Ministry of
Forests, Lands and
Natural Resource Operations

FISH COLLECTION PERMIT
Fish Salvage

File: 34770-20

ATS Project: 120106
Permit No.: FJ16-225327 - **AMENDED JUNE 8, 2017**

Permit Holder: BC Hydro and Power Authority – Karen von Muehldorfer
Suite 1100, 1055 Dunsmuir, 6th Floor
Vancouver BC V7X 1V5

Authorized Persons: Karen von Muehldorfer, Kurt Merrifield, Tanya Seebacher, Bobby Bedingfield and Shawn Giesbrecht.

Pursuant to section 19 of the *Wildlife Act*, RSBC 1996, Chap. 488, and section 18 of the Angling and Scientific Regulations, BC Reg. 125/90, the above named persons are hereby authorized to collect fish for scientific purposes from non-tidal waters subject to the conditions set forth in this Permit:

Permitted Sampling Period: June 30, 2016 to December 31, 2023

Permitted Waterbodies: Peace Region – Peace River and tributaries (230)

Permitted Sampling Techniques: MT, SN, DN and EF (subject to permit terms and conditions)

Potential Species: See Appendix C (subject to permit terms and conditions)

Provincial Conditions: (Permit holders must be aware of all terms and conditions):

- **Variance approved for Provincial Condition #13:** Electrofishing may be conducted in the vicinity of spawning gravel, redds, or spawning fish, or around gravels which are capable of supporting eggs or developing embryos of any species of salmonid at a time of year when such eggs or embryos may be present.
- **Variance approved for Provincial Condition #12:** When water temperatures are less than 5°C, all other permitted salvage methodologies will be employed prior to the use of electrofishing wherever feasible during the salvage operation.

All other Provincial conditions apply. See Appendix A

Region Specific Conditions:

- **Variance approved for Regional Condition #3:** Electrofishing will be permitted between September 15 and June 15 in streams containing bull trout.
- The proponent must report annually on activities conducted under this permit, including locations sampled.
- Fish salvage operations in large areas (#3) can involve greater technical and logistical complexity due to the spatial scale. Salvage plans for these large areas (i.e., >400m2) will be developed by Qualified Environmental Professionals in accordance with the CEMP, and will be provided to FLNRO prior to the commencement of fish salvage operations.
- The regional manager and relevant officers retain section 25 authority.

All other Regional conditions apply. See Appendix A

Authorized by:

Chris Addison
Regional Manager
Recreational Fisheries & Wildlife Programs
Peace Region

Date: **June 8, 2017** Permit Fee $25

This permit supersedes FJ16-225327 issued on October 17, 2016

Any contravention or failure to comply with the terms and conditions of this permit is an offense under the *Wildlife Act*, RSBC 1996, Chap. 488 and B.C. Reg. 125/90.

Appendix A: Fish Collection Permit Conditions

Any Variation of the following terms and conditions will require explicit authorization by the appropriate regional Fish & Wildlife Section Head.

Provincial Conditions

1. This collecting permit is not valid
   - in national parks,
   - in provincial parks unless a Park Use Permit is also obtained,
   - in tidal waters,
   - for eulachon or for salmon* other than kokanee, or
   - for collecting fish by angling unless the permit holder and crew members possess a valid angling licence.

   This collecting permit is **only** valid for species listed as threatened, endangered or extirpated under the Species at Risk Act (SARA) **in conjunction with a permit issued under Section 73 of SARA from Fisheries and Oceans Canada.**

   *Contact the Department of Fisheries and Oceans for fish collecting permits for salmon, eulachon or SARA listed species (see Appendix B).

2. The permit holder (or the project supervisor) named on the application for a scientific collection permit will carry a copy of this permit while engaged in fish collecting and produce it upon request of a conservation officer, fisheries officer or constable.

3. Any specimens surplus to scientific requirements and any species not authorized for collection in this permit shall be immediately and carefully released at the point of capture.

4. Fish collected under authority of this permit shall not be used for food or any purpose other than the objectives set out in the approved application for a scientific collection permit. The permit holder shall not sell, barter, trade, or give away, or offer to sell, barter, trade or give away fish collected under authority of this permit. Dead fish shall be disposed of in a manner that will not constitute a health hazard, nuisance or a threat to wildlife.

5. No fish collected under authority of this permit shall be
   - transported alive unless authorized by this permit, or
   - transplanted unless separately authorized by the Federal/Provincial Fish Transplant Committee.

6. The permit holder shall, within 90 days of the expiry of this permit, submit a report of fish collection activities. Interim reports may also be required and shall be submitted as required by the permit issuer. All submissions must be filed electronically to: http://www.env.gov.bc.ca/fish_data_sub/index.html

   Reporting specifications, information and templates are available from this website and outline the mandatory information requirements. Prior notification of submission or questions regarding data report standards can be made to: fishdatasub@gov.bc.ca

7. This collecting permit is subject to cancellation at any time and shall be surrendered to a conservation officer on demand or to the issuer upon written notice of its cancellation.

8. This permit is valid only for the activities approved on the application form and in accordance with any restrictions set out therein.

9. This permit is valid only for trained, qualified staff named in the Application. The permit holder will comply with all Worker's Compensation Board requirements and other regulatory requirements. Permit holders are responsible for ensuring staff members listed on the permit are properly certified for specific sampling methods or activities (e.g. electroshocking).

10. Any workers not listed on the permit must be supervised by the permit holder or one of the additional persons as named on the permit.

11. All sampling equipment that has been previously used outside of B.C. must be cleaned of mud and dirt and disinfected with 100mg/L chlorine bleach before using in any water course to prevent the spread of fish pathogens (e.g. Whirling disease) and / or invasive plant species. Any washed off dirt or mud must be disposed of in a manner such that it cannot enter a watercourse untreated.

12. No electrofishing is to take place in waters below five degrees C.

13. Electrofishing may not be conducted in the vicinity of spawning gravel, redds, or spawning fish, or around gravels which are capable of supporting eggs or developing embryos of any species of salmonid at a time of year when such eggs or embryos may be present.

14. Angling must only occur in accordance with the regulations specified in the current BC Freshwater Fishing Regulations Synopsis.

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Appendix A: Fish Collection Permit Conditions Continued

Region Specific Conditions

Peace Region

- The permit holder must advise Region 7B (Peace) of sampling activities 48 hrs prior to field operations. Please complete the following notification form: http://www.env.gov.bc.ca/pasb/reports/fish/permit_notify7b.html
- Voucher specimens for all regionally significant red and blue-listed species (3 per species) must be submitted to the Regional Fish Information Specialists as per RISC standards.
- No electrofishing will be permitted between September 15 and June 15 in streams containing bull trout.
- All sampling gear follow Association of Professional Biologists' advisory practice bulletin #5. Practice Advisory – Didymo, see: https://www.professionalbiology.com/sites/default/files/pdfs/Didymo.pdf
- The proponent must report annually on activities conducted under this permit, including locations sampled.
- The regional manager and relevant officers retain section 25 authority.
- When water temperatures are less than 5°C, all other permitted salvage methodologies will be employed prior to the use of electrofishing wherever feasible during the salvage operation.
- Fish salvage operations in large areas (#3) can involve greater technical and logistical complexity due to the spatial scale. Salvage plans for these large areas (i.e., >400m2) will be developed by Qualified Environmental Professionals in accordance with the CEMP, and will be provided to FLNRO prior to the commencement of fish salvage operations.

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Appendix B: Table 1 - Species at Risk

The following are species at risk that have been listed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as either endangered, threatened or a species of special concern. Species also listed under the Species at Risk Act (SARA) are identified with an asterisk, and are subject to additional permitting requirements through the Federal Department of Fisheries and Oceans (DFO).

Common Name	Scientific Name
Benthic Paxton Lake Stickleback	**Gasterosteus sp.*
Benthic Vananda Creek Stickleback	**Gasterosteus sp.*
Limnetic Paxton Lake Stickleback	**Gasterosteus sp.*
Limnetic Vananda Creek Stickleback	**Gasterosteus sp.*
Nooksack Dace	**Rhinichthys sp.*
Morrison Creek Lamprey	**Lampetra richardsoni*
Vancouver Lamprey (Cowichan Lake Lamprey)	**Lampetra macrostoma*
Cultus Pygmy Sculpin	**Cottus sp.*
Shorthead Sculpin	**Cottus confusus*
Hotwater Physa	**Physella wrighti*
Limnetic Enos Lake Stickleback	*Gasterosteus sp.*
Benthic Enos Lake Stickleback	*Gasterosteus sp.*
Salish Sucker	*Catostomus sp.*
Speckled Dace	*Rhinichthys osculus*
Charlotte Unarmoured Stickleback	*Gasterosteus aculeatus*
Columbia Mottled Sculpin	*Cottus bairdi hubbsi*
Giant Stickleback	*Gasterosteus sp.*
Green Sturgeon	*Acipenser medirostris*
Umatilla Dace	*Rhinichthys umatilla*
West Slope Cutthroat Trout	**Oncorhynchus clarki lewisi*
White Sturgeon	*Acipenser transmontanus*

Applications for permits to specifically collect and retain listed species must be reviewed by the appropriate provincial expert, who will screen permits to ensure that any impacts on listed species are acceptable. For white sturgeon the contact is Steve McAdam (steve.mcadam@gov.bc.ca). For listed non-game freshwater fish the contact is Jordan Rosenfeld (jordan.rosenfeld@gov.bc.ca).

Appendix C: Potential Species

Common Name	Scientific Name	Code	Common Name	Scientific Name	Code
Artic Grayling	*Thymallus arcticus*	GR	Finescale Dace	Phoxinus neogaeus	FDC
Brook Stickleback	*Culaea inconstans*	BSB	Flathead Chub	Platygobio gracilis	FHC
Bull Trout	*Salvelinus confluentus*	BT	Goldeye	Hiodon alosoides	GE
Burbot	*Lota lota*	BB	Kokanee	Oncorhynchus nerka	KO
Mountain Whitefish	*Prosopium williamsoni*	MW	Lake Chub	Couesius plumbeus	LKC
Northern Pearl Dace	*Margariscus margarita*	PDC	Lake Trout	Salvelinus namaycush	LT
Northern Pike	*Esox lucius*	NP	Lake Whitefish	Coregonus clupeaformis	LW
Northern Pikeminnow	*Ptychocheilus oregonensis*	NSC	Largescale Sucker	Catostomus macrocheilus	CSU
Northern Redbelly Dace	*Phoxinus eos*	RDC	Longnose Dace	Rhinichthys cataractae	LNC
Peamouth Chub	*Mylocheilus caurinus*	PCC	Longnose Sucker	Catostomus catostomus	LSU
Prickly Sculpin	*Cottus asper*	CAS	Slimy Sculpin	Cottus cognatus	CCG
Pygmy Whitefish	*Prosopium coulteri*	PW	Spoonhead Sculpin	Cottus ricei	CRI
Rainbow Trout	*Oncorhynchus mykiss*	RB	Spottail Shiner	Notropis hudsonius	STC
Redside Shiner	*Richardsonius balteatus*	RSC	Troutperch	Percopsis omiscomaycus	TP
Walleye	*Stizostedion vitreus*	WP	White Sucker	Catostomus commersoni	WSU
Yellow Perch	*Perca flavescens*	YP			

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