

**Fishway Diversion Wall
Rocky River, Colinet, NL
Environmental Registration Document**

**Submitted to the Government of Newfoundland and Labrador
Department of Municipal Affairs and Environment
Environmental Assessment Division**

**Prepared For: Fisheries and Oceans Canada
Real Property, Safety and Security Area**

Prepared By: Public Services and Procurement Canada

Date: August 1st, 2019

TABLE OF CONTENTS

1.0	NAME OF UNDERTAKING:	2
2.0	PROPONENT:.....	2
3.0	THE UNDERTAKING:	2
3.1	Nature of the Undertaking:	2
3.2	Purpose/Rationale/Need for the Undertaking:	2
4.0	DESCRIPTION OF THE UNDERTAKING:	3
4.1	Geographical Location:	3
4.2	Physical Features:	3
4.3	Construction:	3
4.4	Operation:	6
4.5	Occupations:	7
5.0	APPROVAL OF THE UNDERTAKING:	7
6.0	ABORIGINAL CONSULTATION:	8
7.0	SCHEDULE:	8
8.0	FUNDING:	8

LIST OF APPENDICES

Appendix A Topo Map and Site Plan

1.0 NAME OF UNDERTAKING:

Fishway Diversion Wall, Rocky River, Colinet, NL

2.0 PROPONENT:

- (i) Department of Fisheries and Oceans Canada
Real Property, Safety and Security Branch (DFO-RPSS)
- (ii) Northeast Atlantic Fisheries Center, 80 East White Hills Road
St. John's, NL
A1C 5X1
- (iii) Taryn Baker
Regional Engineer
DFO, Real Property Safety and Security
80 East White Hills Road
St. John's, NL
A1C 5X1
Phone: (709) 772-4289
E-mail: taryn.baker@dfo-mpo.gc.ca
- (iv) Natasha Warren
Environmental Services
Public Services and Procurement Canada
10 Barter's Hill
St. John's, NL
A1X 7P4
Phone: (709) 689-8302
E-mail: natasha.warren@pwgsc-tpsgc.gc.ca

3.0 THE UNDERTAKING:

3.1 Nature of the Undertaking:

The proposed undertaking represents the reconstruction of a fishway diversion wall in Rocky River, Colinet, Newfoundland and Labrador.

3.2 Purpose/Rationale/Need for the Undertaking:

The existing armourstone diversion wall located in Rocky River, Colinet, NL is in a state of disrepair and requires replacement. A new reinforced diversion wall will be constructed to ensure proper flow into the fishway. The upper portion of the diversion wall will be constructed of concrete while the lower portion will be constructed of armour stone. Additional armourstone protection will also be placed around an existing bridge abutment, to mitigate undermining discovered during previous phases of this project. Replacement of the existing diversion wall will ensure the safe and continued passage of fish.

4.0 DESCRIPTION OF THE UNDERTAKING:

4.1 Geographical Location:

The proposed project site is located at the RPSS site in Colinet on the Rocky River. The project site can be accessed via wooden stairs and concrete steps from the Trans-Canada Highway, provincial Route 91, approximately 25 km south of Whitbourne. The approximate coordinates of the project site are 47°13'32" N and 53°34'03" W.

4.2 Physical Features:

The proposed project site is located at the Colinet Rocky River which is on the tip of the northwest arm St. Mary's Bay on the Avalon Peninsula of the island of Newfoundland. Substrate in the project area consists primarily of exposed bedrock and large boulder. Two concrete bridges, bridge pier, wooden stairs, concrete steps, and an information building are within the general vicinity of the project area.

The Rocky River is a salmon river. The existing fishway is a Denil Fishway and consists of a linear prefabricated channel with closely spaced baffles at regular intervals angled against the direction of flow. Between the baffles a backflow is formed, dissipating energy of the flowing water, resulting in a relatively low velocity near the bottom. This allows fish to migrate through the channel.

The fishway is approximately 50 m long and pools are divided by chutes which are notched at the top to allow fish passage. Each pool measures around 3.0 m in length and 3 m in width.

The fishway is located at the mouth of the Rocky River and encompasses a gross drainage area of approximately 300 km². The project site is located atop exposed sedimentary bedrock with continuous cleavage structure. The site is accessible by road through the community of Collinet (Route 91). Equipment used to carry out the required project activities will likely include: excavator, backhoe, dump truck, boom truck, concrete truck, generators, and typical hand tools such as drills, hammers, cement mixers, etc. Waste material generated as a result of the project will be transported to an approved disposal location. An existing wooden stairway leads down to the fishway. Aerial photographs and a topographical map are attached (Appendix A).

The scope of work includes demolition of the existing armour stone diversion wall and construction of a new reinforced concrete/armourstone diversion wall at the DFO-RPSS site in Rocky River, Colinet, NL (See Appendix A). Existing armour stone south east of the existing diversion wall will be temporarily/partially removed to facilitate new work. A portion of the original size stone will be kept around the pier with larger stone to top over this for added protection.

The proposed project is a reconstruction of an already existing structure; therefore alternative locations were not considered.

4.3 Construction:

Commencement of this project is subject to DFO-RPSS operational priorities and funding. Replacement of the diversion wall is expected to require 7 months to complete. Site preparation and construction work will commence in October 2019 and will be concluded by April 2020.

Construction activities will include:

- Demolition, removal and reconstruction of the existing diversion wall. This will be accomplished using heavy equipment. Concrete for the new diversion wall will be poured on-site.
- Currently, construction is scheduled to be completed outside of the fish migration window (May 1st – September 30th). If construction is required to be maintained throughout the salmon migration period a fish relocation plan will be developed and implemented, in consultation with DFO Fisheries Protection Program.
- Equipment and tools will be transported to the project site via local roads.
- Waste material will be transported off site and disposed of at an approved waste disposal location.

The most probable sources of potential pollutants are related to the use of heavy equipment. Accidental spills of heavy equipment fuel/oil and sedimentation from disturbances to riparian area are also a possibility. The project will be assessed pursuant to the CEAA 2012 and all mitigations prescribed as part of that process will be implemented during project description. The following mitigation measures will be utilized to minimize potential interactions with the environment:

Fish / Fish Habitat and Water

- Fisheries and Oceans Canada provided a letter of Advice for the project outlining mitigation measures for the protection of fish and fish habitat (17-HNFL-00001).
- All instream work should take place during the appropriate timing window (October 1 – April 30). If this is not possible, a fish relocation plan must be developed and implemented in consultation with DFO Fisheries Protection Program.
- If at any time Atlantic salmon or sea-run trout are observed migrating upstream or downstream, all works must cease until the migration has ended to ensure there are no impacts to fish movement.
- Minimize duration of in-water work.
- Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation.
- Plan activities near water such that materials such as rust solvents, degreasers, grout, or other chemicals do not enter the watercourse.
- Develop a response plan that is to be implemented immediately in the event of a sediment release or spill of a deleterious substance and keep an emergency spill kit on site.
- Ensure that building material used in the watercourse has been handled and treated in a manner to prevent the release of leaching of substances into the water that may be deleterious to fish.

- Develop and implement an Erosion and Sediment Control Plan for the site that minimizes risk of sedimentation of the waterbody during all phases of the project.
- If there is any run-off of concrete or associated water, it should be directed to a drainage control device such as a settling pond and appropriately managed. No concrete run-off is allowed to enter the water.
- Retain a qualified environmental professional to ensure applicable permits for relocating fish are obtained and to capture any fish trapped within an isolated/enclosed area at the work site and safely relocate them to an appropriate location in the same waters. Fish may need to be relocated again, should flooding occur on the site.
- As this is a scheduled salmon river, if at any time Atlantic salmon or Sea Run trout are observed migration upstream or downstream, all works must cease until the migration has ended to ensure that there are no impacts fish movements.
- Time works such that it does not interfere with the sensitive life stages of the fish species present. Ideally, the work should be carried out during low-flow periods.
- Clearly identify in the field sensitive habitats near the work site that are to be protected.
- Detonation of small scaring charges set off one minute prior to the main charge to scare fish away from the site.
- Use of noise generators to move fish out of the area.
- Environment Canada has provided advice on the concrete production (Appendix C) which must be followed during activities. It should be noted that any release of a deleterious substance can result in harm to fish and migratory birds and may be in contravention of the Canadian Environmental Protection Act.

Birds and Bird Habitat

- Should migratory bird nests be encountered during project activities, work should be minimized to avoid any potential disturbance to any nest site and surrounding environment and EC should be contacted.
- All work to be conducted in accordance with the Migratory Birds Convention Act (MBCA), which outlines that no migratory bird nests or eggs will be moved or obstructed during the construction or operation phase of the project. It is recommended that vegetation clearing not take place during the breeding season until fledglings have left parental territories.
- Migratory birds, their eggs, nests and young are protected under the MBCA.
- The contractor is responsible to ensure a spill kit is on site. Equipment within the spill kit should be adequate for the proposed project. In case of a spill, the contractor should contact Environment Canada at 1-800-563-9089.
- All construction equipment must be fitted with standard and well maintained noise suppression devices. Appropriate dust suppression methods are to be employed when required. Air filters should be used to minimize exhaust emissions.
- Vegetation removal should be kept to a minimum.

Soil (surface and subsurface)

- Work should be scheduled to avoid periods of heavy precipitation. Erosion control structures (temporary matting, geotextile filter fabric) are to be used, as appropriate, to prevent erosion runoff or sediment laden water during the construction phase.
- Any exposed soil must be minimized by limiting the area exposed at any one time and by limiting the time that any one area is exposed. All stockpiled soil must be covered and/or dyked to prevent erosion or runoff of sediment-laden water from leaving the site. Whenever possible, exposed soil should be replanted or sodded to ensure soil stabilization.
- All wastes must be recycled where possible or otherwise disposed of appropriately.
- Machinery must be checked for leakage of lubricants or fuel and must be in good working order. Refueling must be done at least 100 m from any waterbody. Basic petroleum spill cleanup equipment should be on site. All spills or leaks should be promptly contained, cleaned up and reported to the 24 hour environmental emergencies reporting system (1-800-563-9089).
- Containers of petroleum products or chemicals that may be required on site will be tightly sealed against corrosion and rust, and surrounded by an impermeable barrier in a dry, water-tight building or shed with an impermeable floor.
- Waste oils and used lubricating oil will be retained in a tank or closed container and disposed of by a company licensed for handling and disposing of used oil products.
- Mechanical inspections will be conducted routinely on equipment to search for leaks. Leaks will be repaired immediately.

Vegetation

- Areas that may require extensive grubbing will be stabilized as soon as possible to reduce potential for erosion.

Air Quality and Noise

- All construction equipment must be fitted with standard and well maintained noise suppression devices. Appropriate dust suppression methods are to be employed when required. Air filters should be used to minimize exhaust emissions.

4.4 Operation:

Routine maintenance and repair projects will be carried out on an as- required basis over the estimated thirty (30) year life of the structure.

Reasonably foreseeable pollutants occurring during the operational phase of the proposed project are limited to accidental discharges of fuel. The operation and maintenance of the site will be under the control of Fisheries and Oceans Canada, Real Property Safety and Security Branch. Potential resource conflicts are not anticipated as a result of the operation of the

proposed project.

4.5 Occupations:

Reconstruction of the diversion wall is expected to require 7 months to complete. Commencement of the proposed project is scheduled for October 2019.

The following list outlines occupations which may be employed during the design and construction period. Please note that this list represents only an approximation of the number and type of occupations that may be produced as a result of the proposed project. Actual occupations created as a result of the proposed project will ultimately be determined by the successful contractor. Occupations are expected to be comparable to those created for similar construction projects throughout the Province.

- 1 - Project Manager – 0711 - Contractor/Construction
- 1 - Office Administrator – 1211 – Contractor/Construction
- 1 - Project Supervisor/Foreman - 7217– Contractor/Construction
- 1 - OHS Representative - 2263 – Contractor/Construction
- 2 - Carpenters – 7271 – Contractor/Construction
- 4 - Laborers – 7217 - Contractor/Construction
- 1 – Surveyor - 2113 – Contractor/Construction
- 2 - Truck Drivers - 7217 – Contractor/Construction
- 1 - Site Inspector - 2264 - Construction
- 1 - Professional Engineer – 0211 – Entire Project
- 1 - Engineering Technologist – 2231 - Construction Design (Engineering)
- 1 - Office Administrator – 1211 – Entire Project (Engineering)

5.0 APPROVAL OF THE UNDERTAKING:

The following is a list of the likely permits, licenses and approvals required for this project.

Approvals/Certificates/Permits	Regulatory Authority
NL Environmental Assessment Registration ⁽¹⁾	NL Department of Municipal Affairs and Environment, Environmental Assessment Division
DFO–Request For Review (Serious Harm Determination; Aquatic Species At Risk) ⁽²⁾	Fisheries and Oceans Canada, Fisheries Protection Program

Permit to Alter a Body of Water ⁽³⁾	NL Department of Municipal Affairs and Environment, Water Resources Division
--	--

Notes: (1) This document; provincial permits are expected to be issued following release from further environmental assessment.

(2) An application was made to DFO – Fisheries Protection Program to determine if the Project as described herein would avoid Serious Harm to fish by following standard mitigations. Application No 17-HNFL-00001 was received.

(3) Application in progress, submission anticipated to occur following submission of the EA Registration.

6.0 ABORIGINAL CONSULTATION:

Aboriginal persons are not known to utilize the Rocky River RPSS site, nor are there any known aboriginal groups in the surrounding area. As such, aboriginal consultation was not deemed necessary as part of this determination.

7.0 SCHEDULE:

The proposed project is expected to commence in October 2019 and construction would occur over a 7 month period.

8.0 FUNDING:

The total cost estimate for all phases of the proposed project, as provided by the proponent, is approximately \$290,000.00 plus HST. Funds will be provided by Real Property, Safety and Security Branch, Fisheries and Oceans Canada.



August 1, 2019

Date

Environmental Assessment Representative

APPENDIX A

TOPO MAP

SITE PLAN

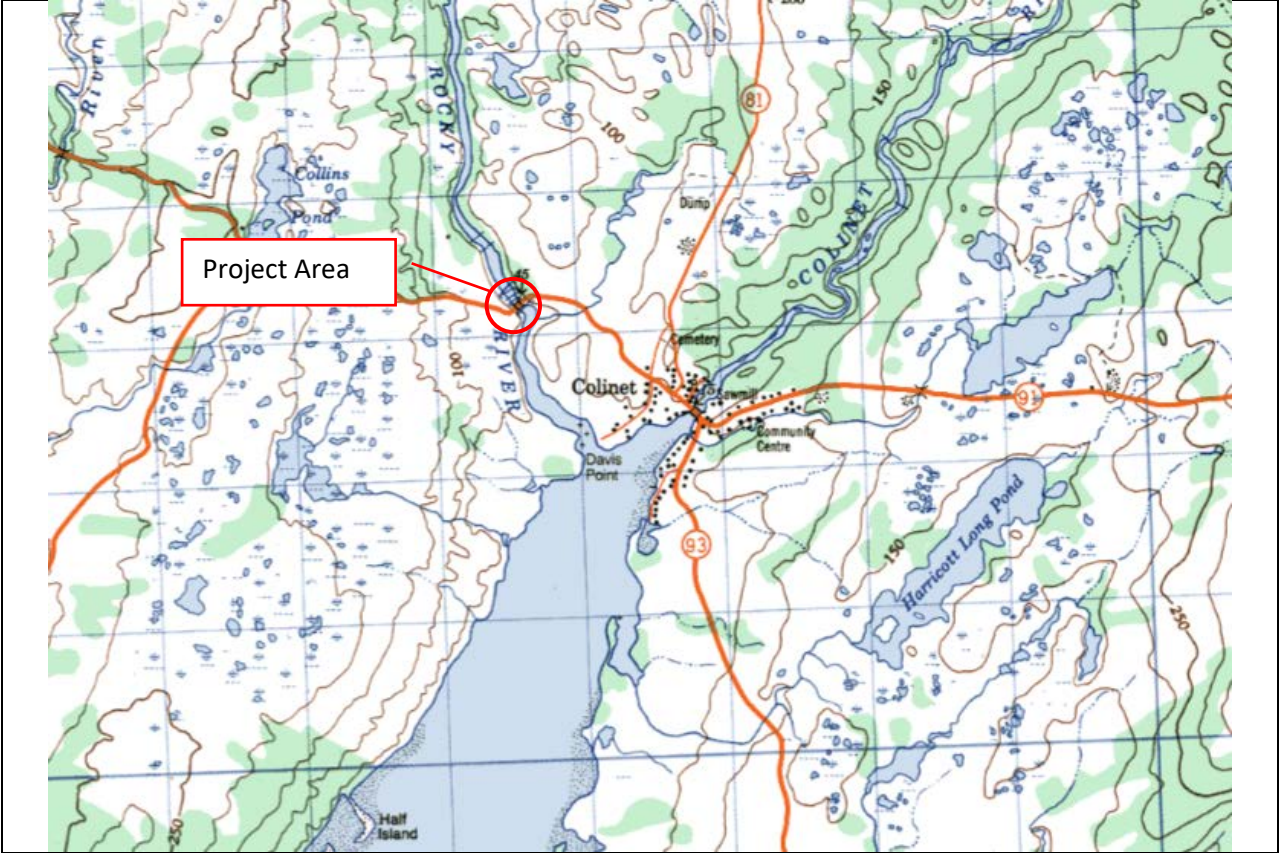


Figure 1: Topographic Map of Proposed Site

Location: Rocky River, Colinet, NL

NTS Mapsheet 01-N-04 – Placentia

Scale 1:50,000



