



Report to the Legislature on Water Power License Fees

Expenditures, Recommendations, Accountability, and Recognition

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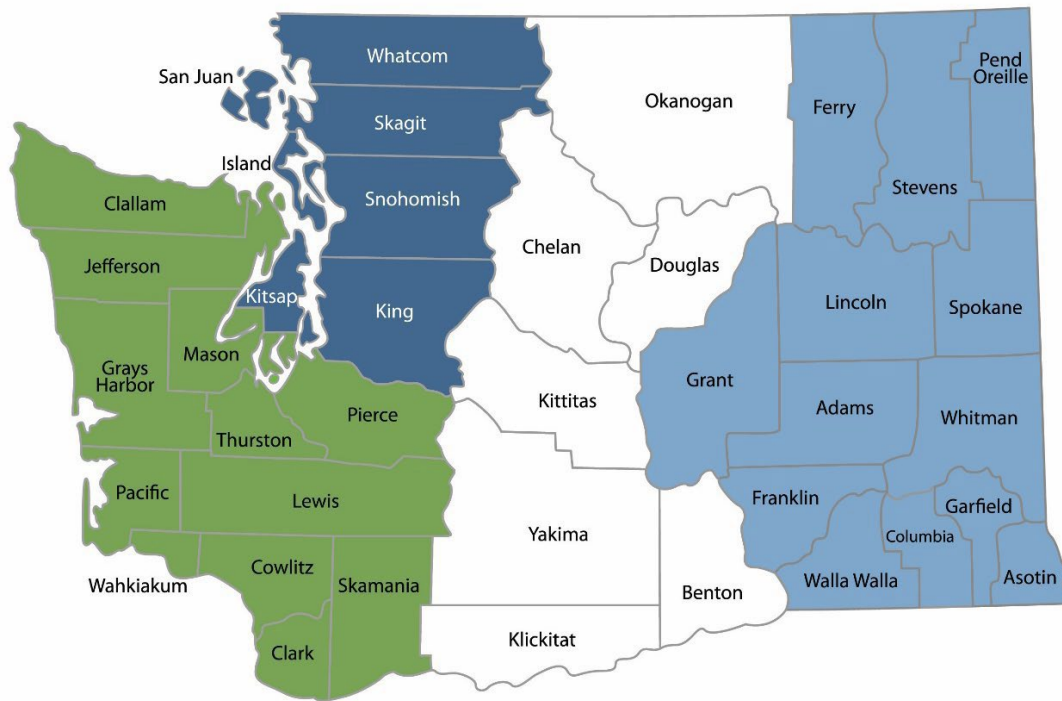
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¹ www.ecology.wa.gov/contact

Department of Ecology's Regional Offices

Map of Counties Served



Southwest Region 360-407-6300	Northwest Region 206-594-0000	Central Region 509-575-2490	Eastern Region 509-329-3400
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Region	Counties served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	PO Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
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DEPARTMENT OF
ECOLOGY
State of Washington

Table of Contents

List of Tables	5
Tables	5
Executive Summary.....	6
Statutory language (enacted June 9, 2022) – RCW 90.16.050	8
About This Report	11
Previous Biennial Progress Reports to the Legislature	11
Water Power License Fee Revenue	12
Revenue	12
Revenue Use	12
Water Quality Program Hydropower Responsibilities	13
Water Resources Program Hydropower Responsibilities.....	15
Washington Department of Fish and Wildlife.....	16
Hydropower Responsibilities	16
Detail of Fund Expenditures.....	17
Summary of 2021-2023 Biennium Expenditures.....	17
Other funds that support the agency hydropower responsibilities	17
Fee expenditures on pre-licensing for proposed hydropower projects	18
Hydropower program workload in FY2022 and FY2023.....	18
Expected workload and full-time employee needs in 2023-2025 biennium	20
Accountability and Recommendations	22
Annual Water Power License Fee Stakeholder Meeting	22
Recognition of Hydropower Operators	28
Dalles Dam North Fishway Hydroelectric Project.....	28
Seattle City Light – Skagit River Project.....	29
City of Tacoma – Nisqually Project.....	29
Chelan County Public Utility District (PUD)	29
Conclusion	31
Appendix A. Fees Revenue for FY2022 and FY2023.....	32
Appendix B. State agency workload by project – Fiscal Year 2022 and 2023.....	39

List of Tables

Tables

Table 1. Previous Biennial Progress Reports.....	11
Table 2. Upcoming Relicensing Schedule.....	15
Table 3. FY 2022-23 FERC Project Expenditures by Agency, Program, and Fund Source.....	18
Table 4. State Agency Fulltime Equivalent (FTE) Program Staffing in FY2022 and FY2023.....	20
Table 5 Fiscal Year 2022 & Fiscal Year 2023 - Total Workload and Expenditures by Licensing Phase.....	22

Executive Summary

Ecology is required to submit a biennial progress report to the Legislature to justify the appropriate use of the water power license fees. This report describes how fees were spent in the current biennium and the expected workload in the next biennium, program accountability, and recognition of hydropower projects that exceed their environmental regulatory requirements.

The Washington Department of Fish and Wildlife (WDFW) and Ecology jointly manage state hydropower environmental regulatory programs, share the revenue from water power license fees to support the program, and collectively consult with the interested parties to improve the programs. This report describes the progress made in three areas:

- How fees were spent in the current biennium and expected work in the next biennium.
- Recommendations and accountability of programs supported by the fees.
- Recognition of hydropower projects that exceed their environmental regulatory requirements.

Washington State maintains authority under Section (§) 401 of the Clean Water Act (CWA) to certify any federal permit or license that may result in a discharge to waters within state jurisdiction. The §401 water quality certification (§401 WQ certification), and conditions therein, ensure that the federally permitted actions meet state laws and protect the quality of state water, habitat, and aquatic resources. Hydropower dams that receive a license to operate from the Federal Energy Regulatory Commission² (FERC) are required to obtain this certification from the state. Ecology, with technical assistance from WDFW, issues these §401 WQ certifications for hydropower projects in the state.

The joint Ecology and WDFW program includes the development of the state §401 WQ certification necessary to receive a federal license. Once licensed, the state program oversees the implementation of certifications, conditions, and other relevant environmental conditions the FERC includes under its authority.

Annual fees are collected from hydropower project owners under the authority of RCW 90.16.050. The fees are based on the amount of state surface water that is used annually for power development. Hydropower fees were first established in 1929 and are assessed to all non-federally owned hydropower projects. These fees are referred to as *base fees*³ and help to fund the Ecology/United States Geological Survey (USGS) cooperative stream flow gauging program. Additional fees, referred to as *water power license fees*, were established by the Washington State Legislature in 2007 and are assessed only to hydropower projects that are under FERC's licensing authority.

The 2007 law revision added a water power license fee specifically to support expenses associated with staff at Ecology and WDFW responsible for issuing and implementing §401 WQ certifications. RCW 90.16.050 includes a sunset date for the water power license fee, which was extended during the 2022 legislative session to June 30, 2029.

² The Federal Energy Regulatory Commission does not issue licenses to other federal agencies. Dams in Washington owned by the U.S. Army Corps of Engineers and the U.S. Bureau of Reclamation do not receive a license.

³ Although not a requirement, information on base fees is also included to provide a complete account of fees collected under RCW 90.16.050.

In the 2021-2023 biennium, Ecology collected \$529,594 in *base fees* from all hydropower projects in Washington as authorized in RCW 90.16.050(1)(a). Additionally, Ecology collected, \$915,965 in *water power license fees* from hydropower projects in Washington that are licensed by the FERC and thus required to pay additional fees per RCW 90.16.050(1)(b). These water rights fees assessed to FERC-licensed hydropower projects help fund technical and policy staff from Ecology and WDFW to develop and implement license requirements.

The total biennial cost to the state agencies for FERC hydropower licensing and implementation was \$1,682,004. The FERC-licensed project fees funded 52% of the full workload associated with hydropower projects in the biennium. Federal and state funds supported the remaining work performed. The supplemental sources and funding totals for each FY22 and FY23 are detailed in Table 2 of this report. We expect the need for relying on federal funds and state funds again in the 2023-2025 biennium to cover the full workload. Additional state general fund granted from the Legislature in 2023 session ensures the work is fully funded.

Ecology and WDFW have annual accountability and reporting requirements under RCW 90.16.050(1)(c)(i) and RCW 90.16.050, section (3). These requirements include consultation with hydropower project operators and other interested parties, submittal of an annual performance survey to water power license fee interested parties, collaboration on annual work plans with hydropower project operators on upcoming work for the next calendar year and hosting an annual stakeholder meeting.

Ecology also provides recognition to hydropower projects that exceed their regulatory requirement. This report includes current certification in Washington State issued by the Low Impact Hydropower Institute (Institute). The Institute is a non-profit 501(c)(3) organization dedicated to reducing the impacts of hydropower generation through the certification of hydropower projects that have avoided or reduced their environmental impacts pursuant to its criteria. Ecology responds to inquiries from the Institute and certification applicants to provide regulatory oversight information necessary for it to certify these hydropower projects.

The statutory language of RCW 90.16.050 is as follows.

Statutory language – RCW 90.16.050

Use of water for power development – Annual license fee – Progress report – Exceptions to the fee schedule – Ensuring accountability in the programs

[2022 c 139 § 1; 2016 c 75 § 1; 2007 c 286 § 1; 1929 c 105 § 1; RRS § 11575-1.]

(1) Every person, firm, private or municipal corporation, or association hereinafter called "claimant", claiming the right to the use of water within or bordering upon the state of Washington for power development, shall on or before the first day of January of each year pay to the state of Washington in advance an annual license fee, based upon the theoretical water power claimed under each and every separate claim to water according to the following schedule:

(a) For projects in operation: For each and every theoretical horsepower claimed up to and including one thousand horsepower, at the rate of eighteen cents per horsepower; for each and every theoretical horsepower in excess of one thousand horsepower, up to and including ten thousand horsepower, at the rate of three and six-tenths cents per horsepower; for each and every theoretical horsepower in excess of ten thousand horsepower, at the rate of one and eight-tenths cents per horsepower.

(b) For federal energy regulatory commission projects in operation that are subject to review for certification under §401 of the federal clean water act, the following fee schedule applies in addition to the fees in (a) of this subsection: For each theoretical horsepower of capacity up to and including one thousand horsepower, at the rate of thirty-two cents per horsepower; for each theoretical horsepower in excess of one thousand horsepower, up to and including ten thousand horsepower, at the rate of six and four-tenths cents per horsepower; for each theoretical horsepower in excess of ten thousand horsepower, at the rate of three and two-tenths cents per horsepower.

(c) To justify the appropriate use of fees collected under (b) of this subsection, the department of ecology shall submit a progress report to the appropriate committees of the legislature prior to December 31, 2009, and biennially thereafter. The progress report will:

(i) Describe how license fees and other funds used for the work of the licensing program were expended in direct support of the federal energy regulatory commission licensing process and license implementation during the current biennium and expected workload and full-time equivalent employees for federal energy regulatory commission licensing in the next biennium. To increase the financial accountability of the licensing, relicensing, and license implementation program, the report must include the amount of licensing fees and program funds that were expended on licensing work associated with each hydropower project. This project-specific program expenditure list must detail the program costs and staff time associated with each hydropower project during the time period immediately prior to license issuance process, the program costs and staff time deriving from the issuance or reissuance of a license to each hydropower project, and the program costs and staff time associated with license implementation after the issuance or reissuance of a license to a hydropower project. This program cost and staff time information must be collected beginning July 1, 2016, and included in

biennial reports addressing program years 2016 or later. The report must also include an estimate of the total workload, program costs, and staff time for work associated with either certification under section 401 of the federal clean water act or license implementation for federally licensed hydropower projects expected to occur in the next reporting period, or both. In addition, the report must provide sufficient information to determine that the fees charged are not for activities already performed by other state or federal agencies or tribes that have jurisdiction over a specific license requirement and that duplicative work and expense is avoided.

(ii) include any recommendations based on consultation with the departments of ecology and fish and wildlife, hydropower project operators, and other interested parties; and

(iii) recognize hydropower operators that exceed their environmental regulatory requirements.

(d) The fees required in (b) of this subsection expire June 30, 2029. The biennial program reports submitted by the department of ecology will serve as a record for considering the extension of the fee structure in (b) of this subsection.

(2) The following are exceptions to the fee schedule in subsection (1) of this section:

(a) For undeveloped projects, the fee shall be at one-half the rates specified for projects in operation; for projects partly developed and in operation the fees paid on that portion of any project that shall have been developed and in operation shall be the full annual license fee specified in subsection (1) of this section for projects in operation, and for the remainder of the power claimed under such project the fees shall be the same as for undeveloped projects.

(b) The fees required in subsection (1) of this section do not apply to any hydropower project owned by the United States.

(c) The fees required in subsection (1) of this section do not apply to the use of water for the generation of fifty horsepower or less.

(d) The fees required in subsection (1) of this section for projects developed by an irrigation district in conjunction with the irrigation district's water conveyance system shall be reduced by fifty percent to reflect the portion of the year when the project is not operable.

(e) Any irrigation district or other municipal subdivision of the state, developing power chiefly for use in pumping of water for irrigation, upon the filing of a statement showing the amount of power used for irrigation pumping, is exempt from the fees in subsection (1) of this section to the extent of the power used for irrigation pumping.

(3) In order to ensure accountability in the licensing, relicensing, and license implementation programs of the department of ecology and the department of fish and wildlife, the departments must implement the following administrative requirements:

(a)(i) Both the department of ecology and the department of fish and wildlife must be responsible for producing an annual work plan that addresses the work anticipated to be completed by each department associated with federal hydropower licensing and license implementation.

(ii) Both the department of ecology and the department of fish and wildlife must assign one employee to each licensed hydropower project to act as each department's designated licensing

and implementation lead for a hydropower project. The responsibility assigned by each department to hydropower project licensing and implementation leads must include resolving conflicts with the license applicant or license holder and the facilitation of department decision making related to license applications and license implementation for the particular hydropower project assigned to a licensing lead.

(b) The department of ecology and the department of fish and wildlife must host an annual meeting with parties interested in or affected by hydropower project licensing and the associated fees charged under this section. The purposes of the annual meeting must include soliciting information from interested parties related to the annual hydropower work plan required by (a) of this subsection and to the biennial progress report produced pursuant to subsection (1)(c) of this section.

(c) Prior to the annual meeting required by (b) of this subsection, the department of fish and wildlife and the department of ecology must circulate a survey to hydropower licensees soliciting feedback on the responsiveness of department staff, clarity of staff roles and responsibilities in the hydropower licensing and implementation process, and other topics related to the professionalism and expertise of department staff assigned to hydropower project licensing projects. This survey must be designed by the department of fish and wildlife and the department of ecology after consulting with hydropower licensees and the results of the survey must be included in the biennial progress report produced pursuant to subsection (1)(c) of this section. Prior to the annual meeting, the department of ecology and the department of fish and wildlife must analyze the survey results. The departments must present summarized information based on their analysis of survey results at the annual meeting for purposes of discussion with hydropower project licensees.

About This Report

As prescribed by the statute, Ecology is required to submit a biennial progress report to the appropriate committees of the Legislature to justify the appropriate use of the water power license fees.

This report describes progress made in three areas:

- How fees were spent in the current biennium and expected workload in the next biennium.
- Recommendations and accountability of programs supported by the fees.
- Recognition of hydropower projects that exceed their environmental regulatory requirements.

Previous Biennial Progress Reports to the Legislature

Statute requires biennial reporting to provide the Legislature with progress on the collection and use of the fees. These reports serve as the record for ensuring the fees are appropriately supporting the licensing and implementation of hydropower projects. Table 1 provides links to our previous biennial reports.

Table 1. Previous Biennial Progress Reports

Water Power License Fees: Biennial Reports to the Legislature Expenditures, Recommendations, Accountability, and Recognition:
2019 – 21 biennium report ⁴
2017 – 19 biennium report ⁵
2015 – 17 biennium report ⁶
2013 – 15 biennium report ⁷
2011 – 13 biennium report ⁸
2009 – 11 biennium report ⁹
2007 – 09 biennium report ¹⁰

⁴ <https://apps.ecology.wa.gov/publications/SummaryPages/2210010.html>

⁵ <https://apps.ecology.wa.gov/publications/SummaryPages/2010027.html>

⁶ <https://fortress.wa.gov/ecy/publications/SummaryPages/1810033.html>

⁷ <https://fortress.wa.gov/ecy/publications/SummaryPages/1610007.html>

⁸ <https://fortress.wa.gov/ecy/publications/SummaryPages/1410048.html>

⁹ <https://fortress.wa.gov/ecy/publications/SummaryPages/1210048.html>

¹⁰ <https://fortress.wa.gov/ecy/publications/SummaryPages/0910095.html>

Water Power License Fee Revenue

RCW 90.16.050 requires a progress report, submitted by the Department of Ecology (Ecology), each biennium that describes how license fees were expended for the Federal Energy Regulatory Commission (FERC) hydropower licensing process in the previous biennium, and expected workload and full-time equivalent (FTE) employees for FERC licensing in the current biennium.

Revenue

Legislative changes made to RCW 90.16.050 and RCW 90.16.090 allowed Ecology to revise the annual hydropower projects' water rights fee for use of water in Washington State beginning in December 2007. The changes to the law provided new funding to Washington Department of Fish and Wildlife (WDFW) and Ecology for specific activities associated with environmental protection, mitigation, and enhancement measures included in FERC-issued hydropower project licenses. The changes included the following license fee schedule for FERC projects:

[RCW 90.16.050 (1)(b)]

For federal energy regulatory commission projects in operation, the following fee schedule applies in addition to the fees in (a) of this subsection: For each theoretical horsepower of capacity up to and including one thousand horsepower, at the rate of thirty-two cents per horsepower; for each theoretical horsepower in excess of one thousand horsepower, up to and including ten thousand horsepower, at the rate of six and four-tenths cents per horsepower; for each theoretical horsepower in excess of ten thousand horsepower, at the rate of three and two-tenths cents per horsepower.

The water-use fee revenue for FERC projects for FY2022 and FY2023 totaled \$915,965. For more detail of fees charged to each licensee for base fees [RCW 90.16.050 (1)(a)] and FERC project fees [RCW 90.16.050 (1)(b)], see Appendix A of this document.

Revenue Use

The water power license fees provide crucial funding for state agency participation in the federal licensing process. Ecology, in collaboration with WDFW, issue Clean Water Act §401 water quality certifications to implement environmental requirements in FERC licenses under state authority. These funds are directed to Ecology's Water Quality (WQ) and Water Resources (WR) programs. Ecology uses half of this funding to contract with WDFW for related services such as technical assistance in meeting license requirements to protect, mitigate, and enhance fish, wildlife, and habitat.

FERC licensed hydropower project activities affect a wide range of water quality and habitat conditions and prompt a variety of engagements with the state agencies, for example project plan reviews, water quality standards compliance, site visits, legal consultation, in-stream flow development and others. Due to these state agency responsibilities and the number of hydropower projects in Washington, the fees have not covered the full workload associated with hydropower compliance in past biennia. We also do not expect fee revenue to fully support the workload in the next biennium.

The following sections provide a description of the hydropower activities and responsibilities of

Ecology's WQ Program and WR Programs, and WDFW's Ecosystem Services Division.

Water Quality Program Hydropower Responsibilities

Water Quality (WQ) Program FERC hydropower license work occurs at both the headquarters and regional levels. WQ staff in headquarters provide technical support to the regional §401 WQ certification coordinators for analysis of water quality studies, approvals of quality assurance project plans (QAPPs), review of water quality models, and interpretations of the water quality standards to develop §401 WQ certifications. WQ headquarters participation enhances consistency among regions on the development and implementation of certifications statewide. Headquarters staff also organize annual meetings with the operators, state agencies, and interested stakeholders. Ecology and WDFW will continue to work with stakeholders through annual meetings and this detailed report, to show accountability for the effective use of these fees and transparency of how the funds are spent.

Regional Water Quality Program §401 WQ certification staff provide the lead point of contact for the dam relicensing and certifications in their regions. Responsibilities include all aspects of hydropower licensing to issue §401 WQ certifications. These water quality licensing activities include:

- Participation in the FERC relicensing process—including meetings, workgroups, and settlement negotiations—as they relate to Ecology’s §401 WQ certification authority.
- Review and preparation of comments on natural resource study plans, QAPPs, and environmental documents related to water quality.
- Development of §401 WQ certification conditions that protect, address impacts, and enhance water quality, flow, and habitat issues, with the assistance of Ecology’s WR Program and WDFW.
- Communication with FERC, the licensee, Tribes, state, and federal resource management agencies (including U.S. Fish and Wildlife Service), and interested parties, on issues associated with conditions in the §401 WQ certification.
- Implementation of conditions in the §401 WQ certification and settlement agreements after issuance.
- Participation of Ecology managers and staff in the Water Power License Fee Structure Stakeholders Workgroup.

In the past few biennia, there were fewer existing dams entering the relicensing process than in the preceding 10 years (2002-2012). As a result, the state agency workload has shifted to implementation and management of recently issued §401 WQ certifications. However, the implementation and management of these §401 WQ certifications continues to be a large workload for the agency. Most of these relicensed dams now have compliance schedules included in their §401 WQ certification conditions which require ongoing implementation activities to comply with WQ standards.

WQ implementation activities include:

- Review and approval of monitoring studies and water quality attainment plans.
- Total dissolved gas abatement approvals and related activities.
- Adaptive management activities associated with compliance schedules.
- Development of use attainability analyses (UAAs) as compliance schedules expire.
- Water quality modeling when necessary to determine future compliance.

Additionally, in the next five years several hydropower projects will be entering the relicensing phase

which typically begins 6 years prior to their FERC license expiration date. Table 2 lists upcoming relicensing projects that will require §401 WQ certifications.

Table 2. Upcoming Relicensing Schedule

FERC Number	Project Name	Licensee	FERC License Expiration Date
P-943	Rock Island	Public Utility District No. 1 of Chelan County	12/31/2028
P-2959	SF Tolt	City of Seattle	7/19/2029
P-2926	Russel D. Smith	ECB, Q-CB, SCB Irrigation Districts	2/28/2030
P-3074	Upriver	City of Spokane	5/31/2031
P-3295	Summer Falls	East, Quincy, and South Columbia Basin Irrigation Districts	7/31/2031
P-2849	Main Canal Works	ECB, Q-CB, SCB Irrigation Districts	11/30/2031
P-3842	Ektopia Branch	ECB, Q-CB, SCB Irrigation Districts	12/31/2031
P-3843	Potholes East	ECB, Q-CB, SCB Irrigation Districts	12/31/2031
P-2937	Quincy Chute	ECB, Q-CB, SCB Irrigation Districts	7/31/2032
P-2840	Potholes East HW	ECB, Q-CB, SCB Irrigation Districts	9/30/2032
P-7337	Cowiche	Yakima-Tieton Irrigation District	6/30/2034
P-7338	Orchard Avenue	Yakima-Tieton Irrigation District	6/30/2034
P-7214	Spring Creek	Lane Smith	8/31/2034
P-7563	Weeks Falls	South Fork II Associates Ltd. Partnership	3/31/2035
P-4885	Twin Falls	Twin Falls Hydro Hydro Associates	4/30/2035

Ecology and WDFW will work with these projects to plan and develop necessary research and to gather data necessary for relicensing and the development of the §401 WQ certification. This workload will be in addition to the continued work on implementing the §401 WQ certification conditions for those projects recently relicensed.

Ecology may also amend orders to some §401 WQ certifications. These amendments may be necessary to correct an error in the certification, incorporate a change in state water quality regulations, or to allow new construction or changes in operation.

Water Resources Program Hydropower Responsibilities

Water Resources (WR) Program staff provide technical analysis of licenses that may require flow modifications from new developments, and because of species protections (such as an Endangered Species Act listing) that were not present when the license was first issued by FERC. License conditions create continuous work – adjusting flows to the needs of fish, removing fish barriers, fish passage at dams, and modifying flow releases. These actions require a process of adaptive management with input from WR instream flow specialists. WR staff located at headquarters also process billing statements and collect the water power license fees. WR activities include:

- Supporting settlement agreements and §401 WQ certifications through adaptive management workgroups.
- Adaptive flow-related management in response to new information, and flow management related to §401 WQ certification conditions.
- Settlement agreement negotiations and development of memorandums of agreement for instream flows for licenses and amendments to licenses.
- Water right permitting for power use.
- Writing instream flow language for §401 WQ certifications.
- Collecting and administering water power license fees.

The WR Program expects that the workload in the next biennium will be similar in nature and quantity to that of the last 2021-2023 biennium. The WR Program will continue to assist the dam operators and regional Ecology FERC coordinators with the implementation of flow and habitat-related conditions.

Washington Department of Fish and Wildlife

Hydropower Responsibilities

Washington Department of Fish and Wildlife (WDFW) staff activities included:

- Assisting Ecology during the development, implementation, and adaptive management of §401 WQ certifications. The agency provided technical fish and aquatic habitat expertise, including instream flow modeling and evaluation.
- Providing technical assistance and collaborating with hydropower project owners, tribes, and stakeholders throughout the FERC licensing and implementation process. Technical assistance includes consultation in the development and implementation of settlement agreement articles; and management plans resulting from settlement agreements, FERC license articles, and §401 WQ certification requirements. These management plans include elements necessary to protect aquatic resources as well as terrestrial resources.
- Providing internal WDFW coordination among WDFW Programs (Fish, Wildlife, Habitat, and Enforcement) and Divisions (Science, Fish Passage, etc.) to ensure agency-wide consistency in consultation with Ecology, FERC, and hydropower project owners.
- Oversight and consultation on natural resource protection and enhancement measures that are required by the FERC-issued operating licenses.
- Participation in natural resource technical committees during licensing, and communication with FERC, Ecology, tribes, project owners, and stakeholders.
- Providing Ecology with quarterly summary reports of fee expenditures associated with each FERC-licensed hydropower project.
- Participation of WDFW managers and staff in the Water Power License Fee Structure Stakeholders Workgroup.

In general, WDFW's role is to monitor the implementation and adaptive management of the protection, mitigation, and enhancement measures for salmonids, bull trout, sturgeon, lamprey, and resident fish, and to consult with Ecology regarding these matters. WDFW staff participation is anticipated in any resource protection and enhancement measures that affect fish and wildlife, or their habitat, as well as measures that affect beneficial uses of water and fish and wildlife recreation.

The 2021-2023 biennium contract provided WDFW \$470,944. For the 2023-2025 biennium, Ecology and WDFW renewed Interagency Agreement (IAA Contract #C2400114) to continue work on FERC-licensed and proposed hydropower projects. The 2023-2025 IAA Contract provides \$459,000 to WDFW which is approximately 50% of the water power license fees collected in the previous biennium.

Detail of Fund Expenditures

Summary of 2021-2023 Biennium Expenditures

The water power license fee totals in Table 3 show the total expenditures to support the state hydropower program in the 2021-2023 biennium. For project specific information in the 2021-2023 biennium, see Appendix B. Total state agency expenditures to support the hydropower program in FY2022 amounted to \$897,850, and in FY2023 it amounted to \$784,154.

Table 3. FY 2022-23 FERC Project Expenditures by Agency, Program, and Fund Source.

Funding Source	Ecology Water Quality & Program A	Ecology Water Resources	WDFW Habitat Management	Totals
Fees Account	\$ 614,755	\$ 8,634	\$ 470,944	\$ 1,094,333
General Fund - State	-	-	\$ 517,829	\$ 517,829
Other State Funds	\$ 12,138	-	-	\$ 12,138
Federal	\$ 57,704	-	-	\$ 57,704
Total	\$ 684,597	\$ 8,634	\$ 988,773	\$ 1,682,004

The total biennial cost to the state agencies for FERC hydropower licensing and implementation was \$1,682,004, compared to \$915,964 in fee revenue. The FERC-licensed project fees funded 54% of the full workload associated with hydropower projects in the biennium.

Federal and state funds supported the remaining 46% of the work performed. The supplemental sources and funding totals for FY22 and FY23 are detailed in Table 3 of this report, above. We expect the need for supplementation from these sources again in the 2023-2025 biennium to cover the full workload.

Other funds that support the agency hydropower responsibilities

Table 3 includes *other funding sources* that supplement license fee revenue to fully support agency staff involved in hydropower licensing, management staff time for policy direction and interagency coordination, and costs for legal consultation from the State Attorney General’s (AG) Office. Supplementary state funds are drawn from General Fund-State and the Model Toxics Control (MTCA) Operating Account. Supplementary federal funds are drawn from the Secretary of Interior, Dingell-Johnson Act grant and the Environmental Protection Agency, Clean Water Act grant to support WDFW and Ecology hydropower programs, respectively.

In FY2022 and FY2023 supplementary state and federal funds provided approximately 46% of the funding for Ecology’s hydropower program and 54% of WDFW’s hydropower program. Without these supplementary funds, the state would not be able to fully support §401 WQ certification and license implementation activities effectively.

Fee expenditures on pre-licensing for proposed hydropower projects

Although the workload associated with relicensing of larger existing projects has decreased in recent biennia, new small-scale projects continue to apply to the FERC for pre-application approval. These include proposed hydropower projects in existing canals, small headwater streams, and open or closed-loop pumped storage systems. These proposals require state agencies to inform project proponents of requirements to meet state environmental regulations. This pre-licensing work is effectively paid for by supplemental funds, not fee revenue.

Since many of these are in the pre-application phase, they are not yet assessed fees pursuant to RCW 90.16.050 unless or until they receive a water right and a FERC license to operate.

Although RCW 90.16.050 does not prohibit the use of fee revenue to fund Ecology and WDFW work on these new project proposals, some stakeholders prefer that fee revenue not be used to support work on projects that do not yet pay fees. The state agencies continue to include the work on these projects within the hydropower program funded by fee revenue and supplementary funding sources.

However, considering these concerns, Ecology and WDFW hydropower programs can report that supplementary state and federal funds for the program continue to exceed the expenditures. This includes work associated with these new project proposals as described above (i.e., those projects in pre-licensing phase that do not yet have a water right, thus, are not assessing fees pursuant to RCW 90.16.050). Ecology and WDFW will continue to use supplemental funding from state and federal funding sources to support this pre-licensing workload.

Hydropower program workload in FY2022 and FY2023

The workload and FTE estimates for the state agencies may differ from one biennium to the next. In a biennium where more hydropower projects are being relicensed, the state workload for the existing projects will largely consist of §401 WQ certification and FERC license article oversight activities. After projects are relicensed, continued Ecology and WDFW participation is necessary to assist and oversee the implementation of conditions, settlement agreements, water quality compliance schedules, and other requirements of the certifications and license articles.

In accordance with RCW 90.16.050(1)(c)(i), Appendix B includes the staff time and program costs expended for each hydropower project under FERC regulatory authority. The table includes Ecology and WDFW staff time and program costs for each hydropower project in FY2022 (July 2021 through June 2022) and FY2023 (July 2022 through June 2023). Expenditures not directly attributable to work on a specific hydropower project are not included¹¹.

Table 4 below provides further detail of fulltime equivalent (FTE) workload for FY2022 and FY2023. The table includes level of work funded by water power license fees (FTEs funded by hydro fees) compared to staffing levels required for each agency's program (Total FTE for FERC projects).

¹¹ Non-project specific expenditures include staff training, leave time, and administrative duties not attributable to any one hydropower project. Table 3 includes total annual expenditures, including non-project specific expenditures.

Table 4. State Agency Fulltime Equivalent (FTE) Program Staffing in FY2022 and FY2023.

State Agency/Program	Project Involvement	FTEs funded by hydro fees	FTEs funded by other sources	Total FTE for FERC projects
Ecology - Water Quality and Water Resources programs, including administration	Technical assistance on instream flow issues for all projects statewide.	1.55	0.20	1.75
WDFW – Habitat, Fish, and Wildlife Programs	Technical assistance and policy on fish, wildlife, water quality, and water resource issues for all projects statewide.	1.29	1.42	2.71
Total State Agency FTEs				4.46

Expected workload and full-time employee needs in 2023-2025 biennium

Workload in the 2023-2025 biennium is expected to be similar to the 2021-2023 biennium for both Ecology and WDFW. During the last biennium, the nature of the work changed for some projects as many projects are required to enter into new attainment plans since their initial compliance schedules have expired.

Many projects were issued with adaptive management requirements in §401 WQ certification as described and in accordance with WAC 173-201A-510(5) Compliance schedules for dams. These compliance schedules were necessary to allow time for the hydropower projects to evaluate reasonable and feasible methods necessary to meet water quality standards. Several compliance schedules came to an end last biennium without yet attaining water quality standards. Ecology has been working with these projects on proposed alternatives using compliance tools such as site-specific criteria, use attainability analysis, or water quality offsets¹². The application of these tools require rulemaking under WAC 173-201A. The nature of this work for Ecology staff in general will include more rule procedure work than technical review and may require more resources from rulemaking staff and the attorney general's office. If hydropower utility owners choose to apply to Ecology for rulemaking, expenditures to support the hydropower program may increase in the 2023-2025 to support these efforts. This increase in expenditures is unknown since it is dependent upon the quantity, type, and complexity of the rulemaking requested, (e.g., use attainability analysis, site specific criteria, etc.)

The 2023-2025 biennium average annual staff time and program costs to support both state agencies' hydropower programs are expected to remain similar to those shown in FY2022 and FY2023 Table 5 above. This expectation is based on the upcoming relicensing efforts in Table 2, approximately 30 percent of the workload and program costs will be expended for new and existing projects entering the licensing process to develop new §401 WQ certification conditions. Approximately 70 percent of the workload and program costs will be expended to assist with and oversee hydropower projects current §401 WQ certification conditions and other FERC license environmental requirements. Like the 2021-2023 biennium, the staff time necessary for the state hydropower program in Ecology and WDFW collectively, is expected to average approximately 10 full time employees. This work is divided among a larger number of staff but corresponds to this quantity of full-time equivalent resources.

Table 5 below summarizes program costs and staff time in FY2022 and FY2023 associated with licensing activities and license implementation. Individual project costs and staff time can be found in Appendix B. Licensing, relicensing, and §401 WQ certification are terms used in this section that relate to the same work and are described in RCW 90.16.050(1)(c)(i).

¹² Site specific criteria, use attainability analyses, and water quality offsets are tools for application of water quality criteria

Table 5. Fiscal Year 2022 & Fiscal Year 2023 - Total Workload and Expenditures by Licensing Phase.

Total workload and other expenditures	Ecology Staff Hours	Ecology Program Cost	WDFW Staff Hours	WDFW Program Cost	Total costs and percentage by licensing phase
Total workload and expenditures for licensing (includes pre-licensing and relicensing of projects)	2,180	\$ 277,576	4,661	\$ 411,976	\$689,552 (41%)
Total workload and expenditures for license implementation	5,105	\$ 415,655	6,608	\$ 576,797	\$992,452 (59%)
Totals	7,285	\$ 693,231	11,269	\$ 988,773	\$ 1,682,004 (100%)

As a result, the terms, licensing, relicensing, and issuance of §401 WQ certification, all relate to the Ecology and WDFW work to research, establish, and ultimately issue state environmental conditions to allow finalization of a FERC license. Implementation is those activities that occur after the finalization of the FERC license.

Accountability

Annual Water Power License Fee Stakeholder Meeting

In accordance with RCW 90.16.050(3)(b) the Department of Fish and Wildlife (WDFW) and the Department of Ecology (Ecology) are directed to host an annual meeting to solicit information from interested parties. The purpose of the annual stakeholder meeting, at a minimum, is to discuss preparations for the Water Power License Fee report, including a review of annual work plans and the annual state agency performance survey.

Invitations to provide feedback through the annual survey and to attend the annual meetings are extended to:

- All water power license fee payers.
- Private residents that have shown interest in hydropower licensing in Washington.
- Non-governmental organizations (NGOs) involved in hydropower licensing.
- Legal offices that represent hydropower operators.

Attendance at the 2021 annual meeting included:

- Ecology and WDFW staff and managers
- Hydropower operator staff from:
 - Avista Corporation
 - Centralia City Light
 - Chelan County PUD
 - Cowlitz County PUD
 - Douglas County PUD
 - Grant County PUD
 - PacifiCorp
 - Puget Sound Energy
 - Seattle City Light
 - Snohomish County PUD Tacoma Power
 - Tollhouse Energy Company

Attendance at the 2022 annual meeting included:

- Ecology and WDFW staff and managers
- Hydropower operator staff from:
 - Avista Corporation
 - Centralia City Light
 - Chelan County PUD
 - Cowlitz County PUD
 - Douglas County PUD
 - Grant County PUD
 - PacifiCorp
 - Puget Sound Energy
 - Seattle City Light

- Snohomish County PUD
- Tacoma Power

Attendance at the 2023 annual meeting included:

- Ecology and WDFW staff and managers
- Hydropower operator staff from:
 - PacifiCorp
 - Centralia City Light
 - Chelan County PUD
 - Avista Corporation
 - Snohomish County PUD
 - Grant County PUD
 - Seattle City Light
 - Tacoma Power

Annual Work plans

In accordance with RCW 90.16.050(3)(a)(i), WDFW and Ecology are directed to develop work plans that include the work anticipated by each department associated with federal hydropower licensing and license implementation. Work plans also support requirements within RCW 90.16.050(1)(c)(i) to consult with water power license fee payers.

WDFW and Ecology worked with each hydropower project owner to develop and review the 2021 and 2022 annual work plans for FERC-licensed projects. The final work plans were assembled into a document and can be reviewed at [Ecology's Water Power License Fees website](#)¹³. The collaborative development of these work plans between Ecology and WDFW and each hydropower facility ensures that the state avoids duplicative work other state or federal agencies or tribes are already performing.

Ecology and WDFW Staff Assignments

In accordance with RCW 90.16.050(3)(a)(ii), WDFW and Ecology are directed to assign one employee to each licensed hydropower project to act as each department's designated licensing and implementation lead for a hydropower project. These hydropower project leads are identified for each project in Appendix C of this report.

Annual State Agency Performance Survey

In accordance with RCW 90.16.050(3)(c) the Department of Fish and Wildlife (WDFW) and the Department of Ecology (Ecology) consult with water power license fee payers and other interested parties. This includes annual meetings and annual state agency performance surveys. The purpose of these engagement efforts is to solicit feedback on the responsiveness of department staff, clarity of staff roles and responsibilities in the hydropower licensing and implementation process, and other topics related to the professionalism and expertise of department staff assigned to hydropower project. The statute further stipulates the survey must be designed by WDFW and Ecology after consulting with hydropower licensees and the results of the survey must be included in the biennial progress report.

¹³ https://www.ezview.wa.gov/site/alias_1962/committees_ferc/37134/ferc.aspx

The annual survey meets the Ecology and WDFW reporting requirements under RCW 90.16.050(1)(c)(i) and RCW 90.16.050(3). Complete survey results for 2021 and 2022 can be found at [Ecology's Water Power License Fees website](#)¹⁴.

About the Survey

The survey consists of 39 questions relevant to hydropower project staff and other industry stakeholders. The survey begins with three optional questions about the participant (Questions 1 through 3), followed by 33 multiple choice questions; four questions required responses and 29 questions were optional.

The multiple-choice response options were, *strongly agree, agree, undecided/neutral, disagree, strongly disagree*, and *N/A*. The questions were divided into four major topic areas. The first question of each topic was required and the remaining questions in each topic were optional. To ensure respondents had the opportunity to share any specific ideas, each topic section included a final free form text option. These four major topics were:

- **Responsiveness** – overall performance of staff response time (Questions 4 through 12). This topic section included nine questions, one required question followed by seven optional questions, and one free form text question.
- **Clarity of staff roles and responsibilities** – overall effectiveness of communication between the state agencies and hydropower project operators (Questions 13 through 19). This topic section included seven questions, one required question followed by five optional questions, and one free form text question.
- **Professionalism** – overall professionalism of state agency staff when communicating and working with hydropower operators (Questions 20 through 27). This topic section included seven questions, one required question followed by five optional questions, and one free form text question.
- **Expertise** – overall knowledge and familiarity of state agency staff of the hydropower projects they manage. (Questions 28 through 37). This topic section included nine questions, one required question followed by seven optional questions, and one free form text question.

Lastly, the survey included three final questions that asked for any additional feedback, comments, or questions from the participant (Questions 37 through 39).

The statute directs that the biennial progress report includes results from the performance survey. We are providing an overview of the survey on Ecology's website, link provided above, which offers result summaries for each question, showing the range of answer choices, and specific narrative survey responses (Questions 12, 19, 27, 37, 38) regarding Ecology and WDFW responsiveness, clarity of staff roles and responsibilities, professionalism, expertise, and other comments. Question 1 of the survey requested email addresses for the respondents; this information does not affect the outcome of the survey, or the feedback provided by Ecology and WDFW. Therefore, Question 1 is not included in this report.

¹⁴ https://www.ezview.wa.gov/site/alias___1962/committees_ferc/37134/ferc.aspx

2021, 2022, and 2023 Survey participation

About the respondents

The survey was distributed to approximately 40-60 participants over the last three years and was completed by 10 participants in 2021, 5 participants in 2022, and 8 participants in 2023. Ecology and WDFW continue to solicit survey participation from all licensee staff with which we interact. Licensees most often choose to reply with one unified response; therefore, we receive fewer responses than we solicit. We also engage smaller licensed utilities to encourage survey feedback but have a lower survey response rate, which could be due to the fewer interactions on less complex projects, or fewer fees they pay relative to larger utilities. To ensure that Ecology and WDFW received authentic and meaningful feedback, the survey allowed for anonymous participation. One participant remained anonymous while the following eight participants provided optional identifying information:

- PacifiCorp
- Avista Corporation
- City of Centralia (Yelm Hydro Project)
- Grant County PUD
- City of Tacoma
- Cowlitz PUD
- City of Seattle
- Snohomish County PUD

Summary of 2021, 2022, and 2023 Survey Results

In general, respondents declared they were satisfied with Ecology and WDFW staff in the 2021, 2022, and 2023 survey results. Below is a summary of the combination of these survey results. Although this is a small response size, respondents were the most active participants and those whose hydropower projects we work with most often.

Topic 1: Responsiveness

In general, we received favorable responses (*Agree to Strongly Agree*) for most multiple-choice questions related to the responsiveness of Ecology and WDFW staff. Areas included satisfaction with agency staff working on hydropower projects, including:

- Timely and sufficient assistance on questions, technical requests, and decisions.
- Timeliness of reviews.
- Collaboration effectiveness to help develop and/or implement project 401 certifications.

State agency response to feedback

Responses to the multiple-choice questions for the surveys indicate this expectation was met and narrative responses on this state agency response to feedback were positive. Ecology and WDFW are committed to focusing on timely responses that include the appropriate legal, technical, and policy staff in each meeting and decision. Each project is assigned one staff person from each state agency and can ask to include a manager to review any decision that affects the hydropower project.

Each hydropower project is also assigned an assistant attorney general (AAG) from the state AGO that staff frequently consult for guidance on issues. AAGs participate in meetings where appropriate or

when their participation is requested by a hydropower utility. Ecology also includes staff engineers when water quality or water resource modeling is under review. Policy issues that need to be reviewed by state agency managers for consistent application of regulation are coordinated by regional and headquarter staff.

Topic 2: Clarity of staff roles and responsibilities

Responses on clarity of staff roles and responsibilities for Ecology and WDFW agency staff received for this topic were predominantly favorable (*Agree to Strongly Agree*) and suggest water power license fee payers know who to contact if they have regulatory questions about their hydropower project. Areas included satisfaction with agency staff working on hydropower projects, including:

- Knowing which agency to contact.
- Agency staff are engaged in the projects and effectively share workload.
- Agency staff collaborate to solve problems with each other and with the projects.

State agency response to feedback

Ecology and WDFW have committed to ensure greater consistency with decision-making by continuing to develop agency-to-agency relationships and through better coordination with the development of an Inter-Agency Agreement.

We continue to develop and participate in agency workgroup meetings. These meetings are used to discuss current issues, share decisions among regional staff, and continue to develop our knowledge and understanding of complex hydropower projects.

Topic 3: Professionalism

Responses received for this topic were favorable (*Agree to Strongly Agree*) and suggest water power license fee payers have a positive experience working with state agencies. Areas included satisfaction with agency staff working on hydropower projects, including:

- Agency staff used professional judgement versus personal opinion.
- Agency staff followed through with commitments.
- Agency staff communicated clearly and professionally and were prepared for meetings.

State agency response to feedback

Agency staff will continue to work on policy issues with Ecology and WDFW managers for consistent application of regulation and coordinate with regional and headquarters staff. Agency staff continuing to participate in trainings and agency workgroup meetings allows for continued development of growth by increased knowledge and understanding of specific hydropower projects and related complex issues.

Topic 4: Expertise

Responses received for this topic were mostly positive (*Agree to Strongly Agree*) and suggest that most water power license fee payers are satisfied with the level of competency of Ecology and WDFW agency staff. Areas included satisfaction with agency staff working on hydropower projects, including:

- Agency staff demonstrate knowledge and experience in their area of expertise.
- Agency staff are familiar and knowledgeable with project's 401 WQ Certifications.
- Agency staff communicated clearly state requirements and provided technical support.

State agency response to feedback

Properly training and retaining staff is important to the state hydropower regulatory programs. Each agency continues to improve on communication among regional staff for consistency. We have increased the frequency of regular internal meetings, and agency headquarters staff oversee technical and policy decisions to improve consistency across all hydropower projects in the state.

Recognition of Hydropower Operators

RCW 90.16.050(1)(C)(i)(c) encourages recognition of hydropower operators that exceed their environmental regulatory requirements.

The Low Impact Hydropower Institute (LIHI, or the Institute) certification is one way hydropower projects are recognized for their operations that enhance environmental and recreational benefits. Ecology responds to inquiries from the Institute and certification applicants to provide regulatory oversight information necessary for it to certify these hydropower projects.

The Institute is a non-profit 501(c)(3) organization dedicated to reducing the impacts of hydropower generation through the certification of hydropower projects that have avoided or reduced their environmental impacts pursuant to its criteria.

Ecology recognizes hydropower utilities that rise above, or exceed, their environmental regulatory requirements. To be certified by the Institute, a hydropower facility must meet criteria in the following eight areas:

- River flows
- Water Quality
- Fish passage and protection
- Watershed protection
- Threatened and endangered species protection
- Cultural resource protection
- Recreation
- Facilities recommended for removal

The criteria standards are typically based on the most recent, and most stringent, mitigation measures recommended for the dam by expert state and federal resource agencies, even if those measures are not a requirement for operating. A hydropower facility meeting all eight certification criteria will be certified by the Institute. Once certified, the owner or operator can market the power from the facility to consumers as produced by a certified facility.

Hydropower projects in Washington that received Institute certification can be found on the [LIHI certification website](https://lowimpacthydro.org/)¹⁵. The following are the four certifications active in Washington State.

Dalles Dam North Fishway Hydroelectric Project

On April 21, 2011, the Dalles Dam North Fishway Hydroelectric Project, (FERC #P-7076), operated by Northern Wasco County Public Utility District (PUD), earned a 5-year LIHI certification (#71) effective July 17, 2010, and expired on July 17, 2015.

In December 2020, LIHI received a complete application and recertified the project until July 16, 2025.

¹⁵ <https://lowimpacthydro.org/>

The Project is adjacent to the US Army Corps of Engineers Dalles Dam, located on the north shore of the Dalles Dam in Washington State. The project diverts auxiliary flows designated for augmenting fish ladder flows. The turbine is powered by an 800 cfs screened intake structure that separates the fish from most of the flow. The fish-free water powers the turbine and then supplements the flow in the north shore fishway entrance. The project is recognized for maintaining adequate fish flows for adult migration, while generating electricity and improving the ladders system to ensure that juvenile fish are excluded from the auxiliary flows.

Seattle City Light – Skagit River Project

On August 28, 2008, the Skagit River Project (FERC #P-553), owned and operated by Seattle City Light, was issued an 8-year LIHI certification (#5). Later, on May 15, 2016, the project receiving a new certification term extending 10 years, until May 14, 2026., which was later extended through May 15, 2031. The Skagit River Hydroelectric Project is located in the upper Skagit River basin, which drains into the northeastern part of Puget Sound. Headwaters of the Skagit River originate in Canada, and the project occupies a scenic area in the Mount Baker-Snoqualmie National Forest and Ross Lake National Recreation Area, adjacent to North Cascades National Park. The project includes three dams: Ross, Diablo, and Gorge. The project is recognized for maintaining instream flows beneficial to salmon and steelhead reproduction and rearing. In addition, the project provides flood control storage and a variety of high-quality recreational opportunities, including hiking, sport fishing, boating, and guided tours.

City of Tacoma – Nisqually Project

The Nisqually Hydroelectric Project (FERC #P-1862), operated by the city of Tacoma, first earned a LIHI certification (#8) in 2003. The project was re-certified in 2008, 2013, and most recently on August 8, 2019. On January 1, 2022, the term of this certification was extended through April 14, 2028. The project is located on the Nisqually River in western Washington, south of the city of Tacoma. The Nisqually River originates from the Nisqually Glacier on Mount Rainier and flows about 80 miles west to Puget Sound. The project was recognized for operating conditions that provide increased minimum flows in the bypassed reach and modified flows overall to provide for minimum flows in the river below the LaGrande powerhouse. In addition, the project maintained 177 acres of lands dedicated to developed recreation, including three recreation facilities on the northern shores of Alder Lake: Alder Lake Park, Sunny Beach Point Day-use Area, and Rocky Point Day-use Area.

Chelan County Public Utility District (PUD)

The Lake Chelan Hydropower Project (FERC #P-637), operated by Chelan PUD, earned a LIHI certification (#30) on January 24, 2008. The project was re-certified on September 26, 2012, and September 26, 2017. On January 15, 2019, LIHI recertified this project effective through September 25, 2027. The project is located on the Chelan River, near the city of Chelan, Washington.

The project occupies 465.5 acres of federal lands administered by the U.S. Forest Service and U.S. Department of the Interior, National Park Service. Chelan PUD was recognized for

maintaining flow for habitat and recreation in the 4.5-mile-long reach of the Chelan River that is bypassed by the project. In addition, the dam maintained a regime of lake elevation levels to meet a complex synthesis of recreational needs, bypass flows, and electrical generation.

Conclusion

This report on water power license fee revenue and expenditures presents information to meet the requirements of RCW 90.16.050 to provide accountability measures for the agencies responsible for administering the program.

All water power license fees are being spent on hydropower licensing projects. Revenue from water use fees totaled \$915,965, while Ecology and WDFW spent \$1,682,004 on associated FERC projects. All revenue from water use fees supported FERC project relicensing and implementation as intended by the law. In addition, other fund sources supported state agency work on new projects that do not yet pay water use fees. The water use fees were extended through 2029 during the 2022 legislative session.

To address stakeholder recommendations and performance survey feedback, Ecology and WDFW are taking the following actions:

- Continue to reach out to all hydropower project owners and operators, and all identified interested parties to gain greater participation in annual surveys and meetings. This will allow the state programs to maintain the level of service expected from these the project owners and operators.
- Increase communication between Ecology and WDFW. The goal of greater communication is to ensure defensible and consistent decisions concerning technical and policy decisions in a timely manner.
- Increase training opportunities for Ecology and WDFW staff to increase their knowledge of hydropower facility and industry to best provide regulatory support.
- Agency headquarter staff will continue to oversee technical and policy decisions to improve consistency across all hydropower projects in the state.

Ecology and WDFW continue an ongoing partnership with the hydropower facilities that supply Washington with water storage and clean energy. Funding from water power license fees play a critical role in the habitat and water quality protection work of the agencies, supporting over half of this critical work. With new funding provided by the Legislature in the 2022 session, Ecology and WDFW have adequate funding to continue this work at the needed level.

Appendices

Appendix A. Fees Revenue for FY2022 and FY2023

Licensee	Project Name	FERC No.	2022 Base Fee	2022 FERC Fee	2023 Base Fee	2023 FERC Fee	TOTAL
Avista Corporation	Little Falls	non-FERC	\$1,489.91	\$0.00	\$1,489.91	\$0.00	\$2,979.82
Avista Corporation	Long Lake (Spokane)	P-2545	\$2,527.57	\$4,493.45	\$2,527.57	\$4,493.45	\$14,042.04
Avista Corporation	Monroe Street (Spokane)	P-2545	\$751.09	\$1,335.27	\$751.09	\$1,335.27	\$4,172.72
Avista Corporation	Nine Mile (Spokane)	P-2545	\$1,446.89	\$2,572.25	\$1,446.89	\$2,572.25	\$8,038.28
Avista Corporation	Upper Falls (Spokane)	P-2545	\$647.35	\$1,150.84	\$647.34	\$1,150.84	\$3,596.37
Bellingham, City of	Mirror Lake	P-7747	\$363.27	\$0.00	\$363.27	\$0.00	\$726.54
Black Creek Hydro Inc.	Black Creek	P-6221	\$357.05	\$634.76	\$357.05	\$634.76	\$1,983.62
Brian Gogarty	Deep Creek	P-5991	\$69.55	\$0.00	\$0.00	\$0.00	\$69.55
Cascade Water Alliance	White River	P-12685	\$1,166.93	\$2,074.55	\$1,166.93	\$2,074.55	\$6,482.96
Cascadian Home Farm/Rodale Institute	Cascadian Farm Hydro	non-FERC	\$10.19	\$0.00	\$10.19	\$0.00	\$20.38
Centralia, City of	Yelm Hydro Plan	P-10703	\$664.36	\$1,181.09	\$664.36	\$1,181.09	\$3,690.90
Columbia Basin Hydropower	East Canal Headworks	P-2840	\$236.87	\$421.09	\$0.00	\$0.00	\$657.96
Columbia Basin Hydropower	Eltopia Branch Canal 4.6	P-3842	\$131.23	\$233.30	\$131.23	\$233.30	\$729.06

Licensee	Project Name	FERC No.	2022 Base Fee	2022 FERC Fee	2023 Base Fee	2023 FERC Fee	TOTAL
Columbia Basin Hydropower	Main Canal Headworks	P-2849	\$522.45	\$928.80	\$522.45	\$928.80	\$2,902.50
Columbia Basin Hydropower	P.E.C. 66.0	P-3843	\$125.18	\$222.55	\$125.18	\$222.55	\$695.46
Columbia Basin Hydropower	Quincy Chute	P-2937	\$294.75	\$524.00	\$0.00	\$0.00	\$818.75
Columbia Basin Hydropower	Russel D. Smith	P-2926	\$252.41	\$448.73	\$252.41	\$448.73	\$1,402.28
Columbia Basin Hydropower	Summer Falls	P-3295	\$1,512.00	\$2,688.00	\$1,512.00	\$2,688.00	\$8,400.00
Electron Hydro LLC	Electron	non-FERC	\$1,030.91	\$0.00	\$1,030.91	\$0.00	\$2,061.82
Energy Northwest (WPPSS)	Packwood Lake	P-2244	\$1,281.27	\$2,277.82	\$1,281.27	\$2,277.82	\$7,118.18
Halbrook Painting Co.	Falls Creek, Lake Sutherland	non-FERC	\$63.00	\$0.00	\$63.00	\$0.00	\$126.00
Holden Village, Inc.	Holden Village	non-FERC	\$157.09	\$0.00	\$157.09	\$0.00	\$314.18
Holden Village, Inc.	Railroad Creek No.1	non-FERC	\$10.74	\$0.00	\$10.74	\$0.00	\$21.48
Hydro Technology Systems Inc.	Meyers Falls	P-2544	\$235.02	\$417.82	\$235.02	\$417.82	\$1,305.68
Kelly Peterson Sweet	Company Creek	non-FERC	\$40.89	\$0.00	\$40.89	\$0.00	\$81.78
Koma Kulshan Associates LP	Koma Kulshan	P-3239	\$885.60	\$1,574.40	\$0.00	\$0.00	\$2,460.00
Lilliwaup Falls Generating Co.	Lilliwaup Creek	P-3482	\$114.95	\$0.00	\$114.95	\$0.00	\$229.90
McMaster Corp	Bear Creek	non-FERC	\$191.93	\$0.00	\$191.93	\$0.00	\$383.86
Millstream Farms	Touchet River	non-FERC	\$12.96	\$0.00	\$12.96	\$0.00	\$25.92

Licensee	Project Name	FERC No.	2022 Base Fee	2022 FERC Fee	2023 Base Fee	2023 FERC Fee	TOTAL
Northern Wasco County Public Utility District	The Dalles Dam	P-7076	\$409.09	\$727.27	\$409.09	\$727.27	\$2,272.72
Northern Wasco County Public Utility District	Northshore Fishway at McNary Dam	P-10204	\$558.10	\$992.18	\$558.10	\$992.18	\$3,100.56
PacifiCorp	Swift #1 & Swift #2	P-2111 & P-2213	\$10,245.27	\$18,213.82	\$10,245.27	\$18,213.82	\$56,918.18
PacifiCorp	Merwin	P-935	\$4,637.86	\$8,245.09	\$4,637.86	\$8,245.09	\$25,765.90
PacifiCorp	Yale	P-2071	\$5,061.27	\$8,997.82	\$5,061.27	\$8,997.82	\$28,118.18
Patriot Hydro LLC	S.F. Snoqualmie River (Twin Falls)	P-4885	\$977.52	\$1,737.82	\$977.52	\$1,737.82	\$5,430.68
Pickering, Frederick	Bigg's Creek	P-9044	\$9.57	\$17.02	\$9.57	\$17.02	\$53.18
Port Angeles, City of	Morse Creek	P6461	\$180.08	\$320.15	\$0.00	\$0.00	\$500.23
Public Utility District No.1 of Chelan County	Chelan Falls	P-637	\$3,080.03	\$5,475.60	\$3,080.03	\$5,475.60	\$17,111.26
Public Utility District No.1 of Chelan County	Dryden	non-FERC	\$218.25	\$0.00	\$218.25	\$0.00	\$436.50
Public Utility District No.1 of Chelan County	Little Leavenworth	non-FERC	\$17.18	\$0.00	\$17.18	\$0.00	\$34.36
Public Utility District No.1 of Chelan County	Rock Island	P-943	\$18,903.07	\$33,605.45	\$18,903.07	\$33,605.45	\$105,017.04
Public Utility District No.1 of Chelan County	Rocky Reach	P-2145	\$38,467.64	\$68,386.91	\$38,467.64	\$68,386.91	\$213,709.10
Public Utility District No.1 of Chelan County	Stehekin	non-FERC	\$86.58	\$0.00	\$86.58	\$0.00	\$173.16
Public Utility District No.1 of Chelan County	Tumwater	non-FERC	\$451.02	\$0.00	\$451.02	\$0.00	\$902.04

Licensee	Project Name	FERC No.	2022 Base Fee	2022 FERC Fee	2023 Base Fee	2023 FERC Fee	TOTAL
Public Utility District No.1 of Douglas County	Wells Dam	P-2149	\$27,774.00	\$49,376.00	\$27,774.00	\$49,376.00	\$154,300.00
Public Utility District No.1 of Lewis County	Cowlitz Falls	P-2833	\$2,113.77	\$3,757.82	\$2,113.77	\$3,757.82	\$11,743.18
Public Utility District No.1 of Lewis County	Mill Creek	P-4949	\$172.80	\$0.00	\$172.80	\$0.00	\$345.60
Public Utility District No.1 of Okanogan Co.	Similkameen Dam - Enloe	P-12569	\$233.59	\$415.27	\$233.59	\$415.27	\$1,297.72
Public Utility District No.1 of Pend Oreille Co.	Box Canyon	P-2042	\$2,876.79	\$5,114.29	\$2,876.79	\$5,114.29	\$15,982.16
Public Utility District No.1 of Pend Oreille Co.	Calispell Creek	non-FERC	\$126.41	\$0.00	\$126.41	\$0.00	\$252.82
Public Utility District No.1 of Snohomish County	Henry M. Jackson Project	P-2157	\$3,428.82	\$6,095.67	\$3,428.82	\$6,095.67	\$19,048.98
Public Utility District No.1 of Snohomish County	Calligan Creek	P-13948	\$491.40	\$873.60	\$491.40	\$873.60	\$2,730.00
Public Utility District No.1 of Snohomish County	Hancock	P-13994	\$474.70	\$843.91	\$474.70	\$843.91	\$2,637.22
Public Utility District No.1 of Snohomish County	Youngs Creek	P-10359	\$562.09	\$999.27	\$562.09	\$999.27	\$3,122.72
Public Utility District No.1 of Snohomish County	Woods Creek	P-3603	\$187.12	\$0.00	\$187.12	\$0.00	\$374.24
Public Utility District No.2 of Grant County	Priest Rapids	P-2114	\$31,036.50	\$55,176.00	\$31,036.50	\$55,176.00	\$172,425.00
Public Utility District No.2 of Grant County	Wanapum	P-2114	\$31,144.91	\$55,368.73	\$31,144.91	\$55,368.73	\$173,027.28
Public Utility District No.2 of Grant County	East Canal Headworks	P-2840	\$0	\$0	\$236.87	\$421.09	\$657.96

Licensee	Project Name	FERC No.	2022 Base Fee	2022 FERC Fee	2023 Base Fee	2023 FERC Fee	TOTAL
Public Utility District No.2 of Grant County	Quincy Chute	P-2937	\$0	\$0	\$294.75	\$524.00	\$818.75
Puget Sound Energy	Lower Baker	P-2150	\$3,118.38	\$5,543.78	\$3,118.38	\$5,543.78	\$17,324.32
Puget Sound Energy	Snoqualmie Falls	P-2493	\$1,689.34	\$3,003.27	\$1,689.34	\$3,003.27	\$9,385.22
Puget Sound Energy	Upper Baker	P-2150	\$2,984.73	\$5,306.18	\$0.00	\$0.00	\$8,290.91
Rocky Brook Hydro	Rocky Brook Hydro LLC	P-3873	\$307.52	\$0.00	\$307.52	\$0.00	\$615.04
Rosario Signal LLC	Cascade Creek	non-FERC	\$16.30	\$0.00	\$16.30	\$0.00	\$32.60
Seattle, City of	Boundary	P-2144	\$0.00	\$0.00	\$31,341.48	\$55,718.18	\$87,059.66
Seattle, City of	Cedar Falls	non-FERC	\$0.00	\$0.00	\$1,183.09	\$0.00	\$1,183.09
Seattle, City of	Diablo Dam (Skagit)	P-553	\$0.00	\$0.00	\$5,184.00	\$9,216.00	\$14,400.00
Seattle, City of	Gorge Dam (Skagit)	P-553	\$0.00	\$0.00	\$6,199.57	\$11,021.45	\$17,221.02
Seattle, City of	Newhalem	P-2705	\$0.00	\$0.00	\$366.19	\$651.00	\$1,017.19
Seattle, City of	Ross Dam (Skagit)	P-553	\$0.00	\$0.00	\$9,230.32	\$16,409.45	\$25,639.77
Seattle, City of	South Fork Tolt	P-2959	\$0.00	\$0.00	\$818.12	\$1,454.44	\$2,272.56
Seefeld Corporation	Smith Creek	P-5982/FERC Exempt	\$34.36	\$0.00	\$34.36	\$0.00	\$68.72
Sheep Creek Hydro Inc.	Big Sheep Creek	P-5118/FERC Exempt	\$225.82	\$0.00	\$225.82	\$0.00	\$451.64
Sollos Energy LLC	Burton Creek	P-7577	\$96.55	\$0.00	\$96.55	\$0.00	\$193.10

Licensee	Project Name	FERC No.	2022 Base Fee	2022 FERC Fee	2023 Base Fee	2023 FERC Fee	TOTAL
South Fork Associates, Limited Partnership	Weeks Falls	P-7563	\$404.80	\$719.63	\$0.00	\$0.00	\$1,124.43
Southern California Public Power Company	Tieton Hydroelectric Project	P-3701	\$768.21	\$1,365.71	\$768.21	\$1,365.71	\$4,267.84
Spokane, City of	Upriver Hydro Plant	P-3074	\$886.91	\$1,576.73	\$886.91	\$1,576.73	\$4,927.28
Tacoma, City of	Alder (Nisqually)	P-1862	\$1,841.73	\$3,274.18	\$1,841.73	\$3,274.18	\$10,231.82
Tacoma, City of	Cushman No.1	P-460	\$1,755.82	\$3,121.45	\$1,755.82	\$3,121.55	\$9,754.64
Tacoma, City of	Cushman No.2	P-460	\$3,269.45	\$5,812.36	\$3,269.45	\$5,812.36	\$18,163.62
Tacoma, City of	LaGrande Dam (Nisqually)	P-1862	\$128.93	\$229.20	\$128.93	\$229.20	\$716.26
Tacoma, City of	LaGrande Powerhouse (Nisqually)	P-1862	\$2,684.56	\$4,772.55	\$2,684.56	\$4,772.55	\$14,914.22
Tacoma, City of	Mayfield (Cowlitz)	P-2016	\$5,759.18	\$10,238.55	\$5,759.18	\$10,238.55	\$31,995.46
Tacoma, City of	Mossyrock (Cowlitz)	P-2016	\$10,810.59	\$19,218.82	\$10,810.59	\$19,218.82	\$60,058.82
Tacoma, City of	McMillen Reservoir (Hood St.)	P-10256	\$188.14	\$0.00	\$188.14	\$0.00	\$376.28
Tacoma, City of	North Fork Powerhouse	P-460	\$355.56	\$632.10	\$355.56	\$632.10	\$1,975.32
Tacoma, City of	Wynoochee River	P-6842	\$727.77	\$1,293.82	\$727.77	\$1,293.82	\$4,043.18

Licensee	Project Name	FERC No.	2022 Base Fee	2022 FERC Fee	2023 Base Fee	2023 FERC Fee	TOTAL
Transalta Centralia Generating LLC	Skookum-chuck River	P-4441	\$202.72	\$0.00	\$202.72	\$0.00	\$405.44
Trinity Conservancy, Inc.	James Creek	non-FERC	\$12.27	\$0.00	\$12.27	\$0.00	\$24.54
Trinity Conservancy, Inc.	Phelps Creek	P-719	\$63.92	\$113.64	\$63.92	\$113.64	\$355.12
Walla Walla, City of	Twin Reservoirs	P-10376	\$276.87	\$0.00	\$276.87	\$0.00	\$553.74
Western Hydro LLC (paid by Confluence Law PLLC)	Nooksack Falls	non-FERC	\$449.93	\$0.00	\$449.93	\$0.00	\$899.86
Yakima-Tieton Irrigation District	Cowiche	P-7337	\$123.30	\$219.20	\$123.30	\$219.20	\$685.00
Yakima-Tieton Irrigation District	Orchard Unit 1	P-7338	\$97.61	\$173.52	\$97.61	\$173.52	\$542.26
Yakima-Tieton Irrigation District	Orchard Unit 2	P-7338	\$98.00	\$174.22	\$98.00	\$174.22	\$544.44

The total revenue collected for base fees in the 2021-2023 biennium was \$529,594 (\$239,898 in FY 2022 and \$289,696 in FY 2023). The total revenue collected for the water power license fees in the 2021-2023 biennium was \$915,965 (\$414,707 in FY 2022 and \$501,257 in FY 2023).

Appendix B. State agency workload by project – Fiscal Year 2022 and 2023

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	Ecology Staff time (hrs)	Ecology Program Costs	WDFW Staff time (hrs)	WDFW Program Costs	State Program Total Costs
AVISTA CORPORATION	P-2545	SPOKANE RIVER (4 projects) Long Lake Monroe Street Nine Mile Upper Falls	Implementation	864	\$64,619	239	\$21,283	\$85,902
COLUMBIA BASIN HYDROPOWER	P-14329	BANKS LAKE PUMPED STORAGE	Pre-licensing	0	\$0	0	\$0	\$0
BLACK CREEK HYDRO INC.	P-6221	BLACK CREEK	Implementation	0	\$0	0	\$0	\$0
CENTRALIA CITY OF	P-10703	YELM HYDRO PLANT	Implementation	18	\$1,305	0	\$0	\$1,305
COLUMBIA BASIN HYDROPOWER	P-3842	ELTOPIA BRANCH CANAL	Implementation	0	\$0	0	\$0	\$0
COLUMBIA BASIN HYDROPOWER	P-2849	MAIN CANAL HEADWORKS	Implementation	0	\$0	0	\$0	\$0
COLUMBIA BASIN HYDROPOWER	P-3843	POTHOLES EAST CANAL	Implementation	0	\$0	0	\$0	\$0

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	Ecology Staff time (hrs)	Ecology Program Costs	WDFW Staff time (hrs)	WDFW Program Costs	State Program Total Costs
COLUMBIA BASIN HYDROPOWER	P-2926	RUSSEL D SMITH PEC 22.7	Implementation	0	\$0	0	\$0	\$0
COLUMBIA BASIN HYDROPOWER	P-3295	SUMMER FALLS	Implementation	0	\$0	0	\$0	\$0
ENERGY NORTHWEST	P-2244	PACKWOOD LAKE	Implementation	118	\$13,040	247	\$21,393	\$34,433
FFP PROJECT 101, LLC	P-14861	GOLDENDALE PUMPED STORAGE PROJECT	Application	550	\$54,938	614	\$52,960	\$107,898
HYDRO TECHNOLOGY SYSTEM, INC.	P-2544	MEYERS FALLS	Implementation	461	\$33,426	103	\$8,963	\$42,389
KOMA KULSHAN ASSOCIATES	P-3239	KOMA KULSHAN	Implementation	0	\$0	0	\$0	\$0
MCNARY HYDRO	P-10204	MCNARY DAM FISH ATTRACTION	Implementation	0	\$0	0	\$0	\$0
PACIFICORP	P-935	MERWIN	Implementation	241	\$24,534	331	\$29,216	\$53,750
PACIFICORP	P-2111	SWIFT NO. 1	Implementation	43	\$3,465	338	\$29,874	\$33,339

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	Ecology Staff time (hrs)	Ecology Program Costs	WDFW Staff time (hrs)	WDFW Program Costs	State Program Total Costs
PACIFICORP	P-2071	YALE	Implementation	51	\$4,768	347	\$30,642	\$35,410
PACIFICORP	P-2213	SWIFT NO. 2 (owned by Cowlitz PUD)	Implementation	0	\$0	238	\$20,833	\$20,833
PICKERING, FRED	P-9044	BIGG'S CREEK	Implementation	0	\$0	0	\$0	\$0
PORT ANGELES, CITY OF	P-6461	MORSE CREEK	Implementation	0	\$0	0	\$0	\$0
PUD NO 1 OF CHELAN COUNTY	P-637	LAKE CHELAN	Implementation	172	\$19,973	308	\$25,890	\$45,863
PUD NO 1 OF CHELAN COUNTY	P-943	ROCK ISLAND	License reissuance	365	\$40,674	1,477	\$134,502	\$175,176
PUD NO 1 OF CHELAN COUNTY	P-2145	ROCKY REACH	Implementation	86	\$7,628	574	\$50,252	\$57,880
PUD NO 1 OF DOUGLAS COUNTY	P-2149	WELLS	Implementation	117	\$12,875	626	\$54,731	\$67,606
PUD NO 1 OF LEWIS COUNTY	P-2833	COWLITZ FALLS	Implementation	437	\$39,753	276	\$23,751	\$63,504

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	Ecology Staff time (hrs)	Ecology Program Costs	WDFW Staff time (hrs)	WDFW Program Costs	State Program Total Costs
PUD NO 1 OF OKANOGAN COUNTY	P-12569	ENLOE PROJECT	FERC License Cancelled	0	\$0	1	\$106	\$106
PUD NO 1 OF PEND OREILLE COUNTY	P-2042	BOX CANYON	Implementation	141	\$10,224	183	\$16,297	\$26,521
PUD NO 1 OF PEND OREILLE COUNTY	P-2225	SULLIVAN LAKE	License surrender	2	\$145	0	\$0	\$145
PUD NO 1 OF SNOHOMISH COUNTY	P-13948	CALLIGAN CREEK	Implementation	0	\$0	0	\$0	\$0
PUD NO 1 OF SNOHOMISH COUNTY	P-13994	HANCOCK CREEK	Implementation	0	\$0	0	\$0	\$0
PUD NO 1 OF SNOHOMISH COUNTY	P-2157	HENRY M JACKSON	Implementation	27	\$2,666	114	\$9,847	\$12,513
PUD NO 1 OF SNOHOMISH COUNTY	P-14295	SUNSET FALLS	License not issued	0	0	0	\$0	\$0

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	Ecology Staff time (hrs)	Ecology Program Costs	WDFW Staff time (hrs)	WDFW Program Costs	State Program Total Costs
PUD NO 1 OF SNOHOMISH COUNTY	P-10359	YOUNGS CREEK	Implementation	0	0	0	\$0	\$0
PUD NO 2 OF GRANT COUNTY	P-2114	COLUMBIA RIVER (2 projects) Priest Rapids Wanapum	Implementation	134	\$13,488	604	\$52,846	\$66,334
PUD NO 2 OF GRANT COUNTY	P-2840	POTHOLES EAST CANAL HEADWORKS	Implementation	0	\$0	0	\$0	\$0
PUD NO 2 OF GRANT COUNTY	P-2937	QUINCY CHUTE	Implementation	0	\$0	0	\$0	\$0
PUD OF NORTHERN WASCO COUNTY	P-7076	DALLES DAM NORTH FISHWAY	Implementation	0	\$0	0	\$0	\$0
PUGET SOUND ENERGY, INC.	P-2150	BAKER RIVER (2 projects) Upper Baker, Lower Baker	Implementation	108	\$12,570	135	\$11,500	\$24,070
PUGET SOUND ENERGY, INC	P-10888	KOMA KULSHAN T. L.	Implementation	0	\$0	0	\$0	\$0
PUGET SOUND ENERGY, INC	P-2493	SNOQUALMIE FALLS	Implementation	97	\$11,377	21	\$1,754	\$13,131

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	Ecology Staff time (hrs)	Ecology Program Costs	WDFW Staff time (hrs)	WDFW Program Costs	State Program Total Costs
SEATTLE, CITY OF	P-2144	BOUNDARY	Implementation	400	\$29,003	281	\$24,916	\$53,919
SEATTLE, CITY OF	P-2705	NEWHALEM CREEK	Implementation	34	\$3,823	0	\$0	\$3,823
SEATTLE, CITY OF	P-553	SKAGIT RIVER (3 projects) Ross, Gorge, Diablo	License reissuance	1,813	\$181,89	2,569	\$224,408	\$406,227
SEATTLE, CITY OF	P-2959	TOLT RIVER - SOUTH FORK	Implementation	10	\$725	219	\$18,709	\$19,434
BLACK CANYON HYDRO	P-14110	BLACK CANYON HYDROELECTIC	Pre-licensing	0	\$0	0	\$0	\$0
SOUTH FORKS ASSOCIATES L.P.	P-7563	WEEKS FALLS	Implementation	5	\$599	0	\$0	\$599
SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY	P-3701	TIETON DAM	Implementation	0	\$0	3	\$250	\$250
SPOKANE, CITY OF	P-3074	UPRIVER	Implementation	12	\$870	0	\$0	\$870
TACOMA, CITY OF	P-6842	WYNOOCHEE DAM	Implementation	18	\$1,305	308	\$27,280	\$28,585

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	Ecology Staff time (hrs)	Ecology Program Costs	WDFW Staff time (hrs)	WDFW Program Costs	State Program Total Costs
TACOMA, CITY OF	P-2016	COWLITZ RIVER (2 projects) Mossyrock Mayfield	Implementation	737	\$80,654	695	\$60,732	\$141,386
TACOMA, CITY OF	P-460	LAKE CUSHMAN (2 projects) Cushman No.1 Cushman No.2	Implementation	155	\$16,133	232	\$19,786	\$35,919
TACOMA, CITY OF	P-1862	NISQUALLY RIVER (3 projects) Alder Dam LaGrande Dam LaGrande Powerhouse	Implementation	69	\$6,832	186	\$16,052	\$22,884
TRINITY CONSERVANCY INC	P-719	TRINITY	Implementation	0	\$0	0	\$0	\$0
TWIN FALLS HYDRO ASSOCIATES LP	P-4885	TWIN FALLS	Implementation	0	\$0	0	\$0	\$0
YAKIMA-TIETON IRRIGATION DISTRICT	P-7337	COWICHE	Implementation	0	\$0	0	\$0	\$0

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	Ecology Staff time (hrs)	Ecology Program Costs	WDFW Staff time (hrs)	WDFW Program Costs	State Program Total Costs
YAKIMA-TIETON IRRIGATION DISTRICT	P-7338	ORCHARD AVENUE	Implementation	0	\$0	0	\$0	\$0
TOTAL				7,285	\$693,231	\$11,269	\$988,773	\$1,682,004

Appendix C FERC Licensing and Implementation Leads

Project Name	Owner	FERC No.	Ecology Project Lead	WDFW Project Lead
Alder (Nisqually)	Tacoma, City of	P-1862	Anne Baxter	Peggy Miller
Baker	Puget Sound Energy	P-2150	Scott Bohling	Brock Applegate
Banks Lake Pumped Storage	Brookfield Renewable Resources	P-13296	Jordan Bauer	Patrick Verhey
Banks Lake Pumped Storage	Grand Coulee Hydroelectric Authority	P-13681	Jordan Bauer	Patrick Verhey
Barclay Creek	Free Flow Power	P-13864	Scott Bohling	Brock Applegate
Banks Lake Pumped Storage	Columbia Basin Hydropower	P-14329	Jordan Bauer	Leslie King
Battery Pearl Hill Pump Storage Project	Shell Energy Northwest	P-14795	Breean Zimmerman	Patrick Verhey
Big Sheep Creek	Sheep Creek Hydro, Inc.	P-5118	Jordan Bauer	Jeff Lawlor
Black Canyon	Black Canyon Hydro, LLC	P-14110	Scott Bohling	Brock Applegate
Black Creek	Black Creek Hydro, Inc.	P-6221	Scott Bohling	Brock Applegate
Boundary	Seattle, City of	P-2144	Jordan Bauer	Jeff Lawlor
Box Canyon	Public Utility District No. 1 of Pend Oreille Co.	P-2042	Jordan Bauer	Jeff Lawlor
Burton Creek	Sollos Energy, LLC	P-7577	Anne Baxter	Peggy Miller
Calligan Creek	Calligan Creek Hydro, Inc.	P-8864	Scott Bohling	Brock Applegate
Cle Elum	Grant County PUD	P-12746	Breean Zimmerman	Patrick Verhey
Cle Elum Storage Dam	FFP, Qualified Hydro 24, LLC	P-13843	Breean Zimmerman	Leslie King

Project Name	Owner	FERC No.	Ecology Project Lead	WDFW Project Lead
Cowiche	Yakima-Tieton Irrigation District	P-7337	Breean Zimmerman	Patrick Verhey
Cowlitz Falls	Public Utility District No. 1 of Lewis County	P-2833	Anne Baxter	Peggy Miller
Cushman No. 1	Tacoma, City of	P-460	Anne Baxter	Peggy Miller
Cushman No. 2	Tacoma, City of	P-460	Anne Baxter	Peggy Miller
Deep Creek Project	Foster, Gordon (Northern Light)	P-5991	Jordan Bauer	Leslie King
Diablo Dam (Skagit)	Seattle, City of	P-553	Scott Bohling	Brock Applegate
Easton Diversion Dam	Qualified Hydro 25, LLC	P-13850	Breean Zimmerman	Leslie King
Eltopia Branch	Grand Coulee Project Hydroelectric Authority	P-3842	Jordan Bauer	Patrick Verhey
Enloe	Public Utility District No. 1 of Okanogan Co.	P-12569	Breean Zimmerman	Patrick Verhey
Falls Creek	Halbrook, David A.	P-5497	Breean Zimmerman	Patrick Verhey
Goldendale Pumped Storage	FFP Project 101, LLC	P-14861	Breean Zimmerman	Patrick Verhey
Gorge Dam (Skagit)	Seattle, City of	P-553	Scott Bohling	Brock Applegate
Green Hydropower Chief Joseph Project	Green Hydropower	P-13525	Jordan Bauer	Patrick Verhey
Green Hydropower Grand Coulee Project	Green Hydropower	P-13522	Jordan Bauer	Patrick Verhey
Green Hydropower Rocky Reach Project	Green Hydropower	P-13534	Jordan Bauer	Patrick Verhey
Hancock Creek	Public Utility District No. 1 of Snohomish County	P-13994	Scott Bohling	Brock Applegate

Project Name	Owner	FERC No.	Ecology Project Lead	WDFW Project Lead
Henry M. Jackson Project	Public Utility District No. 1 of Snohomish County	P-2157	Monika Kannadaguli	Brock Applegate
Howard Hanson	Free Flow Power	P-13848	Scott Bohling	Peggy Miller
Kachess Storage Dam	Kachess Dam Hydropower, LLC	P-14206	Breean Zimmerman	Leslie King
Keechelus Storage Dam	Keechelus Hydropower, LLC	P-14116	Breean Zimmerman	Leslie King
Keechelus Storage Dam	Qualified Hydro 32, LLC	P-14128	Breean Zimmerman	Leslie King
Koma Kulshan	Koma Kulshan Associates	P-3239	Scott Bohling	Brock Applegate
LaGrande Dam (Nisqually)	Tacoma, City of	P-1862	Anne Baxter	Peggy Miller
LaGrande Powerhouse (Nisqually)	Tacoma, City of	P-1862	Anne Baxter	Peggy Miller
Lake Chelan Project	Public Utility District No. 1 of Chelan County	P-637	Breean Zimmerman	Leslie King
Lilliwaup Creek	Lilliwaup Falls Generating Co.	P-3482	Anne Baxter	Peggy Miller
Long Lake	Avista Corporation	P-2545	Jordan Bauer	Leslie King
Lower Baker	Puget Sound Energy	P-2150	Scott Bohling	Brock Applegate
Main Canal Headworks	Grand Coulee Project Hydroelectric Authority	P-2849	Jordan Bauer	Patrick Verhey
Martin Creek Hydroelectric Project	Free Flow Power	P-13865	Scott Bohling	Brock Applegate
Mayfield (Cowlitz)	Tacoma, City of	P-2016	Anne Baxter	Peggy Miller
McMillan Reservoir (Hood St)	Tacoma, City of	P-10256	Anne Baxter	Peggy Miller
McNary Northshore	Northern Wasco Co. PUD	P-10204	Breean Zimmerman	Patrick Verhey
McTaggart Creek	Tacoma, City of	P-460	Scott Bohling	Peggy Miller

Project Name	Owner	FERC No.	Ecology Project Lead	WDFW Project Lead
Merwin Dam	PacifiCorp Company	P-935	Anne Baxter	Peggy Miller
Meyers Falls	Hydro Technology Systems Inc.	P-2544	Jordan Bauer	Mike McLellan
Mill Creek	Public Utility District No. 1 of Lewis County	P-4949	Anne Baxter	Peggy Miller
Monroe Street	Avista Corporation	P-2545	Jordan Bauer	Leslie King
Morse Creek	Port Angeles, City of	P-6461	Anne Baxter	Peggy Miller
Mossyrock (Cowlitz)	Tacoma, City of	P-2016	Anne Baxter	Peggy Miller
Newhalem	Seattle, City of	P-2705	Scott Bohling	Brock Applegate
Nine Mile	Avista Corporation	P-2545	Jordan Bauer	Leslie King
Orchard Unit 1	Yakima-Tieton Irrigation District	P-7338	Breean Zimmerman	Patrick Verhey
Orchard Unit 2	Yakima-Tieton Irrigation District	P-7338	Breean Zimmerman	Patrick Verhey
P.E.C. 66.0	Grand Coulee Project Hydroelectric Authority	P-3843	Jordan Bauer	Patrick Verhey
P.E.C. Headworks	Grand Coulee Project Hydroelectric Authority	P-2840	Jordan Bauer	Patrick Verhey
Packwood Lake	Energy Northwest (WPPSS)	P-2244	Anne Baxter	Peggy Miller
Phelps Creek	Trinity Conservancy, Inc.	P-719	Breean Zimmerman	Patrick Verhey
Priest Rapids	Public Utility District No. 2 of Grant County	P-2114	Breean Zimmerman	Patrick Verhey
Quilcene Pipeline	Port Townsend Paper Corporation	P-5411	Anne Baxter	Peggy Miller
Quincy Chute	Grand Coulee Project Hydroelectric Authority	P-2937	Jordan Bauer	Patrick Verhey
Rock Island	Public Utility District No. 1 of Chelan County	P-943	Breean Zimmerman	Patrick Verhey
Rocky Brook Electric Inc.	Rocky Brook Hydro Electric L.P.	P-3873	Anne Baxter	Peggy Miller
Rocky Reach	Public Utility District No. 1 of Chelan County	P-2145	Breean Zimmerman	Patrick Verhey
Ross Dam (Skagit)	Seattle, City of	P-553	Monika	Brock

Project Name	Owner	FERC No.	Ecology Project Lead	WDFW Project Lead
			Kannadaguli	Applegate
Russel D. Smith	Grand Coulee Project Hydroelectric Authority	P-2926	Jordan Bauer	Patrick Verhey
Ruth Creek	Free Flow Power	P-13866	Scott Bohling	Brock Applegate
Sentinel Mountain Pump Storage	United Power Corporation	P-12759	Jordan Bauer	Jeff Lawlor
Smith Creek	Seefeld Corporation	P-5982	Scott Bohling	Brock Applegate
Snoqualmie Falls	Puget Sound Energy	P-2493	Scott Bohling	Brock Applegate
South Fork Tolt	Seattle, City of	P-2959	Scott Bohling	Peggy Miller
Sullivan Creek	Public Utility District No. 1 of Pend Oreille Co.	P-2225	Jordan Bauer	Jeff Lawlor
Summer Falls	Grand Coulee Project Hydroelectric Authority	P-3295	Jordan Bauer	Patrick Verhey
Swamp Creek	Free Flow Power	P-13867	Scott Bohling	Brock Applegate
Swift No. 1	PacifiCorp Company	P-2111	Anne Baxter	Peggy Miller
Swift No. 2	Cowlitz County PUD	P-2213	Anne Baxter	Peggy Miller
The Dalles Dam	Northern Wasco Co. PUD	P-7076	Breean Zimmerman	Patrick Verhey
Tieton Hydroelectric Project	Southern California Public Power Company/Tieton Hydropower, LLC	P-3701	Breean Zimmerman	Leslie King
Trinity Hydroelectric Project	Reid Brown	P-719	Breean Zimmerman	Patrick Verhey
Twin Falls (S.F. Snoqualmie R.)	Twin Falls Hydro Associates	P-4885	Monika Kannadaguli	Brock Applegate
Twin Reservoirs	Walla Walla, City of	P-10376	Jordan Bauer	Leslie King
Upper Baker	Puget Sound Energy	P-2150	Scott Bohling	Brock

Project Name	Owner	FERC No.	Ecology Project Lead	WDFW Project Lead
				Applegate
Upper Falls	Avista Corporation	P-2545	Jordan Bauer	Leslie King
Upriver Hydro Plant	Spokane, City of	P-3074	Jordan Bauer	Leslie King
Wanapum	Public Utility District No. 2 of Grant County	P-2114	Breean Zimmerman	Patrick Verhey
Weeks Falls	South Fork Associates, Limited Partnership	P-7563	Monika Kannadaguli	Brock Applegate
Wells Dam	Public Utility District No. 1 of Douglas County	P-2149	Breean Zimmerman	Patrick Verhey
White River	Cascade Water Alliance/Puget Sound Energy	P-12685	Anne Baxter	Peggy Miller
Wynoochee River	Tacoma, City of	P-6842	Anne Baxter	Peggy Miller
Yale Site	PacifiCorp Company	P-2071	Anne Baxter	Peggy Miller
Yelm Hydro Plant	Centralia, City of	P-10703	Anne Baxter	Peggy Miller
Youngs Creek	Public Utility District No. 1 of Snohomish County	P-10359	Scott Bohling	Brock Applegate