

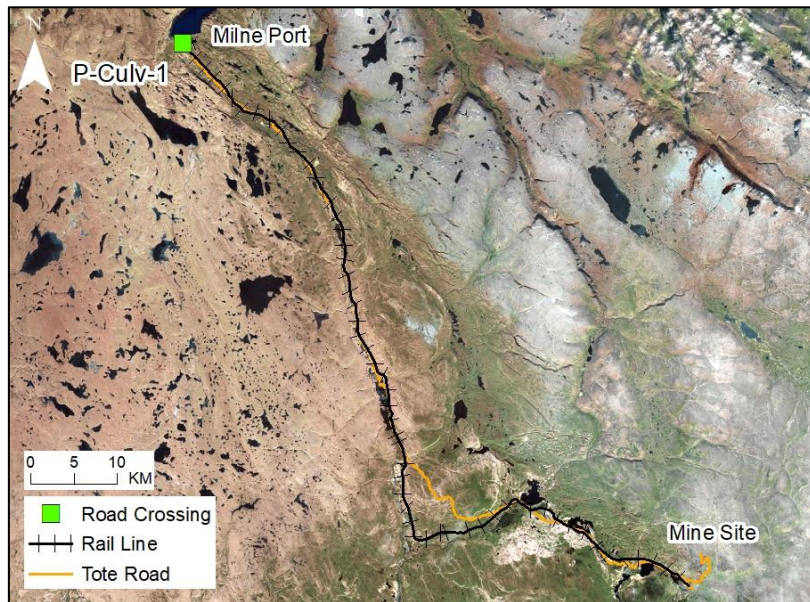
PORT SITE P-CULV-2

LOCATION AND CROSSING DESCRIPTION

Site ID:	P-Culv-2	Dates Surveyed:	18-Jun-19; 2-Sep-20	Waterbody Type:	Pond
Project Interaction:	Culvert	Centreline UTM Coordinates:	17W 503005 E 7975214 N	Culvert Length (m):	16.355
Number of Barrels:	1	Culvert Diameter/Span (mm):	600	Slope (%):	0.6

GENERAL PHYSICAL CHARACTERISTICS

Surface Area (m²):	6,576	Shoreline Length (m):	571	Drainage Basin Area (m²):	-
Maximum Depth (m):	0.5 (estimated)			Mean Depth (m):	-



SUMMARY

Port area infrastructure includes a culvert on the northeast shoreline of a pond at P-Culv-2. The pond is shallow with soft, fine sediment throughout. This pond lacked downstream connectivity and had diffuse inflows prior to construction of laydown areas (LP3 and LP5) in 2019. Following construction of the laydown areas, diverted upstream water has been directed to a culvert and artificial channel at site P-Culv-43. This concentration of flows has improved connectivity between the pond adjacent to site P-Culv-2 and a small, shallow stream to the northwest that flows into Phillips Creek. Water depth was <0.05 m in fall 2020 at the hydrology gauging station at the upstream end of the stream which may have been insufficient for passage of juvenile char, based on a minimum depth of 0.05 m for juvenile char 60 mm in length; anadromous juvenile char are typically >120 mm in length when they first migrate to marine habitat. However, it is unknown if depths are sufficient for passage of anadromous juvenile char under other flow conditions.

The hydrology gauging station at the mouth of the stream that drains the pond presents a barrier to upstream fish movements. No fish were observed or captured in the pond and it lacks connectivity to other waterbodies. This pond does not provide fish habitat.

**BAFFINLAND IRON MINES
MARY RIVER PROJECT**

North/South Consultants Inc.
Aquatic Environment Specialists

FISH HABITAT:

ARCTIC CHAR - NO

NINESPINE STICKLEBACK - NO

PORT SITE P-CULV-2

BARRIERS

Upstream/ Downstream	UTM		Barrier Type			Height (m)	Gradient (°)	Description	Site Label
	Easting	Northing	1	2	3				
Downstream	502963	7975341	VD					Permanent barrier: Hydrology station downstream prevents fish access to the pond	A
Upstream	INFLOW TO POND AN ARTIFICIAL DIVERSION CHANNEL								



A

PORT SITE P-CULV-2

FISH HABITAT POTENTIAL

Nearest Potential Overwintering Habitat - ARCH: Milne Inlet

Distance to Nearest Potential Overwintering Habitat - ARCH (km): 1.3

Overwintering Habitat Upstream of Site - ARCH (Y/N): No

Species	Spawning	Overwintering	Rearing	Adults Present
ARCH	N	N	N	N
NNST	N	N	N	N

FISHING SITES



PORT SITE P-CULV-2

FISHERIES DATA

Date: 18-Jun-19 **Temperature (°C):** 7.0 **Gear Used:** Backpack ElectrofisherVisual

Distance Fished (m): 103 **Duration Fished (seconds):** 96

Species	Season	Effort (Seconds)	Fish Captured	Fish Observed	CPUE (No. Fish/60 Seconds)	Length Range (mm)
ARCH	Spring	96	0	0	-	-
NNST	Spring	96	0	0	-	-

Date: 02-Sep-20 **Temperature (°C):** - **Gear Used:** Backpack ElectrofisherVisual

Distance Fished (m): Two-thirds of pond perimeter **Duration Fished (seconds):** 439

Species	Season	Effort (Seconds)	Fish Captured	Fish Observed	CPUE (No. Fish/60 Seconds)	Length Range (mm)
ARCH	Fall	439	0	0	-	-
NNST	Fall	439	0	0	-	-

ENCROACHMENT/INFILL HABITAT

Area	Fines (%)	Gravel (%)	Small Cobble (%)	Large Cobble (%)	Boulders (%)
Nearshore	100	0	0	0	0
Offshore	100	0	0	0	0

OTHER NOTES/OBSERVATIONS

No fish were captured via electrofishing or observed in the pond in spring 2019 or fall 2020. Due to the downstream barrier preventing access from Phillips Creek, the pond does not provide fish habitat.

PORT SITE P-CULV-2

18-JUN-19; 02-SEP-20



A



B



C



D

Photos 1. Photos at the site in spring 2019 (top) and fall 2020 (bottom): (A) looking south; (B) looking east; (C) looking north; and (D) looking upstream from the outflow's confluence with Phillips Creek.