

## 1.0 INTRODUCTION

### 1.1 PURPOSE AND NEED

The Wells Hydroelectric Project is located at river mile (RM) 515.8 on the Columbia River, downstream of Chief Joseph dam and upstream from Rocky Reach dam (Figure 1-1). Wells dam consists of 10 generating units, producing approximately 840 megawatts of power, and 11 gated spillway openings. The hydraulic capacity of the Wells powerhouse is 200,000 cfs. Adult fishways are located on both sides of the river at the dam to provide upstream passage of adult anadromous fish. The vast majority of downstream migrating fish pass the dam via the juvenile bypass system; some pass through spillways during infrequent periods of spill. A small proportion pass through the turbines.

The Wells facility, owned by the Public Utility District No. 1 of Douglas County (DCPUD), produced its first commercial power in August 1967 after receiving an operating license from the Federal Energy Regulatory Commission (FERC License No 2149). This license is due for renewal on 1 June 2012. Utilities receiving power from the facility include the DCPUD, Puget Sound Energy, Portland General Electric Company, PacifiCorp, the Washington Water Power Company and the Okanogan County PUD.

The combined effects of hydropower projects, flood control, irrigation, timber harvesting, grazing activities, commercial and sport fishery harvest, as well as changes in ocean conditions have resulted in the decline of some stocks of mid-Columbia River fishes.

The Douglas PUD hopes that by working cooperatively with the fishery agencies and tribes, agreements can be developed to aid in the recovery of animal species covered by this plan. The objectives of these efforts are to: 1) avoid future listing(s) of mid-Columbia fishes under the Endangered Species Act (ESA) by helping to maintain a healthy population of fish; and 2) in the event of a listing(s), to legally proceed with operations which might otherwise result in illegal "take" of listed species.

To date, only summer steelhead (*Oncorhynchus mykiss*) are listed as a threatened or endangered species and Spring Chinook are proposed for Endangered Species under the ESA in the mid-Columbia region. As of 9 August 1997, anadromous forms of steelhead are listed as endangered in the upper Columbia River. Evolutionary Significant Unit (ESU) upstream of the Yakima River Confluence (U.S. Federal Register 1997, 62; 159 pg. 43937-43954). Steelhead produced at the Wells Fish Hatchery are included in this listing since the National Marine Fisheries Service (NMFS) considers them essential to the recovery of natural populations. ESA section 9(a) "Take" prohibitions have been in effect since 17 October 1997. However, the status of two other races/demes is presently being reviewed by the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS). These species are spring chinook salmon

Figure 1-1. Location of Wells dam and other mid-Columbia Public Utility District and federal dams in the mid-Columbia reach (PUD projects in bold).

PLACEHOLDER

(*O. tshawytscha*) and sockeye salmon (*O. nerka*). Summer/fall chinook were petitioned for listing in 1993, but such a listing was found to be not warranted by the NMFS in 1994 (U.S. Federal Register 1994). Summer/fall chinook are addressed in the HCP since they represent an important component of anadromous fish production in the mid-Columbia basin. The endemic stock of coho salmon (*O. kisutch*) is considered extinct.

Douglas County PUD has previously developed and implemented numerous mitigation measures for anadromous fish passage and habitat losses at the Wells Project. Many of these measures were developed as part of the original dam licensing agreement between the DCPUD and the FERC. Other measures were developed through negotiations resulting in a 1990 Settlement Agreement between the DCPUD, state and federal agencies and tribes (FERC 1990). These mitigation measures have provided substantial protection to anadromous fish at the Wells Project. However, the listing of any of the species previously mentioned could substantially affect operation of PUD and other hydropower facilities throughout the basin. The HCP is intended to enhance protection of these fishes while providing a greater degree of certainty in long-term operation of the Wells Project.

## **1.2 HCP DOCUMENTATION**

The HCP documentation provides information on the impacts of the Wells Project operations on fish runs in the mid-Columbia River and describes ongoing mitigation measures for these impacts. This documentation and accompanying Implementing Agreement (IA) will be used to support application(s) for an incidental take permit from the NMFS and USFWS should a species be listed as endangered under the ESA. Should a species covered by the plan be considered for listing as threatened or endangered under the ESA, then this documentation will form the basis of a pre-listing conservation plan.

### **1.2.1 Project-specific MCMCP Documents**

This Wells HCP addresses project-specific technical issues, and includes specific mitigation and monitoring measures proposed as part of the Conservation Plan. This HCP contains detailed information on and analysis of the Wells Project regarding:

- the environmental settings in the project vicinity;
- structural and operational features of the project;
- existing issues related to anadromous salmonids;
- existing mitigation and monitoring measures, and their effectiveness;
- outstanding issues related to anadromous salmonids;
- proposed mitigation and enhancement measures to address the outstanding issues; and
- proposed monitoring.

### **1.3 PERMIT-RELATED ISSUES**

The Wells HCP addresses impacts of the Wells Project on spring and summer/fall chinook salmon, coho salmon, sockeye salmon and summer steelhead. The design of proposed mitigation measures and the monitoring of their effectiveness is based on current conditions (i.e., January 1995). Ongoing mitigation measures are considered existing conditions. Existing conditions are not considered an action subject to mitigation unless they cause "take" of a listed species as defined under the ESA.

#### **1.3.1 Term of Permit**

In the event that this documentation forms the basis for an incidental take permit, this HCP is intended to remain in effect for 50 years. Prior to the expiration of the project license, the DCPUD will initiate the renewal process for an operating license issued by the FERC for the Wells Project. Mitigation measures, agreed to as part of this HCP process, shall be consistent with measures requested by the fishery agencies and tribes during the relicensing process.

#### **1.3.2 Spatial Extent Covered by the Wells HCP**

The Wells HCP addresses impacts and provides conservation measures for the reach of the mainstem Columbia River from the Wells Project tailrace, approximately 1,000 feet downstream of the dam, upstream to approximately 2,000 feet downstream of Chief Joseph dam. The Wells HCP addresses the mainstem Columbia River and portions of tributaries that are influenced by backwater effects from the Wells Project, such as the lower reaches of the Methow and Okanogan Rivers.

#### **1.3.3 Decision Standards**

All measures proposed in the Wells HCP are intended to minimize and mitigate impacts to plan species covered under this plan to the "maximum extent practicable" as required by the ESA [50 CFR 17.22 (b)(2) and 17.32 (b)(2)]. This definition includes considerations of what is necessary from a biological standpoint to mitigate impacts to the species of concern, as well as what is economically feasible in terms of operation of the Wells Project. Failure to achieve NNI, 91 percent project survival or 95 percent juvenile dam passage survival (see page ES-2) does not in an of itself mean that the District's incidental take of permit species will either (a) appreciably reduce the likelihood of the survival and recovery of permit species in the wild or (b) is not likely to jeopardize the continued existence of the endangered or threatened species or result in distraction or modification of habitat of such species which is determined by the Secretary of Commerce to be critical.

#### **1.4 IMPACTS/EFFECTS COVERED BY THE WELLS HCP**

The mid-Columbia River is an important migratory and habitat area for mid-Columbia fishes. The Wells HCP addresses potential impacts on several key aspects of migration and habitat use of the project area by these species, including:

- upstream passage of adult fish at Wells dam;
- upstream passage of adults through the reservoir behind Wells dam;
- downstream passage of juvenile fish through Wells reservoir;
- downstream passage of juveniles at Wells dam;
- water quality conditions (particularly total dissolved gas and water temperature);
- fish production facilities;
- reservoir productivity and habitat use;
- mainstem spawning habitat and use; and
- predation.

The Wells HCP is also designed to respond to the contingency that other aquatic plant and animal species within the plan's term may require protective or mitigative measures. That contingency is addressed through initiation of Joint Fishery Party (JFP) consultation to establish a decision-making and implementation process during the entire listing or action process and throughout the status review for such species.