



FWCP
Fish & Wildlife
COMPENSATION PROGRAM

Annual Report

Coastal Region
2022–2023

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

Over the past year, our Coastal Region board has been able to come back together in person as we work to conserve and enhance fish and wildlife in watersheds impacted by BC Hydro dams. Our Coastal Region board approved funding for 30 projects—18 fish and 12 wildlife—for a total of approximately \$2.11 million in 2022–2023 (F23).

Congratulations and thank you to all the project proponents who are carrying out this vital work. If you'd like to know more about the projects we funded in our Coastal Region, review our [F23 project list](#).

Of the many projects that were underway in our Coastal Region this year, one that deserves special recognition is the Northern Spotted Owl Breeding Program. The FWCP is a long-term funder of this important project. This year marked the release of three spotted owls, born and raised in the Lower Mainland breeding facility, into the Fraser Canyon. This was the first release of these rare owls into the wild anywhere in the world.

After important deliberations and considerations, the initial work planning to update each of our Coastal action plans started this fiscal. The action plans support our mission to conserve and enhance fish and wildlife impacted by the construction of BC Hydro dams.

The board bids farewell to several members this year and welcomes new ones. I would like to extend my sincere thanks to outgoing public representative Jack Minard and BC Hydro representative Laurel Stevens for their time and commitment. And—after seven years on the board—I would like to say thank you to Todd Manning for leading our team so effectively as board chair for the past five years. Thank you for keeping us on track!

If you have any questions about our projects, grants, or this annual report, please contact our [regional manager](#), Julie Fournier. We'd be happy to answer your questions.



Larry Casper
FWCP Coastal Region
Alternate Board Chair



Front cover: The at-risk western painted turtle is only present at 18 sites in the Lower Fraser Valley. With FWCP funding, 136 turtles were released, and follow-up studies show 75-100% survived the first 90 days. [COA-F23-W-3710](#). Photo: R. Maichin

1. Organizational overview

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.

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 Fisheries & Oceans Canada (DFO)) and ensures active participation and input from First Nations and public stakeholders. Independent regional boards 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: 21
- Provincial government: 5
- Public stakeholders: 9

Board representation by region is shown in Figure 1.1.

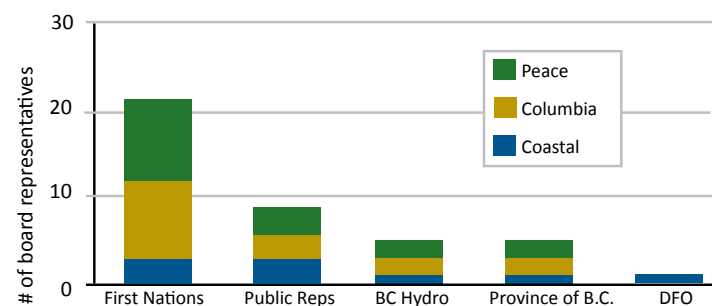


Figure 1.1: Board representation across all three FWCP regions

Since 1988, BC Hydro has provided more than \$210 million to the FWCP to compensate for dam impacts, and the FWCP has funded more than 2,300 projects across our 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.

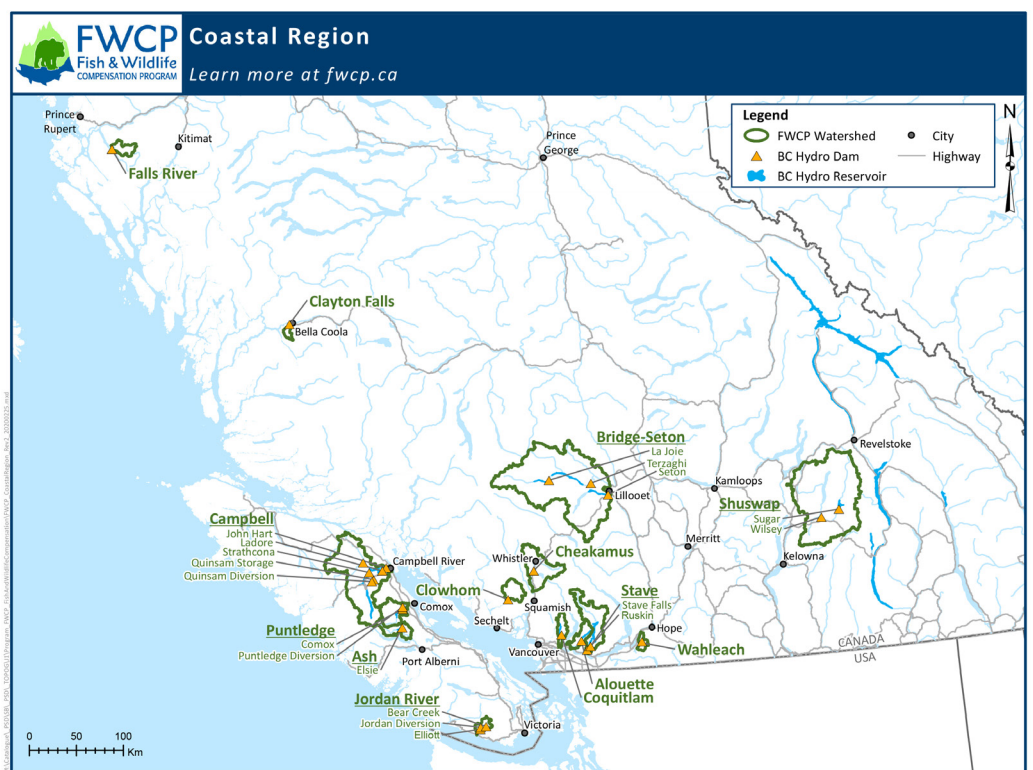


Figure 1.2: Map of the FWCP's Coastal Region

2. Our strategic approach

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 and wildlife in watersheds impacted by BC Hydro dams.

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 in our [Governance Manual](#).

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 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 F23 projects approved for funding by our Coastal Region board align with the priority actions identified in the Coastal Region action plans.

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 and in 2024 we intend to report on the progress made to address these recommendations.

Across all our regions, the evaluation and financial audit recommended exploring a potential increase in the use of directed projects—recommendation #9. Each region is now delivering between five to 20 directed projects, in addition to the grant-based projects. Engaging with our partners in the process, we also made significant progress on updating the FWCP Governance Manual—recommendation #8. We are aiming to finalize updates to the manual next fiscal. Proposed changes include updates to the sustainable use strategic objective—recommendation #1—in addition to refreshing FWCP's other strategic objectives. Other planned updates revolve around FWCP's obligations under UNDRIP—recommendation #9—which we will continue to advance throughout F24.

In our Coastal Region, planning was initiated to update the Coastal Region watershed action plans. During the planning phase, the Coastal Region board identified that they intend to significantly reduce the number of priority actions in the updated plans—recommendation #4—to support the region in being more focused and strategic when establishing priorities.

In our Columbia Region, there was significant progress this year on increasing the engagement of First Nations—recommendation #6—with the formation of the Columbia Region First Nations Working Group. In addition, the number of board members for our existing First Nations partners increased from one to three for each Nation, and dedicated funds to support First Nations leadership in directed projects continued. The Columbia Region initiated a review of one key annual and ongoing project—the Nutrient Restoration Program—advancing work on recommendation #2 to ensure long-term projects reflect the intent and priorities of the partnership, and that the intended outcomes are achieved. The final [technical review report](#) on the Nutrient Restoration Program, including findings and recommendations, is available online.

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

3.0 Board, committee members, and staff

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/Ryan Stewart	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/Ian Routley	Public

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—North 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 Chytk	Public

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

STAFF

In each region, program management and operations were implemented by a regional manager and supported by Monique Stevenson, FWCP program manager, and Melissa Fiel de Sousa, environmental project manager. Julie Fournier was our Coastal Region manager during F23.

4.0 Financial report

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 \$2,335,200. Our Coastal Region board approved a budget of \$2,456,219 for this year, adding previously uncommitted available funds.

Figure 4.1 shows a total of just over \$4.2 million available to our Coastal Region as of April 1, 2022. This comprises the approved budget of approximately \$2.46 million, uncommitted available funds of approximately \$60,000, and remaining prior-year funding commitments of approximately \$1.17 million, \$454,000, \$94,000, and \$10,000 from F22 to F19 respectively.

Figure 4.2 illustrates the approved budget for F23 as of April 1, 2022. Funding for fish projects made up nearly 50% of the budget, wildlife projects 23%, and land securement 14%. Administrative costs made up approximately 11% of the 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 3% of the annual budget.

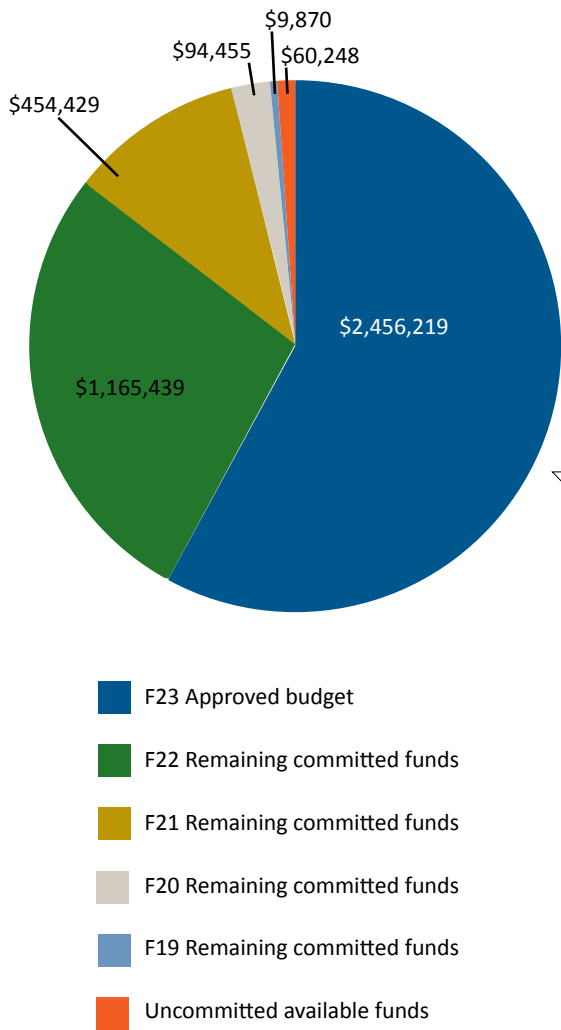


Figure 4.1: FWCP Coastal Region financial summary on April 1, 2022

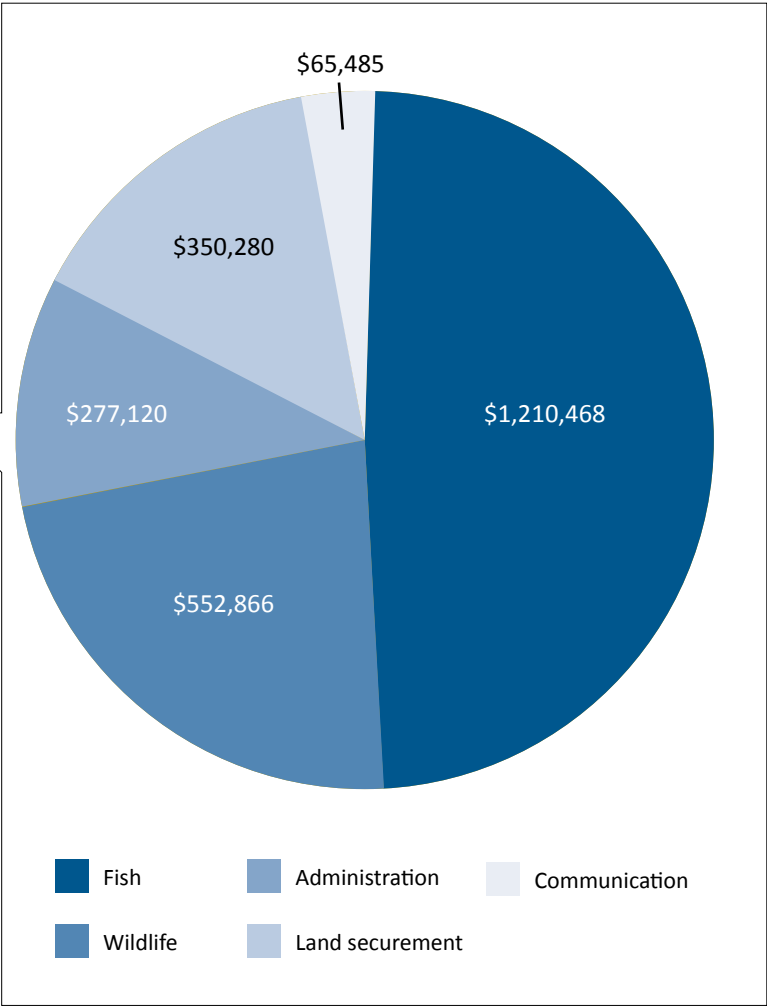


Figure 4.2: Allocation of the approved Coastal Region budget of approximately \$1.91 million as of April 1, 2022

Coastal Region expenditures up to the end of fiscal, March 31, 2023, are shown in Table 4.1. 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 4.1—F23 allocated funds not yet expended by March 31, 2023, are labelled as planned payments.

Occasionally, projects come in under budget (unspent funds in Table 4.1). Funds not spent during the fiscal year will be carried forward as unspent surplus budget and made available for new spending in future fiscal years. Funds identified as land securement are approved for a reserve fund that, if remain unspent, are carried forward and made available for future land securement proposals.

Table 4.1: F23 budget status as of March 31, 2023

Fund category	F23 Approved budget	Paid up to March 31, 2023	Planned payments ¹	Unspent funds ²
Fish	\$1,210, 467	\$763,043	\$446,710	\$713
Wildlife	\$552,866	\$242,230	\$442,380	\$(131,744)
Administration	\$277,120	\$201,311	\$36,635	\$139,173
Land securement	\$350,280	\$0	\$350,280	\$0
Communications	\$65,485	\$49,112	\$16,372	\$0
TOTAL	\$2,456, 218	\$1,405,986	\$1,226,495	(\$91,859)

Note 1: Planned payments represent expected invoices for approved, ongoing projects that have not yet submitted final reports by March 31, 2023.

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

At the end of this reporting period, approximately \$1.26 million of the annual budget had been spent, and \$1.29 million¹ remained as an F23 commitment to spend in F24 —see Table 4.1.

In addition to the planned payments of approximately \$1.29 million, the balance of prior-year funding commitments anticipated to be spent in F24 was approximately \$522,000 from F22, \$251,000 from F21, and \$83,000 from F20 (Figure 4.3).

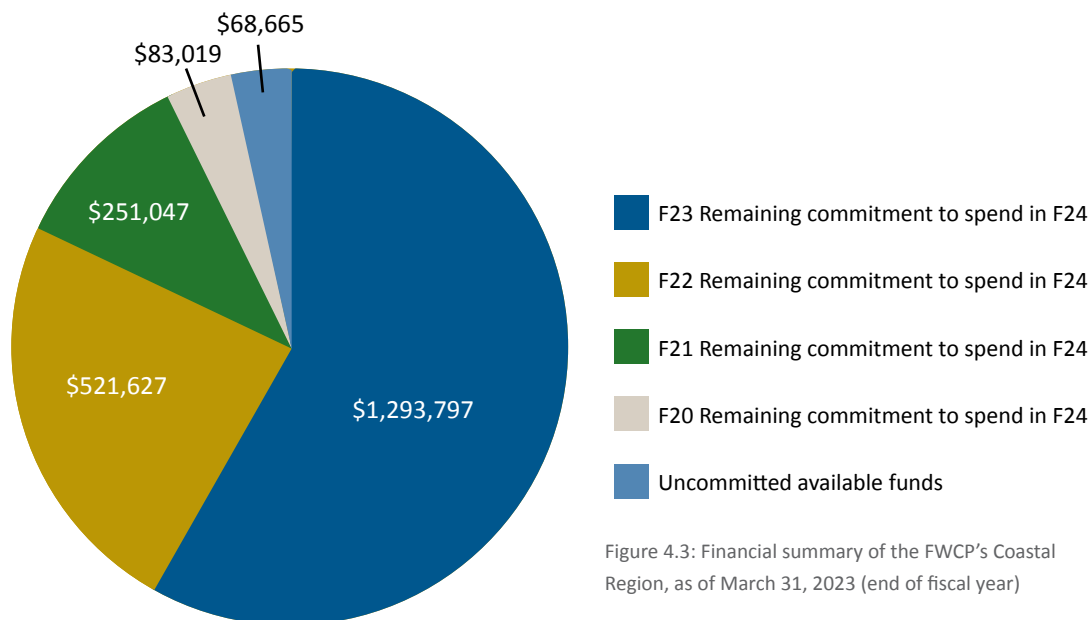


Figure 4.3: Financial summary of the FWCP's Coastal Region, as of March 31, 2023 (end of fiscal year)

1. The end of fiscal F23 and the year-end deadline for project reporting are on the same day, therefore reports—and potentially statement of accounts—are not reviewed and accepted until after the March 31 deadline causing them to be associated with the next fiscal (F24). Many final payments for F23 projects are processed in the first few months of F24, and unused funds are allocated for future spending.

5.0 Project funding and grants

PROVINCIAL PROJECT FUNDING

This year, the three regional boards approved 95 projects for a total FWCP contribution of approximately \$9.81 million. The total value of these projects—including leveraged funding from other organizations and in-kind resources—was \$22.36 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](#).

COASTAL REGION PROJECT FUNDING

In our Coastal Region, the FWCP funds the delivery of fish and wildlife projects in a variety of ways, including grant applications and directed projects. Thirty projects were approved for this year, for approximately \$2.11 million in funding from our Coastal Region board.

Grant-based projects

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 in any action plan and will achieve the intended outcome. Each priority action in our action plans is identified as Open, Open/Directed, or Directed. The proposed project must be aligned to an Open or Open/Directed priority action to be eligible for a grant.

Our Coastal Region board received 24 grant applications for fish (16) and wildlife (eight) projects in this reporting period, resulting in a request of approximately \$1.92 million in funding. Ten applications came from Vancouver Island, seven from the Lower Mainland and Coast, four from the Southern Interior, and three applications were for multiple watersheds.

Our Coastal Region board approved more than \$1.55 million in funding for 20 projects through our annual intake of grant applications: 13 fish—approximately \$1.13 million—and seven wildlife—approximately \$423,000.

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 F23, as stated, the FWCP funding allocation for grant-based projects was approximately \$1.55 million; as a result of financial partnerships and in-kind contributions, the total value of the projects was just over \$6.78 million. In other words, for every \$1 invested by the FWCP, others contributed nearly \$4.50, greatly increasing the value of the FWCP’s investment overall.

Directed projects

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

Nearly \$909,000 was approved for nine directed projects, including hatchery operations, distribution of chum salmon carcasses in the Puntledge River Watershed, gravel post-storm assessment in the Campbell River Watershed, and land securement (which received more than \$350,000). See the full list of directed projects in Section 6.0.

Approved projects by proponent type

The FWCP Coastal Region board funded a total of 30 projects—nine directed projects and 21 grant application-based projects. The majority, more than two-thirds, were led by non-government organizations—such as stewardship groups or non-profit environmental organizations. The full split of projects led by proponent type is shown in Figure 5.1.

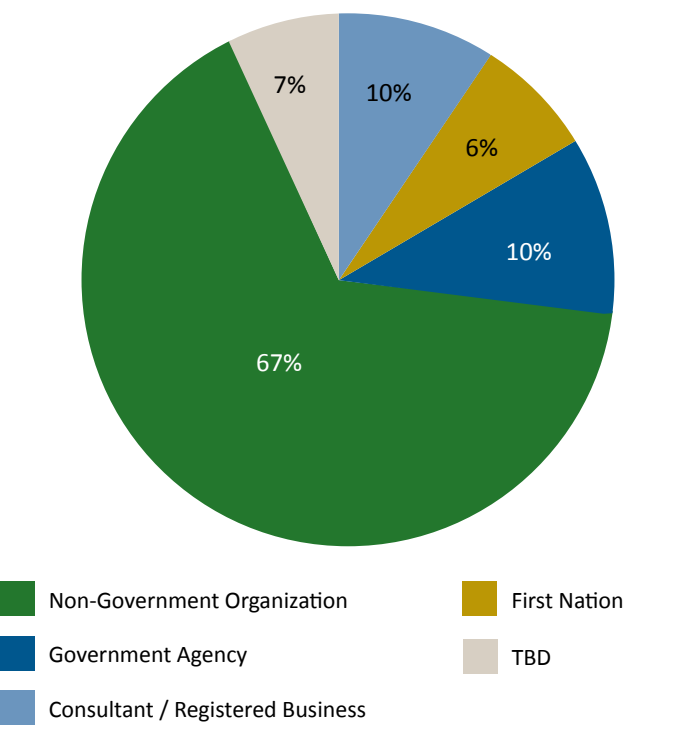


Figure 5.1: Coastal F23 approved projects by lead proponent type

Approved projects by action type

Priority actions in our Coastal Region action plans are grouped into five broad action types: research and information acquisition; habitat-based; species-based; monitoring and evaluation; and land securement.

This year, approximately 60% of projects funded were for habitat-based projects and a further 20% for species-based projects. Seven per cent of the projects funded were for land securement. Figure 5.2 shows the approved projects by action type.

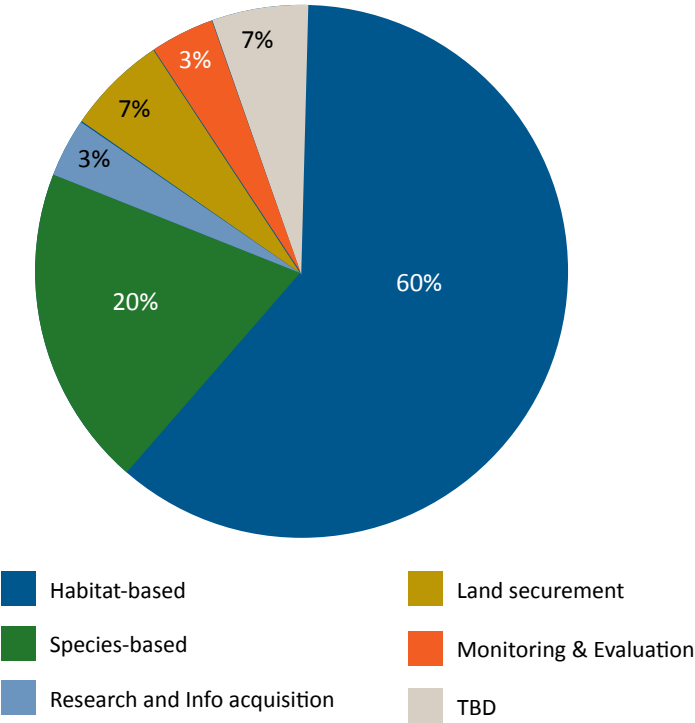


Figure 5.2: Breakdown of approved projects by action type

Approved projects by watershed

The approved projects were distributed across the watersheds in which we operate, as shown in Table 5.1. The FWCP supported projects in 10 of the 14 Coastal Region watersheds—not including projects covering multiple watersheds.

Table 5.1: F23 Approved projects by watershed

Watershed	FWCP funding	Number of Projects
Alouette	\$112,393.00	3
Cheakamus	\$548,210.00	2
Coquitlam	\$94,190.00	2
Campbell	\$173,138.70	6
Puntledge	\$252,173.50	6
Jordan	\$61,559.69	1
Shuswap	\$11,785.00	1
Bridge Seton	\$173,846.00	2
Multiple	\$336,746.35	6
TBD*	\$350,280.00	1
Total	\$2,114,322.24	30

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



In the Bridge-Seton River Watershed, our Coastal Region board is helping recovery of endangered whitebark pine trees by funding the planting of seedlings. The at-risk tree is a sentinel species, important for biodiversity, and is an important sub-alpine food source for at-risk Clark’s nutcrackers, and grizzly bears. [COA-F23-W-3700](#). Photo: R. Moody

Community Engagement Grant

The goal of the Community Engagement Grant is to provide an opportunity for FWCP stakeholders and First Nations, bands, or groups to apply for a small grant to support conservation and enhancement work that aligns with our action plans. A total annual budget of \$10,000 is available in our Coastal Region.

This year, nine applications were received and six were approved, for a total of \$7,500. The full list of approved Community Engagement Grants is shown in Table 5.2

Table 5.2 Approved F23 Coastal Community Engagement Grants

Applicant	Project Title	Grant Amount
St'át'imc Government Services	St'át'imc Capacity Development in Recovering Species-At-Risk Populations & Habitat in the Bridge-Seton Watershed	\$500
Campbell River Fish & Wildlife Ass'n	Western Screech-Owl Nestbox Program	\$1,000
Alouette River Management Society	Ridge Meadows Rivers Day 2022	\$1,000
City of Coquitlam	Salmon Come Home Community Outreach Event	\$1,000
British Columbia Conservation Foundation	Northern Spotted Owl Breeding Program Awareness	\$1,000
Birds Canada	Indigenous Engagement in Black Swift Conservation in Lillooet, Mission, and Pemberton	\$3,000*
		TOTAL \$7,500

*For multiple watersheds



A project by the Squamish River Watershed Society, with funding from our Coastal Region board, has removed part of an industrial berm in the Squamish River Estuary and improved fish access to habitat. Juvenile salmon now have access to 144 hectares of rearing habitat. [COA-F23-F-3643](#). Photo: J. Buchanan

6.0 Coastal Region projects and results

Table 6.1 provides a listing of 2022–2023 Coastal Region fish and wildlife projects approved for funding. The funding identified may vary from the approved budget as of April 1, 2022, 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: F23 Approved projects and results

Project ID Proponent FWCP \$ amount Watershed	Grant-based fish projects: title and description	Project outcomes
COA-F23-F-3719 Alouette River Management Society \$81,547 Alouette River Watershed	Improving salmon habitat in the Alouette River Watershed <i>Alouette River Salmonid Habitat Rejuvenation Project:</i> This project will focus on up to five salmon habitat projects in the Alouette River Watershed. Each salmon habitat area was developed within the last three decades to support spawning or rearing life stages. On-the-ground works include removing sediment from the channels, adding spawning gravel, removing invasive reed canary grass, and upgrading a beaver box (which is used to deter beavers), a pipe, and a culvert to improve flows.	100+ dump trucks of sediment removed to enhance salmon habitat To restore salmon spawning and rearing habitat in the Alouette River, the project team removed 100 linear feet of invasive reed canary grass, installed a new beaver-proof pipe, and removed 102 dump trucks of sediment
COA-F23-F-3705 British Columbia Wildlife Federation \$5,846 Alouette River Watershed	Training habitat stewards <i>Fish Habitat Stewardship Workshops—Coastal:</i> These workshops teach volunteers appropriate enhancement techniques for different habitat types, project planning skills, and habitat stewardship. Volunteers will gain the skills needed to become riparian stewards in their own backyards. They will be equipped to help restore valuable fish and wildlife habitat based on ecologically informed decisions.	Stewards enhance 943 m² of riparian habitat Through education and hands-on experience, this project taught volunteers new ways to restore fish and wildlife habitat in the Alouette River Watershed. Together, stewards planted 112 native seedlings. The project helped to strengthen relationships with the Alouette River Management Society.
COA-F23-F-3678 British Columbia Conservation Foundation \$4,977 Campbell River Watershed	Evaluating habitat restoration sites in the Campbell River Watershed <i>Campbell River: Habitat Project Effectiveness Monitoring:</i> This Seed Grant project will assess the condition and effectiveness of existing habitat enhancement projects on the lower Campbell River. A field crew will visit each habitat restoration site on the river to assess the effectiveness of the project compared to the original objectives. Identifying and evaluating potential deficiencies can help inform future projects aimed at optimizing and restoring the habitat.	Three of four sites surveyed are functioning well With funding from this Seed Grant, field visits to previous salmon habitat restoration sites on the Campbell River took place. The survey of four sites found that three are functioning well. A beaver dam has been built at the fourth site that is adversely affecting the productivity of the side channel. Implementing recommendations from this assessment will provide an opportunity to construct spawning platforms to enhance coho spawning habitat.
COA-F23-F-3732 British Columbia Conservation Foundation \$59,050 Campbell River Watershed	Improving spawning habitat in the upper Campbell River <i>Upper Campbell River Bulk Gravel Feasibility:</i> This project will help determine the feasibility of large-scale bulk spawning gravel additions in the upper Campbell River. The project will encompass a detailed engineering feasibility assessment and will engage key stakeholders (e.g., landowners and the Campbell River Gravel Committee).	Report pending

Project ID Proponent FWCP \$ amount Watershed	Grant-based fish projects: title and description	Project outcomes
COA-F23-F-3713 Guardians of Mid-Island Estuaries Society \$51,838 Campbell River Watershed	Applying eco-cultural restoration techniques in the Campbell River estuary <i>Eco-cultural Restoration of the Campbell River Estuary:</i> This multi-year eco-cultural restoration project builds on recent restoration efforts in the Campbell River estuary and will reduce erosion and provide greater resiliency during peak flows. Indigenous fish weir techniques will be used to protect and restore vital estuary sedge marsh habitat. Alder and willow fencing will help exclude Canada geese from the site and protect the tidal channel-edge habitat. Sites will be prepared for transplanting <i>Carex lyngbyei</i> (Lyngbye's sedge).	Report pending
COA-F23-F-3670 Cheakamus Foundation for Environmental Learning \$132,990 Cheakamus River Watershed	Improving flows and habitat for salmon <i>Cheakamus Centre Off-channel Habitat & Intake Upgrades Year 2:</i> This project will continue work started in 2021 to clean up and remove sediment from the Gorbuscha water intake and channels, replace the intake, and monitor downstream channels to ensure functional off-channel habitat operations. The off-channel habitat on the lands of the Cheakamus Centre/School District #44 is vitally important to the survival of coho, chum, and pink salmon populations. Steelhead salmon depend on off-channel habitat away from the mainstem flows of the Cheakamus River for spawning, rearing, and overwintering habitat.	Habitat enhancement completed at three sites To enhance salmon habitat in the Cheakamus River Watershed, sediment was removed from water intake pipes and channels at Far Point, Duck Pond, and Eagle Point intakes. The project team recommended improvements that would reduce the amount of sediment building up in each of these channels, which are important for coho, chum, steelhead, and pink salmon.
COA-F23-F-3643 Squamish River Watershed Society \$415,220 Cheakamus River Watershed	Improving fish passage in the Cheakamus River Watershed <i>Phase 2: Squamish Estuary Lower Training Berm Modification:</i> This multi-year project is focused on the restoration of declining Chinook salmon populations in the Salish Sea and reconciliation with the Squamish Nation on the loss of their historic village and lands within the estuary. A berm constructed in the estuary in the 1970s, without the engagement of the Squamish Nation, is impeding fish passage. This phase of the project will modify the berm to significantly restore access to more than 144 hectares of estuarine habitat to out-migrating juvenile salmonids, with a focus on Chinook salmon.	40,000 m³ of soil and rock removed to improve fish habitat in Squamish Estuary In 2022, the 300-metre opening in the Squamish Estuary training berm was completed and more than 40,000 m³ of soil and rock was removed. The opening restores access for juvenile salmon to valuable estuarine habitat. One hundred juvenile Chinook salmon were tagged for monitoring. Students and other community members visited the site to learn about the restoration project.
COA-F23-F-3709 MakeWay Charitable Society \$69,190 Coquitlam-Buntzen Watershed	Using technology to improve fish passage <i>Coquitlam River Floodgate and Salmon Passage Year 2:</i> This multi-year project will use fish tracking technology to assess juvenile salmon passage at three floodgates installed in the Coquitlam River Watershed. 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 kilometres 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.	Report pending
COA-F23-F-3692 Pacheedaht First Nation \$60,851 Jordan River Watershed	Creating high-quality fish habitat in the Jordan River <i>Lower Jordan River Side Channel Development: Year 2:</i> The goal of this project is to create a tributary and groundwater-fed side channel on the left side of Reach 1 of the Jordan River. This will provide high-quality rearing and overwintering habitat for coho salmon and searun cutthroat trout. The channel will also provide spawning habitat for several species, including chum.	Report pending

Project ID Proponent FWCP \$ amount Watershed	Grant-based fish projects: title and description	Project outcomes
COA-F23-F-3707 Comox Valley Project Watershed Society \$175,527 Puntledge River Watershed	Restoring riparian habitat in the Puntledge River Watershed <i>Kus-kus-sum: Unpaving Paradise Year 2:</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 and restoring a decommissioned sawmill site back to its pre-disturbance state. 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. Year 2 of the restoration work will include extensive earth excavation, re-grading, channel creation, topsoil introduction, and native species planting.	Creation of two tidal channels among enhancements at Kus-kus-sum During this project's second year, more than 11,000 m² of conservation land was recontoured, 16,000 m³ of soil was removed, and two tidal channels were created. Also, 5,000 native flora were planted. This was achieved with the help of more than 100 volunteers, who learned habitat restoration techniques.
COA-F23-F-3677 M. Sheng Consulting \$5,000 Puntledge River Watershed	Improving salmon access and flows in the Forbidden Plateau channel <i>Forbidden Plateau Channel Upgrades to Improve Salmon Access:</i> This Seed Grant project will review and inspect the state of existing infrastructure and develop designs to increase and maintain water flows into the Forbidden Plateau channel. The project aims to attract and increase the presence of adult salmon in the channel. A design and construction plan report will be provided.	Report pending
COA-F23-F-3712 Guardians of Mid-Island Estuaries Society \$52,646 Puntledge River Watershed	Applying eco-cultural restoration techniques in the Puntledge River Watershed <i>Eco-cultural Restoration of the K'ómoks Estuary Year 3:</i> This project will focus on restoration efforts led by the Guardians of Mid-Island Estuaries Society and the K'ómoks First Nation Guardians. This project will include controlling overabundant populations of resident Canada geese, which threaten the success of restoration efforts by over-grazing remnant and restored habitat. Habitat restoration strategies utilize an eco-cultural approach based on a modification of traditional fish weir to construct fencing to physically exclude Canada geese from grazing marsh vegetation.	Report pending
COA-F23-F-3667 Kingfisher Interpretive Centre Society \$11,785 Shuswap River Watershed	Improving salmon stewardship 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 key, and this project helps to build compassion, promote action, protect fish, and preserve the Shuswap River Watershed.	Salmon stewardship education reaches approximately 4,000 students About 2,000 students visited the Kingfisher Interpretive Centre to take part in education about Shuswap River chinook. Another 2,000 students took part in school-based education programs designed to instill stewardship values in young people and encourage them to preserve the Shuswap River Watershed.

Project ID Proponent FWCP \$ amount Watershed	Grant-based wildlife projects: title and description	Project outcomes
COA-F23-W-3700 Moody Tree \$48,150 Bridge-Seton Watershed	Growing endangered whitebark pine in the Bridge-Seton Watershed <i>Whitebark Pine Recovery in the Bridge River Drainage:</i> 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. This project will support natural regeneration through competition reduction and collecting seeds from healthy trees in highly infected areas. Outreach will be conducted with First Nations, the community, and industry.	5,000 pine seedlings planted To help restore the Endangered whitebark pine in the Bridge-Seton Watershed, the project team planted whitebark pine seedlings over approximately 24 hectares of land. Competition trees were removed from 2.6 hectares and cones from three stands of trees were collected for blister rust screening.
COA-F23-W-3637 British Columbia Conservation Foundation \$125,696 Bridge-Seton Watershed	Captive-raising 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 River Watershed. 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.	First captive-bred northern spotted owls released into the wild The breeding program introduced three new pairs to each other in 2022, and one of the pairs bred. Within the captive population, fertility increased from 75% to 93% but hatchability and survivorship was lower than expected. Two chicks survived to adulthood. The success of the captive breeding program allowed the recovery program to release three captive-bred male owls into protected habitat. These were the first captive-bred owls to be released from the northern spotted owl breeding facility near Langley.
COA-F23-W-3744 Discovery Coast Greenways Land Trust \$29,723 Campbell River Watershed	Restoring ecological function in the Campbell River estuary <i>Restoring Ecological Function in the Campbell River Estuary Year 7:</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. In Year 7, this 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.	More than 5,000 kg of invasive plants removed Now in its seventh year, this project removed 5,484 kg of invasive plants from the Campbell River Watershed. More than 500 trees and shrubs were planted in riparian areas on Baikie Island and Tyee Spit. The project team is investigating effective treatments to restore native marsh habitat—such as natural revegetation and planting nursery-grown silverweed, rushes, and lady ferns. They are also evaluating whether invasive plant removal has better results in spring or fall.
COA-F23-W-3742 Madrone Environmental Services Ltd \$12,550 Campbell River Watershed	Increasing habitat for at-risk owls and monitoring effectiveness <i>Western Screech-owl Habitat Enhancement and Monitoring:</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. Riparian and low-elevation forest inventory needs will be assessed through more surveys.	Twenty nest boxes installed for western screech-owl in riparian habitat The project team installed new nest boxes and assessed 91 existing boxes to see if they are being used by western screech-owls. Monitoring using 33 automated recorded units over 10 nights yielded no detections. The data collected will be shared with B.C.'s Wildlife Species Inventory. Outreach events for school students and a fish and wildlife club helped raise awareness of western screech-owls.

COA-F23-W-3675 Marmot Recovery Foundation \$11,825 Campbell & Puntledge River Watersheds	Recovering endangered Vancouver Island marmots <i>Translocating Vancouver Island Marmots to Strathcona Park 2022:</i> This project will support the transfer of between four and eight Vancouver Island marmots from Mount Washington into Strathcona Park. These additions will help re-established colonies persist while future recovery efforts continue. The marmot, which is federally designated as Endangered, is an endemic species that was extirpated from Strathcona Park in the 1990s. Reintroduction efforts have successfully established several marmot colonies in the park.	Three marmots moved into Strathcona Park To support the wild colony of Endangered Vancouver Island marmots, three marmots were moved from alpine habitat on Mount Washington into Strathcona Park—the wild population there had been nearly extirpated in the 1990s. To support this colony, the project set up 14 feeders, which were used by at least 73 marmots. Feeders help improve the reproductive potential of marmots. Meanwhile, across all of the Vancouver Island marmot colonies, 28 marmots were released. At least 27 pups were born in wild colonies in 2022.
COA-F23-W-3687 Wildlife Conservation Society Canada \$59,206 Cheakamus, Coquitlam-Buntzen, Jones Creek and Wahleach Lake & Stave River Watersheds	Evaluating white-nose syndrome mitigation options <i>Developing and Evaluating Bat Mitigation Strategies Year 4:</i> This multi-year project will evaluate the use of a probiotic to reduce bat mortality caused by white-nose syndrome in colonies at Alice Lake, Stave Lake, and Colony Farm Regional Park in Coquitlam. 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.	Disease management process tested in bat colonies A mixture of probiotics was applied to bat colonies to study ways to reduce bat mortality due to white-nose syndrome. Analysis of bat roosts and wings looked at how well the probiotic mixture was picked up by the bats. Monitoring of bat colonies used tagging and acoustic recordings to check for the presence of white-nose syndrome. The project teams worked with local First Nations interested in bat conservation to help with community outreach.
COA-F23-W-3710 British Columbia Conservation Foundation \$135,715 Alouette, Coquitlam-Buntzen & Stave River Watersheds	Recovering western painted turtles <i>Western Painted Turtle Recovery in Lower Mainland Watersheds:</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 Alouette, Coquitlam and Stave River watersheds. This project aims to increase populations by releasing head-started turtles, monitoring the populations’ recovery, providing essential habitat—such as basking features and nesting habitat—and monitoring the effectiveness of that habitat.	More than 100 head-started turtles released in the Lower Mainland In 2022, 101 western painted turtles were released at four sites to recover the wild population. Seventy-eight nests were identified: cages were built around some nests to protect eggs from predation, and 16 other nests were brought into the captive breeding facility. Basking and nesting habitat was enhanced, including four nesting beaches and five basking logs. At the care facility, treatment methods were tested to see if they reduced the risk of disease; this research led to the use of anti-parasitic treatments and sterilizing tubs.
COA-F23-W-3745 Cumberland Community Forest Society \$120,000 (out of \$350,280 set aside for land securement) Puntledge River Watershed	Conserving critical riparian habitat in the Puntledge River Watershed <i>Lower Perseverance Creek Corridor Project:</i> This project aims to secure a 19-hectare corridor of ecologically valuable and privately owned creek bed, riparian wetlands, and riparian forest in Lower Perseverance Creek in the Puntledge River Watershed. This corridor has been identified as a top priority for protection by the Comox Valley Land Trust, the K’ómoks First Nation, and the Cumberland Community Forest Society.	Report pending
Community Engagement Grant \$7,500 funded out of \$10,000 set aside Multiple watersheds	Supporting community-based projects <i>F23 Community Engagement Grants:</i> Our Coastal Region board approved funding for Community Engagement Grants. These grants, typically up to \$1,000 each, support multiple projects led by stewardship groups, First Nations, and others to benefit fish and wildlife.	Community projects funded to support western screech-owls, salmon, Indigenous engagement, and more Community Engagement Grants were approved to St’at’imc Government Services, Campbell River Fish & Wildlife Association, Alouette River Management Society, City of Coquitlam, BC Conservation Foundation, and Birds Canada.

Project ID Proponent FWCP \$ amount Watershed	Directed projects: title and description	Project outcomes
COA-F23-F-3769-DCA Alouette River Management Society \$25,000 Alouette River Watershed	Improving fish passage in the Alouette River Watershed <i>Fish Passage Feasibility Study:</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.	Approximately 11,000 sockeye smolts estimated to have migrated from Alouette Reservoir In total, 2,205 sockeye smolts were captured in 2022, of which 1,459 were lower caudal clipped and released below the Alouette Dam. Of the clipped and released fish, 295 were recaptured, resulting in an estimate of 10,876 smolts migrating from the Alouette Reservoir between April and May. This was the seventh highest estimate in 17 study years. Between July and October 2022, four sockeye salmon adults returned to spawn. Genetic analysis identified one as originating from Alouette stock, and two as Weaver/Cultus stock.
COA-F23-F-3780-DCA Watershed Watch Salmon Society \$25,000 Coquitlam-Buntzen Watershed	Improving fish passage in the Coquitlam-Buntzen Watershed <i>Fish Passage Feasibility Study:</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.	Only one sockeye adult returned to the Coquitlam River In 2022, 226 sockeye salmon smolts were captured. This report covers year four—of 10—to assess the uncertainties in the sockeye life cycle modelling and re-evaluate smolt outmigration. Data collection on smolt outmigration and adult enumeration continues.
COA-F23-F-3768-DCA A-Tlegay Fisheries Society \$15,000 Campbell River Watershed	Improving salmon spawning habitat in the Campbell River Watershed <i>F23 Annual Campbell River Salmon Spawning Habitat Restoration Strategy (Post-storm Assessment):</i> Our Coastal Region board has approved funds to be directed toward assessing the condition of salmon spawning habitat in the Campbell River in the event of high winter storm flows. This aligns with the Campbell River Salmon Spawning Habitat Restoration Strategy.	Post-storm spawning gravel assessment completed The high-level assessment of the available spawning area at priority spawning areas in the Campbell River was achieved. Drone footage collected additional information in a cost-effective way. The results were shared with the Campbell River Spawning Habitat Roundtable. They will help to make informed decisions regarding actions to improve salmon spawning habitat.
Fisheries and Oceans Canada \$17,000 Puntledge River Watershed	Supporting Chinook in the Puntledge River Watershed <i>Supporting Aquaculture and Summer Chinook in the Puntledge River Watershed:</i> Annual funding to the Puntledge River Hatchery provides support to summer Chinook production.	Report pending
COA-F23-F-3750-DCA Courtenay and District Fish & Game Protective Association \$2,000 Puntledge River Watershed	Adding nutrients to the Puntledge River Watershed <i>Upper Puntledge River Watershed Chum Carcass Distribution:</i> This 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.	Nearly 4,000 salmon carcasses distributed in Puntledge River Watershed In early November 2022, a total of 3,840 salmon carcasses from Puntledge River Hatchery were distributed to eight of the nine treatment sites in the Upper Puntledge and Cruickshank rivers. Results were shared with various conservation stakeholders.

Project ID Proponent FWCP \$ amount Watershed	Directed projects: title and description	Project outcomes
COA-F23-W-3770-DCA Province of B.C. \$90,000 multiple watersheds	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.	Mapping tool to help strategic decision-making The development of a mapping tool is on track to reflect priority values, objectives, and assessment results as directed by the FWCP Coastal Region board.
Ecofish Research Ltd. \$30,000 multiple watersheds	F23 action plan update pilot project <i>Implement a Pilot Project for the Habitat Assessment Mapping Tool:</i> Our Coastal Region board has approved funds to be directed toward a pilot action plan update. The project will help develop a consistent approach to using the habitat mapping assessment tool to support FWCP processes and action plans across all 14 watersheds.	Report pending