

**OFFER OF SETTLEMENT AND JOINT
EXPLANATORY STATEMENT IN SUPPORT
OF SETTLEMENT AGREEMENTS AND
IN SUPPORT OF MOTION TO CONSOLIDATE**

**BOUNDARY HYDROELECTRIC PROJECT
(FERC NO. 2144-038)**

**SULLIVAN CREEK HYDROELECTRIC PROJECT
(FERC NO. 2225-013)**

March 2010

Submitted by

SEATTLE CITY LIGHT

**PUBLIC UTILITY DISTRICT No. 1 OF
PEND OREILLE COUNTY, WASHINGTON**

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**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

I. INTRODUCTION

A. General

The City of Seattle, Seattle City Light Department (“SCL”), Licensee for the Boundary Hydroelectric Project, FERC No. 2144 (“the Boundary Project”); Public Utility District No. 1 of Pend Oreille County, Washington (“PUD”), Licensee for the Sullivan Creek Hydroelectric Project, FERC No. 2225 (the “Sullivan Creek Project”); the Bureau of Indian Affairs (“BIA”); the National Park Service (“NPS”); the U.S. Fish and Wildlife Service (“USFWS”); the U.S. Forest Service (“USFS”); the Kalispel Tribe (“Tribe”); the Washington State Department of Fish and Wildlife (“WDFW”); the Washington State Department of Ecology (“Ecology”); The Lands Council; American Whitewater; the Selkirk Conservation Alliance (“SCA”); the Town of Cusick, Washington; Rick Larson; and Al Six (collectively referred to as “Settlement Parties” or “Parties”) are pleased to file this Joint Explanatory Statement in support of two settlement agreements, pursuant to Rule 602 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“FERC” or “Commission”).¹ These two agreements are the Boundary Hydroelectric Project Relicensing Settlement Agreement (“Boundary Settlement”) and the Sullivan Creek Hydroelectric Project Settlement Agreement (“Sullivan Creek Settlement”).

B. Overview of the Settlement Agreements

The Settlement Parties for both the Boundary and Sullivan Creek settlements have devoted extraordinary efforts toward reaching agreement on disputed issues and drafting

¹ 18 C.F.R. § 385.602.

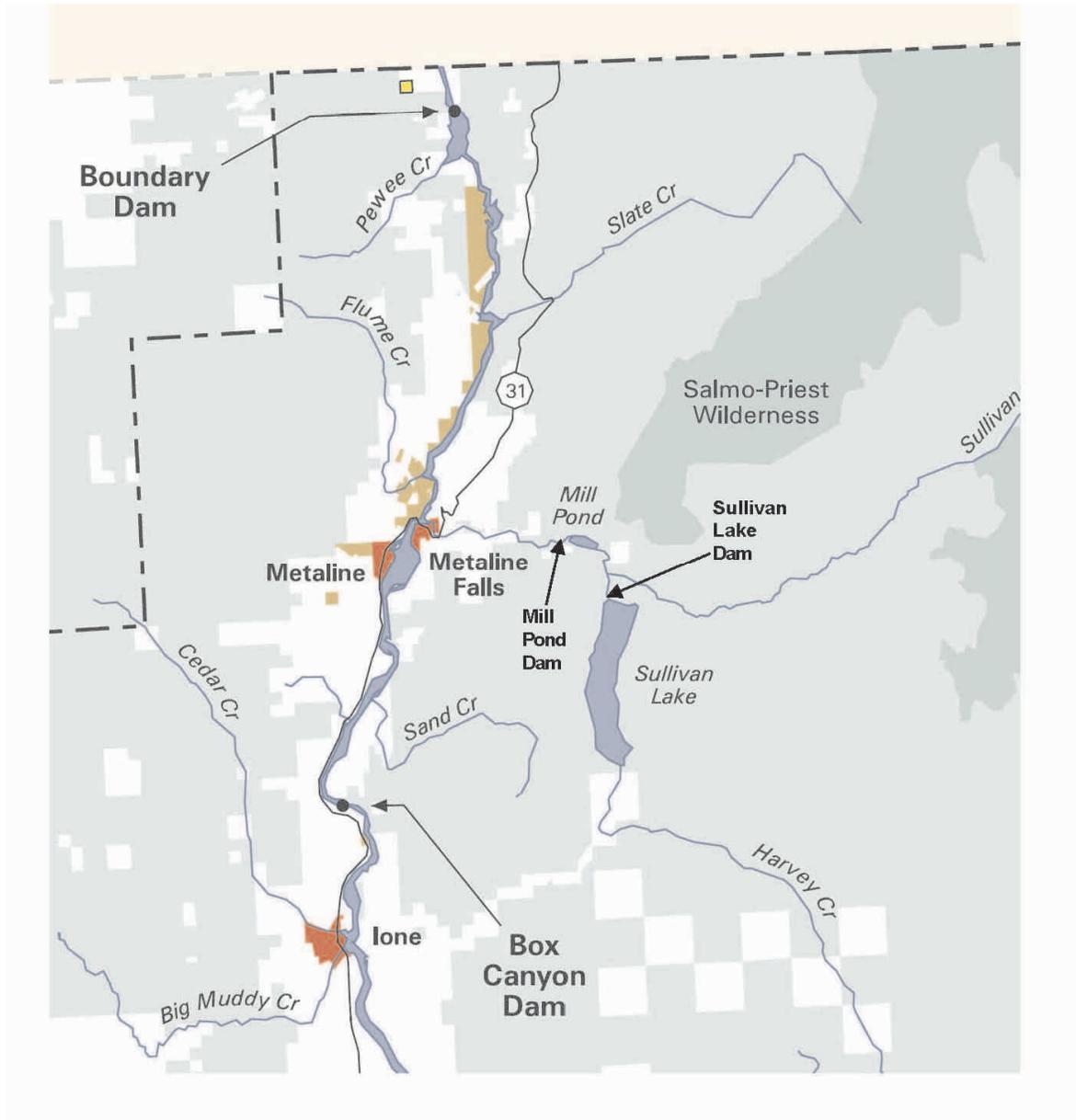
Proposed License Articles and License Surrender Conditions that satisfy their respective interests. These two settlement agreements produce unique procedural advantages for the Commission and substantial resource benefits to address the issues raised during the Boundary and Sullivan Creek negotiations. The Boundary and Sullivan Creek settlements are both comprehensive settlements, which, with the completion of related administrative processes (i.e., Section 401 certification, Endangered Species Act (“ESA”) consultation, and National Historic Preservation Act (“NHPA”) compliance), will resolve all issues raised by the Parties in the two settlement negotiations, including issues related to the governmental agencies’ conditioning authority.

The Boundary Settlement is intended to govern the relationships of the Boundary Settlement Parties throughout the term of the new Commission license, including procedures for future consultation and dispute resolution among the Parties. It establishes SCL’s protection, mitigation and enhancement (“PM&E”) obligations, including upstream fish passage, entrainment reduction, aquatic habitat improvements, recreational fish stocking, native salmonid conservation, well-decommissioning, and land acquisition. The Boundary Settlement Agreement includes other substantial PM&E measures described below. Together, the sum of these measures is intended to address the resources affected by the continued operation of the Boundary Project.

The Sullivan Creek Settlement provides for the license surrender and the orderly disposition of the Sullivan Creek Project, which includes Mill Pond Dam and Sullivan Lake Dam. Sullivan Lake Dam will remain on National Forest System (“NFS”) lands and will be authorized by a USFS special use authorization (“SUA”) when the Sullivan Creek license is

terminated by the Commission. Mill Pond Dam is proposed to be removed and the aquatic habitat of Sullivan Creek restored for the substantial resource benefits these measures will provide. As explained below, SCL will assist the PUD in discharging its obligations under the license surrender order to remove Mill Pond Dam, restore Sullivan Creek, and construct a cold water release facility at Sullivan Lake through off-license bilateral agreements between SCL and the PUD. The Boundary Settlement also provides that SCL will assume responsibility under its new license for the long-term monitoring and maintenance of the restoration work at Mill Pond after the Sullivan Creek Project license has been terminated by FERC.

The Parties created these two interdependent settlement agreements to minimize the impact of the surrender proceeding on the Pend Oreille ratepayers while at the same time preserving SCL's operational flexibility at Boundary. An important aspect of the Boundary Project's value to SCL and the region is its flexibility and reliability; Boundary can ramp up or down quickly within the hour and in immediate response to customer demand. Operational flexibility allows SCL to continue to provide clean, safe, and reliable power to its ratepayers over the next license term. The off-license tributary restoration measures that SCL proposes to undertake in Sullivan Creek, the most important tributary to Boundary Reservoir, together with other substantial PM&E measures described in the settlement agreements, provide substantial resource benefits and are intended to address concerns regarding the Boundary Project's impacts to aquatic resources. The geographical relationship of the Boundary and Sullivan Creek projects is shown below:



Source: Draft Biological Assessment, Boundary Hydroelectric Project, p. 4 (Fig. 2.1-1) (March 2010).

II. ACTION SOUGHT FROM THE COMMISSION

A. Approval of Settlement Agreements

Implementation of the settlement agreements depends upon Commission approval and acceptance of the agreements as part of the new license for Boundary and the license surrender

order for Sullivan Creek. The actions requested of the Commission and outlined in the settlement agreements are necessarily intertwined: implementation of *all* of the actions is essential if the shared goals of the Parties are to be realized. For this reason, the Parties respectfully request that the Commission adopt language identical to the language of the Boundary Proposed License Articles and Sullivan Creek Proposed License Surrender Conditions. If the final Commission orders in these proceedings are materially inconsistent with these documents, the settlement agreements include procedural provisions for dispute resolution and potential subsequent withdrawal, and the settlement agreements may be terminated.²

The delicately-balanced outcome of negotiations in the Boundary and Sullivan Creek proceedings was rooted fundamentally in the expansive non-operational measures SCL agreed to undertake in exchange for the Settlement Parties' agreement not to seek operational changes for the Boundary Project. This unique package of PM&E measures would not be achievable if these two proceedings remain separate and distinct. The Parties ask the Commission to approve these measures without material change because they provide a significant legacy of long-term resource and developmental benefits.

The Boundary and Sullivan Creek settlements satisfy the interests of the agencies with Federal Power Act ("FPA") and other statutory authority related to the resources affected by the projects. All Parties agree that the settlement agreements are fair and reasonable and in the public interest. Pursuant to 18 C.F.R. § 385.602, the Parties request that the Commission approve the settlement agreements and adopt without modification the Parties' proposed articles

² See Boundary Settlement §§ 9, 10; Sullivan Creek Settlement §§ 9, 10.

and conditions as part of the new license for Boundary and the surrender order for Sullivan Creek.

B. Consolidation of the Proceedings

This Joint Explanatory Statement (“JES”) is filed in support of the Settlement Parties’ Motion to Consolidate as well as their Offer of Settlement. Due to the interconnected nature of the Boundary Settlement and Sullivan Creek Settlement, the Parties have requested in a separately filed motion that the Commission consolidate the Boundary relicensing and Sullivan Creek license surrender proceedings for review and analysis under the FPA and National Environmental Policy Act (“NEPA”).³ *See* 18 C.F.R. § 385.602(b)(3). As explained in this JES, the PM&E measures and off-license commitments in the Boundary Settlement Agreement are linked to the surrender conditions included in the Sullivan Creek Settlement Agreement so as to provide significant resource benefits on the same river system that could not occur absent mirror-image settlements in each proceeding.

SCL’s obligations under the Boundary Settlement Agreement to carry out certain activities in the Sullivan Creek Project area, pursuant to off-license agreements, are dependent upon the Commission approving various conditions included in the Sullivan Creek Settlement. For example, SCL cannot perform its obligations under the Mill Pond Interlocal Agreement (the off-license agreement included as Attachment 1 to the Boundary Settlement Agreement) until FERC approves the Mill Pond Decommissioning Plan (an appendix to the PUD’s license surrender application and the Sullivan Creek Settlement). Furthermore, SCL and the PUD cannot begin the financing, design, and construction of the Sullivan Lake cold water release

³ The USFWS will also consider consolidating its reviews under Section 7 of the ESA.

facility under their settlement agreements without Commission action. *See* Cold Water Release MOA (an off-license agreement included as Attachment 2 to the Boundary Settlement Agreement). The linkages and timing provisions included in the settlement agreements make consolidated NEPA review and processing of the Boundary relicensing and Sullivan Creek surrender appropriate.

Consolidation of the FPA and NEPA proceedings for the Boundary and Sullivan Creek settlement agreements, as well as potential consolidation under the ESA, also will lead to significant procedural efficiencies for all of the Parties, and in particular, the Commission, USFWS and the USFS. Because the settlement agreements for the Boundary Project relicensing and the Sullivan Creek Project license surrender link together habitat restoration activities on Sullivan Creek, the largest tributary to the Boundary Reservoir, the Commission should consolidate the NEPA analysis of these proposed actions. Furthermore, the USFS could utilize FERC's NEPA analysis to issue the SUA for the remaining Sullivan Creek facilities. FERC could work with the USFWS to consolidate ESA consultation on these two proceedings. Finally, Ecology could use the Commission's analysis in its review of SCL's and the PUD's applications for Clean Water Act Section 401 certification.

C. Request for Technical Conference

The Settlement Parties recognize that many of the Proposed License Articles and Proposed License Surrender Conditions included in this filing and the issues surrounding the relationship between the Boundary relicensing and the Sullivan Creek license surrender are complex. Upon the request of the Commission, the Settlement Parties would be pleased to schedule a technical conference with the Commission, where the Parties could present an

overview of the settlement agreements and answer any questions prior to the Commission issuing its environmental analysis addressing issuance of a new license for Boundary and accepting surrender of the Sullivan Creek license.

III. PROCEDURAL HISTORY THAT PRODUCED THE AGREEMENTS IN PRINCIPLE AND FINAL SETTLEMENT AGREEMENTS

A. Development of the Agreements in Principle

In 2003, the PUD decided not to seek a new license for the Sullivan Creek Project. In March 2008, FERC determined that the Sullivan Creek Project is subject to its mandatory licensing jurisdiction, and that the PUD must file an application to surrender its license for the Sullivan Creek Project.⁴ Subsequently, the PUD entered into settlement negotiations with interested parties during the spring of 2008, including resource agencies, local governments, non-governmental organizations, and members of the public, to determine the disposition of its Sullivan Creek Project located on a tributary of the Pend Oreille River in Washington.

SCL entered into negotiations in April 2009 with most of those same Parties to resolve the issues surrounding the relicensing of its Boundary Project, located on the Pend Oreille River downstream of the Sullivan Creek Project. During the negotiations, the Parties sought to minimize Boundary operational changes in order to preserve its operational flexibility while also improving habitat and resource conditions. The Settlement Parties reviewed all available information on habitat in the mainstem Pend Oreille River and its tributaries. The Settlement Parties found there were limited opportunities for habitat improvements for native salmonids on

⁴ *Public Utility District No. 1 of Pend Oreille County, Wash.*, 122 FERC ¶ 61,249, *order on rehearing*, 124 FERC ¶ 61,064 (2008).

the mainstem Pend Oreille River and instead identified tributary habitat improvements as the most effective actions to address potential Boundary Project impacts on habitat for native fisheries and aquatic resources.

The Parties recognized that there are tributary restoration measures SCL could undertake involving resources in Sullivan Creek, the most important tributary to Boundary Reservoir, that would partly address concerns regarding the Boundary Project's impacts to aquatic resources. In the Boundary and Sullivan Creek Agreements in Principle ("AIPs") filed in September 2009, the most significant of these tributary restoration measures were identified as removal of Mill Pond Dam, restoration and long-term monitoring of Sullivan Creek above Mill Pond Dam, and financial participation in the evaluation and potential construction of a cold water release facility that would release cold water from Sullivan Lake to Outlet and Sullivan creeks. The AIPs did not specify whether SCL's obligations regarding the Sullivan Creek tributary restoration measures would be proposed as on-license or off-license obligations.

During negotiation of the AIPs, the Parties to the settlement agreements concluded that removal of Mill Pond Dam will remove a fish passage barrier in the vicinity of the Boundary Project, providing potential access to 16 miles of spawning, rearing, overwintering and foraging habitat. Bull trout are listed as threatened under the Endangered Species Act and providing access to additional, good quality habitat is a high priority for the Resource Agencies. The AIPs also provided that if the results of the studies were favorable, SCL and PUD would jointly participate in the construction of a Sullivan Lake cold water release facility to cool water temperatures and improve native salmonid habitat conditions in Sullivan Creek (below the confluence with Outlet Creek), and provide cooler water input to the Pend Oreille River.

In summary, the AIPs reflected the Parties' agreement, resulting from extensive negotiations and compromises, that concerns with the Boundary Project could be mitigated by a suite of measures within and outside the Boundary Reservoir, including the removal of Mill Pond Dam and the potential release of cold water from Sullivan Lake, in lieu of restrictions on the Boundary Project's power operations.

B. Evolution of Settlement Structure from AIPs to Settlement Agreements

After SCL and the PUD filed the AIPs with FERC in September 2009, SCL and the PUD received letters from FERC encouraging the involvement of FERC separated, non-decisional staff in settlement negotiations. Both SCL and the PUD accepted FERC's offer. Through separated staff, the Parties became aware of the potential procedural problems for the Commission caused by the settlement architecture under consideration in the negotiations. Specifically, FERC separated staff strongly encouraged the Parties to pursue Mill Pond Dam removal with a license surrender and decommissioning proposal by the PUD and an off-license agreement that recognizes SCL as a contractor of the PUD.

After the Commission granted additional time to complete settlement negotiations in January 2010, the Parties determined, with the assistance of FERC separated staff, that the settlement architecture should avoid unnecessary complications that could arise in the proceedings before the Commission. The Parties also completed modeling that demonstrated the potential effectiveness of a cold water release facility. The settlement agreements filed with this JES therefore propose Mill Pond Dam removal and restoration, and construction of the Sullivan Lake cold water release facility, as conditions of the PUD's proposed license surrender. However, off-license provisions of the Boundary Settlement Agreement oblige SCL to conduct

Mill Pond Dam removal and to fund half of the Sullivan Lake cold water release facility based on the original premise of the Parties that the measures are intended to address the Resource Agencies' concerns about impacts associated with continued operation of the Boundary Project. The Parties believe this is an appropriate resolution of the issues. Accordingly, the final settlement agreements submitted herewith were configured to ensure that the Commission could act upon them in a straightforward manner consistent with existing Commission precedent. The configuration of these elements in the final settlement agreements is shown in Table 1.

Table 1. CONFIGURATION OF THE FINAL SETTLEMENT AGREEMENTS

<i>PM&E Measure</i>	FERC License Order for Boundary	FERC Surrender Order for Sullivan	USFS SUA	Related Off- License Agreement
Removal of Mill Pond Dam		X		Interlocal Agreement between SCL and the PUD
Initial Restoration of Sullivan Creek		X		Interlocal Agreement between SCL and the PUD
Long-term Monitoring and Maintenance of Sullivan Creek below Sullivan Dam	X			
Construction of the Cold Water Release Structure at Sullivan Dam		X		MOA between SCL and the PUD
Long-term operation of Sullivan Lake Dam and Reservoir			X	

IV. THE SETTLEMENT AGREEMENTS

A. Boundary Settlement Agreement

The Boundary Dam is located downstream of the Town of Metaline Falls on the Pend Oreille River in northeastern Washington. The Boundary Project is one of eleven hydroelectric and storage projects in the Clark Fork – Pend Oreille River basin. The Boundary Project occupies approximately 606 acres of NFS lands and 314 acres of Bureau of Land Management (“BLM”) lands. Although no Indian tribes have reservation lands directly within or adjacent to the Boundary Project, the Boundary Project is located within the aboriginal territory claimed by the Kalispel Tribe and may affect resources held in trust by the federal government.

Boundary Dam is a 340-foot-high, variable-radius concrete arch dam and is situated in a narrow canyon and founded on interbedded limestone and dolomite of the Metaline Limestone formation. The Boundary Project is SCL’s largest generation facility, supplying 35 to 45 percent (depending on water conditions) of Seattle’s power requirements. Authorized installed capacity is approximately 1,003 megawatts (“MW”) at the existing maximum water surface elevation (1,994 feet North American Vertical Datum (“NAVD”) 88 at the forebay). The Boundary Project is operated in a load-following mode that shapes available water to deliver power during peak-load hours. This operating regime allows SCL to meet continued service area load growth and support regional system reliability.

The Boundary Settlement Agreement includes many measures intended to protect, mitigate or enhance resources that will be impacted by continued operation of the Project. Among them, SCL will study effects of entrainment on target species (bull trout, westslope cutthroat trout, and mountain whitefish) and determine whether a substantial percentage of fish

in the Project area are affected by Project entrainment. Based on the results of these studies, SCL will build facilities at the Project to improve Boundary Dam survival of target species or implement appropriate non-operational measures to improve survival of target species. SCL also will construct upstream passage. In addition, SCL will improve the habitat condition and function of tributaries draining to Boundary Reservoir to offset an estimated 304 acres of reservoir habitat affected by the Boundary Project. SCL will fund, design, construct, operate, and maintain a fish propagation facility to produce native salmonids to be released into tributaries to Boundary Reservoir. Furthermore, SCL will acquire approximately 158 acres of riparian and upland habitat and approximately 13,022 lineal feet of varying habitats immediately adjacent to water features for wildlife. The Boundary Settlement also includes five water quality plans that require SCL to: make operational and structural improvements to its facilities to decrease total dissolved gas; engage in various measures to decrease water temperatures, such as replace culverts, install large woody debris in tributaries and tributary deltas, and add riparian plantings; conduct a five-year dissolved gas monitoring plan; and control and suppress aquatic invasive species such as Eurasian milfoil, zebra and quagga mussels, and New Zealand mudsnails. SCL's settlement also includes a Historic Properties Management Plan to ensure the documentation of historic properties and the protection of cultural resources. Finally, SCL is committed to providing a variety of recreational improvements, such as a 10-year capital improvements program to existing and new recreational sites, implementation of a management program for dispersed recreation sites along the shoreline of the Project, and road improvements for recreational access purposes.

B. Sullivan Creek Settlement Agreement

Like the Boundary Project, the Sullivan Creek Project is located in Pend Oreille County in the northeast corner of Washington State. It is owned and operated by the PUD. The Sullivan Creek Project is located on Sullivan, Outlet and Harvey creeks and Sullivan Lake, approximately 4.5 miles east of the Town of Metaline Falls. Sullivan Creek is the largest tributary to the Boundary Project reservoir. Sullivan Creek enters the Pend Oreille River about ten miles upstream of Boundary Dam on the eastern edge of the Project reservoir. As originally constructed by the Portland Inland Cement Company in 1909, the Sullivan Creek Project included Sullivan Lake Dam and Reservoir, Sullivan Creek diversion dam and conduit, Mill Pond Dam⁵ and Reservoir, a conduit, penstock, powerhouse, and transmission facilities. Sullivan Creek Project operations were terminated and the powerhouse was decommissioned in 1956. The PUD obtained a license from the Federal Power Commission in 1958 to operate the Sullivan Creek Project for the benefit of generation at downstream projects and acquired the Project facilities in 1959. The conditions of the license included the possibility of adding generating capabilities later if it were economically feasible to do so, but it was later determined, after several studies, that adding generation at the Project would not be economic, and plans to rebuild the Project were never implemented.

The Sullivan Creek Project occupies approximately 500 acres of NFS lands managed by the USFS. The PUD's license for the Sullivan Creek Project expired on October 1, 2008. It is currently operating under annual licenses.

⁵ Two dams are located at the Mill Pond site: a log crib dam and an adjacent, newer concrete dam. For the purposes of this JES and the Settlement documents, the two structures are referred to as the Mill Pond Dam.

The Sullivan Creek Settlement provides for the orderly disposition of Sullivan Creek Project works and establishes the procedural framework governing the relationship of the Parties throughout the license surrender process. The Sullivan Creek Settlement also provides the proposed conditions that will govern the continued operation of remaining Sullivan Creek Project facilities under an SUA to be issued to the PUD by the USFS. The Parties have agreed to support an SUA term of 30 years. The Sullivan Creek Settlement includes measures that will provide significant resource benefits through the removal of the Mill Pond Dam, sediment management, channel restoration and monitoring activities at the restored stream channel, installation of a cold water release facility and a modified operating regime.

The Sullivan Creek Settlement and the License Surrender Application provide that the PUD will assume responsibility under the FPA for removal of Mill Pond Dam and restoration of the affected area of Sullivan Creek as a proposed condition of a license surrender order to be issued by the Commission. The PUD has entered into an Interlocal Agreement with SCL, whereby SCL will conduct the removal and restoration activities as a cooperating agency of the PUD under State law. In addition, the PUD proposes to assume responsibility under the FPA for the design and construction of a cold water release facility at Sullivan Lake Dam and Reservoir as a condition of the license surrender order. The PUD and SCL have entered into a Memorandum of Agreement whereby SCL will reimburse the PUD for 50 percent of the cost of this facility.

After the PUD discharges its obligations under the license surrender order, including removal of Mill Pond Dam, related restoration work, and completion of the cold water release facility, the Parties assume that the Commission will issue a notice or order declaring that the

surrender of the PUD's license has become effective.⁶ Thereafter, the PUD proposes to continue operating Sullivan Lake Dam and Reservoir pursuant to the conditions of an SUA to be issued by the USFS in accordance with the Sullivan Creek Settlement.

V. PROJECT BOUNDARY IMPLICATIONS OF MILL POND DAM REMOVAL, SULLIVAN CREEK RESTORATION, COLD WATER RELEASE FACILITY AND OTHER MEASURES

The Boundary Settlement and Sullivan Creek Settlement do not propose to alter the boundaries of the Boundary Project to account for SCL's (1) off-license involvement in the removal of Mill Pond Dam, restoration of Sullivan Creek, and funding of the Sullivan Lake cold water release facility, or (2) SCL's on-license maintenance and monitoring of the Mill Pond area after the termination of the Sullivan Creek Project license. The removal of Mill Pond Dam and the restoration of Sullivan Creek are the ultimate responsibility of the PUD as the licensee of the Sullivan Creek Project. However, pursuant to the settlement agreements, SCL has entered into the Interlocal Agreement with the PUD (Attachment 1 of the Boundary Settlement) for the actual removal of Mill Pond Dam and the restoration of Sullivan Creek. To make this relationship as procedurally straightforward as possible, the Parties request that FERC (a) require the PUD to remove Mill Pond Dam and restore Sullivan Creek as a condition of its license surrender order as

⁶ In the event the Commission does not require the PUD to construct the cold water release facility as a condition of the order accepting surrender of the license, Section 7.14.5 of the Sullivan Creek Settlement Agreement provides that (1) the PUD will request the USFS to process an SUA authorizing the construction of the cold water release facility, and (2) the PUD will request the FERC to grant an amendment of the license (a) to authorize the construction of such facility, or (b) to remove the Sullivan Lake Dam and Reservoir from the license to allow the PUD to proceed with construction of such facility in accordance with the terms of an SUA issued by the USFS.

proposed in the PUD's application, and (b) not modify the Boundary Project's boundary with relation to Mill Pond Dam.

In addition, to the extent that certain Proposed License Articles call for measures that are one time in nature or do not involve ground-disturbing activities, the Parties do not anticipate FERC's issuance of the Boundary license would require modification of the Project boundary. *See* Policy Statement on Hydropower Licensing Settlements, FERC Docket No. PL06-5-000 (Sept. 21, 2006) ("To an extent, the Commission has allowed an exception for lands and waters on which a licensee is to carry out one-time measures. For example, if a licensee is required once to place material in a stream in order to create fish habitat, but is not required to undertake other measures in that area during the license term, the Commission may not include that reach within the project boundary."). Similarly, the Commission has held that funding commitments, like SCL's funding of the Sullivan Lake cold water release facility, do not require project boundary expansion. *See PacifiCorp*, 106 FERC ¶ 61,306, at 62,200 (2004).

SCL, however, is proposing certain modifications to the Boundary Project boundary. SCL proposes to make limited Project boundary expansions for: an operations and maintenance support area; roads used exclusively or primarily for project purposes; Project Habitat Lands ("PHLs"); proposed recreation facilities; and certain proposed habitat restoration activities. Among the expansions, SCL proposes to expand the Project boundary to include 276.3 acres for habitat management. The Boundary Wildlife Preserve ("BWP") Addition (89 acres) was purchased in 1994 to protect it from being logged and to provide a buffer for the BWP. In addition, portions of three other SCL-owned parcels currently reside outside of the Project boundary and will be brought into the boundary to be managed as PHLs, including Tailrace East

(86.9 acres), Everett Creek (82.7 acres), and Sullivan Creek (17.7 acres). The Settlement Parties agreed to manage these parcels as PHLs because they contain habitat that would benefit wildlife. SCL also proposes to bring into the Project boundary other parcels of land that will be managed primarily for the benefit of other resources or as support areas for Project operations and will *not* be managed as PHLs.

VI. DETAILED DESCRIPTION OF THE BOUNDARY SETTLEMENT AGREEMENT

The Boundary Settlement and the included Exhibits and Appendices provide measures in Proposed License Articles and Management Plans for operations, upstream fish passage, entrainment reduction, aquatic habitat and resources, water quality, terrestrial resources, vegetation, recreation, historic properties, well-decommissioning, and land acquisition. These measures address the resources affected by the continued operation of the Boundary Project.

The Parties believe that implementation of the Proposed License Articles and resource Management Plans in the Boundary Settlement will satisfy all requirements of the FPA and related federal law with regard to this relicensing proceeding. The Boundary Settlement also will lead to resolution of all issues among the Parties within the scope of the relicensing proceeding. The Commission's approval of the Boundary Settlement and its Exhibits and Appendices and incorporation of the Proposed License Articles and Management Plans into the new license would serve the public interest as the agreement balances development interests related to the Boundary Project with the substantial PM&E measures for fish, wildlife, recreational, and cultural resources and other beneficial public uses. Approval of the agreement

also will ensure that continued operation of the Boundary Project on NFS lands will be consistent with the Colville National Forest Land and Resources Management Plan, as amended.

A. Article 1: Operations

This Proposed License Article requires certain water surface elevations to address recreational interests and imposes constraints on turbine sequencing and operations to reduce total dissolved gases (“TDG”). The Boundary Project is operated in a load-following mode that uses available water to deliver power during peak-load hours. The normal maximum reservoir water surface varies from elevation 1,994 feet at the forebay to 1,999 feet at the Box Canyon tailrace. The reservoir has relatively little active storage (about 40,843 acre-feet) within the maximum drawdown of 40 feet (active storage from elevation 1,994 NAVD 88 to elevation 1,954 NAVD 88) authorized under the current license. Currently, SCL voluntarily restricts and maintains the summer forebay pool level to facilitate recreational access and use. In its Proposed License Article for Operations, SCL proposes to formalize this operational commitment.

B. Article 2: Boundary Resource Coordinating Committee and Work Groups

This Proposed License Article requires SCL to implement Section 8 of the Boundary Settlement Agreement that establishes a Boundary Resource Coordinating Committee and five work groups: the Fish and Aquatics Work Group, Terrestrial Resources Work Group, Recreation Resources Work Group, Cultural Resources Work Group, and Water Quality Work Group. Section 8 of the Boundary Settlement requires SCL to consult with the work groups on all aspects of the New License, Settlement Agreement, and Management Plans (defined as the “Project Documents”). Section 8 also defines the consensus decision-making process that will govern work group operations and other procedural protocols.

C. Article 3: Terrestrial Resources

This Proposed License Article requires SCL to implement the terrestrial resource PM&E measures contained in the Terrestrial Resources Management Plan (“TRMP”) in consultation with the Terrestrial Resources Work Group (“TRWG”). The TRMP presently addresses 1,911.4 acres of land (either currently contained within or proposed for inclusion into the Project boundary) owned by SCL, USFS, and BLM. The TRMP is the principal instrument for management of, implementation, monitoring and adaptation of PM&E measures for terrestrial resources affected by or related to the Project. The TRMP describes the implementation of the following programs: (1) Erosion; (2) Habitat Management, Enhancement and Protection; (3) Integrated Weed Management; (4) Rare, Threatened or Endangered (“RTE”) Plant Species; (5) Wildlife; and (6) Shoreline Management. The details for each of these programs are provided in the TRMP (Settlement Exhibit 2).

D. Article 4: Land Acquisition

This Proposed License Article requires SCL to acquire additional Boundary PHLs within 5 years of license issuance, and such lands will be proposed to be included within the Project boundary. In consultation with the TRWG, SCL will prioritize and select parcel(s) for acquisition using the habitat criteria described in the Proposed License Article and TRMP to attain the stated targets. SCL will notify the Commission of the location and acreage of land acquired and submit updated license Exhibit G maps within 90 days of acquisition.

The PHLs acquired pursuant to this Article should achieve the targets of approximately 158 acres of riparian and upland habitat and approximately 13,022 lineal feet of varying habitats

immediately adjacent to water features. The details regarding habitat objectives are provided in the TRMP (Settlement Exhibit 2).

E. Article 5: Recreation Resources

The Boundary Project offers many recreational opportunities including boating, waterskiing, fishing, swimming, sightseeing, picnicking, wildlife viewing, and camping, among others. There are several existing recreation sites and use areas at the Project, including five developed recreation sites (of which three are owned and operated by SCL) and multiple dispersed shoreline sites. Within the region, the Project occupies an important niche in the provision of outdoor recreation opportunities, in particular water-based and water-enhanced opportunities, in a highly scenic, uncrowded setting.

This Proposed License Article requires SCL to implement the Recreation Resources Management Plan (“RRMP”) to enhance recreation resources at the Boundary Project in consultation with the Recreation Resources Work Group (“RRWG”). The RRMP is an implementation plan that will be used to monitor, design, construct, fund, operate, and maintain existing and proposed public recreation facilities and programs at the Project. The RRMP requires SCL to implement the following programs: (1) Recreational Facility Capital Improvements; (2) Recreational Facility Operations and Maintenance; (3) Shoreline Dispersed Recreation Management; (4) Recreation Monitoring; (5) Travel and Public Access Management; and (6) Multi-Resource Interpretation and Education. The details for each of these programs are provided in the RRMP (Settlement Exhibit 3).

F. Article 6: Well Decommissioning

This Proposed License Article requires SCL to implement the Monitoring Well and Road Decommissioning Plan contained in Exhibit 4 to the Boundary Settlement. SCL installed a series of wells along the lower portion of the Boundary Reservoir (from the town of Metaline downstream to the vicinity of the dam) in the late 1950s as a means to monitor groundwater levels. In order to install the wells, SCL was granted permission to use existing roads or construct new roads (or short access “spurs”) over private and federal land. SCL no longer has a need to monitor the water levels and is taking steps to decommission the wells (per WAC 173-160-381) and associated roads. The Monitoring Well and Road Decommissioning Plan addresses the treatment of the wells and roads on federal land.

G. Article 7: Programmatic Agreement

This Proposed License Article requires SCL to implement the “Programmatic Agreement Among the Federal Energy Regulatory Commission and the Washington State Historic Preservation Officer for Managing Historic Properties that may be Affected by a License Issuing to Seattle City Light for the Continued Operation of the Boundary Hydroelectric Project,” which the Parties anticipate FERC will enter into prior to license issuance to fulfill its responsibilities under Section 106 of the NHPA. The Parties anticipate that the Programmatic Agreement will include and require implementation of the Historic Properties Management Plan contained in Exhibit 5 to the Boundary Settlement.

H. Article 8: Water Quality Plans

The proposed Water Quality Plans license article requires SCL to implement the following water quality plans, all of which have been accepted by Ecology as draft for purposes

of the 401 application, and are contained in Exhibits 6-10 to the Boundary Settlement: (1) Temperature Attainment Plan, (2) TDG Attainment Plan, (3) Dissolved Oxygen (“DO”) Attainment Plan, (4) Aquatic Invasive Species Control and Prevention Plan (“AISCPP”), and (5) Fish Tissue Sampling Plan.

I. Article 9: Fish and Aquatic Resources

This Proposed License Article requires SCL to implement the Fish and Aquatics Management Plan (“FAMP”) (Settlement Exhibit 11) in consultation with the Fish and Aquatics Work Group (“FAWG”). The FAMP is the principal guiding document for the planning, implementation, monitoring, adaptive management, and reporting of PM&E measures for fish and aquatic resources affected by or related to the Boundary Project. The FAMP includes specific goals for fish and aquatic resources, as well as clearly defined objectives for achieving the goals. The following resource management programs are included in the FAMP and are addressed specifically in the following Proposed License Articles: Mainstem Fish Community and Aquatic Habitat Measures (Article 9 (A)), Upstream Fish Passage (Article 9 (B)), Reduction of Project Related Entrainment Mortality (Article 9 (C)), Tributary Non-native Trout Suppression and Eradication (Article 9 (D)), Tributary Fish Community and Aquatic Habitat Measures (Article 9 (E)), Mill Pond Dam Site Monitoring and Maintenance (Article 9(F)), Native Salmonid Conservation Program (Article 9 (G)), Recreational Fish Stocking Program (Article 9 (H)), and Fund for Habitat Improvements in Tributaries to Sullivan Lake (Article 9 (I)).

1. Article 9 (A): Mainstem Fish Community and Aquatic Habitat Measures

Although the Parties have focused the Boundary PM&E measures on tributary habitat, pre-licensing studies did identify several non-operational measures to benefit mainstem habitats. Project operations can cause pool levels to rise and fall on a daily basis, causing fish to become stranded or trapped as pool levels decline. Depressions and pools along the shoreline may become exposed as pool levels drop causing juvenile fish to become trapped and subject to injury and mortality. An area referred to as the “Cobble Sisters” at PRM 30.3 within the Upper Reservoir Reach was identified as an area with a high occurrence of trapping. The pools and depressions at the site are the result of aggregate mining that occurred prior to completion of the Project and represent about 21 percent of the trapping area within the upper reservoir. The tributary deltas are important transition zones between mainstem and tributary habitats and coldwater tributary plumes offer thermal refugia to native salmonids during warm summer months. Currently, the tributary deltas are characterized as containing poor habitat features due to the lack of stable bedforms, small substrate particle sizes, sparse cover (e.g., boulders, large woody debris ("LWD")) and few pools. Both salmonids and predatory sportfish have been observed holding at the confluence of tributaries to Boundary Reservoir and the influence of introduced sportfish predators on salmonid populations is unclear.

This Proposed License Article requires SCL to address these impacts by (1) enhancing mainstem reservoir habitat by providing additional spawning gravel below the PUD’s upstream Box Canyon Dam to increase potential mountain whitefish spawning habitat in the upper project reservoir, (2) modifying trapping pools in the area known as the Cobble Sisters to reduce the risk of fish being trapped in the pools during periods of declining flow and reservoir water surface

elevations, (3) enhancing tributary delta habitat by providing additional cover, in the form of LWD jams, for salmonids occupying coldwater refugia at tributary mouths, and (4) conducting fish community surveys and evaluating predation on outmigrating native salmonids at select tributary deltas.

2. Article 9 (B): Upstream Fish Passage

Boundary Dam was built without fish passage facilities. Downstream power and water storage projects, such as Grand Coulee and Chief Joseph dams, blocked anadromous fish migrations to the Upper Columbia Basin. Without upstream fish passage facilities, any potential gene flow by native salmonids can only occur in a downstream direction by fish that survive entrainment. However, declines in populations of native salmonids have increased attention on protecting resident fish movements. The USFWS Bull Trout Draft Recovery Plan, for example, currently calls for upstream passage at Albeni Falls (U.S. Army Corps of Engineers), Box Canyon Dam (PUD) and Boundary Dam (SCL). The PUD is planning to construct upstream fish passage facilities at Box Canyon Dam targeting upstream passage of bull trout, westslope cutthroat trout, and mountain whitefish.

This Proposed License Article requires SCL to install, operate, maintain and monitor a single upstream trap-and-haul fishway facility (upstream fishway, or fishway) in the Boundary Project tailrace. The purpose of this fishway is to provide safe, timely, and effective passage for bull trout, cutthroat trout, and mountain whitefish (target fish species) in the Project area for the license term and any subsequent annual licenses.

A trap-and-haul facility is appropriate due to comparatively low population sizes of native salmonids and physical site constraints in the tailrace. While agreement has been reached

on the preferred alternative, there is uncertainty regarding an appropriate site within the tailrace for the fixed trap-and-haul facility. In addition, because of the low numbers of native salmonids captured or observed in the Boundary Dam tailrace, there is little direct information regarding movement patterns of bull trout, cutthroat trout, or mountain whitefish in the Boundary tailrace. As a result, SCL will work collaboratively with the FAWG and the approving agencies in all aspects of the fishway development and implementation processes.

3. Article 9 (C): Reduction of Project Related Entrainment Mortality

Boundary Dam was built without entrainment reduction facilities. As fish pass downstream through Boundary Dam facilities, they are exposed to potential injury and mortality, with the level of mortality depending on the pathway, flow rate, and size of fish. A total of about 55,000 fish (all species) was estimated to have been entrained through all Project turbines and spill gates at the Project over a one-year period.

As part of relicensing activities, a team of fish passage experts evaluated alternate entrainment reduction concepts at Boundary Dam including fixed full flow screens, modular inclined screens, and floating or fixed surface collectors. The results of the evaluation determined that a floating surface collector concept would provide the most flexibility and potentially the highest incremental increase in fish protection. The estimated incremental increase in survival was 0 to 2 percent for 4-inch fish, -1 to 9 percent for 10-inch fish, and 8 to 21 percent for 24-inch fish. Since little is known about the migration depth of bull trout, westslope cutthroat trout, and mountain whitefish, the efficacy of a floating surface collector concept to reduce entrainment of the target species is uncertain. Due to uncertainty regarding the effects of entrainment on target fish populations, and uncertainty regarding the efficacy of

available entrainment reduction options, the Proposed License Article requires SCL to implement an entrainment reduction program including an evaluation phase to assess the effects of Project entrainment on target species.

This Proposed License Article requires SCL to develop and implement studies to quantify the effects of entrainment on target species (bull trout, westslope cutthroat trout, and mountain whitefish) and to determine whether any population of target fish species (*i.e.*, a unique population that constitutes a substantial percentage of fish in the Project area or that has a unique evolutionary niche that requires special protection) or a substantial number of target fish are affected by Project entrainment. Based on the results of these studies, SCL will either build facilities at the Project to improve Boundary Dam survival of target species or implement appropriate non-operational measures to improve survival of target species pursuant to the provisions of this program.

SCL will implement this article in three phases: (1) an initial entrainment assessment and evaluation phase will occur from the first through the 18th year following license issuance at a cost not to exceed \$23,000,000; (2) implementation of entrainment reduction measures (if needed) scheduled for the 19th through the 33rd year following license issuance at a cost not to exceed an additional \$47,000,000, plus any unexpended funds from the \$23,000,000 allocated during phase 1; and (3) reevaluation of entrainment related mortality and adaptive management from the 34th year following license issuance through the end of the license term with no funding limitations.

4. Article 9 (D): Tributary Non-native Trout Suppression and Eradication

Most of the tributaries to Boundary Reservoir have been stocked with non-native salmonids such as brook trout, brown trout, and hatchery rainbow trout from out-of-basin stocks. The presence of non-native trout, especially brook trout, is a serious threat to native salmonids as a result of interbreeding (with bull and westslope cutthroat trout) and competition for habitat and food resources. The USFWS (1999) stated in its status review that westslope cutthroat trout are usually found in the cooler upper extents of tributaries, but suggested this use was more likely driven by competition from other trout such as rainbow trout and brook trout that are less tolerant of cooler, higher gradient streams, rather than a preference for that habitat type.

This Proposed License Article requires SCL to implement a non-native salmonid suppression and eradication program in portions of 23 water bodies in the Boundary Reservoir watershed. Within one year of license issuance, SCL must submit to FERC an integrated schedule approved by the FAWG for its suppression and eradication activities. Implementation of the suppression and eradication activities in Sullivan Creek and its tributaries will begin during the first through the 10th years after license issuance, in Sweet Creek during the first through 20th years after license issuance, in Slate Creek, Uncas Gulch and Flume Creek during the 11th through 15th years after license issuance, and in Pewee Creek, Lime Creek, Lake Lucerne and Sand Creek during the 16th through 20th years after license issuance.

5. Article 9 (E): Tributary Fish Community and Aquatic Habitat Measures

Based on the results of extensive modeling, monitoring and analyses of Project effects, which indicated limited opportunity to recover native salmonid populations through mainstem habitat improvement, many of the Boundary aquatic PM&E efforts focus on implementing

measures in Boundary tributaries. Habitat in the tributary reaches has been degraded by blocking culverts, roads constructed in riparian zones, and past logging practices which reduced LWD recruitment. Through this Proposed License Article, SCL will implement habitat treatments in tributaries to Boundary Reservoir to benefit native salmonids, followed by monitoring and adaptive management to increase performance of the measures.

This Proposed License Article requires SCL to implement aquatic habitat measures in tributaries to Boundary Reservoir. The overall objective is to improve the habitat condition and function of tributaries draining to Boundary Reservoir to offset an estimated 304 acres of reservoir habitat affected by the Boundary Project. This action, along with the removal of Mill Pond Dam and the replacement or removal of presently impassable culverts, will offset the continuing operational effects of the Boundary Dam on aquatic habitat within the Project area.

Specific aquatic habitat measures include the following:

- habitat protection, riparian improvement, and stream channel enhancement in Sullivan Creek from river mile (“RM”) 0.30 to RM 0.54;
- stream and riparian improvements in Sullivan Creek from RM 2.3 to RM 3.0 and North Fork Sullivan Creek;
- LWD placement and road improvements in Sullivan Creek and selected tributaries upstream of the confluence with Outlet Creek;
- culvert replacements and LWD placement in tributaries to Boundary Reservoir;
- riparian planting, culvert replacement, and channel reconstruction in Linton Creek from RM 0.00 to RM 0.24;
- riparian and channel improvements in Sweet Creek from RM 0.0 to RM 0.6;
- habitat enhancement in Tier-2 tributaries to Boundary Reservoir; and
- restoration of dispersed recreation sites located in Sullivan Creek riparian areas.

The specific scope of each measure is detailed in the FAMP.

6. Article 9 (F): Mill Pond Dam Site Monitoring and Maintenance

Mill Pond, located at RM 3.9 on Sullivan Creek and part of the PUD's Sullivan Creek Project, was created when a log crib dam was constructed in 1909 by the Portland Cement Company. An un-gated concrete dam was built in 1921 just below the log crib dam. The concrete dam is 134 feet long and about 55 feet high and maintains the water surface elevation of Mill Pond at approximately 2,520 feet NAVD 88.

Mill Pond Dam is a man-made barrier to the upstream movement of resident fish. The impoundment has altered natural stream processes in Sullivan Creek by interrupting the downstream transport of bedload material and some LWD. The dam has created a condition where Sullivan Creek downstream of Mill Pond Dam is sediment depleted. The sediment transport capacity downstream of the dam exceeds the sediment supply, which has resulted in armoring of the bed surface and a lack of gravels for use by spawning salmonid populations. The Mill Pond impoundment has also slowed water velocities and increased summer water temperatures in lower Sullivan Creek.

The PUD has proposed to remove Mill Pond Dam and restore the site as part of its surrender of the Sullivan Creek Project license. The Mill Pond Decommissioning Plan submitted by the PUD to FERC as part of its surrender application requires removal of both the concrete and log crib dams and artificial foundations to facilitate natural stream functions. Existing sediments that have accumulated behind Mill Pond Dam will be managed to facilitate dam removal and stream channel restoration. Following dam removal, the Sullivan Creek stream channel, from upstream of Mill Pond Dam site to Outlet Creek will be restored to a self-

functioning system consistent with the Sullivan Creek channel upstream and downstream of Mill Pond. New stream channel banks will be stabilized with keyed-in logs with root wads and large boulders, and then planted with native herbaceous and woody riparian species.

Benefits of Mill Pond Dam removal and associated site restoration will include elimination of the man-made barrier to upstream fish passage, an increase in the quantity and quality of habitat for native salmonids, restoration of downstream transport of coarse sediment and LWD, and benefits to water quality in the form of reduced summer water temperatures due to reductions in water surface area and increases in water velocity in the area of Mill Pond Reservoir.

Following completion of the restoration effort and when the Commission determines that the Mill Pond Decommissioning Plan for the PUD's surrender of its license has been completed, this Proposed License Article requires SCL to monitor and maintain the site to ensure that the stream channel and floodplain are functioning in accordance with the design criteria, that riparian and upland vegetation is becoming established and to control non-native plant species.

7. Article 9 (G): Native Salmonid Conservation Program

Outplanting of native salmonids produced from an approved facility can complement brook trout suppression and habitat improvement activities and assist the rapid recruitment and colonization of underutilized tributary habitats. No self-reproducing bull trout populations occur in any tributaries to Boundary Reservoir and artificial propagation of bull trout could be used to seed currently unoccupied habitat. Outplanting of early lifestage, locally adapted, native salmonids spawned and reared in an appropriate facility may support rapid population response to biological and habitat treatments.

The Proposed License Article requires SCL to design, construct and operate a fish propagation facility for the production of native salmonids to supplement tributaries draining into Boundary Reservoir. The initial capacity for the hatchery will be up to 45,000 eyed eggs, fry, or fingerling (3 to 4 inch) fish per year and multiple age class broodstock (capacity of 1,000-2,000 pounds). Annual production will be commensurate with the need to outplant fish in areas where non-native suppression/eradication has occurred in tributaries draining into Boundary Reservoir. Propagated native salmonids will be released to supplement existing populations, or to introduce native salmonids into reaches where they are not currently present. Target release sites will include those reaches where non-native trout have been actively suppressed or where high quality, but underutilized habitat is available in tributaries draining into Boundary Reservoir. Supplementation of native salmonids is expected to complement non-native trout suppression and/or stream habitat improvement activities.

8. Article 9 (H): Recreational Fish Stocking Program

Boundary Project operations impact mainstem and tributary delta habitats, and cause loss of fish through entrainment and increased predation on salmonids associated with the reservoir environment. Since 2001, SCL has voluntarily stocked sterile rainbow trout in the Boundary Reservoir to increase recreational fish opportunities.

This Proposed License Article requires SCL to provide for the annual stocking of trout in 18 lakes within a fifteen-mile area around the Boundary Project beginning no later than year 2 of the license. Trout species stocked in these lakes will consist of westslope cutthroat, rainbow, rainbow triploid, and tiger trout, and may include fall fry, fingerlings, spring fry and catchable-

size fish. The number, size and species of fish, planting schedule and location may be adjusted in consultation with WDFW and subject to approval of the appropriate agencies.

9. Article 9 (I): Fund for Habitat Improvements in Tributaries to Sullivan Lake

In addition to the previously described fish and aquatic PM&E measures, SCL shall implement an additional measure that is expected to benefit native salmonids in the Project Area but that is not addressed in the FAMP.

Sullivan Lake, which is part of the PUD's Sullivan Creek Project, supports a naturally-reproducing, self-sustaining population of kokanee (*Oncorhynchus nerka*) that is a recreational fishery of regional importance. Kokanee are a landlocked form of sockeye salmon that rear in Sullivan Lake but spawn in lower Harvey Creek draining to Sullivan Lake.

This Proposed License Article requires SCL to establish a \$2.5 million Sullivan Lake Upper Tributary Fund for improving aquatic habitat conditions in Harvey, Noisy and Jungle creeks that flow into Sullivan Lake. Improving aquatic habitat conditions in these tributaries will benefit the Sullivan Lake kokanee population and reduce recreational fishing pressure on Boundary tributary streams. In addition, genetic testing of cutthroat trout suggests that relatively pure strains of westslope cutthroat trout occur in Harvey Creek upstream of Sullivan Lake. Improving habitat conditions in Harvey Creek will increase protection to a westslope cutthroat trout population in the Boundary drainage. The Sullivan Lake Upper Tributary Fund is not addressed in the FAMP because SCL's responsibilities are limited to establishing the fund, which shall be administered by the FAWG.

J. Article 10: Escalation

This Proposed License Article requires that unless otherwise indicated, all costs or payment amounts specified in dollars in the New License and Management Plans shall be deemed to be stated as of the year 2009, and SCL shall escalate such sums as of January 1 of each following year (starting in the year 2012, or in the year preceding the Commission License issuance, whichever is later). The Proposed License Article also provides a formula for determining escalation.

VII. DETAILED DESCRIPTION OF THE SULLIVAN CREEK SETTLEMENT AGREEMENT

The Sullivan Creek PM&E measures provide significant resource benefits through the removal of the Mill Pond Dam, sediment management, channel restoration and monitoring activities at the restored stream channel, installation of a cold water release facility and a modified operating regime. The Parties believe that removal of Mill Pond Dam will remove a fish passage barrier in the vicinity of the Boundary Project, providing potential access to 16 miles of spawning, rearing, overwintering and foraging habitat. Bull trout are listed as threatened under the Endangered Species Act and providing access to additional, good quality habitat is a high priority for the Resource Agencies. The Parties also intend that provision of a Sullivan Lake cold water release facility will cool water temperatures and improve native salmonid habitat conditions in Sullivan Creek (below the confluence with Outlet Creek), and will provide cooler water input to the Pend Oreille River. In combination with the Mill Pond Dam removal, the Sullivan Lake cold water release also will improve habitat for bull trout and westslope cutthroat trout.

Mill Pond Dam removal and additional stream restoration measures are intended to return Sullivan Creek to a naturally functioning stream environment in the reach that is currently inundated by the Mill Pond reservoir. In addition, the Mill Pond Dam removal also is expected to improve the habitat of Sullivan Creek from its confluence with Outlet Creek down to Boundary Reservoir for native salmonids. Pools available in this reach provide a holding area for any bull trout that might migrate up Sullivan Creek to escape warm temperatures in the Pend Oreille River.

After completion of the Mill Pond restoration effort, the PUD will undertake compliance monitoring. In addition, the PUD will conduct effectiveness monitoring in years 2, 3 and 4 following completion of dam removal, sediment management and site restoration activities. The PUD will develop an effectiveness monitoring report, subject to review and approval by USFS and Ecology, which will be filed with FERC within one year of the completion of effectiveness monitoring activities. The Parties propose that FERC terminate the license upon approval of the PUD's final effectiveness monitoring report.

Sullivan Dam and Reservoir will remain in place to continue to provide significant recreational opportunities, including camping, boating, fishing and swimming. Furthermore, the Parties believe that the measures the PUD is committing to undertake will improve the temperature regime in this watershed. These measures include constructing a cold water release facility in Sullivan Lake, increasing minimum instream flows at Sullivan Dam and modifying the operating regime in the summer and fall.

The Parties believe that the cold water release facility will improve the water temperature regime in lower Sullivan and Outlet creeks. While temperatures in lower Sullivan and Outlet creeks under the present operating regime of Sullivan Lake Dam are lower than natural

conditions (without the dam), they are still above the tolerance levels of certain life stages of native salmonids during the summer months in these streams. Furthermore, the cold water release facility will enable the Project to meet state water temperature standards (16 C) and bull trout temperature targets (14 C) in both Outlet and Lower Sullivan creeks. By drawing water from deep in the lake, the cold water releases will mitigate the likely impacts to lake productivity of the fall drawdown. Screening of the cold water release facility will prevent entrainment of fish. Under the proposed operating regime, the cold water release allows fall drawdown to expose Harvey Creek spawning areas significantly earlier by allowing earlier and larger water releases that do not violate state water temperature standards. This measure will protect or even enhance lake-based sport fishing. Moreover, the cold water release facility is critical to increasing the minimum flows in Outlet Creek without violating state water temperature standards. In addition, the cold water releases allow sufficient water to be released in late September for paddling, when paddling is more desirable. Finally, if the PUD decides to pursue the sale or lease of 5,000 acre-feet of its usable storage between June 1 and August 31 to the State of Washington or another purchaser, the cold water release facility is necessary to meet water quality standards.

The PUD will be solely responsible to undertake the design, construction, operation and monitoring of the cold water release facility as a condition of the license surrender order. The PUD's monitoring and operation of the cold water release facility will be consistent with the flow regime as defined in the Sullivan Creek Settlement and Washington water quality standards. Construction work for the cold water release facility will be completed within 36 months following FERC's issuance of the Sullivan Creek license surrender order. SCL will reimburse

the PUD for 50 percent of the costs of this facility pursuant to a Memorandum of Agreement with the PUD.

The PUD will be responsible for removal of Mill Pond Dam and Sullivan Creek restoration work in accordance with the proposed Mill Pond Decommissioning Plan under the license surrender order. The PUD has executed an Interlocal Agreement with SCL whereby SCL will undertake such removal and restoration activities as a cooperating agency of the PUD under State law. The PUD also will be responsible for undertaking measures to mitigate for impacts to heritage resources as a result of Mill Pond Dam removal and related restoration activities.

The PUD will consult with the USFS and other stakeholders to develop mitigation measures to address adverse effects of the proposed project to National Register of Historic Places eligible resources. The agreed upon mitigation measures will be expressed in a Memorandum of Agreement (“MOA”) to be signed by the PUD, the USFS, the Tribe, the Washington State Historic Preservation Officer and the Advisory Council on Historic Preservation (if they choose).

Some changes to the operating regime of Sullivan Lake Dam will be made as follows:

- Increased instream flow releases will be made year-round in accordance with the Sullivan Creek Settlement.
- The winter lake level will be raised 5 feet to elevation 2570.0 ft MSL to help ensure that Sullivan Lake fills more often in the spring.
- Rates of Sullivan Lake filling in the spring and drawdown in the fall will be managed for enhancement of the environment and for recreation.
- Each year the PUD will start refilling Sullivan Lake on or before April 1st and continue until an elevation of 2588.66 ft MSL is reached. The PUD will seek to achieve and maintain Sullivan Lake at an elevation of 2588.66 ft MSL through Labor Day each year, subject to hydrologic conditions, water availability and dam discharge flow requirements as provided in the Settlement Agreement.

After the Commission has determined that surrender of the Project license has become effective, the PUD will continue to operate Sullivan Lake Dam and Reservoir in accordance with the Sullivan Creek Settlement and the terms and conditions of the SUA to be issued by the USFS.

VIII. STRUCTURE OF THE BOUNDARY AND SULLIVAN CREEK SETTLEMENT AGREEMENTS

A. Structure of Boundary Settlement Agreement

The Boundary Settlement includes a number of Exhibits, Appendices, and Attachments.⁷ The Exhibits, Appendices, and Attachments reflect the substantive agreement of the Parties and are incorporated into and made a part of the Settlement Agreement. The Boundary Exhibits and Appendices, and Attachments are:

1. Exhibits

Exhibit 1: Proposed License Articles

Exhibit 2: Terrestrial Resources Management Plan

Exhibit 3: Recreation Resources Management Plan

Exhibit 4: Monitoring Well and Road Decommissioning Plan

Exhibit 5: Historic Properties Management Plan

Exhibit 6: Aquatic Invasive Species Control and Prevention Plan

Exhibit 7: Dissolved Oxygen Attainment Plan

Exhibit 8: Fish Tissue Sampling Plan

Exhibit 9: Temperature Attainment Plan

⁷ The Attachments are off-license agreements between SCL and the PUD that are included for informational purposes only.

Exhibit 10: Total Dissolved Gas Attainment Plan

Exhibit 11: Fish and Aquatics Management Plan

Exhibit 12: USFS Draft Preliminary Section 4(e) Terms & Conditions

2. Appendices

Appendix 1: Authorized Party Representatives for Communications

Appendix 2: Authorized Party Representatives for Dispute Resolution Committee

Appendix 3: Boundary Clean Water Act § 401 Certification Application

3. Attachments

Attachment 1: Interlocal Agreement for Mill Pond Decommissioning Between Seattle City Light and Public Utility District No. 1 of Pend Oreille County

Attachment 2: Cold Water Release Memorandum of Agreement

B. Record of Support for Boundary Settlement Agreement

Extensive information has been developed over the previous four years in this proceeding. The Parties agree that the aggregate of this information provides substantial evidence to support the PM&E measures to be implemented under the Settlement Agreement although the Parties maintain varying opinions and positions regarding some aspects of the information. That record of this substantive evidence is summarized in the Final License Application and supporting Appendices filed with the Commission by SCL in September 2009; in the addenda to the Application and Appendices filed simultaneously herewith; and in SCL's Responses to the Commission's Additional Information Requests filed herewith. The record includes the following relevant reports:

- Study 1: Erosion Study (Final filed with Updated Study Report, March 2009)

- Study 2: Peak Flood Flow Conditions Above Metaline Falls (Final filed with Updated Study Report, March 2009)
- Study 3: TDG and Potential Abatement Measures (Final filed with Updated Study Report, March 2009)
- Study 4: Toxics Assessment (Final filed with Updated Study Report, March 2009)
- Study 5: Water Quality Constituent and Productivity Monitoring (Final filed with Updated Study Report, March 2009)
- Study 6: Relationship of pH and DO to Macrophytes in Reservoir (Final filed with Updated Study Report, March 2009)
- Study 7: Mainstem Aquatic Habitat Modeling (Final filed with Updated Study Report, March 2009)
- Study 8: Sediment Transport Reservoir Tributary Delta Habitats (Final filed with Updated Study Report, March 2009)
- Study 9: Fish Distribution, Timing, and Abundance (Final filed with Updated Study Report, March 2009 and Addendum filed April 2009)
- Study 10: Large Woody Debris Management (Final filed with Initial Study Report, March 2008)
- Study 11: Productivity Assessment (Final filed with Updated Study Report, March 2009)
- Study 12: Fish Entrainment and Habitat Connectivity (Final filed June 2009)
- Study 13: Recreational Fishery (Final filed with Updated Study Report, March 2009)
- Study 14: Factors Affecting Aquatic Productivity in Tributary Habitats (Final filed with Updated Study Report, March 2009)
- Study 15: Waterfowl/Waterbird (Final filed with Updated Study Report, March 2009)
- Study 16: Riparian Trees and Shrubs (Final filed with Updated Study Report, March 2009)

- Study 17: RTE Plant Species (Final filed with Updated Study Report, March 2009)
- Study 18: RTE Wildlife Species (Final filed with Updated Study Report, March 2009)
- Study 19: Big Game (Final filed with Updated Study Report, March 2009)
- Study 20: Bat Surveys and Habitat Inventory (Final filed with Updated Study Report, March 2009)
- Study 21: Recreation Resource (Final filed with Updated Study Report, March 2009)
- Study 22: Land and Roads (Revised Final filed with Updated Study Report, March 2009)
- Study 23: Aesthetic/Visual Resource (Final filed with Updated Study Report, March 2009)
- Study 24: Cultural Resource (Final filed with Updated Study Report, March 2009)
- Operational Studies including:
 - (1) The following documents produced by or for SCL: Average Year Packet (6-04-09); Average Year Packet page 18 revised (6-08-09); Dry Year Packet (6-04-09); Integrated Summary Table Average Year (6-04-09); and Integrated Summary Table Dry Year (6-04-09).
 - (2) Tetra Tech May 2008. Scenario Tool and Hydraulic Routing Model Demonstration produced for Seattle City Light;
 - (3) Tetra Tech May 2008. Overview of Hydraulic Routing Model and Scenario Tool Demonstration produced for Seattle City Light;
 - (4) Cdd Howard Consulting Ltd. August 2008. Seattle City Light Boundary Relicensing Scenario Tool Overview and Technical Documentation produced for Seattle City Light.

The record has served as the basis for the technical discussions and negotiations leading to the substantive provisions of the Boundary Settlement. In particular, each Proposed License Article rests on a thorough review of the technical record assembled as part of this relicensing proceeding. The record in this proceeding provides ample substantial evidence on which to

approve the Boundary Settlement and to incorporate the Proposed License Articles into the new license for the Project.

C. Structure of Sullivan Creek Settlement Agreement

The Sullivan Creek Settlement includes a number of Appendices, Exhibits and Attachments. The Appendices and Exhibits reflect the substantive agreement of the Parties and are incorporated into and made a part of the Settlement Agreement. The Attachments are the bilateral agreements between SCL and the PUD regarding implementation of certain measures and a bilateral agreement between the PUD and WDFW regarding support for fisheries management activities in the Sullivan Creek basin.

The Sullivan Creek Appendices, Exhibits and Attachments are:

1. Appendices and Exhibits

Appendix A: PM&E Measures for License Surrender and SUA

Exhibit 1: Decision Tree for Spring Filling Rate Adjustments

Exhibit 2: Decision Tree for Dry Year Flow Releases

Appendix B: Proposed License Surrender Conditions

Appendix C: Special Use Authorization Application

Appendix D: Proposed Special Use Authorization Conditions

Appendix E: Mill Pond Decommissioning Plan

Appendix F: Cold Water Release Facility Plan

Appendix G: Authorized Party Representatives for Resource Committee and Communications

Appendix H: Authorized Party Representatives for Dispute Resolution Committee

Appendix I: Sullivan Creek Clean Water Act § 401 Certification Application

2. Attachments

Attachment 1: Interlocal Agreement for Mill Pond Decommissioning Between Seattle City Light and Public Utility District No. 1 of Pend Oreille County

Attachment 2: Cold Water Release Memorandum of Agreement

Attachment 3: Fisheries Management Memorandum of Agreement

D. Record of Support for Sullivan Creek Settlement Agreement

Extensive information has been developed in this proceeding. The Parties agree that the aggregate of this information provides substantial evidence to support the PM&E measures to be implemented under the Settlement Agreement although the Parties maintain varying opinions and positions regarding some aspects of the information. The record of this substantive evidence is presented in the License Surrender Application, including Exhibits A through E and supporting Appendices, which the PUD is filing concurrently with this Offer of Settlement. The appendices to the PUD's application include the following relevant reports and studies:

Appendices to License Surrender Application

- Appendix A-1 Sullivan Creek Project Settlement Agreement
- Appendix A-2 Mill Pond Decommissioning Plan
- Appendix A-3 USFS Special Use Authorization Application
- Appendix B-1 Raw Streamflow Data
- Appendix B-2 Sullivan Lake Level Prediction Model
- Appendix B-3 Cold Water Release Facility Plan
- Appendix D-1 Cost Estimate for License Surrender
- Appendix E.2-1 2008 Updated Colville National Forest Existing Information Analysis
- Appendix E.2-2 2009 Mill Pond Bathymetry and Sediment Evaluation Study

- Appendix E.3-1 1994 and 1996 PUD Water Quality Data
- Appendix E.3-2 Sullivan Lake Productivity Study
- Appendix E.3-3 WDFW Temperature Data and Temperature Modeling
- Appendix E.3-4 Ecology, Toxics Monitoring: Freshwater Fish, January 2009
- Appendix E.3-5 Sullivan Lake Elevation Management Scenarios Report
- Appendix E.3-6 Outlet Creek Flow Study Memo, July 17, 2009 (Beecher memo, June 2009)
- Appendix E.4-1 Fisheries Survey of the Limnetic Zone of Sullivan Lake (Baldwin & McLellan)
- Appendix E.4-2 Response to FERC AIR September 1996
- Appendix E.4-3 Sullivan Creek Fish Barrier Assessment
- Appendix E.4-4 Harvey Creek Habitat Survey Report
Revised Draft Report: Entrainment investigations and Study of Fish Presence
in the Vicinity of Sullivan Lake Dam
- Appendix E.4-6 2009 Sullivan Creek Instream Flow Study and associated plans
- Appendix E.4-7 Review of Lake Fertilization
- Appendix E.4-8 Working Draft, Temperature Ranges of Fishes in Sullivan and Outlet Creeks,
- Appendix E.4-9 Sullivan Creek Bull Trout Spawning and Incubation Analysis Working Draft
- Appendix E.5-1 Sullivan Creek Collaboration Meetings Fact Sheet, May 7, 2008
- Appendix E.5-2 U.S. Fish and Wildlife Service List of ESA-listed wildlife species; WDFW
Washington State Species lists
- Appendix E.6-1 1996 PUD Wetland Report
- Appendix E.7-1 1994 HRA Cultural Resources Assessment Report (filed separately)
- Appendix E.8-1 2005 Pend Oreille Valley Tourism Marketing and Development Assessment

This evidence has served as the basis for the technical discussions and negotiations leading to the substantive provisions of the Sullivan Creek Settlement. The Proposed License Surrender Conditions are based on a thorough review of the technical record assembled during the mediation process for the license surrender. The record in this proceeding provides ample evidence on which to approve the Sullivan Creek Settlement and to adopt the Proposed License Surrender Conditions in an order accepting the PUD's application for surrender of license for the Sullivan Creek Project.

DATED this 29th day of March, 2010.

K&L GATES LLP

U.S. Forest Service



By _____
Elizabeth Thomas
Attorneys for Applicant
Seattle City Light

By /s/ Kristen T. Bonanno

DAVIS WRIGHT TREMAINE LLP

SELKIRK CONSERVATION ALLIANCE



By _____
James Vasile
Attorneys for Applicant
Public Utility District No. 1 of Pend Oreille
County, Washington

By /s/ Jerry Boggs

WASHINGTON DEPARTMENT OF FISH AND
WILDLIFE

By /s/ William C. Frymire
Assistant Attorney General

WASHINGTON DEPARTMENT OF ECOLOGY

By /s/ Joan Marchioro
Assistant Attorney General

KALISPEL TRIBE

By /s/ Phil Katzen

THE TOWN OF CUSICK, WASHINGTON

By /s/ Robert Spencer

AL SIX

By /s/ Allan C. Six

BUREAU OF INDIAN AFFAIRS, U.S. FISH AND
WILDLIFE SERVICE AND NATIONAL PARK
SERVICE

By /s/ Jennifer Frozena
Attorney-Advisor, Office of the Solicitor

THE LANDS COUNCIL

By /s/ Steve Llewellyn

AMERICAN WHITEWATER

By /s/ Kevin R. Colburn

RICK LARSON

By /s/ Richard A. Larson