



FISH COLLECTION PERMIT Research

Amended November 3, 2021

File: 34770-20

Permit No.: FJ20-606663

Permit Holder: British Columbia Hydro & Power Authority – Michael McArthur
333 Dunsmuir Street
Vancouver BC V6B 5R3

Authorized Persons: Brent Mossop, Nich Burnett, Dave Hunter, Kael Hanak, Michael McArthur, Dani Ramos-Espinoza, LJ Wilson, Annika Putt, Katrina Cook, Mike Chung, Stephanie Lingard, Angela Ratzburg, Jen Buchanan, Collin Middleton, Cole Martin, Rick Palmer, Ian MacLeod, Peter Frederiksen, Cris Gomez, Ryan Morin, Daniel King, Adrienne Ducharme, Megan Love, Dustin Ford, Demitria Burgoon, Josh Sutherby, Paul Grutter, David Roscoe, Geoff Sawatzky, Kevin Little, Sean Hollis, Natasha Audy, Corby Shurgot, Amy Kavalinas, Amy Cardinal, Brad Hildebrand, Chris King, Jason Baird, Jacqueline Pizzey, and Peter Merth.

Pursuant to section 18 of the Angling and Scientific Collection Regulation, BC Reg. 125/90, the above-named persons are authorized to collect fish for scientific purposes (from non-tidal waters) subject to the terms set forth in this Permit:

Permitted Sampling Period: November 3, 2021 to December 1, 2023

Permitted Waterbodies: Peace Region – Peace River (230)

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

Targeted Species: See Appendix D. (subject to permit terms)

Permitted Sampling: See Appendix E.

Provincial Terms: (Permit holder and authorized persons must be aware of all terms):

See Appendix A.

Region Specific Terms: See Appendix A.

- Contingency sampling is restricted to 3km downstream of Site C. The Ministry of Forests, Lands, Natural Resource Operations and Rural Development must be notified within 48 hours of the start of contingency sampling.
- Annual progress reports submitted to Ministry of Forests, Lands, Natural Resource Operations and Rural Development.
- Transportation of live fish is authorized to one of 4 proposed release locations

Authorized by

Greg Van Dolah
Regional Manager
Recreational Fisheries & Wildlife Programs
Peace Region

Date: November 3, 2021

Permit Fee \$25

This permit supersedes permit FJ20-606663 issued on November 3, 2020

Appendix A: Fish Collection Permit Terms

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

Provincial Terms

1. 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.**

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

2. Any specimen's surplus to scientific requirements and any species not authorized for collection in this permit must be immediately and carefully released at the point of capture.
3. Fish collected under authority of this permit must not be used for food or any purpose other than the objectives set out in this permit. Dead fish must be disposed of in a manner that will not constitute a health hazard, nuisance or a threat to wildlife.
4. No fish collected under authority of this permit must be transplanted unless separately authorized by the Federal/Provincial Introductions and Transfers Committee.
5. The permit holder must, within 90 days (120 days for the Kootenay/Boundary region and Peace region) of the expiry of this permit, submit a report of fish collection activities. Interim reports may also be required and must be submitted as required by the permit issuer. All submissions must be filed electronically to: <https://www2.gov.bc.ca/fish-data-submission-process>.

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

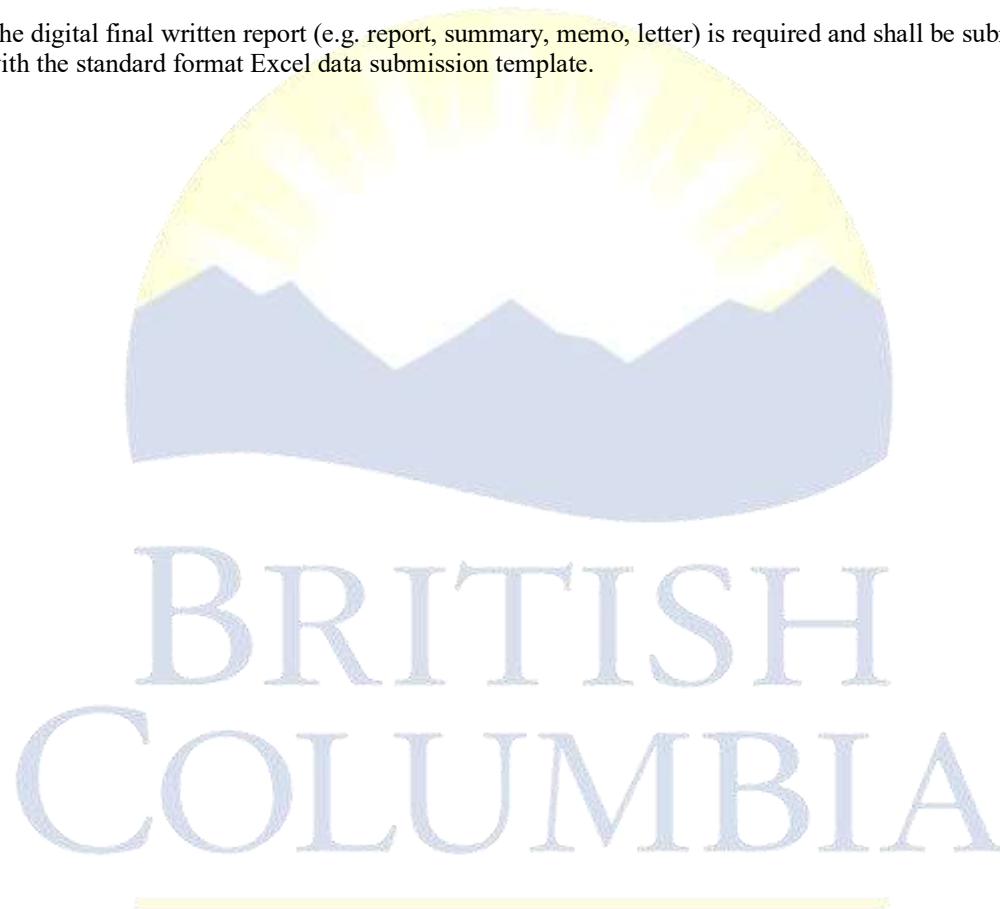
6. The permit holder must comply with all Workers' Compensation Board requirements and other regulatory requirements. The permit holder is responsible for ensuring authorized persons listed on the permit are properly certified for specific sampling methods or activities (e.g. electroshocking).
7. Any workers not listed on the permit must be supervised by the permit holder or one of the authorized persons named on the permit.
8. 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.
9. No electrofishing is to take place in waters having a temperature less than five degrees C.
10. No sampling of fish in waters having a temperature greater than twenty degrees C.
11. Electrofishing must 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.

Region Specific Terms

Peace Region

- No electrofishing is 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 – Dydimo, see:
<http://a100.gov.bc.ca/pub/eirs/viewDocumentDetail.do?fromStatic=true&repository=BDP&documentId=9469>
- All fishing gear (e.g. gill nets, minnow traps, etc.) that are left unattended must have the permit holders contact information (name and phone number).
- Within 120 days of expiry of this permit, the permit holder must submit a report that summarizes all field and any laboratory analysis data related to the sampling program (typically location of catch, species, individual fish tissue metals analysis, moisture content, fish length and weight, etc., and as applicable) and all associated raw laboratory data.

The digital final written report (e.g. report, summary, memo, letter) is required and shall be submitted along with the standard format Excel data submission template.



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

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).

BRITISH
COLUMBIA

Appendix C: Advisory

GENERAL

- It is the permit holder's responsibility to be aware of all applicable laws and the limits of this permit. For example,
 - This permit **does not** authorize the collection of fish in national or provincial parks.
 - This permit does not authorize the collection of fish in tidal waters.
 - This permit does not authorize the collection of eulachon or for salmon, other than kokanee.
 - This permit is NOT authority to angle for fish without a valid angling licence.
 It is the responsibility of the permit holder to obtain proper authorization.
- The Province is not liable for any illness contracted through fish handling. It is the responsibility of the permit holder to inform themselves of possible health hazards, and to ensure that all reasonably necessary safety measures are undertaken.
- If applicable, the permit holder is responsible for renewing his or her own permit. The issuer is not obliged to send a reminder notice.

LEGISLATION

Below is a non-exhaustive list of provisions under the *Wildlife Act* and regulations that are relevant to this permit. It is the permit holder's responsibility to be aware of any provisions under the Act or regulations that may apply to this permit.

Wildlife Act

Suspension and cancellation of permits

- 25** (1) A regional manager, for any cause he or she considers sufficient, and after providing an opportunity for the person to be heard, may suspend or cancel a permit held by a person, may order that the person is ineligible to obtain or renew a permit for a period and, if he or she does make an order, must inform the person of the period of ineligibility.
- (2) An officer may, without the necessity of holding a hearing, exercise the powers of a regional manager under this section to suspend a permit and, if a permit is suspended by an officer, the matter must be referred to the regional manager, who may confirm, reduce, extend or terminate the suspension.

Documents not transferable

- 81** Except as authorized by regulation or as otherwise provided under this Act, a licence, permit or limited entry hunting authorization is not transferable, and a person commits an offence if the person
- (a) allows his or her licence, permit or limited entry hunting authorization to be used by another person, or
 - (b) uses another person's licence, permit or limited entry hunting authorization.

Failure to pay fine

- 85** (1) This section applies if a person
- (a) fails to pay, within the time required by law, a fine imposed as a result of the person's conviction for an offence under this Act or the Firearm Act, and
 - (b) has been served with notice of this section.
- (2) In the circumstances referred to in subsection (1),
- (a) the person's right to apply for or obtain a licence, permit or limited entry hunting authorization under this Act is suspended immediately and automatically on the failure to pay the fine,
 - (b) all licences, permits and limited entry hunting authorizations issued to that person under this Act are cancelled immediately and automatically on the failure to pay the fine,
 - (b.1) the person must not apply for employment as an assistant guide,
 - (b.2) the person must not guide as an assistant guide, and
 - (c) the person commits an offence if, before that fine is paid, the person
 - (i) applies for, or in any way obtains, a licence, permit or limited entry hunting authorization under this Act,
 - (ii) does anything for which a licence, permit or limited entry hunting authorization under this Act is required,
 - (iii) applies for employment as an assistant guide, or
 - (iv) guides as an assistant guide.

Proof of identity and authorization

97 (1) In this section, “**authorization**” means a licence, permit or limited entry hunting authorization issued under this Act.

- (2) Subject to subsection (5), a person who is required to hold an authorization must, on the request of an officer,
 - (a) state the person’s name and address,
 - (b) produce prescribed photo identification, and
 - (c) demonstrate in accordance with subsection (3) that the person holds the authorization.
- (3) A person may demonstrate that the person holds an authorization by
 - (a) producing the authorization, or
 - (b) unless the regulations require that the original authorization be produced,
 - (i) producing a legible copy of the authorization, or
 - (ii) if authorized by the regulations, stating a number assigned to the person by the director as an identification number for the person.
- (4) Subject to subsection (5), a person who would be required to hold a licence or permit issued under this Act were the person not exempt under section 11 (9) or 12 (b) must, on the request of an officer,
 - (a) state the person’s name and address, and
 - (b) produce prescribed photo identification.
- (5) Subsections (2) (b) and (4) (b) do not apply to a person in a prescribed class of persons.
- (6) A person who contravenes subsection (2) or (4) commits an offence.

Wildlife Act General Regulation

Proof of identity

21.01 (1) For the purposes of section 97 (2)(b) and (4)(b) of the Act, the following photo identification is prescribed:

- (a) valid photo identification issued to a person by any of the following:
 - (i) the government of Canada;
 - (ii) the government of a province or territory, or an agent of the government of a province or territory, in which the person has a current address;
 - (iii) the Nisga’a Lisims Government, if the person is a Nisga’a citizen;
 - (iv) a treaty first nation, if the person is a treaty first nation member of the treaty first nation;
 - (b) in the case of a person who is a non-resident alien, valid photo identification in the form of
 - (i) a passport, or
 - (ii) a driver’s licence issued to the person by a foreign jurisdiction in which the person has a current address;
 - (c) in any case, a valid NEXUS card.
- (2) For the purposes of section 97 (5) of the Act, persons under 16 years of age are prescribed as exempt from the requirement to produce photo identification.

Freshwater Fish Regulation

Offences

2 A person commits an offence where the person

- (a) has in possession,
- (b) transports, or
- (c) traffics in

live fish unless authorized by a permit or a licence.

Wildlife Act Permit – COVID 19 Conditions, May 8, 2020

- COVID 19 Prevention and Risks information reference BC Centre for Disease Control (BCCDC) <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/prevention-risks>)
- If you have COVID-19, or think you might have it, help prevent spreading by following the instructions from the BCCDC: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/about-covid-19/if-you-are-sick>
- Symptoms of human illness should be reported to public health and those individuals should not perform any field work (<http://www.bccdc.ca/health-info/diseases-conditions/covid-19/about-covid-19/symptoms>)
- Field work should be limited to critical work only

- Field crew should:
 - not have been out of the country for 2 weeks
 - practice effective physical distancing through the duration of field work
 - be limited to those essential for performing tasks (no volunteers)
 - avoid shared vehicle travel but, when required, use best practices for reducing potential contact (face masks, staggered seating, no crew with potential contact with positive cases of COVID 19)
 - apply 2 metre personal separation
 - practice proper hygiene and cleaning of contact surfaces as possible, including equipment that has been in contact with wildlife
- Additional situation specific precautions include:
 - for amphibians, specific biosecurity protocols are required to protect those species, and these must be included in the Animal Care Application.
 - for other species where direct contact is required, wear appropriate disposable gloves, face (cloth or home made) masks, and after the handling, use hand sanitizer/wipes
 - if close contact with the animal is required (e.g. restraint, or any procedure that brings a person's face close to the animal's face or hair coat/fur), additional personal protective equipment (PPE) (e.g. mask, face shield if available) can be utilized to further reduce risk, especially to protect from facial contact (eyes, nose, mouth) with the animal directly (hair coat/fur) or with respiratory droplets/aerosols
- At this time, due to the uncertainty around human to wildlife transmission of the virus causing COVID 19, it is important for field workers to report any sick/dead/unusual findings of wild animals to the Wildlife Health Program for assessment and potential research through testing. Please report such cases to Dr. H. Schwantje at helen.schwantje@gov.bc.ca or 250-361-7619.



BRITISH
COLUMBIA

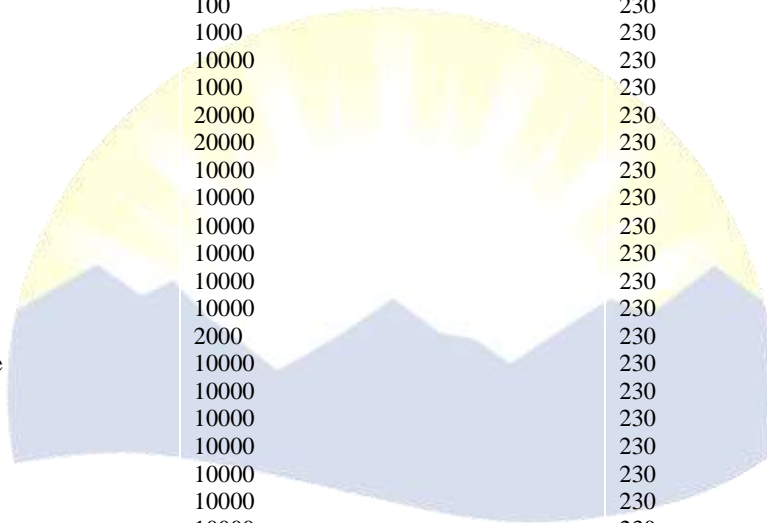
Appendix D: Targetted Species

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



Appendix E: Permitted Sampling

Target Species	# of Fish	Sample Waterbody/Code
Bull Trout	2000	230
Arctic Grayling	3000	230
Brook Trout	500	230
Kokanee	1000	230
Lake Whitefish	1000	230
Lake Trout	100	230
Mountain Whitefish	30000	230
Pygmy Whitefish	500	230
Rainbow Trout	3000	230
Burbot	500	230
Goldeye	100	230
Northern Pike	1000	230
Yellow Perch	10000	230
Walleye	1000	230
Largescale Sucker	20000	230
Longnose Sucker	20000	230
White Sucker	10000	230
Brook Stickleback	10000	230
Finescale Dace	10000	230
Flathead Chub	10000	230
Lake Chub	10000	230
Longnose Dace	10000	230
Northern Pikeminnow	2000	230
Northern Redbelly Dace	10000	230
Peamouth	10000	230
Pearl Dace	10000	230
Redside Shiner	10000	230
Spottail Shiner	10000	230
Trout Perch	10000	230
Prickly Sculpin	10000	230
Slimy Sculpin	10000	230
Spoonhead Sculpin	10000	230



BRITISH
COLUMBIA