widened to 30 feet (Figure 2), as would AR-7 and AR-8 to the surge tank and flowline (Figure 4). Up to three additional ARs between Powerhouse Road and the flowline alignment may be required for placement of concrete blocks and rubble and the covering soil. AR-13, as proposed in the Final SEPA SEIS, would not be needed or built, and therefore there would be no associated impacts.

3.2 DAM BREACHING AND REMOVAL

3.2.1 Concrete Dam Removal, Storage, and Disposal

Approximately 34,000 cubic yards of concrete from the dam would be disposed of in the flowline alignment. Up to about 2,500 cubic yards of steel-reinforced concrete would be removed from the surge tank. Concrete blocks and rubble remaining from the dam would be hauled to the existing flowline alignment between the dam and the surge tank, and rubble from the surge tank would be disposed of in the spillway below it in order to fill it. Sediment from the drained reservoir and soil from berms adjacent to the flowline would be used to cover the concrete. The area would be contoured for drainage and revegetated.

3.2.2 Upstream Cofferdam Removal and Disposal

Historic photographs and drawings show that a cofferdam system was used in the original construction of the dam and was left behind in the reservoir and subsequently flooded. This cofferdam would be removed as soon as possible after draining of the reservoir following dam breaching. It would be important to remove the cofferdam as soon as possible so that it would not hold back fine sediments that could kill fish and exceed water quality criteria after the river has been reoccupied by fish and so that it would not block upstream fish passage.

3.2.3 Monitoring

Monitoring is proposed to demonstrate that performance criteria are met for several of the management plans. Monitoring would continue during the post-removal management period. The proposed monitoring would include:

- Continuous turbidity and pH monitoring at a minimum of two new water quality monitoring sites using electronic data loggers
- Monitoring for mercury in sediments at the mouth of the White Salmon River and in three places in the Columbia River
- Visual inspection of all fugitive dust sources and effectiveness of dust control methods
- Monitoring revegetation and presence of noxious weeds
- Topographic sediment mapping to assess effectiveness of bank stabilization
- Visual inspection of stormwater erosion control measures and their effectiveness
- Identification and monitoring of wetland establishment areas
- Fish passage evaluation and record keeping

The duration of the monitoring is variable, but would generally continue until specific performance criteria are met.