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FISH AND WILDLIFE COMPENSATION PROGRAM

COLUMBIA BASIN *STREAMS ACTION PLAN*

June 2012

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FOR GENERATIONS


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Columbia Streams Action Plan

1. Introduction

In 1995 the Fish & Wildlife Compensation Program (Columbia Basin) was created to coordinate efforts to compensate for fish and wildlife losses associated with BC Hydro projects in the region (Figure 1). An Administrative Agreement was signed in 1999 between the BC Ministry of Environment and BC Hydro to formalize the management of the program, which was developed to satisfy the obligations regarding fish and wildlife attached to the Arrow, Duncan, Mica, Seven Mile and Revelstoke project water licences. The program is delivered as a partnership between BC Hydro, the BC Provincial Government, Fisheries and Oceans Canada, First Nations and public stakeholders.

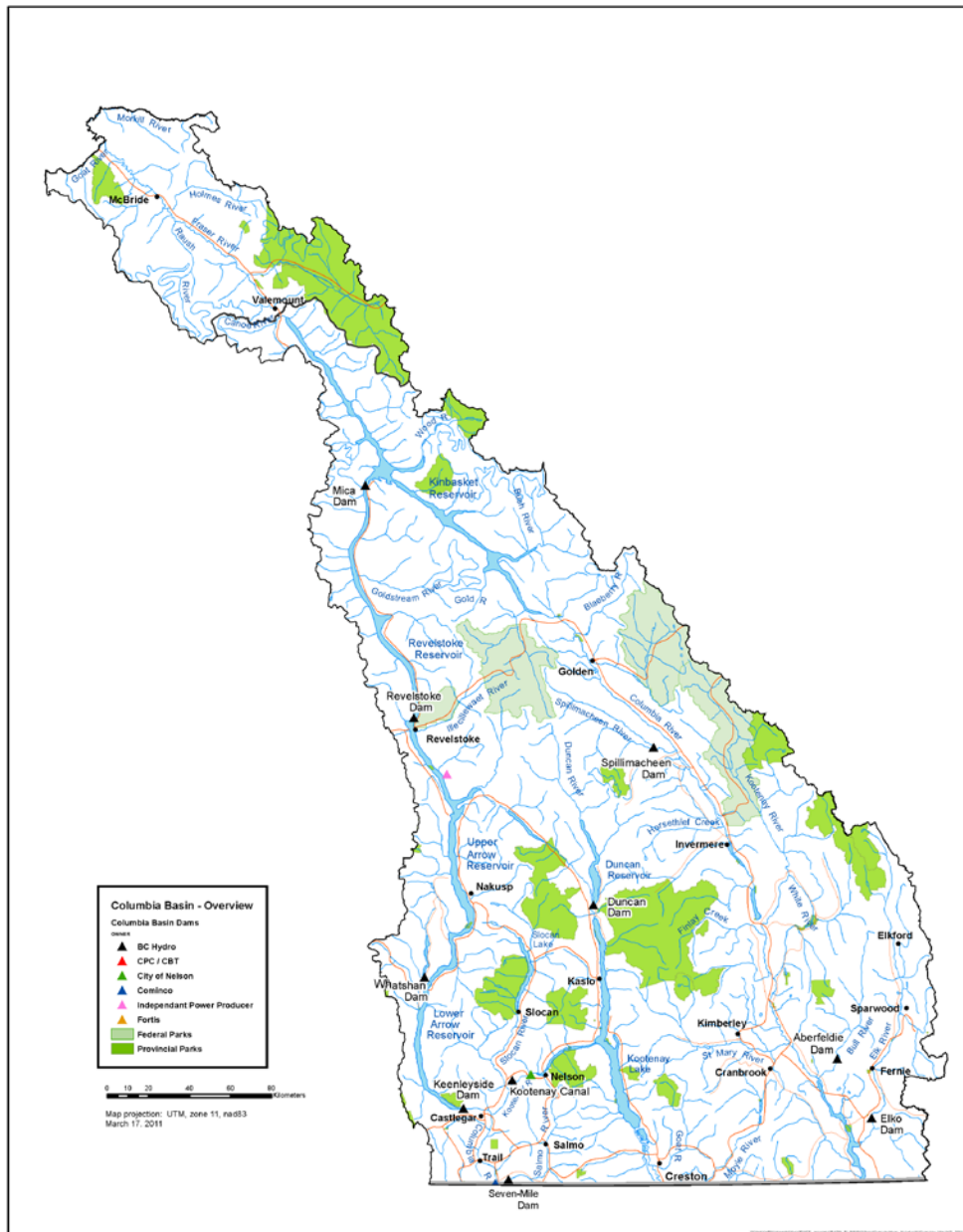


Figure 1. The Columbia basin generation system, indicating the region's major dams and reservoirs.

The FWCP developed a strategic framework that guides overall planning for compensation investments (MacDonald 2009). The framework has guided the development of strategic plans for each basin within the FWCP program area, which are in turn informing action plans that focus on specific priorities within each basin (**Error! Reference source not found.**)

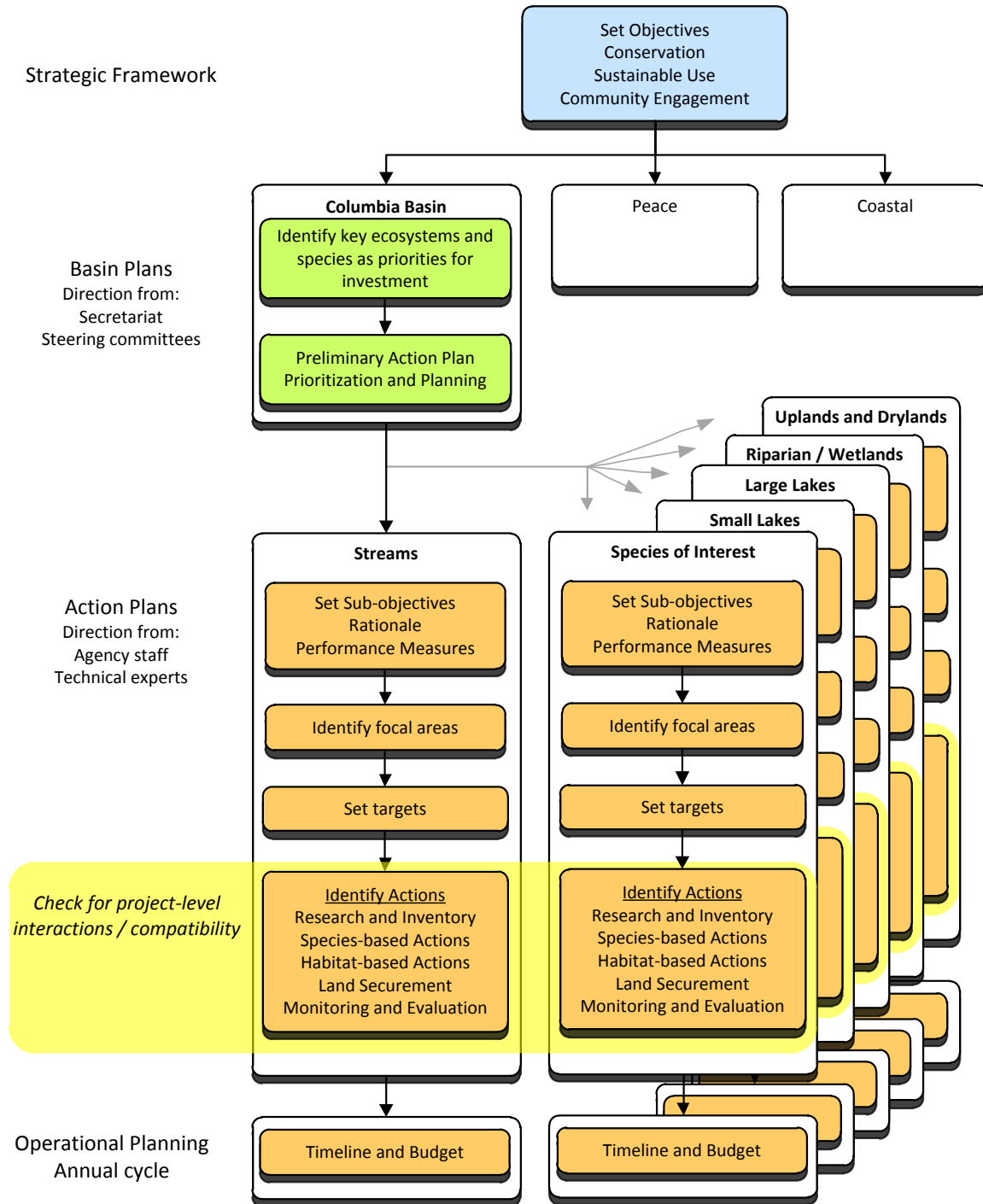


Figure 2. Relationship between the Streams Action Plan and higher level planning and objectives.

This Streams Action Plan sets out priorities for the Fish and Wildlife Compensation Program to guide projects on streams within the FWCP: Columbia project area primarily in support of fish. The plan builds on the FWCP's strategic objectives and the Columbia Basin Plan (Fish and Wildlife Compensation Program 2011a). Action plans have also been developed for large lakes, small lakes, riparian and wetland areas, upland and dryland areas, and species of interest;¹ some actions may be complementary across the different plans.

Since the original habitats have been lost permanently, FWCP will invest in enhancement and protection of remaining river fragments and other streams in the program area (Figure 1) that are not directly impacted, but where habitat improvement/enhancement opportunities exist. Actions will be developed for an initial set of streams within the FWCP area. Additional areas may be added in time, but this initial set will provide focus for FWCP investment over the next five years.

The actions and priorities described here have been developed with input from the BC Ministry of Environment (MOE), BC Ministry of Forests, Lands and Natural Resource Operations (FLNRO), Fisheries and Oceans Canada (DFO), BC Hydro, First Nations and local stakeholders. It is important to understand, however, that planning priorities within action plans may not translate immediately into funded projects. Limited program funding requires that priority-setting has to also be developed across the program as a whole, not just within action plans. The process of selecting which actions will be implemented in any given year will occur during the annual implementation planning cycle.

2. Overview context

2.1 Impacts and Threats

As part of the Columbia Dam Impact Study, Thorley (2008) estimated losses and gains of different aquatic habitats. He estimated that more than 1,050 km of stream habitat was inundated by reservoirs in the Columbia region. Additional to this total are 381 km of inundated, mostly low order stream habitat that was estimated through GIS analysis (Thorley 2008). These “construction lines” are streams that were not identified on pre-construction maps, but which can be inferred from present day mapping. Thorley separated total stream losses into categories defined by combinations of stream order, elevation and stream gradient. Most of the inundated streams were low to moderate elevation (i.e., 300 to 1000 m) and low gradient (i.e., <3 % slope), which is perhaps not surprising since most of the dams are on rivers in valley bottoms. Habitat losses (including Koocanusa Reservoir, but not construction lines) were 231 km for stream order 1-2, 199 km for stream order 3-5, 301 km for stream order 6-7, and 469 km for stream order 8-9. More than 93% of construction lines were of stream order 1-2.

Non-hydro impacts occur on streams that are not within the BC Hydro footprint area. These impacts include historic and ongoing effects of logging, mining, and land use changes from agriculture, urbanization and other developments. Such effects vary substantially among locations within the Columbia basin.

¹ All of the FWCP Columbia Plans are available at: <http://www.fwcpolumbia.ca/version2/index.php>

2.2 Limiting factors

Limiting factors likely vary among species, trophic levels and locations. Limiting factors for fish likely include biotic factors like predation and competition, and abiotic factors like habitat quantity and quality, access to habitats (i.e., passage), summer and winter water temperatures, flow regime, nutrient levels and length of the growing season. Many streams in the Columbia basin are naturally low productivity (oligotrophic) systems. The limiting factors include natural and human-induced aspects, and the latter include both hydropower and other developments. Sheer availability of physical stream habitat does not limit opportunities for the program to undertake work in streams.

2.3 Trends and Knowledge Status

General trends in habitat loss and alteration from BC Hydro facilities have been assessed as part of the Columbia Dam Impacts Study (e.g., Thorley 2008 and references therein). Other basin-wide trends in the abundance, distribution and productivity of streams and the species dependent on them, have not been compiled. Significant changes include:

- Loss of stream and riparian habitat from reservoir creation,
- Alteration of stream and riparian habitat from flow regulation,
- Loss of riparian and instream habitat from land development, and
- Loss in aquatic and riparian productivity from hydrology changes and stressors such as invasive species.

3. Action Plan Objectives, Measures and Targets

Clear management objectives are necessary to guide information acquisition and prioritize management actions. Priority actions and information needs will change as both improvements to the system are realized and information is gained. The current plan reflects the information available and values expressed by stakeholders (FWCP partners, First Nations and local communities) through reports, interviews and regional workshops held between 2009 and 2011.

3.1 Objective and Target Setting

The following terminology is used in this report.

Objectives:	Objectives are high-level statements of desired future conditions (outcomes), consistent with FWCP partner mandates and policies.
Sub-objectives and Status Indicators:	Sub-objectives are detailed statements of desired future conditions within objectives, from which status indicators can be derived and alternative management actions evaluated. Sub-objectives and indicators provide the details necessary to translate policy into actions and to evaluate their consequences. They may be arranged hierarchically within objectives, and usually indicate conditions necessary to attain the objective to which they refer.
Measures:	Measures are specific metrics whose values indicate the degree to which desired future conditions have been achieved. They can be either qualitative or quantitative. There is a preference to develop the latter where possible for ease of monitoring.
Targets:	Targets are the values of measurable items that indicate the attainment of a desired condition. In the current context these may be expressed as a single value or as a range to acknowledge the inherent variability of ecosystems.
Actions:	Management actions, plans or policies for achieving the objectives.

Objectives are the “ends” or the outcomes we ultimately care about. Actions are the “means,” or the things we do to achieve them. This report focuses on describing the actions required to achieve the objectives in relation to fish and wildlife habitat associated with streams. Actions relating to specific species or habitats may also be related to actions in other Action Planning documents such as the Riparian and Wetlands or Species of Interest plans.

3.2 FWCP Streams

For the purpose of this Action Plan we define four stream types that will be the focus of FWCP actions. Categories are based on stream order, using the groupings defined in Thorley (2008).

Category 1 Stream order 1-2. The BC Hydro dam footprint inundated 231 km of first and second order streams.

Category 2 Stream order 3-5. The BC Hydro dam footprint inundated 199 km of this stream type.

Category 3 Stream order 6-7. The BC Hydro dam footprint inundated 301 km of this stream type.

Category 4 Stream order 8-9. The BC Hydro dam footprint inundated 469 km of this stream type.

3.3 Objectives for FWCP Streams

Management objectives are common to all streams discussed in this plan, although the species of interest vary somewhat among the streams. While the objectives are expected to remain stable over time, the indicators and targets may evolve as agencies' management priorities shift, or new information becomes available.

There are three FWCP objectives:

1. Conservation – Ensure a productive and diverse aquatic ecosystem,
2. Conservation – Improve the status of species of conservation concern,
3. Sustainable Use – Maintain or improve opportunities for sustainable use.

There is no implied priority to the objectives on this list.

Objective 1 – Ensure a productive and diverse aquatic ecosystem

Rationale: The effects of water use and land use are ongoing threats to instream and riparian habitats in the Columbia basin, and protecting and enhancing remaining habitat is a high priority. Many streams can benefit from management actions that enhance productivity or reduce specific threats (e.g., spawning and rearing habitat enhancement, treatment for invasive species, access control, passage improvements). Habitat may also be protected if adjacent lands are protected from conversion to other uses (e.g., by purchasing the land or negotiating a covenant or stewardship agreement). Possible compensation actions identified by Thorley (2008) include, habitat protection, reconnection of isolated habitats (e.g., culverts), bank stabilization and riparian revegetation, construction of aquatic structures (e.g., LWD, etc.), flow restoration, road deactivation and stabilization, nutrient enrichment, spawning channels, hatcheries, and removal of invasives.

Measures and Targets: Measures and targets will be developed when further inventory and planning are completed.

Objective 2 – Improve the status of species of conservation concern

Rationale: Species of conservation concern may also benefit from general improvements in stream habitat, but often there are specific factors that may be limiting the abundance and distribution of priority species. The list of applicable species and actions to address limiting factors are presented in the Species of Interest Action Plan for the Columbia Basin. There may be good opportunities to meet conservation objectives through actions that are part of several different action plans, and the priorities presented in this plan should not be interpreted as constraining restoration actions aimed at supporting species of interest.

Measures and Targets: Measures and targets will be developed during further progress on the Species of Interest Action Plan.

Objective 3 – Maintain or improve opportunities for sustainable use

Rationale: Many stream-dependent species are the focus of sustainable use activities by First Nations and the public. At this time, there are no actions directed specifically towards improving sustainable use opportunities but such actions may be planned and funded in the future.

Regulated and unregulated streams can benefit from management actions that address limiting factors that improve production of fish for angling or wildlife for viewing.

Measures and Targets: Measures and targets will be developed when further inventory and planning are completed.

4. Action Plan

4.1 Overview

The Action Plan has individual actions that are presented in Section 4.2. Some actions support multiple sub-objectives, which in turn support multiple objectives. **Error! Reference source not found.** 3 provides an overview of the link between actions and objectives.

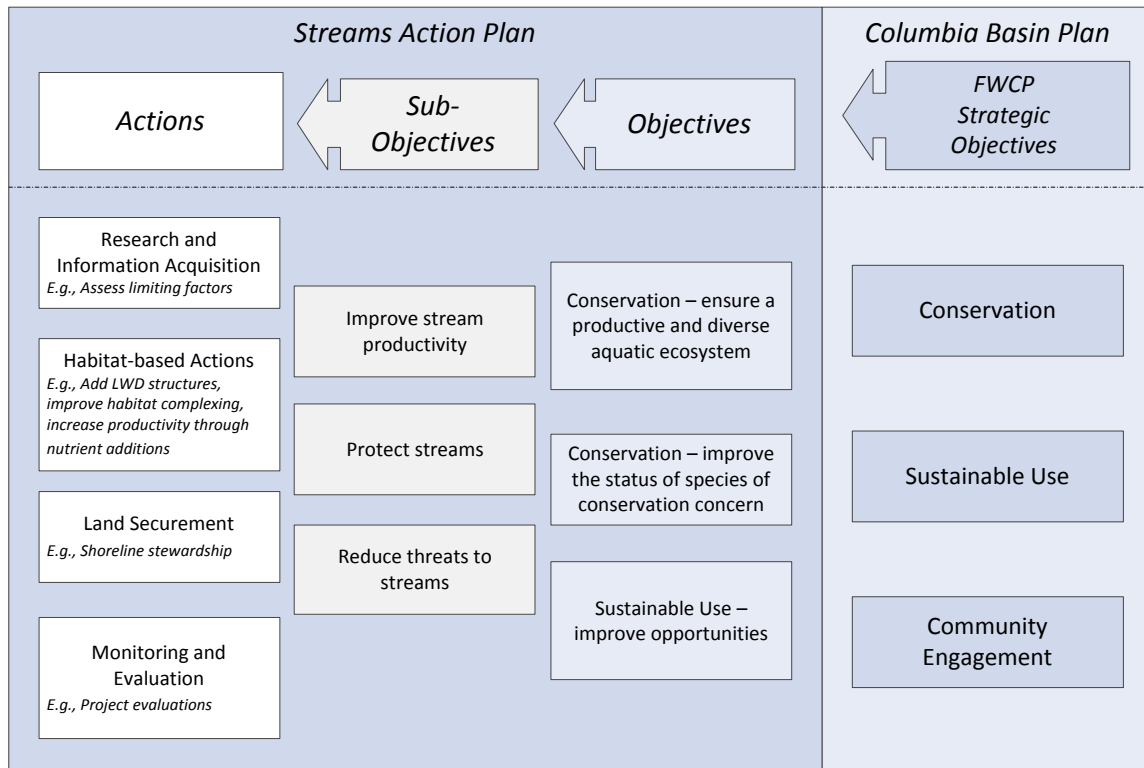


Figure 3: Relationship between actions, sub-objectives and objectives in this Streams Action Plan and the FWCP strategic objectives in the Columbia Basin Plan.

4.2 Components

At this time the Streams Action Plan will focus on 15 priority streams or their immediate watersheds. The plan does not preclude work on other streams, but these will be given priority for FWCP investment over the next five years. The 15 streams and the primary species of concern are:

1. Salmo River (rainbow trout and bull trout; harlequin duck)
2. Columbia River downstream of Keenleyside Dam (rainbow trout, white sturgeon, great blue heron)
3. Slocan River (rainbow trout and bull trout)
4. Alkolkolex River (westslope cutthroat trout)
5. Flathead River (westslope cutthroat trout and bull trout)
6. Kootenay River mainstem downstream of Kootenay Lake (rainbow trout)

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7. Kootenay River mainstem upstream of Kootenay Lake (white sturgeon, burbot)
 8. Goat River (rainbow trout and westslope cutthroat)
 9. Palliser River (westslope cutthroat trout and bull trout)
 10. White River (westslope cutthroat trout and bull trout)
 11. Bull River (westslope cutthroat trout and bull trout)
 12. Elk River (westslope cutthroat trout and bull trout)
 13. Wigwam River (westslope cutthroat trout and bull trout)
 14. St. Mary River (westslope cutthroat trout and bull trout)
 15. Skookumchuck Creek (westslope cutthroat trout and bull trout)

The last seven in the list are tributaries to the Kootenay River upstream of Kooconusa Reservoir and are classified angling waters (Province of British Columbia 2011). In general, streams in the West Kootenay have been impacted by hydropower development to a greater degree than those in the East Kootenay. The remaining streams in the West Kootenay are a priority; however, there may be more opportunity for cost-effective habitat improvements in the East Kootenay.

As a starting point for action planning, two outputs from the Species Rating and Database Tool (FWCP 2011b) were used to identify high priority species that would benefit most from FWCP investment on streams and the generic types of actions required. The first output is the subset of species that depend on streams more than any other type of habitat. The list includes 10 fish, two mammal and three bird species (Appendix A). These are the species that have been heavily impacted by dam footprint on streams and for which there is a regional conservation concern and/or high local interest. Appendix A identifies the highest priority habitat-based actions on streams that will directly benefit these species. The second output is a longer list of species (**Table B1**) for which streams represent a “supporting” habitat; that is, these species occur in streams, but they occur more often or are more dependent on one or more other habitat types. Habitat-based actions taken on streams may benefit these species, but actions on their primary habitat are likely to provide greater benefit.

Table 1 identifies a set of preliminary actions that have been identified to guide initial investment planning efforts. Actions are organized under five broad categories: Research and Information Acquisition, Habitat-based Actions, Species-based Actions, Land Securement, and Monitoring and Evaluation. Actions are also assigned priorities from 1-3. Note that low priority actions are not included in the table.

Research and Information Acquisition.— A number of actions are proposed for the identified streams, but the first step is to develop a better understanding of FWCP investment opportunities in these streams to address the objectives described above. Additional details for the Streams Action Plan will be developed, building on this present plan, and include an updated list of priority streams in the region, a summary of threats and limiting factors, and prioritized actions to meet the objectives. The main deliverable of the plan will be a prioritized list of streams in the region for FWCP investment over the next 5-10 years, and the actions required to enhance and secure stream habitats or otherwise address threats and impacts in support of the objectives in Section 0.

There is much we don't know biologically and physically about streams in the region, so actions will also include collecting information to help evaluate and implement compensation options and assessing performance of implemented restoration activities. Although data gaps exist, there is significant experience with habitat enhancements of different types and the response in productivity, fish biomass, and fish abundance.

Habitat-based Actions.— A number of specific actions will be provided in the future as the streams action plan receives additional input and becomes more detailed. In the meantime, there are actions that have been prejudged as high priorities for the identified streams. These actions are described in Table 1, and there is no need to delay implementing the actions until the detailed plan is complete. For example, some actions will focus on reducing or eliminating threats to the identified streams, or creating or enhancing aquatic habitats.

Land Securement.— Conversion to other land uses is an ongoing threat to foreshore habitat around streams in the Columbia basin, and securing the remaining habitat to prevent loss is a high priority; however, this type of action has tended to occur more often for other habitats like small lakes, wetlands or riparian areas.

Species-based Actions.— Most actions identified in this plan are habitat-based actions, or activities like research or monitoring in support of habitat-based actions. The majority of species-based actions will be coordinated through the Species of Interest Plan.

Monitoring and Evaluation.— Monitoring is a cornerstone of good resource management because it provides information on present status and trends and allows post-implementation assessment of management decisions and programs. Fundamentally, monitoring provides direction on adjustments that may be necessary. There are multiple elements related to FWCP investment in streams that require monitoring. Realistically, monitoring will likely focus on abundance of species of concern and measures of angling opportunity and satisfaction. Results of monitoring should feed directly into compensation program evaluation and help revise objectives and targets, where necessary.

Table 1. Actions with associated priorities for streams in the Columbia basin.

Actions	Salmo River	Columbia River d/s of HLK	Slocan River	Kootenay River d/s of Kootenay Lake	Kootenay River u/s of Kootenay Lake	Alkolex River	Flathead River	Upper Kootenay River tributaries	Priority
Research & Information Acquisition									
Develop a regional streams plan for the 15 identified priority streams mentioned in this action plan. The plan should assess limiting factors, describe opportunities for FWCP investment, guide future work in these streams with specific actions and targets, and describe how results should be monitored. The plan should also develop future priorities by laying out tasks to do similar evaluations on other streams in the project area; the greatest opportunities may be in the East Kootenay.	x	x	x	x	x	x	x	x	1
Protect or improve flows in stream habitats through contributing to studies that will result in conservation water licences or buy-back of existing licences on important streams and their tributaries	x	x	x	x	x	x	x	x	3
Habitat Based Actions									
Implement activities as identified and prioritized in a detailed regional streams action plan. Habitat-based actions may include, reconnection of isolated habitats (e.g., culverts), bank stabilization and riparian revegetation, construction of aquatic structures (e.g., LWD, etc.), flow restoration, road deactivation and stabilization, nutrient enrichment, construction of spawning channels.	x	x	x	x	x	x	x	x	1
Add LWD structures to provide refuge habitats for larger fish during low water periods in late summer and winter (deep pools with cover from predators)	x								1
Ensure access to smaller tributaries that provide spawning and juvenile rearing habitats		x							1
Undertake habitat complexing on streams that have limited LWD recruitment and a low incidence of pool habitat.	x	x	x	x	x	x	x	x	2
Restore riparian vegetation and stabilize areas of severe erosion. Actions may include cattle fencing, for example.	x		x					x	2
Fertilize mainstem and tributary habitats to enhance productivity	x								3
Land Securement									
Protect remaining stream habitats through land purchases or covenants	x	x	x	x	x	x	x	x	1
Implement land securement activities as identified and prioritized in a detailed regional streams action plan.	x	x	x	x	x	x	x	x	1
Monitoring & Evaluation									
Conduct monitoring and evaluation of past and present enhancement projects	x	x	x	x	x	x	x	x	1
Implement monitoring activities as identified and prioritized in a detailed regional streams action plan.									1

5. Conclusion

The development of BC Hydro dams and reservoirs in the Columbia Basin resulted in the inundation of over 1,050 km of stream habitat (primarily valley-bottom, low gradient). The larger reservoirs that have taken their place are fundamentally different than natural stream habitat, resulting in direct and indirect impacts to a number of fish and wildlife species.

Opportunities to undertake habitat-based actions (e.g., bank stabilization) or land securement have been identified for a set of streams in the basin, including:

1. Salmo River
2. Columbia River downstream of Keenleyside Dam
3. Slocan River
4. Alkolkolex River
5. Flathead River
6. Kootenay River mainstem downstream of Kootenay Lake
7. Kootenay River mainstem upstream of Kootenay Lake
8. Goat River
9. Palliser River
10. White River
11. Bull River
12. Elk River
13. Wigwam River
14. St. Mary River
15. Skookumchuck Creek

Importantly, this action plan also identifies the need to undertake additional baseline inventories, evaluations and planning to refine the target streams in the basin that offer the best opportunity for restoration or enhancement actions.

By making investments in these streams, FWCP directly addresses the program's strategic objective to maintain productive and diverse ecosystems. The investments contribute to improving the status of priority species by improving the habitats on which many of the species depend. These habitats also support a variety of consumptive and non-consumptive sustainable use activities by First Nations and the public.

6. References

- Fish and Wildlife Compensation Program. 2011a. Columbia Basin Plan. Available at: <http://www.fwcpcolumbia.ca/version2/index.php>
- Fish and Wildlife Compensation Program. 2011b. *FWCP: Columbia Species Rating and Database Tool*. Background report to accompany the ExcelTM-based tool.
- MacDonald, A. 2009. Fish & Wildlife Compensation Program: Executive Summary. Report for BC Hydro, Vancouver, BC.
- Province of British Columbia. 2011. 2009-2011 Freshwater fishing regulations synopsis. Available at: <http://www.env.gov.bc.ca/fw/fish/regulations/synopsis/printed.html>.
- Thorley, J. L. 2008. Aquatic habitat losses and gains due to BC Hydro dams in the Columbia Basin. Prepared for Fish and Wildlife Compensation Program – Columbia Basin, Nelson BC.

Appendix A Species with the greatest dependence on stream habitats.

The following species have been identified as having a high conservation concern and/or local interest and a strong dependence on stream habitats. These species depend on streams more than any other type of habitat and have been heavily impacted by dam footprint on streams (see Columbia Species of Interest Plan). The preliminary recommended actions and their priority (1 = first, 2 = second) are identified for each species.

Table A1. Output from the Species Rating and Database Tool (FWCP 2011b). This table identifies species of regional conservation concern whose primary habitat is streams. First and second order priority actions are listed in twelve categories.

Species	Guild	Research & Information Acquisition			Species-Based Actions			Habitat-Based Actions			Land Securement		Monitoring & Evaluation	Priority in the Species Plan
		Inventory	Assessment (e.g., targets)	Integrated habitat planning	Translocate / Reintroduce	Alternate Predator Prey Man	Other	Habitat Creation	Habitat restoration	Restore connectivity	Habitat Acquisition	Habitat Stewardship		
White Sturgeon	BEN	-	-	-	1	-	-	-	2	2	-	-	2	Recovery
Rainbow Trout (insectivorous-Fluvial)	INS	-	-	-	-	-	-	2	1	-	-	-	2	Focal
Westslope cutthroat trout	INS	-	-	-	2	-	-	2	1	-	-	2	2	Focal
Leopard dace	NMI	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Umatilla dace	NMI	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Columbia sculpin	SCL	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Malheur mottled sculpin	SCL	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Shorthead sculpin	SCL	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Torrent sculpin	SCL	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Mountain sucker	SUC	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Northern River Otter	CAR	1	-	-	-	-	-	-	-	2	-	-	I	Inventory
American Dipper **	FLY	1	-	-	-	-	-	-	-	-	-	-	I	Inventory
Belted Kingfisher **	WAT	1	-	-	-	-	-	-	-	-	-	2	-	Inventory
Harlequin Duck	WAT	2	-	2	-	-	-	-	2	-	-	1	2	Focal

* Priority wetland species - *Canadian Intermountain Joint Venture*

** Priority landbird - *Northern Rockies Bird Conservation Region (Partners in Flight)*

1 = First Priority Action

2 = Second Priority Action(s)

I: Indicator sp

Appendix B Species that use streams as supporting habitat.

The following species use streams as a “supporting” habitat; that is, these species occur in streams, but they occur more often or are more dependent on one or more other habitat types. For example, streams often provide adjacent wetland and riparian habitat features and species that use wetlands and riparian areas will therefore show an association with streams, but the association with streams is essentially an outcome of the primary association. Habitat-based actions taken on streams may benefit these species, but actions on their primary habitat are likely to provide greater benefit. Such species and the actions to support them are discussed in greater detail within other ecosystem-based action plans, and it is expected that most habitat-based actions of benefit for species in this list will be addressed in these other plans. That said, these species do use streams, and some portion of their habitat requirements may be addressed in this Streams Action Plan. The preliminary recommended actions and their priority (1 = first, 2 = second) are identified for each species.

Table B1. Output from the Species Rating and Database Tool (FWCP 2011b). This table identifies species of regional conservation concern whose secondary habitat is stream. First and second order priority actions are listed in twelve categories.

Species	Guild	Research & Information Acquisition			Species-Based Actions			Habitat-Based Actions			Land Securement		Monitoring & Evaluation	Priority in the Species Plan
		Inventory	Assessment (e.g., targets)	Integrated habitat planning	Translocate / Reintroduce	Alternate Predator Prey Man	Other	Habitat Creation	Habitat restoration	Restore connectivity	Habitat Acquisition	Habitat Stewardship		
Burbot (Other)	BEN	-	2	-	-	-	-	2	2	2	2	-	1	Focal
Burbot (Kootenay Lake)	BEN	-	2	-	1	-	-	2	2	2	-	-	2	Focal
Rainbow Trout (insectivorous-SL)	INS	-	1	-	-	-	-	2	-	-	-	-	2	Focal
Rainbow Trout (insectivorous-LL)	INS	-	-	-	-	-	-	-	1	-	-	-	2	Focal
Bull Trout	PIS	2	1	-	2	-	-	2	1	-	-	-	2	Focal
Rainbow Trout (piscivorous-LL)	PIS	2	1	-	-	-	-	2	1	-	-	-	2	Focal
Kokanee	PLK	-	2	-	-	-	2	-	1	-	-	-	2	Focal
Pygmy Whitefish	WFI	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Col. Spotted Frog	AMP	-	-	2	-	-	-	-	-	-	-	2	1	Focal
Painted Turtle	AMP	2	-	-	-	-	-	2	2	2	2	1	2	Focal
Black Swift **	AER	1	-	2	-	-	-	-	-	-	-	-	-	Inventory
Cliff Swallow	AER	1	-	2	-	-	-	-	-	-	-	2	-	Inventory
Tree Swallow	AER	1	-	-	-	-	-	-	-	-	-	2	-	Inventory
Vaux's Swift **	AER	2	-	2	-	-	-	1	-	-	-	2	2	Focal
Violet-green Swallow	AER	1	-	-	-	-	-	2	-	-	-	2	-	Inventory
Bald Eagle	RAP	-	-	-	-	-	-	-	-	-	-	2	1	Inventory
Osprey	RAP	-	-	-	-	-	-	-	-	-	-	1	2	Focal
Herring Gull	SHO	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
American Water Shrew	SMA	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Great Blue Heron *	WAD	2	-	2	-	2	-	-	2	-	2	1	2	Focal
Greater Scaup	WAT	1	-	2	-	-	-	-	-	-	-	-	-	Inventory
Bufflehead *	WAT	-	-	-	-	-	-	2	-	-	-	-	1	Inventory
Common Goldeneye	WAT	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Common Loon *	WAT	2	-	-	-	-	-	2	-	-	-	1	2	Focal
Blue-winged Teal	WAT	1	-	2	-	-	-	-	2	-	-	2	-	Inventory
Canvasback	WAT	1	-	2	-	-	-	-	2	-	-	2	-	Inventory
Hooded Merganser *	WAT	-	-	-	-	-	-	1	-	-	-	-	-	Inventory
Lesser Scaup *	WAT	1	-	2	-	-	-	-	-	-	-	2	-	Inventory
Northern Pintail	WAT	1	-	2	-	-	-	-	-	-	-	2	-	Inventory
Ring-necked Duck *	WAT	-	-	-	-	-	-	-	-	-	-	-	1	Inventory
Wood Duck	WAT	1	-	-	-	-	-	2	-	-	-	-	1	Inventory
Long-eared Myotis	BAT	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Long-legged Myotis	BAT	1	-	-	-	-	-	-	-	-	-	-	-	Inventory
Northern Myotis	BAT	-	-	-	-	-	-	-	-	-	2	-	2	Focal
Townsend's Big-eared bat	BAT	2	-	2	-	-	-	-	-	-	-	1	2	Focal
Grizzly Bear	CAR	2	-	2	-	2	-	-	2	1	2	2	2	Focal

* Priority wetland species - *Canadian Intermountain Joint Venture*

** Priority landbird - *Northern Rockies Bird Conservation Region (Partners in Flight)*

1 = First Priority Action

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