

# 2012 - 2013 FWCP ANNUAL REPORT COASTAL REGION



The FWCP is a partnership of:

**BC hydro**   
FOR GENERATIONS



**Canada**



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

GDS13-474

2013

## MESSAGE FROM THE BOARD CHAIR



*Placing willows on the Coquitlam River  
Side Channel Project.  
Photo: Watershed Watch Salmon Society*



*DFO's Mel Sheng shows spawning habitat improvements  
at Bull Island Side Channel on the Puntledge River.  
Photo: Allister McLean*

On behalf of the FWCP-Coastal Board, I'm pleased to invite you to read our Annual Report for Fiscal Year 2013 (April 1, 2012 - March 31, 2013). The FWCP-Coastal program is dedicated to advancing the objectives of the FWCP partnership – conservation, sustainable use, and community engagement – in watersheds impacted by the initial construction of BC Hydro's generation facilities in the Coastal and Southern Interior regions.

Fiscal Year 2013 (F13) proved to be another busy year for FWCP-Coastal. We funded 16 projects related to fish and their habitats, and 13 projects supporting wildlife and their habitats. As always, we received some great proposals from proponents, which aligned with, and supported, our strategic Watershed and Action Plans, introduced in October 2011.

This year, our total funding support available was almost \$1.9 million,

of which \$1.5 million was provided directly to external applicant organizations to support fish and wildlife projects in their communities. We are always pleased to see the level of in-kind and volunteer resources, and additional funding, that our applicants are able to leverage with our support. The total value of the projects that the FWCP-Coastal supported this year is estimated at \$2.6 million.

**THIS YEAR, FWCP-COASTAL  
PROVIDED \$1.5M TO SUPPORT FISH  
AND WILDLIFE PROJECTS**

Reflecting the FWCP partnership, the FWCP-Coastal Board is made up of representatives from the public, First Nations, the Province of B.C., Fisheries and Oceans Canada, and BC Hydro. We wish to thank all the dedicated applicants and proponents who work hard each year to

successfully implement projects to help us achieve our vision of thriving fish and wildlife populations in healthy and sustainable ecosystems.

Yours truly,  
Brian Assu  
FWCP-Coastal Board Chair



*Front cover: Monitoring continues at wetland  
habitat created in the Jordan River watershed.  
Photo: LGL Ltd.*



# 1. ORGANIZATIONAL OVERVIEW

## INTRODUCTION

The Fish and Wildlife Compensation Program (FWCP) was established to compensate for the impacts resulting from the construction of BC Hydro dams by conserving and enhancing fish and wildlife in the Coastal, Columbia and Peace regions of British Columbia. The program operates as a partnership between BC Hydro, the Province of B.C., Fisheries and Oceans Canada (DFO), First Nations, and local communities, organizations and groups.

The FWCP has invested more than \$110 million and delivered more than 1,500 projects that conserve and enhance fish, wildlife and their supporting habitats affected by the creation of BC Hydro owned and operated generation facilities in the

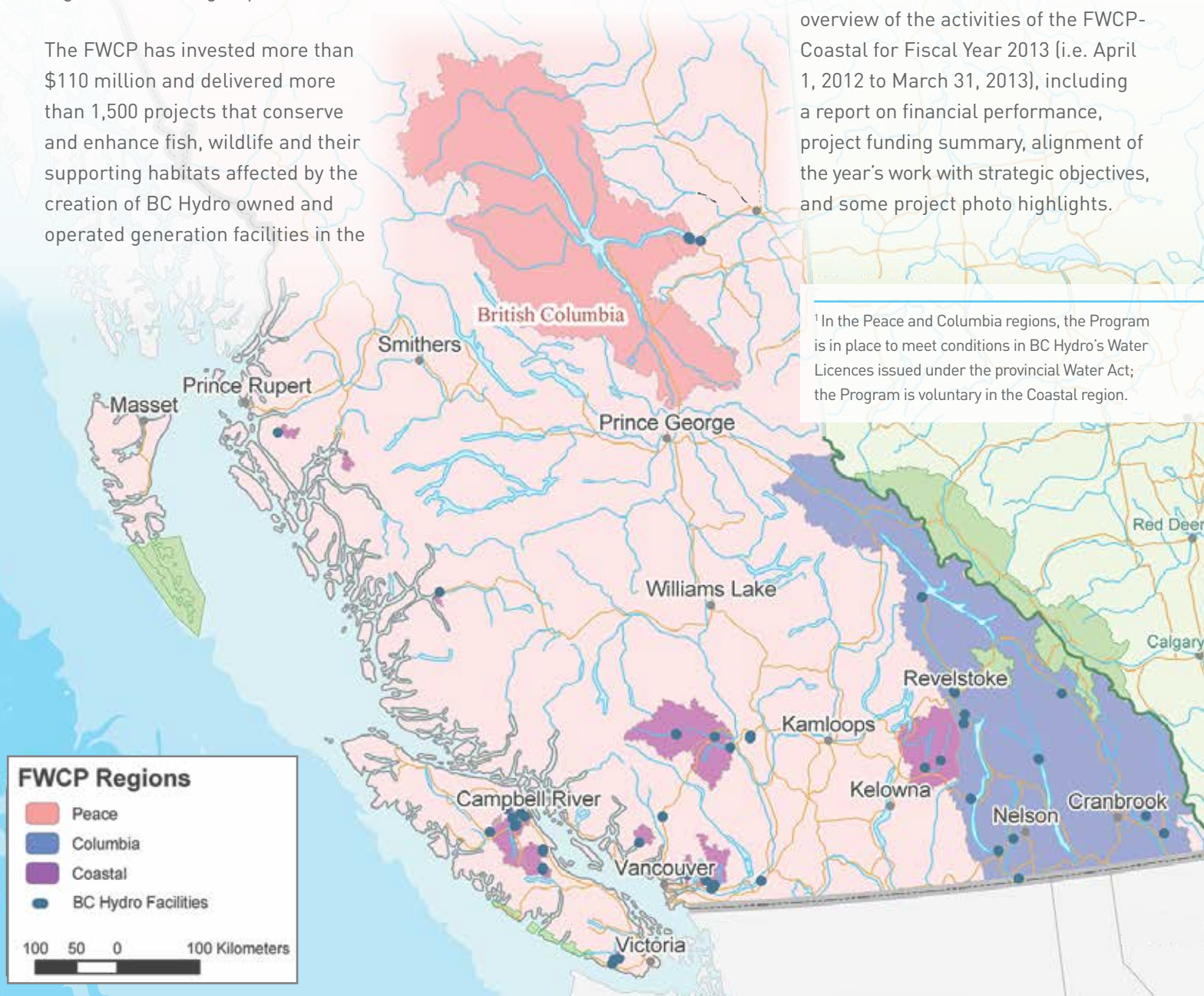
Coastal, Columbia and Peace regions of British Columbia.

Formerly known as the Bridge-Coastal Restoration Program, FWCP-Coastal was established in 1999 to assist in the restoration of fish and wildlife populations and habitat in watersheds impacted by the construction of hydroelectric generation facilities in BC Hydro's Bridge River/Coastal Generation Area, which includes 14

watersheds on Vancouver Island, the Mainland Coast, the Lower Mainland as well as the Bridge/Seton and Shuswap rivers. FWCP-Coastal is a voluntary program<sup>1</sup> initiated by BC Hydro in partnership with its regulators DFO and the Province of B.C., in response to First Nations and stakeholder interests in addressing opportunities for restoration in these watersheds.

This Annual Report provides an overview of the activities of the FWCP-Coastal for Fiscal Year 2013 (i.e. April 1, 2012 to March 31, 2013), including a report on financial performance, project funding summary, alignment of the year's work with strategic objectives, and some project photo highlights.

<sup>1</sup> In the Peace and Columbia regions, the Program is in place to meet conditions in BC Hydro's Water Licences issued under the provincial Water Act; the Program is voluntary in the Coastal region.



# GOVERNANCE

The FWCP is governed through a framework that recognizes the regulatory accountabilities of its agency partners (BC Hydro, the Province of B.C., and DFO), and involves active participation and input from First Nation and public partners. Specifically, each region has a Board to provide local oversight to the planning and implementation of the FWCP at the regional level, and to make local decisions on strategic priorities and on annual expenditures and investments by the Program.

The FWCP-Coastal Board is made up of nine (9) members representing First Nations, the public, Province of B.C., DFO and BC Hydro. The current Board members are:

## FIRST NATION REPRESENTATIVES

- Brian Assu, (Chair), Cape Mudge Indian Band
- Fran Genaille, Peters First Nation
- Larry Casper, Seton Lake Indian Band

## PUBLIC REPRESENTATIVES

- Helen Davis
- Ken Farquharson
- Vivian Birch-Jones

## AGENCY REPRESENTATIVES

- Alice Cheung, Fisheries and Oceans Canada (DFO)
- Harry Brownlow, BC Hydro
- Julia Berardinucci, B.C. Ministry of Forests, Lands and Natural Resource Operations (FLNRO)



The Board reports to the Policy Committee, representing the federal and provincial government regulators (DFO and the Province) and BC Hydro, which exists to allow the Agencies to provide oversight on a range of fish and wildlife-related issues relevant to BC Hydro including, but not limited to, the FWCP. The current Policy Committee members are:

- Edie Thome, Director of Environmental Risk Management, BC Hydro
- Mark Zacharias, Assistant Deputy Minister, BC Ministry of Environment (MOE)
- Bonnie Antcliffe, Regional Director Pacific Region, Fisheries and Oceans Canada (DFO)



The Board is supported by four Technical Committees, one for wildlife projects, and three for fish projects (Lower Mainland, Southern Interior and Vancouver Island). The primary roles of the Technical Committees are to: support the development of strategic plans; provide advice on the effective implementation of action plans; and provide fair and objective technical review, evaluation and ranking of fish and wildlife project proposals for the Annual Operating Plan.

In each region, program management and operations are implemented by a full-time Program Manager who administers all aspects of program delivery including contribution agreements and contracts. During F13, the FWCP-Coastal Program Manager was Allister McLean. The Program Administrator for all three FWCP regions is Lorraine Ens.

## 2. FWCP'S STRATEGIC FRAMEWORK

The FWCP uses a strategic framework to guide overall planning for compensation investments. The framework (Figure 2.1) has guided the development of strategic plans (Section 3) for each basin or watershed within the FWCP program area, which are in turn informing action plans that focus on specific priorities within each watershed.

The Program has a forward-looking, ecosystem-based approach that defines the desired outcomes and takes actions to restore, enhance and conserve priority species and their habitats. This approach is further conveyed in our vision and mission statements.

### FWCP STRATEGIC FRAMEWORK

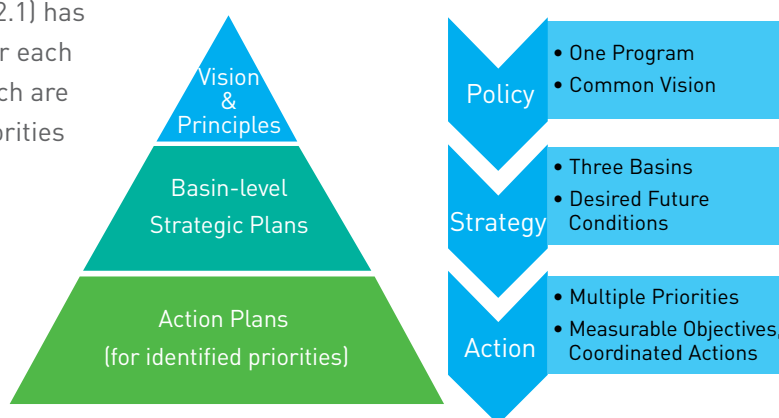


Figure 2.1: Relationship between the FWCP Strategic Framework, basin strategic plans and action plans.

## VISION

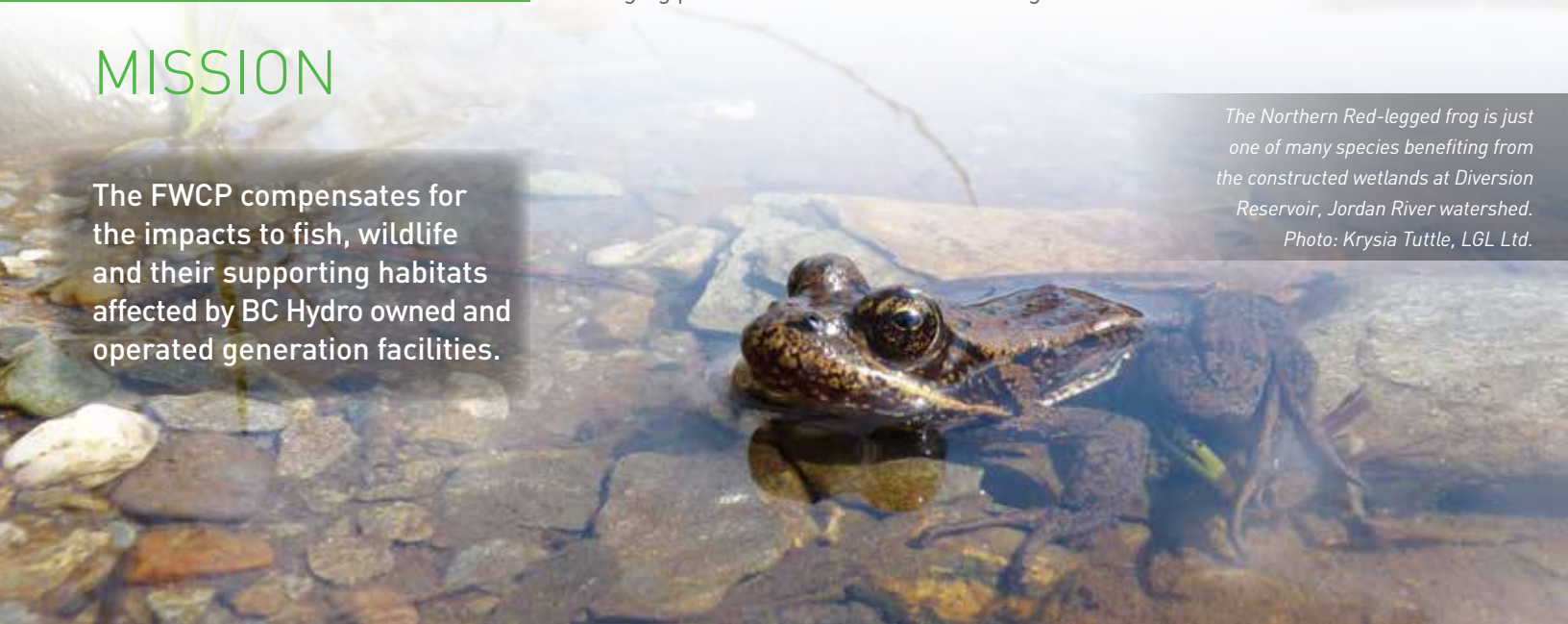
Thriving fish and wildlife populations in watersheds that are functioning and sustainable.

An effective program will support the maintenance of healthy fish and wildlife populations in basins significantly altered by hydroelectric development. Actions taken should satisfy both the conservation and sustainable use objectives and, where possible, restore ecosystem function, making species more resistant to emerging pressures such as climate change.

## MISSION

The FWCP compensates for the impacts to fish, wildlife and their supporting habitats affected by BC Hydro owned and operated generation facilities.

*The Northern Red-legged frog is just one of many species benefiting from the constructed wetlands at Diversion Reservoir, Jordan River watershed.  
Photo: Krycia Tuttle, LGL Ltd.*



# 3. FWCP STRATEGIC OBJECTIVES AND STRATEGIC PLANS

## 3.1 STRATEGIC OBJECTIVES

The strategic objectives for the Fish and Wildlife Compensation Program reflect a synthesis of the core objectives and mandates of the partner agencies as they relate to mitigating impacts associated with hydro-power generation in British Columbia:

### Conservation

- Maintain or improve the status of species or ecosystems of concern.
- Maintain or improve the integrity and productivity of ecosystems and habitats. This addresses the concept of ecosystem integrity, resiliency and the functional elements of ecosystems, including efforts to optimize productive capacity.

### Sustainable Use

- Maintain or improve opportunities for sustainable use, including harvesting and other uses. This objective focuses on the program's role in restoring or enhancing the abundance of priority species, and in providing information to resource management decision-makers related to providing opportunities for harvesting and other uses. Harvesting includes First Nation, recreational and commercial harvests. Other uses may include cultural, medicinal, or non-consumptive uses such as wildlife viewing.

### Community Engagement

- Build and maintain relationships with stakeholders and aboriginal communities. This objective stems from BC Hydro's social responsibility policy, MOE's shared stewardship goal and the approach of DFO's Stewardship and Community Involvement Program. This recognizes the importance of engaging aboriginal communities, local stakeholders, and other interest groups to contribute toward making good decisions and delivering effective projects.

## 3.2 STRATEGIC PLANS

The Coastal region includes 14 watersheds across the Lower Mainland, Vancouver Island and the Southern Interior that have been impacted by the creation of BC Hydro generation infrastructure and facilities. These watersheds are:

### Larger Watersheds:

Alouette  
Ash  
Bridge-Seton  
Campbell River  
Cheakamus  
Coquitlam  
Puntledge  
Shuswap  
Stave

### Smaller Watersheds:

Clayton Falls  
Clowhom  
Falls River  
Jordan  
Wahleach

Strategic **Watershed Plans** were developed for each watershed with input from partner agency staff and the communities within which the Program operates through interviews and workshops. The Watershed Plans set out the strategic



Photo: Watershed Watch



Photo: Ministry of Environment

direction for the FWCP-Coastal, including the shared vision, mission and strategic objectives noted above in Section 2, which form the foundation of the FWCP. They further describe the specific watershed settings and the general impacts that the creation of the generation facilities (construction of the dams, the development of hydro-power, and alterations in the hydraulic regimes of the systems) had on the ecosystems, fish and wildlife habitat.

For each of the nine larger watersheds, three **Action Plans** have been developed to accompany the Watershed Plans for topic areas: Salmonids, Riparian / Wetlands, and Species of Interest, which were identified through the planning process as key priorities in the region. For the five smaller watersheds, the Watershed Plans each contain priority action tables for fish and wildlife species.

The Action Plans and tables provide direction and areas of focus for an approximately five-year period in FWCP-Coastal, starting in the fall of 2011, when the Plans were approved as Final Drafts by the FWCP-Coastal Board. The Final Draft status recognizes that the plans are considered living documents that will be reviewed and refined on an on-going basis, as determined by the regional Board.

Each year, as the FWCP-Coastal Board reviews and approves the Annual Operating Plan, alignment with the strategic priorities identified in the Watershed Plans and Action Plans is a key consideration.

Starting with Fiscal Year 13 (F13) annual work planning cycle, all applications for funding to the FWCP-Coastal, and any potential directed studies or work, are measured against new FWCP Watershed and Action Plans. Project proposals that do not directly address a priority project will not be approved. The Plans are posted at the FWCP website at [www.fwcp.ca](http://www.fwcp.ca), and each year, applicants are asked to review the relevant Plan and identify how their proposed project aligns with and supports its objectives.

**FWCP reports are available on the Ministry of Environment's online data management systems. To search for a report of interest, please visit [www.env.gov.bc.ca/clir](http://www.env.gov.bc.ca/clir).**

## 4. REPORT ON PERFORMANCE

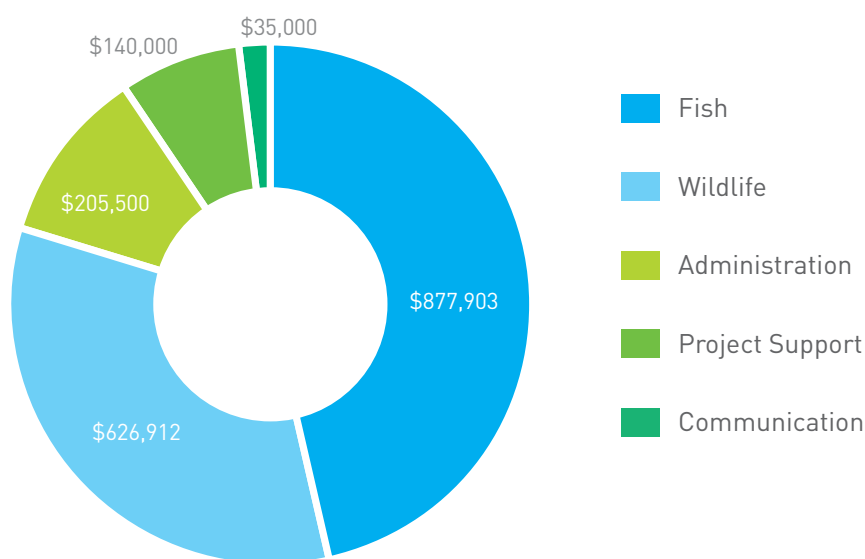
### 4.1 FINANCIAL REPORT

The FWCP is funded by BC Hydro through a notional fund that is indexed to the consumer price index. The FWCP fiscal year runs from April through to March of the following year. For F13, the annual funding budget for FWCP-Coastal was almost \$1.95M.

Each year, the current annual funding budget is allocated either in full or in part by the FWCP-Coastal Board toward fish and wildlife projects, administrative costs (e.g. salaries, safety, Board and technical review committee expenses) and project support and communication costs (e.g. program evaluation, communications

**Fiscal Year 2013 Approved Budget at April 1, 2012**

Figure 4.1



support and advertising). These allocations form the Annual Operating Plan. Any unallocated funds in a given year are carried forward (“unspent surplus budget”), and are available for new spending in future fiscal years.

Approved Budget

For F13, the Board approved a budget of \$1.886M, going primarily toward projects related to fish and wildlife enhancement projects. Figure 4.1 illustrates the approved F13 budget at the start of the fiscal year. A complete project list for F13 is found starting on page 8. Administrative costs made up approximately 11% of the total budget. Project support costs included funding for an assessment of the previous year’s project effectiveness (Evaluation Plus), and associated staff and consulting fees.

Year-end Accounting

Program expenditures up to fiscal year-end March 31, 2013 are illustrated in Figure 4.2 and listed in Table 4.1. It should be noted that Figure 4.2 represents a “snapshot” in time of actual and planned payments made related to F13 projects. Each year, allocated project funding is

not fully paid by year-end due to the seasonal nature of field-based projects and the fact that many project proponents are unable to submit their final project reports for approval by March 31 fiscal year-end. The F13 allocated funds not yet paid out by March 31, 2013 are labelled “Planned” in Figure 4.2 and Table 4.1.

In addition, it is not uncommon for projects to come in under-budget

(“Unspent” in Figure 4.2). Any funds not spent during the fiscal year will be carried forward as unspent surplus budget and made available for future new project spending. If additional projects remaining in the “Planned” category come in under-budget, the Unspent amount for F13 may increase. During F13, the unspent funds also include \$70k targeted for the Evaluation Plus project effectiveness review, which was deferred to F14.

Fiscal Year 2013 Actual Budget at March 31, 2013

Figure 4.2

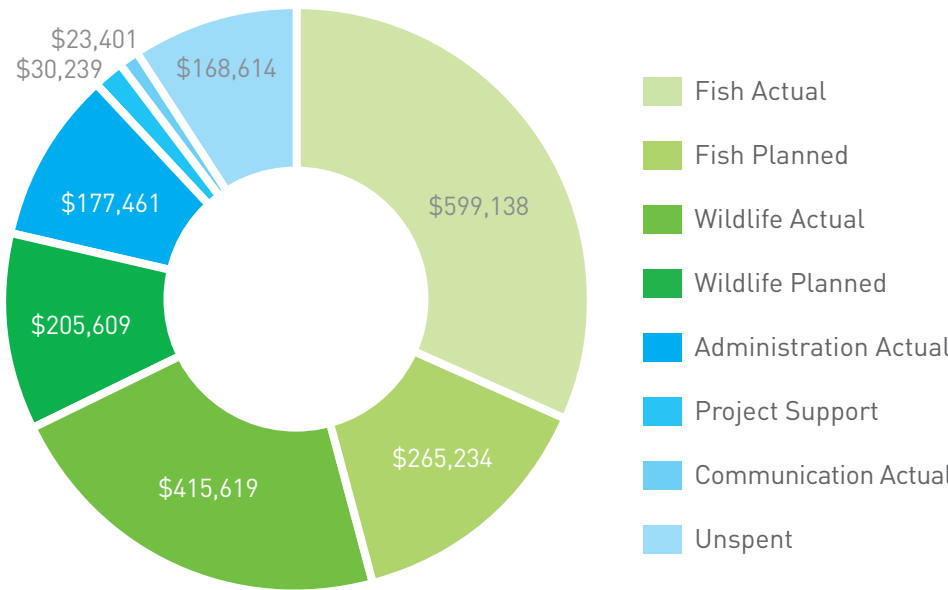


Table 4.1: F13 Actual Budget at March 31, 2013 (\$000s)

Fund Category	F13 Approved Budget	Paid up to March 31, 2013	Planned Payments <sup>1</sup>	Unspent Funds <sup>2</sup>
Fish	\$878	\$599	\$265	\$14
Wildlife	\$627	\$416	\$206	\$6
Administration	\$206	\$177	\$0	\$28
Project Support	\$140	\$30	\$0	\$110
Communications	\$35	\$23	\$0	\$12
TOTAL	\$1,886	\$1,245	\$471	\$170

Note 1: Planned payments represents expected invoices for approved, ongoing projects that have not yet submitted final reports by March 31st  
Note 2: Unspent funds are carried forward and available for next fiscal year



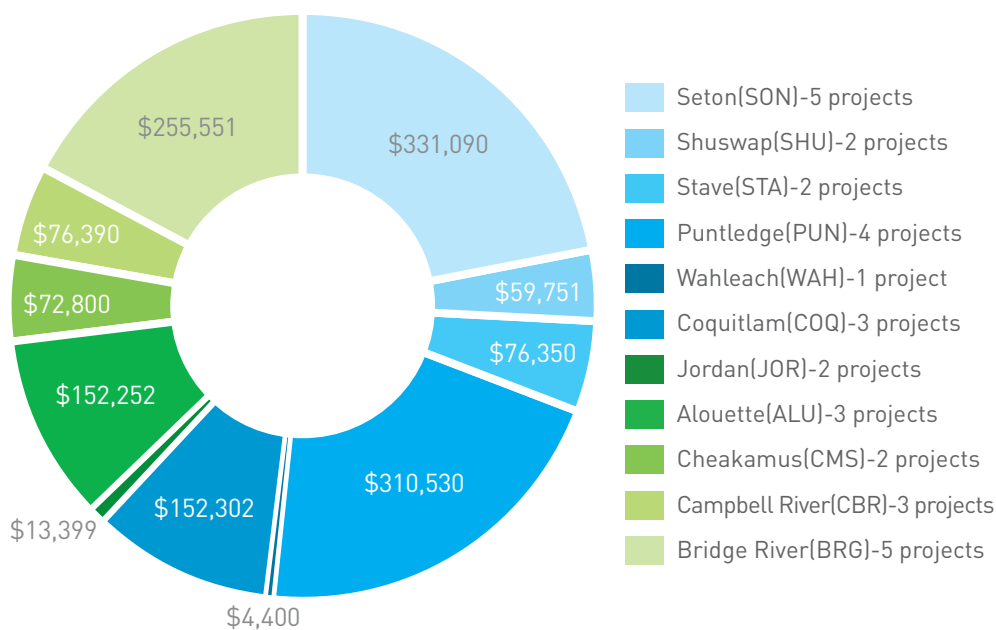
## Approved Budget Allocation by Type

The approved F13 budget for FWCP-Coastal included \$627k on Wildlife-related projects and \$878k on Fish-related projects (total \$1,486M). These projects were distributed across the watersheds in which the Program operates as shown in Figure 4.3.

Most proponents apply for funding from FWCP for a portion of overall project costs, with in-kind services and/or equipment and other sources of funding providing leverage of the FWCP investments. In F13, approximately \$1.070M in in-kind or other funding brings the total value of projects receiving FWCP-Coastal funding to \$2.632M.

## Fiscal Year 2013 Fish & Wildlife Projects by Watershed

Figure 4.3



## 4.2 STRATEGIC PLAN ACCOUNTABILITY

As noted in Section 3.2, alignment with the strategic priorities identified in the Watershed Plans and Action Plans is a key consideration for the Technical Review Committees and Board during the project evaluation and selection process.

Tables 4.3 and 4.4 provide a listing of the projects selected for funding during F13, including alignment with the Watershed and Action Plans.

Starting in F14, the Evaluation Plus process will further evaluate the success and performance of a sample of projects, including alignment with Watershed and Action Plans and whether the results of the projects address the applicable Action(s) according to the needs identified in the Plans.

*A new riparian forest, roughly the size of a football field, was planted at Sheep Paddocks, Coquitlam River. Photo: Watershed Watch Salmon Society*

## 4.3 F13 List of Projects and Grant recipients - Fisheries

Fisheries Projects	Lead Applicant	Region	FWCP Investment	Total Project Value	Project Type*	Action Plan	Priority
12.ALU.01	Smolt Parental Lineage Assessment to Establish Successful Spawn of Returned Sockeye	LM	\$ 57,100.00	\$ 108,100.00	RI	ALU Salmonid	1
12.ALU.04	Coniagas Spawning and Rearing Channel	LM	\$ 35,151.00	\$ 53,910.00	HB	ALU Salmonid	2
12.CBR.03	Salmon River - Bigtree Side-Channel Performance Improvements - Seed Funding	VIG	\$ 4,840.00	\$ 8,170.00	EM	CBR Salmonid	1
12.CMS.01	Cheakamus River-Dave Marshall Salmon Reserve Habitat Enhancement 2011/2012	LM	\$ 67,800.00	\$ 105,350.00	HB	CMS Salmonid	1
12.COQ.01	Coquitlam River Sidechannel and Or Creek Ponds Restoration	LM	\$ 67,900.00	\$ 93,250.00	HB	COQ Salmonid	1
12.COQ.02	Coquitlam Dam Sockeye Capture and Transport	LM	\$ 22,550.00	\$ 27,550.00	RI	COQ Salmonid	1
12.PUN.01	Summer Chinook Hatchery Returns-Preparation for Adult Assessment Phase	VI	\$ 57,777.50	\$ 77,946.00	RI	PUN Salmonid	1
12.PUN.02	Dyke Slough (Courtenay River Estuary) Habitat Restoration Phase 2 Feasibility Study - Seed Funding	VI	\$ 4,950.00	\$ 18,450.00	RI	PUN Salmonid	1 and 2
12.PUN.03	Puntledge River Hatchery Summer Chinook Rearing Consolidation Project	VI	\$ 151,184.00	\$ 222,750.00	SB	PUN Salmonid	1
12.PUN.04	Evaluation of Natural and Hatchery Summer Chinook and Coho Production in the Upper Puntledge	VI	\$ 96,619.20	\$ 88,244.20	RI	PUN Salmonid	1
12.SFN.01	Lower Stave River Steelhead Smolt Imprinting Adult Assessment	LM	\$ 10,150.00	\$ 33,950.00	SB	SFN Salmonid	1
12.SFN.02	Stave River Coho Off Channel Habitat Restoration	LM	\$ 66,200.00	\$ 89,700.00	HB	SFN Salmonid	1
12.SHU.01	Habitat Complexing (Pool Creation) in Bessette Creek Phase 3	SI	\$ 40,091.80	\$ 42,891.80	HB	SHU Salmonid	1
12.SHU.03	Impact of Wilsey Dam on Middle Shuswap River Substrate Composition	SI	\$ 19,660.00	\$ 97,540.00	HB	SHU Salmonid	1
12.SON.01	Gates Creek Salmon Project	SI	\$ 165,930.00	\$ 191,000.00	RI	BRG SON Salmonid	2 and 3
12.CBR.00	Jordan Water Quality Review (Summary of existing data)	VI	\$ 5,000.00	\$ 5,000.00	EM	JOR (small watershed)	High
<b>TOTAL</b>	Big Tree Side Channel-Erosion	VI	\$ 877,903.50	\$ 1,268,802.00	HB	CBR Salmonid	1

### \* Project Types:

RI = Research and Information Acquisition  
HB = Habitat Based Action  
SB = Species Based Action  
EM = Evaluation & Monitoring  
LA = Land Acquisition

#### 4.4 F13 List of Projects and Grant recipients - Wildlife

Wildlife Projects	Lead Applicant	Region	FWCP Investment	Total Project Value	Project Type*	Action Plan	Priority
12.W.ALU.01	Identify, Conserve and Restore Populations of Priority Species at Risk and Their Associated Habitats within the Alouette River Watershed	LM	\$ 60,000.00	\$ 167,900.00	RI	ALU Species of Interest	High/1
12.W.BRG.01	Inventory of fisher populations and reproductive dens in the Bridge River Watershed	SI	\$ 19,550.00	\$ 40,750.00	RI	BRG SON Species of Interest	High
12.W.BRG.02	Grizzly Bear Recovery Habitat Action within the Bridge River Restoration Area	SI	\$ 146,836.00	\$ 221,136.00	RI	BRG SON Species of Interest	High/no link to action table
12.W.BRG.03	Mule Deer Buck Migrations and Habitat Use in the Bridge River, British Columbia	SI	\$ 31,620.00	\$ 90,320.00	RI	BRG SON Species of Interest	High
12.W.BRG.04	Identification of Mineral Lick Locations and Use by Mountain Goats	SI	\$ 52,545.00	\$ 94,145.00	RI	BRG SON Species of Interest	Medium
12.W.CBR.01	V1 Marmot Buttle Lake Supplementation Project	VIG	\$ 66,550.00	\$ 186,550.00	SB	CBR Species of Interest	High
12.W.CMS.01	Squamish Estuary Management Directive - Seed Funding	LM	\$ 5,000.00	\$ 6,000.00	RI	CMS Riparian and Wetland	Cat 1 habitat
12.W.COQ.01	Coquitlam River Riparian Planting	LM	\$ 61,852.00	\$ 63,652.00	HB	COQ Riparian and Wetland	Cat 1 habitat
12.W.JOR.01	Monitoring of the Constructed Wetlands at Diversion Reservoir, Jordan River Watershed Southern Vancouver Island	VIG	\$ 8,399.50	\$ 8,399.50	EM	JOR Watershed Plan	Aligns with plan/not specific
12.W.SON.01	Powerhouse Foreshore Restoration Project - Phase 5	SI	\$ 90,000.00	\$ 211,650.00	HB	BRG/SON Species of Interest	High
12.W.SON.02	Sekw'el'was Seton River Corridor Conservation and Restoration Project-Phase 1	SI	\$ 30,000.00	\$ 222,485.00	RI	BRG/SON Salmonid	1 and 2
12.W.SON.03	Western Screech Owl Conservation and Management for the Bridge-Seton Area	SI	\$ 35,160.00	\$ 54,195.30	RI	BRG/SON Species of Interest	High
12.W.WAH.01	Mapping and Wildlife Inventory with the Wahleach Watershed - Seed Funding	LM	\$ 4,400.00	\$ 5,600.00	RI	WAH Watershed Plan	Seed/ High potential
	Gates Creek property	LM	\$ 10,000.00	\$ 10,000.00	LA	N/A	
	Horseshoe Bend Placer Tenure Purchase	LM	\$ 5,000.00	\$ 5,000.00	LA	N/A	
<b>TOTAL</b>	<b>FWCP-Coastal (non-proponent project)</b>	<b>LM</b>	<b>\$ 626,912.50</b>				

**\* Project Types:**

RI = Research and Information Acquisition  
HB = Habitat Based Action  
SB = Species Based Action  
EM = Evaluation & Monitoring  
LA = Land Acquisition