



Annual Report

Coastal Region

2021–2022

fwcp.ca



Fisheries and Oceans Canada
Pêches et Océans Canada



The FWCP is a partnership between BC Hydro, the Province of B.C., Fisheries and Oceans Canada, First Nations, and public stakeholders to conserve and enhance fish and wildlife in watersheds impacted by BC Hydro dams.

Message from our board chair

When you look back at last year – and the 18 fish and 13 wildlife projects our board approved for \$2.4 million – you can see the diversity of projects and partners working together to make a difference and to help us conserve and enhance fish and wildlife in watersheds impacted by BC Hydro dams. It is great to see this progress in Coastal Region's 14 distinct and ecologically diverse watersheds.

The projects funded last year are helping to improve fish passage, enhance and improve access to spawning habitat, continue restoration work in important coastal estuaries, support at risk marmots, whitebark pine, turtles, bats, owls, and other species, – and that's just a start. Take a moment to look at our [project list](#) or visit our [interactive map](#) at fwcp.ca and get a better idea about the 2021–2022 (F22) fish and wildlife projects we funded.

As chair of the Coastal Region board, I want to extend a sincere thank you to the First Nations, stewardship groups, agencies, consultants, and academic researchers who develop the grant applications and then deliver so many important projects. And despite the challenges of the pandemic, and extreme weather that impacted travel and field work for some of you, you did it! Thank you on behalf of the Fish & Wildlife Compensation Program.

In addition to our projects, this was a busy year for the entire FWCP team as we:

- Continued working to address the recommendations from the independent [evaluation and financial audit](#), including updates to the [Governance Manual](#) that guides our work. See our update on page 5.
- Renewed our three-year communications strategy with a focus on refreshing our products, engaging youth, and strengthening our communications with Indigenous Nations across our three regions.

As I look back, I want to take a moment to recognize the work of my fellow board members. I want to thank Adam Silverstein, Fisheries and Oceans Canada, for his years—more than seven—of dedicated service to the FWCP. I want to welcome Dale Desrochers who will represent our federal partner until Adam returns.

As I look ahead, I am excited to see the important work continue. The board is looking ahead to continuing work on fish passage feasibility projects; and restoration work to maintain and improve habitat for Chinook and other salmon species. In addition, the board is working with the Province of B.C. in developing a habitat assessment mapping tool to address a priority action in our action plans to improve strategic planning for conservation and restoration opportunities.

If you have any questions about our projects, grants, or this annual report, please contact our [regional manager](#). Our team is available to answer your questions.



Todd Manning
FWCP Coastal Region Board Chair

Front cover: In 2021-2022 our Coastal Region board approved approximately \$2.4 million for 31 fish and wildlife projects, including nearly \$350,000 for the dismantling of a section of a berm in the Squamish River Estuary in the Cheakamus River Watershed that will improve access to rearing habitat for juvenile salmonids. [COA-F22 F-3475](#). Photo: J. Buchanan



1. Organizational overview

1.1 INTRODUCTION

With annual funding from BC Hydro, the Fish & Wildlife Compensation Program (FWCP) conserves and enhances fish and wildlife in watersheds impacted by 31 BC Hydro dams. The FWCP directs those funds toward priority actions across its three regions—Coastal, Columbia, and Peace—to fulfill its mission and work toward its vision of thriving fish and wildlife populations in watersheds that are functioning and sustainable.

BC Hydro has water licence obligations in the Columbia and Peace regions and has made voluntary commitments to address the impacts of dams in the Coastal Region. BC Hydro fulfills the applicable obligations through the work of the FWCP.

The FWCP is governed through a framework that recognizes the regulatory accountabilities of agency partners (i.e., BC Hydro, the Province of B.C., and DFO) and ensures active participation and input from First Nations and public stakeholders. Independent board members in each region review, evaluate, and approve funding for all projects. Our boards include representatives from each of our FWCP partners: BC Hydro, the Province of B.C., First Nations, and public stakeholders. The Coastal Region board also has a representative from DFO. When it comes to decision-making, input from each board member is given equal consideration through collaborative discussion.

Learn more at fwcp.ca/our-story.

Combined, our three regional boards have the following representatives:

- BC Hydro: 5
- Federal government: 1
- First Nations: 15
- Provincial government: 5
- Public stakeholders: 9

Board representation by region is shown in Figure 1.1. In F22, the boards approved approximately \$9.4 million for 100 fish and wildlife projects.

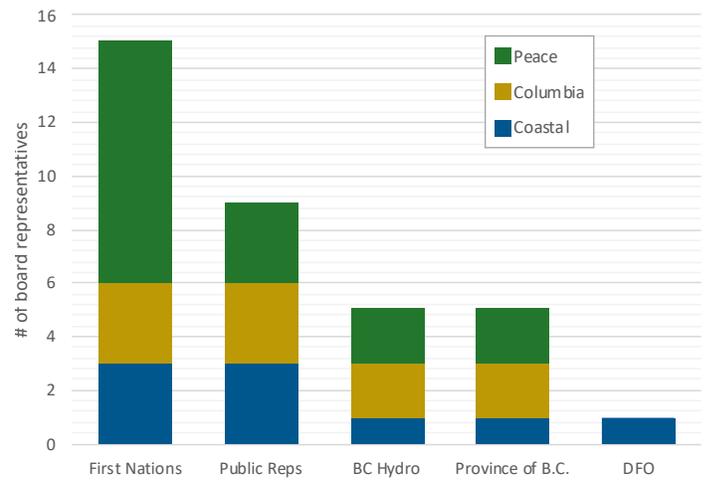


Figure 1.1: Board representation across all three FWCP regions

Since 1988, BC Hydro has provided more than \$200 million to the FWCP to compensate for dam impacts, and the FWCP has funded more than 2,200 projects across its three regions.

The FWCP’s Coastal Region was established in 1999 as a voluntary initiative by BC Hydro in response to First Nations and stakeholder interests in addressing the impacts of BC Hydro dams. It includes 14 watersheds on Vancouver Island, in the Lower Mainland, the Central and Sunshine Coasts, and watersheds in the Southern Interior (e.g., Bridge-Seton and Shuswap River watersheds) where BC Hydro dams are located.

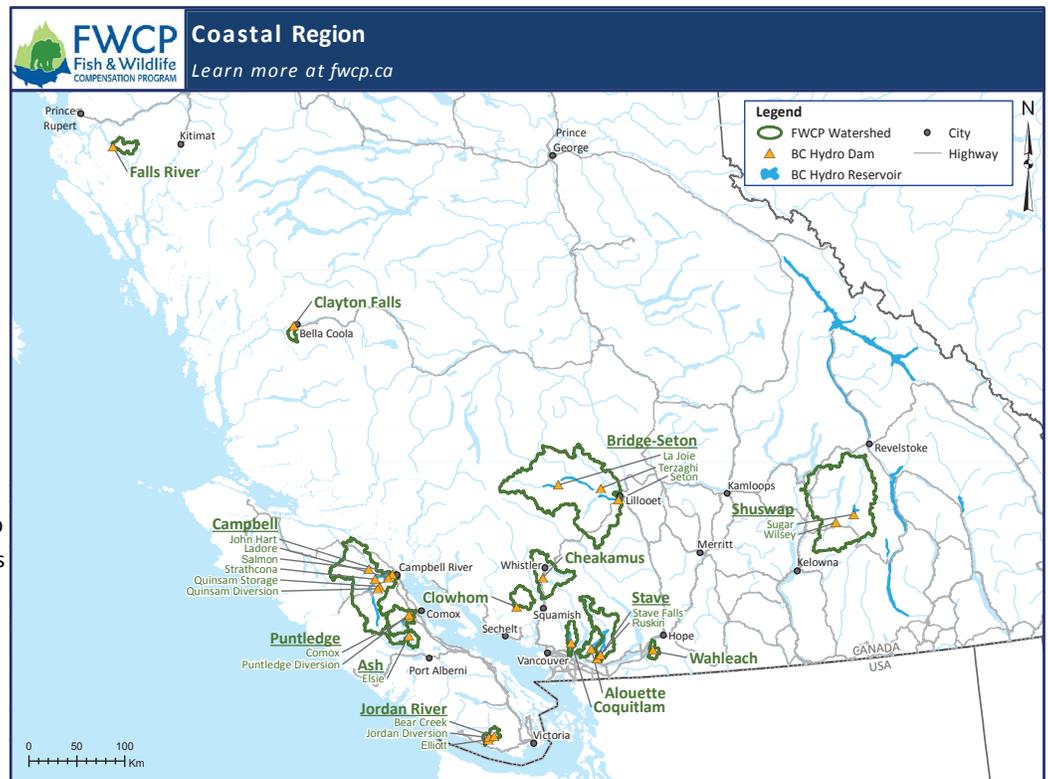


Figure 1.2: Map of the FWCP’s Coastal Region

2. Our strategic approach

2.1 VISION AND MISSION

Our vision is for thriving fish and wildlife populations in watersheds that are functioning and sustainable, and our mission is to compensate for fish, wildlife, and their supporting habitats in watersheds impacted by BC Hydro owned and operated generation facilities.

We take a forward-looking, ecosystem-based approach that defines the desired outcomes and takes actions to restore, enhance, and conserve priority species and their habitats. The FWCP's strategic objectives are:

Conservation

Maintain or improve the status of species or ecosystems of concern. Maintain or improve the integrity and productivity of ecosystems and habitats.

Sustainable use

Maintain or improve opportunities for sustainable use, including harvesting and other uses. Harvesting includes First Nations, recreational, sport, and commercial harvests. Other uses may include cultural, medicinal, or non-consumptive uses.

Community engagement

Build and maintain relationships with stakeholders and Indigenous communities. This objective stems from BC Hydro's social responsibility policy and the Province of B.C.'s shared stewardship objective.

More details on these three objectives can be found at [Governance Manual](#).

2.2 ACTION PLANS

Our action plans guide FWCP investments in fish and wildlife projects. They are referenced annually by our regional boards to track progress toward implementation, set annual priorities, and guide decision-making in setting out and approving the annual operating plan for each region. Actions in our action plans are eligible for FWCP funding and align with our vision, mission, and geographic scope.

In our Coastal Region, we have 14 watershed-based [action plans](#) that were updated in 2017.

All F22 projects approved for funding by our Coastal Region board align with the priority actions identified in the Coastal Region action plans.

2.3 UPDATE: EVALUATION AND FINANCIAL AUDIT

Responding to the nine recommendations from our 2019 independent evaluation and financial audit remains a priority. Steady progress is being made on all recommendations as we balance core business priorities and human resources.

Across all our regions, the evaluation and financial audit recommended exploring a potential increase in the use of directed projects. Each region is now delivering between five to eight directed projects, in addition to the grant-based projects.

In September 2021, a tri-region meeting of the boards endorsed an action to clarify the scope and intended outcomes of Strategic Objective #2: maintaining or improving opportunities for sustainable use. In our Columbia Region, work is underway to strengthen engagement of First Nations in the region's leadership, decision making, and project planning and delivery.

Learn more about our evaluation and financial audit <https://fwcp.ca/evaluation-audit-2018-2019/>



Volunteers from the Courtenay and District Fish and Game Protective Association continued to distribute chum salmon carcasses this year in the Puntledge River Watershed to help transfer valuable nutrients upstream. [COA-F22 F-3526](#). Photo: C&DFGPA.

3.0 Board, committee members, and staff

3.1 FWCP COASTAL REGION BOARD

The board guides our work and is responsible for approving our Coastal Region projects and budget. In addition to funding projects through our annual grants, the board may choose to direct projects.

Coastal Region board members:

Brian Assu	We Wai Kai Nation
Mark Peters	Peters First Nation
Laurel Stevens	BC Hydro
Adam Silverstein/Dale Desrochers	DFO
Scott Barrett	Province of B.C.
Laurie Kremsater	Public
Larry Casper	Tsal'alh
Todd Manning, Chair	Public
Jack Minard	Public

3.2 TECHNICAL COMMITTEES

The board is supported by four fish and wildlife technical committees. They act in an advisory role by providing technical review, evaluation, and ranking of fish and wildlife grant applications; supporting the development of strategic plans; assisting in the development and oversight of directed projects; and providing advice on the effective implementation of action plans.

Lower Mainland and Coast fish technical committee

Katy Jay	BC Hydro
Murray Manson, Chair	DFO
Chris Hegele	Province of B.C.
Vacant	First Nation
Veronica Woodruff	Public

Southern Interior fish technical committee

Vacant	Province of B.C.
Arne Langston	BC Hydro
Dr. Brian Heise	Public
Elinor McGrath	Okanagan Nation Alliance
Collin McGregor, Chair	DFO

Vancouver Island fish technical committee

Eva Wichmann, Chair	BC Hydro
Jim Lane	Nuu-chah-nulth Tribal Council
Mike McCulloch	Province of B.C.
Scott Northrup	DFO
Sean Mitchell	Public

Wildlife technical committee

Chris Apps	Kitselas First Nation
Fraser Corbould, Chair	BC Hydro
Catherine Denny	Province of B.C.
Paul Chytyk	Public

3.3 POLICY COMMITTEE

The policy committee sets the FWCP's overall policy direction including the governance structure, establishes the strategic framework, oversees periodic evaluations, approves significant changes to the FWCP, and addresses dispute resolution when necessary, among other responsibilities beyond the FWCP. For more details, refer to our [Governance Manual](#).

Policy committee members:

Brad Fanos

Regional Director Pacific Region, Fisheries and Oceans Canada

James Mack

Assistant Deputy Minister, Ministry of Environment & Climate Change Strategy

Karen Popoff

Director, Environment, BC Hydro

3.4 STAFF

In each region, program management and operations were implemented by a region manager and supported by Monique Stevenson, FWCP program manager and Lorraine Ens or Melissa Fiel de Sousa, environmental project manager. Julie Fournier was our Coastal Region manager during F22.



Coastal Region board members (June 2022) are responsible for guiding the FWCP's work. From left: Scott Barrett, Todd Manning, Ryan Stewart, Laurie Kremsater, Larry Casper, Dale Desrochers. Missing: Brian Assu, Mark Peters, and Jack Minard.

4.0 Project funding and grants

4.1 PROVINCIAL PROJECT FUNDING

This year, FWCP boards approved 100 projects for a total FWCP contribution of approximately \$9.4 million. The total value of these projects—including leveraged funding from other organizations and in-kind resources—was \$14.4 million.

Final reports for all FWCP-funded projects are uploaded to [Ecocat](#) or [SIWE](#) provincial databases, and searchable spreadsheets of reports for each FWCP region are available at [fwcp.ca/results](#).

4.2 COASTAL REGION PROJECT FUNDING

In our Coastal Region, the FWCP supports the delivery of fish and wildlife projects in a variety of ways, including grant applications and directed projects. Thirty-one projects were approved for this year, for approximately \$2.4 million in funding from our Coastal Region board.

Grant applications

The FWCP's annual grant intake opens each August and closes in late October. All grant applications go through a three-stage review process. For more details, visit our FAQs at [fwcp.ca/apply-for-funding/](#).

Grant applicants are required to develop a project idea that aligns with one or more priority action(s) in any action plan(s) and will achieve the intended outcome(s). Each priority action in our action plans is identified as Open, Open/Directed, or Directed. The proposed project must be aligned to an Open priority action to be eligible for a grant.

Our Coastal Region board received 34 grant applications for fish (19) and wildlife (15) for projects in this reporting period, resulting in a request of approximately \$2.11 million in funding. Ten applications came from the Lower Mainland and Coast, 14 from Vancouver Island, and eight from the Southern Interior. Two applications were for multiple watersheds.

Our Coastal Region board approved just over \$1.53 million in funding for 23 projects through our annual intake of grant applications: 13 fish (approximately \$1.087 million) and 10 wildlife (approximately \$445,000).

The FWCP encourages grant applicants to seek additional funding sources (e.g., other funding agencies and in-kind contributions) to leverage FWCP funding contributions. We recognize the value of partnerships to help plan, deliver and fund projects and we encourage grant applicants to build funding and project partnerships into their projects. In F22, the FWCP funding allocation for grant-based projects was approximately \$1.28 million in funding for 23 projects. As a result of financial partnerships and in-kind contributions, the total value of the projects was just over \$3 million. In other words, for every dollar invested by the FWCP, others contributed more \$2.35, greatly increasing the value of the FWCP's investment overall.

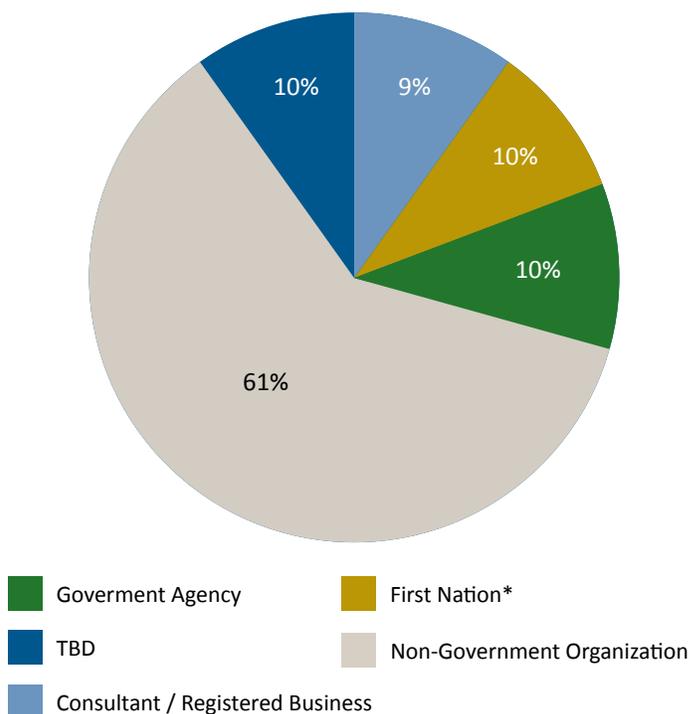
Directed funds

Our Coastal Region board may also choose to direct funds to regional priorities as directed projects or reserved funds.

Just over \$855,000 was approved for eight directed priorities: five fish (approximately \$342,000) and three wildlife (approximately \$513,000). They included salmon spawning habitat restoration in Campbell River, the annual contribution to Puntledge Hatchery, habitat assessment mapping, and reserved funds for land securement. For the full list, see Table 6.1

Approved projects by proponent type

The FWCP Coastal Region board approved a total 31 projects—23 grant application-based and eight directed priorities. The majority were led by non-government organizations such as stewardship groups or non-profit environmental organizations. Figure 4.1 below illustrates the diversity of proponents that led Coastal region projects in F22.



*Includes Indigenous-owned businesses and Indigenous organizations

Figure 4.1: Coastal F22 approved projects by lead proponent type

Approved projects by action type

Priority actions in our Coastal Region action plans are grouped into five broad action types:

- 1) research & information acquisition
- 2) habitat- based
- 3) species-based
- 4) monitoring and evaluation
- 5) land securement.

This year, more than 80% of projects funded were either habitat- or species-based. There were no monitoring and evaluation projects approved. Figure 4.2 shows the distribution of approved projects by action type.

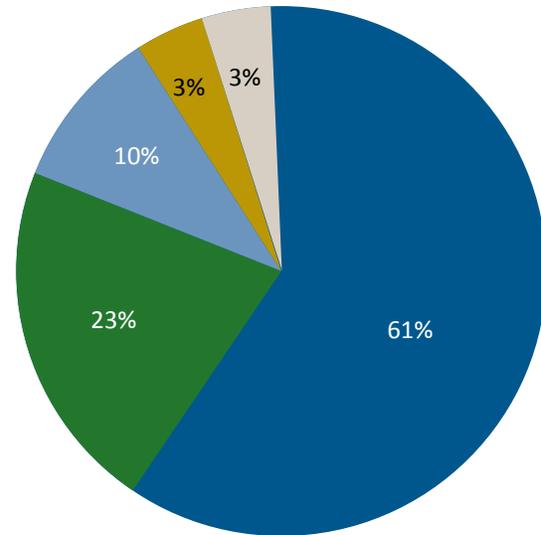


Figure 4.2: Allocation of the approved F22 Coastal Region budget by action type.

Approved projects by watershed

The approved projects were distributed across the watersheds in which we operate, as shown in Table 4.1. The FWCP supported projects in 10 of the 14 Coastal Region watersheds—not including projects covering multiple watersheds.

Table 4.1 Approved funding for projects by watershed

Watershed	FWCP funding	Number of Projects
Alouette	\$25,000	1
Cheakamus	\$437,240	2
Coquitlam	\$227,162	3
Clowhom	\$17,900	1
Campbell	\$386,803	6
Puntledge	\$275,402	5
Shuswap	\$14,684	2
Bridge-Seton	\$215,960	3
Stave	\$29,933	1
Multiple watersheds	\$311,062	4
Falls River	\$99,130	1
TBD*	\$336,092	2
Total	\$2,376,370	31

* Includes \$s set aside for land the securement reservation fund

Community Engagement Grant

The goal of the Community Engagement Grant is to provide an opportunity for FWCP stakeholders and First Nations to apply for a small grant to support conservation and enhancement work that aligns with our action plans.

This year, nine applications were received and eight were approved, for a total of \$7,500—allocating all the annual funds available. The full list of approved Community Engagement Grants is shown in Table 4.2



The St'át'imc Government Services received a Community Engagement Grant to train community members to undertake water sampling for eDNA analysis to help white sturgeon, Chinook and coho salmon near Lillooet. Photo: SGS

Table 4.2 Approved F22 Coastal Community Engagement Grants

Applicant	Project Title	Grant Amount
Mission Creek Environmental Stewardship Society	Litter Buster & Youth Camps	\$1,000
MV Beattie Elementary School	Osprey Webcam	\$1,000
The Adam's River Salmon Society	Don't Tread on my Redd	\$1,000
Enderby Recreational Services	Shuswap River Ambassador Program	\$1,000
Alouette River Management Society	Ridge Meadows Rivers Day 2021	\$1,000
Morrison Creek Streamkeepers	Arden Creek Restoration Project	\$1,000
Wild Research Society	British Columbia Marsh Monitoring Program	\$1,000
St'át'imc Government Services	St'át'imc Capacity Development in Recovering Species at Risk	\$500
		TOTAL \$ 7,500

5.0 Financial report

5.1 APPROVED BUDGET AND EXPENDITURES

Our Coastal Region board allocates annual funding toward fish and wildlife projects, land securement, administration, and communications. These allocations form the annual operating plan. Any unallocated funds are carried forward as uncommitted available funds for future spending.

The annual voluntary funding provided from BC Hydro to the region for the year was \$2,228,100. Our Coastal Region board approved a budget of \$2,725,808 for this year, utilizing previously uncommitted available funds.

Figure 5.1 shows a total of nearly \$3.7 million available to our Coastal Region as of April 1, 2021. This comprises the approved budget of approximately \$2.73 million, uncommitted available funds of approximately \$89,000, and remaining prior-year funding commitments of approximately \$739,000, \$136,000, and \$10,000 from F21, F20 and F19 respectively.

Figure 5.2 illustrates the approved budget for F22 as of April 1, 2021. Funding for fish projects made up 52% of the budget, wildlife projects made up 22%, and the land-securement reserve fund made up 13%. Administrative costs made up approximately 11% of the total budget and include regional manager salary and expenses, fees associated with uploading reports to the provincial data warehouses, maintenance and refinements to our grant management system, and support staff, board, and technical committee costs. The remaining allocation was for communications and was approximately 2% of the annual budget.

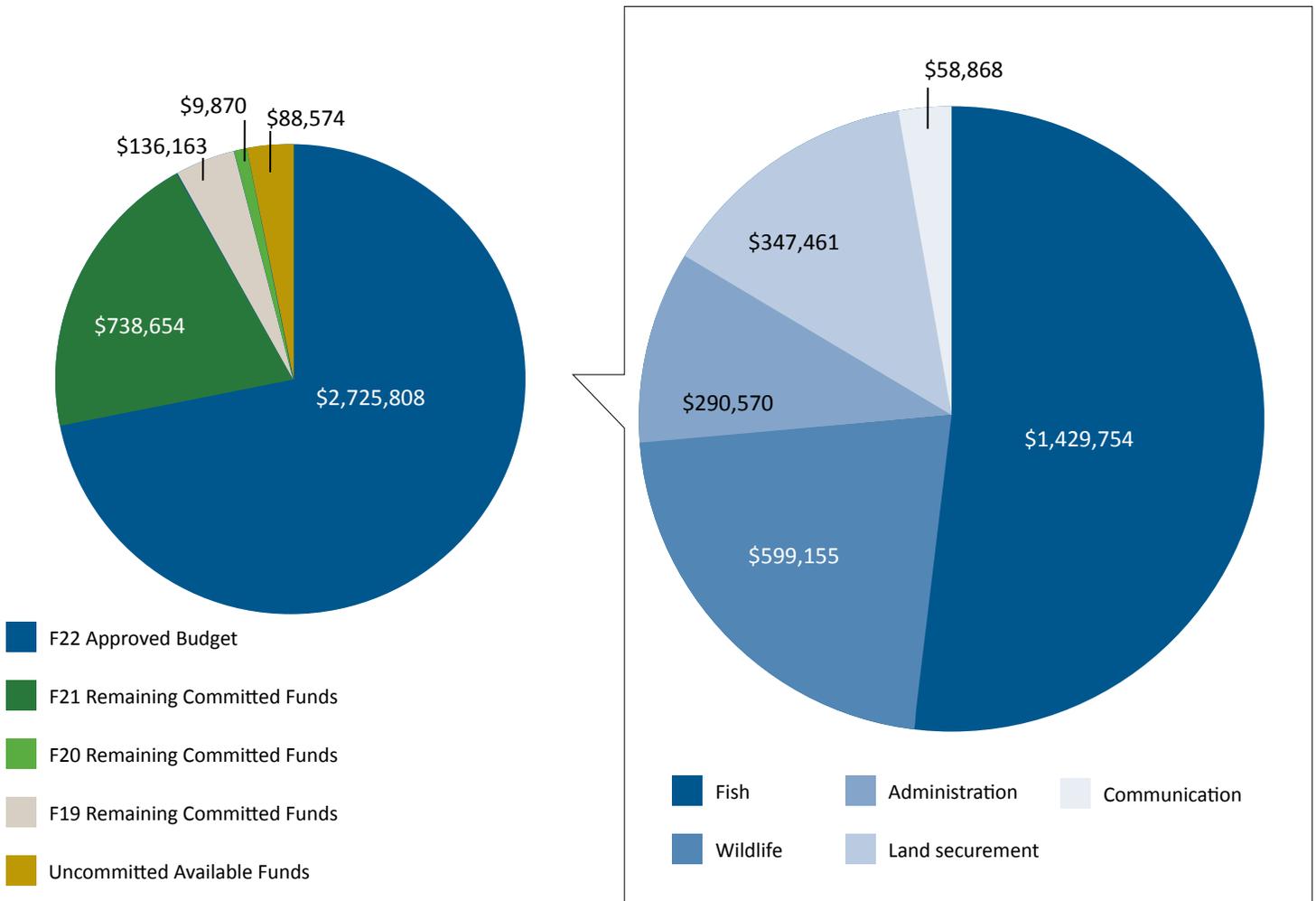


Figure 5.1: FWCP Coastal Region financial summary on April 1, 2021

Figure 5.2: Allocation of the approved Coastal Region budget of approximately \$2.73 million as of April 1, 2021

Coastal Region expenditures up to the end of fiscal, March 31, 2022, are shown in Table 5.1. This reflects a snapshot of actual and planned payments made related to this year’s projects. Project funding each year may not be fully allocated by year-end and—as shown in Table 5.1—F22 allocated funds not yet expended by March 31, 2022, are labelled “planned payments.”

Occasionally, projects come in under budget (“uncommitted available funds” in Table 5.1). Funds not spent during the fiscal year will be carried forward as unspent surplus budget and made available for new project spending in future fiscal years. Funds identified as land securement are approved for a reserve fund. The fund is carried forward and made available for approved land securement proposals in future fiscal years. \$582,088 remains from previous years.

Table 5.1: F22 budget status as of March 31, 2022

Fund category	F22 approved budget	Paid up to March 31, 2022	Planned payments ¹	Uncommitted available funds ²
Fish	\$1,426,753	\$832,944	\$528,987	\$67,822
Wildlife	\$599,155	\$332,476	\$259,179	\$7,500
Administration	\$290,570	\$187,641	\$84,834	\$18,095
Land Securement	\$357,461	\$0	\$347,461	\$0
Communications	\$8,868	\$52,835	\$6,033	\$0
TOTAL	\$2,725,808	\$1,405,986	\$1,226,495	\$93,417

Note 1: Planned payments represent expected invoices for approved, ongoing projects that have not yet submitted final reports by March 31, 2022.

Note 2: Uncommitted available funds are carried forward and available for the next fiscal year.

At the end of this reporting period (Table 5.1), approximately \$1.41 million of the annual budget had been spent, and nearly \$1.23 million remained as an F22 commitment to spend in F23. The balance of prior-year funding commitments anticipated to be spent in F23 was approximately \$454,000 from F21, \$94,000 from F20, and \$10,000 from F19, resulting in uncommitted available funds of approximately \$180,000 (Figure 5.3).

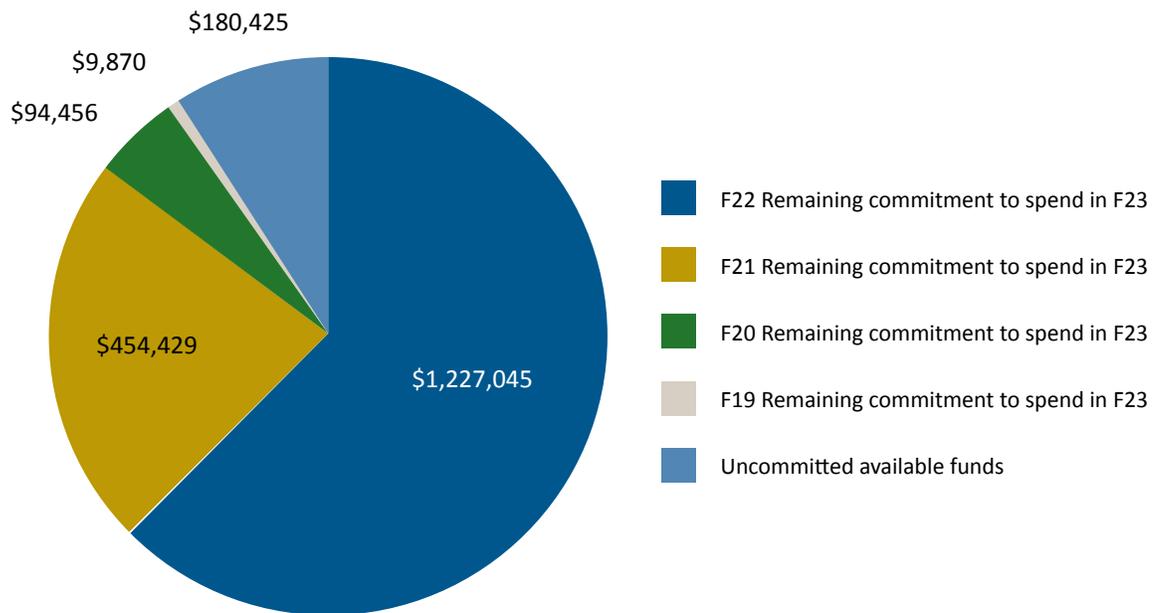


Figure 5.3: Financial summary of the FWCP’s Coastal Region, as of March 31, 2022 (end of fiscal year)

6.0 Coastal Region projects

Table 6.1 provides a listing of 2021–2022 Coastal Region fish and wildlife projects approved for funding. The funding identified may vary from the approved budget as of April 1, 2021, due to project budget increases or decreases as they progressed throughout the fiscal year. Final reports for all projects are posted to the appropriate provincial databases once available. Visit fwcp.ca/results for an updated list of all available final reports.

Table 6.1: F22 Approved projects

Project ID	2021 - 2022 Grant-based Fish Projects	Project Lead	FWCP Funding	Project Type	Action Plan Alignment	Watershed
COA-F22 F-3389	<p>Supporting salmon hatchery in the Puntledge River Watershed <i>Courtenay and District Fish and Game Salmon Hatchery, Comox Lake</i> This project will help support a new fish hatchery at the Comox Lake property of the Courtenay and District Fish and Game Protective Association. With access to 3,000 l/min of water from a new drinking water intake, the hatchery will have consistently cool water.</p>	Courtenay and District Fish & Game Protective Association	\$ 86,030	Species-based Actions	All	Puntledge River Watershed
COA-F22 F-3474	<p>Building awareness of salmon in the Shuswap River Watershed <i>Conservation of Shuswap River Chinook through Education</i> This multi-year stewardship project aims to help protect Shuswap River Chinook by providing place-based, experiential education to thousands of local students. Salmon are a keystone species due to their importance in maintaining the health of ecosystems. Protecting salmon requires knowledge, awareness, and a passion for the species. Education is the key, and this project helps to build compassion, promote action, protect fish, and preserve the Shuswap River Watershed.</p>	Kingfisher Interpretive Centre Society	\$ 10,250	Species-based Actions	All	Shuswap River Watershed
COA-F22 F-3475	<p>Improving fish passage in the Cheakamus River Watershed <i>Squamish Estuary Fish Passage Improvement Project: Year 4</i> This multi-year project is focused on improving fish passage between the Squamish River and the central estuary. In year four of this project, work will focus on creating an additional opening along the berm for fish passage. In the past three years, two culverts that were limiting fish passage were replaced with large fish-friendly box culverts. Restoration activities started in 2017 with an FWCP-funded feasibility study that identified three main areas of focus: culvert upgrades, spit realignment, and reconnecting tidal flows across the CN spur line.</p>	Squamish River Watershed Society	\$ 348,725	Habitat-based Actions	Rivers, Lakes, & Reservoirs	Cheakamus River Watershed
COA-F22 F-3486	<p>Using technology to improve fish passage <i>Coquitlam River Floodgate Effectiveness and Salmon Passage: Year 1</i> This multi-year project will use fish tracking technology to assess juvenile salmon passage at three floodgates installed in the Coquitlam River Watershed in 2011. This work will compare fish movement relative to floodgate openings and investigate how gate operation can improve passage. Results will ultimately increase understanding of how and where automated floodgates can be used to benefit salmon species in the Fraser River Watershed. The automated floodgate was installed on a Coquitlam River tributary to allow fish passage and enhance over three km of crucial salmon habitat. There is evidence, however, that it is not allowing fish passage during the crucial time when juvenile salmon are seeking refuge and overwintering on their migration to the Pacific Ocean.</p>	MakeWay Charitable Society	\$ 69,190	Habitat-based Actions	Rivers, Lakes, & Reservoirs	Coquitlam River Watershed

Project ID	2021 - 2022 Grant-based Fish Projects	Project Lead	FWCP Funding	Project Type	Action Plan Alignment	Watershed
COA-F22 F-3508	<p>Restoring riparian habitat in the Puntledge River Watershed <i>Kus-kus-sum Unpaving Paradise: Year 1</i> This multi-year project on the Kus-kus-sum conservation lands will focus on removing a steel-cladded retaining wall bordering the Courtenay River. This wall has narrowed the river channel and resulted in increased seal predation of salmon, both out-migrating juveniles and returning spawners.</p> <p>The restoration of this former sawmill site is a collaboration between the K'ómoks First Nation, the City of Courtenay, and the Comox Valley Project Watershed Society. This site is part of a salmon migratory corridor for the Puntledge River and Tsolum River watersheds and is of cultural importance to the K'ómoks First Nation.</p>	Comox Valley Project Watershed Society	\$ 160,373	Habitat-based Actions	Rivers, Lakes, & Reservoirs	Puntledge River Watershed
COA-F22 F-3513	<p>Helping rebuild Chinook stocks in the Bridge-Seton Watershed <i>Portage Creek Chinook Conservation Enhancement: Year 5</i> This multi-year project will support the enhancement and coded wire tagging of 50,000 yearling Portage Creek Chinook smolts. It will provide the population with higher egg-to-smolt survival rates, and the tags will yield important assessment information.</p> <p>This Chinook population is classified as a vulnerable single-site Conservation Unit under the government of Canada's Wild Salmon Policy, and it has had diminishing returns for more than 10 years. Fisheries and Oceans Canada proposes strategic enhancement of a minimum of one generation (i.e., five years) to support the preservation and rebuilding of this population and its unique genetic component, while fu</p>	Fisheries and Oceans Canada	\$ 31,766	Species-based Actions	All	Bridge-Seton River Watershed
COA-F22 F-3520	<p>Increasing vegetation to lower water temperatures for chinook <i>Bessette Creek Riparian Restoration Planning</i> Bessette Creek in the Shuswap River Watershed experiences high water temperatures in late summer and early fall. This coincides with the spawning migration of Chinook salmon, which return in low numbers.</p> <p>This riparian restoration project will focus on planning and landowner engagement at high-priority sites to help restore vegetation cover at strategic locations in the watershed to reduce water temperatures to benefit spawning Chinook. This project will build on data from mapping and temperature study projects that pinpoint key areas where re-vegetation has the greatest potential to mitigate rising stream temperatures. The data will also be used to guide site-specific planning and resident engagement.</p>	Okanagan Nation Alliance	\$ 5,000	Habitat-based Actions	Wetland & Riparian	Shuswap River Watershed
COA-F22 F-3521	<p>Improving flows and habitat for salmon <i>Gorbuscha Intake and Channel Restoration: Year 1</i> This multi-year project will restore water flows downstream from the Gorbuscha intake on the east side of the Bailey Bridge in the Squamish River Watershed. Clearing out the intake will improve overwintering habitat for salmon and support spawning and rearing.</p> <p>Currently, the poorly functioning intake dramatically reduces inflows along the off-channel habitat, impacting pink and coho salmon habitat.</p>	Cheakamus Foundation for Environmental Learning	\$ 88,515	Habitat-based Actions	Rivers, Lakes, & Reservoirs	Cheakamus River Watershed

Project ID	2021 - 2022 Grant-based Fish Projects	Project Lead	FWCP Funding	Project Type	Action Plan Alignment	Watershed
COA-F22 F-3524	<p>Improving fish passage and habitat in the Falls River Watershed <i>Falls River Watershed Fish Habitat and Fish Passage Assessment</i> This project will result in restoration recommendations and connectivity assessment options for the Falls River Watershed. The project entails a thorough fish habitat and fish passage assessment of the Hayward Watershed. It will determine if anadromous salmon and resident trout species can—or have historically been able to—migrate throughout the entire system: from the Ecstall River through the Hayward Creek to Hayward Lake and then into the Falls River Reservoir via Little Beaver Creek. A detailed habitat assessment will provide information on current habitat quantity, quality, and condition, and it will document impacts due to historical forestry activities (i.e., identify migration barriers) and potential restoration projects.</p>	North Coast-Skeena First Nations Stewardship Society	\$ 99,130	Research & Information Acquisition	Rivers, Lakes, & Reservoirs	Falls River Watershed
COA-F22 F-3526	<p>Adding nutrients to the Puntledge River Watershed <i>Upper Puntledge River Watershed Chum Carcass Distribution: Year 2</i> This multi-year project will support the distribution of chum salmon carcasses from a hatchery into the upper Puntledge River Watershed. Their slow decomposition will contribute essential marine-derived nutrients and energy that will benefit the entire food web and sustain the production of fish and other salmon-dependent species within the watershed.</p>	Courtenay and District Fish & Game Protective Association	\$ 2,000	Habitat-based Actions	Rivers, Lakes, & Reservoirs	Puntledge River Watershed
COA-F22 F-3550	<p>Using eco-cultural restoration techniques in the Campbell River Watershed <i>Eco-Cultural Restoration of the Campbell River Estuary: Year 3</i> This multi-year eco-cultural restoration project builds on recent restoration efforts in the Campbell River estuary. Alder and willow materials will be used to make wooden habitat enclosures that protect the tidal channel-edge habitat, and sites will be prepared for transplanting <i>Carex lyngbyei</i> (i.e., Lyngbye's sedge). The enclosures use Indigenous fish weir techniques to protect and restore vital estuary sedge marsh habitat. The restoration sites will help reduce erosion and provide greater resiliency during peak flows. Wei Wai Kum Coastal Guardians and partners are helping deliver this project.</p>	Guardians of Mid-Island Estuaries Society	\$ 48,805	Habitat-based Actions	Rivers, Lakes, & Reservoirs	Campbell River Watershed
COA-F22 F-3555	<p>Improving water flows for salmonids <i>Reeve Slough Salmonid Habitat Reconnection Project 2021</i> This project in the Coquitlam River Watershed will reconnect the 31,800 m2 Reeve Slough relic channel to the Coquitlam River. A water supply intake valve and chamber will be installed at the Reeve Park Pump Station pond to sustain year-round inflows. A 600 m field-fit—a shallow excavation following the natural high-flow drainage path—will provide outflows to the river, which will be protected with a proven beaver deterrent device. The outfall will be designed to maintain the water level in the slough to support the existing native aquatic and semiaquatic species of plants and animals, including all seven species of Pacific salmonids, and it will deter non-native fish species.</p>	North Fraser Salmon Assistance Project	\$ 132,972	Habitat-based Actions	Rivers, Lakes, & Reservoirs	Coquitlam River Watershed
COA-F22 F-3560	<p>Feasibility study: large-scale gravel additions <i>Upper Campbell River Bulk Gravel Feasibility</i> This Seed Grant project will collect initial information to determine the feasibility of large-scale spawning gravel additions in the Campbell River Watershed. It will include an engineering assessment and stakeholder input. Results of this feasibility study will be provided to the Campbell River Salmon Spawning Habitat Restoration Committee to inform decision-making about spawning gravel mitigation strategies.</p>	British Columbia Conservation Foundation	\$ 4,998	Habitat-based Actions	Rivers, Lakes, & Reservoirs	Campbell River Watershed

Fish Project Total: \$ 1,087,754

Project ID	2021 - 2022 Grant-based Wildlife Projects	Project Lead	FWCP Funding	Project Type	Action Plan Alignment	Watershed
COA-F22 W-3393	<p>Helping captive-raise Canada's most endangered owl species <i>Northern Spotted Owl Captive Breeding Program</i> This multi-year project aims to prevent the extirpation of northern spotted owls in Canada by releasing captive-raised owls into areas protected for the species by the Province of B.C., including the Bridge-Seton Watershed.</p> <p>The northern spotted owl is one of Canada's most endangered birds, and its entire Canadian range occurs in southwestern B.C. Currently, fewer than five individuals remain in the wild in Canada, and 28 captive owls reside at the Northern Spotted Owl Breeding Program facility in Langley, B.C.</p>	British Columbia Conservation Foundation	\$ 123,004	Habitat-based Actions	All	Bridge-Seton River Watershed
COA-F22 W-3443	<p>Supporting the recovery of endangered Vancouver Island marmots <i>Translocating Vancouver Island Marmots to Strathcona Park 2021</i> This project will support the transfer of between four and eight Vancouver Island marmots from Mount Washington into Strathcona Park to help re-established colonies persist while future recovery efforts continue.</p> <p>The marmot, which is federally designated as Endangered, is an endemic species that was extirpated from Strathcona Park in the 1990s. Reintroduction efforts have suc</p>	Marmot Recovery Foundation	\$ 11,825	\$ 11,825	Upland & Dryland	Multiple
COA-F22 W-3468	<p>Growing endangered whitebark pine in the Bridge-Seton Watershed <i>Whitebark Pine Recovery in the Bridge River Drainage</i> This project will support planting 15,000 whitebark pine seedlings at a density of 500–800/ha to support the recovery of this keystone species in high-elevation ecosystems in the Bridge-Seton River Watershed. Cone collections will continue to support future recovery.</p> <p>White pine blister rust, mountain pine beetle, changes to fire regimes, and climate change have impacted whitebark pine, which is federally designated as Endangered. To combat this decline, seedlings from the healthiest trees will be planted in suitable areas, such as those impacted by wildfire. The region has moderate to high rust infection (>80%), and numerous areas have recently been burned by wildfire.</p>	Moody Tree	\$ 61,190	Species-based Actions	Upland & Dryland	Bridge-Seton River Watershed
COA-F22 W 3519	<p>Assessing white-nose syndrome mitigation options in the Stave River Watershed <i>Developing and Evaluating Bat Mitigation Strategies: Year 3</i> This multi-year project will build on baseline data about bats and their roosting conditions in artificial roosts (e.g., bat boxes) in the Stave River Watershed area to evaluate the use of a probiotic to reduce bat mortality caused by white-nose syndrome.</p> <p>If effective, this disease management strategy could inform mitigation efforts for bats across the province. This project will evaluate mitigation tools to reduce further impacts on bats, which face unprecedented threats, including white-nose syndrome.</p>	Wildlife Conservation Society Canada	\$ 29,501	Habitat-based Actions	Upland & Dryland	Stave River Watershed
COA-F22 W-3529	<p>Conserving bats and their habitat in the Clowhom River Watershed <i>Conserving Bats and Their Habitat in Clowhom River Watershed: Year 3</i> This multi-year project will help conserve bats and their habitat by protecting and monitoring two major bat maternity roosts in the Clowhom River Watershed. It will also identify and protect other bat roosts; undertake white-nose syndrome surveillance; increase community awareness and participation in stewardship efforts; and install and monitor bat houses to determine the ideal design, placement, and temperature.</p> <p>The project will help build healthy and resilient bat populations prior to the expected arrival of white-nose syndrome, helping to increase the survival of the species.</p>	Sunshine Coast Wildlife Project	\$ 17,900	Habitat-based Actions	Upland & Dryland	Clowhom River Watershed

Project ID	2021 - 2022 Grant-based Wildlife Projects	Project Lead	FWCP Funding	Project Type	Action Plan Alignment	Watershed
COA-F22 W-3531	<p>Increasing habitat for at-risk owls and monitoring effectiveness <i>Western Screech-owl Habitat Enhancement and Monitoring: Year 2</i> Nest boxes have been installed in the Campbell River Watershed for more than 15 years to benefit western-screech owls. This multi-year project will evaluate the effectiveness of this habitat enhancement effort and compare results with other initiatives. In addition, more nest boxes will be installed where habitat enhancement is required.</p> <p>Riparian and low-elevation forest inventory needs will be assessed through more surveys using automated recording units.</p>	Madrone Environmental Services Ltd.	\$ 28,080	Habitat-based Actions	Wetland & Riparian	Campbell River Watershed
COA-F22 W-3546	<p>Restoring ecological function in the Campbell River Watershed <i>Restoring Ecological Function in the Campbell River Estuary: Year 6</i> This multi-year project aims to help restore ecological integrity and function in the Campbell River Watershed by managing invasive plants in the estuary, including yellow flag iris, purple loosestrife, and Japanese knotweed. The project will provide additional capacity for invasive species management, which will benefit fish and wildlife while protecting both the provincially Red-listed Henderson's checkermallow-tufted hairgrass ecological community and Vancouver Island beggarticks, a species of Special Concern under the Species at Risk Act.</p>	Discovery Coast Greenways Land Trust	\$ 29,920	Habitat-based Actions	Wetland & Riparian	Campbell River Watershed
COA-F22 W-3547	<p>Supporting recovery of western painted turtles <i>Western Painted Turtle Recovery in Lower Mainland Watersheds: Year 3</i> The goal of this multi-year project is to support the recovery of the western painted turtle—B.C.'s only remaining native freshwater turtle species—in the Coquitlam, Alouette, and Stave river watersheds. This project aims to increase turtle populations by releasing head-started western painted turtles, monitoring the populations' recovery, and providing essential habitat, such as basking features and nesting habitat, and monitoring its effectiveness. This Pacific coast population of western painted turtles is designated Threatened by COSEWIC. There are only 18 known sites where the species occurs in the Lower Fraser Valley, and more than half of those sites are in the Coquitlam, Alouette, and Stave river watersheds.</p>	British Columbia Conservation Foundation	\$ 130,235	Species-based Actions	All	Multiple
COA-F22 W-3565	<p>Improving bat science and knowledge in the Puntledge River Watershed <i>Puntledge Watershed Bat Project: Year 3</i> This multi-year project will record and analyze ultrasonic acoustic data of bats in the Puntledge River Watershed to determine which bat species occur there and gather basic information about their life history attributes. This project will also identify maternal colonies and hibernacula and develop strategies to protect high-quality bat habitat in the watershed. The project includes installing permanent acoustic monitoring stations, driving transects, conducting site-specific field investigations with ultrasonic acoustic data recording devices, and community outreach and education.</p>	Comox Valley Land Trust	\$ 10,000	Habitat-based Actions	Upland & Dryland	Puntledge River Watershed
-	<p>Supporting community-based projects <i>F22 Community Engagement Grants</i> Our Coastal Region board approved funding for Community Engagement Grants. These grants of up to \$1,000 support multiple projects led by stewardship groups, First Nations, and others to benefit fish and wildlife throughout the year.</p>	-	\$ 7,500	-	-	-

Wildlife Project Total: \$ 449,155

Project ID	2021 - 2022 Direct Fish and Wildlife Projects	Project Lead	FWCP Funding	Project Type	Action Plan Alignment	Watershed
COA-F22-PUN-DF0-01	Supporting Chinook in the Puntledge River Watershed <i>Supporting Aquaculture and summer chinook in the Puntledge River Watershed</i> This multi-year project provides annual funding to the lower Puntledge River Hatchery to support summer Chinook production.	Fisheries and Oceans Canada	\$ 17,000	Species-based Actions	All	Puntledge River Watershed
COA-F22-F-3583-DCA	Improving fish passage in the Alouette River <i>Fish Passage Feasibility Studies</i> Our Coastal Region board has approved funds to support fish passage feasibility plans for the Alouette River based on the Fish Passage Decision Framework.	Alouette River Management	\$ 25,000	Species-based Actions	Rivers, Lakes, & Reservoirs	Alouette River Watershed
To be assigned	Improving fish passage in the Coquitlam River <i>Fish Passage Feasibility Studies</i> Our Coastal Region board has approved funds to support fish passage feasibility plans for the Coquitlam River based on the Fish Passage Decision Framework.	Watershed Watch	\$25,000	Species-based Actions	Rivers, Lakes, & Reservoirs	Coquitlam River Watershed
COA-F22-F-3584-DCA	Improving spawning habitat in the Campbell River Watershed F22 Annual Campbell River Salmon Spawning Habitat Restoration Strategy (Post-storm Assessment) Our Coastal Region board has approved funds to be directed toward assessing the condition of salmon spawning habitat in the Campbell River. This aligns with the Campbell River Salmon Spawning Habitat Restoration Strategy.	-	\$ 15,000	Species-based Actions	Rivers, Lakes, & Reservoirs	Campbell River Watershed
To be assigned	Improving Campbell River salmon spawning habitat <i>Campbell River Salmon Spawning Habitat Restoration Strategy Site 5</i> Our Coastal Region board has approved funds to be directed toward improving spawning habitat at a priority spawning site as identified in the Campbell River Salmon Spawning Habitat Restoration Strategy. This project follows COA-F21-F-3367-DCA Campbell River Site 5 Gravel Placement Feasibility Assessment.	-	\$ 260,000	Habitat-based Actions	Rivers, Lakes, & Reservoirs	Campbell River Watershed
COA-F22-W-3575-DCA	Developing a habitat assessment map <i>Directed Watershed Habitat Assessment Mapping</i> Our Coastal Region board has approved funds to be directed toward the implementation of habitat assessment mapping across the Coastal Region's 14 watersheds. This action is a directed priority across all the Coastal Region action plans.	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 90,000	Research & Information Acquisition	All	All
To be assigned	Habitat assessment mapping tool pilot study <i>Develop and Implement Pilot for a Habitat Assessment Mapping Tool</i> Our Coastal Region board has approved funds to be directed toward developing a consistent approach to using the habitat mapping assessment tool to support FWCP processes and strategic plans across all 14 watersheds.	-	\$ 60,000	Research & Information Acquisition	All	All
To be assigned	Securing conservation lands in our Coastal Region <i>Securing Conservation Lands in our Coastal Region</i> Our Coastal Region board has approved funds to be directed toward the future purchase of conservation lands.	-	\$ 347,461	Land Securement	All	All

Direct Project Total \$ 839,461

2021 - 2022 Project Funding Approved Total \$ 2,376,370