

Environmental Protection Plan

Cape Pond to Horse Chops Multi-Use Trail

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Note: Where a provision, statement or any correspondence made under this EPP is inconsistent or conflicts with a provision, term or condition of provincial or federal legislation, policy or guidelines, the provision, term or condition of provincial or federal legislation, policy or guidelines shall have precedence over the provision, statement or any correspondence made under this EPP.

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Abbreviations and Acronyms

ATV – All-Terrain Vehicle

BBBAA- Bay Bulls Bauline Athletic Association

COSEWIC – Committee on the Status of Endangered Wildlife in Canada

DFO – Department of Fisheries and Oceans

EEMP – Environmental Effects Monitoring Plan

EPP – Environmental Protection Plan

NLDOEC – Newfoundland & Labrador Department of Environment and Conservation

NLESA - Newfoundland and Labrador Endangered Species Act

SARA - Species at Risk Act

Section 1.0 Introduction and Purpose

Residents along the Southern Shore embrace the outdoors for activities such as walking, hiking, and snowshoeing as well as ATV and snowmobile use. Currently there are very few ATV trails along the southern shore, and for those available, they are contained within a certain area or community and very sub-standard whereby they cross over wetland areas such as bogs and peat land. The goal for this trail is to provide a safe and welcoming environment for people to engage in a wide variety of recreation & physical activities, including, but not limited to, ATV, walking, hiking, snowshoeing, etc. The development of this trail will keep motorized vehicles off the community roadways, away from wetland areas and no longer disturbing our aquatic wildlife. It will be designed wide enough for pedestrians and ATV to occupy the space at the same time.

There has been work already started to upgrade the existing trail system, via the Transmission line, between Renew's and Cape Broyle. This trail will be developed from Cape Pond Road to Horse Chops Road and it will link up with the Cape Broyle to Renew's trail, as well as the Cape Pond Road to Mobile First Pond Road, cabin road network.

The southern shore is already a well-known tourism destination for boat tours, Air B&Bs and hiking along the East Coast Trail system. Introducing a multi-use trail system along the southern shore will draw even more tourists that enjoy the community sights and sounds but also the picturesque back country views. A trail like this is something that residents have expressed interest in for a long time now. And it would be great to see it come to fruition.

Section 2.0 Geographic Location

Cape Pond Road		Horse Chops Road
MTM Zone 1	To	MTM Zone 1
N-5228170m; E-303525m		N-5224060m; E-302160m

As noted in Figure 1, the trail application is located on the Avalon Peninsula of the Province of Newfoundland and Labrador. Figure 2 shows more clearly that the trail application is located on the Avalon Peninsula, along the Southern Shore between the communities of Tors Cove and Cape Broyle. The trail is approximately 12 kms southwest of Tors Cove and approximately 9 kms northwest of Cape Broyle. It is located east of the Avalon Wilderness Area (approximately 2.7 km's at the north end and 1.7 km's at the south end) and west of La Manche Provincial Park (approximately 6.2km's at its nearest point to the Provincial Parks 1km buffer).

The proposed trail will run from Horse Chops Road to Cape Pond Road. Horse Chops Road is a cabin area road that lies outside of the municipal boundary and planning area boundary for the Town of Cape Broyle (as stated in Town of Cape Broyle Municipal Plan 2009). Cape Pond Road is another cabin area road that is south of the local service district of Tors Cove.

GPS coordinates of Horse Chops Road:
47.15613, -53.03489

GPS coordinates of Cape Pond Road:
47.19281, -53.01674

2.1 Physical Features:

Crown land, including forest, water bodies, and wildlife

-Size of area:

Frontage = 2.5-3 meters Depth = 4,910 meters

No buildings/shelters/look-out areas will be constructed.

We will be minimizing the number of trees that are cut in the process, however, the trees and logs that are cut during construction will be used for brush matting if required along the trail.

The size of the area affected by the undertaking is approximately 1 hectare or 2.5 acres. The width of disturbed ground will be 2.5-3meter driving surface with a berm width of 1 meter on one side or the other.

This undertaking will not go through any wetlands. There are currently multiple unregistered trails that go through the wetland areas such as one extending north into Beaver Pond from Horse Chops Road, West of the applied trail, and one extending south of Cape Pond Road, east of the applied trail.

The purpose of our application is to the construct a trail that avoids the wetlands and goes through highland areas. Currently at this time, we are waiting on approval of our Crown Land application (application No. 159586), once approved, we would then apply to the Water Resources division for water crossing permits.

The area is mostly barren lands with a few small timber areas. We will be avoiding the wetland areas if possible.

Figure 1 Trail Location

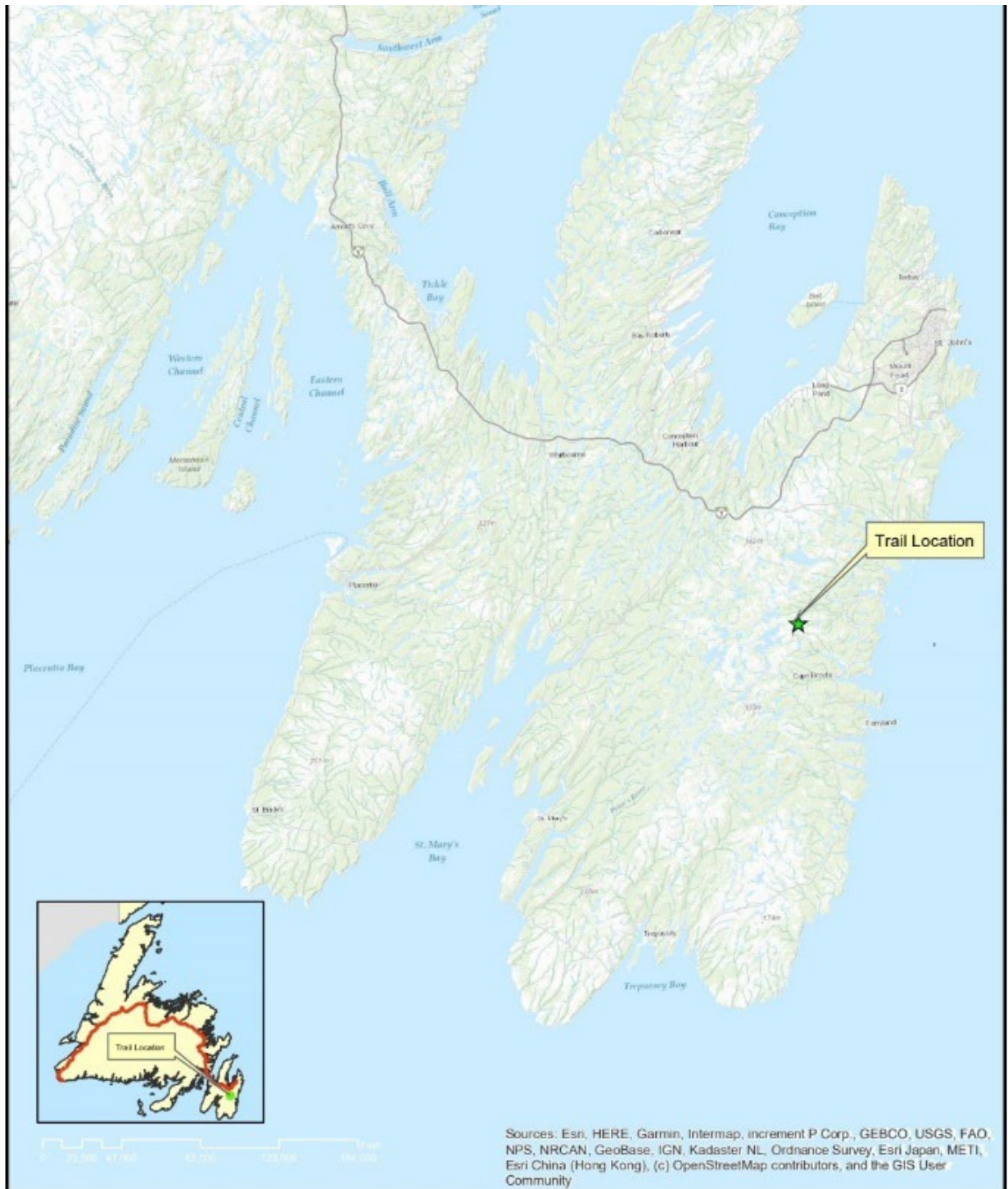
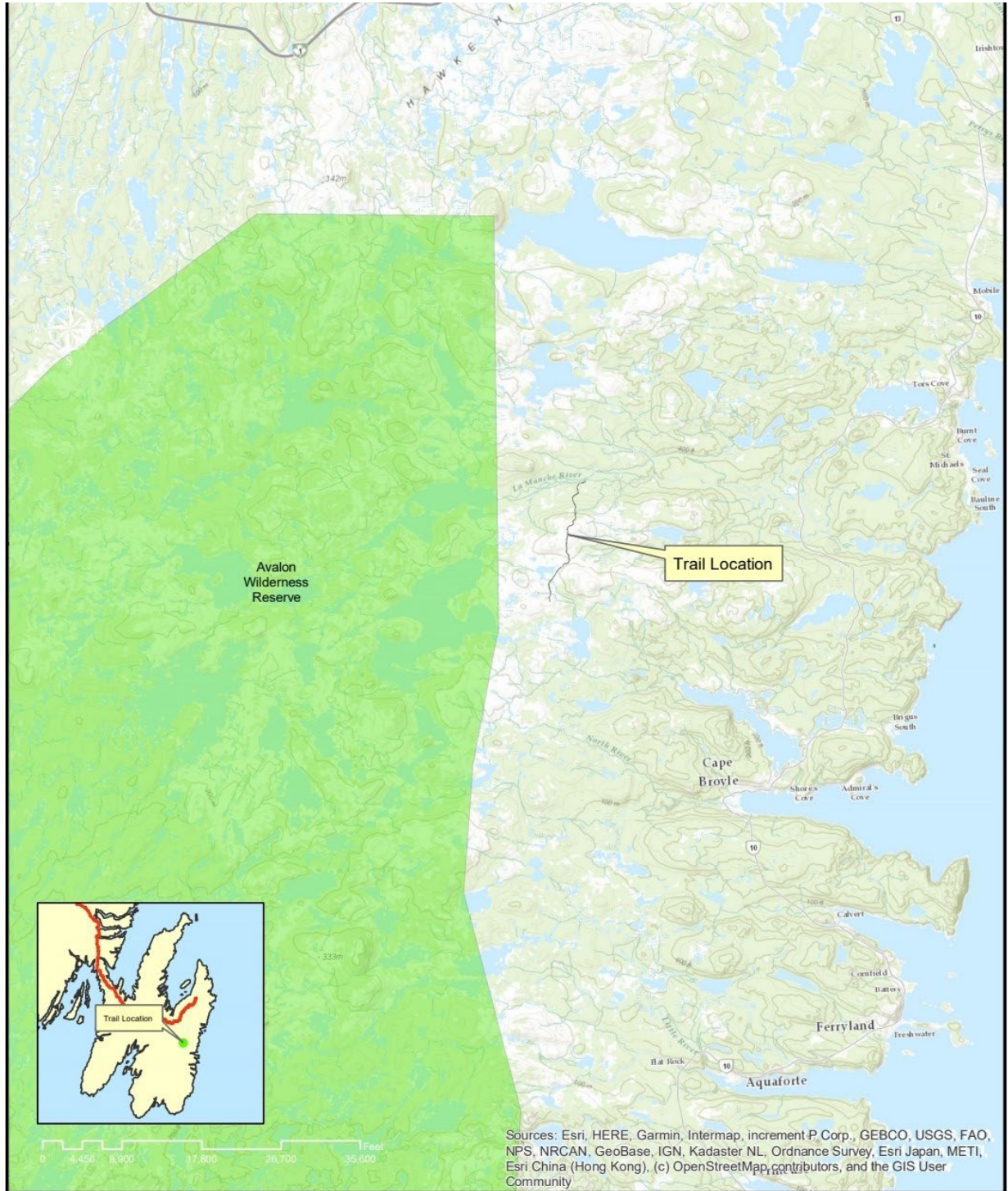


Figure 2 Trail Location Close Up



3.0 Construction

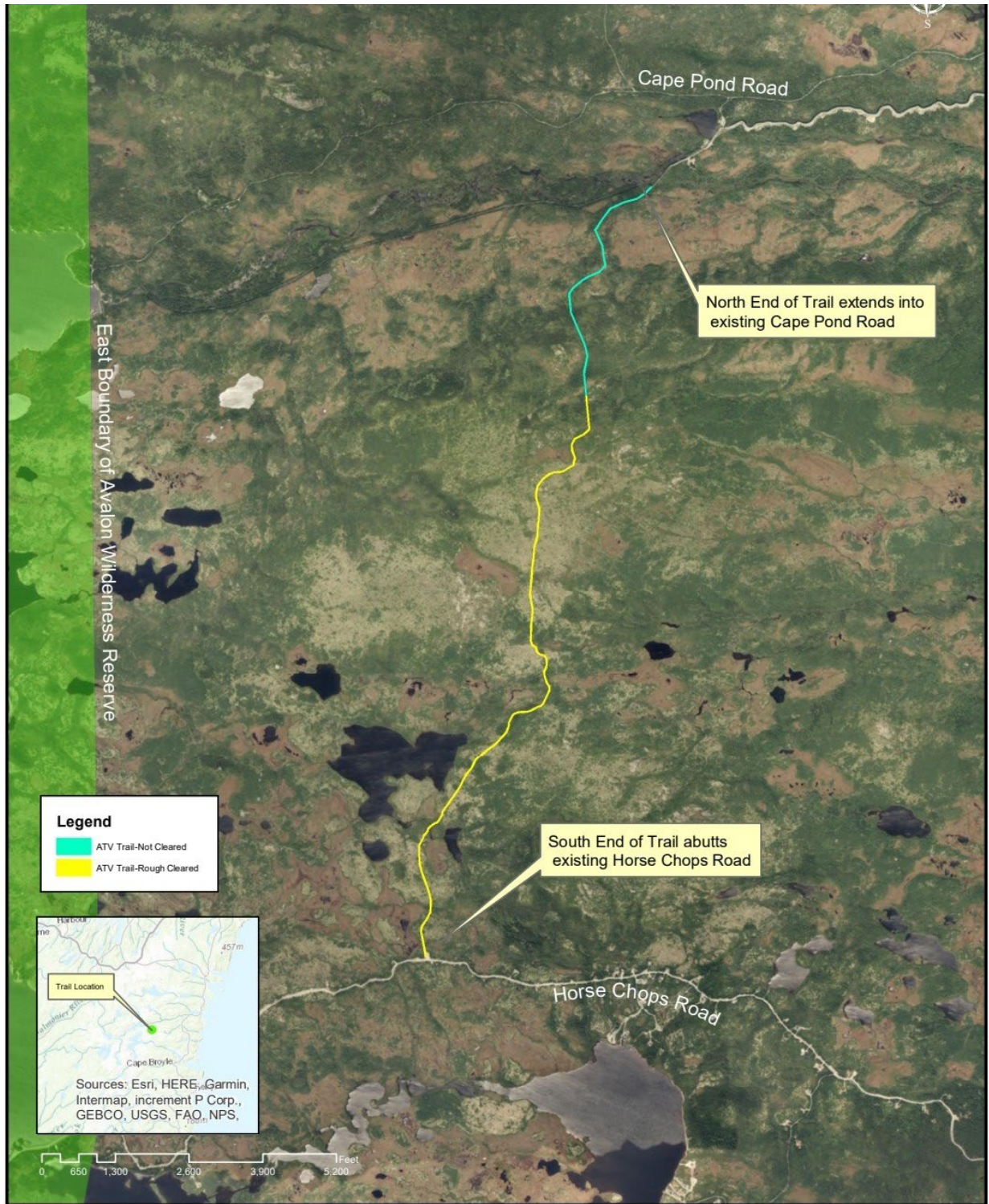
The construction of the trail will follow the contours of the land with no cut or fills required. As shown in Figure 3, there have been 3.5 km of trail currently rough cleared, with another 1.4 km remaining. The area rough cleared only has the grubbing completed. The rough clearing entailed scraping off the top vegetative layer down to the soil layer and moving it to one side of the trail. Within the 3.5 kms cleared, there were 5 water crossings encountered that may require a permit from Water Resources. These include 3 streams with a cross section of 0.45 – 0.6 m wide, and a 0.2 m depth, a river with a cross section of 1.2m wide and 0.25m depth, and another river with a 2 m cross section width and 0.4m depth.

The finished trail will be sloped to one side to allow for water runoff. The trail will be monitored for silt or soil erosion and silt barriers will be used if needed to control any silt movement.

The construction period will entail and has entailed 2 excavators/operators for approximately 2 working days, totaling approximately 20 hours. As well as a chain saw operator, for removal of trees. A spill kit was on hand during this construction period. There were no signs of moose or caribou habitat areas as the majority of the trail follows very high ground with no shelter belts. Nor were there any bird nesting areas encountered. There was no pollution of soil during the construction period, only emissions from the excavator exhaust system.

Proposed measures to mitigate potential adverse environmental effects on receptors and resource/land use conflicts: Existing trails in the area of Cape Pond Road and Horse Chops Road travel across bog and wetland areas, as identified above. The proposed route is to be constructed on dry land – high ground as to mitigate any future risk to wetland biodiversity.

Figure 3



4.0 Operation

This trail will be operated year around as a multi-purpose trail and utilized for walking, biking, cycling, snowshoeing, and ATV's. Maintenance for the trail will be covered off by a user fee system and performed by volunteers. Maintenance may include filling of potholes or culvert repairs.

Potential causes of resource conflicts: potential sources of pollutants during operation of trail would be emissions from ATV's and snowmobiles.

Public consultation have consisted of a polling petition of support for the trail, which as of today's date contain over 1500 names of support (link to petition below):

<https://www.change.org/p/approval-of-crown-land-trail-for-the-southern-shore-trailway>

4.1 Occupations:

Construction: Construction of trail will be done by volunteers in accordance with the National Occupational Classification codes for the construction of the trail are as follows;

7521.0 – Heavy Equipment Operator (except Crane)

8421.0 – Chain saw Operator

Operation: 1 full time regional recreation director employed by the Bay Bulls Bauline Athletic Association and 14 volunteer board members.

5.0 Woodland Caribou

5.1 Purpose

The purpose of the Environmental Effects Monitoring Plan (EEMP) for Woodland Caribou is to outline the protection measures for Woodland Caribou and associated effects monitoring for the construction phase of the proposed multi use trail and associated general use activities once the Cape Pond to Horse Chops trail is completed.

5.2 Historical and Baseline Information for Woodland Caribou on the Avalon Peninsula

Woodland Caribou is native to Newfoundland and Labrador, representing the Boreal population which encompasses two distinct groups: sedentary forest-dwelling caribou and migratory forest tundra caribou (NLDOEC, 2009). The sedentary forest-dwelling ecotype is the group in which the Newfoundland population of Woodland Caribou belongs to (NLDOEC, 2009). Instead of migration, sedentary forest-dwelling caribou undergo a seasonal dispersion during calving periods (Nalcor 2010; Bergerud, Luttich and Camps, 2008). The total population of Newfoundland caribou is estimated at approximately 34,000 with a density of 30 caribou/100km² while Labrador is currently estimated at 3 caribou/100 km² (NLDOEC, 2009). In comparison to Labrador's

Woodland Caribou herds, insular Newfoundland caribou are not listed as threatened under either the federal *SARA* or the provincial *NLESA*, with island caribou occurring at higher densities than similar herds in Labrador (NLDOEC, 2009). Recent surveys have indicated the main reason for their decline to be poor recruitment rates (Nalcor, 2010) and poor calf survival (Trindale, Norman, Mahoney, Weir, Lewis, Porter and Gullage, 2010).

Work on the Newfoundland Woodland Caribou population dynamics previously indicated that the entire population encompassed 4 broadly defined but distinct herds which include: the Interior Head, the Humber River Herd, the Northern Peninsula Herd and the Avalon Peninsula Herd (Wilkerson, 2010). Currently, the government of Newfoundland and Labrador categorizes the Newfoundland Woodland Caribou population into 19 Caribou Management Units (or herds) based on calving locations and for management purposes, as seen below in Figure 4 (Wilkerson, 2010).

Figure 4 Distribution of Newfoundland Caribou Herds (Wilkerson, 2010)



The hunting season for these caribou herds are from September to December each year, except the following 4 herds are closed for hunting as depicted below in Figure 5: The Avalon Peninsula Herd, Burin Knee, Burin Foot and Blow Me Down Mountains (Wilkerson, 2010). Located near the proposed multi use trail is the 1070 km² Avalon Wilderness Reserve, which protects the Avalon

Peninsula Herd from hunting and habitat loss (Wilkerson, 2010). In the 1960s, the Avalon Peninsula Herd was severely depleted with a steady increase afterwards until a time in the 1990s when they were exposed to Scandinavian Brain Worm and again faced a reduction in population (Wilkerson, 2010).

Figure 5

Caribou Management Hunting Areas (NLDOEC, 2009)



In Newfoundland, Woodland Caribou exhibit the following seasonal preferences for food:

- I. Spring: broad-leaved evergreens, deciduous shrubs and sedges (Bergerud, 1972);
- II. Summer: deciduous shrubs, reindeer lichens and fungi (Bergerud, 1972);
- III. Fall: reindeer lichen (*Cladonia spp*) (Nalcor, 2010);
- IV. Winter: reindeer lichen (Mayor, Schaefer, Schneider and Mahoney, 2009) and arboreal and evergreen shrubs (Bergerud, 1972).

Population estimates of the Avalon Caribou Herd within Caribou Management Area (CMA) 65 are presented in Table 1 below. CMA 65 boundaries are defined in Figure 6. These population size estimates were generated using population viability analysis (PVA) and provided by the NLDOEC Wildlife Division. The census survey completed in 2005 had an estimate of 570 caribou in the Avalon CMA. As presented in Figures 7 and 8, caribou observations of groups of 4 and 21 caribou were recorded in 2005, approximately 17 km southwest of the westernmost tip of the proposed

multi use trail.

Table 1.0

Avalon Caribou Management Area Census Survey Data (NLDOEC – Wildlife Division, 2015)

Year	Season	Population Size Estimate
1956	Fall	71
1957	Fall	86
1958	Fall	86
1959	Fall	112
1960	Fall	206
1961	Fall	350
1962	Winter	381
1963	Winter	371
1964	Fall	438
1965	Fall	570
1966	Fall	650
1967	Fall	720
1970	Fall	1230
1971	Winter	1560
1973	Fall	1969
1975	Winter	1537
1976	Spring	1982
1977	Fall	2653
1981	Spring	2422
1982	Winter	1705
1990	Fall	6361
1996	Winter	7104
1998	Winter	1845
2005	Winter	570

Figure 6

Caribou Management Area (CMA) 65

Figure 7

CMA 65 Caribou Survey 2005 - Transect Lines and Caribou Locations (Sourced from NLDOEC, 2015)

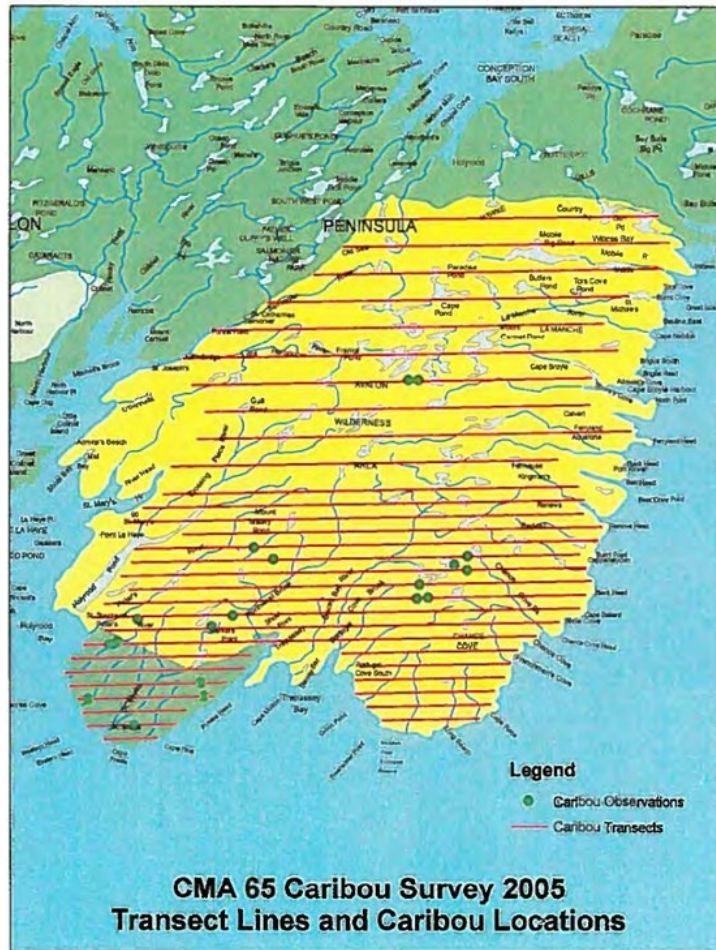
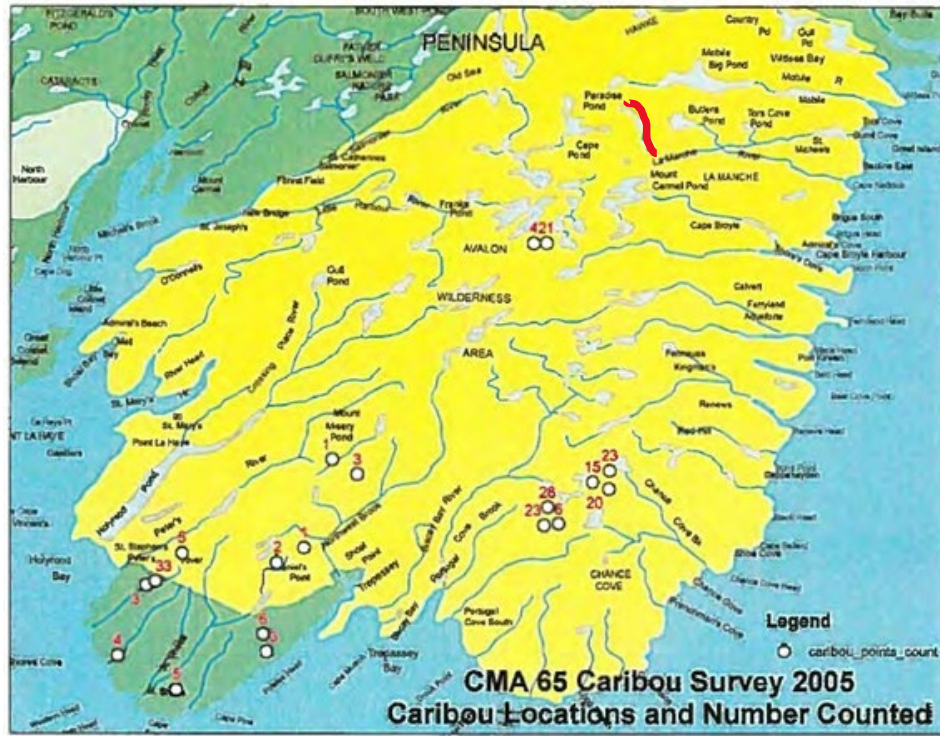


Figure 8

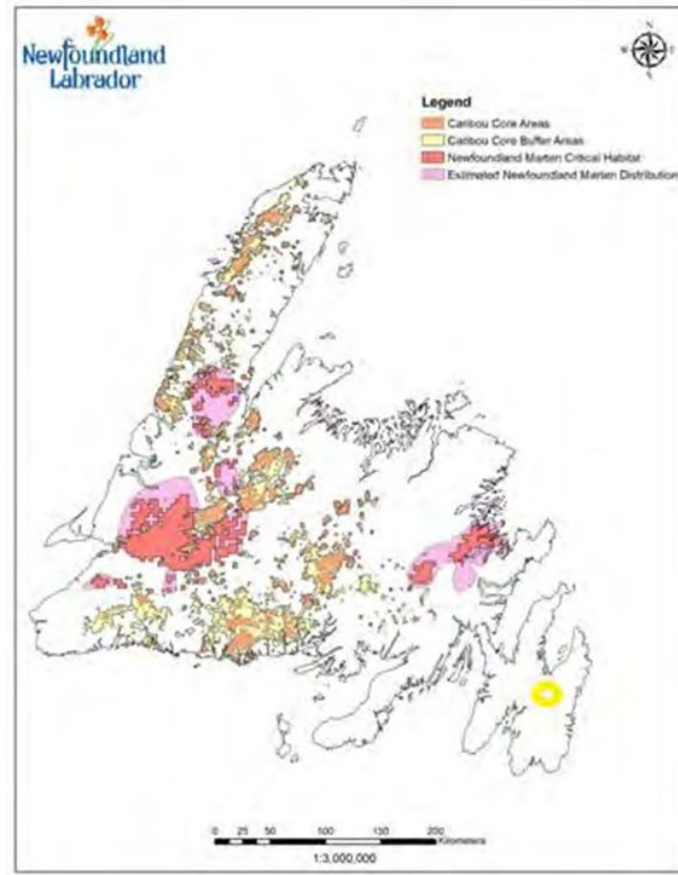
CMA 65 Caribou Survey 2005 - Caribou Locations and Number Counted (Sourced from NLDOEC 2015)



As can be seen above in Figure 8, there are no core caribou areas located within the Project Site (highlighted in red) on the Avalon Peninsula.

Figure 9

Woodland Caribou Core Areas in Newfoundland (Modified from Forestry and Agrifoods Agency, 2014)



Over the last 3 years, numerous helicopter surveillance flights have been conducted and have not yielded a single observation of any individual animal nor was there any evidence of any herds in the immediate vicinity. Additionally, there is also an ATV trail (which is what is being proposed to upgrade) connecting Cape Pond to Horse Chops and there have been no reported signs of Caribou from the users or local hunters in the area.

5.3 Regulatory Compliance

The sedentary population of Woodland Caribou in insular Newfoundland is not listed under either the federal *SARA* or *NLESA*. This EEMP's purpose is to evaluate predicted project effects on Woodland Caribou and help to mitigate, to the extent practical, impacts during construction and public usage on:

- i. Caribou mortality; and
- ii. Disturbance to caribou and their associated habitat which includes increased or altered access and habitat loss.

The Department of Environment and Climate Change, Environmental Assessment Division, under the guidance of the *Environmental Protection Act*, have released the Project from EA and set conditions for this release that Bay Bulls Bauline Athletic Association shall: “... *submit an Environmental Protection Plan (EPP) that includes details on caribou occupancy in the area. Historic range use, potential impacts of the project on caribou and measures that will be undertaken to mitigate adverse impacts*”.

5.4 Predicted Adverse Effects

Although there is no evidence of Woodland Caribou currently present in the Project area, it is recognized that historically, populations have been observed there. The following are potential effects of project impacts on possible future Woodland Caribou habitat:

- i) Adverse: Potential habitat alteration and or loss, potential changes in movement or migration routes, temporary sensory disturbances, potential for reduced forage availability or access and potential for direct or indirect mortality through either vehicle collision or increased predation and or hunting;
- ii) Low Magnitude: Potential habitat alteration and or loss;
- iii) Local to Regional Effect: Potential sensory disturbance and avoidance; and,
- iv) Short to far-Future Time Period: Potential avoidance of proposed resource access road and resultant habitat loss.

5.5 Environmental Effects Monitoring and Mitigation

Various mitigation tactics will be employed to help lessen impacts on possible Woodland Caribou within the Project area. Construction personnel will be trained through orientation, to recognize any vulnerable, threatened or endangered caribou before vegetation clearing and site activities. Personnel will be prohibited from interacting with the caribou; this includes diverting, following, harassing and/or feeding. Garbage will also be contained to prevent attracting caribou to the site.

The Department of Fisheries Forestry and Agriculture, Forestry Services Branch, will also be notified and updated regarding wildlife encounters and nuisance wildlife. During grubbing activities, operators will be instructed to flatten grubblings to finish grade to avoid any steep embankments so caribou and other wildlife can easily cross the trail.

The construction crew will report all wildlife sightings and nuisance wildlife to the BBAA Manager who will then contact the Wildlife Division if deemed necessary.

BBAA will contact the Department of Fisheries Forestry and Agriculture, Wildlife Division, if caribou are discovered occupying a location under construction or development to determine if either activity must be suspended or if appropriate mitigation tactics can be facilitated. The Department of Fisheries Forestry and Agriculture, Wildlife Division and the Canadian Wildlife Service of Environment Canada will be contacted immediately at 1-800-668-6767 if human-

mediated caribou mortality occurs.

Scheduling will ensure that construction activities will take in to account potential impacts to sensitive caribou habitat and critical caribou cycle periods and as a result, will consider additional mitigation tactics needed. Consideration will also be given to annual timing of migration and calving (May 1 to July 1) in the immediate area of the Project Site.

All vehicles and equipment will adhere to the construction site speed limit of 15 km/hr and will yield the right-of-way to wildlife. In the case of caribou activity on the trail, caribou will always have the right of way and be allowed to pass undisturbed. Once the multi-use trail is complete, signage will be installed along the trail advising the public to be aware of caribou, yield to caribou and directions on how to report a caribou sighting.

BBBAA will be in constant contact with the Department of Fisheries Forestry and Agriculture, Wildlife Division and other relevant stakeholders and officials during the trail construction regarding caribou movement and potential sightings in the project vicinity.

5.6 Baseline Data Collection

Where project activities are occurring, baseline data collection is the determination of caribou presence. Prior to construction aerial surveys and periodic trips from Horse Chops to Cape Pond on the current trail were conducted which established the baseline conditions. As noted above, caribou were not observed during the aerial or ATV surveys.

5.7 Construction Activities Data Collection

Aerial surveys will be conducted prior to beginning of construction to ensure no presence of caribou in the project vicinity. If caribou are observed during the flight, discussions will be held immediately with the Department of Fisheries Forestry and Agriculture, Wildlife Division, regarding additional mitigation measures.

5.8 Follow-up and Monitoring

Because the construction will only take approximately 10 days, periodic aerial and ATV surveillance will occur once the rail is complete with the purpose of alerting the Department of Fisheries Forestry and Agriculture, Wildlife Division, if there is a caribou sighting.

In the event there is a sighting, temporary closure signs will be installed at both ends of the Cape Pond to Horse Chops multi-use trail until the BBBAA is advised by the Department of Fisheries Forestry and Agriculture, Wildlife Division, it is safe to reopen on behalf of the caribou.

6.0 References

A listing of key reference material and works cited is presented below:

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