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September 13, 2022

Jim Cahill
Senior Budget Assistant to the Governor for Natural Resources
Office of Financial Management
P.O. Box 43113
Olympia, WA 98504-4313

RE: ESSB 5693 Sec. 130 (22) Preliminary Report

Mr. Cahill:

Enclosed please find a summary of preliminary findings in the evaluation of riparian-related programs in Washington State (“Preliminary Report”) conducted pursuant to ESSB 5693 Sec. 130 (22). The Office of Financial Management (“OFM”) has contracted with Plauché & Carr, LLP (“Plauché & Carr”), and its subconsultant, Industrial Economics, Inc. (“IEC”) under this provision “to evaluate the effectiveness, utilization, and outcomes of the voluntary incentive programs for landowners and of existing regulatory programs responsible for protecting and restoring areas along streams and rivers toward achieving a science-based standard for a fully functioning riparian ecosystem.” The Preliminary Report provides an overview of the evaluation scope and process, summarizes the initial phase of work performed and preliminary findings of that work, and outlines next steps.

In the initial phase, Plauché & Carr identified key state programs and authorities with a role in riparian protection and/or restoration. Appendix A provides a summary of these state programs and a brief description of their respective roles with regards to riparian areas. Plauché & Carr and IEC then conducted outreach with state agencies to further identify and refine key programs, as well as to identify key points of contact for these programs, and IEC conducted technical interviews with appropriate agency points of contact to compile data and information relevant to the scope, goals and objectives, and outcomes of these programs. Appendix B provides a table of the programs identified through this process and summarizes their approach to riparian area protection and restoration, and target population. Appendix C lists the data and documentation provided by agency contacts and compiled as of the date of the Preliminary Report. The Preliminary Report provides additional details from this initial phase including overarching themes heard in interviews; initial insights regarding programs, data, and information; and next steps in the analysis.

A primary objective of the Preliminary Report is to ensure that Appendices A, B, and C contain the key state programs and data that will be the focus of the next phase of the evaluation. In this next phase, Plauché & Carr and IEC will finalize these program and data compilations; generate a more detailed summary of identified state programs; analyze the data and information compiled to evaluate

the effectiveness of the selected programs; and develop recommendations regarding state program effectiveness, use, and outcomes. A final report of recommendations will be submitted by December 1, 2022.

Sincerely,

A handwritten signature in blue ink, appearing to read 'A. Carr', is positioned above the printed name.

Amanda M. Carr

Enclosures

The logo for Industrial Economics, Incorporated (IEC) is positioned in the top left corner. It features the letters 'IEC' in a large, white, sans-serif font. Below the letters is a small, white silhouette of a boat on a river, set against a background of a blue sky with white clouds. The entire logo is overlaid on a vertical teal stripe that runs down the left side of the page.

IEC

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& CARR LLP

Evaluation of Riparian-Related Programs in Washington State: Summary of Preliminary Findings

PREPARED FOR: OFFICE OF FINANCIAL MANAGEMENT, OFFICE OF THE GOVERNOR

PREPARED BY: INDUSTRIAL ECONOMICS, INCORPORATED (IEC) AND PLAUCHÉ & CARR LLP

SEPTEMBER 13, 2022



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Project Background

Engrossed Substitute Senate Bill 5693 Sec. 130 (22)

"...to evaluate the effectiveness, utilization, and outcomes of the voluntary incentive programs for landowners and of existing regulatory programs responsible for protecting and restoring areas along streams and rivers toward achieving a science-based standard for a fully functioning riparian ecosystem."



Project Objectives

- Compile and analyze existing data and information to assess the technical effectiveness and outcomes of existing state programs and authorities
 - Conducting outreach and interviews with agency technical staff
 - Research and data collection for identified programs
 - Identify individual program objectives and goals
 - Effectiveness is being measured in relation to a 'science-based standard for a fully functioning riparian ecosystem' (ESSB 5693 Sec. 130(22))
 - Effectiveness is also being measured in relation to individual program objectives and goals
- Develop preliminary findings and final report of recommendations toward achieving a science-based standard for a fully functioning riparian ecosystem



Outreach Summary: Focus

- Identified state voluntary and regulatory programs to target
 - Conducted research and compiled a broad list of Washington programs and authorities that include protection and/or restoration of riparian areas
 - Focused on programs most directly responsible for protecting and restoring riparian areas
 - See Appendix A: State Programs - Riparian Areas
 - Worked with state agencies to identify target programs and connect with appropriate points of contact
 - See Appendix B: Program Summary
- Interviewed state agency points of contact and compiled data and information
 - See Appendix C: Preliminary Data Inventory

Outreach Summary: Overview of Interviews

INTERVIEW TOPICS

- The scope of current initiatives to protect and restore riparian areas
- The effectiveness of riparian protection and restoration programs in Washington State
- Methods and data that are being used to measure program scope, performance, and outcomes
- Current and future planned updates to relevant programs



Outreach Summary: Overview of Agency Technical Interviews

Agency/Organization	Number of Relevant Riparian-Related Programs Discussed in Interviews	Interviews Completed
State Conservation Commission	6	2
Department of Ecology	10	9
Recreation and Conservation Office – Governor’s Salmon Recovery Office	3	1
Puget Sound Partnership	1	1
Department of Fish and Wildlife	3	3
Department of Natural Resources	4	2
Conservation Districts	1	1
Department of Commerce	1	1
Department of Agriculture	2	1
TOTAL	31	21



Preliminary Overview of Targeted Programs

SUMMARY

- Program types:
 - Regulatory (8)
 - Voluntary (18)
 - Technical/scientific assistance (5)
- Example target populations:
 - Agricultural landowners/producers
 - Small forest landowners
 - Coastal communities
 - Property owners along shorelines of the state
 - Local governments (e.g., counties, municipalities)



Preliminary Overview of Targeted Programs

PROGRAM NAME:

- Identification of the program name and lead state agency responsible for implementing the regulatory or voluntary program.

APPROACH TO RIPARIAN PROTECTION:

- Description of the means and/or degree to which riparian habitat is protected or restored through program activities.

TARGET POPULATION:

- Identification of entities/ populations eligible to participate or regulated by the program.

Preliminary Overview of Targeted Programs

Mechanism/Approach to Riparian Habitat Protection or Restoration	Number of Programs*
Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	11
Develops scientific guidance and/or provides technical expertise regarding riparian habitat protection.	6
Fulfillment of regulatory requirements may include protection of riparian areas.	4
Fulfillment of regulatory requirements must include protection of riparian habitats.	2
Grant program that provides funding for land acquisition or easements that could include riparian habitat.	2
Grant program that provides funding for projects that have a substantial focus on riparian habitat improvement.	8

*One program may contribute to multiple mechanisms/approaches



Example Program Data

RIPARIAN HABITAT- SPECIFIC:

- Miles of stream/Acres planted with riparian habitat
- Average buffer width
- Number of trees planted
- Number of waterways where riparian buffers implemented

OTHER ECOLOGICAL METRICS:

- Water quality measures
- Stream temperatures
- Miles of river restored, protected or with improved habitat

ADMINISTRATIVE METRICS:

- Participation rates/number of participants
- Grant funds disseminated
- Program funding levels
- Compliance with rules
- Number of projects completed

Data Collection Status

DATA AVAILABILITY:

- A small number of programs do appear to have available tabular data that measure various effectiveness metrics (e.g., CREP, NRI, RCO/PRISM)
- Many programs have some manner of information related to understanding their own effectiveness, though often limited to or focused on administrative outcomes
- Many programs have regular reporting that summarizes key outcomes and metrics consistently across years



Data Collection Status

KEY LIMITATIONS:

- Many programs implemented locally, and centralized/standardized data are not collected or available
- Some data are not sharable due to privacy requirements
- Geospatial data identifying scope of program and program outcomes are very limited
- Data that are collected are not necessarily compiled in tabular format
- Data may not be current or regularly updated

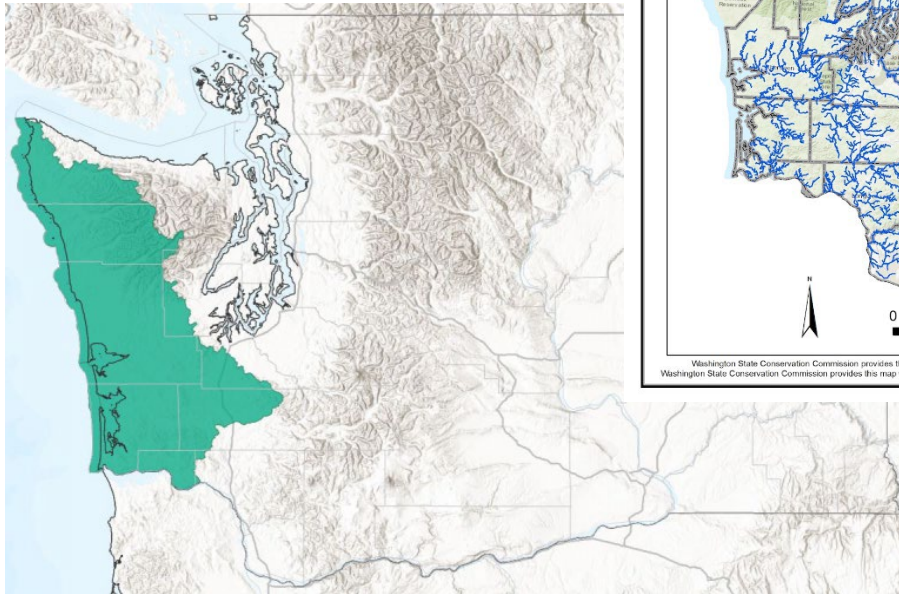


Data Collection Status

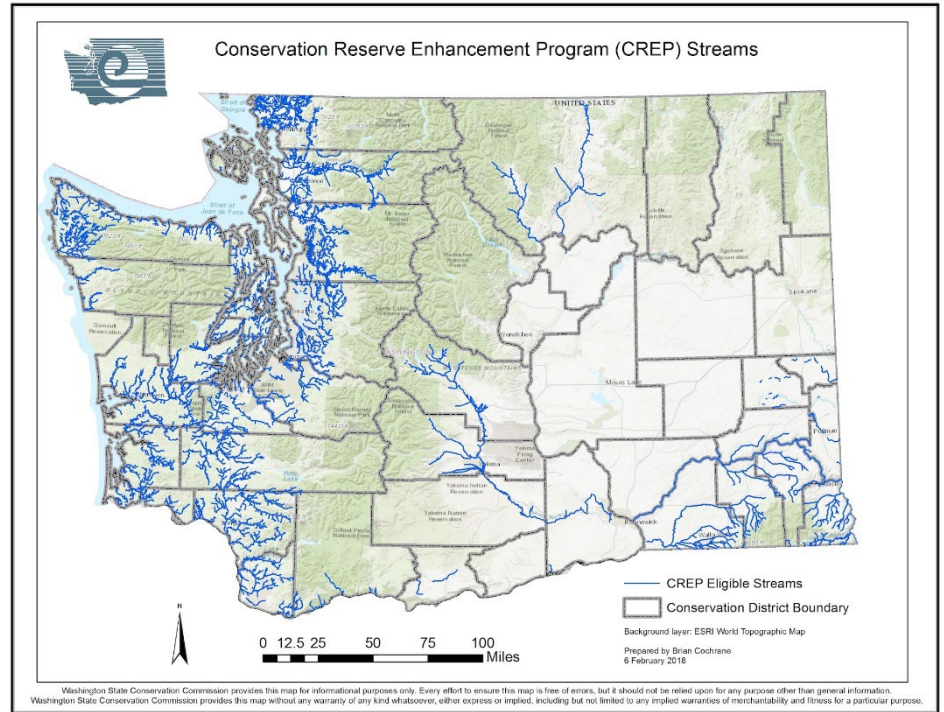
DATA AND INFORMATION RECEIVED TO DATE:

- Performance and monitoring reports
- Program fact sheets and infographics
- Website links with background information, program story maps, and program-specific publication libraries
- Published academic studies related to specific programs
- Online databases and data sources
- Data from program-specific databases
- GIS data sources
- Program-specific maps (e.g., eligible areas, project locations)

Data Collection Status



Geographic coverage of the Washington Coast Restoration and Resilience Initiative



CREP Streams



Preliminary Themes: Overarching

- No programs currently measuring effectiveness to DFW's SPTH standard specifically
- Many programs do not have sufficient funding necessary to comprehensively collect effectiveness data
- Programs implemented at local level have no central repository/coordination or standardization for data collection and performance measurement
 - Challenge of standardization across different goals and targets depending on conditions on the ground
- Effectiveness monitoring of ecological outcomes has generally been sporadic or opportunistic



Preliminary Themes: Regulatory Programs

- Current regulatory framework largely lacks specific focus on riparian habitat protection, with exception of Forest Practices
- Limited scope of authority to regulate uses and activities within riparian areas
- Challenges with implementation and enforcement
 - Insufficient funding to implement programs (e.g., recruit participants, administer grants, provide assistance to participants)
 - Lack of sufficient funding and capacity to fully enforce/monitor compliance
 - Roles of state agencies and local entities are conflicting or unclear
 - Variation in local implementation of riparian regulations



Preliminary Insights: Regulatory Programs

- Effectiveness towards fully functioning riparian habitat
 - Definition and goals for functioning riparian habitat differs across programs, and no program has yet adopted WDFW SPTH guidance
 - Riparian habitat generally not a specific regulatory requirement, but one of many options for achieving other endpoints
 - Program goals (e.g., No Net Loss) may be forward-looking, and do not serve to restore/create additional riparian habitat
 - Performance measurement is often limited to administrative metrics (e.g. number of permits etc.) or implementation of BMPs



Preliminary Themes: Voluntary Programs

- Numerous voluntary programs
- Limitations
 - Lack of sufficient funding
 - Competition among regions (e.g., salmon recovery regions, Conservation Districts, local governments) for limited funds
 - Lack of funding for long-term monitoring/adaptive management
 - Program success dependent on landowner participation (both initial participation and continued involvement), which is variable
 - Inconsistency of incentives offered to landowners in exchange for taking riparian areas out of production (e.g., due to biennial funding cycle, changes in National Agricultural Statistics Service rental rates)
- Watershed-level planning efforts may provide enhanced benefits to riparian habitat by taking a holistic approach to accomplishing riparian habitat goals



Ongoing Efforts to Address Limitations in Existing Riparian-Related Programs

- Various efforts are currently being developed to enhance conservation and restoration of riparian habitat protection. These will be acknowledged in the Final Report but will not be evaluated for effectiveness.
 - Ecology developing *Voluntary Clean Water Guidance for Agriculture* program
 - Ecology considering use of riparian buffers in Combined Animal Feeding Operation (CAFO) general permit
 - DFW High Resolution Change Detection work - mapping changes in riparian areas
 - PSP work to define riparian effectiveness metrics
 - Ecology is working to refine channel migration zones and improve National Hydrography data sets

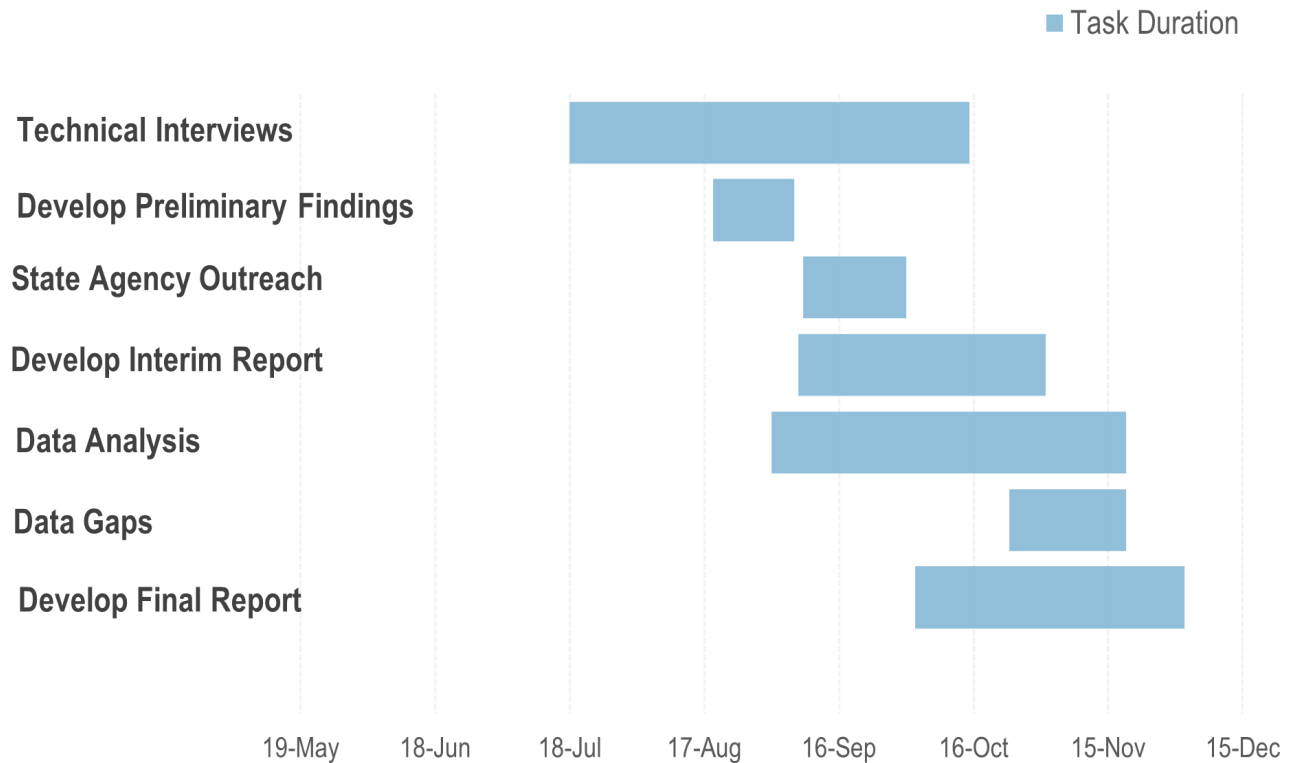


Next Steps

- ✓ Continue follow up from technical interviews
- ✓ Conduct data analysis
- ✓ Conduct gaps analysis
- ✓ Outreach to identify and resolve any critical program and information gaps
- ✓ Final report - December 2022

Schedule

Timeline for Riparian-Related Program Effectiveness Evaluation



IEC



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Appendix A: State Programs – Riparian Areas



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Regulatory

Growth Management Act

The Growth Management Act (GMA) requires local governments to adopt comprehensive land use plans and development regulations that protect designated critical areas, which include riparian areas. Local critical area regulations may include riparian buffers but commonly employ riparian management zones. The aim of riparian management zones is to avoid development activities in riparian areas with certain exceptions and corresponding mitigation requirements. The Voluntary Stewardship Program provides an alternative to regulation of agricultural activities under the GMA in 27 counties.

The Growth Management Hearings Board has jurisdiction to review comprehensive plans and critical area ordinances as well as to invalidate noncompliant plans.

Authorities

- Chapters 36.70A, 36.70B, 36.70C RCW
- Chapters 365-185, 365-190, 365-195, 365-196, 197, 365-198, 365-199 WAC

State Agencies

- Department of Commerce
- Growth Management Hearings Board

Local Entities

- Counties and cities

Regulated Uses

- Local entities preparing Comprehensive Plans
- Local plans regulate development and land use activities, typically new activities, subject to locally-adopted categorical exemptions

Shoreline Management Act

The Shoreline Management Act (SMA) requires local governments develop Shoreline Master Plans (SMPs) to protect and manage state shorelines and adjacent shorelands, subject to approval by the Department of Ecology. SMPs include provisions regulating uses within shoreline jurisdiction that assure “no net loss” of ecological functions and that require authorization through one of three permit processes: substantial development permits, conditional use permits, or variances.

The SMP Guidelines, developed by the Shorelands and Environmental Assistance Program, address shoreline buffers, setbacks and vegetation conservation in several sections. Buffer widths and setbacks within SMPs vary among jurisdictions and are tailored to local shoreline ecological conditions, but each work to limit clearing, cutting or elimination of vegetation within a certain distance from the shoreline.

Local governments and the Department of Ecology can utilize varying levels of enforcement action to address impacts to riparian areas that are unauthorized or inconsistent with an SMP or the SMA.

Authorities

- Chapter 90.58 RCW
- Chapters 173-18, 173-20, 173-22, 173-26, 173-27 WAC

State Agencies

- Department of Ecology
- Shoreline Hearings Board

Local Entities

- Counties and cities

Regulated Uses

- Counties and cities preparing SMPs
- SMPs regulate certain uses, development, and modifications within shorelines (e.g., aquaculture, boating facilities, commercial and residential development, mining, shoreline stabilization, piers and docks), typically new activities
- Subject to exemptions, including agricultural activities, Forest Practices, certain restoration projects

Water Quality Program

**The Department of Ecology's
Water Quality Program
performs regulatory
functions that may include
protection or restoration of
riparian areas**

1. STANDARDS AND PERMITTING

2. ASSESSMENT AND IMPROVEMENT

WATER QUALITY STANDARDS AND PERMITTING

The Water Quality Program sets water quality standards for groundwater and surface water. These standards set maximum contaminant levels, pollution limits, and other criteria to protect state-specified uses of waters (e.g., aquatic life, drinking water). Additional “antidegradation” requirements prevent unnecessary lowering of water quality for water bodies exceeding water quality standards. Penalties and corrective action orders may be issued for violations.

Water quality standards are primarily implemented through State Wastewater Discharge Permits, National Pollutant Discharge Elimination System permits, Section 401 certifications, and other water quality permits. Certain standards for agricultural activities and on-site sewage systems are implemented by the Department of Agriculture and the Department of Health, respectively. Permits may require conditions or programs that include protection or restoration of riparian habitat. Riparian enhancement and buffers may also be components of wetlands mitigation.

Authorities

- 33 U.S.C. § 1251 et seq; Chapters 90.44, 90.48, 90.64, 90.84 RCW
- Chapters 173-200, 173-201A, 173-216, 173-220, 173-700 WAC

State Agencies

- Department of Ecology
- Department of Agriculture
- Department of Health

Regulated Uses

- Activities with potential to contaminate groundwater
- Discharges from municipal, commercial, industrial uses such as construction, water treatment plants, CAFOs, industrial or municipal facilities, and stormwater runoff
- Projects and activities proposed in waters of the U.S. or waters of the state such as dredging, hydropower, development, piers

WATER QUALITY ASSESSMENT AND IMPROVEMENT

The Water Quality Program performs a biennial assessment of water bodies and submits a list of those not meeting surface water quality standards (known as the 303(d) list) to the US Environmental Protection Agency (EPA) for approval. Impaired waters on the list require a water quality improvement project or Total Maximum Daily Load (TMDL) plan to address point and non-point sources of pollution. These efforts may involve increasing protective limits in water quality permits, clean-up projects, and implementing best management practices (BMPs) with landowners, including riparian restoration projects (e.g., revegetation) and protection practices (e.g., livestock exclusion BMPs).

Where voluntary adoption is unsuccessful, the Department of Ecology has authority to require a nonpoint source polluter to implement BMPs. Further, any person who violates or creates a substantial potential to violate water quality requirements is subject to a variety of enforcement measures, including orders, injunctions, and civil penalties.

Authorities

- 33 U.S.C. § 1251 et seq; Chapter 90.48 RCW
- Chapter 173-201A WAC

State Agencies

- Department of Ecology

Regulated Uses

- Point sources of pollution, including discharges into surface waters by municipal, commercial and industrial uses
- Nonpoint sources of pollution, often involving land use activities, including agriculture, forest practices, habitat alteration, recreation, urban/suburban areas, and industrial emissions

Hydraulic Project Approval

The Habitat Program administers review, permitting, and enforcement of Hydraulic Project Approval (HPA). Before undertaking a hydraulic project, any person or government agency is required to obtain approval as to the adequacy of means proposed for the protection of fish life under an HPA permit. Hydraulic projects include construction or performance of work that will use, divert, obstruct, or change the natural flow or bed of marine or fresh waters of the state. Authority to issue HPA permits, condition hydraulic projects, and enforce the hydraulic code extends landward of the ordinary high-water line to riparian uplands. However, HPA authority does not cover all uses and activities or all pre- and post- project activities. Certain HPA applications for Fish Habitat Enhancement Projects can qualify for streamlined permitting.

Compliance biologists conduct site inspections during construction and/or upon completion for some but not all projects. Inspections are focused on those projects with the greatest potential to harm fish and their habitat.

Authorities

- Chapter 77.55 RCW
- Chapter 220-660 WAC

State Agencies

- Department of Fish and Wildlife

Regulated Uses

- Construction or performance of work by private or public entities that will use, divert, obstruct, or change the natural flow or bed of any of the salt or fresh waters of the state, including, for example, shoreline stabilization, docks and piers, boat ramps and launches, culverts and bridges, marinas and terminals, dredging, utilities, and mining
- Subject to exemptions, including placement of boundary markers, derelict fishing gear removal, removal of certain invasive species, use of scientific measurement devices, forest practices hydraulic projects, and installation or maintenance of aquaculture facilities, among others

Shorelands and Environmental Assistance Program

The Shorelands and Environmental Assistance Program oversees administration of several state authorities, including the State Environmental Policy Act (SEPA). The Program performs SEPA rulemaking, provides SEPA training for other agencies, and issues guidance including the SEPA Handbook.

SEPA requires all state and local agencies to conduct an environmental review prior to carrying out any agency actions, approvals, or undertaking any proposals not specifically exempted. SEPA plays a key role in both project permitting and land use planning and provides agencies substantial authority to impose conditions or measures to mitigate “significant adverse environmental impacts” or deny proposals with significant impacts that cannot be mitigated. Depending on the scope of a proposal, this could result in conditions being placed on a project to ensure the protection of riparian areas, including buffers or other mitigation requirements.

Authorities

- Chapter 43.21C RCW
- Chapter 197-11 WAC

State Agencies

- Department of Ecology

Regulated Uses

- State and local government decisions, including issuance of permits for private projects, constructing public facilities, or adopting regulations, policies, and plans
- Subject to exemptions (e.g., forest practices, sale of real property, cell towers, emergencies, minor new construction)

Forest Practices Program

The Forest Practices Program includes many rules that impact riparian areas. Generally, these rules establish the riparian buffer area for fish bearing (Type F) streams as one site potential tree height. The rules break riparian areas into three zones, from most to least protective: the (1) core, (2) inner, and (3) outer zones. Parcels of 20 contiguous acres or less owned by landowners with less than 80 total forested acres are exempt from buffer requirements but must meet other riparian management measures. Forest Practices rules extend to lands covered under the Forest Practices Habitat Conservation Plan (HCP), including approximately 9.3 million acres of non-federal, non-tribal forestland in Washington.

Forest Practices rules are reviewed through an adaptive management program, and the Timber, Fish, and Wildlife Policy Committee develops solutions to issues that arise in the Forest Practices Program.

Authorities

- Chapter 76.09 RCW
- Chapter 222-30 WAC

State Agencies

- Forest Practices Board
- Department of Natural Resources

Regulated Uses

- Forest practices such as road construction, timber harvest, and thinning on private and public lands under the Forest Practices HCP
- Forest practices covered under a separate HCP are subject to the standards within the HCP and not necessarily the Forest Practices rules

Voluntary

State Conservation Commission Programs

The Commission, together with Conservation Districts, administers voluntary incentive-based programs that often protect or restore riparian areas

- 1. CONSERVATION RESERVE ENHANCEMENT PROGRAM**
- 2. NATURAL RESOURCE INVESTMENTS**
- 3. VOLUNTARY STEWARDSHIP PROGRAM**
- 4. SUSTAINABLE FARMS AND FIELDS**
- 5. SALMON RECOVERY FUNDING PROGRAM**
- 6. AGRICULTURAL CONSERVATION EASEMENTS**

Conservation Districts

Conservation Districts (CDs) are subdivisions of state government that provide community-based natural resource expertise and funding and carry out State Conservation Commission (SCC) programs. The SCC is the coordinating agency for the state's 45 CDs and provides training, quality assurance, and consistency across conservation planning through its Center for Technical Development. CDs are involved in riparian protection and restoration on private lands through existing programs, as well as innovation of new programs:

- Washington is leading development of a Commodity Buffers Program (CBP), started by the Spokane County CD, which leverages federal Regional Conservation Partnership Program and CD funds to make annual payments to agricultural producers at or above adjacent crop rotation values in return for installing riparian buffers. CBP bridges a financial gap in existing cost-share programs and encourages producers to implement conservation practices.
- Walla Walla and King County CDs include urban riparian protection incentive programs providing technical assistance and project design and implementation services for urban landowners to plant riparian buffers.

Authorities

- Chapter 89.08 RCW
- Title 135 WAC

State Agencies

- State Conservation Commission

Local Entities

- Conservation Districts

Program Participants

- Washington landowners, depending on Conservation District and program eligibility

Conservation Reserve Enhancement Program

The Conservation Reserve Enhancement Program (CREP) leverages federal and non-federal funds to target specific state, regional, or nationally significant conservation concerns. The US Department of Agriculture (USDA) Farm Service Agency (FSA) state office administers CREP in conjunction with the SCC and Conservation Districts. CREP policies are largely set at the national level, with some state policies made by the state FSA office. The primary purposes of CREP in Washington is to restore and protect riparian habitat for salmon recovery.

CREP pays landowners annual rent for establishing buffers along salmon-bearing streams and wetlands instead of crops. The Program may also pay for livestock exclusion fencing and watering facilities. These riparian measures are preserved under 10- to 15- year renewable contracts. Project costs are paid by CREP, shared between the FSA and SCC often at a 4-1 leverage of state dollars. The Program provides oversight and maintenance for five years after planting, paid for by the SCC.

In 2022, the State Legislature appropriated \$7,000,000 for CREP.

Authorities

- 16 U.S. Code § 3831a; Chapter 89.08 RCW

State Agencies

- State Conservation Commission

Local Entities

- Conservation Districts

Program Participants

- Private owners of cropland or marginal pastureland, including Tribal lands, on salmon bearing stream reaches
- Ineligible lands include those with existing easements that restrict farming activity, urban lands, and public lands (unless leased for the full life of the CREP contract)

Natural Resource Investments

The Natural Resource Investments (NRI) Program is a cost-share program funded by the SCC and used by CDs to offer local, incentive-based programs empowering landowners to voluntarily install best management practices (BMPs). BMPs advance natural resource objectives, including those pertaining to salmon recovery, climate resilience, and water quality.

NRI funds are capital funds and must be used to support structural BMP projects. BMPs must also meet USDA Natural Resources Conservation Services (NRCS) requirements. NRI project BMPs may protect or restore riparian areas through critical area planting, hedgerow planting, fencing, large woody debris structure, riparian forest buffers, and streambank and shoreline protection. Projects may span multiple properties and cost-share is available to participants on public lands up to 50%.

In 2021, the State Legislature provided \$4,000,000 for NRI.

Authorities

- Chapter 89.08 RCW

State Agencies

- State Conservation Commission

Local Entities

- Conservation Districts

Program Participants

- Private owners or lessees of urban or rural farms and ranches within Conservation District boundaries and identified for eligible projects

Voluntary Stewardship Program

Created in 2011, the Voluntary Stewardship Program (VSP) provides counties the option to meet GMA and critical areas requirements by developing local plans that use voluntary, incentive-based tools, rather than regulations, to address agricultural activities. The SCC administers funding for counties to develop and implement VSP work plans. These plans identify critical areas and agricultural activities and establish measurable benchmarks for program and resource results. While there is significant flexibility in plan development, the SCC Executive Director has ultimate approval authority and obtains a recommendation for individual VSP work plan approval or rejection by a technical panel including the Departments of Ecology, Fish and Wildlife, and Agriculture, and the SCC. Every five years, a progress report on VSP work plan benchmarks is provided to the SCC. If progress is not achieved, new incentives may be created, or the county may be required to revert to a regulatory approach.

In 2022, the State Legislature appropriated \$3,000,000 for on-the-ground VSP projects that seek to address salmon habitat resource needs or impacts, including, for example, projects that reduce stream temperature, increase shade, riparian area exclusion fencing, and removal of fish passage barriers.

Authorities

- RCW 36.70A.700, et seq.
- WAC 365-196-832

State Agencies

- State Conservation Commission

Local Entities

- Conservation Districts

Program Participants

- VSP counties (27)
- Local agricultural landowners in VSP counties with approved work plans

Sustainable Farms and Fields Program

Created in 2020, the Sustainable Farms and Fields Program (SFFP) distributes grant funding to Conservation Districts and other public entities to make it easier for farmers and ranchers to implement climate-smart practices and projects that increase carbon sequestration and reduce greenhouse gas emissions (GHGs). Farmers and ranchers may receive free services (e.g., on-farm consultations, farm plans, and other technical expertise) and financial assistance to help cover the cost of eligible projects, equipment, seed for cover crops, and other expenses. Eligible projects and practices may benefit riparian areas, including through buffers and vegetation.

The SCC consults with the Department of Agriculture, Washington State University, and the USDA NRCS to prioritize SFFP grant applications. Prioritization is based on several factors including, among others, creation of riparian buffers or other fish habitat enhancements.

In 2022, the State Legislature appropriated an additional \$2,000,000 for SFFP.

Authorities

- RCW 89.08.615

State Agencies

- State Conservation Commission

Local Entities

- Conservation Districts

Program Participants

- Public entities with expertise to provide technical assistance and/or capacity to implement climate-smart practices, including Conservation Districts, state agencies, colleges, universities, and extension offices, Tribes, local governments, and special purpose districts
- Agricultural landowners or operators

Salmon Recovery Funding Program

Created in 2022, the Salmon Recovery Funding (SRF) Program encourages landowner incentive programs focusing on projects to restore areas critical to salmon habitat, also known as riparian restoration projects. The opportunity provides funding for projects that both protect critical areas and maintain agricultural viability. Eligible project types are cost-share, District Implemented Projects, incentives programs (e.g., the Commodity Buffers Program), or planning/design of a riparian restoration BMP, and may include multiple landowners.

In 2022, the State Legislature appropriated \$10,000,000 from the Salmon Recovery Account to the State Conservation Commission to be used solely to provide grants for riparian restoration projects with landowners.

Authorities

- RCW 77.85.170

State Agencies

- State Conservation Commission

Local Entities

- Conservation Districts

Program Participants

- Conservation Districts implementing riparian projects with landowners
- Owners of land including riparian areas, with preference for lands within watersheds with critical salmon habitat needs

Agricultural Conservation Easements Program

The Office of Farmland Preservation (OFP), within the SCC, works to address the loss of agricultural and forest land in Washington. The OFP addresses the decline in the amount and use of agricultural lands and prevention of conversion to non-agricultural uses. To this end, the OFP includes a state Agriculture Conservation Easements Program (ACEP). While ACEP priorities are focused on protecting food production and preventing conversion to non-agricultural uses, they also include the conservation of wildlife habitat and protection of water resources. Agricultural conservation easements add restrictions on development and subdivision to property titles and provide a plan to protect conservation values of the land.

The OFP may partner with Conservation Districts on agricultural and forest easement projects seeking funding from the Recreation and Conservation Office's Washington Wildlife and Recreation Program.

Authorities

- Chapter 89.10 RCW; RCW 89.08.530

State Agencies

- State Conservation Commission, Office of Farmland Preservation

Local Entities

- Conservation Districts

Program Participants

- Agricultural and forest landowners

Forest Riparian Easement Program

The Forest Riparian Easement Program (FREP) is a voluntary program that reimburses small forest landowners for the value of the trees they are required to leave to protect fish habitat. Forest riparian easements are effective for 50 years, provide compensation for a minimum of 50% of the timber value, and applies to trees adjacent to streams, wetlands, seeps, or unstable slopes. In 2022, the State Legislature appropriated \$5,000,000 for FREP.

The Rivers and Habitat Open Space Program also acquires conservation easements on private forestlands. However, these easements are permanent and open to any qualifying forestland with critical habitat or unconfined channel migration zones.

The Forest Stewardship Assistance Program (FSAP), which performs science, monitoring, and planning at the Department of Natural Resources, also provides technical assistance to small forest landowners to help them make informed decisions for managing their land. This may include use of programs, like FREP, to help landowners successfully meet riparian and other forest practice requirements.

Authorities

- RCW 76.13.120
- Chapter 222-21 WAC

State Agencies

- Department of Natural Resources

Program Participants

- Small forest landowners

Puget Sound Partnership

The Puget Sound Partnership (PSP) is the state agency leading the region's collective effort to restore and protect Puget Sound. PSP provides coordination between partners to implement an Action Agenda for Puget Sound recovery, including protection and restoration efforts. PSP's Integrated Planning Program facilitates broad collaboration and communication to develop a shared vision and plan to accelerate Puget Sound recovery. The Ecosystem Recovery Team works closely with the region's Local Integrating Organizations and salmon recovery Lead Entities to align actions, remove barriers, and direct resources to advance the most important actions embedded in recovery plans. PSP also includes the Puget Sound Ecosystem Monitoring Program (PSEMP), a network of experts who collaborate to track ecosystem conditions that directly address management and science questions critical to Puget Sound recovery.

Authorities

- Chapter 90.71 RCW
- Title 400 WAC

State Agencies

- Puget Sound Partnership

Program Participants

- Local, state, and federal agencies, Tribes, citizens, and nonprofits

Governor's Salmon Recovery Office

The Governor's Salmon Recovery Office (GSRO) develops the state's salmon recovery strategy. GSRO contracts with seven regional organizations as well as 25 watershed-based organizations (called "Lead Entities") to implement the strategy through development and implementation of regional salmon recovery plans. Regional organizations are made up of local, state, and federal agencies, Tribes, and citizens and coordinate efforts through the Council of Regions. Regions advise Lead Entities to implement habitat protection and restoration projects under regional plans, and Lead Entities coordinate state and federal funds, recruit grant applicants, and evaluate and prioritize projects. GSRO administers funds for these recovery efforts and advises the Salmon Recovery Funding Board.

Every two years, GSRO issues the State of Salmon in Watersheds report to the State Legislature, tracking progress towards salmon recovery statewide and within salmon recovery regions.

Authorities

- Chapter 77.85 RCW
- Title 420 WAC

State Agencies

- Recreation and Conservation Office

Local Entities

- Regional salmon recovery organizations and Lead Entities

Program Participants

- Local, state, and federal agencies, Tribes, nonprofits, citizens, businesses and other involved parties and project applicants

Salmon Recovery Funding Board

The Salmon Recovery Funding (SRF) Board administers state and federal funds for elements to achieve overall and regional salmon recovery and oversees the Salmon Recovery and Puget Sound Acquisition and Restoration fund. Salmon recovery grants are used to restore and protect salmon habitat, including land and water that support processes important to salmon like upland riparian habitat projects. Applicants for salmon recovery grants must demonstrate how their projects address the goals and actions defined in regional salmon recovery plans or Lead Entity watershed-level strategies.

Some of the funds for salmon recovery are provided in the Puget Sound Acquisition and Restoration (PSAR) program. PSAR is co-managed by the Recreation and Conservation Office and the Puget Sound Partnership, and the SRF Board prioritizes projects for funding. PSAR was created to help implement the most regionally significant habitat protection and restoration priorities that advance salmon recovery efforts.

Authorities

- Chapter 77.85 RCW
- Title 420 WAC

State Agencies

- Recreation and Conservation Office
- Puget Sound Partnership

Program Participants

- Salmon recovery project proponents and Lead Entities

Regional Fisheries Enhancement Groups

The Regional Fisheries Enhancement Group (RFEG) Program supports 14 RFEGs, which are separate, local, nonprofit organizations with their own board of directors and supported by their members. RFEGs create local partnerships with agencies, Tribes, businesses, landowners, and community members to enhance state salmon and steelhead resources. Through this collaboration, the RFEGs lead community development of restoration, education, and monitoring projects and maximize volunteer efforts and private donations towards the state's salmon recovery efforts. RFEGs are common applicants for funding to implement regional salmon recovery plans and watershed-level strategies. Each RFEG is a separate nonprofit organization with its own board of directors. The groups are funded by a portion of Department of Fish and Wildlife commercial and recreational fishing license fees as well as individual grants and donations.

Authorities

- Chapter 77.95 RCW

State Agencies

- Department of Fish and Wildlife

Program Participants

- RFEGs (14)
- Local, state, and federal agencies, Tribes, citizens, nonprofits, businesses and other involved parties

Recreation & Conservation Office Grants

The Recreation and Conservation Office (RCO) offers additional grant opportunities that may fund riparian protection or restoration

Estuary and Salmon Restoration Program

The Estuary and Salmon Restoration Program (ESRP), co-managed by RCO, the Department of Fish and Wildlife, and the Puget Sound Partnership, provides grants and technical assistance for projects that restore and conserve near-shore areas in the Puget Sound. The Program advances projects using the scientific foundation developed by the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP).

Aquatic Lands Enhancement Account

The Aquatic Lands Enhancement Account (ALEA), co-administered by the RCO and the Department of Fish and Wildlife, ensures money generated from aquatic lands is used to protect and enhance those lands, including through projects that restore or preserve fish and wildlife habitat. Grants may be used for the acquisition, improvement, or protection of aquatic lands for public purposes, including tidelands, shore lands, harbor areas, and beds of navigable waters.

Washington Wildlife and Recreation Program – Farmland and Forestland

The Washington Wildlife and Recreation Program (WWRP) provides funding to a broad range of land conservation efforts. Farmland Preservation grants fund purchase of development rights on farmlands to ensure they remain available for farming in the future and to restore natural functions to improve the land's viability for farming. Forestland Preservation grants fund the purchase or lease of conservation easements to ensure forests remain available for timber production in the future and to restore habitat.

Department of Ecology Grants

The Department of Ecology administers several grant programs that may fund riparian protection or restoration

Water Quality Combined Funding Program

This Program, administered by the Water Quality Program, provides an annual single-application process to apply for funding from multiple sources all at once for eligible projects that benefit water quality. Funding sources of the Program include Clean Water Act Section 319 federal grants, Centennial Clean Water Program grants, Clean Water State Revolving Fund loans, and Stormwater Financial Assistance Program grants. Stream and riparian habitat restoration and buffers are eligible projects under multiple of these funding sources.

Floodplains by Design

The Floodplains by Design grant program, administered by the Shorelands and Environmental Assistance Program, is focused on accelerating integrated efforts to reduce flood risks and restore habitat along Washington's major river corridors. The Program is a public-private partnership led by the Department of Ecology, Bonneville Environmental Foundation, and the Puget Sound Partnership. Eligible projects include collaborative efforts towards conservation and restoration of habitat for salmon and other aquatic species.

Streamflow Restoration Competitive Grant Program

Streamflow Restoration Competitive Grants provide funding to state, local, and Tribal governments and non-profit organizations through state competitive grants to enhance streamflow. Eligible projects for streamflow restoration funding include watershed function, riparian, and fish habitat improvements. Chapter 90.94 RCW, Chapter 173-566 WAC.

Offices of the Columbia River and Chehalis Basin

The Department of Ecology includes two regional offices focused water needs in the Columbia River and on flooding in the Chehalis Basin. The Office of the Columbia River was established to aggressively pursue current and future water needs solutions for people and the environment and to implement the Columbia River Water Management Program and works to implement the Yakima Basin Integrated Plan with other partners. The Office of the Chehalis Basin was established to pursue implementation of the Chehalis Basin Strategy, including administration of funds for projects that reduce flood damage and restore aquatic habitat.

Authorities

- Chapter 90.90 RCW, et seq.
- RCW 43.21A.730, et seq.

State Agencies

- Department of Ecology

Program Participants

- State, local, and federal agencies, Tribes, irrigation districts, agricultural interests, and nonprofits

Open Space Taxation Act

The Open Space Taxation Act provides that landowners may apply for an open space, agricultural land, or timberland classification, permitting the assessed value of property to be based on “current” rather than “highest and best” use. Once classified, agricultural and timber lands further benefit from an exemption from special benefit assessments, primarily applicable to urbanized areas (e.g., storm sewerage service), for as long as the land remains in such classification. “Open space land” includes land that, if preserved, would conserve and enhance natural resources and protect streams or water quality, priority consideration is given to lands used for buffers that are planted with or primarily contain native vegetation.

The Act also authorizes local governments and nonprofit organizations to acquire permanent rights to future development of any open space, agricultural land, or timberland through a Conservation Futures program. Counties are encouraged to use Conservation Futures as a tool for salmon recovery and may create a levy (up to \$0.0625 per \$1,000 assessed valuation) to pay for acquisitions and the operation and maintenance of acquired properties. Currently, 14 counties levy such a tax.

Authorities

- Chapter 84.34 RCW
- Chapter 458-30 WAC

State Agencies

- Department of Revenue

Local Entities

- Counties

Program Participants

- Owners of designated open space land or any land that, by preserving its present use, would conserve and enhance natural or scenic resources
- Owners of farm and agricultural or timber land
- Local governments and nonprofit organizations in counties offering Conservation Futures

Scientific and Technical Programs

Additional programs at the Departments of Fish and Wildlife, Ecology, and Agriculture offer tools, expertise, and input regarding riparian areas

- 1. PRIORITY HABITATS AND SPECIES**
- 2. ENVIRONMENTAL ASSESSMENT PROGRAM**
- 3. NATURAL RESOURCES ASSESSMENT PROGRAM**

Priority Habitats and Species Program

The Priority Habitats and Species (PHS) program provides scientific and technical expertise and supports a number of state and local efforts important to the protection and recovery of habitats and ecosystems. The PHS program is the Department of Fish and Wildlife's (DFW's) primary means of providing expertise and information to local land use decision makers, including on GMA and critical areas, and SMA.

The PHS program developed the agency's Riparian Ecosystem guidance, Vol. 1 and Vol. 2, providing science-based policy recommendations for local governments to protect and restore riparian habitat, and developed a Riparian Ecosystems Online Site Potential Tree Height (SPTH) Map Tool. DFW also offers High Resolution Change Detection data products for land use change, land cover, tree canopy, and visible surface water.

In 2022, the State Legislature provided \$1,297,000 to the Department of Fish and Wildlife to increase technical assistance to local jurisdictions to better integrate salmon recovery plans into Comprehensive Plans and critical areas ordinances, and \$70,000 to assess the current condition of riparian ecosystems.

State Agencies

- Department of Fish and Wildlife

Program Participants

- State and local agencies and programs, land use decision makers

Environmental Assessment Program

The Environmental Assessment Program (EAP) employs scientists to measure and analyze environmental conditions. The EAP provides a broad range of studies, modeling and data tools, including freshwater studies monitoring habitat. Habitat monitoring includes stream biological, watershed health, and forest practices effectiveness monitoring. The EAP's work provides important resources to Department of Ecology and other agency programs and contributes to the State of the Salmon in Watersheds Report.

The EAP is co-leading development of Voluntary Clean Water Guidance for Agriculture with the Water Quality Program. Once completed, the guidance will describe best management practices to protect water quality, including riparian buffers.

In 2022, the State Legislature provided \$901,000 to conduct a two-year pilot project identifying technologies, methodologies, datasets, and resources needed to refine and maintain the accuracy of the National Hydrography Dataset for the state to better monitor the health of riparian buffers.

State Agencies

- Department of Ecology

Program Participants

- State agencies and programs

Natural Resources Assessment Program

The Natural Resources Assessment Section (NRAS) works with the agriculture industry and regulators to protect Washington's natural resources. NRAS's activities focus on providing scientific studies and expertise, monitoring, and analytical tools to identify, evaluate, and mitigate impacts of agricultural chemicals on the environment, including with regards to riparian ecosystems. NRAS partners with the U.S. Geological Survey and the Departments of Ecology and Health to monitor water resources for pesticide residues and to assess the effects of pesticides on surface and ground water.

NRAS program staff provide expertise and input on state agency boards (e.g., State Conservation Commission) and advisory groups (e.g., Agriculture and Water Quality Advisory Committee).

State Agencies

- Department of Agriculture

Program Participants

- State agencies and programs



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Evaluation of Riparian-Related Program Effectiveness

Appendix B: Program Summary

September 2, 2022

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TABLE B-1: REGULATORY PROGRAMS

Program Name	State Agency	Mechanism/Approach to Riparian Habitat Protection and Restoration	Target Population
Pesticide Management Division -- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)	Department of Agriculture	Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	Agricultural producers
Growth Management Act	Department of Commerce	Fulfillment of regulatory requirements may include protection of riparian areas.	Local government agencies (county and municipal) that regulate land use
NPDES Permitting	Department of Ecology	Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	Municipalities and industries discharging wastewater to surface water
Wetlands	Department of Ecology	Fulfillment of regulatory requirements may include protection of riparian areas.	Parties involved in development in wetland areas
Nonpoint Pollution Program	Department of Ecology	Fulfillment of regulatory requirements may include protection of riparian areas.	Local partners including local governments, special purpose districts, Tribal governments, and nonprofit organizations who can assist with solving systemic issues; as well as individual landowners where nonpoint pollution sources are detected

Program Name	State Agency	Mechanism/Approach to Riparian Habitat Protection and Restoration	Target Population
Shoreline Management Act	Department of Ecology	Fulfillment of regulatory requirements must include protection of riparian habitats.	Any person or government agency who desires to undertake development and other certain uses in shoreline areas
Hydraulic Project Approval	Department of Fish and Wildlife	Fulfillment of regulatory requirements may include protection of riparian areas.	Any person or government agency who desires to undertake construction work that impacts flow or bed of state waters.
Forest Practices Program	Department of Natural Resources	Fulfillment of regulatory requirements must include protection of riparian habitats.	Large and small private and state forest landowners (i.e., non-federal and non-tribal lands)

TABLE B-2: VOLUNTARY PROGRAMS

Program Name	State Agency	Mechanism/Approach to Riparian Habitat Protection and Restoration	Target Population
Floodplains by Design Grants	Department of Ecology	Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	Local and Tribal governments; Nonprofit organizations
Water Quality Financial Assistance Program	Department of Ecology	Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	Local Governments
Storm Water Financial Assistance Program	Department of Ecology	Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	Local Governments
Streamflow Restoration Grants	Department of Ecology	Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	State and federal agencies, local governments, Tribal governments, and non-profits with priority for projects based in watersheds and areas specified in the 2018 Streamflow Restoration law

Program Name	State Agency	Mechanism/Approach to Riparian Habitat Protection and Restoration	Target Population
Office of Chehalis Basin	Department of Ecology	Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	Landowners in the Chehalis Basin
Office of the Columbia River	Department of Ecology	Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	Federal, state and local partners supporting the Yakima Basin Integrated Plan
Forestry Riparian Easement Program	Department of Natural Resources	Grant program that provides funding for land acquisition or easements.	Small forest landowners
Forest Stewardship Assistance Program	Department of Natural Resources	Grant program that provides funding for projects that have a substantial focus on riparian habitat improvement.	Forestland owners of 5 or more acres
Snohomish Watershed Resilience Action Plan (WRAP)	Department of Natural Resources	Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	Tribal, federal, state and local governments, environmental nonprofits and private sector partners in the Snohomish watershed
Estuary Salmon and Restoration Program (ESRP)	Recreation and Conservation Office	Grant program that provides funding for projects that have a substantial focus on riparian habitat improvement.	Organizations working to restore shoreline and nearshore habitats critical to salmon and other species in Puget Sound

Program Name	State Agency	Mechanism/Approach to Riparian Habitat Protection and Restoration	Target Population
Salmon Recovery/Puget Sound Acquisition and Restoration Fund	Recreation and Conservation Office	Grant program that provides funding for land acquisition or easements. Grant program that provides funding for projects that have a substantial focus on riparian habitat improvement.	Local agencies; Special purpose districts, such as port, park and recreation, conservation, and school districts; State agencies; Native American Tribes; Private landowners; Nonprofit organizations; Regional fisheries enhancement groups
Washington Coastal Restoration and Resiliency Initiative	Recreation and Conservation Office	Grant program that provides funding for projects that have a substantial focus on riparian habitat improvement.	Coastal communities in Washington
Conservation District Activities	State Conservation Commission	Develops scientific guidance and/or provides technical expertise regarding riparian habitat protection. Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	Landowners willing to implement voluntary conservation-based actions and projects.
Conservation Reserve Enhancement Program	State Conservation Commission	Grant program that provides funding for projects that have a substantial focus on riparian habitat improvement.	Agricultural landowners or operators bordering eligible stream segments
Voluntary Stewardship Program	State Conservation Commission	Grant program that provides funding for projects that have a substantial focus on riparian habitat improvement.	Agricultural producers in critical areas

Program Name	State Agency	Mechanism/Approach to Riparian Habitat Protection and Restoration	Target Population
Natural Resources Investments	State Conservation Commission	Grant program that provides funding for projects that have a substantial focus on riparian habitat improvement.	Landowners willing to undertake conservation measures to protect salmon and water quality
Salmon Recovery Funding Program	State Conservation Commission	Grant program that provides funding for projects that have a substantial focus on riparian habitat improvement.	Conservation Districts, in partnership with other entities including farmers, ranchers and other landowners of critical salmon habitat
Sustainable Farms and Fields	State Conservation Commission	Ancillary benefits to riparian habitat through programs focused on other outcomes (e.g., water quality, stormwater, pesticides, floodplains, flood control).	Conservation districts and other public entities that possess the expertise to provide technical assistance and/or capacity to implement climate-smart practices

TABLE B-3: TECHNICAL/SCIENTIFIC ASSISTANCE PROGRAMS

Program Name	State Agency	Mechanism/Approach to Riparian Habitat Protection and Restoration	Target Population (simple)
Natural Resources Assessment Section	Department of Agriculture	Develops scientific guidance and/or provides technical expertise regarding riparian habitat protection.	Agricultural producers
Habitat Program - General	Department of Fish and Wildlife	Develops scientific guidance and/or provides technical expertise regarding riparian habitat protection.	State agencies, local governments, landowners, and others involved in land use planning and development, or conservation activities
High Resolution Change Detection	Department of Fish and Wildlife	Develops scientific guidance and/or provides technical expertise regarding riparian habitat protection.	State agencies and others interested in understanding changes in land use
Performance Monitoring - Overall Puget Sound	Puget Sound Partnership	Develops scientific guidance and/or provides technical expertise regarding riparian habitat protection.	N/A

Conservation Districts Technical Assistance and Implementation Funding	State Conservation Commission	Develops scientific guidance and/or provides technical expertise regarding riparian habitat protection.	Varies by program
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Evaluation of Riparian-Related Program Effectiveness

Appendix C: Preliminary Data Inventory

September 1, 2022

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PRELIMINARY DATA COLLECTION INVENTORY

This document includes a complete inventory of all documents and information provided to date by program contacts or identified through other research of available resources primarily conducted to locate documents identified during interviews or in preparation for interviews. The technical team is still in the process of reviewing this information to evaluate the utility of each source to the evaluation, and to identify those that will be primary sources for the evaluation. The purpose of this inventory is to facilitate review to determine whether any critical sources are missing from the list. Items marked with an asterisk identify sources that are preliminarily identified as potential key data sources.

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