

Environmental Protection Plan

Demonstration Trail Parson's Pond to Daniel's Harbour

Trailhead Development Company Inc.

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3			
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Environmental Preview Report – Appendix C

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Abbreviations and Acronyms

AIS	Aquatic Invasive Species
DBH	Diameter at Breast Height
DECC	Department of Environment, Conservation and Climate Change (Provincial)
C DFO	Department of Fisheries and Oceans Canada
EPA	<i>Environmental Protection Act</i>
EPP	Environmental Protection Plan
EPR	Environmental Preview Report
FAL	Department of Forestry, Agriculture and Lands
GNL	Government of Newfoundland and Labrador
GNP	Great Northern Peninsula
HADD	Harmful Alteration, Disruption, and Destruction
IMBA	International Mountain Bicycling Association
MBCA	<i>Migratory Birds Convention Act</i>
MTM	Modified Transverse Mercator
NLESA	Newfoundland and Labrador <i>Endangered Species Act</i>
SAR	Species at Risk
TDCI	Trailhead Development Company, Inc.
UAS	Unmanned Aerial System
WC	Water Crossing
WLA	<i>Wild Life Act</i>
WRA	<i>Water Resources Act</i>

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1 Introduction

Following review of the Great Coastal Trail – Parson's Pond to Daniel's Harbour Demonstration Trail Project (herein referred to as the "Project") Registration Document (available [here](#)), the Government of Newfoundland and Labrador (GNL) Department of Environment, Conservation and Climate Change (DECCC) required the preparation of an Environmental Preview Report (EPR). The Guidelines issued for the EPR require submission of an Environmental Protection Plan (EPP) by the proponent (i.e., the Trailhead Development Company Inc., TDCI).

This EPP is a field-ready document describing applicable environmental protection measures for: 1) construction and maintenance personnel; 2) trail users; and 3) TDCI's commitments for the long-term management of the Project. This EPP demonstrates a commitment to the environment as well as applicable guidelines/regulations and an understanding of potential effects of the Project.

The proposed trail spans several water crossings and boggy areas, and skirts along bluffs, beaches, and sand dunes. It also falls within the breeding ranges of Bank Swallow, Short-eared Owl, Olive-sided Flycatcher, and several other Species at Risk (SAR; see Section 4.1.2 in LGL 2025). This EPP describes mitigation measures relevant to sensitive habitats and species/life history periods that may be affected by trail development and usage. At a minimum, the mitigation measures provided in this EPP meet standards consistent with the provincial *Water Resources Act* (WRA), *Environmental Protection Act* (EPA), *NL Endangered Species Act* (NLESA), and *Wild Life Act* (WLA)/Regulations, federal *Migratory Birds Convention Act* (MBCA), and Schedule "C" of the Licence to Occupy Crown Land associated with the Project (Application number 161561).

This EPP is considered a living document and will be reviewed and updated on a regular and/or as-needed basis (as appropriate) throughout the various Project stages. As such, this is a controlled-distribution document intended to be maintained and updated (as necessary) by personnel as recorded in the Revision Table on this document's cover page.

2 Site Location

The Project is located on the west coast of the island of Newfoundland's Great Northern Peninsula (GNP), between the communities of Parson's Pond and Daniel's Harbour (Table 2.1; Figure 2.1). The proposed trail will be routed approximately parallel to Route 430, with several access points for construction, emergency personnel, maintenance, and, ultimately, use by the public. A relatively small portion (606 m, roughly half of which consists of existing trail that is not included in the Project) runs northeast-southwest through the Arches Provincial Park.

Table 2.1. Proposed start and end coordinates for the proposed trail from Parson's Pond to Daniel's Harbour.

Position	MTM Zone	UTM Zone	Latitude	Longitude
Parson's Pond – End of Church Road	3	21 N	50.032988°N	57.710028°W
Daniel's Harbour – Bennette Lodge	3	21 N	50.226548°N	57.590878°W

MTM = Modified Transverse Mercator.
UTM = Universal Transverse Mercator

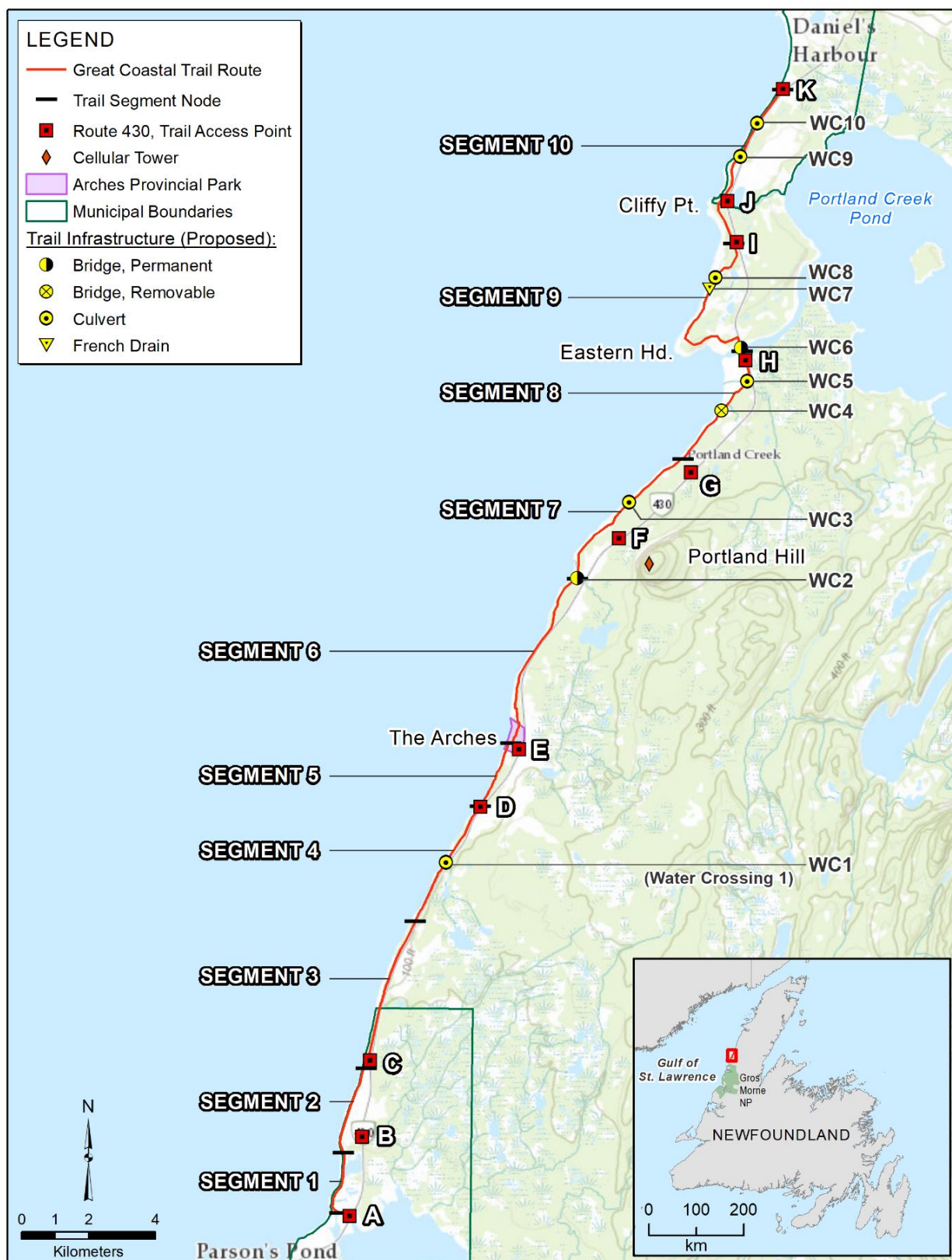


Figure 2.1. Proposed Great Coastal trail route located along the coastline between the communities of Parson's Pond and Daniel's Harbour, NL.

3 Project Description

A brief summary of the Project Description as relevant to this EPP is provided here; see Section 4 in LGL 2025 for a full description of the Project. The proposed trail runs generally northeast-southwest for a length of ~26.6 km, primarily on Crown Land with smaller sections passing through the Arches Provincial Park and along municipal or unmaintained/unofficial access roads. The trail will be wide enough to accommodate both pedestrian and bicycle traffic (2.4-3.0 m tread, 3.0-4.0 m cleared corridor) but will be closed to motorized vehicle traffic. Where the trail is constrained by topography, the width may be reduced to 2.0 m but with wider passing zones placed every 50-100 m. The size of the area affected by the undertaking is approximately 0.11 km², or 27.18 acres.

The elevation along the trail ranges from ~0-25 m, with mostly gentle grades averaging 5-8% and relatively few short stretches of steeper grades up to 10-12%.

The trail traverses through barren habitat and crosses several watercourses. Dedicated fieldwork completed for the Project (see Appendix F, *Field Report*, in LGL 2025) confirmed that the route of the trail has been ground-truthed to avoid wetlands wherever possible. Where such avoidance is not possible, mitigation measures will be employed as described in Section 4.0 below.

A total of ten confirmed water crossings were identified along the trail through ground-truthing (Figure 3.1-Figure 3.10). There are no other visible areas along the trail determined to require a Water Body Modification/Crossing Permit at this time. However, should this change after construction commences, this EPP would be updated as appropriate. Potential crossings that were preliminarily identified prior to the ground-truthing exercise that were determined to no longer exist (e.g., water body permanently dried up) were not evaluated further and are excluded from this EPP.



Figure 3.1. Water Crossing No. 1 (WC1; 50.093322°N, 57.681432°W; elevation 4.5 m) is <2.0 m wide and outflows at a cobble beach.



Figure 3.2. Water Crossing No. 2 (WC2; 50.14235°N, 57.646087°W; elevation 1.0 m) is approximately 8.0 m wide.



Figure 3.3. Water Crossing No. 3 (WC3; 50.15538°N, 57.632144°W; elevation 0.9 m) is approximately 3.0 m wide.



Figure 3.4. Water Crossing No. 4 (WC4; 50.17124°N, 57.60731°W; elevation 1.0 m) is approximately 5.0 m wide and outflows at a sandy beach.



Figure 3.5. Water Crossing No. 5 (WC5; 50.176186°N, 57.60033°W; elevation 8.0 m) is approximately 2.0 m wide

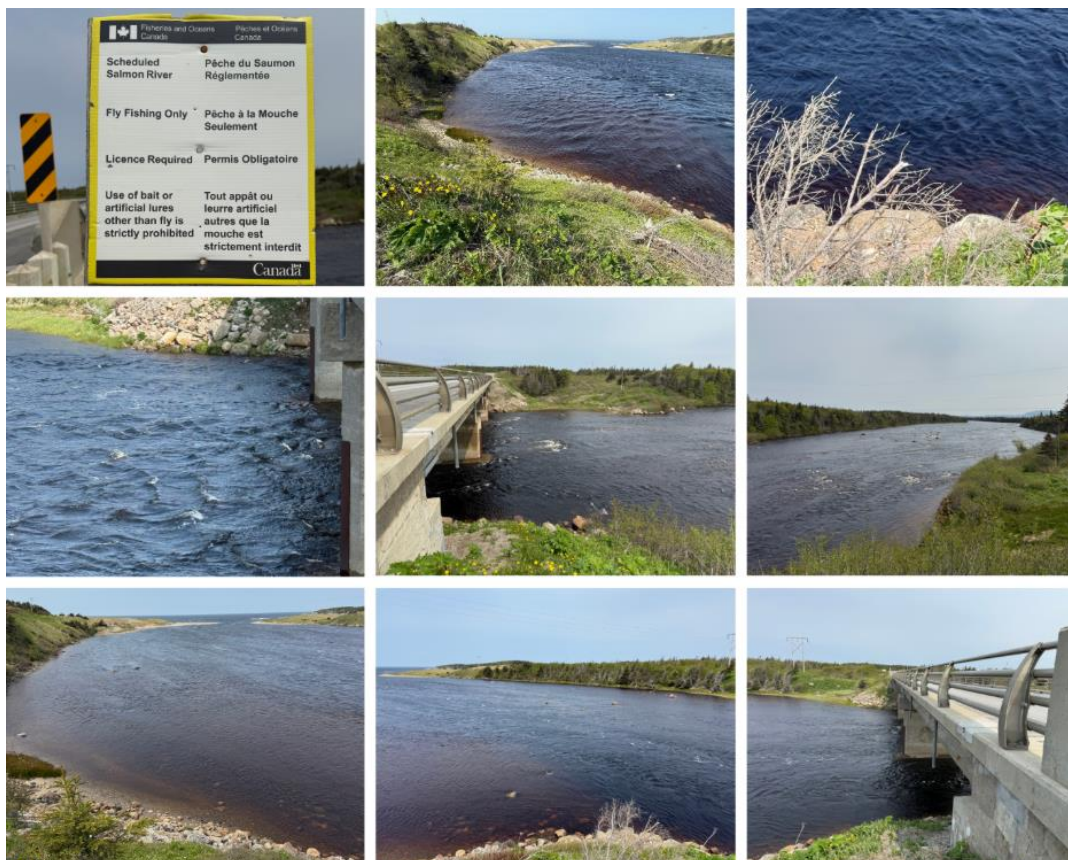


Figure 3.6. Water Crossing No. 6 (WC6; 50.176186°N, 57.60033°W; elevation m) crosses over Portland Creek and is approximately 100.0 m wide



Figure 3.7. Water Crossing No. 7 (WC7; 50.192114°N, 57.610391°W; elevation 2.0 m) is an ephemeral channel <1.0 m wide



Figure 3.8. Water Crossing No. 8 (WC8; 50.194088°N, 57.608896°W; elevation 16.6 m) is an ephemeral channel <0.5 m wide

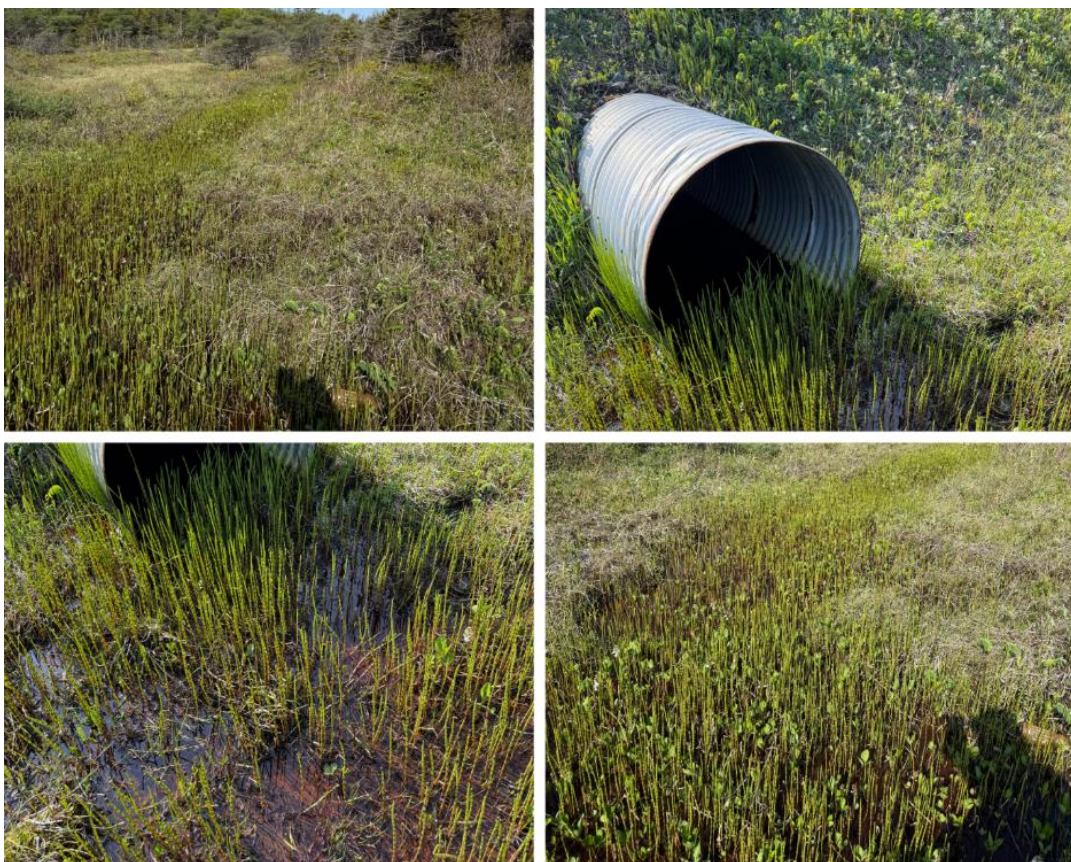


Figure 3.9. Water Crossing No. 9 (WC9; 50.214896°N, 57.602215°W; elevation 13.0 m) is an ephemeral channel <1.0 m wide



Figure 3.10. Water Crossing No. 10 (WC10; 50.220616°N, 57.597652°W; elevation 4.8 m) is an ephemeral channel <2.0 m wide.

4 Project Specific Environmental Protection Procedures

4.1 Construction Phase

Project construction activities will include the removal of vegetation and soil to achieve the desired trail tread and corridor width, full-bench cuts on side slopes, raised tread and causeways in wet areas, rock armouring in erosion-prone locations, trail sign installation, and installation of water crossing infrastructure (e.g., culvert installation, boardwalks). Mineral soils and/or granular material will be used in areas where existing terrain requires an increase in grade or is deemed inadequate for trail construction (e.g., too wet or organic). Mineral soils or stone needed for the Project will be acquired from approved sources. Staging areas will be located at designated entry points (see Figure 2.1). Materials will be transported to the staging points via trucks and either carried in on existing paths or along sections of completed trail; no new roads will be constructed for the Project. Construction methods will follow the International Mountain Bicycle Association (IMBA) trail development guidelines (Carsten 2023).

In addition to the mitigation measures provided in this section, mitigation measures and procedures provided in Appendix A and Appendix B will be followed for historical resources.

4.1.1 Construction Schedule

Construction will commence following regulatory approval, with an anticipated start date in spring 2026 and a projected trail operation date of summer 2027. Construction of the entire 26.6-km trail is estimated to take ~1.5 years to complete, which includes a 2026 primary construction period (e.g., April to December) and subsequent finishing period in spring 2027 (e.g., April to June). Two or more crews will work simultaneously at different segments of the trail during the construction period, weather permitting.

The MBCA, WLA, and associated Regulations protect birds and prohibit the disturbance or destruction of bird nests or eggs in NL and prohibit the possession of a live migratory bird or its carcass, skin, nest, or egg (except under authority of a permit). Birds included under the MBCA generally include most landbirds (i.e., those with mainly terrestrial life cycles), all shorebirds and waterfowl, and all seabirds except cormorants and pelicans. No permits can be issued for the incidental take of migratory birds from development projects/economic activities.

4.1.1.1 Environmental Concern

Construction activities may disturb or destroy bird nests or eggs or otherwise interfere with the migratory bird breeding period (15 April-15 August).

4.1.1.2 Environmental Protection Procedures

The following mitigation procedures will be followed:

- Vegetation and tree clearing will occur outside of the migratory bird breeding period to the extent possible;
- Where clearing must occur within the migratory bird breeding period:
 - Nest sweeps will be conducted along the entire affected trail section within seven days of the start of clearing;
 - Buffers (in compliance with the MBCA) will be established if active nests are identified;
- Where known Bank Swallow burrows occur:
 - Construction crew members will be informed of known locations; and
 - Protection buffers will be included in operational plans to avoid potential risks to the burrows.

4.1.2 Personnel

This section applies to personnel associated with/participating in Project construction activities.

4.1.2.1 Environmental Concern

Personnel involved in Project construction activities may disturb sensitive wildlife or habitat or disrupt important life functions, such as feeding or reproduction. Personnel activities may also result in deterioration of water crossings or trespassing onto private properties or fishing stages.

4.1.2.2 Environmental Protection Procedures

The following mitigation procedures will be followed for construction/ground personnel:

- Personnel will be provided a copy of the most recent EPP, Occupational Health and Safety Information, and any other relevant updates during safety tailgate meetings, via the TDCI social media account(s), and/or signs as appropriate;
- Personnel will receive environmental awareness training based on this EPP by knowledgeable TDCI staff;
- Report caribou sightings to the TDCI, who will keep a sightings record;
 - Update this EPP as needed to include updated findings/sightings;
- Avoid private properties and fishing stages at the southern end of the trail, along the Parson's Pond estuary (maintain awareness of physical barriers and signage);
- Prior to disturbance:
 - Take photos of sensitive wildlife habitat, such as water crossings, wetlands, and areas within 50 m to waterbodies;
 - Update this EPP to include these photos as an Appendix;
- Upon completion of trail development in a given segment:
 - Take photos of sensitive wildlife habitat, such as water crossings, wetlands, and areas within 50 m to waterbodies;
 - Update this EPP to include these photos as follow-up to the above Appendix;
- Upon completion of the trail:
 - Install signage at trail entrances advising the public of the importance of the area to wildlife (e.g., Bank Swallows), the need to yield to wildlife and pack garbage out, how to report important wildlife sightings (e.g., caribou) to the TDCI, and any other relevant information that may arise.

4.1.3 Aquatic Invasive Species (AIS)

Fisheries and Oceans Canada (DFO) maintains an Aquatic Invasive Species (AIS) Program. In the NL Region, aquatic invasive species include biofouling organisms (i.e., tunicates, bryozoans, crustaceans, seaweeds) and European green crab (*Carcinus maenas*; GC 2025; Figure 4.1). Recently, preliminary data also indicate the presence of several freshwater species, but the data are not yet available publicly (GC 2025). Biofouling tunicates, bryozoans, crustaceans, and seaweeds that have been known to occur in NL include (GC 2025):

- Golden star tunicate (*Botryllus schlosseri*);
- Violet tunicate (*Botrylloides violaceus*);
- Vase tunicate (*Ciona intestinalis*);
- Coffin box bryozoan (*Membranipora membranacea*);
- Orange ripple bryozoan (*Schizoporella japonica* Ortmann);
- Japanese skeleton shrimp (*Caprella mutica*); and
- Oyster thief (*Codium fragile*).

The AIS Regulations prohibit the importation, possession, transportation, release, or introduction of AIS (DFO 2019). The EPR Guidelines indicate a requirement for measures that will be undertaken to prevent the introduction and spread of AIS into waters from machinery and equipment working in/near water.



Figure 4.1. Aquatic invasive species known to occur in NL: A) Golden star tunicate; B) violet tunicate; C) vase tunicate; D) coffin box bryozoan; E) orange ripple bryozoan; F) Japanese skeleton shrimp; G) oyster thief; and H) European green crab (Source: Figure 2 in Ryland et al. 2014; GC 2024b).

4.1.3.1 Environmental Concern

The introduction of AIS can have serious negative effects on the environment, socio-economics, and human health (DFO 2024a). As they do not have natural predators in non-native environments, they can quickly grow/establish, directly harm, or negatively alter habitats of native species, particularly SAR (DFO 2024a). Once established, AIS can reduce local biodiversity and habitat quality, outcompete or harm/kill native species, increase costs for aquatic industries (e.g., cleaning costs for aquaculture), and negatively impact Indigenous or recreational activities (e.g., through permanent alteration of ecosystems, such as those used for Indigenous or recreational fishing; DFO 2024a). It is important to note that there are no Project activities in marine waters.

4.1.3.2 Environmental Protection Procedures

The four pillars of management for AIS include (DFO 2024a):

- Prevention;
- Early detection;
- Appropriate response (i.e., eradication and habitat restoration); and
- Continuous control and management of an established AIS that cannot be eradicated.

As such, the following mitigation procedures will be followed to minimize the low risk of AIS spread from other areas:

- Wash machinery/equipment used in construction of the trail that comes into contact with a waterbody with soapy water before and after use in the Project area, between work in different bodies of water, and any time it is brought back to the Project area between periods of use off-site;
- Conduct washing on dry land such that the soapy runoff will not directly enter any waterway/water body;
- Allow machinery/equipment to fully dry after washing;
- If a suspected AIS is found:
 - Confirm the identification (e.g., see [DFO 2024b](#)); and
 - Report it (see contact information to report an AIS [here](#)).

4.1.4 Waterbodies

A description of waterbodies associated with the Project is provided in Section 4 and Appendix F *Field Report*, of LGL (2025). The EPR Guidelines stipulate that a minimum 30-m undisturbed buffer along all waterbodies (except coastline and water crossings) and wetlands (including bogs and marshes) that appear on 1:50,000 National Topographical Survey maps must be maintained for any proposed land clearing and infilling activities.

4.1.4.1 Environmental Concern

During construction activities, some substances (associated with machinery/equipment) will be used that are/may be classified as hazardous, such as petroleum fuel, oil/lubricant, solvents (e.g., cleaner-degreasers), waste petroleum products (e.g., used engine/motor oil), glycol (e.g., antifreeze), or epoxies. The use and storage of such materials could result in an uncontrolled/accidental release into water bodies and associated negative impacts on flora, fauna, and/or human health and safety.

4.1.4.2 Environmental Protection Procedures

The following mitigation procedures will be followed:

- Wherever possible, a minimum 30-m undisturbed vegetated buffer will be maintained around all water bodies and wetlands/bogs on either side of the proposed route;
 - Includes laydown areas, equipment storage, and access areas;
- Where a 30-m buffer is not possible (note: these areas are few) or where a watercourse must be crossed:
 - Use low-impact construction methods (e.g., bridges with abutments set back from the water's edge; rip-rap for bank stabilization and erosion prevention; geotextile fabric and clean granular fill in wetland crossings to distribute weight and protect the underlying soil; appropriately-sized extended culverts for erosion protection);
- Install silt barriers to prevent erosion of material into surrounding areas (e.g., barrens, waterbodies [ponds, streams], wetlands [including bogs]);
- Route the trail through vegetated areas and away from bluff/bank edges wherever possible;
- Undertake all possible measures to avoid harmful alteration, disruption, and destruction (HADD) of fish habitat (Bradbury et al. 2021);

- Do not fuel vehicles within 100 m of any waterbodies, watercourses (including ephemeral streams) or wetland areas;
- Keep a spill kit on hand;
- Undertake ditching along the trail to ensure the surface of the trail remains dry/in place and any run-off is collected and redirected away from surrounding areas; and
 - Slope the finished trail surface to one side to allow water runoff.

Once a notice of approval/license has been received from the Crown Lands Division, the TDCI will apply for the following:

- Permit to Alter a Body of Water – Newfoundland and Labrador Department of Environment, Conservation and Climate Change (DECCC);
- Water Crossing Permit (Stream Crossings) – Water Resources Management Division; and
- Review of Project-related activities within 15 m of water bodies (to ensure proper mitigations are in place for potential culvert/bridge construction and other impact avoidance measures; see Section 9.1 in LGL 2025) – DFO.

Once the above permits are received, this EPP will be updated, and the permits will be attached as an appendix.

It should be noted that DFO may request future fieldwork to satisfy stipulations for their Fish Habitat Protection Program.

4.1.5 Critical Habitat and Wildlife

Critical habitat is considered essential for the survival or recovery of a SAR. Habitats and SAR along the proposed trail are described in Sections 4.1.2, 4.2.2, 4.2.4, and 6.2.5 in LGL (2025).

The EPR Guidelines include the following requirements:

- Avoidance of valued and critical environmental components, including wildlife, wildlife habitat, SAR, and dunes along the trail;
- Avoidance of Bank Swallow nesting colonies and critical habitat along/near the trail, particularly near areas with known breeding colonies at Parson's Pond and Portland Creek; and
- Avoidance of local fishing stages located near or adjacent to the trail (i.e., Parson's Pond).

4.1.5.1 Environmental Concern

There are some habitat types (e.g., sand dunes) in the region that are sensitive and could be disturbed, altered, or harmed during Project construction activities. The sand dunes located just south of Portland Creek (the waterway) are a rare habitat type and sensitive to disturbance. The proposed trail configuration has been rerouted to increase the distance from sand dunes west of Route 430 and south of Portland Creek River. However, an isolated remnant wetland with compromised ecological function is located in this area, immediately adjacent to the western side of Route 430.

Several raptor species nest in the region, including Bald Eagle, Osprey, Northern Goshawk, Sharp-shinned Hawk, Merlin, American Kestrel, and Great Horned Owl. Several SAR also occur in the area, such as Short-eared Owl, Bank Swallow, the Northern Peninsula caribou herd (species of conservation concern), and bats. Construction activities have the potential to interrupt breeding activities or disturb nests or SAR and/or their habitat. Also refer to Section 6.4 of the Mitigation Plan specific to birds (Appendix B).

4.1.5.2 Environmental Protection Procedures

The following mitigation procedures will be followed:

- The trail has been routed to avoid traversing the sand dunes south of Portland Creek;

- To reduce the risk of introducing or spreading exotic and/or invasive vascular plant species (e.g., Purple Loosestrife, *Lythrum salicaria*), equipment will arrive at the construction site clean and free of soil and vegetative debris.
- No vegetation clearing will occur within 800 m of a Bald Eagle, Osprey, or Short-eared Owl nest during the nesting season (15 April-15 August) or within 200 m during the rest of the year;
 - The 200-m buffer also applies to all other active raptor nests during the nesting season;
- Report the location and a description of any raptor nest site to the FAL Wildlife Division (by phone at 709-637-2025 or via the Wildlife Information Management System available [here](#) [note: an account must be created prior to use]);
- Prior to any mechanical ground disturbance (e.g., mini-excavator) related to trail construction in extensive areas devoid of tree cover (e.g., coastal barrens, meadows) during the 15 April-15 August period, a knowledgeable birder will complete a Short-eared Owl (SAR) presence/absence survey within seven days of the planned construction activity start date;
 - The survey is necessary to ensure that no ground-nesting Short-eared Owl are disturbed by the planned activities;
 - Any identified Short-eared Owl nest(s) or young will result in the implementation of a no-disturbance buffer of 800 m, and construction activities within the buffer will be postponed until after 15 August, and/or a subsequent survey confirms the young have successfully fledged;
 - Survey results, including GPS locations of approximate nest site(s) will be emailed by the TDCI to the FAL Wildlife Division as soon as possible after survey completion;
- Disturbance to the Bank Swallow colony that has been identified in the coastal bluffs north of Parson's Pond will be reduced by routing the trail on the beach, ~5-10 m below the bluffs;
- Report caribou sightings to the TDCI, who will maintain a record and provide the data to the FAL Wildlife Division on an annual basis;
- Immediately report human-caused caribou injury/mortality to the TDCI, who will immediately report the information to the FAL Wildlife Division;
- Do not feed or remove wildlife in/from the area, respectively;
- Do not chase, catch, divert, follow, or otherwise harass wildlife;
- Yield the right-of-way to wildlife (including personnel and equipment);
- Maintain equipment in good working order to minimize noise and air/ground pollution;
- Avoid disturbing existing vegetation outside the trail route;
- Do not create offshoot trails;
- Employ strategic trail placement/alignment and grade reversals and install obstructions/appealing versus unappealing trail tread (as applicable) to guide users during the Operation Phase;
- Install trail markers with instruction for users to avoid offshoot trail creation;
 - Update this EPP to include photo of trail markers/signs as an appendix;
- Where the activity is necessary, only remove trees with <25 cm diameter at breast height (DBH), as larger trees have the potential to serve as roost sites for local bats (SAR); and
- Do not construct buildings, shelters, or look-out areas along the trail.

Once a notice of approval for the Project has been received from the Crown Lands Division:

- The TDCI may obtain a Forest Harvesting Permit from the FAL; and
- This EPP will be updated to include the Permit as an appendix.

4.2 Operation Phase

During the Operation Phase, activities will include maintenance by Project-associated personnel and recreational use by hikers and cyclists. The trail will be open and maintained annually from May-October as a shared-use path

for walking/hiking and cycling. The trail will be inspected monthly (during spring, summer, and fall) and after severe weather events to ensure the safety of users. Inspections may also be performed with the assistance of unmanned aerial system (UAS) drone flights. UAS pilots will have a valid operator license to conduct this work. It is anticipated that maintenance will mainly include filling of potholes and bridge or culvert repairs. The trail will also be monitored for garbage and dumping. Maintenance will not occur from November-April, so use of the trail during this period will be considered at the risk of the trail user.

In addition to the mitigation measures provided in this section, mitigations and procedures provided in Appendix A and Appendix B must be followed for historical resources.

4.2.1 Personnel and Trail Users

This section applies to Project personnel involved in maintenance/upkeep of the trail and trail users (i.e., hikers, cyclists).

4.2.1.1 Environmental Concern

Personnel involved in maintenance/upkeep activities and trail users may disturb sensitive wildlife or habitat or disrupt important life history functions, such as feeding or reproduction. Personnel or trail users may also cause the deterioration of water crossings or trespass onto private properties or fishing stages.

The TDCI must maintain the established trail network at the standards outlined in this EPP and related provincial/federal regulations and guidelines. Deviations from this EPP resulting in negative impacts to the environment, such as deteriorated water crossings or trail deviation from the final registered GIS track (to be submitted to the FAL and DECCC), may result in cancellation of the lease under the *Crown Lands Act*.

4.2.1.2 Environmental Protection Procedures

The following mitigation procedures will be followed:

- A copy of the most up-to-date EPP will be provided to Project personnel, along with Occupational Health and Safety related information and relevant updates as applicable to personnel and trail users via safety tailgate meetings, the TDCI social media account(s), and signage;
- Project personnel will receive environmental awareness training based on this EPP by knowledgeable TDCI staff;
- During monthly Trail inspections, ensure there is placement of notices/signs that prohibit the creation of secondary trails;
- Personnel will monitor the Trail for garbage and dumping;
 - Take photos and document brief descriptions of the issue and applied measures/activities undertaken to rectify the issue, and report to the TDCI;
 - Update the EPP to include the photos and documentation as an Appendix;
 - Should trail inspections reveal that the TDCI's measures are being disregarded or garbage is identified as an issue, TDCI will discuss further steps with the FAL Resource Enforcement Division;
- Personnel and trail users will be encouraged to report caribou sightings, need for repairs/maintenance, indications of off-branching, garbage sightings, or other such relevant information to the TDCI, who will maintain a record;
 - This EPP will be updated to include such information as applicable; and
- Personnel and trail users will be directed (via physical barriers and/or signage) to avoid private properties and fishing stages (i.e., those at the southern end of the Trail, along the Parson's Pond estuary).

4.2.2 Waterbodies

A description of waterbodies associated with the Project is provided in Section 4 and Appendix F *Field Report*, of LGL (2025).

4.2.2.1 Environmental Concern

During maintenance/upkeep activities, some substances (associated with machinery/equipment) will be used that are/may be classified as hazardous, such as petroleum fuel, oil/lubricant, solvents (e.g., cleaner-degreasers), waste petroleum products (e.g., used engine/motor oil), glycol (e.g., antifreeze), or epoxies. The use and storage of such materials could result in an uncontrolled/accidental release into water bodies and associated negative impacts on flora, fauna, and/or human health and safety.

4.2.2.2 Environmental Protection Measures

The following mitigation procedures will be followed:

- Wherever possible, maintain a minimum 30-m undisturbed vegetation buffer around all water bodies and wetlands/bogs on either side of the proposed route (includes laydown areas, equipment storage, access sites, and future maintenance requirements);
 - In the few locations where it is not possible to maintain this 30-m buffer or where a watercourse must be crossed:
 - Use low-impact/stabilization methods and/or materials, as appropriate (e.g., rip-rap for bank stabilization and erosion prevention);
- Avoid bluff/bank edges whenever possible and HADD of fish habitat (Bradbury et al. 2021);
- Do not fuel vehicles within 100 m of any waterbodies, watercourses (including ephemeral streams) or wetland areas; and
- Keep a spill kit on hand.

4.2.3 Critical Habitat and Wildlife

Critical habitat is considered essential for the survival or recovery of a SAR. Habitats and SAR are described in 4.1.2, 4.2.2, 4.2.4, and 6.2.5 in LGL (2025).

4.2.3.1 Environmental Concern

Multi-purpose trails tend to offer public access into remote wildlife areas, increasing the challenge of monitoring for illegal activities related to wildlife or sensitive/critical habitat. Another potential negative side-effect is the creation of offshoot trails that may cause significant negative impacts to sensitive wildlife habitats, such as wetlands, fish-bearing streams, or lichen-covered barrens.

The EPR Guidelines include the following requirements:

- Avoidance of valued and critical environmental components, including wildlife, wildlife habitat, SAR, and dunes along the trail;
- Avoidance of Bank Swallow nesting colonies and critical habitat along/near the trail, particularly near areas with known breeding colonies at Parson's Pond and Portland Creek; and
- Avoidance of local fishing stages located near or adjacent to the trail (i.e., Parson's Pond).

4.2.3.2 Environmental Protection Measures

The following mitigation procedures will be followed:

- Prior to any mechanical ground disturbance (e.g., mini-excavator) related to trail maintenance in extensive areas devoid of tree cover (e.g., coastal barrens, meadows) during the 15 April-15 August

period, a knowledgeable birder will complete a Short-eared Owl (SAR) presence/absence survey within seven days of the planned maintenance activity start date;

- The survey is necessary to ensure that no ground-nesting Short-eared Owl are disturbed by the planned activities;
- Any identified Short-eared Owl nest(s) or young will result in the implementation of a no-disturbance buffer of 800 m, and maintenance activities will be postponed until after 15 August, and/or a subsequent survey confirms the young have successfully fledged;
- Survey results, including GPS locations of approximate nest site(s) will be emailed by the TDCI to the FAL Wildlife Division as soon as possible after survey completion;
- Report caribou sightings to the TDCI, who will maintain a record and provide the data to the FAL Wildlife Division on an annual basis;
- Immediately report human-caused caribou injury/mortality to the TDCI, who will immediately notify the FAL Wildlife Division;
- Personnel and trail users will not chase, catch, divert, follow, or otherwise harass wildlife;
- Personnel and trail users will be directed (via physical barriers and/or signage) to avoid private properties and fishing stages (i.e., those at the southern end of the trail, along the Parson's Pond estuary).
- Personnel and trail users must yield right-of-way to wildlife (includes equipment);
- Keep maintenance equipment in good working order to minimize noise and air/ground pollution;
- Personnel and trail users must avoid disturbance to existing vegetation outside the trail route;
- Personnel and trail users must not create offshoot/secondary trails (the trail will be marked with signage indicating the activity is prohibited); and
- If wet areas are identified during the life of the trail due to weather events, suitable removed vegetation will be used for brush matting/corduroying in areas as necessary.

4.3 Decommissioning Phase

There are currently no plans for decommissioning of the proposed trail. Should the trail be decommissioned at a future date, this EPP will be updated at that time to mitigate potential environmental effects in accordance with applicable provincial/federal regulations, legislation, and guidelines.

In addition to the mitigation measures that will be added to this EPP for Decommissioning Phase activities, mitigations and procedures provided in Appendix A and Appendix B must be followed for historical resources.

5 Literature Cited

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Appendix A: Historic Resources Mitigation Plan

Historic resources, such as archaeological sites, are non-renewable resources that are often vulnerable to disturbance and loss through ground-disturbing activities associated with construction. Historic resources include structures, features, and artifacts of cultural significance, and they carry cultural, educational, and heritage value. Ground-disturbing activities that can threaten historic resources begin early in the construction and even planning phases of projects, and include trenching, clearing, grubbing, levelling, trail construction, etc. Archaeological sites and other historic resources are protected by law (*Historic Resources Act* [RSNL1990 CHAPTER H-4]).

Sites with historic resources present have been identified within and near the Project area, and there remains potential for additional as-yet unrecorded sites. These include both archaeological sites and ethnographic sites (recent sites that contain tangible evidence of land use). Site-specific mitigation measures shall be developed when work is planned within areas with high potential for historic resources.

An Archaeological Impact Assessment has already been completed for the Project only from Parson's Pond to Daniel's Harbour. The results of this assessment have been reported to the Provincial Archaeology Office. To date, eight archaeological sites have been identified within or near the Project area. Additionally, one ethnographic site was identified within the Project area in 2025, south of Daniel's Harbour.

These known sites will either be protected during the planning and construction phases, will be recovered prior to the construction phase, or alternative mitigation/protection plans will be developed in consultation with the Provincial Archaeology Office. Table A.1 below contains a summary of known site information and proposed mitigation measures.

As per provincial requirements, additional archaeological field assessment shall be completed as required for any changes in trail routing, for additional trail infrastructure, and for future trail segments beyond the Demonstration Trail from Parson's Pond to Daniel's Harbour.

The following additional project-wide measures shall be implemented to adequately mitigate potential impacts to historic resources:

- a) As the preferred method of mitigation, project designs shall be modified wherever possible to avoid known sites by a minimum buffer of 50 m. Actual buffer size may vary, with the approval of the Provincial Archaeology Office, according to factors such as space constraints, terrain, anticipated impacts, and site significance. Where warranted, site buffers shall be marked with flagging indicating a "no work zone" or with temporary fencing while construction activities are ongoing;
- b) Where a known site cannot be adequately avoided, it shall be recorded and/or recovered (i.e. through detailed excavation) according to the standards outlined in the *Historic Resources Act* and other relevant legislation, and to the satisfaction of the Provincial Archaeology Office;
- c) Project personnel (including contractors and subcontractors) shall be provided with a copy of the Historic Resources Accidental Finds Protocol (see Appendix B), informing them of their responsibilities with respect to such resources. A copy of the Protocol shall be available at every work site;
- d) Crews working in areas with high potential for historic resources shall be given a briefing informing them of the areas of high potential and of procedures to follow in the event of accidental finds;
- e) For each work crew, one person shall be designated to lead the implementation of the Historic Resources Accidental Finds Protocol (see Appendix B) and report any identified or suspected historic resources to the Provincial Archaeology Office (Jamie Brake, Provincial Archaeologist, 709-729-2462);
- f) Regular monitoring shall be conducted to ensure that mitigation and protection measures are being adequately implemented;
- g) Known sites adjacent to the Project area shall be visited regularly (e.g. annually, or as warranted by Project activities) while field conditions are adequate (i.e., ground is not snow-covered) to ensure they have not been impacted by Project activities; and
- h) If paleontological resources are encountered or suspected, procedures shall follow the Historic Resources Accidental Finds Protocol (see Appendix B).

Table A.1. Historic resources near the Project, Parson's Pond to Daniel's Harbour.

Site No.	Site Description	Project Location	Expected Project Activities/Impacts	Proposed Mitigation
EaBk-01	Large Dorset site, some previous disturbance (ATV trail, gardening, cemetery), threatened by coastal erosion	Trailhead, Parson's Pond	Use of existing ATV track, increased pedestrian traffic may increase risk of looting of eroding artifacts	Extension of existing erosion barrier, minor salvage excavation
EaBk-02	20th century (and possibly earlier) fish weir	Parson's Pond	N/A	Avoidance – achieved by current route
Arches 1	19th/20th century pit feature, Pre- Inuit spot-find	Arches Provincial Park	N/A	Avoidance – achieved by current route
EbBj-01	Pre-contact Indigenous site (Dorset and Maritime Archaic)	North side of Portland Creek	N/A	Avoidance – achieved by current route
EbBj-03	Pre-contact Indigenous site, possible European component	South side of Portland Creek	N/A	Avoidance – achieved by current route
EbBj-07	Pre-contact Indigenous site (likely Dorset)	North side of Portland Creek	N/A	Avoidance – achieved by current route
EbBj-10	Pre-contact Indigenous site (likely Dorset)	Eastern Head	N/A	Avoidance – achieved by current route, but re-assessment required if a lookout is planned
EbBj-13	Shipwreck (possible)	Portland Cove	N/A as planned – increased pedestrian traffic may damage site if lookout proceeds	Avoidance – achieved by current route
Daniel's Harbour South Ethno Site	Fence/enclosure	South of Daniel's Harbour, along old coastal trail	Trail development, pedestrian traffic	Recording - complete

Appendix B: Historic and Paleontological Resources Accidental Finds Protocol

Historic resources include structures, features, and artifacts of cultural significance, and they carry cultural, educational, and heritage value. Examples include stone or metal tools, ceramics and pottery, clay pipes, old root cellars, trappers' tilts, and logging camps, stone walls, and lines or circles of stones. Paleontological resources include the fossilized remains or impressions of plants and animals. Both Historic and Paleontological resources are protected by law, and it is important that they are handled appropriately so that they can contribute to our knowledge of the cultural and natural history of NL.

If historic resources are encountered or suspected, immediately STOP WORK and do the following:

1. Immediately stop all work in the area.
2. Secure and leave any heavy equipment where it is – heavy equipment can easily accidentally damage fragile artifacts and obliterate features.
3. Delineate an area of approximately 50 m around the find as a “no work zone”, and remove all personnel not required to protect the area.
4. Without removing the object, record it by taking pictures and GPS coordinates.
5. Contact the Provincial Archaeologist Office: Jamie Brake, Provincial Archaeologist, 709-729-2462.
6. Contact the Project Archaeologist, Environmental Monitor, or designate.
7. Complete the form below, and await further guidance from the Provincial Archaeologist Office and/or the Project Archaeologist.
8. Do not return to work in the area until you have been informed that it is safe to do so by the Provincial Archaeologist Office or the Project Archaeologist.

The Provincial Archaeologist Office will assess the find and the area to determine its significance and determine if mitigation is required. Any mitigation measures necessary shall be developed in consultation with the Provincial Archaeologist Office.

Historic and Paleontological Resources Accidental Find Reporting Form

Your name:

Your contact information:

Date and time of the find:

Precise location of the find (use GPS coordinates if possible, and provide directions if required):

Description of the find:

Description of the activity that resulted in the find:

Sketch a map of the exact location of the find so it can be relocated by the archaeologist: