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**City of Tacoma,  
Department of Public Utilities, Light Division  
Cowlitz Hydroelectric Project  
FERC No. 2016**

**Settlement Agreement License Article 11.**

**Fish Habitat Fund Allocation Plan**

**1. Introduction**

This plan is prepared as a response to the March 13, 2002, Federal Energy Regulatory Commission (the Commission), Order Approving Settlement and Issuing New License, and the July 18, 2003, Commission Order Denying Rehearing and Lifting Stay for FERC Project No. 2016, Settlement Agreement License Article 1. The license article requires the City of Tacoma, Department of Public Utilities, Light Division (Tacoma Power) to develop and file a plan for the uses of the fish habitat fund.

**1.1 Project Description**

The Cowlitz Project (FERC No. 2016) is Tacoma Power's largest electricity generating facility and is located on the Cowlitz River, Lewis County, Washington. The Project consists of two dams, the Mayfield Dam at river mile (RM) 52 and Mossyrock Dam, upstream at RM 65. In addition to the project generating electricity and providing flood control, Tacoma Power operates 3 major parks, manages approximately 14,000 acres of wildlife lands, and owns and funds operation of the Cowlitz Salmon Hatchery (RM 50) and the Cowlitz Trout Hatchery (RM 42). The Barrier Dam, associated with the Cowlitz Salmon Hatchery is located at RM 49.5. The original 50-year license for the Cowlitz Project was issued on December 28, 1951. A new thirty-five year license was issued and became effective on July 18, 2003.

The Mayfield development completed in 1963 includes a 250-foot-high, 850-foot-long, concrete arch and gravity dam that impounds Mayfield Lake, which has a maximum surface area of 2,250 acres. In addition to the Cowlitz River, inflows from the Tilton River also contribute to Mayfield Lake, which supports public and private recreational facilities. An 854-foot-long power tunnel passes through the right abutment of the dam and terminates at a concrete forebay structure. Four penstocks continue from the forebay structure to the four generating units, which have an installed capacity of 162-megawatts (MW).

The Mossyrock development completed in 1968 includes a 606-foot-high double curvature concrete arch dam that creates Riffe Lake, a 23-mile long, 11,830-acre reservoir with 52 miles of shoreline. Riffe Lake supports several parks and other recreational facilities. Three penstocks, varying in length from 248 to 285 feet, extend down to the powerhouse, which is adjacent to the base of the dam. The powerhouse contains two generating units with room for a third, and has a total installed capacity of 300 MW. Transmission lines link the Mossyrock and Mayfield developments.

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## 1.2. FERC License Article

*Within 6 months of license issuance, the Licensee shall establish a habitat fund in the amount of \$3.0 million for the purpose of fisheries habitat protection, restoration, and enhancement through acquisition, easements or restoration projects. The habitat fund may be a special or separate account held by Licensee with all accrued interest being credited to the fund. Within one year of license issuance, the Licensee shall file with the Commission a plan for the uses of the habitat fund, including: a) a statement of the priority uses and criteria for disbursement of the funds, identifying acquisition by Tacoma in fee title or by conservation easements of riparian habitat along side channels below Barrier Dam as first priority; b) a description of efforts the Licensee will make in concert with other entities to leverage the habitat fund as matching funds for other salmon recovery funding opportunities; c) plans to coordinate with Lewis County on purchases of land or easements, including any plans to fund Lewis County personnel to conduct the acquisition of land rights; d) procedures for conservation groups and others to request the Licensee's participation in restoration projects along with criteria for such participation; and e) a statement of what, if any, additional lands acquired through the habitat fund will be included within the Project boundary. The Licensee shall prepare the plan in consultation with a Habitat Advisory Group provided for in the August 2000 Settlement Agreement, or, if the Settlement Agreement has become void, in consultation with U.S. Fish and Wildlife Service, National Marine Fisheries Service, Washington Department of Fish and Wildlife, U.S. Forest Service and Lewis County. When a draft plan has been prepared, it shall be provided to all affected agencies and Tribes for 30-day review and comment. The Licensee shall include with the final plan documentation of consultation and copies of comments and recommendations, and specific descriptions of how the final plan accommodates all comments and recommendations. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on Project-specific information. The Commission reserves the right to require changes to the plan. Upon Commission approval, the Licensee shall implement the plan, including any changes required by the Commission. Following Commission approval, the plan becomes a requirement of the license, enforceable by the Commission.*

## 2. Objectives

The objects of this plan are as follows:

1. Establish priorities and criteria for the allocation of the habitat fund.
2. Provide opportunities to leverage additional funds for acquisition and restoration.
3. Establish procedures and criteria for conservation groups and others to request Tacoma's participation in restoration projects
4. Describe how Tacoma will coordinated activities with Lewis County.

## 3. Plan

The protection of habitat in the lower Cowlitz River basin will serve to prevent habitat degradation from land use practices and allow for both active and passive restoration activities. The acquisition of properties is beneficial to aquatic and riparian resources where existing or potential development and other human activities are incompatible with the maintainance of healthy aquatic ecosystems. To this end, the August 2000 Settlement Agreement, which was incorporated into the Cowlitz River Project license issued by the Commission, called for the formation of the Habitat Advisory Group (HAG) to oversee fish habitat protection, restoration, and enhancement on the Cowlitz River. The HAG consists of representatives from each

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settlement party that chooses to participate. Those parties that have participated or expressed interest in doing so are; Tacoma Power, US Fish and Wildlife Service (USFWS), WA Department of Fish and Wildlife (WDFW), American Rivers/Trout Unlimited, NOAA Fisheries, and Lewis County. The role of the HAG is to provide guidance in the use of the habitat fund established by Tacoma Power. The HAG will serve as the body responsible for reviewing and approving which projects are eligible and their relative priority within the basin.

## **A. Projects**

### **1. Eligible projects**

Proposals brought before the HAG for consideration must fall under the categories of eligibility described below. Projects will be defined as acquisitions, easements, and restoration. Other project types will not be considered consistent with the intent of the Habitat Fund. All projects must demonstrate their value in addressing one or more salmonid life history stages, and enhance, protect or restore the aquatic system on which they depend.

#### **1.1 Acquisitions and Conservation Easements (Priority 1)**

Acquisition in fee-title and conservation easements of mainstem and tributary habitats in the Cowlitz River between the Barrier Dam and the confluence with the Toutle River will be given the highest priority. Particularly, properties containing off-channel habitats such as side-channels, oxbows, wetlands, etc. will be of the highest interest. A comprehensive evaluation of important lower Cowlitz River side channels and important habitat sites was completed during relicensing. Fee-title acquisition of these important sites will be considered top priority. Although entities other than Tacoma may submit proposals for eligible acquisition projects, only Tacoma Power shall hold title to purchased properties.

Conservation easements may be used as tool to protect priority lands where fee-title acquisition is not desirable, is cost prohibitive, or where protection of priority lands may be better accomplished through a conservation easement or purchase of development rights.

#### **1.2 Habitat Restoration Activities (Priority 2)**

Although construction projects are currently a low priority, the HAG may consider funding habitat restoration and enhancement projects. Restoration projects in tandem with acquisition or conservation easements will be considered a higher priority than construction projects alone.

Restoration actions considered would be those that restore natural processes or correct ongoing sources of degradation, such as setbacks or removals of levees or stabilized banks, retrofits of point sources of pollution, fencing of livestock, planting riparian buffers or barrier removal. Projects should have no or low maintenance.

## **2. Project Prioritization and Ranking**

Ranking criteria have been developed by the HAG as a means to compare the relative benefits of proposed projects. These criteria will be used to assign a point value to each proposal as it relates to; 1) the proposals applicability to the Cowlitz Project objectives, 2) Its relationship to existing basin recovery planning processes or identified priority projects, 3) biological and technical merit, 4) imminent threat if action should be delayed, and 5) the ratio of relative costs to the anticipated benefits. The framework for evaluating projects is described in Attachment A.

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Once the priority sites identified during relicensing have been pursued, or at the direction of the HAG, the remaining funds in the account will be made available for other acquisitions or habitat restoration projects.

## **B. Leveraging Funds**

Multiple funding sources exist from both state and federal agencies and other sources that could be used for acquisition, land protection, and restoration activities. When applicable, and as grant procedures allow, additional funds from outside sources will be investigated and / or pursued. Possible resources identified by the HAG include:

- FEMA acquisition assistance (Frequently flooded areas)
- Salmon Recovery Funding Board
- Federal Conservation Reserve and Enhancement Program (Natural Resources Conservation Service)
- Corps of Engineers (Section 206, 1135)
- Wetland Reserve Program
- National Fish and Wildlife Foundation Grants
- Private Stewardship Grants (Federal)
- WA Dept of Ecology
- Community Restoration Program (NOAA Fisheries)
- Family Forest Fish Passage Program (WDFW)
- USFWS

Conservation groups and others are encouraged to initiate project proposals with Lewis County and the HAG. The HAG will entertain proposals so long as they are eligible and meet the criteria and prioritization set forth by the HAG. Cowlitz habitat funds may also be used as a source of matching funds for proposed project grants requiring multiple funding sources. The percentage of the habitat fund contribution to the proposed project will be determined by the HAG, and weighted by applying the established ranking criteria and priorities.

## **C. Lewis County Partnership**

Tacoma Power has entered into a Memorandum of Understanding (MOU) with Lewis County for services related to the allocation of the Habitat Fund. Lewis County will act as an agent within the limits of the MOU for Tacoma Power in the acquisition of properties (real properties and /or conservation easements) for the purpose of fish habitat protection. Lewis County and/or Tacoma Power will identify and approach landowners of the properties recognized as a priority in the lower Cowlitz River.

## **D. Cowlitz Hydroelectric Project Lands**

Fee – title purchases and easements made with the habitat fund will be held in Tacoma Power's ownership. Tacoma will establish which properties will be included within the Cowlitz Project boundary on an individual basis. FERC will be notified if and when any acquired properties are to be included in the Project boundary.

## **E. Notification**

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Upon approval by the Commission of the final Habitat Fund Allocation Plan, a public notification will be released announcing the availability of the funds. This notification will include a statement of project eligibility and contact information. Notifications will be made to fish habitat grant funding sources such as those listed in Section B and to local newspapers. This information will also be placed on the Tacoma Power website and in the Cowlitz Currents newsletter.

#### **4. Implementation**

The plan will be implemented after approval by the Commission. Tacoma Power will annually review progress made towards habitat protection and report its findings to the HAG. If over this period, acceptable progress has not been made toward fund expenditure through land acquisitions and easements, the HAG will evaluate and consider modifications to the eligibility criteria and the prioritization of potential projects.

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## Attachments

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## **Attachment A**

### **Section 1. Framework for Evaluating Funding Requests for Habitat Projects**

The HAG will consider five factors in the evaluation of proposed funding request. The five factors will be assigned a relative score or ranking based on the evaluation each committee member makes, then aggregated for the entire committee. (maximum of 100 total points).

#### **A. Applicability of site or restoration project to Cowlitz Project objectives (25 points)**

This factor considers the broad level characteristics such as the location of the site, type of restoration, or the species or life stage that would benefit, compared to the broad objectives of fish restoration / protection goals for Tacoma in the Cowlitz basin. This factor may also consider whether the site or restoration project may provide dual benefits under the wildlife habitat program.

#### **B. Relationship to basin or agency objectives (institutional information) (15 points).**

This factor considers the broad level objectives of other agencies or conservation organizations for the Cowlitz basin. Considerations will be made as to whether the site would meet priority objectives of other conservation protection activities such as basin recovery planning processes, the Conservation Commission Limiting Factors Analysis or other assessments. The institutional criteria (Section 3, below) would be an example of factors that the evaluation committee would consider within this section.

#### **C. Technical or scientific merit (biological guidelines) (25 points).**

This factor considers the biological and physical characteristics of the site. The biological, physical, and restoration criteria (Section 2, 4, and 5, below) would be an example of factors for the evaluation team to consider in rating the technical merit of the site. This section will identify the specific results or benefits (short-term and long-term) that are expected to be achieved through the acquisition, protection, or restoration of the site.

#### **D. Risk / threats to site (15 points).**

This factor considers the relative risk of the site for future development if not protected. Timing should also be considered if delay in action might result in lost habitat protection opportunities.

#### **E. Relative cost / benefit (20 points).**

This factor balances the relative cost of site acquisition to the anticipated benefits identified in Item C above. The availability of matching funds, or cost sharing with other agencies or funding sources, may be included in this section.

### **Section 2. Criteria for consideration**

#### **A. Applicability to settlement agreement**

#### **B. Recommended by other plans or technical groups**

- FTC recommended site
- LCFRB recommended site (Lower Columbia Fish Recovery Board).
- Limiting Factors Analysis recommended action (Washington State Conservation Commission)
- Recovery or basin plans

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### **C. Biological/scientific merit**

#### Biological characteristics

- Spawning areas
- Side channels that are available at all flows during spawning and incubation, especially for fall Chinook and winter steelhead.
- Side channels that provide low flow availability (<2,140 cfs per LFA)
- Juvenile rearing areas
- Complex habitat that supports multiple salmonid species usage
  - Areas that are functioning well now and do not need restoration to function
  - Riparian condition (Especially natural riparian areas with large trees, complex cover, overhanging vegetation)
  - Large woody debris on a reach scale
  - Pool quality and quantity
  - Substrate quality, % embeddedness
  - Floodplain connectivity (Especially naturally unconfined channels)

#### Physical characteristics

- Inflow types
- Bank types
- Gravel or riparian
- Maintaining natural input processes (gavel, wood, etc.)
- Geomorphic longevity

### **D. Risk/threats to site**

- Threatened with future development (higher priority)
- Already protected areas (low priority)  
i.e., Publicly owned, or inaccessible to humans

### **E. Relative cost/benefit**

#### Amount of incidental land purchase

- Percent of parcel meeting habitat criteria. Will owners sell partial piece of the property or whole parcel versus nothing?
  - Opportunity for upland use as wildlife area-
- Shoreline length per acre of parcel