



(Photograph by: Northwest Hydraulic Consultants Ltd. View Looking upstream below the Beaver Dam during low flow conditions)

Endako River Weir Project Environmental Management Plan

Upper Fraser Fisheries Conservation Alliance (UFFCA)



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Date	Version	Review Type	Reviewed by
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Mar. 24, 2021	A	Senior	Trisha Merriman, R.P. Bio., CPESC, PMP
Mar. 25, 2021	A	Document	Amanda Wamsteeker, B.NRSc, PMP
Mar. 29, 2021	B	Client	Andrea Sterling, M.Sc., R.P. Bio.
Mar. 30, 2021	C	Final	Mark Asquith B.Sc., CPESC.

Disclaimer

This report is rendered solely for the use of the Upper Fraser Fisheries Conservation Alliance (UFFCA) in connection with the Endako River Weir Project (the Project), and no person may rely on it for any other purpose without Triton Environmental Consultants Ltd.'s (Triton) prior written approval. Should a third party use this report without Triton's approval, they may not rely upon it. Triton accepts no responsibility for loss or damages suffered by any third party because of decisions made or actions taken based on this report.

The objective of this report is to provide an Environmental Management Plan (EMP) for UFFCA for the above noted Project.

This report is based on facts and opinions contained within the referenced documents, including the results of any data collection programs carried out in relation to this report. We have attempted to identify and consider facts and documents relevant to the scope of work, accurate as of the time during which we conducted this analysis. However, the results, our opinions, or recommendations may change if new information becomes available, or if information we have relied on is altered.

The following assumptions were relied on during the preparation of this report:

- All information available about the Project was provided by UFFCA.
- UFFCA will review and provide input/comments regarding construction approach prior to submission to any government agency or release to construction contractors.
- An Environmental Monitor (EM) will be onsite during all work in environmentally sensitive areas.

We applied accepted professional practices and standards in developing and interpreting data. While we used accepted professional practices in interpreting data provided by UFFCA or third-party sources, we did not verify the accuracy of any such data.

This report must be considered as a whole; selecting only portions of this report may result in a misleading view of the results, our opinions, or recommendations.

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1.0 Introduction

1.1 Project Description

The Upper Fraser Fisheries Conservation Alliance (UFFCA) is proposing to install a passive rock weir on the Endako River, at the outlet of Burns Lake, British Columbia (BC) (Figure 1 and 2). The intent of this weir is to provide water storage in Burns Lake for release during Chinook and Kokanee spawning windows. The constructed weir will enhance overall flow consistency for migration and spawning likelihood in the Endako River. Activities anticipated to occur include Beaver dam removal, clearing and access grading, installation of an arched rock weir and side-channel slotted-fishway, riparian planting, and site reclamation.

Triton Environmental Consultants Ltd. (Triton) was retained by UFFCA to prepare this Environmental Management Plan (EMP), and to provide a qualified Environmental Monitor (EM) who will provide training, mentoring and oversight to UFFCA members and construction personnel during the Project. The construction contractor (the Contractor) for the Project is M4 Enterprises out of Vanderhoof, BC.

1.2 Scope of Work and Relevant Documents

An EMP is an action plan that outlines and details environmentally sensitive aspects of the Project and provides mitigation and monitoring measures aimed at reducing or eliminating environmental impact at all levels of the Project. This EMP outlines the proposed scope of work that will be required to complete the weir installation and the applicable environmental mitigation plans, including:

- Erosion and sediment control;
- Invasive plant management;
- Waste management;
- Wildlife management;
- Air quality and dust control;
- Spill contingency;
- Environmental monitoring requirements; and
- Environmental procedures for the scope of work.

Environmental legislation, best management practices (BMPs), and guidance documents relevant to the project include, but are not limited to, the following:

- *Fisheries Act*;
- *Water Sustainability Act*;
- *Canadian Environmental Protection Act*;
- *Environmental Management Act*;
- *Migratory Birds Convention Act*;

- *Wildlife Act*;
- *Species at Risk Act*;
- Terms and Conditions for *Water Sustainability Act* Changes In and About a Stream as specified by Ministry of Forests, Lands, Natural Resource Operations, and Rural Development (FLNRORD) Habitat Officers, Skeena Region (BC MFLNRORD 2018);
- Standards and Best Practices for Instream Works (BC WLAP 2004);
- Best Management Practices for Amphibian and Reptile Salvages in British Columbia - Version 1.0 (BC MFLRNO 2016); and
- A Field Guide to Fuel Handling, Transportation & Storage (BC MWLAP 2002).

1.3 Key Personnel and Contact Information

A list of contacts for the Project is provided in Table 1.

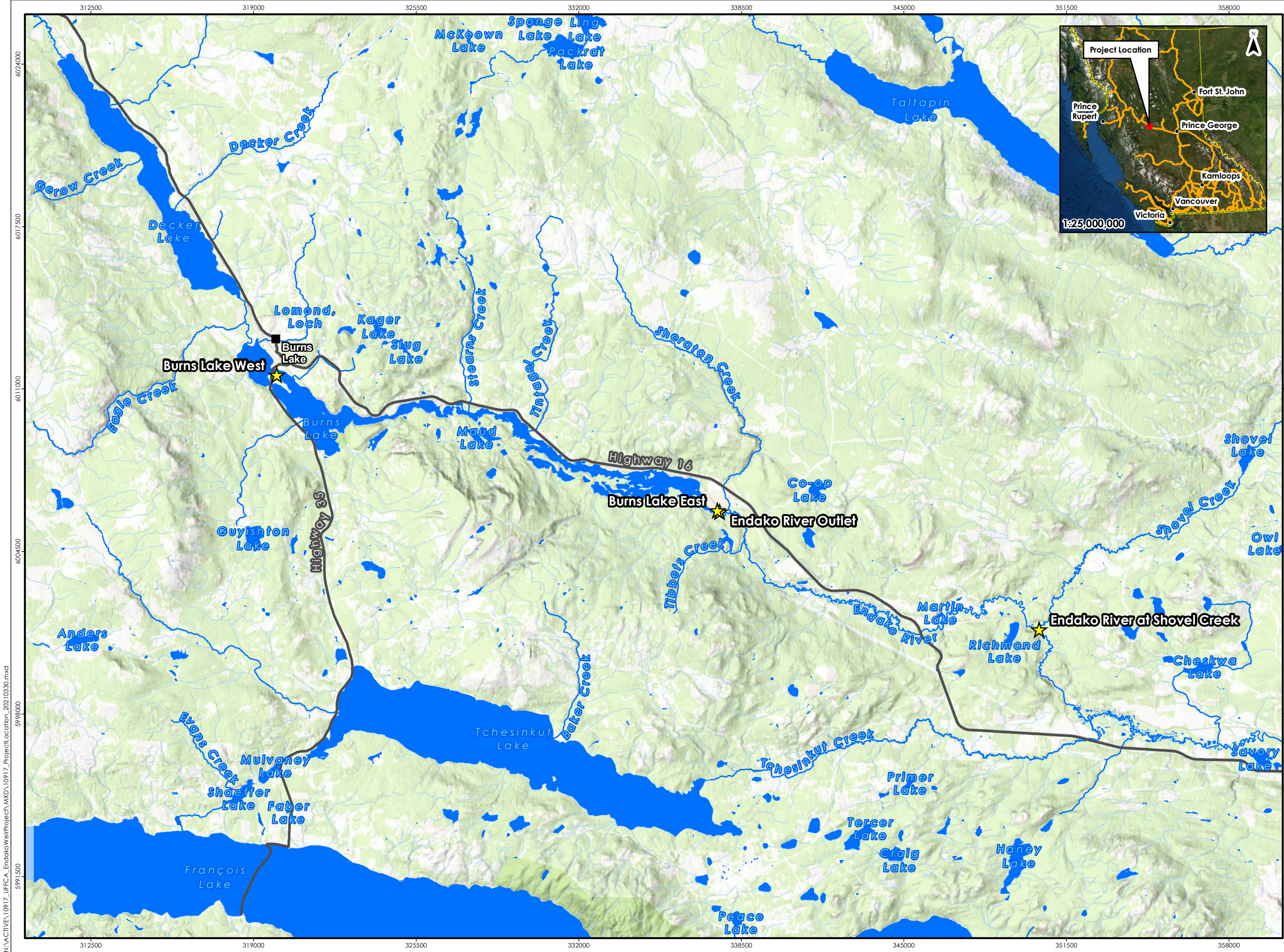
Table 1. Project contact list

UFFCA			
Technical Project Manager	Andrea Sterling	Ph. 250-981-6062	Email: andrea@sabiology.ca
Project Manager	Michelle Tung		Email: michelle@mtung.ca
Executive Director	Gord Sterritt		Email: gord.sterritt@upperfraser.ca
Construction Contractor – M4 Enterprises Ltd.			
Construction Manager	Paul Manwaring	Ph. 250-567-0547	Email: paulm@m4enterprises.ca
Site Supervisor	Dustin Rumley	Ph. 250.966.3407	Email: dustin@m4enterprises.ca
Triton Environmental Consultants			
Project Manager / Environmental Technical Lead	Mark Asquith	Ph. 250.562.9155 Cell. 250.640.1241	Email: masquith@triton-env.com
Emergency Management BC			
Spill Reporting (to all receiving environments)		1-800-663-3456	

1.4 Project Schedule and Activities

The exact construction schedule is currently unknown; however, Beaver dam removal is anticipated before freshet and construction is likely to commence mid July 2021. Project activities are expected to occur in the following sequence:

- Removal of Beaver dam, Spring 2021;
- Site isolation and associated fish salvage;
- Construction of arched rock weir;
- Installation of side-channel slotted-fishway;
- Removal of site isolation materials; and
- Reclamation and restoration of riparian areas.



Upper Fraser Fisheries
Conservation Alliance

Figure 1

Endako Weir Water level
Monitoring Locations

Legend

- Cities and Towns
- ★ Water Level Monitoring Locations
- ~ Major Roads
- ~ Watercourse

Sources and Disclaimer

1. Base map Source: ESRI World Topographic Base
2. Base map Data: DataBC Data Catalogue (<https://catalogue.data.gov.bc.ca/>)
3. Disclaimer: This map is a visual aid only to be used together with the accompanying report, including and incorporating any disclaimer contained therein. This map has been prepared to illustrate the results of our work, and is **not intended to be used for navigational purposes**. Information displayed on this map is based, in whole or in part, on geographic information that may have been provided by third parties, including government data. Triton Environmental Consultants Ltd. disclaims (without limiting the generality of the foregoing) all responsibility for the accuracy of any such third party information, regardless of the source.



1:150,000

UTM Zone 10 (NAD 1983)

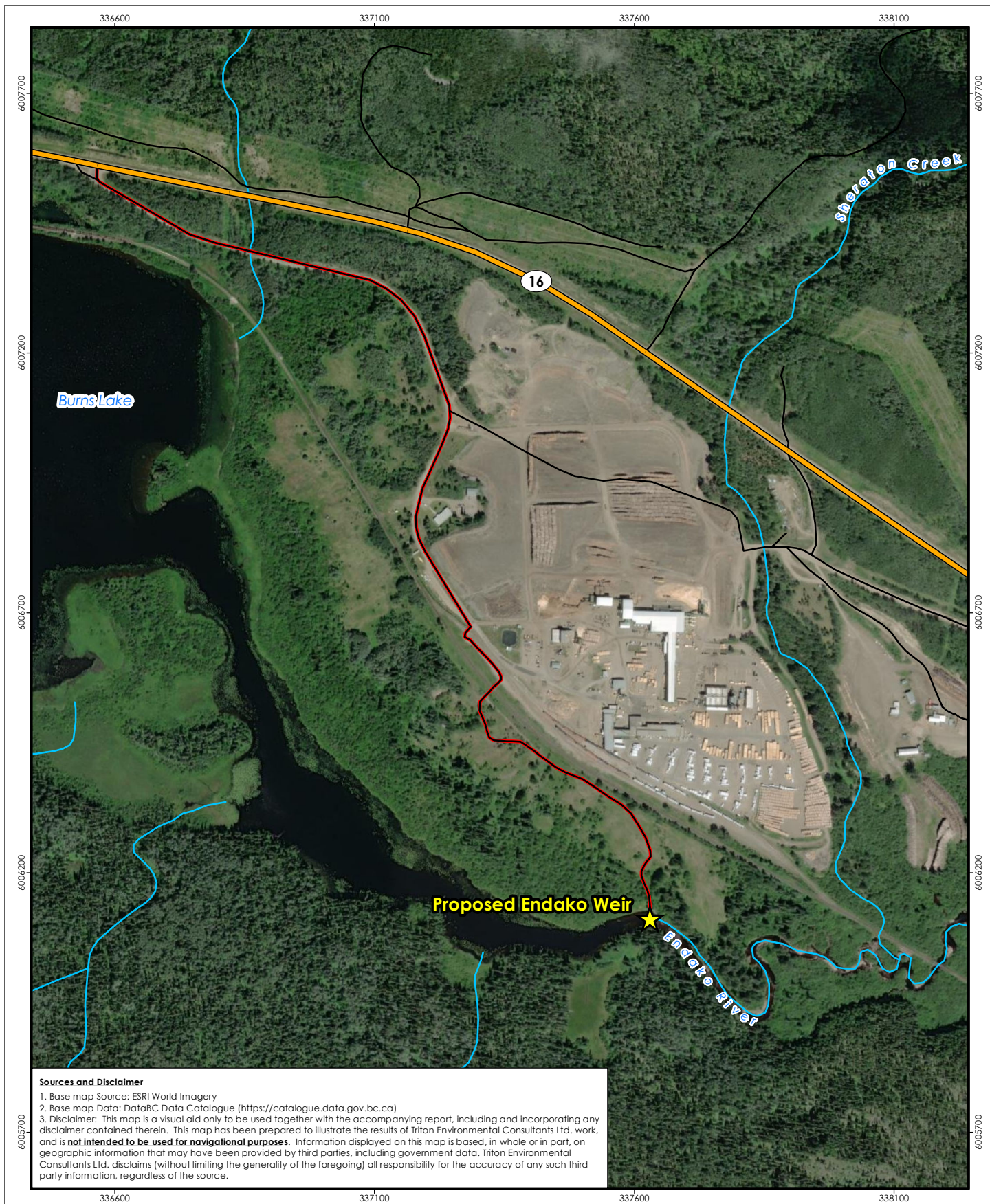
Date: March 30, 2021

Project Number: 10917

Kilometers

0 1 2 4 6 8

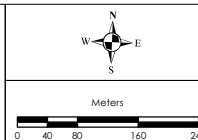
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Figure 2
Endako River Proposed Weir Location

- Access Road
- Highway
- Road
- Watercourse



Project No: 10917
Date: Mar 30, 2021
Scale: 1:10,000
Map Projection: UTM Zone 10 (NAD 1983)

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2.0 Environmental Sensitivities

2.1 Aquatic Resources

The Project is located on the Endako River (Watershed Code (WSC) 180-374000-95200-01900) at the outlet of Burn Lake. A search of iMapBC indicates the key fish present in Burn Lake and the Endako River are known to contain: Brassy Minnow (*Hybognathus hankinsoni*), Burbot (*Lota lota*), Chinook Salmon (*Oncorhynchus tshawytscha*), Kokanee (*Oncorhynchus nerka*), Lake Chub (*Couesius plumbeus*), Leopard Dace (*Rhinichthys falcatus*), Longnose Sucker (*Catostomus catostomus*), Mountain Whitefish (*Prosopium williamsoni*), Northern Pikeminnow (*Ptychocheilus oregonensis*), Prickly Sculpin (*Cottus asper*), Rainbow Trout (*Oncorhynchus mykiss*), Red-side Shiner (*Richardsonius balteatus*), Sockeye Salmon (*Oncorhynchus nerka*; MOECCS 2021).

No other watercourse present within the Project footprint.

2.2 Terrestrial Resources

2.2.1 Ecological Communities

The Project area falls within the Dry Cool Sub-Boreal Spruce (SBSdk) Biogeoclimatic Ecosystem Classification (BEC) subzone in the Bulkley Basin eco-section and Fraser Plateau ecoregion (BC MOECCS 2021). Within this BEC subzone in the Nadina Natural Resource District, there are 16 Provincially listed ecological communities of special concern (Red- and Blue-listed) that have the potential to occur (BC CDC 2021). Two of these ecological communities, mountain alder / red-osier dogwood / lady fern (*Alnus incana* / *Cornus sericea* / *Athyrium filix-femina*) and Drummond's willow / bluejoint reedgrass (*Salix drummondiana* / *Calamagrostis canadensis*) are associated with low bench flood areas and, as such, have the potential to occur within the Project area.

2.2.2 Vegetation

There are 20 Red- and Blue-listed vascular and non-vascular plants with the potential to occur in the SBS BEC zone in the Nadina Natural Resource District (BC CDC 2021). A rare plant survey was not conducted for the purposes of this report; however, it is anticipated that the Project will be contained to the historically disturbed access route to the Endako River. These disturbances may reduce the probability of encountering intact rare or endangered ecosystems or plants within the Project area.

According to the Invasive Alien Plant Program (IAPP) within the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (BC MFLNRORD), no invasive plant species have been identified within 500 meters of the Project site. Canada thistle (*Cirsium arvense*), common tansy (*Tanacetum vulgare*), oxeye daisy (*Leucanthemum vulgare*), perennial sow thistle (*Sonchus arvensis*), and yellow king devil (*Pilosella caespitosa*) have been noted along Highway 16 within one kilometer of the Project site (BC MFLNRORD 2021). Best management practices to be employed should noxious or invasive species be encountered can be found in Section 5.

2.2.3 Wildlife

The Project area likely provides some foraging opportunities for species such as Moose (*Alces alces*) and Mule Deer (*Odocoileus hemionus*). Wildlife may experience short-term negative effects because of disturbance from construction activities and avoid the Project area. However, the Project is not expected to have any long-term effects on populations in this area. Wildlife will likely avoid areas of construction activity. The riparian vegetation provides a variety of potential bird habitat including foraging, breeding, and nesting.

The Endako River, and its associated riparian areas, likely provides amphibian habitat within the Project footprint. Various species, such as the Western Toad (*Anaxyrus boreas*), a species on Schedule 1 of the *Species at Risk Act* (SARA), have the potential to occur within the Project area.

There has been historical Beaver (*Castor canadensis*) activity within the project area, including a Beaver dam immediately downstream of the proposed weir location (NHC 2018). If Beavers are observed in the general area of construction, project personnel will shut down and wait for the Beaver(s) to leave the area.

3.0 Regulatory Framework

Section 11 of the *Water Sustainability Act* (WSA) requires anyone performing work “in and about a stream” to do so under an Approval or Notification where required. Approvals are required for works of a complex nature and may take up to 140 days to process. Notifications are required for relatively simple projects (i.e., general maintenance) that do not involve any diversion of water and may take up to 45 days to process. Due to the nature of this project, UFFCA will be applying for a Section 9 Water Use License under the WSA and as such Triton will not apply for a separate Section 11 Change Approval for instream works.

Section 35(1) of the *Fisheries Act* states that no person shall carry on work, undertaking or activity that results in the harmful alteration, disruption or destruction (HADD) of fish habitat unless authorized by the Minister of Fisheries and Oceans Canada (DFO). A Request for Review will be submitted to DFO by Triton, although it is not expected that HADD of fish or fish habitat will occur.

A Fish Collection Permit will be required to salvage fish under the *Wildlife Act* prior to construction. Triton will apply to BC MFLNRORD for this permit on behalf of the Project. A separate variance to work outside the instream reduced risk window must be obtained before a salvage permit will be issued as there is no reduced risk window in the Nadina Forest District to work instream.

A General Wildlife Permit is required for the collection, transfer/salvage, and release of amphibian species under the *Wildlife Act*. As amphibians were given a moderate potential to occur within the Project area, an application to the BC MFLNRORD to salvage amphibians will be submitted by Triton.

A General Wildlife Permit under the *Wildlife Act* and a Section 11 Notification under the WSA is also required to remove the Beaver dam downstream of the proposed weir location. After the weir is constructed, UFFCA will assess if Beavers in the area are impacting the functionality of the weir. Any trapping or removal of Beavers from the Project area to protect the weir, will likely be carried out by a member of the local Burns Lake Indian Band.

3.1.1 Timing Windows

The Endako River falls within the Lakes District of the Nadina Forest District. Due to the known presence of both spring and fall spawners, including Salmon, no reduced risk work window exists within this district (BC MFLNRORD 2018), therefore, a variance will have to be applied to work instream.

The federal *Migratory Birds Convention Act* (MBCA) prohibits incidental take, which is the killing or harming of birds, or the disruption/disturbance of nests and eggs. Likewise, the BC *Wildlife Act* prohibits the disturbances or destruction of a bird, nests, or eggs. The most stringent nesting period for birds that may utilize habitats in the Nadina Forest District is anticipated to be between March 9 and September 1 (Rousseu and Drolet 2015).

Clearing and grubbing activities are required during the bird timing window, and as such, a bird nest survey and rare plant/invasive plant species assessment will be performed simultaneously by a qualified professional to identify any occupied nests and any rare or invasive plant species within the project area and will provide recommendations. The access road into the project area has limited tree cover and is only a short distance from the adjacent mill. Knowing this, all efforts to search for ground nesting birds and the above-mentioned plant species will be completed one-week prior to mobilizing equipment into site.

4.0 Erosion and Sediment Control Plan

The main objective of the Erosion and Sediment Control Plan (ESCP) is to minimize the introduction of sediment into the Endako River and surrounding vegetation. The Project will be responsible for planning, scheduling, and performing the work in such a manner that the quality of surface water flowing from the site meets Provincial water quality guidelines. Water quality monitoring is further described in Section 4.7 of this plan. Documents relevant to this ESCP include:

- BC Ministry of Water, Land and Air Protection (MLWAP) *Environmental Best Management Practices for Urban and Rural Land Development in British Columbia* (June 2004);
- BC MWLAP *Standards and Best Practices for Instream Works* prepared by the Ministry of Land, Water, Air Protection (March 2004); and
- Department of Fisheries and Oceans (DFO) *Land Development Guidelines for the Protection of Aquatic Habitat*.

4.1 Expected Site Conditions

Based on 1981-2010 climate normal from the nearest Environment and Climate Change Canada (ECCC) weather station located in Vanderhoof, BC, winters are cold, and summers are moderate with a mean daily temperature of -11.3°C and 15.5°C, respectively. The annual precipitation in the Vanderhoof area is 332 mm and the annual snowfall is 157.2 cm (ECCC 2021). Precipitation in the form of rainfall (of most concern for erosion control) typically increases through spring, with most of the rainfall accumulating between May and September (Table 2). Major rain events (e.g., >10 mm in one day) are uncommon, but one or two events per month should be anticipated between June and October.

Table 2. 1981-2010 Climate Normals for Vanderhoof, BC

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Precipitation												
Rainfall (mm)	6.6	5.4	7.1	19.4	34.2	56.8	52.3	43.1	44.0	43.3	16.1	3.8
Snowfall (cm)	37.8	21.3	17.3	6.0	0.5	0.2	0.0	0.0	0.2	7.5	29.0	37.5
Extreme Daily Rainfall (mm)	11.0	9.2	14.2	22.3	28.8	35.4	62.0	36.0	25.2	25.8	21.6	11.4
Days with Precipitation												
≥0.2 mm	14.1	9.5	10.0	9.7	12.6	14.1	13.8	12.5	13.0	16.3	14.5	11.8
≥5 mm	3.1	1.7	1.4	1.4	2.4	3.8	3.5	3.1	2.7	3.6	2.8	3.0
≥10 mm	0.81	0.3	0.5	0.35	0.38	1.5	1.4	0.92	1.0	1.0	0.92	0.88
≥25 mm	0.04	0.0	0.0	0.04	0.04	0.08	0.04	0.08	0.04	0.04	0.04	0.04

Bold text indicates maximum values; **Source:** Environment and Climate Change Canada (2021)

4.2 Procedural BMPs

Procedural BMPs are non-structural methods and procedures that can reduce erosion and sediment transportation on-site. They can be used to coordinate construction activities and BMP implementation. The general principles of erosion and sediment control that will be followed include:

- Scheduling construction to minimize the risk of erosion (i.e., low flows and/or driest time of year);
- Retaining existing vegetation wherever possible;
- Close-cutting, and not grubbing vegetation where possible;
- Not disturbing existing embankments where possible, or provide embankment protection where necessary;
- Re-vegetating or covering disturbed areas as soon as possible;
- Directing runoff away from disturbed areas (swales);
- Minimizing the length and steepness of slopes where possible;
- Minimizing runoff velocities and erosive energy;
- Inspecting and maintaining sediment and erosion control structures; and
- Promptly implementing corrective measures, as necessary.

The proper implementation of BMPs will follow DFO *Land Development Guidelines for the Protection of Aquatic Habitat* (Chilibeck et al., 1993).

4.3 Erosion Control BMPs

Erosion control BMPs are required where exposed soils are present to prevent sediment transport. Implementing the following erosion control measures should help reduce the dependency on sediment control measures:

- Seeding and/or mulching any disturbed areas around the laydown and access routes as soon as possible. Hand seeding and mulch may be done as work progresses, which will help provide protection from rainfall and can be done quickly to provide immediate cover.
- Providing and maintaining temporary measures, which may include, but are not limited to, sandbags, silt fences, geotextiles, polyethylene sheeting, water pumps, straw bales, and wattles are required to prevent erosion and migration of mud, sediment and other debris off-site or to other areas of site where damage may result.
- Placing surplus stockpiled materials away from concentrated flows. Stockpiled areas should be monitored after storm events and sediment fencing may be required if erosion and sediment transport is observed. The existing vegetation cover should be retained around the stockpiles to assist with runoff filtration. Seeding and mulching of stockpiled material should be completed as soon as possible. Stabilization will include roughing of the surface by using the excavator

bucket to create grooves in the soil that run parallel to the contours. The area can be seeded (by hand if area is small) using an approved seed mix and straw mulch. Areas that will be disturbed again within 21 days should be covered with tarps to temporarily minimize rainfall and dust erosion.

- Riparian vegetation overhanging the creek, providing cover for fish will be retained to the extent that is practical. It is expected that there will be very little clearing required. Whenever possible, vegetation will be brushed/cut to ground level, but the roots left intact. This will promote rapid regeneration and aide in maintaining bank stability due to the intact root structure.

The layout of additional site-specific erosion control measures will be based on site inspections, construction activities, and evaluation of the ESC measures' performance.

4.4 Sediment Control BMPs

Sediment control BMPs are required in areas where there is potential for water to mobilize sediment and to prevent this sediment-laden water from leaving the site. Sediment control measures are intended to filter or settle sediment-laden water.

For this Project, the following sediment control measures will be implemented, and others may be utilized depending on changing site conditions:

- The installation of sediment fence along the banks of the Endako River to minimize any sediment mobilization into the River is highly recommended. The EM will monitor water quality regularly to ensure no fugitive sediment gets released into the River.
- Any turbid runoff should be directed to areas away from the work zone and preferably to vegetated areas so that it can be filtered prior to entering the Endako River.
- If natural vegetation is not an adequate filter, silt fencing will be used to help prevent runoff from leaving the disposal areas. It will also be used at the toe of slopes or along contours. It will be trenched in with additional stakes installed should more support be required.

Additional site-specific sediment control measures will be based on site inspections, construction activities, and evaluation of the measures' performance. Additional ESC measures will be assessed on-site and implemented before demobilizing.

4.5 Inspecting, Monitoring, and Maintaining ESC Features

All ESC features will be inspected daily by the contractor, UFFCA, and by the Triton EM (when onsite). All findings will be recorded by the EM daily, and a summary will be provided to UFFCA within the post-construction report.

Any ESC deficiencies, which are found to be directly and adversely affecting the environment, will be corrected immediately. A deficiency which has the potential to adversely affect the environment will be addressed and corrected within 48 hours of notification.

To ensure erosion and sediment control BMPs are functioning as intended, maintenance activities will include:

- Sediment fences will be assessed for functionality and any which are at risk of failure, or are failing, will be replaced. Sediment fences that are no longer required for ESC purposes will be removed and re-used or properly disposed of. Sediment fences will not be left in place indefinitely; and
- When sediment or debris accumulation exceeds 30 cm on the fencing, the materials will be cleaned out.

4.6 Inclement Weather

In general, construction activities will be completed in such a manner as to minimize the risk of negative environmental impact and timed to avoid forecasted heavy rain events. The contractor, in consultation with UFFCA, shall cease operations or modify construction methods during periods of inclement weather to avoid sedimentation that cannot be properly managed. During periods when the work is suspended due to inclement weather, the site will be monitored and, when required, mitigative measures will be implemented to control sediment-laden runoff.

4.7 Water Quality Monitoring

Water quality monitoring will be required during construction. The maintenance of water quality in the Endako River has been identified as a key issue for this Project. Given the nature of the work, turbidity will be the primary water quality parameter of concern and will be the focus of the monitoring via Nephelometric Turbidity Units (NTUs). There is also a possibility of hydrocarbon contamination given the proximity of equipment to the river. Hydrocarbon contamination of a watercourse or waterbody will be subject to spill response protocols as outlined in Section 10.

At a minimum, water quality monitoring must address the following:

- Beginning of the day and end of the day water quality (WQ) monitoring for both background (upstream) and impact (downstream) sites will be conducted throughout construction.
- WQ upstream will be at least once a day (likely at start of day) or whenever weather/flow conditions change. Sampling downstream will be hourly (or as frequently as 30 mins depending on activities) when working instream. Hourly sampling may be reduced depending on results of previous sampling events, weather conditions, and flow volumes.
- WQ monitoring is to occur whenever works with potential to impact water quality are, or have been, conducted that result in exposed soils that have not yet stabilized.
- See Table 3 for details surrounding a turbidity exceedance. If there is a turbidity exceedance, then weir related construction activities will be halted and mitigation measures will be implemented immediately, while continuing to monitor

WQ upstream and downstream of the source. Additional ESC measures will be initiated if water quality values do not meet the criteria listed below.

- Water quality monitoring should continue until the water quality issue is resolved and levels return to background.
- The requirement to report exceedances to UFFCA will be completed by the EM. If UFFCA would like to develop a TSS regression curve to analyze and monitor WQ in more detail, the EM will have supplies available to complete this task and samples will be sent to an accredited lab.

Water quality monitoring will be conducted by an EM or Designate, who will have access to water quality sampling equipment, which is to include:

- Turbidity meter;
- Thermometer; and,
- Hand-held conductivity and pH meters or equivalent (i.e., YSI DSS Pro).
- Three hydrometric stations already installed within the project area in 2015 and collects temperature and stage every 15 minutes.

Water quality guidelines for the protection of aquatic life are outlined in Table 3.

Table 3. Summary of water quality guidelines for turbidity, suspended and benthic sediments (Caux et al. 1997)

Maximum Induced Turbidity (NTU) or % of Background	Maximum Induced Suspended Sediments or % of Background
Change from background of 8 NTU for a duration of 24 hours during clear flows	Change from background of 25 mg/L for a duration of 24 hours during clear flows
Change from background of 2 NTU for a duration of 30 days during clear flows	Change from background of 5 mg/L for a duration of 30 days during clear flows
Change from background of 5 NTU when background is 8 – 50 NTU	Change from background of 10 mg/L when background is 25 – 100 mg/L
Change from background of 10% NTU when background is >50 NTU	Change from background of 10% NTU when background is >100 mg/L

5.0 Noxious and Invasive Plant Management Plan

Best management practices to ensure noxious weed and invasive plants are not spread or propagated throughout the construction zone include:

- Management of noxious weeds and invasive plant measures will be discussed during the on-site kick-off meeting.
- All equipment will be washed clean of soil, seeds, and plant parts prior to entering the Project site at the start of the project. The EM will photo document all equipment for soil/seeds/plant parts when they arrive to site and enter it into the daily EM report.
- Minimize soil disturbance and re-vegetate disturbed areas as quickly as possible.
- If possible, locate staging and lay down areas such that they are not located in infested areas. A pre-construction survey will be completed before construction commences.
- One week prior to construction, the UFFCA and QP will survey the construction footprint for any signs of rare plants or invasive/noxious weeds.
- Any observation of an invasive plant or noxious weed is to be reported to the EM. Coordinates will be taken, and these sites will be flagged and reported to the Invasive Alien Plant Program (IAPP).
- Any noxious and invasive species noted in this area will be removed by hand and placed in a bag for disposal. This will reduce the spread of these species by equipment that is required in this area.
- Straw (mulch) sources shall be certified weed-free, and visually inspected prior to application to ensure no invasive plant seeds are present; hay shall not be used as mulch.

6.0 Waste Management Plan

All waste, including construction, domestic and/or hazardous waste will be collected, stored, and removed from site per federal (i.e., *Transportation of Dangerous Goods Act*) and provincial (e.g., *Environmental Management Act*) waste management legislation, including requirements regarding containment, handling, manifesting, and disposal. Hazardous materials will be stored and labeled in accordance with WHMIS requirements, as set out in BC's *Occupational Health and Safety Regulation of the Workers Compensation Act*.

The Contractor is encouraged to reduce, reuse, and recycle construction materials as much as possible, returning recyclable products (e.g., scrap metal, cardboards, fluid containers) to local facilities that are available to receive the materials. Waste containing wildlife attractants (i.e., food scraps) should be removed daily. Should wildlife issues arise, the EM will make recommendations to improve the waste management systems used onsite. No waste will be burned, buried, or disposed of onsite.

7.0 Archeological Management Plan

If items with potential cultural significance are encountered within the Project footprint, the Contractor will immediately notify UFFCA and the appropriate agencies (BC Archaeological Branch, phone 250 953 3334). Works will not resume within 30 m of the potential archaeological site until instructed by UFFCA.

If suspected significant palaeontological remains or archaeological or historical objects are encountered, the following chance find management procedures will be implemented by the Contractor immediately:

- Stop work in the immediate vicinity of the suspected find. Do not undertake further work that could disturb the immediate vicinity of the suspected find site, including the transport of soil or rock to or from the immediate vicinity of the site.
- Flag the area to identify it as a no-go zone.

8.0 Wildlife Management Plan

8.1 Wildlife

Wildlife will likely avoid areas of construction activity; however, if wildlife such as Beavers, Bears, Deer, or Moose are observed near, or within the work site, they will be avoided, and construction will stop in the immediate area until the wildlife leaves the site. If problem or dangerous wildlife is observed, the EM may determine that specific deterrent measures such as air horns be used (mainly for Bears).

Wildlife sightings will be immediately reported directly to the EM or Contractor supervisor. Any aggressive behaviour by wildlife toward the construction crew will result in work shutdown until the wildlife vacates the area, or a Conservation Officer is dispatched to resolve the conflict. Harassment of wildlife will not be tolerated, and crews will be made aware of this during pre-construction meetings.

The construction works have the potential to increase human-wildlife interactions; therefore, the following measures will be utilized to reduce the likelihood of those interactions:

- Food scraps and garbage will be removed from the site daily.
- Appropriate authorities will be promptly notified of roadkill.
- Dangerous human-wildlife incidents will be reported to appropriate authorities.
- Wildlife vehicle collisions will be included in tailboard meetings.

8.2 Amphibians

The EM will do a preliminary search for amphibians prior to construction and during works. If found, amphibians will be salvaged, according to the Best Management Practices for Amphibians and Reptile Salvages in British Columbia (BC MFLNRO 2016) and conditions of the Amphibian Salvage permit, by a qualified professional. Amphibians will be relocated to an area outside of the Project footprint that exhibits similar characteristics to the capture location and exclusion fencing/netting will be installed to keep them out of the work area.

8.3 Beavers

Beaver activity has been identified in the Endako River especially downstream of the proposed weir location where the Beaver dam currently resides (NHC 2018). It is advised that Beaver activity be monitored throughout construction. If Beavers are present following dam removal, the UFFCA will explore mitigation options.

UFFCA will provide long-term monitoring at the weir structure to ensure it does not become compromised due to Beaver impoundment activities if future Beaver populations relocate to the weir structure. The frequency of monitoring will be determined later, depending on site conditions following construction.

The UFFCA has a hydrometric station right above the proposed weir in Burns Lake and right below the proposed weir in the Endako River. These stations measure stage (which

is converted to water level and discharge respectively) every 15 minutes. They have been in place since 2015 and will remain in place and active following weir construction.

9.0 Air Quality and Dust Control

Vehicle and equipment emissions are the primary sources of potential negative air quality associated with the Project. Implementation of innovative and practical idle reduction strategies are encouraged to reduce emissions from the Project. Idle reduction strategies fall into four groups:

- Location of staging areas to minimize impact of emissions;
- Idling time reductions (construction vehicles and equipment);
- Outreach and communication (as part of site orientation); and
- Idle reduction technologies.

Given the limited number of heavy equipment and spatial extent of the work area, it is anticipated that the construction personnel can effectively limit idling and limit equipment operation to only those units necessary for the tasks at hand.

There is a low likelihood of creating large quantities of fugitive dust along the site as the access into the area is currently vegetated and the goal is to retain as much vegetation in-tact as possible during construction. If required, a water truck will be made available to water the access road to limit fugitive dust. It will be up to the contractor to source water privately or apply for a WSA Section 10 - short-term water use permit to fill the water truck from the Endako River or Burns Lake for dust suppression activities.

10.0 Spill Contingency Plan

The Spill Contingency Plan is provided below. All spills will be reported directly to the EM. For incidents that occur when the EM is not onsite, the contractor will provide detailed information to the EM.

10.1 Potential Spill Sources

Potential sources of spills that could occur during construction activities are:

- Leaking or ruptured fuel tanks;
- Spills during refuelling of vehicles and equipment; and
- Leaks from equipment or ruptured hoses.

Sections 10.2 through 10.4 below summarize methods to avoid and mitigate such situations.

10.2 Site-Specific Measures for Spill Prevention and Containment

The spill response planning will focus on prevention and containment. The following site-specific controls will be implemented and maintained throughout the Project:

- The Contractor will provide spill kits at all refuelling, lubrication, repair locations, and within heavy equipment and pick-up trucks for immediate response to spills both to ground and water. Spill kits will be capable of capturing 125% of potential spill volumes.
- All onsite staff will be knowledgeable about hazardous material storage, handling requirements, and spill kit location and deployment.
- All equipment must be maintained in a good state of repair, free of leaks or excess grease, checked regularly for mechanical deficiencies, and equipped with a fully stocked spill kit that is readily available for deployment. Any equipment that has persistent issues will be removed from site.
- The Contractor has an excavator with environmental lubricants, and it is assumed that only enviro-lubed excavators will work instream. The EM will inspect all vehicles and equipment as it arrives to site.
- All vehicles and machinery will be refuelled at least 30 m away from any watercourse or sediment control facility. Large scale fuelling should be conducted offsite; during onsite refueling, fuel must be properly stored in clean Transport Canada approved tidy-tanks or in approved secondary containment facilities. Fuel storage tanks over 250 L must be equipped with auto shutoff valves.
- If refueling of dewatering pumps or generators is required within 30m of the Endako River, two persons will be present during the refueling with a spill kit readily available. The equipment being refueled must be in a containment structure capable of containing 125% of the fuel amount present.
- A large spill kit will be staged downstream for faster deployment of spill materials.

- During hot weather, fuel tanks should not be filled more than 80% to allow for expansion of the flue, reducing the chance of spillage from the fill cap.
- All deleterious substances (hydrocarbons, coolants, etc.) will be stored at least 30m from the Endako River.
- A cover, such as a tarp, must be placed over the top of the fuel cache to prevent accumulation of precipitation in the containment device.
- To prevent vandalism during periods of inactivity (if applicable) all fuels, lubricants and toxic substances will be stored in locked structures. As well, the site has a gate on the access road and will be locked during periods of no construction activity.
- All small fuel storage containers (i.e., jerry-cans) must be stored in drip trays or in a truck bed.
- All waste fuel or products such as filters will be secured in spill-proof containers and discarded at an approved facility.
- Drainage water from areas of work will be channelled into established sumps to provide containment in the event of a spill.

10.2.1 Spill Kit Contents and Locations

All heavy equipment will be equipped with a spill kit during all phases of the Project, which generally contains:

- 15-20 absorbent universal or hydrophilic pads (for water-based substances).
- 2 disposable bags.
- 15-20 absorbent hydrophobic pads (for hydrocarbons).
- Nitrile gloves and eye protection (goggles).
- 3 containment booms.
- Laminated instruction sheets.
- Plug and dyke kit to plug punctured drums or tanks.

Additionally, there must be a barrel spill kits onsite during construction and immediately accessible in the event of a significant spill. It is recommended that this large spill kit be staged in an accessible location adjacent to the Endako River downstream of site, and a means to pull sorbent booms across the channel be available. A barrel spill kit typically contains the following items:

- | | |
|--------------------------------|-------------------------------|
| • 9"x9" absorbent pillows | • 18"x18" absorbent pads |
| • Polyethylene rope | • Nitro gloves |
| • 15 m of 3" containment booms | • 18"x18" antifreeze pads |
| • Sandbags | • Goggles |
| • 12'x18' tarps | • 45-gallon drum |
| • Disposable bags | • Patch sticks/plug-in dyke |
| • 30 lb oil sponge | • Laminated instruction sheet |

10.3 General Spill or Leak Practices and Procedures

In the event of a spill or leak during construction, the following spill or leak practices should be implemented:

- Do not touch or walk-through spilled material.
- Stop the flow safely and quickly (if possible).
- Shut off machinery, pumps, valves etc.
- Plug leaks (if possible).
- Remove or right containers.
- Do not smoke or use cell phones in the spill area.
- Prevent spilled materials from flowing away from the initial spill site or from flowing into a watercourse, creek or any drainage ditches or catch basins.
- Eliminate all ignition sources.
- If possible, turn leaking container so that gas escapes rather than liquid.
- Diligently document clean-up activities. Note especially the time of discovery and initiation of clean-up procedures, areas affected, estimated volumes of materials, disposal locations, and personnel/ equipment involved.

10.4 Cleanup Practices and Procedures

In the event of a spill, the following Spill Response Procedures will be implemented. Procedures will vary depending on the product and spill location.

- Consult the EM or UFFCA as required.
- Ensure appropriate personal protective equipment is worn during spill cleanup work. Consult Safety Data Sheets (SDS) for safety and environmental information specific to the spilled substance.
- For product spills and leaks on soil, liquid will be collected using absorbents and the soiled absorbent materials will then be transferred into a drum or other sealed container. The contaminated soil will be excavated and drummed or otherwise contained. Drums of waste will be labelled to identify their contents and stored in a spill containment area (location to be determined by the Ministry Representative and EM) prior to being hauled offsite for disposal by a certified hauler to an authorized dumpsite for contaminated materials.
- For product spills into the watercourse, absorbent booms will be placed to prevent the spilled product from flowing downstream. Absorbent materials will be used to recover floating product.
- Pictures will be taken of the cleanup activities for filing/reporting purposes.
- Ensure replacement of all used spill kits and associated materials on the job site as soon as possible.

10.5 Spill Investigation/Report Form

Table 4 provides reportable levels of some substances that commonly occur on construction projects. The full list is included in Schedule (1) in the *Spill Reporting Regulations* of the *Environmental Management Act*. Spills that are classified as reportable will be reported to the Emergency Management BC (EMBC) 24-hour telephone line: 1-800-663-3456. In the event of a reportable spill, the EM or Contractor will contact EMBC following consultation with UFCCA.

Table 4. British Columbia Reportable Spill Quantities

Substance	Amount spilled to ground
Diesel Fuel	100 L
Gasoline	100 L
Grease	100 L
Hydraulic Oil	100 L
Lubricating Oils	100 L
Solvents	100 L
NOTE: Any quantity of deleterious substance released to a <u>watercourse or waterbody</u> must be reported to Emergency Management BC immediately	

Reportable emergencies include those such as Class 3 and Waste Oils (e.g., 100 L or greater for discharge to ground of gasoline, diesel or lubricants) and any spill to open water. In the event of a spill, the response procedure will be as follows:

1. Notify the EM.
2. Complete an investigation and spill response form (Triton example provided in Appendix 2) and submit to UFCCA within 24 hours of the incident.
3. Contact Emergency Management BC (1-800-663-3456) if it is of reportable levels.

Spills that do not meet the reportable levels as noted above will still be recorded and cleaned up by project personnel. The source of the spill or leak will be investigated by the EM to ensure it is not repeated. While small drips or leaks are not considered an incident in and of themselves, over time on a project, or repeated in a certain area (i.e., laydown or site office) can lead to ongoing issues (such as contaminated soils).

The investigation and spill response form must be prepared by the company responsible for the spill and include:

- A general description of the incident;
- A drawing of the site showing the area of the spill;
- Pictures of the spill, damages (if any), and cleanup efforts;
- Source and cause of the incident;
- Description of the response effort;

- Quantity of the spill and percent recovered;
- Itemized cleanup costs;
- Recommendations for preventative and mitigation measures; and
- Plans for upgrading emergency preparedness and response plans.

11.0 Environmental Monitoring Plan

11.1 Environmental Monitor Responsibilities

Due to the nature of the works, it is recommended that a qualified EM be present for most of the works, or at least until the in-channel works have been completed below the high-water mark (HWM). Triton will be responsible for directing all environmental monitoring activities and determining sampling requirements and protocols as required. Triton will be responsible for all technical aspects of environmental sampling and monitoring but will have UFFCA staff present during all phases of the Project. The UFFCA EMs will be from Saikuz First Nations and have completed the Environmental Monitoring Certificate and some of the EMs have past knowledge of this site. Triton's QEP will provide mentorship for the UFFCAs EMs to ensure quality assurance and consistency throughout the Project.

11.2 Monitoring Tasks

Environmental monitoring activities must be sufficient to reliably determine whether the construction activities are being conducted in compliance with this EMP. The EM will be responsible for:

- Updating and distributing the EMP as necessary;
- Conducting a pre-work meeting prior to works and informing construction personnel of key environmental issues;
- Review the work site and look for any rare, invasive, or alien plant species as indicated in Sections 2.2.1 and 2.2.2.
- Completing a nest survey ahead of clearing activities, if required;
- Observing the removal of the Beaver dam in accordance with the permit requirements, usually in 10 cm increments and then allowing flows to equalize prior to removing another layer;
- Conducting fish and amphibian salvages as required and assisting with site isolation;
- Monitoring work activities as they relate to environmental protection when work is taking place instream and within riparian areas;
- Regular inspection of:
 - Sediment and erosion control measures;
 - Water quality monitoring and sampling (as required);
 - Presence or spread of invasive or noxious weeds;
 - Construction equipment on-site for leaks or spills;
 - Emergency response and spill containment and recovery equipment, and spill response training programs;
 - Presence of staining on ground surface, free-phase liquids, or sheens on water;

- o Construction activities to evaluate appropriate implementation of mitigation measures; and
 - o Construction waste management programs.
- Reviewing work plans to ensure compliance, and making recommendations to resolve any non-conformances;
- Being on call and attending onsite environmental emergencies;
- Preparing field notes and photographs describing the progress of the work, any environmental issues that arise, and mitigation measures used to resolve the issue;
- Preparing correspondence related to environmental monitoring, as required;
- Suspending or altering work if an environmental emergency or incident occurs. This may also occur during periods of inclement weather where erosion and sedimentation risks may be higher; and
- Overseeing site cleanup and restoration activities.

11.3 Reporting

As part of monitoring activities, the EM will complete a daily Environmental Monitoring Report, along with a copy of any other report completed that day (i.e., nest survey forms, fish capture summary, spill response forms, etc.). The daily Environmental Monitoring Report will include:

- The date, time, location, temperature, and weather for the monitoring event;
- A description of the construction activity monitored, briefly noting the specifics of what equipment performed the work and how;
- How the observations were made, whether direct observation by the EM or through a report from workers/supervisors in the field;
- The specifics of any environmental issue, if observed;
- The results of any testing of environmental attributes as they become available; and
- Photographs taken to document the monitoring activity. Monitoring events need to be documented with photographic evidence; photographs will be catalogued electronically with captions identifying the time and date, location, and description of observation.

11.3.1 Post-Construction Environmental Summary Report

A post-construction environmental summary report will be submitted to UFFCA following Project completion. The report will contain the following:

- A brief description of the construction activities completed;
- A summary of environmental monitoring activities during construction;
- Results of any salvages conducted prior to works, including, at a minimum, a specific site location, list of species, and numbers salvaged;

- Description of any incidents related to environmental issues or emergencies that occurred on the site and how they were monitored, mitigated, and remediated;
- Description of any outstanding mitigative measures or monitoring programs needed for the completion of site restoration; and
- Representative site photographs;

12.0 Environmental Procedures

Environmental Procedures (EP) are required for works in and around Environmentally Sensitive Areas (ESAs). Works in and around Endako River will include, Beaver dam removal, fish isolation and salvage, stream diversion, weir installation, and reclamation activities.

12.1 Beaver Dam Removal

A Beaver dam is located downstream of the proposed weir location and is currently impounding water upstream of the Endako river into Burns Lake. Prior to construction activities in July 2021 (ideally before freshet), the Beaver dam will be removed to reduce water levels to the extent possible at the weir location. The Beaver dam will be removed as per DFO Interim code-of-practice: Beaver Dam Removal (DFO 2020b). Triton has applied for a General Wildlife Permit under the *Wildlife Act* to remove the Beaver dam, and a Section 11 Notification under the WSA to work in and around a stream during the Beaver dam removal activities. Triton will notify DFO that a Beaver dam will be removed as per their code of practice.

Beavers that may be present may be trapped independently by local First Nations prior to the dam removal to ensure no unnecessary suffering to Beaver(s) in the area during removal activities. The Beaver dam will be removed by hand in controlled steps (approximately 20 cm increments). Water levels and any turbidity plumes associated with the removal process will be stabilized prior to the next drop. It is anticipated that the Beaver dam removal process could take multiple weeks, depending on the water depth difference between the upstream and downstream side of the dam. If this dam is currently controlling water level in Burns Lake, each drop may take a lengthy period to stabilize given the water volumes in the lake. For this reason, it is advisable to start removing the Beaver dam prior to freshet when lake reserve levels are lower.

Key mitigation measures for Beaver dam removals are summarized below:

- Whenever possible, Beaver dams will be removed by hand;
- Install effective sediment and erosion control measures before starting work to prevent the entry of sediment into the Endako River;
- Operate machinery on land and in a manner that minimizes disturbance to the banks of the watercourse;
- Remove the dam gradually to allow the water to release slowly and prevent sediment at the bottom of the ponded area from being released downstream;
- Material removed from the dam will be temporarily placed on the bank to dry out and removed from site before the end of the Project.
- Relocate any fish that become trapped in isolated pools or stranded in newly flooded areas to the main channel of the watercourse;
- Stabilize any waste materials removed from the work site to prevent them from entering the watercourse.

With the presence of an onsite EM, application of standard Best Management Practices and site-specific mitigation measures described above, the proposed works are not expected to have adverse effects on the receiving environment.

12.2 Fish Salvage

Given that fish presence is known in the Endako River, it is imperative that a fish salvage be completed ahead of, and during, instream works to avoid potential harm to fish in the vicinity. Stop nets will be erected upstream and downstream of the work area and located as close to the worksite as possible without causing restriction to the work activities. The stop nets and the isolation measures used to segregate the work area from flows will achieve isolation from fish. Once the area is isolated, a qualified crew will complete fish salvage within the work site using minnow traps, electrofishing passes, and dip netting as the work site is dewatered.

The streambed will be constantly observed during and after the work area is isolated and during diversion and de-watering activities such that any fish missed during the initial efforts can be salvaged if they become stranded in isolated pools. All captured fish will be identified, measured to obtain a representative size range, and released unharmed into similar habitat downstream of the fish isolation fence.

12.3 Isolation from Flow

Isolation from flow will be necessary to construct the arched rock weir and associated fish-way. Isolation methods will depend on discharge volumes encountered at the time of construction and may be achieved by one of three options listed below in order of preference: 1.) cofferdam stream diversion (divert half the stream at a time), 2.) dam the entire stream and create a temporary poly-lined stream channel in the floodplain, or 3.) dam the entire stream and pump water downstream.

1. Isolation via cofferdam stream diversion would be achieved by temporarily diverting the Endako River on one-side of the river using a series of cubic-meter bags (i.e., grain bags or mega-bag). Cubic-meter bags will be placed on polyethylene sheeting that is wrapped up and over the upstream face of the dam to create a watertight headwall to block flows. The mega bags will be placed tightly against each other extending on an angle from the streambank across approximately 60% of the channel width. Depending on the flows and amount of backwatering at the time of diversion it may be necessary to enclose the cofferdam to fully isolate the work area at its downstream end. Small gaps will be filled with sandbags to reduce seepage into the work area. Seepage into the isolated area will be captured in a small sump at the downstream end of the isolated area. A 2-inch (or bigger if required) trash pump will be used to pump the seepage to a well-vegetated area (at least 50 m from any watercourse and to an area with suitable scour protection) and allowed to naturally infiltrate.

Once the portion of the weir and fish-way have been constructed, the weir and streambed should be washed to remove excess sediment prior to reinstating flows into the isolated area. A 2-inch trash pump outfitted with a fire nozzle can be used

for this purpose. The sediment-laden water generated during this process will be captured in a sump immediately downstream of the work area within the isolation as stated above.

Upon completion of construction activities within the initial isolation, the diversion will then be flipped to the opposite side of the river using the same procedure as mentioned above until construction of the rock weir and fish-way is completed.

2. The dam and temporary poly-lined channel (in the floodplain) option will utilize an aqua-dam (mega-secure dam), or cubic-meter bags placed on polyethylene sheeting that is wrapped up and over the upstream face of the dam to create a headwall to block flows. Installing a temporary poly-lined channel to convey flows beside the work area in the flood plain will likely negate the need for 24-hour pumping. Seepage and any sediment-laden water will be pumped from a downstream sump to vegetation as in the cofferdam stream diversion option. A dam and temporary stream channel option would likely facilitate the total construction of the rock weir and fish-way without having to substantially adjust the isolation.
3. The dam and pump option will utilize an aqua-dam (mega-secure dam) or cubic-meter bags placed on polyethylene sheeting that is wrapped up and over the upstream face of the dam to create a watertight headwall to block flows. Large pumps will be used to convey creek flows around the work site, discharging back to the channel downstream. The discharge hoses should be placed so that they discharge into a non-erosive surface to prevent downstream erosion and sedimentation. A second dam may need to be installed downstream of the work site to reduce the chance of backwatering into the site and to contain any sediment-laden water in the work footprint. A dam and pump option would likely facilitate the total construction of the rock weir and fish ladder without having to substantially adjust the isolation. Any water pump intakes used must be properly screened to prevent entrainment and/or impingement of fish as per DFO Interim code-of-practice: End-of-pipe fish protection screens (DFO 20210). This option may be suitable depending on the expected duration of works and creek discharge at the time of construction since it is a relatively straight-forward method that is more efficient to set up. However, the dam and pump option will require 24-hour/day staffing to maintain water management (i.e., refueling; pump maintenance etc.) and it requires that backup pumps and generators be onsite and ready to install if the primary system fails or are overwhelmed by increased flows. Seepage and any sediment-laden water will be pumped from a downstream sump to vegetation as in the diversion option.

To avoid introduction of sediment from the work site to surrounding fish habitat, one or more sumps will be installed within the instream construction area to collect any sediment-laden water leaking through the cofferdam or capture any ground water seepage. Small trash pumps or electric submersible pumps will be used to remove sediment-laden water and discharge it to a well vegetated area away from the watercourse so that it can infiltrate into the ground.

All options will require at least a one-time fording of the Endako River to install the isolation and a one-time fording to remove the isolation given the width of the watercourse at the proposed weir location.

While working in or near the channel, basic operating procedures to protect the environment will include, but are not limited to:

- Ensuring equipment is checked daily for cleanliness and leaks. It is highly recommended that equipment working in the channel use biodegradable hydraulic fluid.
- Large woody debris and rocks may need to be moved to accommodate the rock weir or isolation. LWD must remain within the channel but can be placed outside of the Project footprint. Only beaver dam material will be removed from the channel.
- Rock used for the weir should be free of excessive fractures or fines, and non-acid generating.
- Rock should be individually placed using an excavator with a thumb, not end-dumped into place.
- Stream bank protection measures will be incorporated when conducting any stream fording activities. Stream bank protection measures include the use of LWD to be placed adjacent to the stream bank as to not compromise the bank integrity will be the preferred method.

13.0 Closure

Triton has prepared this document to provide recommendations and mitigation measures for consideration during the construction of the Endako River Weir. Revisions and/or updates to this document may be required as construction progresses. Triton will assist UFFCA during construction to ensure environmental conditions are adhered to as well as, will be available to help train and mentor UFFCA staff.

Should you require any further information, or have any questions or comments, please do not hesitate to contact the undersigned.

Signed this day, March 30, 2021,

Triton Environmental Consultants Ltd.



Mark Asquith B.Sc., CPESC
Environmental Professional

cc. Amanda Wamsteeker – Operations Manager, Prince George

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**APPENDIX 1
2021 NORTHWEST HYDRAULIC CONSULTANTS PASSIVE ROCK WEIR
DESIGN DRAWING**

APPENDIX 2

EXAMPLE – TRITON INVESTIGATION AND SPILL RESPONSE FORM

Spill Report Form