



DEPARTMENT OF
ECOLOGY
State of Washington



Alder Dam on the Nisqually River

Report to the Legislature on Water Power License Fees

Expenditures, Recommendations,
Accountability, and Recognition

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by
Water Quality Program
Washington State Department of Ecology

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Washington State Department of Ecology
Olympia, Washington

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Executive Summary

This legislative report is a requirement to ensure proper expenditure of the water power license fees and to ensure accountability of the use of fee revenue pursuant to Revised Code of Washington (RCW) 90.16.050. The Department of Ecology (Ecology) submits this biennial progress report to the appropriate committees of the Legislature to demonstrate that the water power license fee revenue was used as intended by law.

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 Commission¹ (FERC) are required to obtain this certification from the state. Ecology with technical assistance from the Washington Department of Fish and Wildlife (WDFW) issues these §401 WQ certifications for hydropower projects in the state. Ecology and WDFW co-manage the state hydropower environmental regulatory program. This program includes the development 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*² 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 the licensing authority of FERC. The 2007 law revision maintained the base fee and 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. This additional fee revenue was set to help fund these state agency programs through June 30, 2017.

Substitute House Bill 1130 (Chapter 75, Laws of 2016), an act relating to water power license fees; amended RCW 90.16.050, extending the sunset date of the water power license fees to June 30, 2023. At the request of the hydropower industry, the Legislature also included additional

¹ 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 and therefore are not subject to state water quality certifications.

² Although not a requirement, information on base fees is also included to provide a complete account of fees collected under RCW 90.16.050.

reporting requirements to ensure accountability in the licensing, relicensing, and license implementation of the state programs these fees help to support.

The new actions and supplemental reporting requirement, beginning in FY2017 to justify fee revenue and to provide more accountability of expenditures, are:

- Report other funds used to support state agency programs.
- Identify what staff time and work associated with the licensing and implementation phases of these 30-40 year licenses.
- Provided more detailed reporting on funds expended to assist each hydropower project with compliance.
- Avoid duplicative work and provide sufficient information in annual work plans to ensure other state or federal agencies or tribes aren't already performing activities.
- Host an annual meeting with interested parties to solicit information on the annual work plans and discuss the results of the survey.
- Work collaboratively with hydropower projects to produce annual work plans
- Provide a single point of contact at WDFW and Ecology for each hydropower project.
- Improve service by getting service feedback through an annual survey.

This report to the legislature includes the reporting requirement of the 2007 law for fiscal year 2016 and the new reporting requirements of the 2016 law that became effective in fiscal year 2017. The expenditures section has been enhanced to meet new requirements. New accountability requirements are met through our increased engagement and consultation with stakeholders, including fee payers, non-governmental organization, and interested citizens. WDFW and Ecology; jointly manage state hydropower environmental regulatory program, share the revenue from water power license fees to support the program, and collectively consult with interested parties to improve the programs.

This report describes the progress made in three areas:

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

In the 2015-2017 biennium, Ecology collected \$585,675 in base fees. An additional \$1,018,329 were collected from FERC-licensed projects. These water power license fees 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 \$2,142,611. The fees funded 48 percent of the full workload associated with hydropower projects in the biennium. Federal and state funds supported the remaining 52 percent of the work performed. The supplemental sources and funding totals are detailed in Table B of this report. We expect the need for supplementation from these sources again in the 2017-2019 biennium to cover the full workload.

New accountability reporting requirements for FY2017 are inclusive of the original requirements to consult with hydropower project operators, and other interested parties. Accordingly, the new required annual survey, work plans, and annual stakeholder meeting meet the state agency reporting requirements under and RCW 90.16.050(1)(c)(i)(A) [amended in 2007] and RCW

90.16.050, section (3) [amended in 2016]. The new annual performance survey provided an effective method for Ecology and WDFW to learn where improvements to the hydropower regulatory programs can be made. The survey was designed to gain feedback on performance in four areas; general customer service, licensing process; license implementation, and feedback on the survey design. In general, the survey responses provided positive feedback on state agency performance. Survey respondents also provided feedback on areas where Ecology and WDFW staff can improve. General areas identified for improvement included:

- better preparation for meetings and timeliness with state decisions
- better communication with hydropower projects on purpose of studies and information required for licensing and implementation actions.
- greater consistency between regional staff and handling hydropower regulatory compliance, and
- redesigning of the annual performance survey to allow more detailed feedback options.

In response, 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 hydropower project has been assigned an assistant attorney general (AG) from the state AG office. Ecology has also included 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. 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. Ecology and WDFW have committed to ensure greater consistency concerning staff performance and decision-making. We are meeting this goal by increasing frequency of our agency workgroup meetings. These meetings are used to discuss current issues and share decisions among regional staff to ensure we educate new staff, and maintain consistent program policies.

A project to redesign the annual survey will begin in August 2018 and will be completed in time to send the final survey to stakeholders in September 2018 prior to the annual meeting to be held in October. Each concern identified in the survey will be considered by the stakeholder workgroup.

Lastly, Ecology 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 (LIHI). LIHI 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 LIHI's criteria. Ecology responds to inquiries from LIHI and certification applicants to provide regulatory oversight information necessary for LIHI to certify these hydropower projects.

The current statutory language of RCW 90.16.050 enacted on July 1, 2016 is as follows.

Current statutory language – RCW 90.16.050

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

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

(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.

(i) The progress report will:

(A) 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. In order 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;

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

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

(ii) The fees required in (b) of this subsection expire June 30, 2023. The biennial progress 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)(i) 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)(i) 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:

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

New Requirements for This Biennium

With the passage of Substitute House Bill 1130 (Chapter 75, Laws of 2016), RCW 90.16.050 was amended to include additional reporting requirements. Since amendments to the law were initiated in the second fiscal year of this biennial report, some section summaries include the reporting requirements of FY2016 and additional reporting information for FY2017. A summary of the new actions and supplemental reporting requirement, beginning in FY2017, are provided below.

Fee expenditures:

- Report other funds used to support state agency programs.
- Identify work that is in direct support of hydropower licensing, relicensing, and license implementation.
- Report on funds expended on licensing work associated with each hydropower project, including program costs and staff time.
- Estimate the total workload, program costs, and staff time for work associated with the licensing and/or license implementation activities for each hydropower project in the next biennium.
- To avoid duplicative work, provide sufficient information to ensure other state or federal agencies or tribes aren't already performing activities.

Accountability:

- Host an annual meeting with interested parties to solicit information on the annual work plans and discuss the results of the survey.

- Work collaboratively with hydropower projects to produce annual work plans that include anticipated work activities for each project in the next year.
- Assign one employee each from Ecology and WDFW to each licensed hydropower project.
- Circulate an annual survey to solicit feedback on the responsiveness of department staff, clarity of staff roles and responsibilities, and other topics related to the professionalism and expertise of department staff.

These new accountability reporting requirements are inclusive of the original requirements to consult with hydropower project operators, and other interested parties. Accordingly, the new required annual survey, work plans, and annual stakeholder meeting meet the state agency reporting requirements under and RCW 90.16.050(1)(c)(i)(A) [amended in 2007] and RCW 90.16.050, section (3) [amended in 2016].

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 as the 2007 legislation and 2016 amendments intended. Table A provides links to previous biennial reports for review.

Table A. Previous Biennial Progress Reports

Water Power License Fees: Biennial Reports to the Legislature Expenditures, Recommendations, Accountability, and Recognition:	
2013 – 15 biennium	https://fortress.wa.gov/ecy/publications/SummaryPages/1610007.html
2011 – 13 biennium	https://fortress.wa.gov/ecy/publications/SummaryPages/1410048.html
2009 – 11 biennium	https://fortress.wa.gov/ecy/publications/SummaryPages/1210048.html
2007 – 09 biennium	https://fortress.wa.gov/ecy/publications/SummaryPages/0910095.html

1. Water Power License Fee Expenditures

The Revised Code of Washington (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.

Amendments 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 authorization to Washington Department of Fish and Wildlife (WDFW) and Ecology to spend these funds on specific activities associated with environmental protection, mitigation, and enhancement measures included in FERC-issued hydropower project licenses. The amendments 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.

Fee collection is based on the calendar year. In the 2015-2017 biennium, average annual revenues of \$509,164 were collected from FERC licensed projects based on RCW 90.16.050. Ecology also collected average annual revenues of \$292,837 in base fees provided by RCW 90.16.050 (1) (a) to help fund the Ecology/USGS cooperative stream gauging program in the state. These base fees were collected prior to the 2007 legislation and are not subject to the 2023 sunset date.

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.

The water power license fees provide funding for state agency participation, which is necessary to issue Clean Water Act §401 water quality certifications and to implement other 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 engagement 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 Program, 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 provided 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, including:

- 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 USFWS), and stakeholders, 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. 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 several biennia a few large hydropower dams will be entering the licensing phase. The licensing phase generally begins 10 years prior to the expiration date of the license. 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 as a result 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's expected workload in the next biennium will be similar in nature and quantity to that of the last 2015-2017 biennium. The WR Program will continue to assist the 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.

The 2015-2017 biennium contract provided WDFW an average of \$255,000 per fiscal year from water power license fees. For the 2017-2019 biennium, Ecology and WDFW maintained this funding amount in the renewed Interagency Agreement (Ecology Contract # C1800074; WDFW Contract #17-09143) to continue work on FERC-licensed and proposed hydropower projects.

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 oriented recreation.

Detail of Fund Expenditures

Summary of expenditures 2015-2017 biennium expenditures

The water power license fee totals in Table B show the fees spent on FERC hydropower project activities in the 2015-2017 biennium. For additional information on water power license fees collected in the 2015-2017 biennium, including fees paid by project and owner, see Appendix A.

Table B. FERC Project Expenditures by Agency, Program, Fiscal Year, and Fund Source

Fiscal Year	Full time equivalent (FTEs)	Funding Source	Ecology Water Quality & Program A	Ecology Water Resources	WDFW Habitat Management	Totals
2016	7.58	Water Power License Fees	\$ 179,310	\$ 10,272	\$ 243,922	\$ 433,504*
		Other funding sources				
		General Fund - State	-	-	\$ 400,172	\$ 400,172
		Other State Funds	\$ 46,931	-		\$ 46,931
		Federal (Ecology)	38,795	-	-	38,795
		Federal (WDFW)	-	-	92,500	92,500
		Other **	7,143	-	21,500	28,643
		Total funding from other sources				
Total expenditures on hydropower project work - FY2016						\$ 1,040,545

2017	8.77	Water power License Fees	\$ 315,194	\$ 10,313	\$ 266,226	591,733*
		Other funding sources				
		General Fund - State	-	-	\$ 385,395	\$ 385,395
		Other State Funds	\$ 18,344	-		18,344
		Federal (Ecology)	22,811	-	-	22,811
		Federal (WDFW)	-	-	102,852	102,852
		Other **	7,143	-	21,500	28,643
		Total funding from other sources				
Total expenditures on hydropower project work - FY2017						\$ 1,149,778

* Funds are spent from Water Power License Fees in the 027 Reclamation Account (<http://www.ofm.wa.gov/fund/detail.asp?fund=027>).

** Attorney General's Office assistance is funded by assorted program funds. The totals shown are an average annual fiscal year for the cost of Assistance AGO assistance provided in the biennium.

Other funds that support the agency hydropower responsibilities

Table B details the total expenditures for the 2016-2017 biennium which were \$2,190,323. Included in Table B are *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 State Toxics Control 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 the FY2016 and FY2017, supplementary state and federal funds provided approximately 52 percent of the funding for these state agencies' hydropower compliance programs. Without these supplementary funds, the state would not be able to effectively complete §401 WQ certification and license implementation activities.


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 closed-loop pumped storage systems. These proposals require state agency involvement to inform project proponents of requirements to meet state environmental regulations. 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 state agency 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 this stakeholder concern, the state agency hydropower programs can report that supplementary state and federal funds for the program continue to exceed the expenditures associated with new project proposals. Overall, supplemental funding is more than sufficient to offset license fees and support this state agency workload.

Hydropower program workload in FY2016

Table C below provides further detail of fulltime equivalent (FTE) workload for FY2016. 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*). This was the reporting requirement prior to the new requirements introduced by 2016 Substitute House Bill 1130. Since the changes to the law were initiated in the second fiscal year of this biennial report, the FY2016 information is summarized here as it has in previous biennia.

Table C. State Agency Fulltime Equivalent (FTE) Program Staffing in the FY2016³

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.	1.64	0.11	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.	1.65	3.95	5.6
Washington State Attorney General's Office	Legal assistance with FERC Licensing, §401 WQ certifications, amendments, and settlement agreements. (Includes assistance provided to both Ecology and WDFW.)	-	0.23	0.23 ⁴
 Total State Agency FTEs		3.29	4.29	7.58

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 state agency 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.

Hydropower program workload in FY2017

Substitute House Bill 1130 (Chapter 75, Laws of 2016) included a requirement for more detailed reporting on work performed for each hydropower project. In accordance with RCW 90.16.05(1)(c)(i)(A), 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 FY2017, which began July 1, 2016

³ Reporting for FY2017 has new requirements and is summarized in Appendix B.

⁴ Workload from the AG's office varied by year. The FTE average is 0.23.

when the new requirements became law. Expenditures not directly attributable to work on a specific hydropower project are not included⁵.

Additionally, the report must include a summary of program costs and staff time associated with projects in the license implementation phase after the license issuance, and program costs and staff time associated with reissuance of a license to a hydropower project. For clarity, it is important to explain the terms used throughout RCW 90.16.05(1)(c)(i)(A). Licensing, relicensing, and §401 WQ certification are terms used in this section that relate to the same work. Each hydropower project requiring a FERC license, whether new (licensing) or existing (relicensing), is evaluated for compliance. Conditions to meet state regulations are established by Ecology and WDFW and are issued through the state §401 WQ certification. These conditions are then incorporated into the FERC license. The state does not issue the license to operate; this is the responsibility of the FERC. The state actions are to establish a §401 WQ certification necessary for a FERC license to be issued and to then to work with the hydropower projects to ensure proper implementation of the §401 WQ certification conditions that have been placed into the FERC license. As a result, the terms; licensing, relicensing, and issuance §401 WQ certification, all relate to the state agency work to research, establish, and ultimately issue state environmental conditions to allow finalization of a FERC license. Implementation are those activities that occur after the finalization of the FERC license. To meet the requirements in RCW 90.16.05(1)(c)(i)(A) to separate costs and staff time between these activities, Table D reflects this concept. Table D summarizes program costs and staff time in FY2017 from Appendix B associated with both, licensing activities and license implementation activities. The expenditures in Table D include the cumulative expenditures in direct support of each hydropower project as directed by RCW 90.16.05(1)(c)(i)(A).

Table D. Fiscal Year 2017 - Total Workload and Expenditures by Licensing Phase⁵

	ECOLOGY		WDFW		Total costs and percentage by licensing phase
	Staff Hours	Program Cost	Staff Hours	Program Cost	
Total workload and expenditures for licensing <i>(includes pre-licensing and relicensing of projects)</i>	630	\$56,176	2334	\$151,711	\$207,887 (21%)
Total workload and expenditures for license implementation <i>(includes work associated with one license surrender project)</i>	2066	\$181,897	9180	\$597,605	\$779,502 (79%)
Totals	2696	\$181,897	11,514	\$746,316	\$987,389

⁵ Non-project specific expenditures include staff training, leave time, and administrative duties not attributable to any one hydropower project. Table B includes total annual expenditures, including non-project specific expenditures

Expected workload and full time employee needs in 2017-2019 biennium

Workload in the 2017-2019 biennium is expected to be similar to the 2015-2017 biennium for both Ecology and WDFW. However, the nature of the work will change for some projects. Over the last decade, many projects were issued adaptive management requirements within the §401 WQ certification 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. Since many compliance schedules are nearing their end, those that have not yet attained water quality standards will need to work with Ecology to propose an alternative using compliances tools such as site specific criteria, use attainability analysis, or water quality offsets⁶. The application of these tools will require rulemaking under WAC 173-201A through the state administrative procedures act process. The nature of this work for Ecology staff will, in general, include more rule procedure work than technical review and may require more resources from rulemaking staff and the attorney general office. If hydropower utility owners choose to apply to Ecology for rulemaking, expenditures to support the hydropower program may increase in the 2017-2019 to support rulemaking efforts such as rule writing and regulatory analysis required by the state administrative procedures act. 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 2017-2019 biennium average annual staff time and program costs to support both state agencies' hydropower programs is expected to remain relatively to those shown in FY2017 Table D above. Approximately 20 percent (~\$200,000) 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 80 percent (~\$800,000) 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. Similar to the 2015-2017 biennium, the staff time necessary for the state hydropower program is expected to average approximately eight full time employees. This work is divided among a larger number of staff but corresponds to this quantity of full-time equivalent resources.

⁶ Site specific criteria, use attainability analyses, and water quality offsets are tool for application of water quality criteria in the state surface water quality standards.

2. Accountability and Recommendations

Annual Water Power License Fee Stakeholder Meeting

In accordance with RCW 90.16.05(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. These meetings had previously been held periodically since the original 2007 legislation on water power license fees, but will now occur no less than annually. The purpose of the annual stakeholder meeting 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. After consultation with interested parties, Ecology and WDFW decided to host these annual meetings in the fall. The first meeting pursuant to the new legislation was held on October 10, 2017. Invitations to provide feedback through the annual survey and to attend the annual meetings are extended to:

- all water power license fee payers,
- private citizens 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 2017 annual meeting included;

- Ecology and WDFW staff and managers
- Staff from NGOs; American Whitewater and Wild Washington Rivers
- Two private citizens
- Hydropower operator staff from;
 - Avista Corporation
 - Centralia City Light
 - Chelan County PUD
 - Cowlitz County PUD
 - Douglas County PUD
 - Grant County PUD
 - Okanogan County PUD
 - PacifiCorp
 - Puget Sound Energy
 - Seattle City Light
 - Snohomish County PUD
 - Tacoma Power
 - Tollhouse Energy Company

Annual Work plans

In accordance with RCW 90.16.05(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)(B) to consult with water power license fee payers. At the annual water power license fee stakeholder meeting on October 10, 2017, Ecology provided an example of a work plan format for the attendees to review. The group then provided recommendations to the improve work plan format. WDFW and Ecology agreed to work with each hydropower project owner to develop and review the 2018 annual work plans for each FERC-licensed project. The final work plans were assembled into a document provided in Appendix C of this report. As required by the 2016 legislation, the state must ensure that duplicative work is avoided. The collaborative development of these work plans between the state agencies 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 90.16.05(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 E of this report.

Annual State Agency Performance Survey

In accordance with RCW 90.16.05 (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 consultation 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 licensing projects. The statute further stipulates that the survey 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.

These new accountability reporting requirements are inclusive of the original requirements to consult with hydropower project operators, and other interested parties. As such the new required annual survey, work plans, and annual stakeholder meeting meet the state agency reporting requirements under and RCW 90.16.050(1)(c)(i)(A) [amended in 2007] and RCW 90.16.050(3) [amended in 2016].

With regard to setting up a customer service survey to meet the statutory requirements, Ecology and WDFW determined that in order to effectively get feedback from all of the hydropower licensee fee holder and stakeholders, it would be beneficial to have an initial survey that asked a series of questions designed to meet the intent of RCW 90.16.05(3)(c), but to also ask questions of the licensees around how to get appropriate feedback on questions and conduct surveys into the future so that it was truly meeting the intended purpose of the statute.

In September 2017, Ecology sent out an initial survey⁷ with 34 questions to all hydropower licensees and stakeholders for their responses. The questions were divided into 4 major topic areas:

1. General customer service – overall performance of Ecology and WDFW staff on hydropower projects
2. Licensing process – performance of Ecology and WDFW staff on license reviews and §401 WQ certifications
3. License implementation – performance of Ecology and WDFW staff related to implementation of hydropower projects
4. About the survey – feedback on the survey questions

From the survey results, we identified areas where concerns or issues had been raised, and then held the required annual meeting in October 2017. Ecology and WDFW shared the survey results and solicited further feedback at the meeting. From the survey and annual meeting, several attendees were identified as willing to assist the two agencies in revising the survey questions for future surveys.

The statute directs that the biennial progress report include results from the performance survey. We are providing an overview of survey results in this section. Appendix D included result summaries for each question, showing the range of answer choices from strongly agree to strongly disagree for multiple choice questions. To ensure respondents had the opportunity to share any specific ideas, each section included a final free form text option.

Survey respondents

To ensure that Ecology and WDFW received authentic and meaningful feedback, the survey allowed for anonymous participation. Five participants remained anonymous while the following seven participants provided optional identifying information;

- Avista Corporation
- Chelan County PUD
- Grant County PUD
- Okanogan County PUD
- PacifiCorp
- Tollhouse Energy Company
- Wild Washington Rivers (NGO)

Results of Customer Service Survey

General Customer Service

In general, we received favorable responses (Agree to Strongly agree) for the majority of multiple choice questions related to the performance of Ecology and WDFW staff in the last year (Questions 1-16). Areas included satisfaction with agency staff working on hydropower projects, including:

⁷ The survey can be found at: <https://www.surveymonkey.com/r/WPLF-Survey>.

- Timely assistance on questions, technical requests, and decisions.
- Being knowledgeable and familiar with projects and regulatory requirements
- Timeliness of reviews
- Communicating clearly
- Being prepared
- Providing consistency for projects
- Following through on commitments

Specific narrative survey responses the state heard concerning agency performance in general customer service can be found in Appendix D under Question 16.

State agency response to feedback

In general, this section of the survey provided positive feedback and expressed appreciation for the state agencies' qualified and unbiased staff. However, some comments indicate that this expectation was not consistently met for all hydropower projects. Ecology and WDFW have committed to ensure greater consistency concerning staff performance and decision-making. We are meeting this goal by increasing frequency of our agency workgroup meetings. These meetings are used to discuss current issues and share decisions among regional staff to ensure we educate new staff, and maintain consistent program policies.

Licensing Process

Survey responses to questions on §401 WQ certification requirements had less respondents because fewer hydropower projects are under license review (Questions 17-23). Responses were more mixed, with some respondents satisfied and others expressing concerns with various aspects of the §401 WQ certification, including:

- Communication of the purpose for studies and information required
- Timely responses to questions
- Estimates for the length of time it would take to achieve milestones
- Ensuring that staff focus on the science and that legal/policy issues that should be handled by others

Specific narrative survey responses the state heard concerning agency performance in the licensing process can be found in Appendix D under Question 23.

State agency response to feedback

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 hydropower project has been assigned an assistant attorney general (AG) from the state AG office and staff frequently consult with the AG office for guidance on issues. AG attorneys participate in meetings where appropriate or when their participation is requested by a hydropower utility. Ecology has also included 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. 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.

Licensing Implementation

Survey responses on questions relating to Ecology and WDFW's work on implementation of hydropower licensed projects were generally very favorable, with the majority of responses "Agree or Strongly agree" (Questions 24-30). Question 30 in Appendix D includes specific comments. There was some dissatisfaction expressed with staff turnover or vacancies causing difficulties for licensees.

Specific narrative survey responses the state heard concerning agency performance in the licensing implementation can be found in Appendix D under Question 30.

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. Agency headquarter staff oversee technical and policy decisions to improve consistency across all hydropower projects in the state.

About the Survey

The last 4 questions in the survey related to feedback on the survey itself (Questions 31-34). The most common concerns about the survey provided in this section and throughout the survey were:

- to include stakeholders in the development of the next survey
- the need to modify the answer options, and
- to allow participants to separate their survey responses between Ecology and WDFW

This information will be used to develop future customer service surveys for hydropower license fee holders and stakeholders, in consultation with them.

State agency response to feedback

Six stakeholders have volunteered to participate in a workgroup in 2018 to revise and finalize the survey questions and include them in each annual meeting process. This project will commence in August 2018 and will be completed in time to send the final survey to stakeholders in September prior to the annual meeting to be held in October. Each concern identified above will be considered by the stakeholder workgroup.

3. 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 certification is one way hydropower project are recognized for their operations that enhance environmental recreational benefits. Ecology responds to inquiries from LIHI and certification applicants to provide regulatory oversight information necessary for LIHI to certify these hydropower projects.

Low Impact Hydropower Institute Certification

The Low Impact Hydropower Institute (LIHI) 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 LIHI's criteria.

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

1. River flows.
2. Water quality.
3. Fish passage and protection.
4. Watershed protection.
5. Threatened and endangered species protection.
6. Cultural resource protection.
7. Recreation.
8. 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 aren't a requirement for operating. A hydropower facility meeting all eight certification criteria will be certified by LIHI. Once certified, the owner or operator can market the power from the facility to consumers as produced by a LIHI- certified facility.

Hydropower projects in Washington that received LIHI certification can be found on the LIHI website at <http://lowimpacthydro.org/project-map/>. The following are the 5 LIHI certification that are active in Washington State.

North Shore Fishway Hydroelectric Project

On November 11, 2011, the Dalles Dam North Shore Hydroelectric Project, (FERC #P-7076), operated by Northern Wasco County Public Utility District (PUD), earned a 4-year LIHI certification (#71). In July 2015 the LIHI board approved a 5-year duration for the current

certification. The certification is effective until July 17, 2020. The Project is adjacent to the US Army Corps of Engineers Dalles Dam. The PUD facility is 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.

Henry M. Jackson Hydroelectric Project

On April 7, 2011, the Henry M. Jackson Hydroelectric Project, operated by PUD No. 1 of Snohomish County, received LIHI certification (#75). In September 2011 the LIHI board approved an 8-year duration for the current certification. The certification is effective until April 7, 2019. The project is located on the Sultan River in Snohomish County, Washington. Culmbach Dam forms the project reservoir, Spada Lake. The project is recognized for managing a balance of municipal water supply, in-stream flows and incidental winter flood storage, and reservoir management to reduce the of risk of spill flows, following Chinook fall spawning and steelhead spring spawning. In addition, the project ensures sufficient lake levels for summer recreation.

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 a 10-year LIHI certification (#5). The certification is effective until May 14, 2026. The Skagit River Hydroelectric Project is located in the upper Skagit River basin, in northeastern Puget Sound, Washington. 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 and most recently on April 15, 2013. The certification was effective until April 15, 2018. The project was 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 project 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 was extended to December 31, 2018. The project was located on the Chelan River, near the city of Chelan, in Chelan County, Washington. The project occupied 465.5 acres of federal lands administered by the U.S. Forest Service and U.S. Department of the Interior, National Park Service. The project was recognized for maintaining flow for habitat and recreation in the 4.5 mil long reach of the Chelan River that is bypassed by the project. In addition, the project maintained a regime of lake elevation levels to meet a complex synthesis of recreational needs, bypass flows, and electrical generation.

Conclusion

In closing, this report on water power license fee revenue and expenditures presents information to meet the requirements of the 2007 law and the 2016 changes made to RCW 90.16.050 by the Legislature to provide further accountability measures.

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 stakeholders.
- 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.
- Ensure that Ecology and WDFW are properly training in hydropower and regulatory policy. Agency headquarter staff will oversee technical and policy decisions to improve consistency across all hydropower projects in the state.
- Improve the annual survey design to gain encourage participation and provide a more effective process for receiving feedback and recommendations to the state hydropower regulatory program.

Continued collaboration with fee payers and other stakeholder through annual meetings, mutually developed work plans, and performance surveys will continue to improve the state agency hydropower programs that ensure the protection of state water, habitat, and aquatic resources.

Appendices

Appendix A. Water power license fees billed for FY2016 and FY2017

Licensee	Project Name	FERC No.	FY 2016			2017		
			Base Fee	FERC Fee	TOTAL	Base Fee	FERC Fee	TOTAL
Avista Corporation	Little Falls	non-FERC	\$1,489.91	♦	\$1,489.91	\$1,489.91	♦	\$1,489.91
	Long Lake (Spokane)	P-2545	2,527.57	4,493.45	7,021.02	2,527.57	4,493.45	7,021.02
	Monroe Street (Spokane)	P-2545	751.09	1,335.27	2,086.36	751.09	1,335.27	2,086.36
	Nine Mile (Spokane)	P-2545	1,446.89	2,572.26	4,019.15	1,446.90	2,572.25	4,019.15
	Upper Falls (Spokane)	P-2545	647.34	1,150.84	1,798.18	647.34	1,150.84	1,798.18
	Sum of all projects		\$6,862.80	\$9,551.82	\$16,414.62	\$6,862.81	\$9,551.81	\$16,414.62
B.G.I. Tooling Co.	Northern Light	P-5991	\$208.63*	\$370.91*	\$579.54*	No payment	No payment	\$0.00
Black Creek Hydro, Inc.	Black Creek	P-6221	\$357.06	\$634.76	\$991.82	\$357.05	\$634.77	\$991.82
Cascade Water Alliance/Puget Sound Energy	White River	P-12685	\$2,333.86*	\$4,149.10*	\$6,482.96*	\$1,166.93	\$2,074.55	\$3,241.48
Cascadian Home Farm	Cascadian Farm Hydro	non-FERC	\$10.19	♦	\$10.19	\$10.19	♦	\$10.19
Centralia, City of	Yelm Hydro Plant	P-10703	\$664.36	\$1,181.09	\$1,845.45	\$664.36	\$1,181.09	\$1,845.45

♦This project is not assessed water power license fees because it does not produce power or because it was issued a FERC license exemption based on low power production.

* B.G.I. Tooling -- This payment includes unpaid fees from 2014 & 2015 – regular annual fees are: Base Fee - \$69.55; FERC Fee \$123.64.

* Cascade Water Alliance/PSE -- This payment includes unpaid fees from 2015 – regular annual fees are: Base Fee - \$166.93; FERC Fee \$2,074.55.

Licensee	Project Name	FERC No.	FY 2016			2017		
			Base Fee	FERC Fee	TOTAL	Base Fee	FERC Fee	TOTAL
Columbia Basin Hydropower	Eltopia Branch	P-3842	\$131.23	\$233.29	\$364.52	\$131.23	\$233.29	\$364.52
	Main Canal Headworks	P-2849	522.45	928.80	1,451.25	522.45	928.80	1,451.25
	P.E.C. 66.0	P-3843	125.18	222.55	347.73	125.18	222.55	347.73
	Russel D. Smith	P-2926	252.41	448.73	701.14	252.41	448.73	701.14
	Summer Falls	P-3295	1,512.00	2,688.00	4,200.00	1,512.00	2,688.00	4,200.00
Sum of all projects			\$2,543.27	\$4,521.37	\$7,064.64	\$2,543.27	\$4,521.37	\$7,064.64
Dale Peterson Orchards, Inc.	Company Creek	non-FERC	\$40.89	♦	\$40.89	\$40.89	♦	\$40.89
Energy Northwest (WPPSS)	Packwood Lake	P-2244	\$1,281.27	\$2,277.82	\$3,559.09	\$1,281.27	\$2,277.82	\$3,559.09
Fred Pickering (Biggs Creek)	Biggs Creek	non-FERC	\$26.59	♦	\$26.59	No payment	♦	\$0.00
Halbrook, David A.	Falls Creek	P-5497	\$63.00	\$112.00	\$175.00	\$63.00	Check	\$63.00
Holden Village, Inc.	Holden Village	non-FERC	\$157.09	♦	-	\$157.09	♦	\$157.09
	Railroad Creek No. 1	non-FERC	10.74	♦	-	10.74	♦	10.74
Sum of all projects			\$167.83	♦	\$167.83	\$167.83	♦	\$167.83
Hydro Technology Systems Inc.	Meyers Falls	P-2544	\$235.02	\$417.82	\$652.84	\$235.02	\$417.82	\$652.84
Janda, John L. (Paid by Russell Stallman)	Janda Power House	non-FERC	17.47	♦	\$17.47	No payment	♦	\$0.00
Koma Kulshan Associates	Koma Kulshan	P-3239	\$885.60	\$1,574.40	\$2,460.00	\$885.60	\$1,574.40	\$2,460.00

♦ This project is not assessed waterpower license fees because it does not produce power or because it was issued a FERC license exemption based on low power production.

Licensee	Project Name	FERC No.	FY 2016			2017		
			Base Fee	FERC Fee	TOTAL	Base Fee	FERC Fee	TOTAL
Lilliwaup Falls Generating Co.	Lilliwaup Creek	P-3482	\$114.96	\$204.36	\$319.32	\$114.96	♦	\$114.96
Millstream Farms	Touchet River	non-FERC	\$12.96	♦	\$12.96	\$12.96	♦	\$12.96
Northern Wasco County Public Utility District	McNary Northshore	P-10204	\$558.10	\$992.18	\$1,550.28	See McNary Hydro	See McNary Hydro	\$0.00
	The Dalles Dam	P-7076	409.09	727.27	1,136.36	409.09	727.27	1,136.36
	Sum of all projects		\$ 967.19	\$ 1,719.45	\$2,686.64	\$ 409.09	\$ 727.27	\$1,136.36
Rosario Signal LLC	Cascade Creek	non-FERC	\$16.30	♦	\$16.30	No payment	♦	\$0.00
McNary Hydro	McNary Northshore	P-10204	See North Wasco County PUD	See North Wasco County PUD	\$0.00	\$558.10	\$992.18	\$1,550.28
PacifiCorp Company	Merwin (Ariel Site)	P-935	\$4,637.86	\$8,245.09	\$12,882.95	\$4,637.86	\$8,245.09	\$12,882.95
	Swift	P-2111 & P-2213	10,245.27	18,213.82	28,459.09	10,245.27	18,213.82	28,459.09
	Yale Site	P-2071	5,061.27	8,997.82	14,059.09	5,061.27	8,997.82	14,059.09
	Sum of all projects		\$19,944.40	\$35,456.73	\$55,401.13	\$19,944.40	\$35,456.73	\$55,401.13
Port Angeles, City of	Morse Creek	P-6461	\$180.08	\$320.15	\$500.23	\$180.08	\$320.15	\$500.23
Port Townsend Paper Corporation	Quilcene Pipeline	P-5411	\$104.91	\$186.51	\$291.42	\$104.91	♦	\$104.91
Public Utility District No. 1 of Chelan County	Chelan Falls	P-637	\$3,080.03	\$5,475.60	\$8,555.63	\$3,040.72	\$5,405.73	\$8,446.45
	Dryden	non-FERC	218.25	♦	218.25	218.25	♦	218.25
	Little Leavenworth	non-FERC	17.18	♦	17.18	17.18	♦	17.18
	Rock Island	P-943	18,903.07	33,605.45	52,508.52	18,903.07	33,605.45	52,508.52
	Rocky Reach	P-2145	38,467.64	68,386.91	106,854.55	38,467.64	68,386.91	106,854.55
	Stehekin	non-FERC	86.58	♦	86.58	86.58	♦	86.58
	Tumwater	non-FERC	451.02	♦	451.02	451.02	♦	451.02
	Sum of all projects		\$61,223.77	\$107,467.96	\$168,691.73	\$61,184.46	\$107,398.09	\$168,582.55

♦ This project is not assessed waterpower license fees because it does not produce power or because it was issued a FERC license exemption based on low power production.

Licensee	Project Name	FERC No.	FY 2016			2017		
			Base Fee	FERC Fee	TOTAL	Base Fee	FERC Fee	TOTAL
Public Utility District No. 1 of Douglas County	Wells Dam	P-2149	\$27,774.00	\$49,376.00	\$77,150.00	\$27,774.00	\$49,376.00	\$77,150.00
Public Utility District No. 1 of Lewis County	Cowlitz Falls	P-2833	\$2,113.77	\$3,757.82	\$5,871.59	\$2,113.77	\$3,757.82	\$5,871.59
	Mill Creek	P-4949	172.80	307.20	480.00	172.80	♦	172.80
	Sum of all projects		\$2,286.57	\$4,065.02	\$6,351.59	\$2,286.57	\$3,757.82	\$6,044.39
Public Utility District No. 1 of Okanogan Co.	Similkameen Dam - Enloe	P-12569	\$233.59	\$415.27	\$648.86	\$233.59	\$415.27	\$648.86
Public Utility District No. 1 of Pend Oreille Co.	Box Canyon	P-2042	\$2,876.79	\$5,114.29	\$7,991.08	\$2,876.79	\$5,114.29	\$7,991.08
	Calispell Creek	non-FERC	126.41	♦	126.41	126.41	♦	126.41
	Sum of all projects		\$3,003.20	\$5,114.29	\$8,117.49	\$3,003.20	\$5,114.29	\$8,117.49
Public Utility District No. 1 of Snohomish County	Henry M. Jackson Project	P-2157	\$3,428.82	\$6,095.67	\$9,524.49	\$3,428.82	\$6,095.67	\$9,524.49
	Calligan Creek	P-13948	245.70	436.80	682.50	220.04	391.18	611.22
	Hancock	P-13994	237.35	421.96	659.31	237.35	421.96	659.31
	Wood Creek	P-3603	187.12	332.66	519.78	187.12	♦	187.12
	Youngs Creek	P-10359	562.09	999.27	1,561.36	562.09	999.27	1,561.36
	Sum of all projects		\$4,661.08	\$8,286.36	\$12,947.44	\$4,635.42	\$7,908.08	\$12,543.50
Public Utility District No. 2 of Grant County	Priest Rapids	P-2114	\$31,036.50	\$55,176.00	\$86,212.50	\$31,036.50	\$55,176.00	\$86,212.50
	Wanapum	P-2114	31,144.91	55,368.73	86,513.64	31,144.91	55,368.73	86,513.64
	P.E.C. Headworks	P-2840	236.86	421.09	657.95	236.86	421.09	657.95
	Quincy Chute	P-2937	294.75	524.00	818.75	294.75	524.00	818.75
	Sum of all projects		\$62,713.02	\$111,489.82	\$174,202.84	\$62,713.02	\$111,489.82	\$174,202.84

♦ This project is not assessed waterpower license fees because it does not produce power or because it was issued a FERC license exemption based on low power production.

Licensee	Project Name	FERC No.	FY 2016			2017		
			Base Fee	FERC Fee	TOTAL	Base Fee	FERC Fee	TOTAL
Puget Sound Energy	Electron	non-FERC	\$1,030.91	♦	\$1,030.91	\$1,030.91	♦	\$1,030.91
	Lower Baker	P-2150	3,118.38	5,543.78	8,662.16	3,118.38	5,543.78	8,662.16
	Snoqualmie Falls	P-2493	1,689.34	3,003.27	4,692.61	1,689.34	3,003.27	4,692.61
	Upper Baker	P-2150	2,984.73	5,306.18	8,290.91	2,984.73	5,306.18	8,290.91
	Sum of all projects		\$8,823.36	\$13,853.23	\$22,676.59	\$8,823.36	\$13,853.23	\$22,676.59
Western Hydro LLC (paid by Mentor Law Group PLLC)	Nooksack Falls	non-FERC	No payment	♦	\$0.00	\$449.93	♦	\$449.93
Rocky Brook Hydro Electric L.P.	Rocky Brook Electric Inc.	P-3873	\$307.52	\$442.24	\$749.76	\$307.52	♦	\$307.52
Seattle, City of	Boundary	P-2144	\$31,341.48	\$55,718.18	\$87,059.66	\$31,341.48	\$55,718.18	\$87,059.66
	Cedar Falls	non-FERC	1,183.09	♦	1,183.09	1,183.09	♦	1,183.09
	Diablo Dam (Skagit)	P-553	5,184.00	9,216.00	14,400.00	5,184.00	9,216.00	14,400.00
	Gorge Dam (Skagit)	P-553	6,199.57	11,021.45	17,221.02	6,199.57	11,021.45	17,221.02
	Newhalem	P-2705	366.19	651.00	1,017.19	366.19	651.00	1,017.19
	Ross Dam (Skagit)	P-553	9,230.32	16,409.45	25,639.77	9,230.32	16,409.45	25,639.77
	South Fork Tolt	P-2959	818.12	1,454.45	2,272.57	818.13	1,454.44	2,272.57
	Sum of all projects		\$54,322.77	\$94,470.53	\$148,793.30	\$54,322.78	\$94,470.52	\$148,793.30
Seefeld Corporation	Smith Creek	P-5982	\$34.36	\$61.09	\$95.45	\$34.36	♦	\$34.36

♦ This project is not assessed waterpower license fees because it does not produce power or because it was issued a FERC license exemption based on low power production.

Licensee	Project Name	FERC No.	FY 2016			2017		
			Base Fee	FERC Fee	TOTAL	Base Fee	FERC Fee	TOTAL
Skookumchuck Dam LLC	Skookumchuck Dam	P-4441	\$202.72	\$328.58	\$531.30	\$202.72	Check	\$202.72
Sheep Creek Hydro, Inc.	Big Sheep Creek	P-5118	\$225.82	\$401.45	\$627.27	\$225.82	♦	\$225.82
Sollos Energy LLC	Burton Creek	P-7577	\$96.55	\$171.63	\$268.18	\$96.54	♦	\$96.54
South Fork Associates, Limited Partnership	Weeks Falls	P-7563	\$404.79	\$719.64	\$1,124.43	\$404.80	\$719.63	\$1,124.43
Southern California Public Power Company	Tieton Hydroelectric Project	P-3701	\$768.21	\$1,365.71	\$2,133.92	\$768.21	\$1,365.71	\$2,133.92
Spokane, City of	Upriver Hydro Plant	P-3074	\$886.91	\$1,576.73	\$2,463.64	\$886.91	\$1,576.73	\$2,463.64
Tacoma, City of	Alder (Nisqually)	P-1862	\$1,841.73	\$3,274.18	\$5,115.91	\$1,841.73	\$3,274.18	\$5,115.91
	Cushman No. 1	P-460	1,755.82	3,121.45	4,877.27	1,755.82	3,121.45	4,877.27
	Cushman No. 2	P-460	3,269.45	5,812.36	9,081.81	3,269.46	5,812.36	9,081.82
	LaGrande Dam (Nisqually)	P-1862	128.93	229.20	358.13	128.93	229.20	358.13
	LaGrande Powerhouse (Nisqually)	P-1862	2,684.56	4,772.55	7457.11	2,134.91	3,795.41	5,930.32
	Mayfield (Cowlitz)	P-2016	5,759.18	10,238.55	15,997.73	5,759.18	10,238.55	15,997.73
	McMillan Reservoir (Hood St)	P-10256	188.14	334.46	522.60	188.14	♦	188.14
	Mossyrock (Cowlitz)	P-2016	10,810.59	19,218.82	30,029.41	10,810.59	19,218.79	30,029.38
	Wynoochee River	P-6842	727.75	1,293.82	2,021.57	727.77	1,293.82	2,021.59
Sum of all projects			\$27,166.15	\$48,295.39	\$75,461.54	\$26,616.53	\$46,983.76	\$73,600.29

♦ This project is not assessed waterpower license fees because it does not produce power or because it was issued a FERC license exemption based on low power production.

Licensee	Project Name	FERC No.	FY 2016			2017		
			Base Fee	FERC Fee	TOTAL	Base Fee	FERC Fee	TOTAL
Trinity Conservancy, Inc.	James Creek	non-FERC	\$12.27	♦	\$12.27	\$12.27	♦	\$12.27
	Phelps Creek	P-719	63.92	113.64	177.56	63.92	113.64	177.56
	Sum of all projects		\$76.19	\$113.64	\$189.83	\$76.19	\$113.64	\$189.83
Twin Falls Hydro Associates	S.F. Snoqualmie River (Twin Falls)	P-4885	\$977.52	\$1,737.82	\$2,715.34	No payment	No payment	\$0.00
Walla Walla, City of	Twin Reservoirs	P-10376	\$276.87	\$492.22	\$769.09	\$276.87	♦	\$276.87
Bear Creek Hydro Association LLC (Paid by McMasterCorp Inc.)	Bear Creek Hydro	non-FERC	\$191.93	♦	\$191.93	No payment	♦	\$0.00
Yakima-Tieton Irrigation District	Cowiche	P-7337	\$123.30	\$219.20	\$342.50	\$123.30	\$219.20	\$342.50
	Orchard Unit 1	P-7338	97.60	173.53	271.13	97.60	173.53	271.13
	Orchard Unit 2	P-7338	97.99	174.22	272.21	98.00	174.21	272.21
	Sum of all projects		\$318.89	\$566.95	\$885.84	\$318.90	\$566.94	\$885.84
**Totals			\$294,041.02	\$513,489.86	\$807,530.88	\$291,634.28	\$504,839.49	\$796,473.77

** The total fees collected in 2015-2017 biennium were \$1,604,005 which is the sum of \$585,675 in base fees and \$1,018,329 in FERC fees.

♦ This project is not assessed waterpower license fees because it does not produce power or because it is exempt from FERC licensing based on minimal power production.

Appendix B. State agency workload by project – Fiscal Year 2017

The following table provides a hydropower project-specific expenditure list in accordance with RCW 90.16.05(1)(c)(i)(A). The table includes time and program costs by Ecology staff and WDFW staff, and a sum of these costs per project for FY 2017.

RCW 90.16.05(1)(c)(i)(A) also requires this information to further divide staff time and program costs by identifying expenditures derived from the following:

- **Agency staff work during the time period immediately prior to license issuance.**
This is the state agency work associated with writing a final §401 water quality certification for the FERC license just prior to its issuance. The following table describes this as *licensing* or *relicensing*.
- **Agency staff work necessary for issuance or reissuance of a license.**
This is the state agency work that is performed with the hydropower owner to plan and prepare all data and information necessary for Ecology to draft a §401 water quality certification. The following table identifies this as *pre-licensing* and can begin as early as a decade prior to the FERC license issuance or reissuance.
- **Agency staff work associated with license implementation.**
This is the state agency work that is performed with the hydropower owner to implement the conditions in the §401 water quality certification or other relevant articles in the FERC license that address water quality, fisheries, or habitat concerns. The following table identifies this as *implementation*.

During the 2015-2017 biennium each of the hydropower projects were within only one of these three licensing phases. Thus, the expenditures for each project are identified as deriving from *licensing* or *relicensing*; *pre-licensing*; or *implementation*, under the *phase of licensing process* column.

In general, the work performed in this biennium for a project included one or more of the following types of activities:

- Development of §401 WQ certifications for re-licensing and pre-licensing of several projects.
- Participation in regular workgroup meetings to provide expertise or clarity on regulatory requirements.
- Review and approval of reports, including water quality management plans, aquatic resource plans.
- Consultation on water quality management and attainment of requirements in FERC license, settlement agreements and §401 WQ certifications.
- Consultation on aquatic and terrestrial habitat requirements in FERC license, settlement agreements and §401 WQ certifications.
- Response to public and stakeholder inquiries and public disclosure requests for information.
- Attendance to public meetings to represent state agency and respond to questions about state role in the licensing process.
- Consultation with the State Attorney General Office on active and potential litigation.

- Attendance to hydropower project site visits to better understand each project and site-specific conditions to meet regulatory requirements.
- Environmental engineer review and consultation of water quality models and results.

State agency workload by project – Fiscal Year 2017

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	ECOLOGY		WDFW		State Program Total Costs
				Staff time (hrs)	Program Costs	Staff time (hrs)	Program Costs	
AVISTA CORPORATION	P-2545	SPOKANE RIVER (4 projects) Long Lake Monroe Street Nine Mile Upper Falls	Implementation	142	\$12,662	138	\$8,970	\$21,632
BLACK CANYON HYDRO	P-14110	BLACK CANYON HYDROELECTIC	Pre-licensing	24	\$2,140	50	\$3,250	\$5,390
BLACK CREEK HYDRO INC.	P-6221	BLACK CREEK	Implementation	0	\$0	0	\$0	\$0
CENTRALIA CITY OF	P-10703	YELM HYDRO PLANT	Implementation	44	\$3,923	5.5	\$358	\$4,281
COLUMBIA BASIN HYDROPOWER	P-14329	BANKS LAKE PUMPED STORAGE	Pre-licensing	51	\$4,548	169.5	\$11,018	\$15,566
COLUMBIA BASIN HYDROPOWER	P-3842	ELTOPIA BRANCH CANAL	Implementation	0	\$0	0	\$0	\$0
	P-2849	MAIN CANAL HEADWORKS	Implementation	0	\$0	0	\$0	\$0
	P-3843	POTHOLES EAST CANAL	Implementation	0	\$0	0	\$0	\$0
	P-2926	RUSSEL D SMITH PEC 22.7	Implementation	0	\$0	0	\$0	\$0
	P-3295	SUMMER FALLS	Implementation	0	\$0	0	\$0	\$0
ENERGY NORTHWEST	P-2244	PACKWOOD LAKE	Implementation	0	\$0	8	\$520	\$520
HYDRO TECHNOLOGY SYSTEM, INC.	P-2544	MEYERS FALLS	Implementation	0	\$0	0	\$0	\$0
KOMA KULSHAN ASSOCIATES	P-3239	KOMA KULSHAN	Implementation	0	\$0	0	\$0	\$0
MCNARY HYDRO	P-10204	MCNARY DAM FISH ATTRACTION	Implementation	0	\$0	14	\$910	\$910
PACIFICORP	P-935	MERWIN	Implementation	25	\$1,624	0	\$0	\$1,624
	P-2111	SWIFT NO. 1	Implementation	43	\$2,794	474.5	\$30,843	\$33,637
	P-2071	YALE	Implementation	25	\$1,624	0	\$0	\$1,624
	P-2213	SWIFT NO. 2 (owned by Cowlitz PUD)	Implementation	3	\$195	0	\$0	\$195

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	ECOLOGY		WDFW		State Program Total Costs
				Staff time (hrs)	Program Costs	Staff time (hrs)	Program Costs	
PICKERING, FRED	P-9044	BIGG'S CREEK	Implementation	0	\$0	0	\$0	\$0
PORT ANGELES, CITY OF	P-6461	MORSE CREEK	Implementation	8	\$713	0	\$0	\$713
PUD NO 1 OF CHELAN COUNTY	P-637	LAKE CHELAN	Implementation	162	\$14,445	697.5	\$45,338	\$59,783
	P-943	ROCK ISLAND	License reissuance	65	\$5,796	0	\$0	\$5,796
	P-2145	ROCKY REACH	Implementation	77	\$6,866	1334.5	\$86,678	\$93,544
PUD NO 1 OF DOUGLAS COUNTY	P-2149	WELLS	Implementation	120	\$10,700	953	\$62,898	\$73,598
PUD NO 1 OF LEWIS COUNTY	P-2833	COWLITZ FALLS	Implementation	117	\$10,433	562	\$36,530	\$46,963
PUD NO 1 OF OKANOGAN COUNTY	P-12569	ENLOE PROJECT	Implementation	46	\$4,102	275	\$17,875	\$21,977
PUD NO 1 OF PEND OREILLE COUNTY	P-2042	BOX CANYON	Implementation	110	\$9,808	305	\$19,825	\$29,633
	P-2225	SULLIVAN LAKE	License surrender	12	\$1,070	0	\$0	\$1,070
PUD NO 1 OF SNOHOMISH COUNTY	P-13948	CALLIGAN CREEK	Pre-licensing	7	\$624	0	\$0	\$624
	P-13994	HANCOCK CREEK	Implementation	27	\$2,408	0	\$0	\$2,408
	P-2157	HENRY M JACKSON	Implementation	22	\$1,962	84.2	\$5,473	\$7,435
	P-14295	SUNSET FALLS	Pre-licensing	477	\$42,533	1550	\$100,750	\$143,283
	P-10359	YOUNGS CREEK	Implementation	2	\$178	5	\$325	\$503
PUD NO 2 OF GRANT COUNTY	P-2114	COLUMBIA RIVER (2 projects) Priest Rapids Wanapum	Implementation	208	\$18,547	1556	\$101,140	\$119,687
	P-2840	POTHOLES EAST CANAL HEADWORKS	Implementation	0	\$0	0	\$0	\$0
	P-2937	QUINCY CHUTE	Implementation	0	\$0	0	\$0	\$0

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	ECOLOGY		WDFW		State Program Total Costs
				Staff time (hrs)	Program Costs	Staff time (hrs)	Program Costs	
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	128	\$11,413	374.5	\$24,343	\$35,756
	P-10888	KOMA KULSHAN T. L.	Implementation	0	\$0	0	\$0	\$0
	P-2493	SNOQUALMIE FALLS	Implementation	14	\$1,248	14.5	\$943	\$2,191
SEATTLE, CITY OF	P-2144	BOUNDARY	Implementation	137	\$12,216	745	\$48,425	\$60,641
	P-2705	NEWHALEM CREEK	License reissuance	0	\$0	0	\$0	\$0
	P-553	SKAGIT RIVER (3 projects) Ross Gorge Diablo	License reissuance	0	\$0	280.5	\$18,233	\$18,233
	P-2959	TOLT RIVER - SOUTH FORK	Implementation	0	\$0	0	\$0	\$0
SHELL ENERGY NORTH AMERICA L.P.	P-14795	BATTERY HILL PUMPED STORAGE	Pre-licensing	6	\$535	284	\$18,460	\$18,995
SOUTH FORKS ASSOCIATES L.P.	P-7563	WEEKS FALLS	Implementation	0	\$0	0	\$0	\$0
SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY	P-3701	TIETON DAM	Implementation	33	\$2,943	46	\$2,990	\$5,933
SPOKANE, CITY OF	P-3074	UPRIVER	Implementation	0	\$0	0	\$0	\$0

Operator	FERC Project No.	Project Name(s)	Phase of licensing process	ECOLOGY		WDFW		State Program Total Costs
				Staff time (hrs)	Program Costs	Staff time (hrs)	Program Costs	
TACOMA, CITY OF	P-6842	WYNOOCHEE DAM	Implementation	150	\$13,375	97.5	\$6,338	\$19,713
	P-2016	COWLITZ RIVER (2 projects) Mossyrock Mayfield	Implementation	164	\$14,624	434	\$28,210	\$42,834
	P-460	LAKE CUSHMAN (2 projects) Cushman No. 1 Cushman No. 2	Implementation	192	\$17,120	606.5	\$39,423	\$56,543
	P-1862	NISQUALLY RIVER (3 projects) Alder Dam LaGrande Dam LaGrande	Implementation	32	\$2,853	425	\$27,625	\$30,478
TRINITY CONSERVANCY INC	P-719	TRINITY	Implementation	14	\$1,248	25	\$1,625	\$2,873
TWIN FALLS HYDRO ASSOCIATES LP	P-4885	TWIN FALLS	Implementation	9	\$803	0	\$0	\$803
YAKIMA-TIETON IRRIGATION DISTRICT	P-7337	COWICHE	Implementation	0	\$0	0	\$0	\$0
	P-7338	ORCHARD AVENUE	Implementation	0	\$0	0	\$0	\$0
TOTALS				2696	\$238,073	11,514	\$749,316	\$987,389

Total workload and expenditures for relicensing <i>(includes pre-licensing and relicensing of projects)</i>	630	\$56,176	2334	\$151,711	\$207,887 <i>(21%)</i>
Total workload and expenditures for license implementation <i>(includes work associated with one license surrender project)</i>	2066	\$181,897	9180	\$597,605	\$779,502 <i>(79%)</i>

Appendix C. 2018 Annual Hydropower Project Work Plans



2018 ANNUAL HYDROPOWER PROJECT WORK PLANS

Washington Department of Fish & Wildlife
Washington Department of Ecology

Purpose

RCW 90.16.050(3)(a), requires that both Department of Ecology and Department of Fish and Wildlife produce an annual work plan that addresses the work anticipated to be completed by each department associated with federal hydropower licensing and license implementation. This document is developed annually to meet this requirement.

The following work plans are provided for all hydropower projects that are assessed water power license fees in accordance with RCW 90.16.050(1)(b). Also included are work plans for some projects currently in planning and development. These projects will not be assessed fees until the project commences.

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Avista Corporation

LONG LAKE, P-2545

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Implementation of FERC license and 401 Certification.
- Address any ongoing water quality issues such as amending or considering variances to monitoring or reporting requirements.
- Ecology involvement in discussions to accommodate changes to the project and scheduled construction activities.
- Ecology involvement along with other regulatory agencies in habitat mitigation projects on reservoir and tributaries of the Spokane River, as appropriate.

COMPLIANCE & LICENSE IMPLEMENTATION:

- License implementation work.

REVIEW, COMMENT, APPROVALS:

- Review and comment on sediment management plans, mitigation plans, stormwater control plans, water quality protection plans, dissolved oxygen (DO), total dissolved gas (TDG), and temperature water quality attainment plans/annual reports, aquatic weed management plans/annual reports, JARPs, and flow/drawdown variance requests.
- Ecology also will review and comment on habitat assessments for rainbow trout and carp removal efforts in Lake Spokane.
- Begin discussions related to compliance with numerical and narrative components of water quality standards, specific to DO, TDG and temperature (ex. Site Specific Criteria).

ACTIVITIES:

- Field or site visits to observe construction impacts, inspect maintenance or mitigation project sites.
- Meetings with Avista personnel, tribes or other agencies to discuss changes proposed for monitoring, construction and maintenance projects, and mitigation measures, as appropriate.

Washington Department of Fish & Wildlife

No workload currently anticipated for 2018.

MONROE STREET, P-2545

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Implementation of FERC license and 401 Certification.
- Address any ongoing water quality issues such as amending or considering variances to monitoring or reporting requirements.
- Ecology involvement in discussions to accommodate changes to the project and scheduled construction/maintenance activities.

Ecology involvement along with other regulatory agencies in habitat mitigation projects on reservoir and tributaries of the Spokane River, as appropriate.

COMPLIANCE & LICENSE IMPLEMENTATION:

- License implementation work.

REVIEW, COMMENT, APPROVALS:

- Review and comment on rock relocation and removal plans, stormwater control plans, water quality protection plans, and flow variance requests.

ACTIVITIES:

- Field or site visits to observe construction impacts, inspect maintenance or mitigation project sites.
- Meetings with Avista personnel, tribes or other agencies to discuss changes proposed for operations or monitoring.

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Preparation for and attendance of meetings.

COMPLIANCE & LICENSE IMPLEMENTATION:

Provide technical assistance.

REVIEW, COMMENT, APPROVALS:

Annual reports.

ACTIVITIES:

Site visit.

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Implementation of FERC license and 401 Certification.
- Address any ongoing water quality issues such as amending or considering variances to monitoring or reporting requirements.
- Ecology involvement in discussions to accommodate changes to the project and scheduled construction/maintenance activities.
- Ecology involvement along with other regulatory agencies in habitat mitigation projects on reservoir and tributaries of the Spokane River, as appropriate.

COMPLIANCE & LICENSE IMPLEMENTATION:

- License Implementation

REVIEW, COMMENT, APPROVALS:

- Review and comment on mitigation plans, stormwater control plans, water quality protection plans, JARPAs, and flow/drawdown variance requests.

ACTIVITIES:

- Field or site visits to observe construction impacts, inspect maintenance or mitigation project sites.

meetings with Avista personnel, tribes or other agencies to discuss changes proposed for operations or monitoring.

Washington Department of Fish & Wildlife

No workload currently anticipated for 2018.

NINE MILE DAM, P-2545

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Implementation of FERC license and 401 Certification.
- Address any ongoing water quality issues such as amending or considering variances to monitoring or reporting requirements.
- Ecology involvement in discussions to accommodate changes to the project and scheduled construction activities.
- Ecology involvement along with other regulatory agencies in habitat mitigation projects on reservoir and tributaries of the Spokane River, as appropriate.

COMPLIANCE & LICENSE IMPLEMENTATION:

- License implementation work.

REVIEW, COMMENT, APPROVALS:

- Review and comment on sediment management plans, mitigation plans, stormwater control plans, water quality protection plans, aquatic weed management plans/annual reports, JARPAs, and flow/drawdown variance requests.

ACTIVITIES:

- Field or site visits to observe construction impacts, inspect maintenance or mitigation project sites.
- Meetings with Avista personnel, tribes or other agencies to discuss changes proposed for operations or monitoring.

Washington Department of Fish & Wildlife

No workload currently anticipated for 2018.

Bellingham, City of

MIRROR LAKE, P-7477

No workload currently anticipated for 2018.

Black Creek Hydro, Inc.

BLACK CREEK-P-6221

No workload currently anticipated for 2018.

Burton Creek Hydro

BURTON CREEK, P-7577

No workload currently anticipated for 2018.

B.G.I. Tooling Co.

NORTHERN LIGHT

No workload currently anticipated for 2018.

Cascade Clean Energy

SYGITOWICZ CREEK, P-5069

No workload currently anticipated for 2018.

Cascade Water Alliance/Puget Sound Energy

WHITE RIVER, P-12685

No workload currently anticipated for 2018.

Centralia, City of

YELM HYDRO PLANT, P-10703

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Participation is through the Nisqually Project.

COMPLIANCE & LICENSE IMPLEMENTATION:

Provide technical support.

REVIEW, COMMENT, APPROVALS:

Assist with fish screens.

ACTIVITIES:

Washington Department of Ecology

COMPLIANCE & LICENSE IMPLEMENTATION: City of Centralia City Light is developing a Water Quality Monitoring Plan

SUMMER/FALL WEEKLY MTGS-Low flow/warm temperature in conjunction with P-1862 Nisqually River Project.

REVIEW AND COMMENT:

- WQ Monitoring Plan (including monitoring site location approval)
- First year data within a WQ Monitoring Report

ACTIVITIES (require review and approval of WQ IWWPP or SWPPP):

- Finish penstock painting and BMP maintenance
- Penstock cleaning
- Fish collection platform adjacent to Barrier dam
- Barrier dam dredging
- SITE VISITS: 2-4/yr

Chelan County Public Utility District No. 1

CHELAN FALLS, P-637

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Coordinate communications with WDFW and Settlement Agreement Implementation Kokanee, Weslope Cutthroat and Rainbow Trout will likely dominate the discussions in the Lake Chelan Fishery Forum. Salmonid survival, Riparian Enhancement will likely dominate discussions in the Chelan River Fishery Forum. Wildlife conservation easements and wildlife enhancements will likely dominate the discussions in the Lake Chelan Wildlife Forum

COMPLIANCE & LICENSE IMPLEMENTATION:

Continued implementation of the FERC license-Fish, wildlife, and recreation. FERC license Article implementation and corresponding forum meetings to provide WDFW technical expertise and consultation. Continued coordination on the Lake Chelan Wildlife Plan

REVIEW, COMMENT, APPROVALS:

All Lake Chelan Fish Forum and Chelan River Fish Forum annual reports, Lake Chelan Wildlife Plan

ACTIVITIES:

Chelan River Operations Monitoring, Lake Chelan tributary M&E, Chelan River Riparian Management Recommendations, entrainment discussions, ramping rate evaluation and Annual Meetings and Report Review

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification - As needed amendment and variance for monitoring and reporting requirements to accommodate changes to the project and upcoming construction activities.

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation

REVIEW, COMMENT, APPROVALS:

- Operations Compliance Monitoring
- Annual Flow/Temperature Report

- Chelan River Water Temperature Modeling Quality Assurance Project Plan Report (Ecology approval)
- Macroinvertebrate/Benthic Monitoring
- Water Quality Protection Plan (as needed)

ACTIVITIES:

- Continue temperature compliance discussions.
- Other activities as needed.

ROCKY REACH, P-2145

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

As in previous years WDFW anticipate attending the monthly Rocky Reach Fish Forum Meetings in order to communicate and address, Agency Policy Issues, Program Coordination, and annual report review.

COMPLIANCE & LICENSE IMPLEMENTATION:

Meetings, Agency Policy Issues, Program Coordination, Caucus, Annual Report Review.

REVIEW, COMMENT, APPROVALS:

All Rocky Reach Fish Forum and Habitat Conservation Plan annual reports, Recreation Management Plan Reports, Rocky Reach Wildlife Management Plan.

ACTIVITIES:

Continue to investigate establishing a Pacific Lamprey No Net Impact Fund.

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification - As needed amendment and variance for monitoring and reporting requirements to accommodate changes to the project and upcoming construction activities.

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation

REVIEW, COMMENT, APPROVALS:

- Aquatic Invasive Species (AIS) Report
- Annual Water Quality Monitoring Report
- Operations Plan
- Gas Abatement Plan
- Total Dissolved Gas Annual Report
- Water Quality Projection Plan (as needed)

ACTIVITIES:

Technical assistance as needed

ROCK ISLAND, P-943

No workload currently anticipated for 2018.

Columbia Basin Hydropower

ELTOPIA BRANCH, P-3842

No workload currently anticipated for 2018.

MAIN CANAL HEADWORKS, P-2849

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Preparation for and attendance of meetings.

WDFW will continue to coordinate the Settlement Agreement Implementation plan.

COMPLIANCE & LICENSE IMPLEMENTATION:

Settlement Agreement Implementation

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- No Ecology activity in recent years, Ecology involvement as needed.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

P.E.C. 66.0, P-3843

No workload currently anticipated for 2018.

RUSSEL D. SMITH, P-2926

No workload currently anticipated for 2018.

SUMMER FALLS, 3295

No workload currently anticipated for 2018.

Cowlitz County Public Utility District No. 1

SWIFT NO. 2, P-2213

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Participate in: Meetings, Field Reviews NSCF, Program Coordination, Management Plans, Policy Issues.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Washington Department of Ecology

COMPLIANCE & LICENSE IMPLEMENTATION: None known at this time.

REVIEW AND COMMENT:

- Reports: Lewis River 2017 Annual Summary of License Implementation and Compliance
- Plans: Cowlitz PUD Wildlife Habitat Management Plan: 2018 (Year 10) Annual Plan

SITE VISIT: As needed.

Douglas County Public Utility District No. 1

WELLS DAM, P-2149

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

The WDFW will continue to actively participate in the Fish & Aquatics Work Group and Wildlife Plan implementation.

COMPLIANCE & LICENSE IMPLEMENTATION:

Continued implementation of the Aquatic Settlement Agreement and Habitat Conservation Plan.
Continued coordination on the Wells Wildlife Plan Implementation.

REVIEW, COMMENT, APPROVALS:

Aquatic Settlement Work Group annual reports, 401 water quality certification reports, Wildlife Plan Implementation Reports.

ACTIVITIES:

- Aquatic Settlement Work Group Annual report and Management Plan Report
 - 401 Water Quality Certification reports
 - • Total Dissolved Gas Abatement Plan Annual Report (2017)
 - • Total Dissolved Gas Abatement Plan (2018)
 - • Water Temperature Annual Report
 - White Sturgeon Broodstock and Breeding Plan per FERC requirement
 - 3-Year White Sturgeon M&E Report
 - Pacific Lamprey Literature Review
-

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification - As needed amendment and variance for monitoring and reporting requirements to accommodate changes to the project and upcoming construction activities.

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation

REVIEW, COMMENT, APPROVALS:

- Total Dissolved Gas Abatement Plan Annual Report (2017)
- Total Dissolved Gas Abatement Plan (2018)
- Aquatic Settlement Agreement Action Plan
- Aquatic Settlement Agreement Annual Report (2017)
- Aquatic Nuisance Species Management Plan Annual Report
- Water Quality Management Plan Annual Report
- Water Temperature Annual Report

ACTIVITIES:

Technical assistance as needed

Energy Northwest (WPPSS)

PACKWOOD LAKE, P-2244

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:
Preparation for meetings and attendance.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:
Meetings & Annual Report Review.

ACTIVITIES:

Washington Department of Ecology

COMPLIANCE & LICENSE IMPLEMENTATION: Become familiar with the Water Quality Certification and FERC License; determine if there are challenges for water quality.

COMMENTS:

Project is operating under FERC issued extension to the original license; automatically renewing until new license is issued.
FERC awaiting biological opinion from National Marine Fisheries Services (NMFS), in order to issue new operating license.

ACTIVITIES:

- SITE VISIT: initial visit to the site. Full Project access limited to non-winter months.

Grant County Public Utility District No. 2

PRIEST RAPIDS - WANAPUM, P-2114

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

White sturgeon and pacific lamprey will likely dominate the discussions in the Priest Rapids Fish Forum. Salmonid survival and No Net impact fund discussion will likely dominate discussions in the Priest Rapids Coordinating Committee.

COMPLIANCE & LICENSE IMPLEMENTATION:

continued implementation of non ESA listed fish management plans/PRFF and act as the backup representative for WDFW on the listed fish species management plans/PRCC.

REVIEW, COMMENT, APPROVALS:

All PRFF and PRCC annual reports, Recreation Management Plan Reports, Terrestrial Management Plan Reports.

ACTIVITIES:

Conduct at least one bald and golden eagle perch and roost survey, work towards utilizing fire suppression funds, and establishing a Pacific Lamprey No Net Impact Fund.

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification - As needed amendment and variance for monitoring and reporting requirements to accommodate changes to the project and upcoming construction activities.

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation

REVIEW, COMMENT, APPROVALS:

- Total Dissolved Gas Abatement Plan
- Annual Fish-Spill Season and Total Dissolved Gas Monitoring Report
- 10-year TDG Compliance Report
- Aquatic Invasive Species Control & Prevention Plan
- Annual Water Quality Monitoring Report

ACTIVITIES: Technical assistance as needed

P.E.C. HEADWORKS, P-2840

No workload currently anticipated for 2018.

QUINCY CHUTE, P-2937

No workload currently anticipated for 2018.

Hydro Technology Systems Inc.

MEYERS FALLS P-2544

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Preparation for and attendance of meetings.

COMPLIANCE & LICENSE IMPLEMENTATION:

Technical assistance Aquatic and Terrestrial management plan.

REVIEW, COMMENT, APPROVALS:

Review Annual Monitoring Report.

ACTIVITIES:

Site visit

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- No Ecology activity in recent years, Ecology involvement as needed.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Koma Kulshan Associates

KOMA KULSHAN, P-3239

No workload currently anticipated for 2018.

Lewis County Public Utility District No. 1

COWLITZ FALLS, P-2149

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Update FERC plans as needed.
- Provide technical assistance to Ecology.
- Monitor snags, perch poles and bald eagle mitigation requirements.
- Monitor kayak take-out facility and development of alternative site. Evaluate impact to Wildlife Mitigation Lands.
- Evaluate when temporary modification of minimum flow is necessary for reservoir refill, avoiding spill, and drought conditions, determine flow below minimum flow. Riffe Lake elevation threshold will be triggered until further notice.
- Make recommendations to operations pursuant to Pacific Northwest Electric Power Planning and Conservation Act.
- Participate on annual field tour, make management recommendations for Wildlife Mitigation Lands to implement mitigation Plan, additional tours to monitor progress as needed.
- Monitor trout stocking policy needs incorporating ESA, review all reports associated with the BiOp reasonable and prudent measures, attend Cowlitz River Science Symposium.
- Coordination with WDFW Programs, Ecology CWA 401 Certification, NMFS, USFWS, Tribe, LCPUD (and Cowlitz River FTC as needed).

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

Annual Reports

- Maintenance Drawdown Sediment Monitoring and Fish Rescue.
- Reports associated with the BiOp reasonable and prudent measures.
- Kayak Takeout FERC Order reporting.
- Report of Monitoring during temporary modification of minimum flow.
- Annual field tour in lieu of reporting.
- Plans.
- Buffer Zone Management Plan (Year) 5 year interval.

ACTIVITIES:

Washington Department of Ecology**COMPLIANCE & LICENSE IMPLEMENTATION:**

- 1984 WQC Condition 5.: Sediment management plan needed to understand how project can best manage sediment to prevent or minimize exceedances of WQ Standards (turbidity, etc?)
- 2015 reservoir drawdown moved +2 million cubic yards of sediment into three mile stretch of Cowlitz River while Riffe Lake (Cowlitz River Project P-2016) was drawn down
- Dam compliance schedule (Agreed Order) for monitoring TDG (new opening in dam) and turbidity concerns with drawdowns of reservoir and activities.

REVIEW AND COMMENT: Drawdowns 2015 and 2016 Turbidity Monitoring Reports; TDG monitoring plan for new discharge location through dam.

ACTIVITIES (require review and approval of WQ IWWPP or SWPPP):

- 2016 Reservoir drawdown – turbidity monitoring
- Dredging at Day Use Park
- Review Tacoma Power's LWD removal plan (in coordination w/Tacoma Power fish collector)
- SITE VISITS: (3-6 visits) drawdown of reservoir, new fish collector through the Cowlitz Falls Dam, compliance with WQC

McNary Hydro

MCNARY NORTHSORE, P-10204

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Attend and actively participate in McNary Fisheries Irrevocable Trust Fund meetings, which are held on a quarterly basis and as needed.

COMPLIANCE & LICENSE IMPLEMENTATION:

Irrevocable Trust Fund is a license settlement agreement.

REVIEW, COMMENT, APPROVALS:

Investigate Grant applications, in addition to review, comment, and vote.

ACTIVITIES:

Washington Department of Ecology

No workload currently anticipated for 2018.

Northern Wasco County Public Utility District

THE DALLES DAM, P-7076

No workload currently anticipated for 2018.

Okanogan Public Utility District

ENLOE PROJECT

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Continue to track electrification or FERC license abandonment pending extension of time request to implement FERC license from US Congress.

COMPLIANCE & LICENSE IMPLEMENTATION:

In the event of electrification implementation of license articles and coordination with Ecology on 401 compliance.

REVIEW, COMMENT, APPROVALS:

Participate in terrestrial, recreation, and aquatic technical workgroup meetings.

ACTIVITIES:

Washington Department of Ecology

No workload currently anticipated for 2018.

PacifiCorp Company

MERWIN, P-935

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Attend Coordinating Committee and Subcommittee meetings, advise PacifiCorp and CCPUD. TCC, ACC, LRC, FCC
- Report review and comment.
- Monitor implementation of plans WHMP, HSP, M&E, AOP,
- Monitor progress for achieving Reintroduction Outcome Goals
- Assist NMFS and USFWS with In Lieu decision as necessary
- Monitor operations for compliance
- Monitor wood collected from reservoirs for aquatic projects; provide funding recommendations
- Monitor gravel amounts to determine augmentation need below Merwin
- Recommendations for steps to minimize predation in Merwin if requested
- Review Aquatic Fund proposals and provide funding recommendations based on protocols, update protocols as needed, monitor available funding
- Depending on In Lieu decision, Develop, review and comment on strategic plan to solicit proposals; evaluate project proposals; review In Lieu fund report, monitor available funding
- advise on the production of rainbow trout and release in Swift Reservoir, and kokanee released in Lake Merwin
- Recommend lands for wildlife mitigation acquisition; monitor available funds; recommend expenditure of funds, field tours
- Monitor and recommend implementation of the recreation measures
- Coordinate with WDFW Programs, Ecology CWA 401 Certification, NMFS, USFWS, LCFRB, USFS, Tribes, PacifiCorp and CCPUD

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

- Annual Reports
- Lewis River Hydroelectric Projects (year) Annual Report Annual Summary of License Implementation and Compliance: Aquatic and Terrestrial Resources
- Lewis River Bull Trout (*Salvelinus confluentus*) Annual Operations Report North Fork Lewis River – (year)
- Hatchery and Supplementation Program (year) Annual Report
- Lewis River Fish Passage Program (year) Annual Report
- Yale Reservoir Kokanee (*Oncorhynchus nerka*) Escapement Report (year)
- Wildlife Habitat Management Plan Annual Progress Report for Operation Phase (year)
- (Year) Road Maintenance & Abandonment Work Completed for Merwin, Yale & Swift

- (Year) Annual Report Lewis River Aquatic Fund Projects
- New Information Regarding Fish Transport into Lake Merwin and Yale Lake June 24, 2016
- Annual Plans
- Lewis River Bull Trout (*Salvelinus confluentus*) Annual Operations Plan North Fork Lewis River – (year)
- Lewis River Wildlife Habitat Management Plan (year) Annual Plan
- Wildlife Habitat Management Plan (year) (Year #) Annual Plan For The Swift No. 2 Wildlife Management Area
- Rolling 5-Year Recreation Action Plan Calendar Year (year)

ACTIVITIES:

Washington Department of Ecology

COMPLIANCE & LICENSE IMPLEMENTATION:

- Ensure TDG and temperature exceedances are monitored and are in alignment with the Attainment Plan
- Collect data: Temperature, DO, TDG (tailrace only), and turbidity (for construction projects)

MONTHLY:

- ACC meetings (2-3/year)
- Summer/fall warm water conditions = as needed conference calls RE: Instream flows

REVIEW AND COMMENT:

- Reports: Annual Habitat and Monitoring and Evaluation Reports
- Attainment Plan compliance (TDG and temperature)
- Notification on TDG exceedances during spill events

ACTIVITIES (require review and approval of WQ IWWPP or SWPPP):

- Woodland Release Pond; CSWGP and IWWPP
- Cedar Creek boat ramp IWWPP
- ADA fishing access IWWPP
- FERC Environmental Inspection – attendance
- SITE VISIT (2/yr)

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- See P-935 Merwin.
- Licenses are implemented as one.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Washington Department of Ecology

COMPLIANCE & LICENSE IMPLEMENTATION:

- Ensure TDG exceedances are monitored and are in alignment with the Attainment Plan
- Collect data: Temperature, DO, TDG (tailrace and turbine adjacent) , and turbidity (construction activities)

MONTHLY:

- ACC meetings (2-3/year)
- Summer/fall warm water conditions = weekly conference calls RE: Instream flows

REVIEW AND COMMENT:

- Reports: Annual Habitat and Monitoring and Evaluation Reports
- Gravel Augmentation cessation
- TDG Attainment Plan – reports of exceedances

ACTIVITIES (require review and approval of WQ IWWPP or SWPPP):

- Clear Creek, Crab Creek, and Muddy River acclimation pond removal; one CSWGP and IWWPP for all three removals
- LWD removal discussions of a IWWPP/SWPPP
- SITE VISIT: Crab Creek, Muddy River, Clear Creek Acclimation Ponds

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- See P-935 Merwin.
- Licenses are implemented as one.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Washington Department of Ecology

COMPLIANCE & LICENSE IMPLEMENTATION:

- Ensure WQ parameter exceedances are monitored and are in alignment with the Attainment Plan
- Collect data: Temperature, DO, TDG (tailrace and turbine adjacent), and turbidity (construction activities)

MONTHLY:

- ACC meetings (2-3/year)
- Summer/fall - warm water conditions = weekly conference calls RE: Instream flows

REVIEW AND COMMENT:

- Reports: Annual Habitat and Monitoring and Evaluation Reports
- TDG Attainment Plan – reports of exceedances

ACTIVITIES (require review and approval of WQ IWWPP or SWPPP):

- Saddle Dam day use park; CSWGP and IWWPP
- Piling Repairs
- Rock Block Repair – monitor as needed
- SITE VISITS: 2-4/year

Pend Oreille Public Utility District No. 1

BOX CANYON, P-2042

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Technical Committee: fish, erosion control wildlife.

COMPLIANCE & LICENSE IMPLEMENTATION:

Meetings, Agency Policy Issues, Program Coordination, Caucus, Reports.

REVIEW, COMMENT, APPROVALS:

Annual plan review.

ACTIVITIES:

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Implementation of FERC license and 401 Certification.
- Address any ongoing water quality issues such as amending or considering variances to monitoring or reporting requirements.
- Ecology will be involved in discussions to accommodate changes to the project and scheduled construction activities.
- Ecology will be involved along with other regulatory agencies in habitat mitigation projects on reservoir and tributaries of Pend Oreille River.
- Ecology will be involved in the fish ladder construction project.

COMPLIANCE & LICENSE IMPLEMENTATION:

- License Implementation work.

REVIEW, COMMENT, APPROVALS:

- Review and comment on any reports or plans on the upstream fish passage project.

- Review and comment on Annual TDG Report, Terrestrial Resources Compliance Report, aquatic plant management plan, shoreline management plan, water quality monitoring data reports, terrestrial resources reports/plans, tributary habitat restoration plans/reports, landowner stream bank restoration project fund requests, annual erosion control report, erosion control prevention & remediation plans, fish passage reports, drawdown and discharge reports, operational compliance reports, Weed & Treatment Report, any QAPP changes, DO monitoring reports, and JARPs for projects related to Box Canyon Dam.

ACTIVITIES:

- Consultations with Washington Department of Fish and Wildlife , USFWS, National Forest Service and the Kalispell Tribe.
- Attend Fish Sub Committee meetings.
- Attend Integrated Aquatic Plant Management meetings and workshops.
- Attend Technical Committee workgroup meetings.
- Attend Wildlife Sub Committee meetings.
- Consultations with Washington Department of Fish and Wildlife , USFWS, National Forest Service and the Kalispell Tribe
- Site visits to Box Canyon, Pend Oreille River and tributaries for technical assistance and report verification

Port Angeles, City of

MORSE CREEK, P-6461

Washington Department of Ecology

COMPLIANCE & LICENSE IMPLEMENTATION: Not operating hydroelectric turbines at this time.

REVIEW, COMMENT, APPROVALS:

Potential relinquish FERC License and decommission turbine and pump house.

SITE VISIT: As needed.

Washington Department of Fish & Wildlife

No workload currently anticipated for 2018.

Puget Sound Energy

BAKER, P-2150

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification - As needed amendment and variance for monitoring and reporting requirements to accommodate changes to the project and upcoming construction activities.

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation

REVIEW, COMMENT, APPROVALS:

- Review and comment on water quality protection plan
- Review and comment on annual water quality report
- Review and comment on total dissolved gases monitoring results after installation of new runners
- Review and comments on modifications to WQ monitoring requests – as needed
- Review and comments on WQ deviation/violation – as needed
- Development and review of Administrative orders – as needed

ACTIVITIES:

- Multiple ARG and BRCC meetings.
- Ad hoc meetings and consultation to address project-related issues as they come up
- Response to public information request- as needed

Washington Department of Fish & Wildlife

No workload currently anticipated for 2018.

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Participate in the Terrestrial Resources Work Group.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification - As needed amendment and variance for monitoring and reporting requirements to accommodate changes to the project and upcoming construction activities.

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation

REVIEW, COMMENT, APPROVALS:

- Review and comment on annual water quality report
- Review and comment on TDG monitoring program
- Review and comment on ramp rate study
- Review and comments on modifications to WQ monitoring requests – as needed
- Review and comments on WQ deviation/violation – as needed
- Development and review of Administrative orders – as needed

ACTIVITIES:

- Ad hoc meetings and consultation to address project-related issues as they come up.
- Modifications to WQ monitoring – as needed
- WQ deviation/violation – as needed
- Administrative orders – as needed
- Response to public information request- as needed

Seattle City Light

BOUNDARY, P-2144

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Resource Coordination Committee, Fish and Aquatics Work Group, Hatchery Technical Committee, Water Quality Committee, Terrestrial Resources Work Group, Sullivan Fund.

COMPLIANCE & LICENSE IMPLEMENTATION:

Preparation for meetings.

REVIEW, COMMENT, APPROVALS:

Annual report review.

ACTIVITIES:

Project Field Reviews.

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Implementation of FERC license and 401 Certification.
- Ecology will address any ongoing water quality issues such as amending or considering variances to monitoring or reporting requirements.
- Ecology will be involved in discussions to accommodate changes to the project and scheduled construction activities.
- Ecology will be involved along with other regulatory agencies in habitat mitigation projects on reservoir and tributaries of Pend Oreille River.
- Ecology will be involved in the hatchery project on Skookum Creek.

COMPLIANCE & LICENSE IMPLEMENTATION:

- License Implementation work.

REVIEW, COMMENT, APPROVALS:

- Review and comment on reports and plans for the fish hatchery project.
- Review and comment on habitat restoration plans, engineered log jam plans/reports, aquatic invasive species plans/reports, entrainment reduction plans/reports, and Mill Pond Dam reports/plans.

- Review and comment on annual TDG report, annual temperature measure implementation report, erosion control monitoring report, terrestrial resources compliance report, weed & treatment report, any necessary QAPP changes, and DO monitoring Reports.
- Review and comment on JARPA's for projects

ACTIVITIES:

- Ecology will be involved with Consultations with Washington Department of Fish and Wildlife , USFWS, National Forest Service and the Kalispell Tribe.
- Ecology will be involved with Site visits for projects on the dam, reservoir, tributaries, fish hatchery, Mill Pond Dam such as habitat restoration, engineered logjams, or erosion control projects.
- Ecology will attend meetings of Hatchery subcommittee, FAWG, TDG workgroup, and the Water Quality workgroup.

DIABLO, P-554

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Please see Skagit River Hydroelectric Projects P-553

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Seattle City Light is planning to file the Notice of Intent/PAD to FERC in 2019. Ecology waived its right issue a 401 certification during last license cycle. Ecology does not intend to waive its right to issue 401 certification during upcoming license cycle. Majority of the stakeholders met with FERC, Ecology and SCL staff in September 2017. Initial consultation between different stakeholders have started. Ecology will participate in these consultations as time permits.

COMPLIANCE & LICENSE IMPLEMENTATION:

Pre-license renewal stage

REVIEW, COMMENT, APPROVALS:

- Review of existing water quality monitoring data

ACTIVITIES:

- Multiple pre-license renewal consultation meetings with the tribes and other stakeholders
- Response to public information request- as needed

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Seattle City Light is planning to file the Notice of Intent/PAD to FERC in 2019. Ecology waived its right to issue a 401 certification during last license cycle. Ecology does not intend to waive its right to issue 401 certification during upcoming license cycle. Majority of the stakeholders met with FERC, Ecology and SCL staff in September 2017. Initial consultation between different stakeholders have started. Ecology will participate in these consultations as time permits.

COMPLIANCE & LICENSE IMPLEMENTATION:

Pre-license renewal stage

REVIEW, COMMENT, APPROVALS:

- Review of existing water quality monitoring data

ACTIVITIES:

- Multiple pre-license renewal consultation meetings with the tribes and other stakeholders
 - Response to public information request- as needed.
-

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Will work on implementation of the current FERC license fish and habitat obligations, which includes review and consultation on land acquisitions, restoration projects, research studies, and management of mitigation lands and flows in the river. Will also spend some time on meetings and early studies related to the pre-formal phase of relicensing.

COMPLIANCE & LICENSE IMPLEMENTATION:

Participate on committees established to implement the existing license measures for fish and wildlife.

REVIEW, COMMENT, APPROVALS:

Review and comment on meeting notes and approve fish and wildlife committee decisions, as needed.

ACTIVITIES:

Prepare for and participate in:

- One or monthly meetings of Non-flow Coordinating Committee
- Two meetings per year of Wildlife Resources group
- Two meeting related to relicensing

NEWHALEM CREEK, P-2705

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Preparation for and attendance of meetings.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Project Field Reviews.

Washington Department of Ecology

No workload currently anticipated for 2018.

ROSS, P-555

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Please see Skagit River Hydroelectric Projects P-553

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Seattle City Light is planning to file the Notice of Intent/PAD to FERC in 2019. Ecology waived its right issue a 401 certification during last license cycle. Ecology does not intend to waive its right to issue 401 certification during upcoming license cycle. Majority of the stakeholders met with FERC, Ecology and SCL staff in September 2017. Initial consultation between different stakeholders have started. Ecology will participate in these consultations as time permits.

COMPLIANCE & LICENSE IMPLEMENTATION:

Pre-license renewal stage

REVIEW, COMMENT, APPROVALS:

- Review of existing water quality monitoring data

ACTIVITIES:

- Multiple pre-license renewal consultation meetings with the tribes and other stakeholders
- Response to public information request- as needed

SULLIVAN CREEK (SULLIVAN LAKE STORAGE), P-2225

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Mill Pond Dam Removal-

Meetings, Agency Policy Issues, Program Coordination, Caucus, Plan & Field Review.

COMPLIANCE & LICENSE IMPLEMENTATION:

Lake operation monitoring and annual report

REVIEW, COMMENT, APPROVALS:

Sullivan Lake Cold Water Pipe meeting and annual report

ACTIVITIES:

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Implementation of FERC license.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

- Review and comment on any Water Quality Protection Plans, JARPAs, sediment management plans, or habitat restoration plans.

ACTIVITIES:

- Field or site visits with Seattle City Light staff, tribes, and other resource agency staff.
- Meetings on changes proposed for monitoring, observe construction impacts, maintenance or mitigation projects sites.

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Attend Committee and Subcommittee meetings, meeting preparation, review minutes, advise Seattle City Light and Seattle Public Utilities. Tolt Fisheries Advisory Committee (TFAC) and subcommittees (flow/temperature modeling), IFC
- Report review and comment, Read report(s) to verify compliance with requirements that do not require specific filing
- provide comments on study planning, implementation, and coordination on studies, reaching consensus; responsible for coordinating WDFW's prompt response to questions, requests for information, follow-up to compliance reports, etc.
- Provide fish technical information to Ecology
- Monitor if instream flow adhering to the established normal and critical flow criteria, evaluate the need for change in the rule curves based on new inflow information, monitor instream flow deficiencies
- Monitor down-ramping rates, operations associated with down-ramping, recommend potential solutions to avoid down-ramping in the future
- Identify preservation and restoration actions, recommend development of studies to determine remedial actions or recommendations, for the benefit of fishery resources, recommend how study funds should be spent.
- Assist with obtaining permits, share relevant data, reports, information, etc., pertaining to fisheries, fisheries harvest and escapement, streamflow, municipal and industrial water use, or power generation
- Coordination with WDFW Programs, Ecology CWA 401 Certification, NMFS, USFWS, Tribe, City and County

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

- Annual Reports
- South Fork Tolt River Semi-Annual Compliance Report Seattle City Light and Seattle Public Utilities (date range)
- Project reports – Scour study

ACTIVITIES:

Washington Department of Ecology

No workload currently anticipated for 2018.

Sheep Creek Hydro, Inc.

BIG SHEEP CREEK, P-5118

No workload currently anticipated for 2018.

Snohomish County Public Utility District

CALLIGAN CREEK, P-8864

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification - Ongoing construction activities, as needed amendment and variance for monitoring and reporting requirements.

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation, Construction Phase

REVIEW, COMMENT, APPROVALS:

- Review of monthly water quality monitoring reports
- Review and comments on Annual water quality monitoring report
- Review and comments on updated SPCC
- Review and comments on modifications to WQ monitoring requests – as needed
- Review and comments on WQ deviation/violation – as needed
- Development and review of Administrative orders – as needed

ACTIVITIES:

- Ad hoc meetings and consultation to address project-related issues as they come up
- Response to public information request- as needed.

Washington Department of Fish & Wildlife

No workload currently anticipated for 2018.

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification - Ongoing construction activities, as needed amendment and variance for monitoring and reporting requirements.

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation, Construction Phase

REVIEW, COMMENT, APPROVALS:

- Review of monthly water quality monitoring reports
- Review and comments on Annual water quality monitoring report
- Review and comments on updated SPCC
- Review and comments on modifications to WQ monitoring requests – as needed
- Review and comments on WQ deviation/violation – as needed
- Development and review of Administrative orders – as needed

ACTIVITIES:

- Ad hoc meetings and consultation to address project-related issues as they come up
 - Response to public information request- as needed
-

Washington Department of Fish & Wildlife

No workload currently anticipated for 2018.

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Meetings & Preparation, Field Review, Agency Coordination, Reports.
Participate in the Hatchery Technical Committee.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification - As needed amendment and variance for monitoring and reporting requirements to accommodate changes to the project and upcoming construction activities.

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation

REVIEW, COMMENT, APPROVALS:

- Review and comments on Water Quality Management Annual Report
- Review and comments on Operation Compliance Monitoring Plan Annual report
- Review of Water Temperature Conditioning Plan Annual Temperature Data
- Technical consultation and review of Reach 3 instream flow schedule

ACTIVITIES:

- Multiple Aquatic Resource Committee (ARC) meetings
- Technical consultation and review of Reach 3 instream flow schedule
- Review and comments on Water Quality Management Annual Report
- Operation Compliance Monitoring Plan Annual report – review and comment
- Review of Water Temperature Conditioning Plan Annual Temperature Data – for review
- Modifications to WQ monitoring – as needed
- WQ deviation/violation – as needed
- Administrative orders – as needed
- Responses to public information requests- as needed

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

WDFW anticipates spending substantial time with settlement agreement negotiations, license articles review, and consultation with internal and external technical experts for study plan and study plan results review. Will also consult on 401 certification creation.

COMPLIANCE & LICENSE IMPLEMENTATION:

401 certification development.

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

SNOPUD is planning to file the FERC license application in 2018. As of now Ecology has not received any 401 certification application. Water rights permit is also pending. Ecology and other stakeholders are working together with SNOPUD to resolve multiple issues associated with this project.

COMPLIANCE & LICENSE IMPLEMENTATION:

Pre-license stage

REVIEW, COMMENT, APPROVALS:

- Review and comments on documents submitted for settlement negotiations
- Review of water quality monitoring plans, proposals and studies, as needed
- Response to public information request
- Review of 401 certification application
- Review of environmental impact statement - as needed

ACTIVITIES:

- Multiple pre-license settlement negotiation meetings requested by SNOPUD
- Multiple consultation meetings with the tribes and other stakeholder agencies
- Technical consultation meetings with SNOPUD, as needed
- Field visits with SNOPUD staff and other stakeholders,
- Multiple 401 development related meetings with SHARC members and SNOPUD staff

- Multiple communications and coordination meetings between different ecology programs
- Briefing meetings for AG office and Ecology upper management
- Internal legal and technical consultation meetings with AGO and other Ecology staff
- Meetings and responses to public information requests - as needed

YOUNGS CREEK, P-10359

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Trout Monitoring and Terrestrial Resources Management Plans Annual Reports.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

Trout Monitoring report and terrestrial resource reports.

ACTIVITIES:

site visit

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification - As needed amendment and variance for monitoring and reporting requirements to accommodate changes to the project and upcoming construction activities.

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation

REVIEW, COMMENT, APPROVALS:

- Review and comments on modifications to WQ monitoring requests – as needed
- Review and comments on WQ deviation/violation – as needed
- Development and review of Administrative orders – as needed

ACTIVITIES:

- Meetings and sites visits as needed
- Response to public information request- as needed

South Fork Associates, Limited Partnership

WEEKS FALLS, P-7563

No workload currently anticipated for 2018.

Southern California Public Power Company

TIETON DAM, P-3701

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Attend and actively participate in meetings and coordinate communications with WDFW

COMPLIANCE & LICENSE IMPLEMENTATION:

Continued implementation of Dissolved Oxygen monitoring.

REVIEW, COMMENT, APPROVALS:

Dissolved Oxygen Annual Report and develop entrainment study

ACTIVITIES:

Site visit, annual meeting, report reviews and technical assistance

Washington Department of Ecology

No workload currently anticipated for 2018.

Spokane, City of

UPRIVER PROJECT, P-3074

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Implementation of FERC license - No 401 Certification.
- Address any ongoing water quality issues such as amending or considering variances to monitoring or reporting requirements.
- Ecology involvement in discussions to accommodate changes to the project operations and scheduled construction activities.
- Ecology involvement along with other regulatory agencies in habitat mitigation projects on reservoir.

COMPLIANCE & LICENSE IMPLEMENTATION:

- License Implementation.

REVIEW, COMMENT, APPROVALS:

- Review and comment on sediment management plans, mitigation plans, stormwater control plans, water quality monitoring reports, nutrient monitoring reports, stormwater management plans and reports, JARPAs, and flow variances requests.

ACTIVITIES:

- Field or site visits to observe construction impacts, inspect maintenance or mitigation project sites.
- Meetings with City staff, tribes or other agencies to discuss changes proposed for operations or monitoring.

Washington Department of Fish & Wildlife

No workload currently anticipated for 2018.

Tacoma Power

COWLITZ RIVER, P-2016

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Attend Committee and Subcommittee meetings, meeting preparation, review minutes, advise Tacoma Power. FTC, CRR, HAG.
- Report review and comment, Read report(s) to verify compliance with requirements that do not require specific filing.
- Provide fish technical information.
- Participate in development and implementation of FHMP.
- Evaluation of operation and maintenance of the Hatchery Complex.
- Evaluation of juvenile tagging and monitoring program.
- Adaptive management input and decisions.
- Collection efficiency and fish passage survival.
- Cowlitz Restoration and Recovery Program.
- Evaluate past Fish Disease Management conditions, make changes to the plan, review 5 year report and plan, incorporate any changes into/from the Fisheries and Hatchery Management Plan.
- Monitor minimum flows, adjust minimum flows in adverse conditions; Monitor ramping rate conditions, suggest training to prevent future exceedances. Monitor effects of instream flow requirements (pulsing or channel maintenance flows) on fish and habitat conditions; verify flow data meets Articles 13, 14, 15, and 16 compliance.
- Monitor and evaluate the effectiveness of gravel augmentation; Identify alternative augmentation site and/or method permitting, incorporate Article 417 BMPs.
- Technical Assistance for construction projects – Barrier Dam/Trout Hatchery.
- Coordination with WDFW Programs, Ecology CWA 401 Certification, NMFS, USFWS, Tribes, Trout Unlimited, LCFRB, Tacoma Power.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

Annual Reports

- License Article 401 and Settlement Agreement Article 2 (b). Downstream Fish Passage Improvement Plan: Mayfield (Year)
- Settlement Agreement Article 3, License Article 415 and License Article 401 Upstream Fish Passage Report (Year) Annual Report
- License Article 411 and Settlement Agreement Article 6, Fisheries and Hatchery Management Plan Update: (Year) Annual Project Evaluation and Status Report
- License Article 402 Annual flow monitoring report (Water Year)

- License Article 409 Annual Lower Cowlitz River Side-Channel Maintenance and Use Plan (Year)
- Settlement Agreement License Article 10 Gravel Augmentation Plan –(progress report)
- License Article 11 - Fish Habitat Fund Annual Progress Report. (Date range)
- License Article 410 Lower Cowlitz River Water Quality Monitoring Plan (First) Annual Report
- License Article 501 Hydropower Compliance Management Program Annual Report (year)
- (Year) Annual Report: Cowlitz River Hydroelectric Project, FERC No. 2016- Settlement Agreement License Articles 24 and 12
- Report on the effectiveness of the Riffe Lake/Cowlitz Falls downstream fish passage/collection facilities and measures
- Plan to abandon volitional upstream fish passage and expend funds.
- Fisheries and Hatchery Management Plan Update (six year interval)
- Settlement Agreement License Article 8 Fish Disease Management Plan
- Large Woody Debris Plan –Monitoring Study Report every 5 years

ACTIVITIES:

Washington Department of Ecology

COMPLIANCE & LICENSE IMPLEMENTATION:

- Bi-monthly meetings to discuss WQ Monitoring status, Tacoma Power must present all WQ Monitoring (except TDG) results and request cessation. TDG monitoring must begin with acceptance of new 7Q10 value.
- Location of WQ Monitoring should be re-evaluated based on 2007 and 2008 annual reports.
- Calculation and acceptance of new 7Q10 value once Tacoma Power's consultant develops value.
- Development of Operational Spill TDG Monitoring Plan

MONTHLY: Fish Technical Committee meetings

REVIEW AND COMMENT:

- WQ MONITORING approvals: Riffe Lake Turbidity Study (a component of WQ Monitoring requirements, Ecology approval granted); Operational Spill TDG Monitoring Plan approval;
- New 7Q10 value
- Finalize CSWGP for the downstream fish collector
- Miscellaneous FERC License Article reports that may contain WQ impacts
- Gravel augmentation Water Quality Protection Plan (WQPP)

ACTIVITIES (require review and approval of WQPP and/or SWPPP; may also require Construction Stormwater General Permit(s)):

- Several 404 Corps permits: dredging at hatcheries, Barrier Dam, boat launches, swim beach
- Cowlitz Falls Fish Facility Remodel
- Trout Hatchery Remodel
- Mayfield Juvenile Bypass System
- Salmon Hatchery Intake dredging
- Trout Hatchery dredging
- Multiple Boat ramp repair/maintenance (may include dredging and filling)
- Mossyrock Park boat ramp extension
- Mossyrock Park swim beach creation
- Gust Backstrom fish release site maintenance
- Barrier Dam assessment and repair
- LWD management on Mayfield, Riffe, and Scanewa lakes
- Swafford Pond repair and dredge
- Gravel augmentation below Barrier Dam
- Development of water supply for fish collector at Cowlitz Falls Dam
- Review LWD removal plan (in coordination w/Tacoma Power fish collector)
- SITE VISIT: 3-5/yr

COMMENTS:

Newly discovered USGS seismic risk and requirement to keep Riffe Lake 30' lower than full pool. This potential risk and lower power demand/generation. Mossyrock Dam is now experiencing operational spills, regularly. Need to develop an Operational Spill TDG Monitoring Plan and subsequent monitoring reports.

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Attend Committee and Subcommittee meetings, meeting preparation, review minutes, advise Tacoma Power. FHC, WDFW/Tacoma Fish Supplementation Coordination Subcommittee,
- Report review and comment, Read report(s) to verify compliance with requirements that do not require specific filing
- Provide fish technical information to Ecology
- Monitor compliance with plan elements
- Make recommendations and approve the annual water budget release schedule, adapt as necessary; Implement the Flood Damage Reduction and Mitigation Plan recommendations to restoration to improve channel conveyance capacity decisions
- Consultation on proposed habitat enhancement and restoration projects
- provide adaptive management advice
- Coordination with WDFW Programs, Ecology CWA 401 Certification, NMFS, USFWS, Tribe, Tacoma Power

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

- Annual Reports
- Hydropower Compliance Management Plan Annual Report (Date Range)
- License Article 406 Operations Monitoring and Compliance Annual Report (Reporting timeframe)
- Flood Damage Reduction and Mitigation Annual Report?
- License Article 410 Water Quality Enhancement And Monitoring Plan Annual Water Year Report (date range)
- Fish Habitat Enhancement and Restoration Annual Report (Year)
- Fish Habitat and Monitoring Annual Report (Year)
- License Article 414 Downstream Fish Passage Plan Annual Report (date range)
- License Article 415 and 416 Upstream Fish Passage Annual Report (date range)
- License Article 417 Fish Supplementation Program Annual Report (year)
- License Article 418 Tailrace Monitoring Study (year)
- License Article 421 (year) Wildlife Habitat Enhancement Plan Annual Report
- License Article 423 Threatened and Endangered Species Protection Plan (year) Annual Report
- Annual Plan
- License Article 407 (Coverage) Flow Report [Annual water budget release schedule]

ACTIVITIES:

Washington Department of Ecology**COMPLIANCE & LICENSE IMPLEMENTATION:**

- WQ Monitoring report (Article 410) and request to concur with ceasing WQ Monitoring all parameters. Ecology approval.

MONTHLY:

- Ecology hosts Fish Habitat Committee monthly meetings (3-4 hrs).

REVIEW AND COMMENT:

- Reports: Article 406, 407, 410, 413, 415/416, 417
- WQ Monitoring cessation of required monitoring
- Water Quality Protection Plans for debris removal in reservoirs

ACTIVITIES (require review and approval of Water Quality Protection Plans (WQPP) and/or SWPPP):

- Downstream Fish Collector
- Fish Habitat Restoration projects (LWD placement on North Fork below McTaggart Creek)
- Gravel enhancement in North Fork Skokomish River
- CSWGP: Lake Cushman Recreational Improvements, Lake Kokanee Salmon Hatchery, LWD placement
- Boat ramp repairs: Skokomish Park, Cushman No. 1, Lake Kokanee, Saltwater Park
- Construction of reservoir debris removal site
- SITE VISIT: 3-5/yr.

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Attend Committee and Subcommittee meetings, meeting preparation, review minutes, advise Tacoma Power. NRCC
- Report review and comment, Read report(s) to verify compliance with requirements that do not require specific filing.
- Provide fish technical information to Ecology.
- Monitor compliance with plan(s), minimum flows, bypass reach spill rate, reservoir elevations, ramping rates, planned spills.
- Evaluate kokanee stocking strategy.
- Evaluate effectiveness of monitoring for fish passage from Alder Lake into tributaries.
- Evaluate measures to discourage fish use in bypass reach.
- Evaluate remaining tailrace study needs.
- Evaluate gravel monitoring protocols, address FERC order for gravel mitigation change in bypass reach.
- Annual wildlife land field tour.
- Coordination with WDFW Programs, Ecology CWA 401 Certification, NMFS, USFWS, Tribes, City of Centralia, Tacoma Power.

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

Annual Reports

- License Article 410 (year) Annual License Natural Resources Report
- (year) Alder Lake Kokanee Stocking and Fish Passage Assessment Report License Articles 413 and 415
- Article 416 Report Monitoring Fish Passage in the LaGrande Bypass Reach
- License Article 417 LaGrande Powerhouse Tailrace Attraction Study
- Combined License Article 418 & 419 (year) Nisqually River Gravel Report
- License Article 423 (year) Annual Wildlife Management Report

ACTIVITIES:

Washington Department of Ecology

COMPLIANCE & LICENSE IMPLEMENTATION: None known at this time.

REVIEW AND COMMENT:

- FERC license Articles 416, 418, and 419

MEETINGS:

- Nisqually River Coordinating Committee as needed
- As needed: Summer weekly meetings related to: Low flow/warm temperature
- Participate in Gravel Augmentation meetings to determine if gravel should be augmented or FERC License requirement to be modified

ACTIVITIES (require review and approval of Water Quality Protection Plan (WQPP) and/or SWPPP):

- Gravel augmentation
- SITE VISIT: As needed.

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Attend on-call resource committee meetings, meeting preparation, advise Tacoma Power.
Report review and comment, Read report(s) to verify compliance with requirements that do not require specific filing
Provide fish technical information to Ecology
Article 401 Erosion Control Plan Periodic review of the plan for making any necessary revisions
Monitor temperature, reservoir elevation and outflow. Provide recommendations during drought years when conditions cannot be met
Monitor smolt passage and operations
Monitor flow and ramping rates
Assist Hatchery Division with Section 1135 funds as needed, monitor progress
Monitor fish trap operation, recreation and elk mitigation
Coordination with WDFW Programs, Ecology CWA 401 Certification, NMFS, USFWS, Tribe, Tacoma Power

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

Annual Reports
Wynoochee River Project, FERC No. 6842 FERC License Article 419 (L) Section 1135 Fish Restoration Project Trust Fund
(Year) Article 419 Annual Natural Resources Report

ACTIVITIES:

Washington Department of Ecology

COMPLIANCE & LICENSE IMPLEMENTATION:

- Turbidity and instream flow values brought attorneys to table to discuss compliance with WQC.
- Every TWO MONTH MTGS: WQ Monitoring plan development (ECY hosts), review and comment on plan, Water Rights (1929, 1955, 1980); City of Aberdeen and Tacoma Power sort out the governing documents that apply to operation of the hydropower at the existing dam.
- Development of a Water Quality Monitoring Plan (Ecology provides comments)

MONTHLY:

- Summer warm water conditions = weekly conference calls RE: Temperature and Instream flows
- SUMMER/FALL WEEKLY MTGS-Low flow/warm temperature as needed

ACTIVITIES (require review and approval of Water Quality Protection Plans:

- Coho Campground Boat Launch Repair and Maintenance / Bank Stabilization
- Maintenance of fish release location
- Wynoochee Dam unit intake dredging/debris removal – notification only
- Barrier Dam dredging
- FERC Environmental inspection – attendance
- SITE VISITS: As needed

Trinity Conservancy, Inc.

TRINITY, P-719

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of the Tailrace Relocation Plan Summer of 2018.

COMPLIANCE & LICENSE IMPLEMENTATION:

Tailrace Relocation Plan/401 Water Quality Plan

REVIEW, COMMENT, APPROVALS:

ACTIVITIES:

attend at least one site visit

Washington Department of Ecology

No workload currently anticipated for 2018.

Twin Falls Hydro Associates

TWIN FALLS, P-4885

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Implementation of 401 Certification

COMPLIANCE & LICENSE IMPLEMENTATION:

License Implementation

REVIEW, COMMENT, APPROVALS:

- Review and comments on modifications to WQ monitoring requests – as needed
- Review and comments on WQ deviation/violation – as needed
- Development and review of Administrative orders – as needed

ACTIVITIES:

- Ad hoc meetings and consultation to address project-related issues as they come up
 - Response to public information request- as needed.
-

Washington Department of Fish & Wildlife

No workload currently anticipated for 2018.

Other Projects in Development

HYDROBATTERY PEARL HILL PUMP STORAGE, P-14795

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

Continued FERC licence development, 401 Water Quality Development, and Terrestrial/Aquatic Settlement Agreements

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

Final FERC license application and Ready for Environmental Assessment/NEPA documents

ACTIVITIES:

Several negotiations will likely be needed to establish Settlement Agreements

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

401 Water Quality Development

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

Environmental Assessment/NEPA documents

ACTIVITIES:

BANKS LAKE PUMP STORAGE, P-14329

Washington Department of Fish & Wildlife

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

WDFW will continue to consult on the FERC licence development, 401 Water Quality Development, and Terrestrial/Aquatic Settlement Agreements

COMPLIANCE & LICENSE IMPLEMENTATION:

REVIEW, COMMENT, APPROVALS:

Pre-license application documents

ACTIVITIES:

Washington Department of Ecology

NARRATIVE DESCRIPTION OF EXPECTED WORKLOAD:

- Licensing is ongoing;
- Project environmental assessment: Ecology comment development will require a significant amount of time to coordinate both internally and externally.
- Coordination and consultation with WDFW, USFWS, tribal entities, and federal agencies.
- Initial development/consultation with WDFW on the 401 certification.
- Consultation meetings with Columbia Basin Hydropower to improve project design to protect water quality, fish and wildlife resources on the Lake Roosevelt and Banks Lake portions of the project.

COMPLIANCE & LICENSE IMPLEMENTATION:

Pre-License

REVIEW, COMMENT, APPROVALS:

Review and comment on:

- Early 2018 Columbia Basin Hydropower (CBHP) to finish modeling efforts;
- January 2018 Columbia Basin Hydropower to develop draft study plans for studies;
- March 2018 Study Plan meeting for project;
- April and May 2018 - Final study plans completed and initiation of studies;
- Ecology will review and comment on: study plans, monitoring plans & environmental assessments related to water quality, baseline studies for Banks Lake, Lake Roosevelt and

Crescent Bay, including temperature, toxic contaminant transport, turbidity, & dissolved oxygen.

- Also review sediment and limnology studies.

ACTIVITIES:

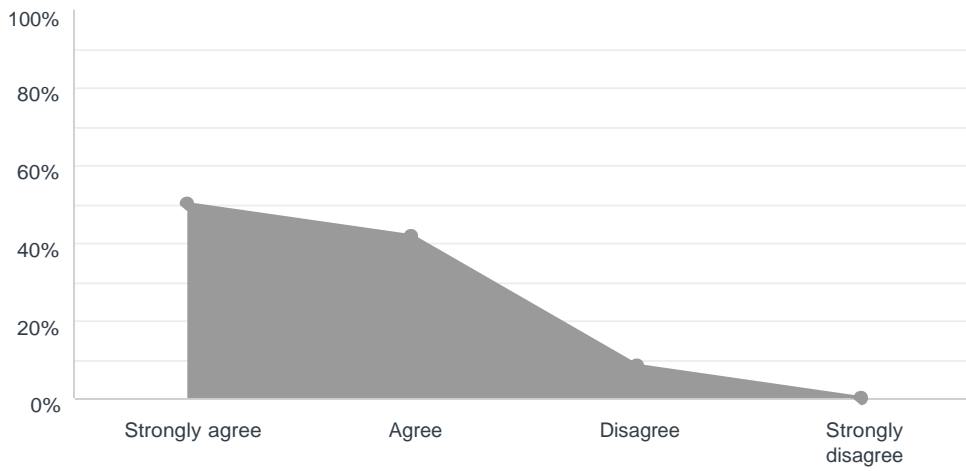
- Attend Pre-Application meetings and consultations to address project related issues as they occur.
- Go on site reviews or field studies for sampling & monitoring.
- Meet and correspond with other jurisdictional agencies as needed.

Appendix D. Annual Performance Survey

Question 1

I know who to contact at the Department of Ecology and Department of Fish & Wildlife if I have regulatory questions about my hydropower project.

Answered: 12 Skipped: 0

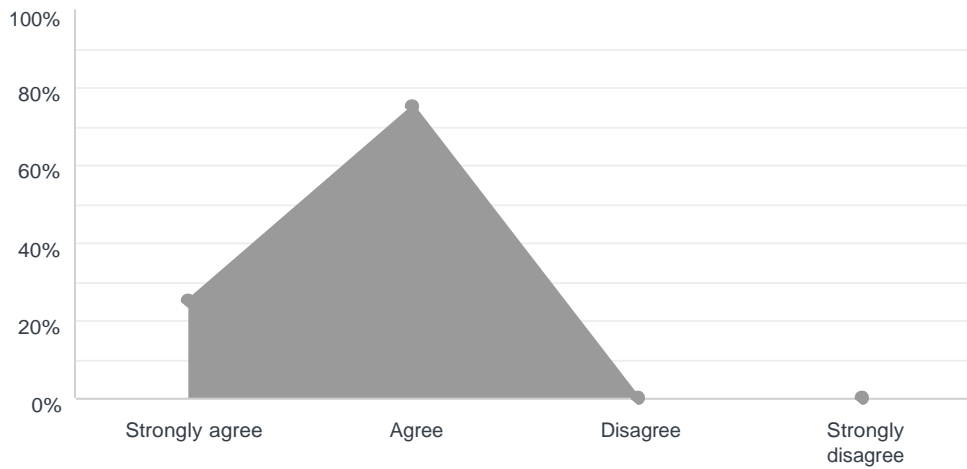


ANSWER CHOICES		RESPONSES	
Strongly agree		50.00%	6
Agree		41.67%	5
Disagree		8.33%	1
Strongly disagree		0.00%	0
TOTAL			12

Question 2

State agency staff were available for assistance upon request.

Answered: 12 Skipped: 0

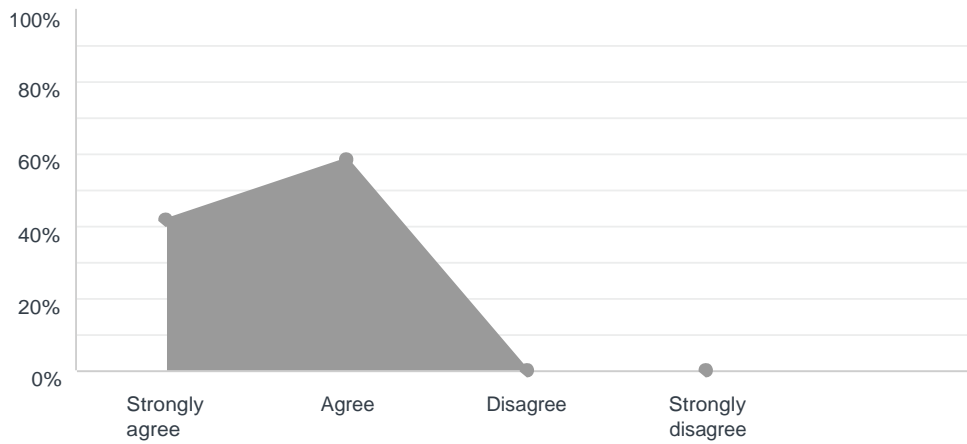


ANSWER CHOICES	RESPONSES	
Strongly agree	25.00%	3
Agree	75.00%	9
Disagree	0.00%	0
Strongly disagree	0.00%	0
TOTAL		12

Question 3

State agency staff were courteous and attentive.

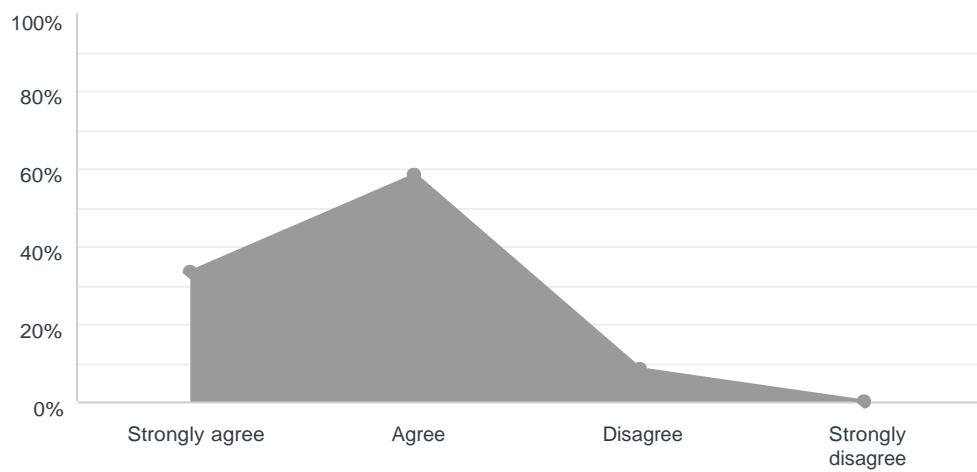
Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	41.67%	5
Agree	58.33%	7
Disagree	0.00%	0
Strongly disagree	0.00%	0
TOTAL		12

Question 4
State agency staff were familiar with my hydropower project(s).

Answered: 12 Skipped: 0

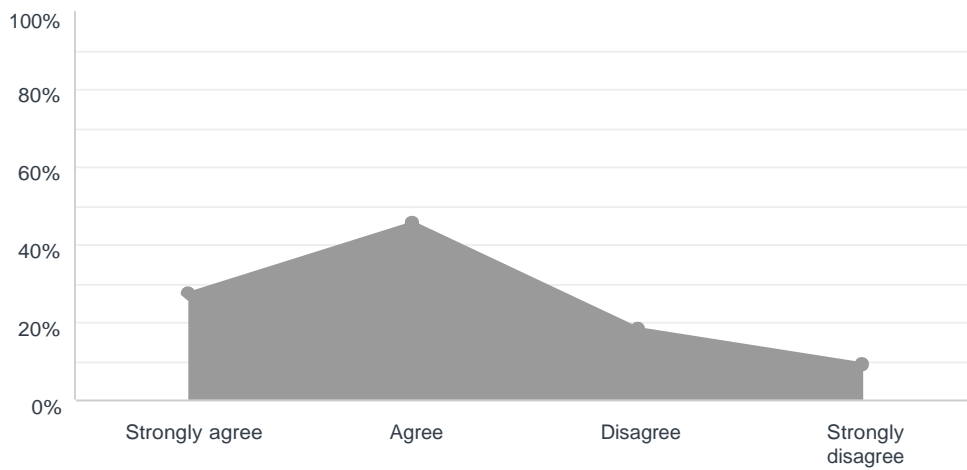


ANSWER CHOICES	RESPONSES	
Strongly agree	33.33%	4
Agree	58.33%	7
Disagree	8.33%	1
Strongly disagree	0.00%	0
TOTAL		12

Question 5

State agency staff were timely in their reviews, responses and/or decision-making.

Answered: 12 Skipped: 0

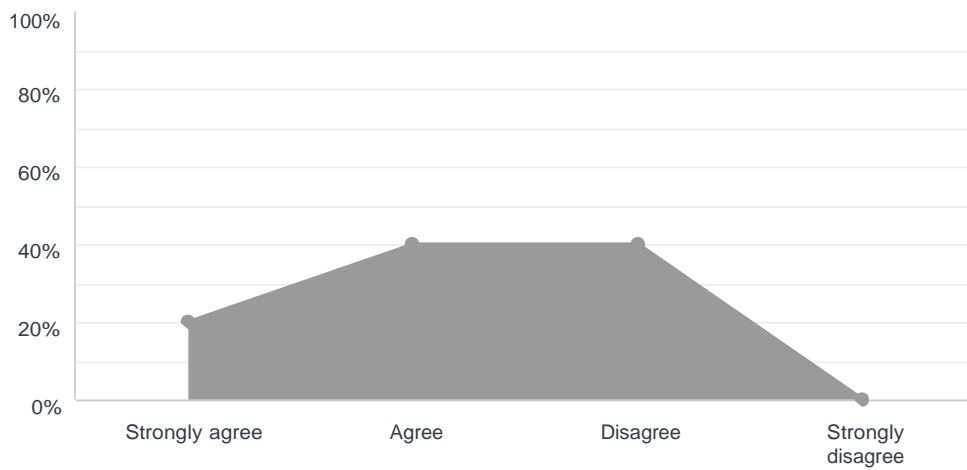


ANSWER CHOICES	RESPONSES	
Strongly agree	27.27%	3
Agree	45.45%	5
Disagree	18.18%	2
Strongly disagree	9.09%	1
TOTAL		11

Question 6

State agency staff used professional judgement rather than personal opinion to influence their work.

Answered: 12 Skipped: 0

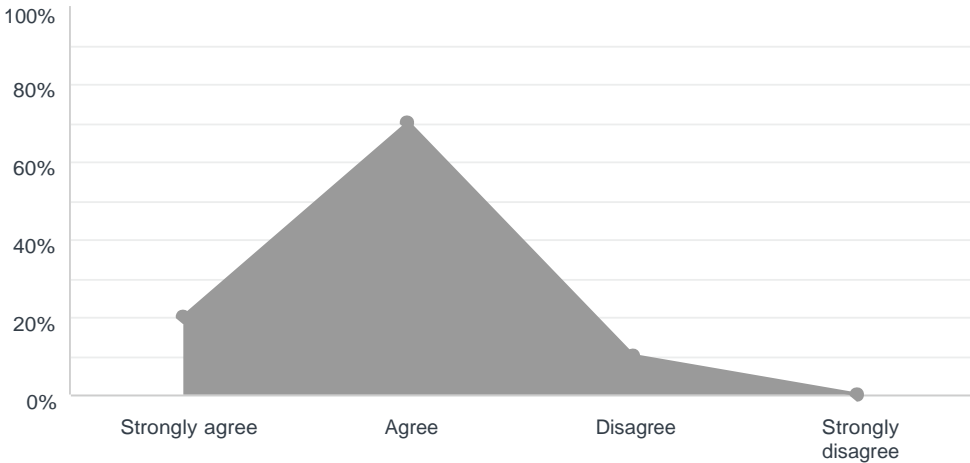


ANSWER CHOICES		RESPONSES	
Strongly agree		20.00%	2
Agree		40.00%	4
Disagree		40.00%	4
Strongly disagree		0.00%	0
TOTAL			10

Question 7

State agency staff communicated information clearly and professionally.

Answered: 11 Skipped: 1

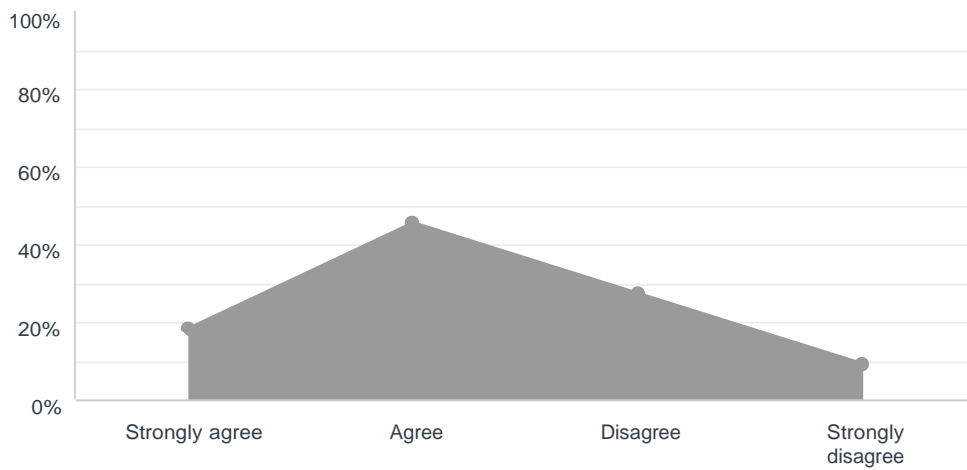


ANSWER CHOICES		RESPONSES	
Strongly agree		20.00%	2
Agree		70.00%	7
Disagree		10.00%	1
Strongly disagree		0.00%	0
TOTAL			10

Question 8

Staff were prepared for meetings and prepared for decision-making.

Answered: 12 Skipped: 0

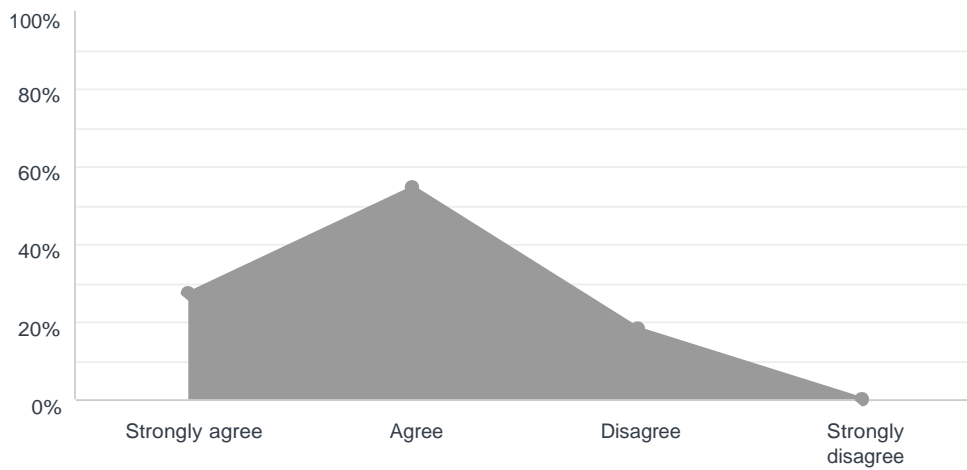


ANSWER CHOICES	RESPONSES	
Strongly agree	18.18%	2
Agree	45.45%	5
Disagree	27.27%	3
Strongly disagree	9.09%	1
TOTAL		11

Question 9

State agency staff worked collaboratively with me to solve problems.

Answered: 12 Skipped: 0

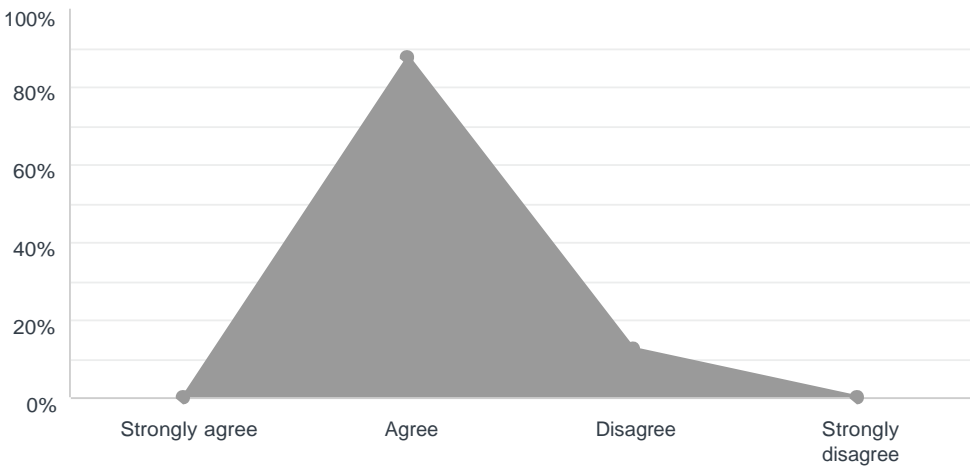


ANSWER CHOICES	RESPONSES	
Strongly agree	27.27%	3
Agree	54.55%	6
Disagree	18.18%	2
Strongly disagree	0.00%	0
TOTAL		11

Question 10

State agency staff worked collaboratively with each other to solve problems.

Answered: 12 Skipped: 0

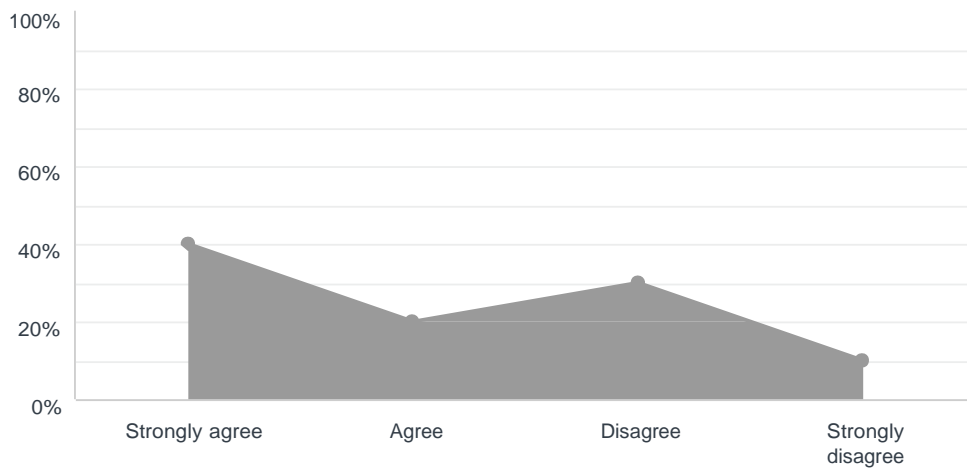


ANSWER CHOICES	RESPONSES	
Strongly agree	0.00%	0
Agree	87.50%	7
Disagree	12.50%	1
Strongly disagree	0.00%	0
TOTAL		8

Question 11

The agency point of contact for my project(s) engaged regularly and consistently.

Answered: 12 Skipped: 0

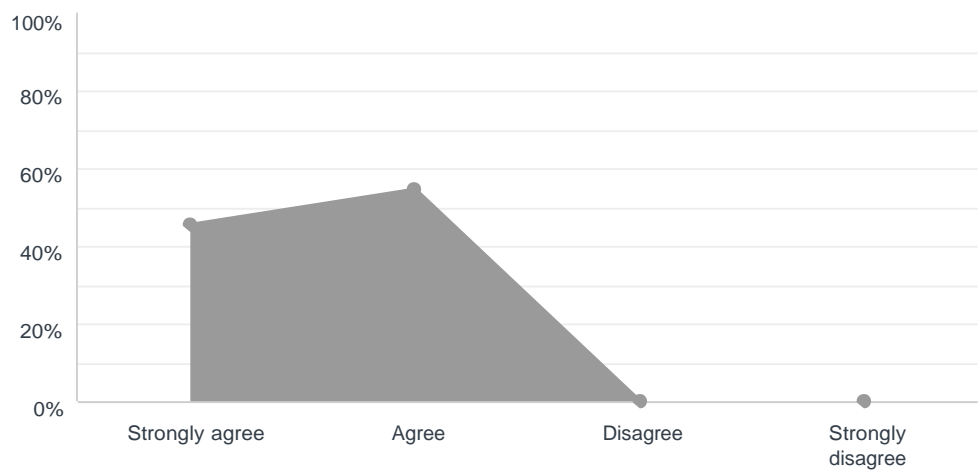


ANSWER CHOICES		RESPONSES	
Strongly agree		40.00%	4
Agree		20.00%	2
Disagree		30.00%	3
Strongly disagree		10.00%	1
TOTAL			10

Question 12

When requested, state agency staff took the time to understand my unique situation and needs.

Answered: 12 Skipped: 0

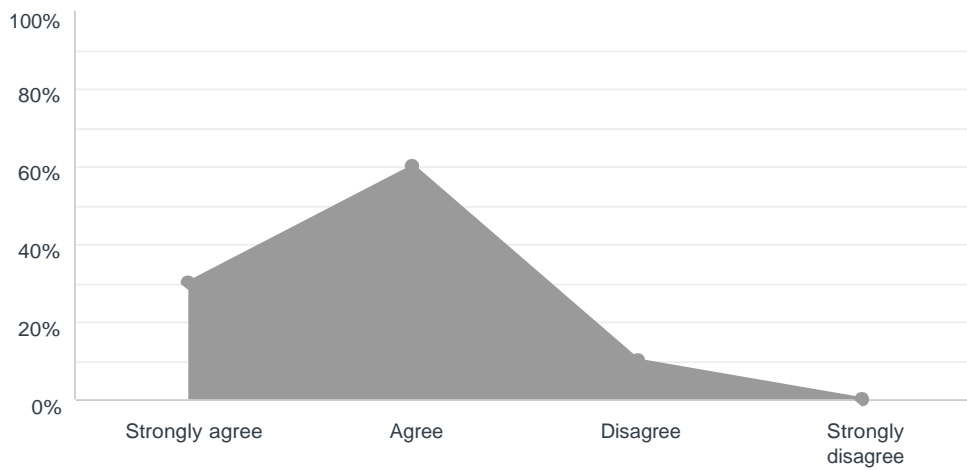


ANSWER CHOICES		RESPONSES	
Strongly agree		45.45%	5
Agree		54.55%	6
Disagree		0.00%	0
Strongly disagree		0.00%	0
TOTAL			11

Question 13

State agency staff demonstrated an understanding of relevant statutes and regulations.

Answered: 12 Skipped: 0

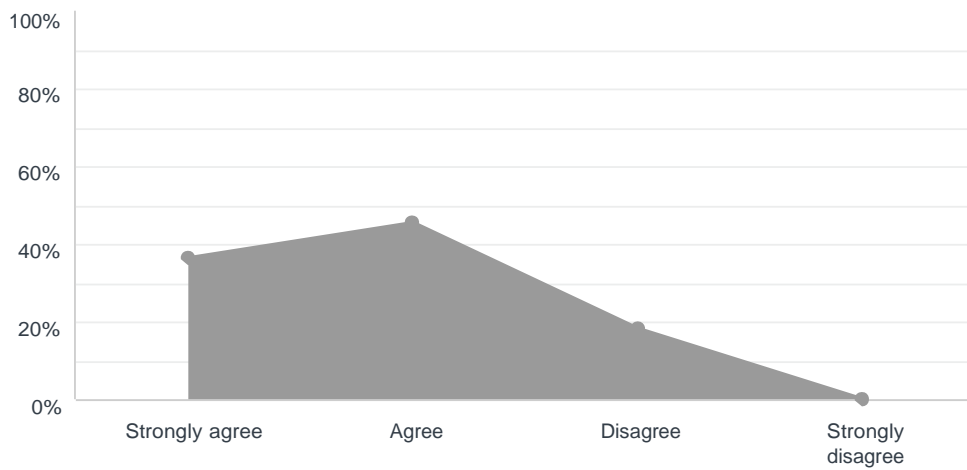


ANSWER CHOICES	RESPONSES	
Strongly agree	30.00%	3
Agree	60.00%	6
Disagree	10.00%	1
Strongly disagree	0.00%	0
TOTAL		10

Question 14

State agency staff demonstrated knowledge and experience in their area(s) of expertise.

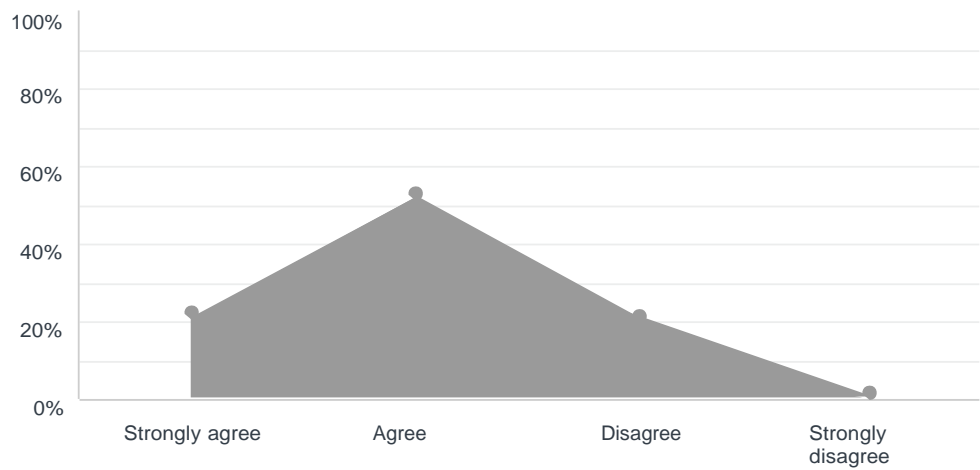
Answered: 12 Skipped: 0



ANSWER CHOICES	RESPONSES	
Strongly agree	36.36%	4
Agree	45.45%	5
Disagree	18.18%	2
Strongly disagree	0.00%	0
TOTAL		11

Question 15
State agency staff followed through with commitments.

Answered: 12 Skipped: 0



ANSWER CHOICES		RESPONSES	
Strongly agree		22.22%	2
Agree		55.56%	5
Disagree		22.22%	2
Strongly disagree		0.00%	0
TOTAL			9

Question 16

Please provide any further feedback you may have in relation to the performance of Ecology and WDFW staff in the last year.

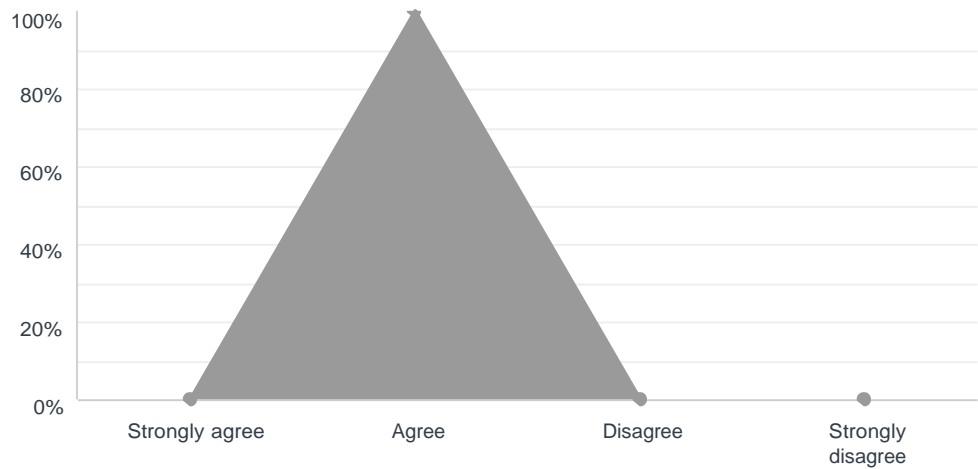
Answered: 9 Skipped: 3

#	RESPONSES
1	The format of this survey is difficult for me to provide meaningful feedback, which I am happy to do. I've had the privilege of engaging with various staff members; each individual has a different level of knowledge in their area, just as each person's level of competence *appears* to vary. *Appears* refers to my lack of understanding whether certain actions and, more often, lack of action is due to a personal deficit or to the lack of financial and personnel resources of the agency.
2	Combining all of the Ecology and WDFW staff we work with on all of our various projects does not provide the ability to comment by agency or project. If the intent is to receive a very broad overarching general response, these questions achieve that. New Ecology staff have been actively engaged and willing to learn and understand our projects.
3	Ecology staff worked hard to understand unique situations and needs, and provided professional judgment based on science, data analysis, and regulatory frameworks to make decisions and provide guidance to licensees. This is VERY helpful and a great example of how keeping consistent, qualified, and unbiased staff in place to support implementation of license and 401 WQC programs and requirements is important and beneficial to the State and to its hydropower projects. Ecology staff were prepared for meetings and provide "on-the spot" guidance, followed by additional formal guidance as needed, in most instances. This is another good example of keeping consistent, qualified, and unbiased staff in place to support implementation of license and 401 WQC programs and requirements is important and beneficial to the State and to its hydropower projects. In some cases, WDFW staff did not base decisions on sound science, and it is important that State staff make decisions that are based on science, data, and regulatory frameworks. However, there are other examples of WDFW staff making decisions that were reasonable and supported by science, data, etc. More consistency from WDFW staff is needed in this area. In some cases, WDFW staff came to meetings prepared and ready to discuss solutions to issues/problems. This is vital to successfully implement license and 401 WQC conditions. However in other cases, WDFW was not prepared to participate in "solving the problem" based on science, data analysis, and regulatory frameworks. More consistency from WDFW staff is needed in this area.
4	Hydropower program staff should function as the lead to coordinate and ensure that their agency's feedback/comments are submitted in a timely and complete manner. Improved knowledge of respective agency's mission and jurisdiction for regulating hydropower and respecting those parameters. Including cost as a consideration when evaluating alternative solutions/approaches. Appreciate respective staff's engagement and attention to complex or immediate issues. Staff availability and focused efforts are valued.
5	It has been a pleasure to work with both WDFW and Ecology.
6	The agency staff usually come to committee meetings prepared to ask questions and provide feedback.
7	need consistency in approaches/position when there is staff turn over
8	Most of the questions above do not apply at this time. The PUD project has not requested Ecology or WDFW staff to engage in work while the PUD is seeking a FERC license extension.
9	My experience has been very positive with WDFW staff assigned to my project, and less so with Ecology staff. My responses to this survey are very positive because they relate to the WDFW staff person.

Question 17

State agency staff worked with you or your organization to help you prepare for the FERC licensing and §401 WQ certification process.

Answered: 7 Skipped: 5

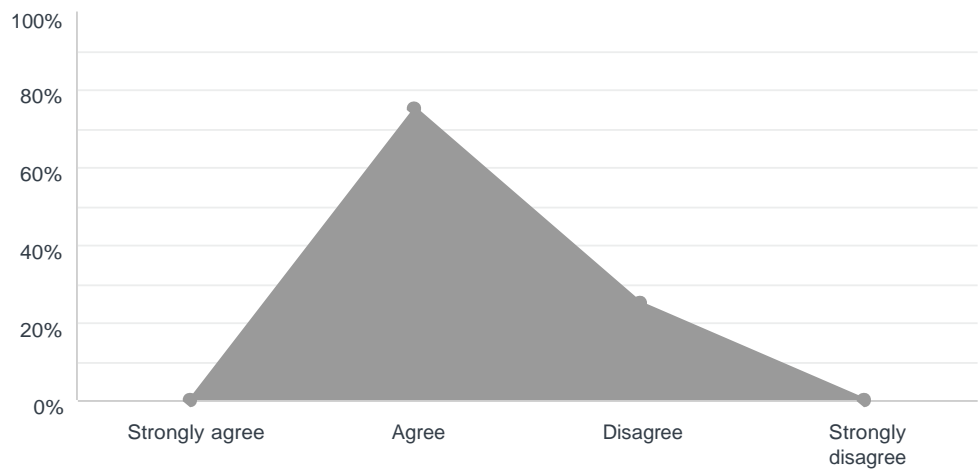


ANSWER CHOICES	RESPONSES	
Strongly agree	0.00%	0
Agree	100.00%	4
Disagree	0.00%	0
Strongly disagree	0.00%	0
TOTAL		4

Question 18

State agency staff kept you informed about the length of time it would take to achieve milestones in the §401 WQ certification process and other state agency actions.

Answered: 7 Skipped: 5

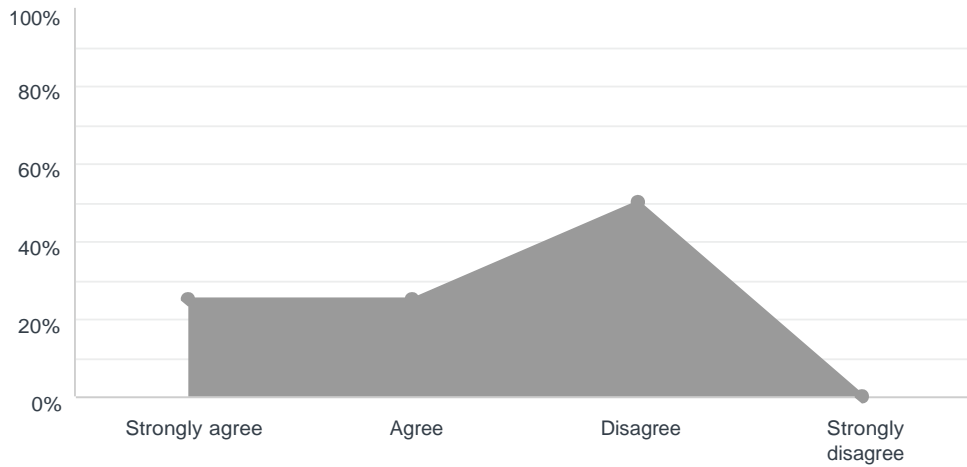


ANSWER CHOICES		RESPONSES	
Strongly agree		0.00%	0
Agree		75.00%	3
Disagree		25.00%	1
Strongly disagree		0.00%	0
TOTAL			4

Question 19

State agency staff provided timely responses to questions related to §401 WQ Certification requirements and other state actions.

Answered: 7 Skipped: 5

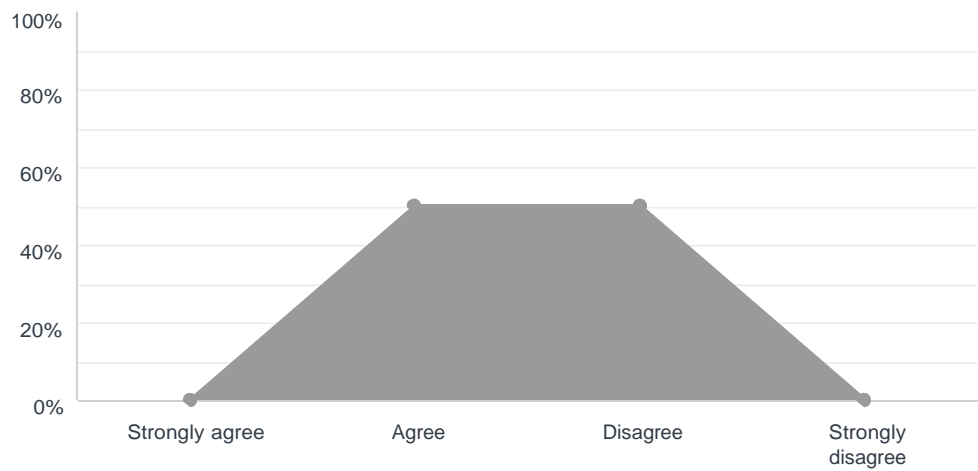


ANSWER CHOICES	RESPONSES	
Strongly agree	25.00%	1
Agree	25.00%	1
Disagree	50.00%	2
Strongly disagree	0.00%	0
TOTAL		4

Question 20

State agency staff provided sufficient answers to questions related to §401 WQ Certification and other state actions.

Answered: 7 Skipped: 5

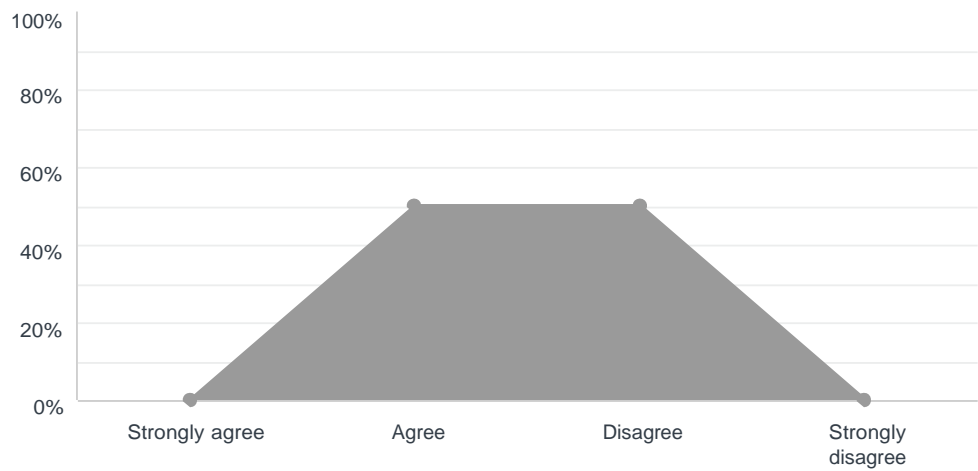


ANSWER CHOICES		RESPONSES	
Strongly agree		0.00%	0
Agree		50.00%	2
Disagree		50.00%	2
Strongly disagree		0.00%	0
TOTAL			4

Question 21

State agency staff effectively communicated the purpose for studies and information required to issue a §401 WQ Certification and other state approvals.

Answered: 7 Skipped: 5

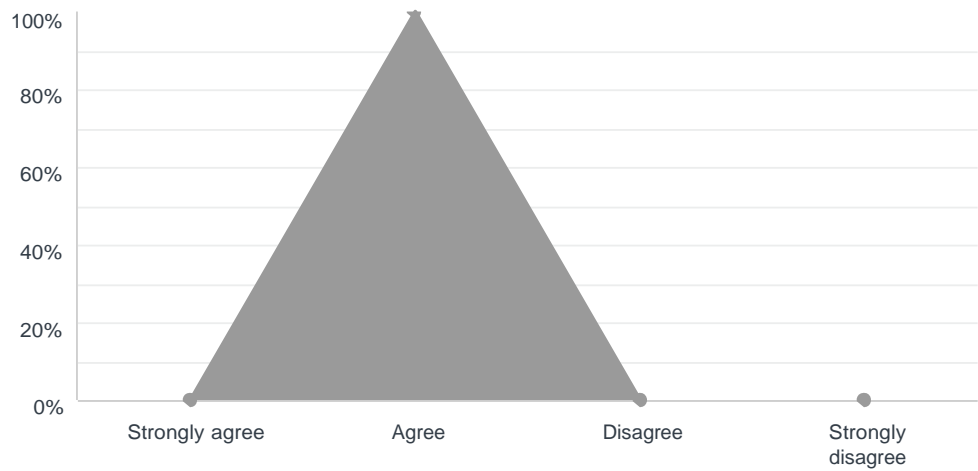


ANSWER CHOICES		RESPONSES	
Strongly agree		0.00%	0
Agree		50.00%	2
Disagree		50.00%	2
Strongly disagree		0.00%	0
TOTAL			4

Question 22

You received the necessary technical support and assistance from state agency staff prior to submitting your application for the §401 WQ Certification.

Answered: 7 Skipped: 5



ANSWER CHOICES		RESPONSES	
Strongly agree		0.00%	0
Agree		100.00%	3
Disagree		0.00%	0
Strongly disagree		0.00%	0
TOTAL			3

Question 23

Please provide any further feedback you may have in relation to your experience with Ecology and WDFW during the licensing process in the last year.

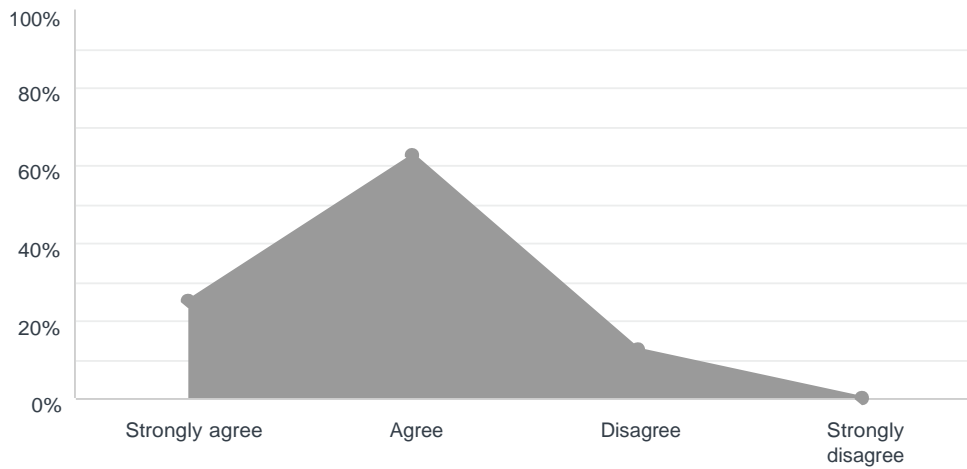
Answered: 6 Skipped: 6

#	RESPONSES	
1	This survey could benefit from including the choice "I don't know."	
2	NA	
3	Not applicable due to no active licensing projects.	
4	Our relicensing was very contentious but ecology §401 cert. was one of the least contentious part.	
5	technical staff should keep their focus on the science/data, and not legal or policy issues	
6	technical staff should focus on the science and not the legal/policy issues that should be handled by others	

Question 24

State agency staff were knowledgeable of your §401 WQ Certification conditions and other state requirements.

Answered: 8 Skipped: 4

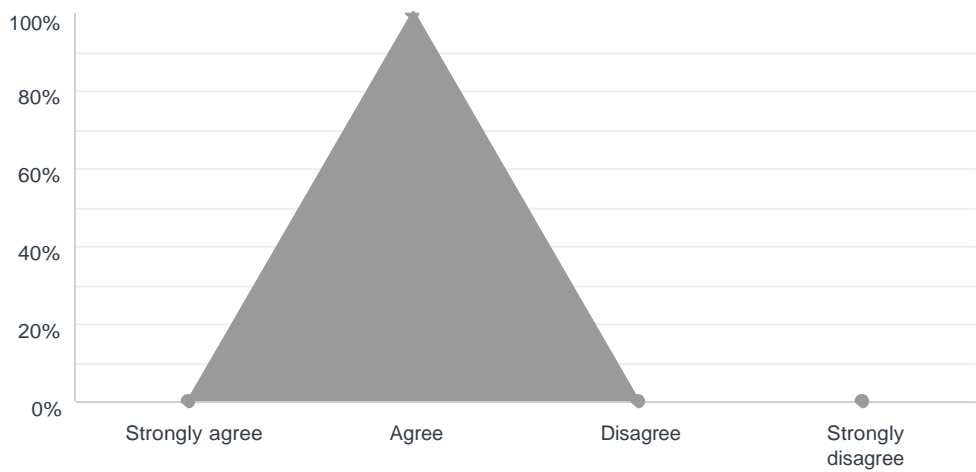


ANSWER CHOICES		RESPONSES	
Strongly agree		25.00%	2
Agree		62.50%	5
Disagree		12.50%	1
Strongly disagree		0.00%	0
TOTAL			8

Question 25

The reporting requirements for implementing your §401 WQ Certification conditions are clear.

Answered: 8 Skipped: 4

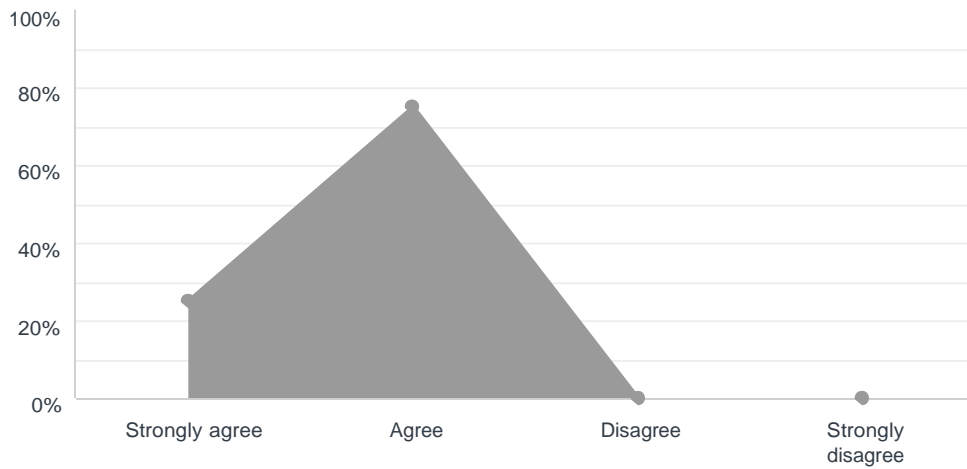


ANSWER CHOICES	RESPONSES	
Strongly agree	0.00%	0
Agree	100.00%	8
Disagree	0.00%	0
Strongly disagree	0.00%	0
TOTAL		8

Question 26

State agency staff were responsive to questions about reporting requirements related to your hydropower project(s).

Answered: 8 Skipped: 4

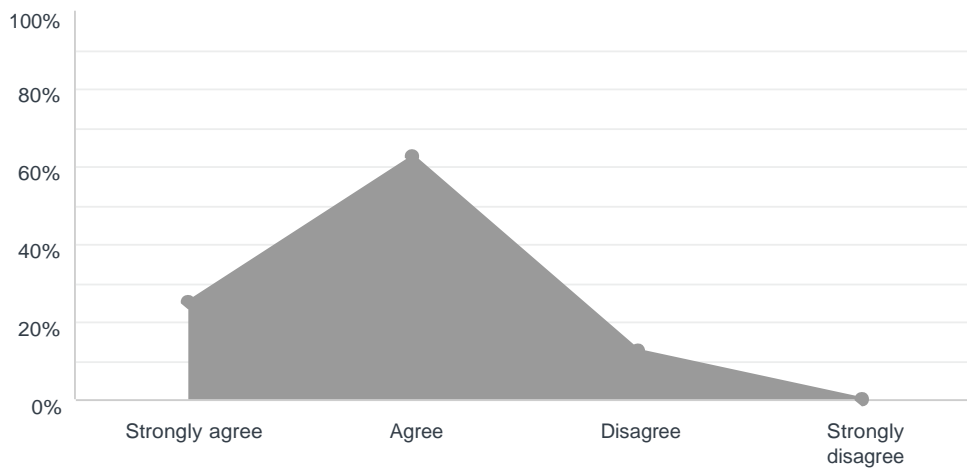


ANSWER CHOICES		RESPONSES	
Strongly agree		25.00%	2
Agree		75.00%	6
Disagree		0.00%	0
Strongly disagree		0.00%	0
TOTAL			8

Question 27

Decisions and approvals needed from state agency staff were provided in a timely manner.

Answered: 8 Skipped: 4

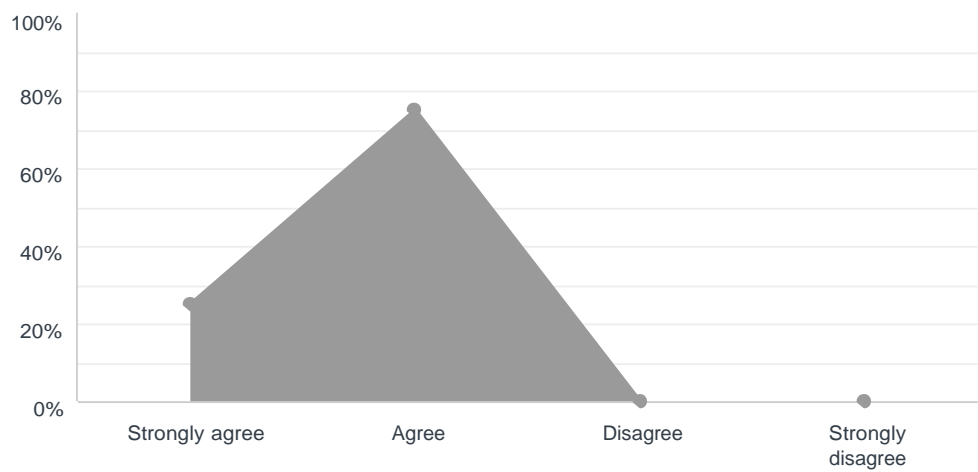


ANSWER CHOICES		RESPONSES	
Strongly agree		25.00%	2
Agree		62.50%	5
Disagree		12.50%	1
Strongly disagree		0.00%	0
TOTAL			8

Question 28

State agency comments and feedback on your reporting documents were clearly communicated.

Answered: 8 Skipped: 4

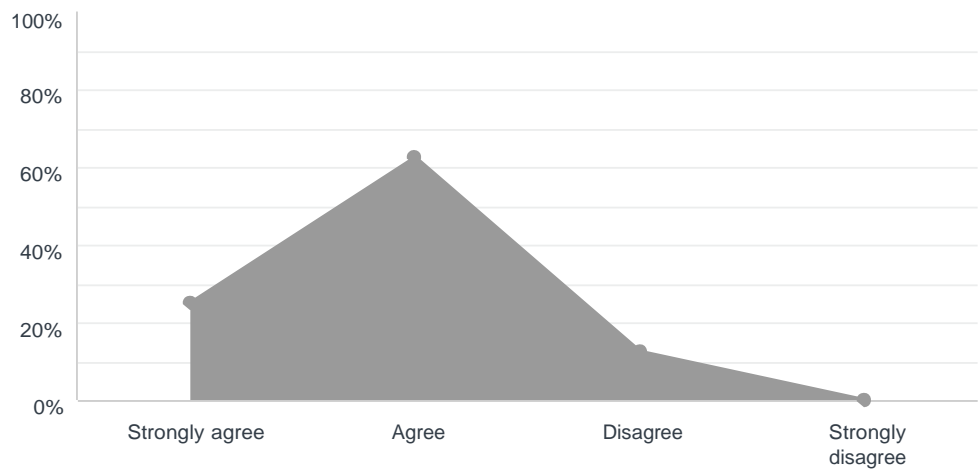


ANSWER CHOICES		RESPONSES	
Strongly agree		25.00%	2
Agree		75.00%	6
Disagree		0.00%	0
Strongly disagree		0.00%	0
TOTAL			8

Question 29

State agency staff provided the technical support and assistance necessary to implement your FERC license and §401 WQ Certification requirements.

Answered: 8 Skipped: 4



ANSWER CHOICES		RESPONSES	
Strongly agree		25.00%	2
Agree		62.50%	5
Disagree		12.50%	1
Strongly disagree		0.00%	0
TOTAL			8

Question 30

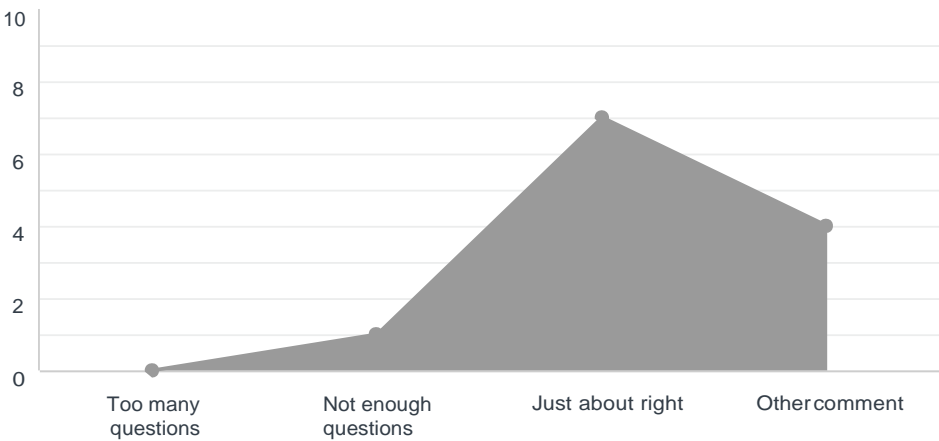
Please provide any further feedback you may have in relation to your experience with Ecology and WDFW during the implementation of license and §401 WQ Certification conditions in the last year.

Answered: 6 Skipped: 6

#	RESPONSES
1	As our Ecology lead is new, knowledge of our §401 Certification has been limited. Ecology staff have been willing to engage and understand our multiple §401 Certification conditions. Regarding Ecology and WDFW staff - advance preparation of meeting materials and understanding of subject matter prior to meetings would be helpful for all parties involved in the discussion, allowing for more productive meetings.
2	In general, we did not require significant resources in this area in 2017; however, when needed Ecology staff was very responsive to request for review, guidance, interpretation of regulations, etc. This is good example of how keeping consistent, qualified, and unbiased staff in place to support implementation of license and 401 WQC programs and requirements is important and beneficial to the State and to its hydropower projects.
3	Staff changes and inconsistency in understanding of hydropower and respective agency regulations has been frustrating and can lead to extra time and effort.
4	Implementation has been successful as agency staff have been consistently involved and no turnover of staff.
5	staff with fisheries expertise/education should be the main POCs for hydroelectric projects
6	We received a lot of excellent support from Ecology in the past couple years on implementing our projects. Our assigned staff person was not among the numerous Ecology staff who provided direction and support in these key projects.

Question 31
Tell us what you think about the length of the survey.

Answered: 11 Skipped: 1



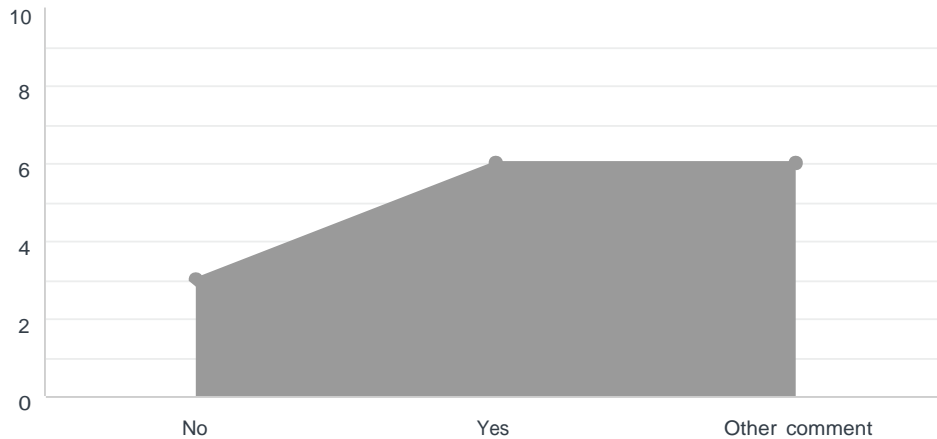
ANSWER CHOICES	RESPONSES	
Too many questions	0.00%	0
Not enough questions	9.09%	1
Just about right	63.64%	7
Other comment	36.36%	4
Total Respondents: 11		

#	OTHER COMMENT	
1	The length is fine, but I feel the content of answer choices needs improvement - which would likely add to length, but justifiably.	
2	Not enough questions to satisfy the separate agencies.	
3	Need to separate Qs for WDFW and Ecology staff, as experiences are different and feedback to each agency, separately, is needed. Also need more questions related to our view of the level of support/service needed from the State in given year (see also comment below).	
4	It's hard to respond about the two agencies with a single comment, as they are staffed differently and operate independently with different regulations.	

Question 32

Did the survey provide you with sufficient opportunity to share feedback on the Ecology and WDFW hydropower program and staff?

Answered: 11 Skipped: 1



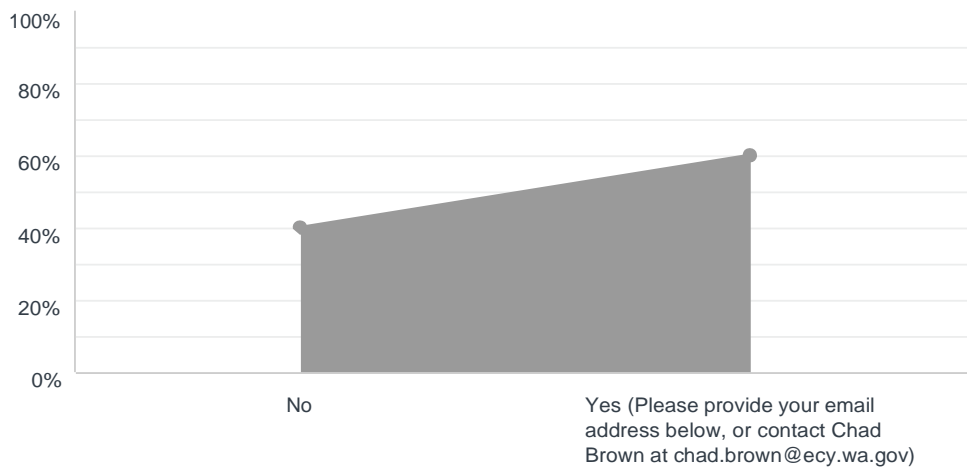
ANSWER CHOICES	RESPONSES	
No	27.27%	3
Yes	54.55%	6
Other comment	54.55%	6
Total Respondents: 11		

OTHER COMMENT
I believe that grouping staff in one as a single unit robs the department of useful feedback. There are 2 other potential dangers: 1.) The agency could misinterpret a comment about one individual and apply it to the department, and 2) there is the risk of inadvertently devaluing the survey participants' time and input
Our responses were answered conditionally. As we have multiple projects and agency staff, the questions do not allow sufficient comment by combining WDFW and Ecology. The questions could be interpreted several ways as they are open ended, not direct or explicit, meaning your answers will be very general. Our expectation was to work collaboratively with you on this questionnaire prior to completing it. We are committed to continue to work collaboratively with you on this questionnaire.
Need to provide Qs related to the level of service needed/required in a given year for each licensee (e.g. how much time did each licensee spend on implementing 401 WQC, and how much support did we need from Ecology and WDFW). Maybe something along the line of listing out how many (and what type (standard, unique, amendment, etc.) of reports/etc. did we file/request review on, how long did it take to get review completed, etc. Also maybe a question on if we think level of support needed increased or decreased from previous year.
Would like a "Sometimes" choice between Agree and Disagree.
Questions specific to each agency would be more useful.
wish there was a choice between agree and disagree as sometimes I'd prefer to answer "somewhat disagree"

Question 33

Would you like to participate in a future workgroup meeting to improve and finalize this annual survey?

Answered: 10 Skipped: 2



ANSWER CHOICES		RESPONSES	
No		40.00%	4
Yes		60.00%	6
TOTAL			10
#	YES (PLEASE PROVIDE YOUR EMAIL ADDRESS BELOW, OR CONTACT CHAD BROWN AT CHAD.BROWN@ECY.WA.GOV)		
1	Andrea@WildWaRivers.org		
2	marcie.clement@chelanpud.org		
3	rhendr1@gcpud.org		
4	thom@tollhouseenergy.com		
5	meghan.lunney@avistacorp.com		
6	dan_b@okpud.org		

Question 34
Please provide us with some information about you.
(All entries are optional.)

#	YOUR NAME	
1	Andrea Matzke	
2	Chelan PUD	
3	Ross Hendrick	
4	PacifiCorp	
5	Thom A, Fischer	
6	Speed Fitzhugh	
7	Dan Boettger	
#	AFFILIATION, IF ANY	
1	Wild Washington Rivers	
2	Chelan PUD	
3	Grant PUD	
4	Tollhouse Energy Company	
5	Avista	
6	Okanogan PUD	
#	HYDROPOWER PROJECTS YOU WORK WITH	
1	Sunset Falls Hydro, Skagit Hydro and formerly Black Canyon Hydro	
2	Rocky Reach, Rock Island, and Lake Chelan	
3	Priest Rapids Project	
4	Lewis River	
5	Electron, Black Creek (in WA)	
6	Spokane River Project	
7	Enloe	

Appendix E. FERC Licensing and Implementation Leads

Project Name	Owner	FERC No.	Ecology Project Lead	WDFW Project Lead
Alder (Nisqually)	Tacoma, City of	P-1862	Carol Serdar	Peggy Miller
Baker	Puget Sound Energy	P-2150	Monika Kannadaguli	Brock Applegate
Banks Lake Pumped Storage	Brookfield Renewable Resources	P-13296	Patrick McGuire	Patrick Verhey
Banks Lake Pumped Storage	Grand Coulee Hydroelectric Authority	P-13681	Patrick McGuire	Patrick Verhey
Barclay Creek	Free Flow Power	P-13864	Monika Kannadaguli	Brock Applegate
Battery Pearl Hill Pump Storage Project	Shell Energy Northwest	P-14795	Breean Zimmerman	Patrick Verhey
Big Sheep Creek	Sheep Creek Hydro, Inc.	P-5118	Patrick McGuire	Jeff Lawlor
Black Canyon	Black Canyon Hydro, LLC	P-14110	Monika Kannadaguli	Brock Applegate
Black Creek	Black Creek Hydro, Inc.	P-6221	Monika Kannadaguli	Brock Applegate
Boundary	Seattle, City of	P-2144	Patrick McGuire	Jeff Lawlor
Box Canyon	Public Utility District No. 1 of Pend Oreille Co.	P-2042	Patrick McGuire	Jeff Lawlor
Burton Creek	Sollos Energy, LLC	P-7577	Carol Serdar	Peggy Miller
Calligan Creek	Public Utility District No. 1 of Snohomish County	P-8864	Monika Kannadaguli	Brock Applegate
Cle Elum	Free Flow Power	P-12746	Breean Zimmerman	Patrick Verhey
Cle Elum Storage Dam	FFP, Qualified Hydro 24, LLC	P-13843	Breean Zimmerman	Graham Simon
Cowiche	Yakima-Tieton Irrigation District	P-7337	Breean Zimmerman	Patrick Verhey
Cowlitz Falls	Public Utility District No. 1 of Lewis County	P-2833	Carol Serdar	Peggy Miller
Cushman No. 1	Tacoma, City of	P-460	Carol Serdar	Peggy Miller
Cushman No. 2	Tacoma, City of	P-460	Carol Serdar	Peggy Miller
Deep Creek Project	Foster, Gordon (Northern Light)	P-5991	Patrick McGuire	Leslie King

Diablo Dam (Skagit)	Seattle, City of	P-553	Monika Kannadaguli	Brock Applegate
Easton Diversion Dam	Qualified Hydro 25, LLC	P-13850	Breean Zimmerman	Graham Simon
Eltopia Branch	Grand Coulee Project Hydroelectric Authority	P-3842	Patrick McGuire	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
Gorge Dam (Skagit)	Seattle, City of	P-553	Monika Kannadaguli	Brock Applegate
Green Hydropower Chief Joseph Project	Green Hydropower	P-13525	Patrick McGuire	Patrick Verhey
Green Hydropower Grand Coulee Project	Green Hydropower	P-13522	Patrick McGuire	Patrick Verhey
Green Hydropower Rocky Reach Project	Green Hydropower	P-13534	Patrick McGuire	Patrick Verhey
Hancock Creek	Public Utility District No. 1 of Snohomish County	P-13994	Monika Kannadaguli	Brock Applegate
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	Monika Kannadaguli	Peggy Miller
Kachess Storage Dam	Kachess Dam Hydropower, LLC	P-14206	Breean Zimmerman	Graham Simon
Keechelus Storage Dam	Keechelus Hydropower, LLC	P-14116	Breean Zimmerman	Graham Simon
Keechelus Storage Dam	Qualified Hydro 32, LLC	P-14128	Breean Zimmerman	Graham Simon
Koma Kulshan	Koma Kulshan Associates	P-3239	Monika Kannadaguli	Brock Applegate
LaGrande Dam (Nisqually)	Tacoma, City of	P-1862	Carol Serdar	Peggy Miller
LaGrande Powerhouse (Nisqually)	Tacoma, City of	P-1862	Carol Serdar	Peggy Miller
Lake Chelan Project	Public Utility District No. 1 of Chelan County	P-637	Breean Zimmerman	Graham Simon
Lilliwaup Creek	Lilliwaup Falls Generating Co.	P-3482	Carol Serdar	Peggy Miller
Long Lake	Avista Corporation	P-2545	Patrick McGuire	Leslie King
Lower Baker	Puget Sound Energy	P-2150	Monika Kannadaguli	Brock Applegate

Main Canal Headworks	Grand Coulee Project Hydroelectric Authority	P-2849	Patrick McGuire	Patrick Verhey
Martin Creek Hydroelectric Project	Free Flow Power	P-13865	Monika Kannadaguli	Brock Applegate
Mayfield (Cowlitz)	Tacoma, City of	P-2016	Carol Serdar	Peggy Miller
McMillan Reservoir (Hood St)	Tacoma, City of	P-10256	Carol Serdar	Peggy Miller
McNary Northshore	Northern Wasco Co. PUD	P-10204	Breean Zimmerman	Patrick Verhey
McTaggart Creek	Tacoma, City of	P-460	Monika Kannadaguli	Peggy Miller
Merwin Dam	PacifiCorp Company	P-935	Carol Serdar	Peggy Miller
Meyers Falls	Hydro Technology Systems Inc.	P-2544	Patrick McGuire	Mike McLellan
Mill Creek	Public Utility District No. 1 of Lewis County	P-4949	Carol Serdar	Peggy Miller
Monroe Street	Avista Corporation	P-2545	Patrick McGuire	Leslie King
Morse Creek	Port Angeles, City of	P-6461	Carol Serdar	Peggy Miller
Mossyrock (Cowlitz)	Tacoma, City of	P-2016	Carol Serdar	Peggy Miller
Newhalem	Seattle, City of	P-2705	Monika Kannadaguli	Brock Applegate
Nine Mile	Avista Corporation	P-2545	Patrick McGuire	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	Patrick McGuire	Patrick Verhey
P.E.C. Headworks	Grand Coulee Project Hydroelectric Authority	P-2840	Patrick McGuire	Patrick Verhey
Packwood Lake	Energy Northwest (WPPSS)	P-2244	Carol Serdar	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	Carol Serdar	Peggy Miller
Quincy Chute	Grand Coulee Project Hydroelectric Authority	P-2937	Patrick McGuire	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	Carol Serdar	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 Kannadaguli	Brock Applegate
Russel D. Smith	Grand Coulee Project Hydroelectric Authority	P-2926	Patrick McGuire	Patrick Verhey

Ruth Creek	Free Flow Power	P-13866	Monika Kannadaguli	Brock Applegate
Sentinel Mountain Pump Storage	United Power Corporation	P-12759	Patrick McGuire	Jeff Lawlor
Smith Creek	Seefeld Corporation	P-5982	Monika Kannadaguli	Brock Applegate
Snoqualmie Falls	Puget Sound Energy	P-2493	Monika Kannadaguli	Brock Applegate
South Fork Tolt	Seattle, City of	P-2959	Monika Kannadaguli	Peggy Miller
Sullivan Creek	Public Utility District No. 1 of Pend Oreille Co.	P-2225	Patrick McGuire	Jeff Lawlor
Summer Falls	Grand Coulee Project Hydroelectric Authority	P-3295	Patrick McGuire	Patrick Verhey
Swamp Creek	Free Flow Power	P-13867	Monika Kannadaguli	Brock Applegate
Swift No. 1	PacifiCorp Company	P-2111	Carol Serdar	Peggy Miller
Swift No. 2	Cowlitz County PUD	P-2213	Carol Serdar	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	Graham Simon
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	Patrick McGuire	Graham Simon
Upper Baker	Puget Sound Energy	P-2150	Monika Kannadaguli	Brock Applegate
Upper Falls	Avista Corporation	P-2545	Patrick McGuire	Leslie King
Upriver Hydro Plant	Spokane, City of	P-3074	Patrick McGuire	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	Carol Serdar	Peggy Miller
Wynoochee River	Tacoma, City of	P-6842	Carol Serdar	Peggy Miller
Yale Site	PacifiCorp Company	P-2071	Carol Serdar	Peggy Miller
Yelm Hydro Plant	Centralia, City of	P-10703	Carol Serdar	Peggy Miller

Youngs Creek	Public Utility District No. 1 of Snohomish County	P-10359	Monika Kannadaguli	Brock Applegate
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