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6.3 HISTORICAL HYDROELECTRIC STRUCTURES INVENTORY AND ASSESSMENT (CUL 3)

6.3.1 Study Objectives

The objective of this study is to inventory and evaluate the National Register-eligibility of historical buildings and structures associated with the hydroelectric facilities. Results will be used to determine impacts and the need for mitigation and management measures. The Yale Project structures and the Merwin (historically called the Ariel Hydroelectric Project) powerhouse were evaluated previously.

6.3.2 Study Area

The Applicants have studied the Merwin, Swift No. 1, and Swift No. 2 structures and considered the National Register-eligibility of the projects individually and together, representing the historical hydroelectric development of the Lewis River basin. The study of hydroelectric historic structures focuses on the primary APE defined for the archaeological inventory.

There are primary and secondary APEs for each of the 4 projects. The primary APE consists of the project lands that immediately encompass project facilities, while the secondary APE includes the Merwin Wildlife Habitat Management Program lands. The APEs are delineated on maps presented in the Study Plan Document (PacifiCorp and Cowlitz PUD 1999, as amended).

6.3.3 Methods

Three tasks will be used to inventory and evaluate the National Register-eligibility of the hydroelectric historic structures, as described below.

6.3.3.1 Compile Background Information

The study team has already collected data from the Yale Project historic resources inventory. Staff members will review this information in comparison with data held by the OAHP and collect materials to fill any gaps that are identified. They will also obtain published and archival materials on the history of development and operation of the hydroelectric projects in the context of southwestern Washington and northwestern Oregon history. The background information will be used to plan the inventory surveys and to evaluate the buildings and structures that are recorded.

6.3.3.2 Inventory Buildings and Structures

The study team will inventory the buildings and structures of the Merwin, Swift No. 1, and Swift No. 2 projects. Work will consist of visiting the structures to prepare OAHP-approved historical resource inventory forms and taking photographs of the structures' representative elevations. During the inventory, staff members will seek anecdotal historical information on the projects from knowledgeable PacifiCorp and Cowlitz PUD employees.

6.3.3.3 Analyze Data and Prepare Technical Report

When the background research and field inventory are completed, the study team will use this information to evaluate the eligibility of the projects' hydroelectric structures for listing in the National Register. Staff members will consider the Merwin and Swift projects individually and then examine the potential of all 4 projects to form an eligible multiple-property listing, such as a Lewis River Hydroelectric Historic District, that represents the history of hydroelectric development in the Lewis River basin.

The analysis will be based on the historical engineering and construction of the projects as well as their relationship to the history of PacifiCorp, Cowlitz PUD, the Lewis River basin, and the development of the region. Team members will prepare one or more technical reports discussing the methods and results of the background research, inventory of structures, and data analysis. The reports will be illustrated with maps and photographs and will contain data tables and appended inventory record forms for review by the consulting parties.

6.3.4 Key Questions

The Historical Hydroelectric Structures Inventory and Assessment is designed to address the following key watershed questions as they relate to relicensing:

- Where are the areas that need protection?

A number of buildings and structures associated with the Merwin, Swift No. 1, and Swift No. 2 projects need protection from deterioration, historically inappropriate maintenance and repair, and Project-related development activities that could damage the structures' character-defining features.

- What evidence is available for the existence of previously undocumented and/or unknown sites?

The inventory of historical structures recorded previously unrecorded buildings and structures associated with the Merwin, the Swift No. 1, and Swift No. 2 projects.

- What are the conditions of known or newly identified sites of cultural, historical, or archaeological importance?

The conditions of the National Register-eligible historical buildings and structures are generally good, as is described in the inventory report.

- Do sites identified in the reservoir areas meet the significance criteria for inclusion on the National Register of Historic Places?

A number of buildings and structures associated with the Merwin, Swift No. 1, and Swift No. 2 projects meet significance criteria for inclusion in the National Register of Historic Places.

- Are there 19th or 20th century sites of historical significance that need protection?

Some of the historically-significant buildings and structures date to the first half of the 20th century, as described below.

6.3.5 Results

The Applicants completed the inventory and evaluation of the historical hydroelectric buildings and structures for the Merwin, Swift No. 1, and Swift No. 2 projects and prepared a draft report (Historical Research Associates 2001) for review by the Cultural Resource Group, including the CIT, YN, the USFS, the State Office of Archaeology and Historic Preservation, and the FERC. The information on the National Register-eligible buildings and structures will form the basis for analyzing project impacts and preparing the CRMP.

The study of historical hydroelectric structures is complete for the Yale Project (PacifiCorp 1999), finding that the facilities are not eligible for listing in the National Register of Historic Places owing to a lack of historical importance. The Ariel powerhouse was evaluated in 1999 and was determined to be eligible for the National Register. The study has inventoried and evaluated the historical buildings and structures for the Merwin, Swift No. 1, and Swift No. 2 projects. The Ariel powerhouse was considered in a earlier study.

The Merwin Project buildings and structures include the dam and penstocks, powerhouse, control house, transmission line, and Ariel village worker housing, dating to 1929-1931. The Swift No. 1 buildings and structures consist of the dam and penstocks, powerhouse, and transmission line. The Swift No. 2 buildings and facilities include the water conveyance system consisting of a power canal and spillway, pump house, powerhouse and penstocks, and transmission line. Other buildings associated with the Swift No. 1 and Swift No. 2 projects are the Swift village worker housing bus stop and tank shed. The Swift facilities date to 1956-1958.

Project historians have recommended that the Merwin Project facilities meet the criteria for listing in the National Register of Historic Places, specifically for their historically significant role in the economic development of the region and for being an excellent example of an early high-head hydroelectric project. A National Register-eligible historic district would include the resources that retain integrity: the dam and penstocks, powerhouse, and control house. The district would exclude the employee housing area and the Lewis River Fish Hatchery because changes to the buildings have compromised their integrity.

The study recommended that the Swift Hydroelectric Project is eligible for listing in the National Register based on its contribution to the economic development of the area as well as for its design and construction advances in earth dams.

6.3.6 Discussion

None of the historical buildings and structures inventoried during the relicensing studies had been recorded previously. A number of buildings and structures associated with the Merwin, Swift No. 1, and Swift No. 2 projects meet significance criteria for inclusion in the National Register of Historic Places. The work identified two historic districts: one for the Merwin Project and one for the combined Swift No. 1 and No. 2 projects. The 2 districts are eligible under National Register Criteria A (reflecting important historical events) and C (reflecting important engineering or design).

The condition of the National Register-eligible historical buildings and structures is generally good. They need protection from deterioration, historically inappropriate maintenance and repair, and Project-related development activities that could damage the structures' character-defining features. The Cultural Resource Management Plan will address the protection of the historical structures (CUL 6).

6.3.7 Schedule

This study is complete.

6.3.8 References

PacifiCorp and Cowlitz PUD. 1999, as amended. Study Plan Document for the Lewis River Hydroelectric Projects. Portland, OR and Longview, WA. October 29, 1999, as amended.

HRA (Historic Research Associates, Inc.). 2001. Archaeological Survey and Test Excavations for the Federal Energy Regulatory Commission Relicensing of the PacifiCorp and Cowlitz PUD Hydroelectric Projects on the Lewis River in Clark, Cowlitz, and Skamania Counties, Washington. Confidential draft report prepared for PacifiCorp, Portland, OR and Cowlitz PUD, Longview, WA. January 2001.

PacifiCorp. 1999. Yale Hydroelectric Project. Cultural Resources Final Technical Report. Portland, OR. April 1999.