



Columbia Region
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Columbia Region fish and wildlife project list 2019 – 2020

Conserving and enhancing fish and wildlife in watersheds impacted by BC Hydro dams

The Fish & Wildlife Compensation Program (FWCP) conserves and enhances fish and wildlife in watersheds impacted by BC Hydro dams. The FWCP is funded annually by BC Hydro. The FWCP funds projects in the Coastal, Columbia and Peace Regions, which fulfills BC Hydro's water licence obligations and voluntary commitments to compensate for fish and wildlife impacts. The FWCP is a partnership between BC Hydro, the Province of B.C., Fisheries and Oceans Canada, First Nations and Public Stakeholders.

In 2019 – 2020 our three regional boards – Coastal, Columbia, and Peace – approved funding for 97 fish and wildlife projects valued at approximately \$9.2 million for 2019–2020. Each project went through a three-stage review and evaluation process prior to a final decision by our local Boards. Each project addresses one or more conservation priority in our Action Plans.

In our Columbia Region, the Board approved approximately \$5.8 million for 38 fish and wildlife projects to be implemented April 1, 2019 – March 31, 2020. First Nations, stewardship groups, consultants, and agencies are leading the 10 fish and 28 wildlife projects that will help conserve and enhance fish and wildlife impacted by BC Hydro dams

About our 2019–2020 project list

This is a final list of projects conditionally-approved by the FWCP Columbia Region Board as of April 1, 2019. Read our annual reports for a final list of projects implemented in 2019 – 2020 and project outcomes.

Approved budgets are to support the delivery of fish and wildlife projects, and do not include the FWCP administration or communications budget. The total number of projects approved for 2019 – 2020 includes budgets approved for future work this fiscal year to be further defined by the regional Boards (i.e. directed projects).

Grant-based fish and wildlife project descriptions are based on information provided in the lead proponent's 2019–2020 grant application.

Directed projects reflect regional conservation priorities and have been identified by our regional Boards for implementation through a request for proposals (RFP) process.

Annual and ongoing fish and wildlife projects are delivered with support from the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRO) through a long-term agreement.

Contact us

Contact Crystal Klym, Columbia Region Manager at 250-365-4591 or crystal.klym@bchydro.com to learn more about our work in the Columbia Region. [Subscribe](#) and stay informed about the projects we fund and how you can apply for a grant.

Learn more at fwcp.ca

FWCP Columbia Region 2019-2020 Project List

#	Project ID	2019-2020 GrantBasedFishProjects	Project Lead	FWCP Funding	Project Type	Action Plan Alignment	Sub-region
1	COL-F20-F-3119	Improving fish habitat on Joseph Creek in our ColumbiaRegion <i>Joseph Creek water analysis and phase 1 fishery action plan</i> This project will restore and enhance fish habitats and ecosystem functions on Joseph Creek, including the development, implementation, monitoring and evaluation of an integrated habitat plan. Education and outreach initiatives focusing on best practices for working in and about streams, and habitat enhancement work are also part of this project.	Columbia Outdoor School	\$ 39,240	Research & Information Acquisition	Streams Action Plan	East Kootenay
2	COL-F20-F-3055	Monitoring Bull Trout populations in the West Kootenay <i>The Salmo River Watershed Bull Trout spawner escapement 2019</i> This project will continue Bull Trout redd counts in known spawning areas of the Salmo River, adding to long-term trend monitoring for this Blue-listed species. This project aligns with guidance from a trans-boundary Watershed Planning Team request to use Bull Trout for continued monitoring of this population. Conservation biology guidelines for Bull Trout require 50-100 individuals to minimize inbreeding effects. Since 2010, the spawning population has been below 100.	Salmo Watershed Streamkeepers Society	\$ 15,125	Monitoring & Evaluation	Species of Interest Action Plan	West Kootenay
3	COL-F20-F-3073	Improving Rainbow Trout habitat at the Murphy Creek spawning channel, a lower Columbia River tributary <i>Murphy Creek spawning channel maintenance and monitoring</i> The Murphy Creek spawning channel has been an important Rainbow Trout enhancement project on the Lower Columbia River since the mid-1980s when it was developed. This project will continue monitoring and maintaining this spawning channel, and will include Rainbow Trout spawner monitoring, water temperature monitoring, spawning channel maintenance (debris removal, adding gravel, removing sediment), and habitat enhancement (riparian planting). Continued maintenance of the spawning channel is imperative to its efficacy in providing spawning habitat for Rainbow Trout in this lower Columbia River tributary.	Okanagan Nation Alliance	\$ 17,089	Habitat-Based Actions	Streams Action Plan	West Kootenay
4	COL-F20-F-3098	Maintaining the Rainbow Trout spawning channel at Murphy Creek, a lower Columbia River tributary <i>Development of Murphy Creek spawning channel management plan</i> This project will develop a management plan for the Murphy Creek spawning channel that will guide long-term maintenance of the channel to further support local Rainbow Trout.	Okanagan Nation Alliance	\$ 9,762	Monitoring & Evaluation	Streams Action Plan	West Kootenay
5	COL-F20-F-3106	Restoring the Rainbow Trout spawning channel at Murphy Creek, a lower Columbia River tributary <i>Murphy Creek spawning channel intake restoration</i> This project will restore existing intakes at the Murphy Creek spawning channel, impacted by erosion and undercutting around the water intakes.	Okanagan Nation Alliance	\$ 45,620	Habitat-Based Actions	Streams Action Plan	West Kootenay
Grant Based Fish Project Total:				\$ 126,836			

#	Project ID	2019-2020 GrantBased Wildlife Projects	Project Lead	FWCP Funding	Project Type	Action Plan Alignment	Sub-region
6	COL-F20-W-3043	<p>Conserving wildlife corridors in the face of climate change <i>Kootenay Connect: riparian wildlife climate change corridors</i> The Kootenay Connect project will identify and develop conservation strategies to establish, recognize, protect, and improve management for landscape connectivity and 12 important wildlife corridors across the Columbia Basin. This project will integrate large carnivores (Grizzly Bears), ungulates, and many other wildlife species' data with large riparian-wetland complexes that link critical habitat and landscape features at a regional scale. Research shows riparian-wetland systems are biodiversity hotspots and climate refugia that also act as wildlife linkages across human-settled valleys. The project team will work with key stakeholders with interests in private and public lands to develop a mosaic of conservation activities, strategies, and solutions.</p>	Birchdale Ecological	\$ 39,900	Research & Information Acquisition	Upland and Dryland Action Plan	Basin-Wide
7	COL-F20-W-3050	<p>Restoring wetland habitat in our Columbia Region <i>Advancing wetland stewardship and restoration in the Kootenays</i> This project, delivered by the BC Wildlife Federation, will restore wetland habitat near Rossland, Kimberley, and Creston to aid listed species, support First Nations, and increase landscape connectivity. Past restoration projects will also receive enhancements to increase biodiversity. This project will benefit several species, including Western Painted Turtle, American Badger, Grizzly Bear, Sandhill Crane, elk, Barn Swallow, Short-eared Owl, Common Nighthawk, Little Brown Bat, Great Blue Heron, Northern Leopard Frog, Western Toad, and a variety of other amphibians and waterfowl. A Wetland keepers workshop will train participants on wetland stewardship, classification, and health assessment, and build capacity of stewardship groups, volunteers, First Nations, government staff, and others to protect, enhance, and restore wetlands. Participants will receive hands-on training at active restoration sites and a comprehensive evaluation will review the value of past wetland restoration for wildlife, to inform future restoration works.</p>	BC Wildlife Federation	\$ 291,200	Habitat-Based Actions	Riparian and Wetlands Action Plan	Basin-Wide
8	COL-F20-W-3051	<p>Collecting baseline bat data before White Nose Syndrome arrives in BC <i>Establishing and monitoring bat abundance and diversity</i> This project will use the standardized North American Bat Monitoring protocol to establish baseline diversity and relative abundance of bats, and will also monitor trends in BC. The project will also locate and monitor bat hibernacula, as White Nose Syndrome (WNS) kills bats during hibernation. Acoustics and mark-recapture techniques will be used, and citizens will be engaged through collaborations with local stewardship groups and cavers (BatCaver.org). Bats play important roles in the ecosystem and economy (e.g. bats reduce the need for pesticides). The ecological fall-out from mass bat die-offs due to White Nose Syndrome is not yet understood, but changes in insect communities could have far-reaching implications.</p>	Wildlife Conservation Society Canada	\$ 54,593	Research & Information Acquisition	Species of Interest Action Plan	Basin-Wide
9	COL-F20-W-3026	<p>Restoring grassland and open forest habitat in our Columbia Region <i>ᑭᐱᑭᐱ ecosystem enhancement project</i> This project will restore a natural Ponderosa Pine ecosystem and enhance a wildlife corridor/linkage, while managing for ecosystem threats, including wildfire and invasive plants. This project will benefit several species, including Long-billed Curlew, Lewis's Woodpecker, Flammulated Owl, Common Nighthawk, Yellow Badger, Williamson's Sapsucker, and Little Brown Bat. Potentially Scarlet Gaura, Scarlet Globe Mallow, Prairie Gold Bean, Hairstem Ground Smoke, and Flat-top Broom Rape.</p>	AQAM	\$ 78,600	Habitat-Based Actions	Upland and Dryland Action Plan	East Kootenay

#	Project ID	2019-2020 GrantBased Wildlife Projects	Project Lead	FWCP Funding	Project type	Action Plan Alignment	Sub-region
10	COL-F20-W-3041	<p>Improving Big Horn Sheep habitat by addressing invasives in our Columbia Region <i>Invasive plant management on Bighorn Sheep winter ranges</i> This project will implement a cooperative management and treatment strategy to reduce invasive plant coverage and improve the compromised quality of low elevation Bighorn Sheep winter ranges near the Wigwam Flats and Bull River. These grasslands are becoming inundated with invasive plants, such as Yellow Hawkweed, St. John's Wort, and Sulphur Cinquefoil. Approximately 300 Bighorn Sheep use these grassland ecosystems and without a comprehensive invasive plant management program, the continued rapid loss of forage quality and quantity will ultimately result in Bighorn Sheep population decline.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 22,000	Habitat-Based Actions	Upland and Dryland Action Plan	East Kootenay
11	COL-F20-W-3052	<p>Restoring wildlife habitats with Akisqnuq First Nation in our Columbia Region <i>Akisqnuq habitat restoration</i> This project will use fire-maintained ecosystem restoration on the Akisqnuq First Nation Reserve to compensate for habitat losses. Activities, as recommended in the Akisqnuq Wildlife Habitat Restoration Plan, include site-specific prescriptions, pre-burn slashing, slash pile burning, chipping/mulching, pruning, and maintaining wildlife trees with no-treatment buffer zones. This project will benefit many species, including Badger, Rocky Mountain Bighorn Sheep, Flammulated Owl, Rubber Boas, Lewis's Woodpecker, elk, Mule Deer, White-tailed Deer, cougar, Black Bear, and wolf.</p>	Akisqnuq First Nation	\$ 95,500	Habitat-Based Actions	Upland and Dryland Action Plan	East Kootenay
12	COL-F20-W-3057	<p>Controlling invasive plants in Tobacco Plains Indian Reserve <i>Tobacco Plains grassland and open forest restoration</i> This project will: 1) help control invasive plants on grasslands and open forests on Tobacco Plains Indian Reserve and will improve habitat for multiple species, including ungulates; 2) support recovery of rare and threatened species; 3) improve habitat connectivity with Crown land; and 4) engage First Nations and community members in land stewardship. Now in year five of a proposed five-year collaboration between Keefer Ecological Services Ltd. (KES) and Tobacco Plains Indian Band (TPIB), this project will continue treatment and monitoring to restore grassland and open forest habitat.</p>	Keefer Ecological Services Ltd	\$ 59,872	Habitat-Based Actions	Upland and Dryland Action Plan	East Kootenay
13	COL-F20-W-3058	<p>Improving forest resilience in the face of climate change <i>Marion Creek benchlands forest restoration project</i> The goal of this project is to improve the structure and resiliency of forests on the Marion Creek Benchlands conservation property, and enhance similar work that is planned on adjacent lands. Restoration of open forest structure in areas where forest in-growth and encroachment have occurred will improve critical habitat for species at risk, reduce the risk of catastrophic fire, and enhance the resiliency of imperilled Rocky Mountain Douglas-fir systems in the face of changing climate. The extreme wildfire seasons of 2017 and 2018 are not isolated events - they represent part of a global trend of increasing mega-fires with tremendous social, ecological, and economic costs. Now more than ever, it is essential that our forests are resilient to habitat-shifting and potential catastrophic wildfires.</p>	Nature Conservancy of Canada	\$ 22,000	Habitat-Based Actions	Upland and Dryland Action Plan	East Kootenay

#	Project ID	2019-2020 GrantBased Wildlife Projects	Project Lead	FWCP Funding	Project type	Action Plan Alignment	Sub-region
14	COL-F20-W-3070	<p>Studying elk migration in the Upper Kootenay River Watershed <i>Elk Valley elk project 2019-2020</i> The purpose of the final year of this five-year project is to study elk migration patterns and survival, and to provide information to help make informed wildlife management decisions. Elk in the Elk Valley appear to have changed migration patterns in recent years, resulting in a redistribution of elk during the summer and fall. Productivity and survival of non-migratory and migratory elk may differ, contributing to differences in the abundance of individuals following these differing migration strategies. Non-migratory elk tend to be more readily involved in agricultural conflicts and may contribute to overgrazing on some ranges.</p>	Sparwood Fish and Wildlife Association	\$ 27,600	Research & Information Acquisition	Species of Interest Action Plan	East Kootenay
15	COL-F20-W-3080	<p>Restoring open forest and grassland in the Rocky Mountain Trench <i>Sheep Mountain ecosystem restoration project</i> The project will restore 42 hectares of historic open forest and range grassland habitat for wildlife use. Species benefiting from the proposed treatments include: sheep, elk, deer, badgers, and Lewis's Woodpecker. Encroachment from Douglas Fir and Yellow Pine have significantly reduced prime forage grounds for wildlife. The goal of this project is to reduce this in-growth using a combination of mechanical and hand treatments.</p>	Rocky Mountain Trench Natural Resource Society	\$ 60,500	Habitat-Based Actions	Upland and Dryland Action Plan	East Kootenay
16	COL-F20-W-3093	<p>Protecting wetland habitat near Golden <i>Inventory and project development for Wiseman Lakes fen</i> This Seed Grant project will support the following activities: 1) a baseline botanical inventory and wetland integrity assessment of Wiseman Lakes near Golden; and 2) development of an ecological and social rationale, and a road map of options for protecting this valuable habitat. Information collected will be used to convey information about the site's values, and to develop a proposal for securing or protecting this site into the future. Wiseman Lakes are a regionally unique, biodiverse, and largely intact upslope wetland (fen) situated on Crown land 230 m above the Columbia River, near Donald. This fen is known to support at least two provincially rare plants, including one Red-listed (SH) aquatic plant, as well as populations of Columbia Spotted Frog.</p>	LGL Limited Environmental Research Associates Ltd.	\$ 4,998	Land Securement	Riparian and Wetlands Action Plan	East Kootenay
17	COL-F20-W-3101	<p>Protecting ecological function by mitigating invasives in the Upper Kootenay River Watershed <i>Invasive plant management and restoration of protected areas</i> This multi-year project aims to retain functional and sustainable ecosystems in protected areas of the East Kootenay by mitigating the impacts of invasive species. Species that will benefit include: Mule Deer, White-tailed Deer, elk, Bighorn Sheep, moose, in addition to other fire-maintained, grassland, and open forest habitat species. Benefits include the reduction of propagule pressure from neighbouring invasive species populations, wildlife habitat conservation, long-term cost-savings through collaborative invasive species management action, and restoration of degraded areas with native plant species.</p>	East Kootenay Invasive Species Council	\$ 30,000	Habitat-Based Actions	Upland and Dryland Action Plan	East Kootenay
18	COL-F20-W-2946	<p>Improving riparian habitat near Revelstoke Dam <i>Monitoring riparian restoration efforts in Revelstoke</i> This project will assess the multi-year survival of live stakes planted in areas dominated by Reed Canarygrass. The project will also assess the effectiveness of this approach to shade out the grass and allow native species to establish in riparian habitats in the drawdown zone near Revelstoke Dam. The restoration sites will provide habitat for several species, including the Yellow Warbler and Silver-haired Bat, and will support diverse plant and animal communities. Riparian habitats are rare in the mid- and lower-Columbia River.</p>	Kingbird Biological Consultants Ltd.	\$ 7,035	Monitoring & Evaluation	Riparian and Wetlands Action Plan	North Columbia

#	Project ID	2019-2020 Grant Based Wildlife Projects	Project Lead	FWCP Funding	Project type	Action Plan Alignment	Sub-region
19	COL-F20-W-3025	<p>Filling information gaps about marsh birds in the Columbia Wetlands <i>Columbia Wetlands marsh bird monitoring project (CWMBMP)</i> The third and final year of this multi-year project is continuing to collect baseline data for 37 FWCP bird species of interest, and will include repeated visual and aural marsh bird surveys at 65 survey stations in the Columbia Wetlands. This will be done in order to estimate marsh bird population numbers and identify significant habitat types used for breeding. This data is needed prior to making management recommendations and actions. The outreach component of this project will lead to habitat-based actions (e.g. installation of nesting boxes), and will build on relationships with landowners, who have the greatest ability to affect wetland waterfowl values on the landscape.</p>	Goldeneye Ecological Services	\$ 14,382	Research & Information Acquisition	Riparian and Wetlands Action Plan	North Columbia
20	COL-F20-W-3027	<p>Supporting caribou by monitoring deer in the North Columbia <i>Monitoring White-tailed Deer in the Columbia Mountains</i> This project will evaluate factors influencing White-tailed Deer populations in the Columbia Mountains. This data will be used to evaluate the efficacy of White-tailed Deer reductions. The vast majority of caribou herds in western Canada are declining. Intense human intervention has been successful in stabilizing three herds, yet only one has shown growth. Understanding and monitoring additional limiting factors that may be preventing population growth is critical for effective adaptive management and recovery.</p>	Alberta Biodiversity Monitoring Institute	\$ 41,180	Research & Information Acquisition	Species of Interest Action Plan	North Columbia
21	COL-F20-W-3039	<p>Restoring wetland and riparian habitat in the North Columbia <i>Reflection Lake restoration project</i> The focus of this three-year project is on on-the-ground restoration, returning Reflection Lake, near Golden, to the hemi-marsh condition to increase breeding bird habitat. This project provides hands-on opportunities for students and builds relationships with First Nations that will use cattails for traditional cultural purposes, such as basket-weaving. This project will benefit the provincially Blue-listed Eared Grebe, and other wetland and riparian species, including Sora, Virginia Rail, Pied-billed Grebe, Wood Duck, and Hooded Merganser. Ideal marsh bird breeding habitat is found in wetlands with a well-interspersed "fifty-fifty" vegetative cover and open water. Cattail monocultures are not well-used by birds.</p>	Goldeneye Ecological Services	\$ 6,139	Habitat-Based Actions	Riparian and Wetlands Action Plan	North Columbia
22	COL-F20-W-3075	<p>Assessing amphibians in the Robson Valley <i>Robson Valley amphibian survey and habitat assessment</i> This project will monitor amphibian occupancy and riparian habitat integrity at a representative sample of wetlands within the Robson Valley. The project will benefit Columbia Spotted Frog, Western Toad, Wood Frog, Long-toed Salamander, Pacific Chorus Frog, and other wetland-dependent wildlife. Baseline inventories will be conducted in previously unstudied areas to fill in existing knowledge gaps and to provide a basis for future population monitoring. Sites with amphibian inventory data will be resurveyed for changes, trends, and ongoing information gaps. The result will be the first long-term population trend data for several amphibian sites in the Robson Valley; site-specific data on riparian health that can be used to measure changes in amphibian habitat over time; reference wetland and riparian conditions; and new information on riparian restoration and securement opportunities in the Robson Valley .</p>	LGL Limited Environmental Research Associates Ltd.	\$ 51,811	Research & Information Acquisition	Riparian and Wetlands Action Plan	North Columbia

#	Project ID	2019-2020 GrantBased Wildlife Projects	Project Lead	FWCP Funding	Project type	Action Plan Alignment	Sub-region
23	COL-F20-W-3118	<p>Mapping old growth-forests in the North Columbia <i>Exceptional old-growth and deciduous forests: North Columbia</i> This project will fill data gaps on exceptional old-growth coniferous and cottonwood forests. These forest types will be mapped with an emphasis on low elevation Interior Cedar-Hemlock (ICH) forests between Valemount and Donald. An index of old-growth values (similar to Holt and Mackillop 2006) will be used to rank old-growth coniferous forests in the ICH adjacent to Kinbasket Reservoir. A similar index will be applied to cottonwood forests in the Red- and/or Blue-listed Fm01, Fm02, and Fm04 site associations. A list of species-based conservation and restoration projects will be developed. An evaluation of the occurrence and distribution of exceptional old-growth forests remaining after reservoir development has not occurred in the Kinbasket Unit.</p>	Okanagan Nation Alliance	\$ 30,000	Habitat-Based Actions	Upland and Dryland Action Plan	North Columbia
24	COL-F20-W-3049	<p>Protecting endangered Northern Leopard Frogs from invasive Bull Frogs <i>Northern Leopard Frog preservation American Bullfrog control</i> This project aims to conduct a comprehensive and targeted surveillance and eradication program on American Bullfrogs. The intent of this project is to protect the productivity of the wetland ecosystem and habitats required by endangered Northern Leopard Frogs from the highly invasive American Bullfrog. Eradicating bullfrogs will enhance potential pond habitat for Northern Leopard Frogs, as bullfrogs are an obligate aquatic species that occupy lakes, ponds, swamps, bogs, backwaters, reservoirs, marshes, streams, irrigation ponds, and ditches. In addition, bullfrog tadpoles are considered to be 'ecosystem engineers,' altering the biomass, structure, and composition of algal communities.</p>	Central Kootenay Invasive Species Society	\$ 42,130	Habitat-Based Actions	Riparian and Wetlands Action Plan	West Kootenay
25	COL-F20-W-3097	<p>Assessing and restoring habitat for Harlequin Ducks <i>Inventory and stewardship of Salmo Watershed Harlequin Ducks</i> This project involves a re-survey of Harlequin Duck adults/broods (as a follow-up to 1999 and 2009 surveys), and development of site-specific habitat management, restoration, and stewardship actions for implementation at priority sites in the Salmo River Watershed. This watershed supports a significant population of Harlequins, confirmed in previous FWCP inventories. A significant, measured decline during a 2009 re-survey coincided with watershed stressors (e.g. recreational corridor use, Crown/private logging, commercial rafting, etc.) and more stressors are planned. This project provides community outreach, engagement, updated population estimates, and site-specific data for successful implementation of stewardship/restoration actions with watershed landowners, managers, and users.</p>	Pandion Ecological Research Ltd.	\$ 20,000	Research & Information Acquisition	Species of Interest Action Plan	West Kootenay
Grant Based Wildlife Project Total				\$ 999,440			

FWCP Columbia Region 2019-2020 Project List

#	Project ID	2019-2020 Annual and Ongoing Fish Projects	Project Lead	FWCP Funding	Project type	Action Plan Alignment	Sub-region
26	COL-F20-F-3006-DCA	<p>Adding nutrients to Arrow Lakes Reservoir in our Columbia Region <i>F20 Arrow Lakes Reservoir nutrient restoration program</i> To address the nutrient losses in Arrow Lakes Reservoir, as a result of the construction of the Mica and Revelstoke Dams, a bottom-up approach is taken with the addition of nutrients (nitrogen and phosphorus in the form of liquid agricultural grade fertilizer), to support phytoplankton populations that are suitable for the production of Daphnia, a main food source for Kokanee.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 847,353	Habitat-Based Actions	Large Lakes Action Plan	West Kootenay
27	COL-F20-F-3007-DCA	<p>Adding nutrients to Kootenay Lake in our Columbia Region <i>F20 Kootenay Lake nutrient restoration program - North Arm</i> To address the nutrient losses in Kootenay Lake, as a result of the construction of the Duncan and Libby dams, a bottom-up approach is taken with the addition of nitrogen and phosphorus. Nitrogen and phosphorus are added in the form of liquid agricultural grade fertilizer to support phytoplankton populations that are suitable for the production of Daphnia, a main food source for Kokanee.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 1,060,612	Habitat-Based Actions	Large Lakes Action Plan	West Kootenay
28	COL-F20-F-3008-DCA	<p>Funding Hill Creek spawning channel on Arrow Lakes Reservoir <i>F20 Hill Creek spawning channel</i> This project supports ongoing operations, maintenance, and monitoring at the Hill Creek spawning channel, including Kokanee fry emigration, Rainbow Trout redd counts and fry emergence, adult Kokanee size, fecundity and escapement, overwintering egg survival, and water quality at the spawning channel. The spawning channel was built as compensation for spawning habitat lost due to the construction of Revelstoke Dam, and now provides additional spawning habitat for Kokanee and Rainbow Trout from Arrow Lakes Reservoir.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 158,327	Habitat-Based Actions	Large Lakes Action Plan	West Kootenay
29	COL-F20-F-3009-DCA	<p>Funding Meadow Creek spawning channel on Kootenay Lake <i>F20 Meadow Creek spawning channel</i> This project supports ongoing operations, maintenance, and monitoring at the Meadow Creek spawning channel. The channel provides spawning habitat for a large proportion of Kootenay Lake Kokanee, which are the primary prey species for both Bull Trout and Gerrard Rainbow Trout. BC Hydro built the spawning channel in 1967, to compensate for lost natural Kokanee habitat, due to the construction of Duncan Dam.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 199,858	Species-Based Actions	Large Lakes Action Plan	West Kootenay
30	COL-F20-F-3127-DCA	<p>Supporting sturgeon recovery in the Upper Columbia River <i>F20 Upper Columbia sturgeon</i> Implemented through BC Hydro's White Sturgeon Management Plan, under the Columbia River Water Use Plan, this FWCP project is contributing to the White Sturgeon Conservation Aquaculture Program in the Canadian portion of the Columbia River Basin.</p>	To Be Confirmed	\$ 110,000	Species-Based Actions	Species of Interest Action Plan	West Kootenay
Annual and Ongoing Fish Project Total:				\$ 2,376,150			

#	Project ID	2019-2020 Annual and Ongoing Wildlife Projects	Project Lead	FWCP Funding	Project type	Action Plan Alignment	Sub-region
31	COL-F20-W-3011-DCA	<p>Stewardship of conservation lands in our Columbia Region <i>F20 land management operations</i> This project focuses on the coordination, oversight, and implementation of land stewardship activities associated with conservation-held lands.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 391,824	Habitat-Based Actions	Upland and Dryland Action Plan	Basin-Wide
32	COL-F20-W-3014-DCA	<p>Enhancing habitat for non-game species in our Columbia Region <i>F20 non-game enhancement</i> Non-game enhancement focuses on critical habitat features for non-game species' reproduction and survival, such as roosting, denning, and nesting habitat. These habitat features require ongoing monitoring and maintenance to continue to benefit the species they were designed for.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 181,674	Species-Based Actions	Species of Interest Action Plan	Basin-Wide
33	COL-F20-W-3015-DCA	<p>Supporting caribou recovery in our Columbia Region <i>F20 caribou recovery</i> A multi-agency effort, led by the Province of B.C., to recover threatened caribou sub-populations is underway. FWCP-funded actions in 2019- 2020 include: Central Selkirk caribou / cougar / wolf mortality investigations and wolf pack-size determinations; participation in caribou census and collaring; predator track surveys in the Central Selkirks; and a survey of moose in the Revelstoke sub-unit.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 105,199	Research & Information Acquisition	Species of Interest Action Plan	Basin-Wide
34	COL-F20-W-3017-DCA	<p>Restoring and enhancing wetlands in our Columbia Region <i>F20 wetland and riparian enhancement</i> The goal of this project is to deliver wetland restoration work, continue to develop new projects, and monitor completed projects. This involves identifying candidate restoration sites, compiling background information, pre-treatment inventory of sites, completing restoration plans working with a wetland specialist, and developing partnerships, permits, and budgets for the implementation of the restoration projects.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 167,866	Habitat-Based Actions	Riparian and Wetlands Action Plan	Basin-Wide
35	COL-F20-W-3018-DCA	<p>Land securment in our Columbia Region <i>F20 land securement</i> This project will designate funds for high-priority land securement projects identified in coordination and collaboration with Kootenay Conservation Program's Securement Committees. Land securement is critical action for habitat protection and conservation in the Columbia.</p>	FWCP	\$ 646,917	Land Securement	Riparian and Wetlands Action Plan	Basin-Wide
36	COL-F20-W-3013-DCA	<p>Enhancing habitat for upland and dryland species in the East Kootenay <i>F20 East Kootenay ecosystem enhancement</i> This project focuses on the oversight, coordination, and implementation of restoration activities in the East Kootenay, including prescription development; slashing, piling, and burning; masticating; burn-planning and burning; and post-burn monitoring and reporting.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 345,949	Habitat-Based Actions	Upland and Dryland Action Plan	East Kootenay

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#	Project ID	2019-2020 Annual and Ongoing Wildlife Projects	Project Lead	FWCP Funding	Project type	Action Plan Alignment	Sub-region
37	COL-F20-W-3012-DCA	<p>Enhancing habitat for upland and dryland species in the West Kootenay <i>F20 West Kootenay ecosystem enhancement</i> This project focuses on the oversight, coordination, and implementation of upland and dryland ecosystem restoration activities in the West Kootenay, including prescription development; slashing, piling, prescribed burn-planning and burning; and post-burn monitoring and reporting.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 210,064	Habitat-Based Actions	Upland and Dryland Action Plan	West Kootenay
38	COL-F20-W-3016-DCA	<p>Supporting Northern Leopard Frog recovery in our Columbia Region <i>F20 Northern Leopard Frog recovery</i> This project involves the inventory monitoring and stewardship of the endangered Northern Leopard Frog population at the Creston Valley Wildlife Management Area. This population is the majority of remaining Northern Leopard Frogs in BC, and serves as the source population for re-introductions and captive assurance populations at the Vancouver Aquarium and Calgary Zoo.</p>	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	\$ 198,324	Species-Based Actions	Species of Interest Action Plan	West Kootenay
Annual and Ongoing Wildlife Project Total:				\$ 2,247,816			
2019 - 2020 PROJECT SPEND TOTAL:				\$ 5,750,243			