

***Boundary Hydroelectric Project (FERC No. 2144)***

***Terrestrial Resources Management Plan***

***Annotated Outline***

**Seattle City Light**

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# **Terrestrial Resources Management Plan Annotated Outline Boundary Hydroelectric Project (FERC No. 2144)**

## **1 INTRODUCTION**

This section will provide an overview of the Seattle City Light's (SCL) Boundary Project (Project) area, facilities, and operations as well as the purpose, scope, and organization of the Terrestrial Resources Management Plan (TRMP).

### **1.1. Description of Project Area, Facilities, and Operation**

This subsection will provide a brief description of Project area, facilities, and operations as they relate to terrestrial resource management, as well as a description of Project operation and maintenance activities, typical minor construction or repair projects, and a brief summary of Project-related recreation.

### **1.2. Purpose and Scope**

This subsection will include a description of lands, facilities, and resources addressed under the TRMP.

### **1.3. Content and Organization**

This subsection will include an overview of the TRMP by section.

## **2 ROLES AND RESPONSIBILITIES, COMMUNICATION, AND COORDINATION**

This section will provide a summary of SCL's and state, federal, and local agencies' roles and responsibilities, communication protocols, meetings, and periodic review of the TRMP's implementation and effectiveness.

### **2.1. Roles and Responsibilities**

#### **2.1.1. Seattle City Light**

This section will describe the primary roles of SCL through the term of the next license, including funding, serving as the primary Project contact, scheduling and leading meetings, maintaining the schedule, coordination with other workgroups, and TRMP development and implementation.

### **2.1.2. Terrestrial Resources Workgroup**

The Terrestrial Resources Workgroup (TRWG) will consist of SCL, the USDA Forest Service, US Fish and Wildlife Service, Washington Department of Fish and Wildlife, Pend Oreille County Weed Control Board, and others to be determined. Entities involved in the development and implementation of the TRMP will be members of the TRWG. The agencies listed above are those that have regularly attended relicensing meetings on terrestrial resource issues. However, all stakeholders are invited to participate in the process. The role of the TRWG will be to consult and coordinate with SCL, assist in TRMP development and implementation, review reports, attend meetings, and coordinate with other resource workgroups. As needed, TRWG members will coordinate with other staff within their respective organizations regarding data and policy updates.

## **2.2. Communication and Coordination**

### **2.2.1. Meetings and Decision-Making**

It is anticipated that, at a minimum, TRWG meetings will be held annually. It is likely, however, that during the early stages of TRMP implementation more frequent meetings and site visits will be required.

### **2.2.2. Annual Reports and Work Plans**

This subsection will discuss the format of annual reports, implementation plans, the TRWG review and comment process, and summarize each year's consultation.

### **2.2.3. Review and Updating of TRMP**

The TRMP will be reviewed and updated as necessary; updates will likely occur every five years. This process will be focused on adaptive management and will include provisions for responding to unanticipated events, such as the frequent occurrence of an endangered species on Project lands.

## **3 TERRESTRIAL RESOURCE GOALS**

### **3.1. Goal 1: Foster biodiversity, ecosystem function, and habitat connectivity on lands affected by the Project**

#### **3.1.1. Objectives**

Objectives will be developed for the following resource areas:

- Wetland and riparian habitats
- Exotic and invasive plants
- Monitoring and management plan for select wildlife species
- Threatened, Endangered, and Sensitive plant species program

- Erosion program
- Adaptive management strategy
- Management of the Boundary Wildlife Preserve
- Road and access management

**3.2. Goal 2: Manage Project-related recreation and other human uses in a manner that is compatible with maintaining biodiversity, ecosystem function, and habitat connectivity**

**3.2.1. Objectives**

- Manage Project-related recreation to minimize effects on wildlife and habitats
- Develop a Shoreline Management Strategy to minimize effects on wildlife and habitats that addresses other issues of shoreline use
- Work cooperatively with relevant land management agencies and landowners to minimize effects on wildlife and habitats on their lands

**3.3. Goal 3: Avoid, minimize, or mitigate effects on wildlife and habitats resulting from ongoing Project-related operations and maintenance**

**3.3.1. Objectives**

- Educate Project personnel and contractors on minimizing effects of maintenance and construction on wildlife and habitats
- Pre-construction planning
- Best Management Practices (BMPs)

**4 EXISTING AND DESIRED CONDITIONS OF LANDS WITHIN THE PROJECT BOUNDARY**

This section will include a description of parcels and their size, habitat types, wildlife and plant special features, current conditions, and desired conditions for long-term management. Issues related to a particular parcels (weed infestations, habitat function, use by sensitive species, human use) will be detailed. The narrative will include a discussion of the current habitat conditions of land parcels, the future habitat conditions that the TRWG wants to achieve on those parcels, and the management processes that will lead to that outcome.

**4.1. Habitat Lands**

These lands have significant terrestrial resource values and require active management to protect and enhance those values.

#### **4.1.1. SCL-owned lands**

- Boundary Wildlife Preserve (BWP): This includes the additional 88 acres of land adjacent to the current BWP. The BWP will be incorporated into the Project boundary (the additional 88 acres will also be incorporated into the Project boundary if relicensing participants agree that it is an appropriate protection, mitigation, and enhancement [PM&E] measure).

#### **4.1.2. Federal and State lands within the Project boundary (it is possible that federal or state lands located outside of the Project boundary could be managed under the TRMP)**

#### **4.2. Project-related lands**

While these lands may not provide high ecological value, their management may be essential for protecting values on adjacent lands. Weed control and minimizing construction disturbance are examples of activities that may be conducted on these lands.

##### **4.2.1. Transmission Line ROW**

##### **4.2.2. Roads**

##### **4.2.3. Facilities**

### **5 RESOURCE MANAGEMENT PROGRAMS**

All resource programs will provide cross-references to other resource areas as applicable. Recreation resources, interpretation and education (I&E), and cultural resources are some of the elements that will require coordination with other workgroups. Schedules for all elements of these programs will be developed by the TRWG.

#### **5.1. Erosion Program**

This program will include elements of erosion control, based on the previously completed erosion feasibility study, and long-term shoreline erosion monitoring. Previously collected baseline data will guide the study design for the long-term monitoring. Because of the relatively low rate of erosion along the reservoir, monitoring will occur once every five to ten years.

#### **5.2. Riparian and Wetland Program**

The comprehensive riparian and wetland program will address protection and enhancement of these resources. The BWP will be expanded by 88 acres (if agreed to by the relicensing participants) and the total area will be incorporated into the Project boundary. One specific issue already identified is the control of all-terrain vehicles and snowmobiles that are adversely affecting soils and vegetation on the property. The TRWG will develop a comprehensive management program for the BWP.

### **5.2.1. Other Lands within the Project boundary**

Other specific riparian/wetland habitats requiring management may be identified as the TRMP is developed.

### **5.3. Integrated Weed Management Program**

A program will be developed that addresses the long-term management of weeds in the Project area. This will include a monitoring and mapping component (every three years) and a strategy for controlling species according to TRMP protocols.

### **5.4. Threatened, Endangered, and Sensitive (TES) Plant Species Program**

TES plant survey data from relicensing studies will be used to develop a program that includes long-term monitoring (every three to five years) and an integrated strategy for protection of TES plants from Project-related effects.

### **5.5. TES Wildlife Program**

Elements of this program will be developed by the TRWG. Some elements under discussion include:

- Annual bald eagle nest surveys
- Management plans for bald eagle nests potentially affected by Project-related activities
- Surveys for peregrine falcons and bank swallows (every three years)
- Integrated strategy for managing human use as it relates to TES species

Other species may be added as appropriate.

### **5.6. Shoreline Management Program**

This program will address potential development along the Project shoreline and the integration of the Pend Oreille County Shoreline Master Program requirements. Specific issues that have been discussed to date include:

- Guidelines for docks and mooring buoys
- Monitoring and enforcement program
- Elements of the program must follow FERC guidelines regarding shoreline uses

### **5.7. Travel and Public Access Management Program**

The travel and public access program will address the use of Project-related lands, roads, and facilities. Items that may be included are reporting of unauthorized uses and instituting seasonal road closures in cooperation with federal land management agencies.

## **6 MONITORING AND ADAPTIVE MANAGEMENT**

An umbrella program, applicable to all resource areas of the TRMP, will be developed to monitor measures implemented per the TRMP, evaluate the effectiveness of these measures, and develop adaptive management strategies to address implementation performance as necessary. Application of such a standard process will allow the TRWG to assimilate information from a past year's efforts and modify plans, if needed, for the following year's activities. The program will include protocols for documentation, distribution of information to the TRWG, and the responsibilities of the TRWG.

## **7 MANAGEMENT OF PROJECT-RELATED ACTIVITIES AND FACILITIES**

This program is applicable to all Project lands, facilities, roads, and operations and maintenance activities. It contains three primary elements: worker training, pre-construction project planning, and standard BMPs.

### **7.1. Worker Environmental Awareness Program**

- Training materials for Project staff and contractors
- Training format/schedule
- Maps/informational materials (T&E species alert program, wildlife mortality contacts, etc.)

### **7.2. Pre-construction planning**

This subsection will address site selection and design, pre-construction species surveys, cultural resources coordination, timing of construction, etc.

### **7.3. Best Management Practices**

- Develop BMPs (ground disturbance, restoration standards, eagle/raptor guidelines, etc.)
- Compliance monitoring program

## **8 REFERENCES**