

FEDERAL ENERGY REGULATORY COMMISSION

Washington, DC 20426

June 26, 2020

OFFICE OF ENERGY PROJECTS

Project No. 553-235-Washington  
Skagit River Hydroelectric Project  
Seattle City Light

**Subject: Scoping Document 1 for the Skagit River Hydroelectric Project, P-553-235**

To the Party Addressed:

The Federal Energy Regulatory Commission (Commission) is currently reviewing the Pre-Application Document submitted by Seattle City Light (City Light) for relicensing the Skagit River Hydroelectric Project, FERC No. 553 (Skagit Project or project). The project consists of three hydroelectric developments: Ross, Diablo, and Gorge. The project is located on the Skagit River, in Whatcom, Skagit, and Snohomish Counties, Washington.

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, Commission staff intends to prepare an environmental assessment (EA), which will be used by the Commission to determine whether, and under what conditions, to issue a new license for the project. To support and assist our environmental review, we are beginning the public scoping process to ensure that all pertinent issues are identified and analyzed, and that the EA is thorough and balanced. Although our current intent is to prepare an EA, there is a possibility that an environmental impact statement (EIS) will be required. The scoping process will satisfy the NEPA scoping requirements, irrespective of whether the Commission issues an EA or an EIS.

We invite your participation in the scoping process, and are circulating the attached Scoping Document 1 (SD1) to provide you with information on the Skagit Project. We are also soliciting your comments and suggestions on our preliminary list of issues and alternatives to be addressed in the EA. We are also requesting that you identify any studies that would help provide a framework for collecting pertinent information on the resource areas under consideration necessary for the Commission to prepare the EA for the project.

Due to the proclamation declaring a National Emergency concerning the Novel Coronavirus Disease (COVID-19), issued by the President on March 13, 2020, we are

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waiving section 5.8(b)(viii) of the Commission's regulations and do not intend to conduct a public scoping meeting and site visit in this case. Instead, we are soliciting written comments, recommendations, and information, on the SD1. If needed, a site visit may be held later in the study plan development and review process.

SD1 is being distributed to both Seattle City Light's distribution list and the Commission's official mailing list (see section 10.0 of the attached SD1). If you wish to be added to or removed from the Commission's official mailing list, please send your request by email to [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov). All emailed requests must specify your wish to be removed from or added to the mailing list and must clearly identify the following on the first page: **Skagit River Hydroelectric Project No. 553-235**.

Please review the SD1 and, if you wish to provide comments, follow the instructions in section 6.0, *Request for Information and Studies*. If you have any questions about SD1, the scoping process, or how Commission staff will develop the EA for this project, please contact Matt Cutlip at (503) 552-2762 or [matt.cutlip@ferc.gov](mailto:matt.cutlip@ferc.gov). Additional information about the Commission's licensing process and the Skagit Project may be obtained from our website, [www.ferc.gov](http://www.ferc.gov), or Seattle City Light's licensing website, <http://www.seattle.gov/light/skagit/Relicensing/default.htm>. The deadline for filing comments is **October 24, 2020**. The Commission strongly encourages electronic filings.

Enclosure: Scoping Document 1

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SCOPING DOCUMENT 1  
SKAGIT RIVER HYDROELECTRIC PROJECT

WASHINGTON

PROJECT NO. 553-235

Federal Energy Regulatory Commission  
Office of Energy Projects  
Division of Hydropower Licensing  
Washington, DC

June 2020

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## SCOPING DOCUMENT 1

### Skagit River Hydroelectric Project, No. 553-235

#### 1.0 INTRODUCTION

The Federal Energy Regulatory Commission (Commission or FERC), under the authority of the Federal Power Act (FPA),<sup>1</sup> may issue licenses for terms ranging from 30 to 50 years for the construction, operation, and maintenance of non-federal hydroelectric projects. On April 27, 2020, Seattle City Light (City Light) filed a Pre-Application Document (PAD) and Notice of Intent to seek a new license for the Skagit River Hydroelectric Project, FERC No. 553 (Skagit Project or project).<sup>2</sup>

The Skagit Project is located on the Skagit River, in Whatcom, Snohomish, and Skagit Counties, Washington. The project consists of three hydroelectric developments: Ross Development, Diablo Development, and Gorge Development and has a total installed capacity of 650.25 megawatts (MW).<sup>3</sup> The average annual generation of the Skagit Project from 2014 to 2018 was 2,503,955 megawatt-hours (MWh).

A detailed description of the project is provided in section 3.0. The location of the project is shown on figure 1. The Skagit Project occupies 19,281.93 acres of federal lands administered by the National Park Service (NPS) and the U.S. Department of Agriculture - Forest Service (Forest Service). Portions of the project, including all the generating facilities, are located within the Ross Lake National Recreation Area, which is

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<sup>1</sup> 16 U.S.C. § 791(a)-825(r) (2018).

<sup>2</sup> The current license for the Skagit Project was issued with an effective date of May 1, 1995, for a term of 30 years and expires on April 30, 2025.

<sup>3</sup> On April 1, 2020, City Light requested to amend Exhibit M of its license to increase the project's capacity to 700.27 MW. Because there are discrepancies between the existing authorized installed capacity values presented in the PAD, the proposed amended authorized installed capacity values as presented in the PAD, and values approved by the Commission in the July 23, 1997 order approving the revised Exhibit M (*see* 80 FERC ¶ 62,056), the authorized installed capacity values presented herein use the values approved by the July 23, 1997, Commission order. Should City Light's revised Exhibit M be approved by the Commission, it is expected that City Light will update the authorized installed capacity values in relevant licensing documents moving forward.

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managed by the NPS as part of the North Cascades National Park Complex. The remainder of the federal lands within the project boundary are administered by the Forest Service, and are primarily located along the transmission line right of way.

The National Environmental Policy Act (NEPA) of 1969,<sup>4</sup> the Commission's regulations, and other applicable laws require that we independently evaluate the environmental effects of relicensing the Skagit Project as proposed, and consider reasonable alternatives to the licensee's proposed action. Currently, we intend to prepare an environmental assessment (EA) that describes and evaluates the probable effects, including an assessment of the site-specific and cumulative effects, if any, of the proposed action and alternatives. The EA preparation will be supported by a scoping process to ensure identification and analysis of all pertinent issues.

Although our current intent is to prepare an EA, there is a possibility that an environmental impact statement (EIS) will be required. The scoping process will satisfy the NEPA scoping requirements, irrespective of whether the Commission issues an EA or an EIS.

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<sup>4</sup> National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4370(f) (2012).

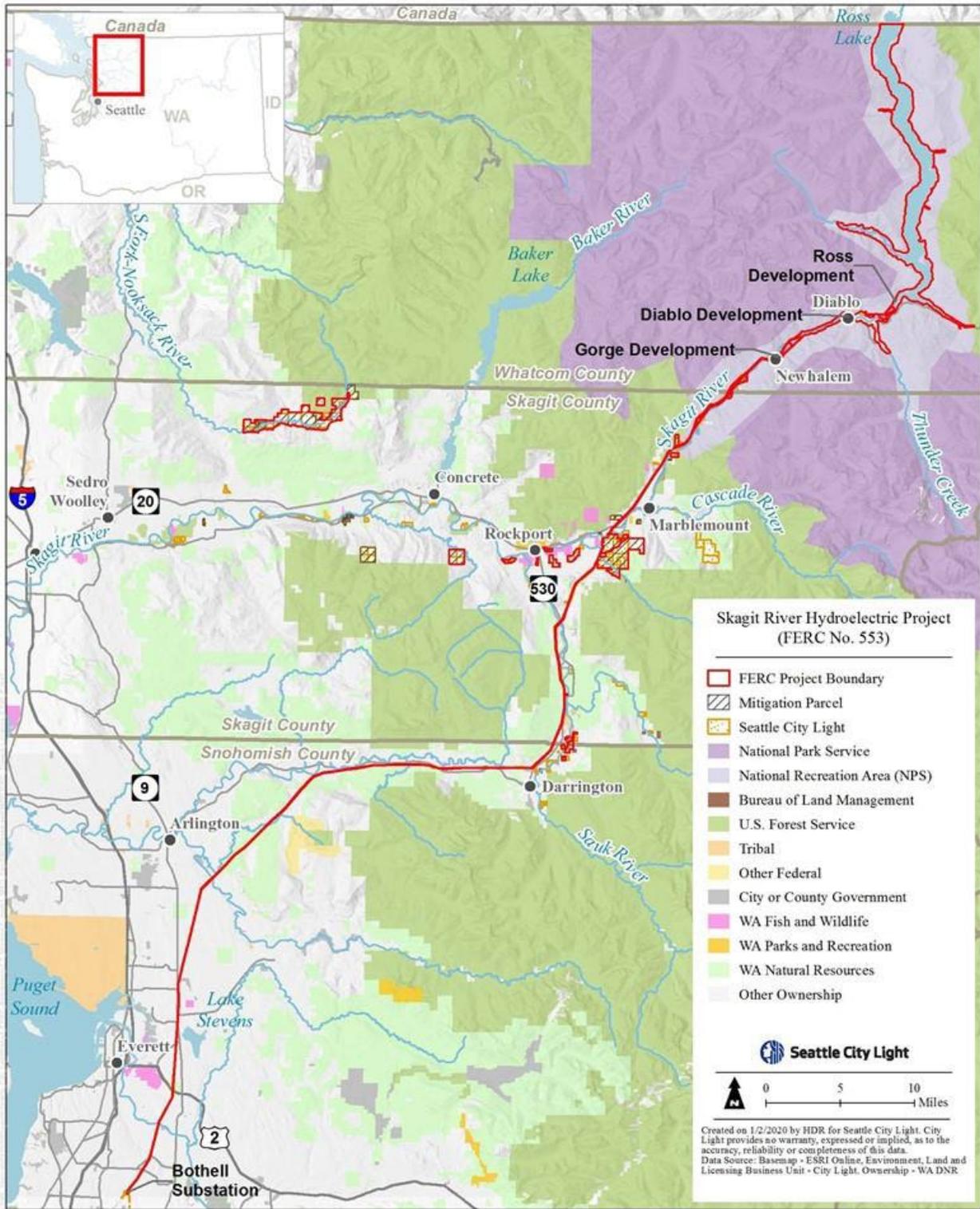


Figure 1. Location of the Skagit Project. (Source: PAD).

## **2.0 SCOPING**

This Scoping Document 1 (SD1) is intended to advise all participants as to the proposed scope of the EA and to seek additional information pertinent to this analysis. This document contains: (1) a description of the scoping process and schedule for the development of the EA; (2) a description of the proposed action and alternatives; (3) a preliminary identification of environmental issues and proposed studies; (4) a request for comments and information; (5) a proposed EA outline; and (6) a preliminary list of comprehensive plans that are applicable to the project.

### **2.1 PURPOSES OF SCOPING**

Scoping is the process used to identify issues, concerns, and opportunities for enhancement or mitigation associated with a proposed action. In general, scoping should be conducted during the early planning stages of a project. The purposes of the scoping process are as follows:

- invite participation of federal, state and local resource agencies, Indian tribes, non-governmental organizations (NGOs), and the public to identify significant environmental and socioeconomic issues related to the proposed project;
- determine the resource issues, depth of analysis, and significance of issues to be addressed in the EA;
- identify how the project would or would not contribute to cumulative effects in the project area;
- identify reasonable alternatives to the proposed action that should be evaluated in the EA;
- solicit, from participants, available information on the resources at issue, including existing information and study needs; and
- determine the resource areas and potential issues that do not require detailed analysis during review of the project.

### **2.2 SCOPING COMMENTS**

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During preparation of the EA, there will be several opportunities for the resource agencies, Indian tribes, NGOs, and the public to provide input. These opportunities occur:

- during the public scoping process (no scoping meetings will be held) and study plan meetings, when we solicit comments regarding the scope of issues and analysis for the EA;
- in response to the Commission's notice that the project is ready for environmental analysis; and
- after issuance of the EA when we solicit written comments on the EA.

We invite all interested agencies, Native-American tribes, NGOs, and individuals to file written comments to assist us in identifying the scope of environmental issues that should be analyzed in the EA. See Section 6.0 below for instructions on filing written comments and information with the Commission.

Copies of the PAD can be viewed on the Commission's website ([www.ferc.gov](http://www.ferc.gov)), using the "eLibrary" link. Enter the docket number, P-553, to access the document. For assistance, contact FERC Online Support at [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov) or toll free at 1-866-208-3676, or for TTY, (202) 502-8659.

Following the scoping comment period, all issues raised will be reviewed and decisions made as to the level of analysis needed. If preliminary analysis indicates that any issues presented in this scoping document have little potential for causing significant effects, the issue(s) will be identified and the reasons for not providing a more detailed analysis will be given in the EA.

If we receive no substantive comments on SD1, then we will not prepare a Scoping Document 2 (SD2). Otherwise, we will issue SD2 to address any substantive comments received. The SD2 will be issued for informational purposes only; no response will be required. The EA will address recommendations and input received during the scoping process.

### **3.0 PROPOSED ACTION AND ALTERNATIVES**

In accordance with NEPA, the environmental analysis will consider the following alternatives, at a minimum: (1) the no-action alternative, (2) the applicant's proposed action, and (3) alternatives to the proposed action.

#### **3.1 NO-ACTION ALTERNATIVE**

Under the no-action alternative, the Skagit Project would continue to operate as required by the current project license (i.e., there would be no change to the existing environment). No new environmental protection, mitigation, or enhancement measures would be implemented. We use this alternative to establish baseline environmental conditions for comparison with other alternatives.

##### **3.1.1 Existing Project Facilities**

The project consists of three hydroelectric developments, about 135 miles of transmission line, two company towns (i.e., Newhalem and Diablo),<sup>5</sup> numerous parcels of fish and wildlife habitat mitigation lands, and numerous recreation and interpretive facilities.

##### **Ross Development**

The Ross Development is located at river mile (RM) 105.3 on the Skagit River and consists of: (1) a 540-foot-high, 1,300-foot-long concrete arch and gravity dam with two spillways, each of which has six 20-foot-high, 19.5-foot-wide radial tainter gates, two butterfly valves at an elevation of 1,340 feet, and two jet valves at elevations of 1,269 and 1,254 feet;<sup>6</sup> (2) the 11,680-surface-acre Ross Lake with a storage capacity of 1,435,000 acre-feet at normal maximum water surface elevation of 1,602.5 feet; (3) two bifurcated intake structures with four 20-foot-wide, 198.13 foot-long openings and trashracks; (4) one 1,800-foot-long and one 1,634 foot-long, 24.5-foot-diameter concrete-lined power tunnels; (5) four 16-foot diameter, 350-foot-long penstocks; (6) a powerhouse containing four generating units with a total authorized installed capacity of

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<sup>5</sup> The towns, supported and maintained by City Light, include office buildings, housing, and a meeting/conference center for City Light staff, but they also include additional facilities for the public such as museums, restrooms, interpretive sites, artwork, etc.

<sup>6</sup> Unless otherwise noted, elevations are referenced to City of Seattle Datum.

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338.625 MW; (7) two 230-kilovolt (kV), 3.8-mile-long transmission lines extending from the power plant to Diablo Switchyard; and (8) appurtenant facilities.

### **Diablo Development**

The Diablo Development is located at RM 101 on the Skagit River and consists of: (1) a 389-foot-high, 1,180-foot-long concrete arch and gravity dam, with a northern spillway that has 12 19-foot-tall, 20-foot-wide radial tainter gates and a southern spillway with seven 19-foot-high, 20-foot-wide radial tainter gates, and a valve house containing three butterfly valves and one Larner Johnson type valve at an elevation of 1,047 feet; (2) the 770-surface-acre Diablo Lake with a gross storage capacity of 50,000 acre-feet at normal maximum water surface elevation of 1,205 feet; (3) two bifurcated intake structures with four approximately 16.75 to 18.75-foot-wide, 153.71-foot-long openings and trashracks; (4) a 19.5-foot-diameter, 1,990-foot-long power tunnel, of which 1,800 feet is concrete-lined and the other 190 feet is steel-lined; (5) two 15-foot-diameter penstocks and two 5-foot-diameter penstocks each 290 feet long; (6) a surge tank; (7) a powerhouse containing four generating units with a total authorized installed capacity of 152.8 MW; (8) a switchyard; (9) a 230-kV, 5.8-mile-long transmission line extending from Diablo Switchyard to the Gorge Switchyard; (10) three 230-kV, 87.5-mile-long transmission lines running from Diablo Switchyard to Bothell Substation; and (11) appurtenant facilities.

### **Gorge Development**

The Gorge Development is located at RM 96.5 on the Skagit River and consists of: (1) a 300-foot-high, 670-foot-long combination concrete arch and gravity dam with a 94-foot-wide spillway that has two 50-foot-high, 47-foot-wide fixed wheel gates and a log chute; (2) the 240-surface-acre Gorge Lake with a gross storage capacity of 8,500 acre-feet at normal maximum water surface elevation of 875 feet; (3) a bifurcated intake structure with two 20-foot-wide, 88.9-foot-long openings and trashracks; (4) a 20.5-foot-diameter, 11,000-foot-long concrete-lined power tunnel; (5) three 10-foot diameter penstocks and one 15-foot-diameter penstock, each 1,600 feet long and each fitted with a 10-foot-diameter butterfly biplane and relief valves; (6) a surge tank with riser; (7) a powerhouse containing four generating units with a total authorized installed capacity of 158.825 MW; (8) a switchyard; (9) a 230-kV, 36.8-mile-long transmission line extending from Gorge Switchyard to North Mountain Substation; and (10) appurtenant facilities.

### **Project Boundary**

The existing project boundary encompasses 31,451 acres<sup>7</sup> and includes all project facilities, including the dams, powerhouses, reservoirs, power tunnels, switchyards, transmission lines, the towns of Newhalem and Diablo, as well as most of the fish and wildlife mitigation lands and several recreation sites. The project boundary does not include all of the lands and waters around and within Ross Lake because the project boundary terminates at the U.S.-Canada border, thus excluding the portion of the reservoir within Canada. The Skagit Project boundary encompasses 19,281.93 acres of federal lands administered by NPS and the Forest Service.

### **Recreation Facilities**

In addition to the power generation facilities, City Light operates and maintains several licensed recreation and interpretive facilities as part of the Skagit Project. Most of these facilities are located around the Diablo and Gorge Development reservoirs and along the Skagit River near the town of Newhalem.

#### ***North Cascades Environmental Learning Center***

The North Cascades Environmental Learning Center (Environmental Learning Center) is a 16-building educational complex on the north shore of Diablo Lake which includes classrooms, a library, labs, lodging and housing facilities, a recycling and composting center, an outdoor amphitheater, outdoor shelters, a canoe and kayak dock, and various trails and paths.

#### ***Diablo Recreation and Visitor Facilities***

Recreation and visitor facilities at Diablo Lake include the Skagit Tour Dock, the West Ferry Landing, the East Ferry Landing, the West Boat Launch, and the East Boat Launch. The Skagit Tour Dock is located on the north shore of Diablo Lake and provides public boat tours of Diablo Lake during the summer months. The West Ferry Landing is located on the west end of the north shore of Diablo Lake and provides public access via ferry to the east end of the lake from June to the end of October. The East Ferry Landing

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<sup>7</sup> City Light is currently amending the project boundary to include additional fish and wildlife mitigation lands that it has recently acquired under ongoing implementation of the existing license. The fish and wildlife mitigation land acreages presented herein are based on the project boundary described in the PAD and approved by the Commission's July 17, 2013 Order Amending License (*see* 144 FERC ¶ 62,044). It is expected that, as additional lands are incorporated into the project boundary, City Light will update the land acreages in relevant licensing documents moving forward.

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is the eastern terminal for the Diablo Lake Ferry on the south shore of Diablo Lake with an attached canoe and kayak dock. The West Boat Launch is a small boat launch and take-out facility located on the west end of the north shore of Diablo Lake. The East Boat Launch is a small boat launch and take-out facility located on the east end of the south shore of Diablo Lake.

### ***Diablo Townsite Recreation Facilities***

Recreation facilities at the Diablo Townsite include trailhead parking and signage for the Sourdough Mountain and Stetattle Creek Trails and the Ross Lodge Picnic Shelter.

### ***Newhalem Town Site and Gorge Lake and Powerhouse Facilities***

Recreation facilities at the Newhalem Town Site and Gorge Lake and Powerhouse Facilities include the Gorge Lake Boat Launch, the Gorge Inn Museum, the Gorge Powerhouse Visitor Gallery, the Skagit Information Center, the Ladder Creek Falls Trail and Garden, and the Trail of the Cedars. The Gorge Lake Boat Launch is a paved launch site with a dock located adjacent the National Park Service-managed Gorge Lake Campground just downstream of the mouth of Stetattle Creek. The Gorge Inn Museum is located in the town of Newhalem and presents a social history of the Upper Skagit River Valley and the project. The Gorge Powerhouse Visitor Galley is located above the Gorge Powerhouse floor and offers views of the project generators and other equipment below as well as photographs and exhibits about the Skagit River Project to members of the public. The Skagit Information Center is located just off of SR-20 on Main Street in Newhalem providing restrooms, indoor and outdoor interpretive displays, art exhibits, and an information desk. The Ladder Creek Falls Trail and Garden is a loop trail originating at the Gorge Powerhouse that follows Ladder Creek through a hillside garden to Ladder Creek Falls. The trail includes interpretive signs and locations to view Ladder Creek Falls and colored lights illuminate the falls at night. The Trail of the Cedars is an interpretive trail providing pedestrian access from the town of Newhalem to Newhalem Powerhouse and a trail leading to the National Park Service-managed Newhalem Campground.

### ***Sauk and Skagit River Boat Launches***

City Light operates and maintains two boat launches located on Forest Service lands on the Sauk and Skagit Rivers that are licensed project facilities. The Marblemount Boat Launch is located on the Skagit River at RM 77 about 12 miles downstream from the Gorge Powerhouse and the town of Newhalem. The Sauk River boat launch is

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located on the Sauk River, a tributary to the Skagit River, about 35 miles from the town of Newhalem. City Light provides funding to the Forest Service for operation and maintenance of these boat launches.

### **3.1.2 Existing Project Operation**

The three project developments are hydraulically coordinated to operate as a single project. Project operation under the existing license is designed to meet four objectives, which are prioritized as follows: (1) flood control, (2) salmon and steelhead protection flows downstream of Gorge Powerhouse, (3) recreation, and (4) power generation. To achieve these goals, City Light must adhere to specific license requirements for Ross Lake levels and for streamflows and ramping rates downstream of Gorge Powerhouse.

City Light's typical operation of each project development is described below.

#### **Ross Development**

Ross Lake, the impoundment created by Ross Dam, is the largest of the three project reservoirs with a useable storage capacity of 1,052,000 acre-feet. City Light operates Ross Lake for storage for energy generation for the entire project as well as for providing downstream flood control and recreation at the lake.

Under existing operations, Ross Lake is drawn down on a yearly basis during winter in order to capture flows from spring runoff and to provide for downstream flood control. The drawdown typically begins after Labor Day and continues until the lake reaches its lowest level in late March or early April. The current license requires City Light to draw down Ross Lake to a level that provides 60,000 acre-feet of storage for flood control by November 15 and 120,000 acre-feet by December 1 and to maintain this available storage through March 15.

Ross Lake levels are also managed to meet recreational needs during the summer months. The current license requires City Light to fill Ross Lake as soon as possible after April 15, achieve full pool depth by July 31, and maintain full pool depth through Labor Day.<sup>8</sup>

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<sup>8</sup> Reservoir elevation limits are subject to adequate runoff, anadromous fish protection flows downstream of the project, flood protection, spill minimization, and firm power generation needs.

City Light typically operates the Ross Powerhouse continuously to pass flow downstream, although it occasionally increases and decreases generation for short periods to help meet load-following demand or other project purposes.

Spills over Ross Dam are infrequent due to the large reservoir storage capacity. Spill is typically associated with gate testing and is usually short in duration and averages only a few cubic feet per second of flow per event.

### **Diablo Development**

The Diablo Development is operated primarily to regulate flow between the Ross and Gorge Developments. Under normal operation, the reservoir level typically fluctuates between 4 and 5 feet per day. Because of its limited useable storage (8,860 acre-feet) relative to Ross Lake, the reservoir cannot absorb large fluctuations in flow under normal operations. Therefore, the Diablo Development spills much more frequently than the Ross Development, averaging about 30 days of spill per year. Spill generally occurs during periods of high runoff in the spring or early summer, or when the powerhouse units are offline or additional flow is needed to meet fish protection flows downstream of the Gorge Powerhouse.

Like the Ross Powerhouse, City Light typically operates the Diablo Powerhouse continuously to pass flow downstream, although it occasionally increases and decreases generation for short periods to help meet load-following demand or other project purposes.

### **Gorge Development**

The Gorge Development is operated primarily to regulate flows downstream of the powerhouse for salmon and steelhead protection in the upper Skagit River. The fish protection flow requirements are specified in the Revised Fisheries Settlement Agreement (FSA) Flow Plan that was approved by a July 17, 2013 Commission order amending license. The fish protection flows are generally designed to: (1) limit maximum flows when salmon and steelhead are spawning to prevent redd building along the margins of the river where they could be subject to flow fluctuations or dewatering if flows are reduced, (2) maintain minimum flows throughout the incubation period to prevent dessication of redds, and (3) limit ramping to protect sensitive life stages of salmon and steelhead from rapid increases or decreases in river flows.

In order to comply with the requirements of the FSA Flow Plan, City Light operates Gorge Reservoir and Powerhouse to provide a continuous, stable flow regime in

the upper Skagit River. City Light typically limits reservoir fluctuations to about 3 to 5 feet and does not typically operate the powerhouse to meet load-following demand.

The Gorge Development creates a 2.5-mile-long bypassed reach of the Skagit River between the dam and powerhouse. There are no minimum flow requirements in the existing license for the Gorge bypassed reach. Therefore, except during spill events at Gorge Dam, bypassed reach flow is limited to accretion flow, spill-gate seepage, tributary input, and precipitation runoff.

Spill at Gorge Dam into the 2.5-mile-long Gorge bypassed reach occurs any time that inflow exceeds the generating capacity of the powerhouse, or if additional flow is needed to meet fisheries protection flows in the upper Skagit River. These spill events typically occur between 14 and 61 days per year.

## **3.2 APPLICANT'S PROPOSAL**

### **3.2.1 Proposed Project Facilities and Operations**

City Light proposes to continue to operate and maintain the Skagit Project as is required in its existing license. City Light does not propose any new development or changes in project operation at this time. However, City Light is considering<sup>9</sup> several changes to project facilities and operations that it will evaluate during the licensing process. These include:

#### Diablo Tailwater Dredging

This activity would include dredging the main channel downstream of the confluence of Stetattle Creek to restore hydraulic head and associated hydroelectric generating capacity at the Diablo Powerhouse, which has been reduced by approximately three percent since original project construction due to sediment deposits from Stetattle Creek.

#### Diablo Lake Tour Dock

This activity would include constructing a new tour dock on the shoreline of Diablo Lake near the Environmental Learning Center. The current tour dock is located

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<sup>9</sup> Although City Light is not currently proposing these activities, staff expects that City Light will collect any information necessary to evaluate the environmental effects of these actions in the license application, should they be proposed at that time.

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about one-half-mile from the check-in site for the tours and requires that participants either walk along a narrow road or take a shuttle bus. A new dock near the Environmental Learning Center would improve the tour experience for elderly and participants with disabilities by improving access and safety. City Light would remove the existing tour dock and repurpose or restore the existing site.

### Ross Lake Pumped Storage

City Light is considering adding pumped storage capability at the Ross Development. This operational change would require installing new pumps directly below the existing low-level outlet, constructing a new single span of transmission line across the project tailrace, and deepening the Ross Powerhouse tailrace to provide sufficient depth for pump submergence. Under pumped storage operations, City Light would pump water from Diablo Reservoir into Ross Lake during periods of low energy demand and use the additional stored water in Ross Lake to generate electricity during periods of high demand. Pumped storage operations at the Ross Powerhouse would cause greater daily fluctuations in Ross Lake and Diablo Reservoir levels than occurs under existing conditions.

The current license for the project expires on April 30, 2025.

### **3.2.2 Proposed Environmental Measures**

The environmental measures that are currently proposed by City Light are described below.

#### Geology and Soils

- Update the existing Erosion Control Plan for reservoir shorelines and project roads.
- Develop a transmission line corridor management plan that includes best management practices to protect cultural and natural resources from the effects of soil erosion due to project operation and maintenance activities, and from indirect erosional effects of recreational use of roads and trails along the transmission line corridor.

#### Aquatic Resources

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- Continue to implement the FSA Flow Plan and ramping rate limits to protect salmon and steelhead spawning, incubation, and rearing in the upper Skagit River downstream of Gorge Powerhouse.
- Develop an aquatic invasive species management plan.

### Terrestrial Resources

- Develop vegetation management plans for townsites, transmission line corridors, and fish and wildlife mitigation lands to manage invasive species; protect rare, threatened, and endangered plant species; and protect streams, riparian areas, wetlands, and other priority habitats.
- Develop a wildfire management plan that includes fire prevention, response, and fuels management.
- Update the existing Wildlife Mitigation Lands Management Plan to incorporate newly acquired lands and include site-specific habitat management activities.

### Recreation and Land Use

- Continue to provide Skagit tours and ferry services on Diablo Lake.
- Continue to operate the Environmental Learning Center and Skagit Information Center.
- Continue to maintain the Ladder Creek Falls Trail and Trail of the Cedars.

### Aesthetic Resources

- Develop and implement a plan to reduce light pollution where safety considerations allow.
- Continue to consult with the National Park Service regarding visual impacts of project maintenance, lighting, and changes to project facilities within the Ross Lake National Recreation Area.

### Cultural Resources

- Update and implement the Skagit Archaeological Resources Mitigation and Management Plan and the Historic Resources Mitigation and Management Plan.

### **3.3 DAM SAFETY**

It is important to note that dam safety constraints may exist and should be taken into consideration in the development of proposals and alternatives considered in the pending proceeding. For example, proposed modifications to the dam structure, such as the addition of flashboards or fish passage facilities, could impact the integrity of the dam structure. As the proposal and alternatives are developed, the applicant must evaluate the effects and ensure that the project would meet the Commission's dam safety criteria found in Part 12 of the Commission's regulations and the Engineering Guidelines (<http://www.ferc.gov/industries/hydropower/safety/guidelines/eng-guide.asp>).

### **3.4 ALTERNATIVES TO THE PROPOSED ACTION**

Commission staff will consider and assess all alternative recommendations for operational or facility modifications, as well as protection, mitigation, and enhancement (PM&E) measures identified by the Commission, the agencies, Indian tribes, NGOs, and the public.

### **3.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY**

At present, we propose to eliminate the following alternatives from detailed study in the EA.

#### **3.5.1 Non-power License**

A non-power license is a temporary license the Commission would terminate whenever it determines that another governmental agency is authorized and willing to assume regulatory authority and supervision over the lands and facilities covered by the non-power license. At this time, no governmental agency has suggested a willingness or ability to take over the project. No party has sought a non-power license, and we have no basis for concluding that the Skagit Project should no longer be used to produce power. Thus, we do not consider a non-power license a reasonable alternative to relicensing the project.

#### **3.5.2 Project Decommissioning**

As the Commission has previously held, decommissioning is not a reasonable alternative to relicensing in most cases.<sup>10</sup> Decommissioning can be accomplished in different ways depending on the project, its environment, and the particular resource needs.<sup>11</sup> For these reasons, the Commission does not speculate about possible decommissioning measures at the time of relicensing, but rather waits until an applicant actually proposes to decommission a project, or a participant in a relicensing proceeding demonstrates that there are serious resource concerns that cannot be addressed with appropriate license measures and that make decommissioning a reasonable alternative.<sup>12</sup> City Light does not propose decommissioning, nor does the record to date demonstrate there are serious resource concerns that cannot be mitigated if the project is relicensed; as such, there is no reason, at this time, to include decommissioning as a reasonable alternative to be evaluated and studied as part of staff's NEPA analysis.

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<sup>10</sup> See, e.g., *Eagle Crest Energy Co.*, 153 FERC ¶ 61,058, at P 67 (2015); *Public Utility District No. 1 of Pend Oreille County*, 112 FERC ¶ 61,055, at P 82 (2005); *Midwest Hydro, Inc.*, 111 FERC ¶ 61,327, at PP 35-38 (2005).

<sup>11</sup> In the unlikely event that the Commission denies relicensing a project or a licensee decides to surrender an existing project, the Commission must approve a surrender “upon such conditions with respect to the disposition of such works as may be determined by the Commission.” 18 C.F.R. § 6.2 (2019). This can include simply shutting down the power operations, removing all or parts of the project (including the dam), or restoring the site to its pre-project condition.

<sup>12</sup> See generally *Project Decommissioning at Relicensing; Policy Statement*, FERC Stats. & Regs., Regulations Preambles (1991-1996), ¶ 31,011 (1994); see also *City of Tacoma, Washington*, 110 FERC ¶ 61,140 (2005) (finding that unless and until the Commission has a specific decommissioning proposal, any further environmental analysis of the effects of project decommissioning would be both premature and speculative).

## **4.0 SCOPE OF CUMULATIVE EFFECTS AND SITE-SPECIFIC RESOURCE ISSUES**

### **4.1 CUMULATIVE EFFECTS**

According to the Council on Environmental Quality's regulations for implementing NEPA (40 C.F.R. 1508.7), a cumulative effect is the effect on the environment that results from the incremental effect of the action when added to other past, present and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time, including hydropower and other land and water development activities.

#### **4.1.1 Resources that could be Cumulatively Affected**

Based on information in the PAD for the Skagit Project, and preliminary staff analysis, we have identified fisheries resources as resources that could be cumulatively affected by the proposed continued operation and maintenance of the Skagit Project in combination with other hydroelectric projects and activities in the Skagit River Basin.

#### **4.1.2 Geographic Scope**

Our geographic scope of analysis for cumulatively affected resources is defined by the physical limits or boundaries of: (1) the proposed action's effect on the resources, and (2) contributing effects from other hydropower and non-hydropower activities within the Skagit River Basin.

For fisheries resources, we have identified the geographic scope to include the entire Skagit River from its headwaters to where it empties into Puget Sound. We chose this geographic scope because the operation and maintenance of the Skagit Project, in combination with other activities such as road and railroad construction and maintenance, timber harvest, agriculture, fish hatchery production, commercial and recreational fisheries, non-native fish species, floodplain development, and mining in the upper portion of the watershed above Ross Lake may affect the fisheries resources of Skagit River.

#### **4.1.3 Temporal Scope**

The temporal scope of our cumulative effects analysis in the EA will include a discussion of past, present, and reasonably foreseeable future actions and their effects on

each resource that could be cumulatively affected. Based on the potential term of a new license, the temporal scope will look 30 to 50 years into the future, concentrating on the effect on the resources from reasonably foreseeable future actions. The historical discussion will, by necessity, be limited to the amount of available information for each resource. The quality and quantity of information, however, diminishes as we analyze resources further away in time from the present.

## **4.2 RESOURCE ISSUES**

In this section, we present a preliminary list of environmental issues to be addressed in the EA. We identified these issues, which are listed by resource area, by reviewing the PAD and the Commission's record for the Skagit Project. This list is not intended to be exhaustive or final, but contains the issues raised to date. After the scoping process is complete, we will review the list and determine the appropriate level of analysis needed to address each issue in the EA. Those issues identified by an asterisk (\*) will be analyzed for both cumulative and site-specific effects.

### **4.2.1 Geologic and Soils Resources**

- Effects of any proposed project construction and recreation-related activities on soil erosion and sedimentation.
- Effects of existing and any potential changes in project operation on shoreline stability of the reservoirs.
- Effects of project operation and maintenance activities on mass wasting along access roads and the transmission line corridor.

### **4.2.2 Water Quality**

- Effects of existing and any potential changes in project operation on water quality in the three project reservoirs, including: fecal coliform and turbidity levels in Ross Lake, and dissolved oxygen and pH levels in Diablo and Gorge Reservoirs.
- Effects of project operation on water quality in the upper Skagit River downstream of Gorge Dam (i.e., bypassed reach and full-flow reach below the powerhouse), including water temperatures, dissolved oxygen, total dissolved gas, and turbidity levels.

### 4.2.3 Fisheries and Aquatic Resources\*

- Effects of existing and any potential changes in project operation on resident fish populations and habitat in the three project reservoirs.
- Effects of existing and any potential changes in project operation in the three project reservoirs on access to tributary habitat for resident fish spawning.
- Effects of existing and any potential changes in project operation and large woody debris management within reservoirs on aquatic habitat in the reservoirs and Skagit River downstream of Gorge Dam.
- Effects of sediment deposition in project reservoirs and any potential measures to address sedimentation (e.g., dredging) on resident fish species.
- Determination of benefits of providing minimum instream flows in the Gorge bypassed reach for resident and anadromous fish species.
- Determination of benefits of providing fish passage at the project dams for resident and anadromous fish species.
- Effects of existing and any potential changes to project operation, including flood control operations, on aquatic habitat, and sediment transport and other geomorphic processes of the upper Skagit River.
- Effects of existing and any potential changes to powerhouse operations at the three developments on resident fish entrainment injury and mortality.
- Adequacy of existing FSA Flow Plan at protecting anadromous fish spawning, incubation, rearing, and outmigration life stages in the Skagit River.
- Adequacy of existing ramping rates to protect fisheries resources of the Skagit River.
- Effects of transmission line maintenance activities on fisheries and aquatic habitat in rivers, streams, and floodplains within the transmission line corridor.

#### 4.2.4 Terrestrial Resources

- Effects on the natural fire regime of the North Cascades National Park complex due to project-related fire management practices (e.g., fuels reduction treatments and suppression of naturally ignited fires) in forests surrounding project facilities, in order to protect lives and property.
- Effects of continued or modified project operations, including reservoir fluctuations, on littoral, wetland, emergent, and riparian habitats and associated wildlife, including wetland-dependent birds and amphibians.
- Effects of existing and any potential changes to project facilities, operations, maintenance, and project-related recreation activities, on terrestrial wildlife, habitats, and vegetation communities, including sensitive plants and nesting northern goshawk.
- Effects of existing and any potential changes to project facilities, operations, maintenance, and project-related recreation activities, on the establishment, spread, and control of invasive plants.
- Effects of electrocution and collision hazards of existing and any new project transmission lines on eagles, waterfowl, and other birds.
- Adequacy of existing management plans or practices to protect terrestrial resources on the project's fish and wildlife mitigation lands.

#### 4.2.5 Threatened and Endangered Species

- Effects of continued project operation and maintenance, and any proposed changes to project facilities or operations, on the gray wolf, which is federally-listed as endangered; Chinook salmon, steelhead, bull trout, grizzly bear, Canada lynx, northern spotted owl, marbled murrelet, and Oregon spotted frog, which are federally-listed as threatened; and North American wolverine, which has been proposed for listing as threatened.

#### 4.2.6 Recreation Resources

- Effects of existing and any potential changes to project facilities and

operations on recreational use in the project area, including the adequacy of existing recreational access and the adequacy and capacity of existing recreational facilities.

- Effects of existing and any potential changes to project facilities and operations on angling and whitewater boating opportunities in the Gorge bypassed reach, and feasibility of providing minimum flows and access to enhance these opportunities.
- Effects of reservoir level fluctuations from existing and any potential changes to project facilities and operations on recreational use and accessibility to boat docks and other water access facilities.
- Effects of activities related to road improvements and relocation of the Skagit Tour Ferry Dock on recreational access and use.
- The consistency of continuing project operation, and any proposed project modifications, with recreation management goals and objectives of Federal and state comprehensive plans for the project area.

#### **4.2.7 Aesthetic Resources**

- Effects of reservoir level fluctuations from existing and any potential changes to operations on the aesthetic resources.
- Effects of existing and any potential changes to project facilities on aesthetic resources.
- The consistency of continuing project operation and any proposed project modifications with visual quality management goals and objectives of Federal and state comprehensive plans for the project area.
- Effects of existing and any potential changes to project facilities and operations and boat activity on noise levels within the Ross Lake National Recreation Area.
- Effects of existing and any potential changes to project facilities lighting requirements on resources within the Ross Lake National Recreation Area.

#### **4.2.8 Cultural Resources**

- Effects of existing and any potential changes to project facilities and operations, including reservoir fluctuations, on historic properties and archaeological resources, including Traditional Cultural Properties.

#### **4.2.9 Socioeconomic Resources**

- Effects of any proposed modifications to project facilities on the local economy, infrastructure, and services including employment, housing, transportation, tourism, and businesses.

#### **4.2.10 Developmental Resources**

- Economics of the project and the effects of any proposed or recommended environmental measures on the project's economics.

## 5.0 PROPOSED STUDIES

Depending upon the findings of studies completed by City Light and the recommendations of the consulted entities, City Light will consider, and may propose certain other measures to enhance environmental resources affected by the project as part of the proposed action. City Light’s initial study proposals are identified by resource area in table 1. Detailed information on City Light’s initial study proposals can be found in the PAD. Further studies may need to be added to this list based on comments provided to the Commission and City Light from interested participants, including Indian tribes.

Table 1. City Light’s initial study proposals for the Skagit Project. (Source: PAD)

<b>Resource Area</b>	<b>Proposed Study</b>
<b>General</b>	
	Operations model to evaluate how alternative operational scenarios affect reservoir elevations, power generation, and outflows for each of the project developments under various operational constraints. The model will be used to assess how operations affect other environmental resources of the project area.
<b>Geologic and Soils Resources</b>	
	Reservoir shoreline erosion assessment to update prior inventory, assess currently known erosion sites and control measures, and identify any new erosion sites.
	Inventory the erosion and slope stability issues that overlap with project facilities, access roads, and transmission line corridors.
<b>Water Quality</b>	

<b>Resource Area</b>	<b>Proposed Study</b>
	Water quality monitoring study to assess water quality conditions in the three project reservoirs and the Skagit River downstream of Gorge Dam.
<b>Aquatic Resources</b>	
	Study of sediment deposition in select tributary deltas within project reservoirs
	Geomorphology study to provide information on geomorphic processes that influence aquatic habitat (e.g., channel configuration, gravel composition, large woody debris characteristics, off-channel habitat) in the Skagit River between Gorge Dam and the Sauk River confluence.
	Instream flow model to assess flow and aquatic habitat relationships in the Skagit River between Gorge Dam and the Sauk River confluence.
	Reservoir fish stranding and trapping study to assess native fish (i.e., rainbow trout, bull trout, and dolly varden) trapping and stranding risk within the three project reservoirs due to project operation.
<b>Terrestrial Resources</b>	
	Vegetation mapping to characterize the existing condition of vegetation resources within the project boundary and a surrounding 0.5-mile buffer.

<b>Resource Area</b>	<b>Proposed Study</b>
	Wetland assessment to characterize baseline conditions of wetlands within the project boundary and the Skagit River channel migration zone from the Gorge Powerhouse to the Sauk River confluence.
	Identify, characterize, and assess threats to rare, threatened, or endangered plant species and populations in areas within the project boundary or wildlife mitigation lands potentially affected by project-related operations, maintenance, and recreation.
	Invasive plants inventory to determine the location, extent, and dispersal vectors for non-native plants within the project boundary, associated risks to fish and wildlife habitat, and information for a long-term weed management plan.
	Marbled murrelet study to map suitable nesting habitat within the project boundary and wildlife mitigation lands, and determine whether this habitat is occupied by nesting murrelets.
	Golden eagle habitat analysis to map the intersection of migratory routes and suitable nesting and foraging habitats with project transmission line corridors, verify potential nesting and foraging habitats within powerline corridors, and determine potential use of corridors for foraging and threat of collision with transmission lines.
	Northern goshawk habitat analysis study to identify and map areas of suitable habitat within the project boundary and a surrounding 0.5-mile buffer.

<b>Resource Area</b>	<b>Proposed Study</b>
	Special-status amphibian study to identify areas of potentially suitable breeding habitat for Oregon and Columbia spotted frogs in wetland and littoral zones along the three project reservoirs, and assess breeding use of habitats by spotted frogs or other pond-breeding amphibians.
	Beaver habitat assessment to gage extent of beaver use of and impacts to chum salmon spawning channels, and to identify areas of potentially suitable and unoccupied beaver habitat on or near project lands for potential relocation of problem beavers within the watershed.
<b>Recreation, Land Use, and Aesthetics</b>	
	Recreation use and facility assessment to determine (1) preferences, attitudes and characteristics of recreation users, (2) the condition, accessibility and use effects of project recreation facilities, (3) current recreational use and activities, and (4) future recreation demand.
	Gorge bypass reach safety and whitewater boating assessment to evaluate the recreational whitewater boating potential under current conditions of the Gorge bypassed reach, and to evaluate the feasibility of expanding boating opportunities in this reach.
	Project facility lighting inventory to identify project facilities within the Ross Lake National Recreation Area that utilize outdoor lighting and describe the purpose and need for lighting at each project

<b>Resource Area</b>	<b>Proposed Study</b>
	facility, and the characteristics of the lights being used.
	Project operation sound assessment to identify project facilities and equipment that emit sound and quantify and model sound emissions from these sources to determine noise effects on the Ross Lake National Recreation Area.
<b>Cultural Resources</b>	
	Cultural resources data synthesis study to develop an understanding of the affected environment/current conditions for cultural resources within the study area and identify data gaps and the need for future study, consultation, or management plans.
	Cultural resources survey to identify cultural resources within the project's Area of Potential Affect (APE), identify potential effects on those cultural resources within the APE, and determine National Register of Historic Places (National Register) eligibility of affected resources identified within the APE.
	Gorge bypass reach cultural resources survey to identify and assess the potential effects of project operation and maintenance on cultural resources within the Gorge bypassed reach that are included in or eligible for listing in the National Register.

## **6.0 REQUEST FOR INFORMATION AND STUDIES**

We are asking federal, state, and local resource agencies, Indian tribes, NGOs, and the public to forward to the Commission any information that will assist us in conducting an accurate and thorough analysis of the project-specific and cumulative effects associated with relicensing the Skagit Project. The types of information requested include, but are not limited to:

- information, quantitative data, or professional opinions that may help define the geographic and temporal scope of the analysis (both site-specific and cumulative effects), and that helps identify significant environmental issues;
- identification of, and information from, any other EA, EIS, or similar environmental study (previous, on-going, or planned) relevant to the proposed relicensing of the Skagit Project;
- existing information and any data that would help to describe the past and present actions and effects of the project and other developmental activities on environmental and socioeconomic resources;
- information that would help characterize the existing environmental conditions and habitats;
- the identification of any federal, state, or local resource plans, and any future project proposals in the affected resource area (e.g., proposals to construct or operate water treatment facilities, recreation areas, water diversions, timber harvest activities, or fish management programs), along with any implementation schedules);
- documentation that the proposed project would or would not contribute to cumulative adverse or beneficial effects on any resources. Documentation can include, but need not be limited to, how the project would interact with other projects in the area and other developmental activities; study results; resource management policies; and reports from federal and state agencies, local agencies, Indian tribes, NGOs, and the public;
- documentation showing why any resources should be excluded from further study or consideration; and

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- study requests by federal and state agencies, local agencies, Indian tribes, NGOs, and the public that would help provide a framework for collecting pertinent information on the resource areas under consideration necessary for the Commission to prepare the EA/EIS for the project.

All requests for studies filed with the Commission must meet the criteria found in Appendix A, *Study Plan Criteria*.

The requested information, comments, and study requests should be submitted to the Commission no later than October 24, 2020. All filings must clearly identify the following on the first page: **Skagit River Hydroelectric Project (P-553-235)**. Scoping comments may be filed electronically via the Internet. See 18 C.F.R. 385.2001(a)(1)(iii) and the instructions on the Commission's website <http://www.ferc.gov/docs-filing/efiling.asp>. Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at <http://www.ferc.gov/docs-filing/ecomment.asp>. You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support at [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov) or toll free at 1-866-208-3676, or for TTY, (202) 502-8659.

Register online at <http://www.ferc.gov/esubscription.asp> to be notified via email of new filings and issuances related to this or other pending projects. For assistance, please contact FERC Online Support <mailto:ferconlinesupport@ferc.gov>.

Any questions concerning how to file written comments with the Commission should be directed to Matt Cutlip at (503) 552-2762 or [matt.cutlip@ferc.gov](mailto:matt.cutlip@ferc.gov). Additional information about the Commission's licensing process and the Skagit Project may be obtained from the Commission's website, [www.ferc.gov](http://www.ferc.gov).

## **7.0 EA PREPARATION**

Currently, we anticipate the need to prepare a draft and final EA. The EA will be sent to all persons and entities on the Commission's service and mailing lists for the Skagit Project. The EA will include our recommendations for operating procedures, as well as environmental protection and enhancement measures that should be part of any license issued by the Commission. All recipients will then have 30 days to review the EA and file written comments with the Commission.

A copy of City Light's process plan, which has a complete list of relicensing milestones for the Skagit Project, including those for developing the license application, is attached as Appendix B to this SD1.

## **8.0 PROPOSED EA OUTLINE**

The preliminary outline for the Skagit Project EA is as follows:

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## 9.0 COMPREHENSIVE PLANS

Section 10(a)(2) of the FPA, 16 U.S.C. section 803(a)(2)(A), requires the Commission to consider the extent to which a project is consistent with federal and state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by a project. Staff has preliminarily identified and reviewed the plans listed below that may be relevant to the Skagit Project. Agencies are requested to review this list and inform the Commission staff of any changes. If there are other comprehensive plans that should be considered for this list that are not on file with the Commission, or if there are more recent versions of the plans already listed, they can be filed for consideration with the Commission according to 18 CFR 2.19 of the Commission's regulations. Please follow the instructions for filing a plan at <http://www.ferc.gov/industries/hydropower/gen-info/licensing/complan.pdf>.

The following is a list of comprehensive plans currently on file with the Commission that may be relevant to the Skagit Project.

Bureau of Land Management. Forest Service. 1994. Standards and guidelines for management of habitat for late-successional and old-growth forest related species within the range of the northern spotted owl. Washington, D.C. April 13, 1994.

Forest Service. 1989. Okanogan National Forest land and resource management plan. Department of Agriculture, Okanogan, Washington.

Forest Service. 1990. Mt. Baker-Snoqualmie National Forest land and resource management plan. Department of Agriculture, Seattle, Washington. June 1990.

Interagency Committee for Outdoor Recreation. Washington State Comprehensive Outdoor Recreation Planning Document (SCORP): 2002-2007. Olympia, Washington. October 2002.

Interagency Committee for Outdoor Recreation. 1995. Washington State outdoor recreation and habitat: Assessment and policy plan 1995-2001. Tumwater, Washington. November 1995.

Interagency Committee for Outdoor Recreation. 1991. Washington State trails plan: policy and action document. Tumwater, Washington. June 1991.

National Marine Fisheries Service. 2008. Recovery Plan for Southern Resident Killer Whales. Seattle, Washington. January 2008.

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National Marine Fisheries Service. Pacific Fishery Management Council. 1978. Fishery management plan for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California commencing in 1978. March 1978.

National Park Service. 1988. North Cascades National Park Complex General Management Plan: Lake Chelan National Recreation Area and North Cascades National Park. Department of the Interior, Sedro Woolley, Washington. June 29, 1988.

National Park Service. 1993. The Nationwide Rivers Inventory. Department of the Interior, Washington, D.C. 1993.

National Park Service. 2005. North Cascades National Park Complex Fire Management Program. Sedro-Woolley, Washington. May 2005.

National Park Service. 2008. North Cascades National Park Complex Mountain Fishery Management Plan. Sedro-Woolley, Washington. June 2008.

National Park Service. 2011. North Cascades National Park Complex Invasive Non-Native Plant Management Plan. Sedro-Woolley, Washington. November 2011.

National Park Service. 2011. Ross Lake National Recreation Area General Management Plan. Department of the Interior, Seattle, Washington. 2011. 125

National Park Service. 2014. Mount Rainier and North Cascades National Park Complex Fisher Restoration Plan. Ashford and Sedro-Woolly, Washington. 2014.

Pacific Fishery Management Council. 1988. Eighth amendment to the fishery management plan for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California commencing in 1978. Portland, Oregon. January 1988.

State of Washington. 1977. Statute establishing the State scenic river system, Chapter 79.72 RCW. Olympia, Washington.

U.S. Fish and Wildlife Service. n.d. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C.

U.S. Fish and Wildlife Service. Canadian Wildlife Service. 1986. North American

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waterfowl management plan. Department of the Interior. Environment Canada. May 1986.

Washington Department of Ecology. 1994. State wetlands integration strategy. Olympia, Washington. December 1994.

Washington Department of Ecology. 1986. Application of shoreline management to hydroelectric developments. Olympia, Washington. September 1986.

Washington Department of Fisheries. 1987. Hydroelectric project assessment guidelines. Olympia, Washington.

Washington Department of Fish and Wildlife. 1997. Management recommendations for Washington's priority habitats: Riparian. Olympia, Washington. December 1997.

Washington Department of Fish and Wildlife. 2004. Management recommendations for Washington's priority species, Volume IV: Birds. Olympia, Washington. May 2004.

Washington Department of Fish and Wildlife. 2005. Washington's comprehensive wildlife conservation strategy. Olympia, Washington. September 19, 2005.

Washington Department of Game. 1987. Strategies for Washington's wildlife. Olympia, Washington. May 1987.

Washington Department of Natural Resources. 1987. State of Washington natural heritage plan. Olympia, Washington.

Washington Department of Natural Resources. 1997. Final habitat conservation plan. Olympia, Washington. September 1997.

Washington State Energy Office. 1992. Washington State hydropower development/resource protection plan. Olympia, Washington.

Washington State Parks and Recreation Commission. 1988. Washington State scenic river assessment. Olympia, Washington. September 1988.

Washington State Parks and Recreation Commission. 1988. Scenic rivers program - report. Olympia, Washington. January 29, 1988.

**10.0 MAILING LIST**

The list below is the Commission’s official mailing list for the Skagit Project (FERC No. 553). If you want to receive future mailings for the Skagit Project and are not included in the list below, please send your request by email to [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov). All emailed requests to be added to the mailing list must clearly identify the following on the first page: Skagit River Project No. 553-235. You may use the same method if requesting removal from the mailing list below.

Register online at <http://www.ferc.gov/esubscribenow.htm> to be notified via email of new filings and issuances related to this or other pending projects. For assistance, please contact FERC Online Support at [FERCOnlineSupport@ferc.gov](mailto:FERCOnlineSupport@ferc.gov) or toll free at 1-866-208-3676, or for TTY, (202) 502-8659.

**Official Mailing List for the Skagit Project**

American Rivers Patrick Goldsworthy North Cascades Conservation Council P.O. Box 95980 Seattle, Washington 98145-2980	Bonneville Power Administration FERC Contact PO Box 3621 Portland, OR 97208-3621	Bureau of Reclamation Columbia-Cascades Area Office 1917 Marsh Road Yakima, Washington 98901-2058
Michael Haynes Director City of Seattle, City Light Department P.O. Box 34023 Seattle, Washington 98124-4023	Michelle Vargo Power Production Director City of Seattle, City Light Department 700 Fifth Ave Seattle, Washington 98124	Kimberly Pate Chief Dam Safety Engineer City of Seattle, City Light Department P.O. Box 34023 Seattle, Washington 98124-4023
Jay Fields Department of the Interior, Office of the Solicitor 805 SW Broadway Suite 600 Portland, OR 97205	Tyler Farmer Harrigan Leyh Farmer & Thomsen 999 Third Ave Suite 4400 Seattle, WA 98104	Donald R Clark 58468 Clark Cabin Road Rockport, WA 98283

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<p>Karen Taylor-Goodrich          Superintendent          North Cascades National Park          Service Complex          810 State Route 20          Sedro-Woolley, WA 98284</p>	<p>Keith Kirkendall          National Marine Fisheries          Service          1201 NE Lloyd Blvd,          Suite 1100          Portland, OR 97232</p>	<p>David Price          NOAA/National Marine          Fisheries Service          510 Desmond Drive, Suite 130          Lacey, WA 98503</p>
<p>Elizabeth Babcock          NOAA/NMFS/WCR          7600 Sand Point Way NE          Seattle, WA 98115</p>	<p>Steve Copps          NOAA/NMFS/WCR          7600 Sand Point Way NE          Seattle, WA 98115</p>	<p>Philip Fenner          North Cascades Conservation          Council          735 N 79th St.          Seattle, WA 98103</p>
<p>Karen Gustin          Superintendent          Olympic National Park          600 East Park Avenue          Port Angeles, WA 98362</p>	<p>Stan Walsh          Environmental Services          Manager          Sauk-Suiattle Indian Tribe of          Washington          Skagit River System          Cooperative          P.O. Box 368          LaConner, WA 98257</p>	<p>Andrew Bearlin          Capital Projects Coordinator          Seattle City Light          700 Fifth Ave, Suite 3200          Seattle, WA 98124</p>

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<p>Chris Townsend          Director, Natural Resources          Seattle City Light          700 5th Avenue, Suite 3341          Seattle, WA 98104</p>	<p>Stan Walsh          Environmental Services          Manager          Swinomish Indian Tribal          Community          Skagit River System          Cooperative          P.O. Box 368          LaConner, WA 98257</p>	<p>U.S. Army Corps of Engineers          Commander          PO Box 2946          Portland, OR 97208-2946</p>
<p>Maria Cantwell          Senator          U.S. Senate          511 Hart Senate Office Bldg          Washington, District of          Columbia 20510</p>	<p>Upper Skagit Indian Tribe          Office of Tribal Attorney          25944 Community Plaza Way          Sedro-Woolley, WA 98284</p>	<p>USDA Forest Service          Regional Hydropower          Coordinator          1405 Emens Ave N          Darrington, WA          98241-9502</p>
<p>Kristen Bonanno          Region 6 Energy Coordinator          USDA Forest Service          PO Box 3623          Portland, OR 97208-3623</p>	<p>Bill Frymire          Senior Counsel          Washington Office of Attorney          General          PO Box 40100          Olympia, WA 00100</p>	<p>Washington Office of          Archaeology          SHPO          PO Box 48343          Olympia, WA 98504-8343</p>
<p>Washington State Department          of Agriculture          406 General Administration          Building          Olympia, WA 98504-0001</p>	<p>Washington State Department          of Fish and Wildlife          Chief          Habitat Division          600 N. CAPITOL WAY          Olympia, WA 98504-0001</p>	<p>Neil Wise          Washington Office of Attorney          General          PO Box 40100          Olympia, WA 98504-0100</p>
<p>Gary Engman          Washington State Department          of Fish and Wildlife          Habitat Management Division          16018 Mill Creek Blvd., MS:          TB-44          Mill Creek, WA 98021-2296</p>	<p>Einar Wold          Chief          Washington State Department          of Fish and Wildlife          600 Capitol Way N.          Olympia, WA          98501-1076</p>	<p>Brock Applegate          Major Projects Mitigation          Biologist          Washington State Dept of Fish          &amp; Wildlife          16018 Mill Creek Boulevard          Mill Creek, WA 98012</p>
<p>Washington Utilities and          Transportation Commission          PO Box 47250          Olympia, WA</p>		

**APPENDIX A**  
**STUDY PLAN CRITERIA**  
**18 CFR Section 5.9(b)**

Any information or study request must contain the following:

1. Describe the goals and objectives of each study proposal and the information to be obtained;
2. If applicable, explain the relevant resource management goals of the agencies or Indian tribes with jurisdiction over the resource to be studied;
3. If the requester is not a resource agency, explain any relevant public interest considerations in regard to the proposed study;
4. Describe existing information concerning the subject of the study proposal, and the need for additional information;
5. Explain any nexus between project operations and effects (direct, indirect, and/or cumulative) on the resource to be studied, and how the study results would inform the development of license requirements;
6. Explain how any proposed study methodology (including any preferred data collection and analysis techniques, or objectively quantified information, and a schedule including appropriate field season(s) and the duration) is consistent with generally accepted practice in the scientific community or, as appropriate, considers relevant tribal values and knowledge; and
7. Describe considerations of level of effort and cost, as applicable, and why proposed alternative studies would not be sufficient to meet the stated information needs.

**APPENDIX B  
SKAGIT PROJECT PROCESS PLAN AND SCHEDULE**

Shaded milestones are unnecessary if there are no study disputes. If the due date falls on a weekend or holiday, the due date is the following business day. Early filings or issuances will not result in changes to these deadlines.

<b>Responsible Party</b>	<b>Pre-Filing Milestone</b>	<b>Date</b>	<b>FERC Regulation</b>
City Light	File NOI/PAD	4/27/20	5.5, 5.6
FERC	Tribal Meetings	5/27/20	5.7
FERC	Issue Notice of Commencement of Proceeding and Scoping Document 1	6/26/20	5.8
FERC	Scoping Meetings ( <i>Waived</i> )	N/A*	5.8(b)(viii)
All Stakeholders	File Comments on PAD/Scoping Document 1 and Study Requests	10/24/20	5.9
FERC	Issue Scoping Document 2 (if necessary)	12/8/20	5.10
City Light	File Proposed Study Plan	12/8/20	5.11(a)
All Stakeholders	Proposed Study Plan Meeting	1/7/21	5.11(e)
All Stakeholders	File Comments on Proposed Study Plan	3/8/21	5.12
City Light	File Revised Study Plan	4/7/21	5.13(a)
All Stakeholders	File Comments on Revised Study Plan	4/22/21	5.13(b)
FERC	Issue Director's Study Plan Determination	5/7/21	5.13(c)
Mandatory Conditioning Agencies	File Any Study Disputes	5/27/21	5.14(a)
Dispute Panel	Select Third Dispute Resolution Panel Member	6/11/21	5.14(d)
Dispute Panel	Convene Dispute Resolution Panel	6/16/21	5.14(d)(3)

<b>Responsible Party</b>	<b>Pre-Filing Milestone</b>	<b>Date</b>	<b>FERC Regulation</b>
City Light	File Comments on Study Disputes	6/21/21	5.14(i)
Dispute Panel	Dispute Resolution Panel Technical Conference	6/26/21	5.14(j)
Dispute Panel	Issue Dispute Resolution Panel Findings	7/16/21	5.14(k)
FERC	Issue Director's Study Dispute Determination	8/5/21	5.14(l)
City Light	First Study Season	2021	5.15(a)
City Light	File Initial Study Report	3/8/22	5.15(c)(1)
All Stakeholders	Initial Study Report Meeting	3/23/22	5.15(c)(2)
City Light	File Initial Study Report Meeting Summary	4/7/22	5.15(c)(3)
All Stakeholders	File Disagreements/Requests to Amend Study Plan	5/7/22	5.15(c)(4)
All Stakeholders	File Responses to Disagreements/Amendment Requests	6/6/22	5.15(c)(5)
FERC	Issue Director's Determination on Disagreements/Amendments	7/6/22	5.15(c)(6)
City Light	Second Study Season	2022	5.15(a)
City Light	File Updated Study Report	3/8/23	5.15(f)
All Stakeholders	Updated Study Report Meeting	3/23/23	5.15(f)
City Light	File Updated Study Report Meeting Summary	4/7/23	5.15(f)
All Stakeholders	File Disagreements/Requests to Amend Study Plan	5/7/23	5.15(f)
All Stakeholders	File Responses to Disagreements/Amendment Requests	6/6/23	5.15(f)
FERC	Issue Director's Determination on Disagreements/Amendments	7/6/23	5.15(f)

<b>Responsible Party</b>	<b>Pre-Filing Milestone</b>	<b>Date</b>	<b>FERC Regulation</b>
City Light	File Preliminary Licensing Proposal (or Draft License Application)	12/1/22	5.16(a)-(c)
All Stakeholders	File Comments on Preliminary Licensing Proposal (or Draft License Application)	3/1/23	5.16(e)
City Light	File Final License Application	4/30/23	5.17
City Light	Issue Public Notice of Final License Application Filing	5/14/23	5.17(d)(2)
<p>* Due to the proclamation declaring a National Emergency concerning the Novel Coronavirus Disease (COVID-19), issued by the President on March 13, 2020, we are waiving section 5.8(b)(viii) of the Commission’s regulations and do not intend to conduct a public scoping meeting.</p>			