

2015 - MESSAGE FROM THE BOARD CO-CHAIR

On behalf of the FWCP-Columbia Board, I am pleased to invite you to read our Annual Report for Fiscal Year 2015 (F15). FWCP-Columbia is dedicated to advancing the objectives of the FWCP partnership—conservation, sustainable use, and community engagement—in watersheds impacted by BC Hydro's generation facilities in the Columbia Region.

Fiscal Year 2015 (from April 1, 2014 to March 31, 2015) was a busy one again for FWCP-Columbia. As in years past, the majority of program expenditures went toward implementing core fish and wildlife project envelopes. Examples of core projects include the Nutrient Restoration Programs in Arrow Lakes Reservoir and Kootenay Lake, Hill Creek and Meadow Creek spawning channels, East and West Kootenay Enhancement activities, and Land Acquisition.

In addition to the core fish and wildlife projects, 34 grant-based projects were implemented to support the restoration and enhancement of fish and wildlife habitats. We are always pleased to see the amount of in-kind and volunteer support, as well as other funding sources that applicants use to leverage our funding dollars. The total value of the grant-based projects FWCP-Columbia supported in fiscal year 2015 was just under \$2million, with an approximate \$864K investment from the FWCP (up from approximately \$500K in the previous fiscal year).

F15 was a significant year for the FWCP with the launch of the new Upper Kootenay Ecosystem Enhancement Plan (UKEEP), which will guide efforts to conserve and enhance lakes, streams, uplands and drylands, wetlands, and species of interest in the watershed. UKEEP was developed in 2013 through a partnership between the FWCP and Columbia Basin Trust, and is now available for groups, agencies and individuals to apply for funding to undertake one of many actions recommended in the plan available at fwcp.ca.

This was also another year of successful major outreach events organized by FWCP-Columbia. More than 1,000 people (students and public) attended sturgeon release events in Castlegar, Trail, Creston and Revelstoke. Toadfest (now in its fifth year) at Summit Lake near Nakusp not only received wide media coverage and significant crowds, but also may have helped the Ministry of Transportation and Infrastructure reach



a decision to install a larger toad culvert under the highway to reduce toad mortality from vehicles.

For the East Kootenay, the very first Turtle Day was organized by the FWCP at Elizabeth Lake near Cranbrook, to increase awareness about Western Painted Turtles and wetland habitat.

Information-sharing is also an important part of the work with the FWCP, whether it is in the field at the Open House at Meadow Creek Spawning Channel or through public information sessions, such as the Arrow Lakes Fisheries Update meeting (in conjunction with the Ministry of Forests, Lands and Natural Resource Operations) in Nakusp.

Reflecting the FWCP partnership, the FWCP-Columbia Board is made up of representatives from Public Stakeholders, First Nations, the Province of B.C., Fisheries and Oceans Canada and BC Hydro. This marks the second full year of implementation of the new delivery model, and we have continued to ask a lot of our dedicated Board representatives. F15 saw increased program momentum, improved delivery of an effective and efficient program, and strengthened partnerships with project proponents, First Nations and the public.

I would like to take this opportunity to thank the two previous co-chairs who have stepped aside this year to take on other duties within their respective agencies: Paul Rasmussen with the Ministry of Forests, Lands and Natural Resource Operations, and Patrice Rother with BC Hydro. Both worked

diligently to see the FWCP through a key transitionary period toward a new delivery model, and paved the way for strengthened partnerships in the region.

The other major change this year has been with the management of FWCP-Columbia. After three years in the Columbia Region, Trevor Oussoren has taken on the role of overall manager of the Fish and Wildlife Compensation Program, as well as Program Manager for the FWCP-Coastal Region. He has done an excellent job here in the Columbia, so I am very pleased that he

will continue to be an integral part of the organization. As part of his role as FWCP Manager, he is my counterpart and co-chair of the FWCP-Columbia Board, and I look forward to working with him in the future.

At the tail-end of F15, we were very pleased to appoint Crystal Klym as Program Manager for the FWCP-Columbia Region. Crystal is a Professional Agrologist and comes to us with over 10 years' experience in conservation, sustainable natural resource management, and environmental stewardship.

With her experience in building and fostering collaborative partnerships, I am confident that the program will continue to expand and flourish.

And finally, we wish to thank all the dedicated applicants, proponents, contractors, and Program and project partners 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,
John Krebs,
FWCP-Columbia Board Co-Chair

1. ORGANIZATIONAL OVERVIEW

INTRODUCTION

The Fish and Wildlife Compensation Program (FWCP) was established to compensate for the impacts 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 Public Stakeholders.

FWCP has invested more than \$134.6 million and delivered more than 1,600 projects since 1988 that conserve and enhance fish, wildlife and their supporting habitats.

In the Peace and Columbia regions, the FWCP is in place to meet conditions in BC Hydro's Water Licences issued under the provincial *Water Act*; the Program is voluntary by BC Hydro in the Coastal region. FWCP-Columbia was established in 1995.

This Annual Report provides an overview of the activities of FWCP-Columbia for Fiscal Year 2015 (i.e. April 1, 2014 to March 31, 2015), including a report on financial performance, project funding summary and project lists, alignment of the year's work with strategic objectives, as well as highlights from the year.



GOVERNANCE

The FWCP is governed through a framework that recognizes the regulatory accountabilities of agency partners (BC Hydro, the Province of B.C., and DFO) and ensures active participation and input from First Nations and Public Stakeholders. 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-Columbia Board is made up of ten
(10) members representing First Nations, Public
Stakeholders, the Province of B.C., DFO and BC Hydro.
The current Board members are:

FIRST NATION REPRESENTATIVES:

- Joe Nicholas, Ktunaxa Nation (Akisqnuk First Nation)
- Adam Neil, Splatsin People (Shuswap First Nation)
- [Vacant, Okanagan Nation Alliance]

PUBLIC REPRESENTATIVES:

- David White
- Grant Trower
- Rick Morley

AGENCY REPRESENTATIVES:

- David Tesch, B.C. Ministry of Environment (MOE)
- Doug Johnson, BC Hydro
- Trevor Oussoren, BC Hydro
- John Krebs, B.C. Ministry of Forests, Lands and Natural Resource Operations (FLNRO)

FWCP-Columbia gratefully acknowledges the work and commitment of the previous co-chairs: Patrice Rother (BC Hydro) and Paul Rasmussen (Ministry of Forests, Lands and Natural Resource Operations); and Okanagan Nation Alliance representative James Pepper, all of whom stepped down from the Board during F15.

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,
 B.C. Ministry of Environment, (MOE)
- Bonnie Antcliffe, Regional Director Pacific Region, DFO

The Board is supported by a Fish Technical Committee and a Wildlife Technical Committee. 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 a fair and objective technical review, evaluation and ranking, of fish and wildlife projects proposed for the Annual Operating Plan.

Program management and operations are implemented by a full-time Program Manager who administers all aspects of program delivery, including contribution agreements and contracts. For the majority of F15, the FWCP-Columbia Program Manager was Trevor Oussoren. However, on February 23, 2015 a new Program Manager, Crystal Klym, was announced as Trevor transitioned to the FWCP-Coastal/ Provincial Program Manager role. The Program Administrator for all three FWCP regions was Lorraine Ens. Through a Letter of Agreement, the Ministry of Forests, Lands and Natural Resource Operations (FLNRO) implemented a number of core fish and wildlife programs in F15 under the direction of Eva Schindler, Team Leader [FLNRO].



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 watershed within the FWCP program area, which are, in turn, informing action plans that focus on specific priorities within each watershed.

VISION

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

MISSION

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

Principles Basin-level Strategic Plans Action Plans One Program Common Vision Three Basins Desired Future Conditions Multiple Priorities Measurable Objectives,

Figure 2.1: Relationship between the FWCP Strategic Framework, Basin-level Strategic Plan and Action Plans.

(for identified priorities)

Action

Coordinated Actions

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.



3. FWCP STRATEGIC OBJECTIVES AND 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 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 Nations, 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

In 2009, the Program developed a Strategic Framework that guides the overall planning of the compensation investments (MacDonald, 2009). Subsequent to the development of this Strategic Framework, the Basin and Action prioritization process was initiated in 2010. Specifically, within FWCP-Columbia, there is a Basin Plan, which sets forth the strategic direction for the region. In brief, it outlines the vision, principles, policy context and strategic objectives that form the foundation of FWCP-Columbia. Beneath the Basin Plan are six Action Plans (outlined below), which identify a priority-setting process and associated actions. When the Basin and Action Plans are combined, they present the priorities for investments in compensation activities within the Columbia Basin.

ACTION PLANS

- Large Lakes Action Plan;
- Small Lakes Action Plan;
- Riparian and Wetlands Action Plan;
- Upland/Dryland Action Plan;
- Streams Action Plan;
- Species of Interest Action Plan; and
- Upper Kootenay Ecosystem Enhancement Plan (UKEEP)

The Actions Plans are available at fwcp.ca (Action Plans).

In F15, with funding from Columbia Basin Trust, a new plan to conserve and enhance ecosystems in the upper Kootenay River watershed, including Koocanusa Reservoir, was finalized. The new Upper Kootenay Ecosystem Enhancement Plan (UKEEP) will guide efforts to conserve and enhance lakes, streams, uplands and drylands, wetlands and species of interest in the watershed. The fall of 2014 marked the first call for project proposals, with the first project spending under UKEEP to be implemented in 2015 [F16].

The Action Plans (and tables within) provide direction, and identify areas of focus in FWCP-Columbia, for an approximately five-year period, starting in the summer of 2012. The Final Draft status recognizes that the plans are

to be 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-Columbia Board reviews and approves the Annual Operating Plan, alignment with the strategic priorities identified in the Basin and Action Plans is of key consideration.

All projects developed for F15, including both core and application-based projects, align with the Basin Plan and Action Plans. The Plans are posted on the FWCP website, and, each year, applicants are asked to review the relevant Plans and identify how their proposed project aligns with, and supports, their objectives.





4. REPORT ON PERFORMANCE

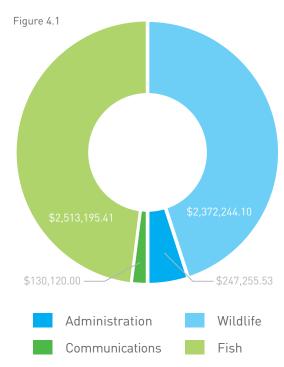
4.1 FINANCIAL REPORT

The FWCP is funded by BC Hydro through a notional fund that is indexed to the Consumer Price Index (CPI). The FWCP fiscal year runs from April 1, through to March 31, of the following year. For F15, the annual funding budget for FWCP-Columbia was over \$5.2M.

Each year annual funding budgets are allocated either in full, or in part, by the Board toward fish and wildlife projects, administrative costs (e.g. salaries, safety, Board and Technical Review Committees expenses, etc.), as well as project support and communication costs (e.g. program evaluation, communications support, and advertising). These allocations form the Annual Operating Plan. Any unallocated funds are carried forward ("unspent surplus budget"), and are available for new spending in future fiscal years.

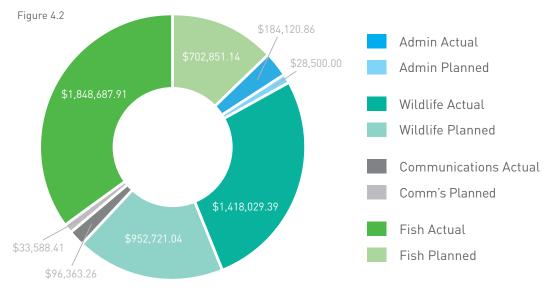
For F15, the Board approved a budget of over \$5.2M, going primarily toward projects related to fish and wildlife enhancement projects. Figure 4.1 illustrates the approved F15 budget at the start of the fiscal year. A complete project list for F15 is found starting on page 11. Administrative and communications costs made up approximately 5% and 2% of the total budget, respectively.

FWCP-Columbia F15 Approved Budget, as of April 1, 2014.



Program expenditures in F15 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 expenditures made related to F15 projects. Each year, allocated project funding is not fully paid by yearend due to the seasonal nature of field-based projects, and the fact that some project proponents are unable to submit

FWCP-Columbia Actual and Planned Expenditures, as of March 31, 2015.



their final project reports for approval by fiscal year-end. The F15 allocated funds not yet paid out by March 31, 2015 are labelled "Planned" in Figure 4.2 and Table 4.1.

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 F15 may increase.

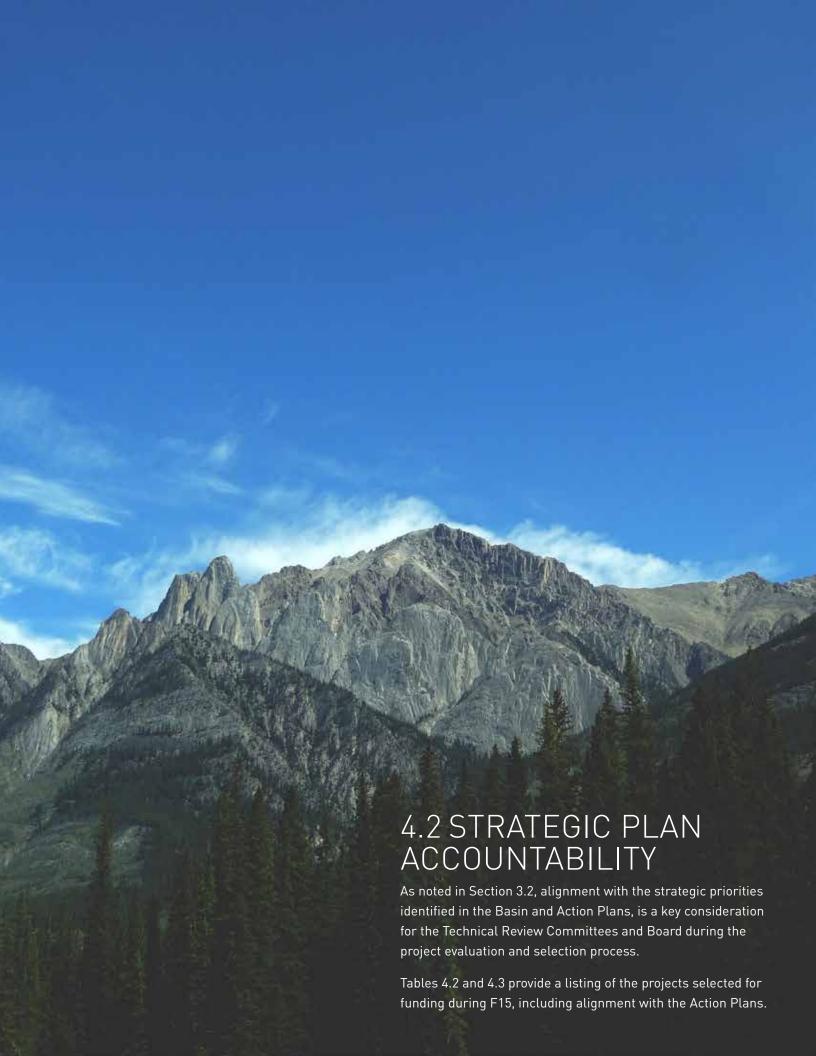
The approved F15 budget for FWCP-Columbia included \$2.4M on Wildlife-related projects, and \$2.5M on Fish-related projects, and their associated implementation support (total \$4.8M), as shown in Table 4.1.

Table 4.1: F15 Actual Budget at March 31, 2015

Fund Category	FY15 Approved Budget	Paid up to 31-Mar-15	Planned Payments ¹	Unspent Funds ²
Administration	\$247,255.53	\$184,121	\$28,500	\$0
Wildlife	\$2,372,244.10	\$1,418,029	\$952,721	\$0
Communications	\$130,120.00	\$96,363	\$33,588	\$0
Fish	\$2,513,195.41	\$1,848,688	\$702,851	\$0
Total	\$5,262,815.04	\$3,547,201	\$1,717,661	\$0

¹Planned payments represents expected invoices for approved, ongoing projects that have not yet been finalized by March 31, 2015

²Unspent funds are carried forward and available for next fiscal year



4.3 F15 PROJECTS

In total, there were 14 core projects (Table 4.2) and 34 application-based projects approved by the Board (17 wildlife, and 17 fish) as shown in Table 4.3.

Table 4.2: F15 Core Fish and Wildlife Projects

Core Project Name	FWCP Contribution	Primary Project Type ¹	Primary Action Plan Linkage
Land Management Operations	\$332,009	LS	Upland/Dryland
West Kootenay Enhancement	\$253,604	НВ	Upland/Dryland
East Kootenay Enhancement	\$337,278	НВ	Upland/Dryland
Non-game Enhancement	\$174,840	НВ	Species of Interest
Large Mammal Monitoring	\$29,050	ME	Upland/Dryland
Land Acquisition Support	\$456,404	LS	All Action Plans
Caribou Recovery	\$78,144	ME	Species of Interest
Leopard Frog Recovery	\$187,410	ME	Species of Interest
Wetland	\$34,170	НВ	Riparian/Wetlands
Core Wildlife Sub Total	\$1,882,909		
Arrow Lakes Nutrient Restoration Program	\$790,024	НВ	Large Lakes
Kootenay Lake Nutrient Restoration Program	\$748,048	НВ	Large Lakes
Hill Creek Spawning Channel	\$152,646	НВ	Large Lakes
Meadow Creek Spawning Channel	\$179,769	НВ	Large Lakes
Upper Columbia Sturgeon	\$230,000	НВ	Species of Interest
Core Fish Subtotal	\$2,100,487		
Grand Total	\$3,983,396		

¹ HB = Habitat-based Actions; LS = Land Securement; ME = Monitoring and Evaluation; and RI = Research and Information Acquisition.

Table 4.3: Fish and Wildlife Application-Based Projects

Project Name	Lead Applicant	FWCP Contribution	Primary Project Type ¹	Primary Action Plan Linkage
Closed Loop Stream Enhancement	Poisson Consulting Ltd.	\$4,998.00	RI	Streams Action Plan
Kootenay Lake Exploitation Study	Poisson Consulting Ltd.	\$8,442.00	ME	Large Lakes Action Plan
Upper Whatshan River Kokanee Assessment	Redfish Consulting Ltd.	\$11,126.50	RI	Large Lakes Action Plan
Slocan Lake Bull Trout Redd Counts	Mountain Water Research	\$25,359.80	RI	Large Lakes Action Plan
Determination of Gerrard Rainbow Trout Parr Productivity and Capacity Required for Defining Management Reference Points	Redfish Consulting Ltd.	\$10,340.00	RI	Large Lakes Action Plan
Feasibility of improvement to fish access on Woodbury Creek	Redfish Consulting Ltd.	\$17,416.80	НВ	Large Lakes Action Plan
Bull Trout Spawner Escapement in the Salmo River Watershed 2014	Salmo Watershed Streamkeepers Society	\$12,837.60	ME	Species of Interest Action Plan
Salmo Watershed Fish Sustainability Plan - Update	Salmo Watershed Streamkeepers Society	\$14,331.08	Other	Streams Action Plan
Gerrard Rainbow Trout growth rates with Kokanee prey at low densities	Redfish Consulting Ltd.	\$22,305.00	ME	Large Lakes Action Plan
Sheep Creek Fertilization: The Food for Fish Enhancement Project	Salmo Watershed Streamkeepers Society	\$28,394.88	НВ	Streams Action Plan
Lower West Arm Rainbow Trout Redd Surveys	Masse Environmental Consultants Ltd.	\$5,784.00	RI	Large Lakes Action Plan

Project Name	Lead Applicant	FWCP Contribution	Primary Project Type ¹	Primary Action Plan Linkage
Protecting Our Waters from Aquatic Invasive Species	Central Kootenay Invasive Plant Committee	\$41,190.00	НВ	Small Lakes Action Plan
Trout Lake Bull Trout Redd Surveys	Masse Environmental Consultants Ltd.	\$26,141.50	RI	Large Lakes Action Plan
Exploring the history of fish- derived nutrient supplies in Arrow Lakes Reservoir	Okanagan Nation Alliance	\$12,160.00	RI	Large Lakes Action Plan
Deer Creek Drawdown Zone Fish Habitat Enhancement, A Pilot Study for Lower Arrow Lake Tributary Access Improvements	Okanagan Nation Alliance	\$112,805.00	НВ	Streams Action Plan
Pass (Norms) Creek Fish Habitat Enhancement Structure Maintenance 2014 – 2015	Okanagan Nation Alliance	\$29,980.50	НВ	Streams Action Plan
Lizard Creek Riparian Restoration Pilot Project	Elk River Watershed Alliance (operating as Elk River Alliance)	\$14,566.00	НВ	Streams Action Plan
Fisheries Based Projects – Subtotal		\$398,179		

Project Name	Lead Applicant	FWCP Contribution	Primary Project Type ¹	Primary Action Plan Linkage
Revelstoke Greenbelt Riparian Restoration Program	Kingbird Biological Consultants Ltd.	\$9,238.00	НВ	Riparian and Wetlands Action Plan
Reptiles At Risk Conservation Project	Jakob Dulisse and Marlene Machmer	\$14,999.85	SB	Upland/Dryland Action Plan
Kootenay Lynx Research - Scientific Publication, Extension and Dissemination	Aspen Wildlife Research Inc.	\$1,500.00	RI	Species of Interest Action Plan

Project Name	Lead Applicant	FWCP Contribution	Primary Project Type ¹	Primary Action Plan Linkage
N Waldo Grassland ER Post Treatment Monitoring & Evaluation	Rocky Mountain Trench Natural Resources Society	\$8,920.00	ME	Upland/Dryland Action Plan
Rabbit Mnt Bighorn Sheep Ecosystem Restoration Resources Society	Rocky Mountain Trench Natural	\$58,725.00	НВ	Species of Interest Action Plan
Marsh Bird Productivity and Conservation in Revelstoke Reach	Cooper Beauchesne and Associates Ltd.	\$33,322.00	RI	Species of Interest Action Plan
Predicting Grizzly Bear Food – Huckleberries, and Trend Monitoring	Birchdale Ecological	\$22,317.75	RI	Species of Interest Action Plan
Revelstoke Caribou Maternity Pen Project Wild	Revelstoke Caribou Rearing in the	\$80,000.00	SB	Species of Interest Action Plan
Abundance and Connectivity of Wolverine (Gulo gulo) in the Kootenay Region	Seepanee Ecological Consulting/ Grylloblatta Ecological Consulting	\$40,405.00	RI	Species of Interest Action Plan
Identifying and Securing Hibernation Habitat in the Southern Columbia Basin for Bats in Response to Risk of White Nose Syndrome.	WCS Wildlife Conservation Society Canada	\$30,300.00	SB	Species of Interest Action Plan
Identifying Wolverine Populations and Fracture Zones in the Columbia Region	Province of British Columbia, Ministry of Environment	\$7,300.00	RI	Species of Interest Action Plan
Meadow Creek Bear Education and Management Project	BC Conservation Foundation	\$46,179.00	SB	Large Lakes Action Plan
Friends of Kootenay Lake Harrop Wetlands Restoration Project	West Kootenay Community EcoSociety	\$8,172.00	НВ	Riparian and Wetlands Action Plan
Advancing Wetland Stewardship in the West Kootenay 2014	The British Columbia Wildlife Federation	\$20,000.00	НВ	Riparian and Wetlands Action Plan

Project Name	Lead Applicant	FWCP Contribution	Primary Project Type ¹	Primary Action Plan Linkage
Ecology of a Focal Wetland Species: The Western Painted Turtle in the Creston Valley.	VAST Resource Solutions Inc.	\$56,000.00	RI	Species of Interest Action Plan
Management and Restoration of Invasive Plants in Protected Areas	East Kootenay Invasive Plant Council (EKIPC)	\$25,000.00	НВ	Upland/Dryland Action Plan
Movement, Habitat Use and Demographics of Western Screech-owls in the West Kootenay: Publication of Results	Seepanee Ecological Consulting and Helen Davis dba Artemis Wildlife Consultants	\$19,000.00	SB	Species of Interest Action Plan
Wildlife Based Projects – Subtotal		\$481,379		

Grand Total	\$879,557	

¹HB = Habitat-based Actions; LS = Land Securement; ME = Monitoring and Evaluation; RI = Research and Information Acquisition; and SB = Species-based Actions.