



**Registration Pursuant to the  
Environmental Assessment Regulations 2003**

**Under the  
Environmental Protection Act**

**For the Proposed  
94L Transmission Line Rebuild**

**September 2024**

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## **Executive Summary**

Newfoundland Power is proposing to rebuild a section of their 94L Transmission Line between Blaketown and Riverhead, Newfoundland (the Project or the Undertaking). Sections of the transmission line have reached the point where continued maintenance is no longer feasible and a section of line must be rebuilt to continue the provision of safe and reliable service to customers in the area.

This project was originally registered in January 2022, and was released from further environmental assessment subject to conditions on August 30<sup>th</sup>, 2022. After completing the first phase of this project, route changes were deemed necessary. This new proposed route is expected reduce project cost and avoid sensitive wetland features identified along the originally approved route. The project crosses or passes within 200m buffer of numerous watercourses that are scheduled salmon rivers under the fisheries act. The project will also involve the construction of a Transmission Line more than 500m from an existing RoW.

The project began with the completion of a 21.4 km section of the line from Riverhead to St. Catherines in 2023. The project is planned to continue following release from Environmetnal Assessment with a section extending from St. Catherines for approximately 21 kilometers toward the Blaketown substation, followed by the 2026 scope extending this line to the Blaketown substation. Based on an assessment of the sources of pollution and implementation of various mitigation measures, the Project is not expected to have any significant impacts on key environmental features.

## 1.0 Introduction

Newfoundland Power (the Proponent) proposes to rebuild transmission line 94L, which extends 58km from Blaketown to Riverhead, Newfoundland. The replacement of this line is necessary based on the physical condition of the line, risk of failure, and potential customer impact in the event of a failure. As this is a radial line with no alternate source of supply, its deteriorated condition exposes customers to potential for more frequent and extended unplanned outages. Additionally, a line in this condition poses environmental and safety risks such as forest fire, spillage of deleterious material, or electrical hazards. Continued maintenance is not feasible for this transmission line, and for this reason the rebuild is critical to the reliability of NL Power services.

The project requires registration under the following sections of the Environmental Assessment Regulations, 2003:


- Section 28: The transmission line crosses several watercourses that are scheduled salmon rivers under the *Fisheries Act* that cannot be spanned outside of their 200m buffer.
- Section 34 (2): The proposed route will require the construction of new transmission line corridor more than 500m from existing rights of way near Colinet as well as near the Blaketown Substation.

Newfoundland Power is proposing an alternative route for sections of EA 2184. The primary focus of the newly proposed route is to move the location of the line to a more accessible area, building more of it roadside along existing roads in the area, instead of primarily backcountry as originally approved. This will reduce the wetlands impacted and move the transmission Line RoW away from the Ripple Pond Ecological Reserve, which is bordered by the previously proposed RoW.

## 1.1 Proponent Information

Newfoundland Power operates an integrated electricity generation, transmission, and distribution system throughout the island portion of Newfoundland and Labrador. As the primary distributor of electricity on the island, we operate 11,500 km of transmission and distribution lines on the island, providing service to over 276,000 customers.

*Table 1 Proponent and consultant information*

PROPONENT	
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## 1.2 The Undertaking

**Name of the Undertaking:** 94L Transmission Line Rebuild (the Project)

**Location of the Undertaking:** Blaketown to Riverhead, Newfoundland and Labrador

### 1.3 Summary of the Undertaking

Newfoundland Power is proposing to rebuild Transmission line 94L (the Project, 94L, or the Undertaking). Transmission Line 94L is a 66 kV H-Frame radial line running between Blaketown (“BLK”) Substation on the Trans-Canada Highway near Whitbourne, and Riverhead (“RVH”) Substation located in Riverhead, St. Mary’s Bay. The line was originally constructed in 1969 by Newfoundland and Labrador Hydro. The new line includes approximately 68 kilometers of original construction consisting of 290 two pole H-Frame structures and 32 single pole structures, with both 559.9 AASC and 477 ASC transmission line conductor. This line provides the only source of supply for St. Catherine’s and Riverhead substations along with Trepassey Substation via Transmission Line 95L. In total, the three substations serve approximately 2,500 customers.

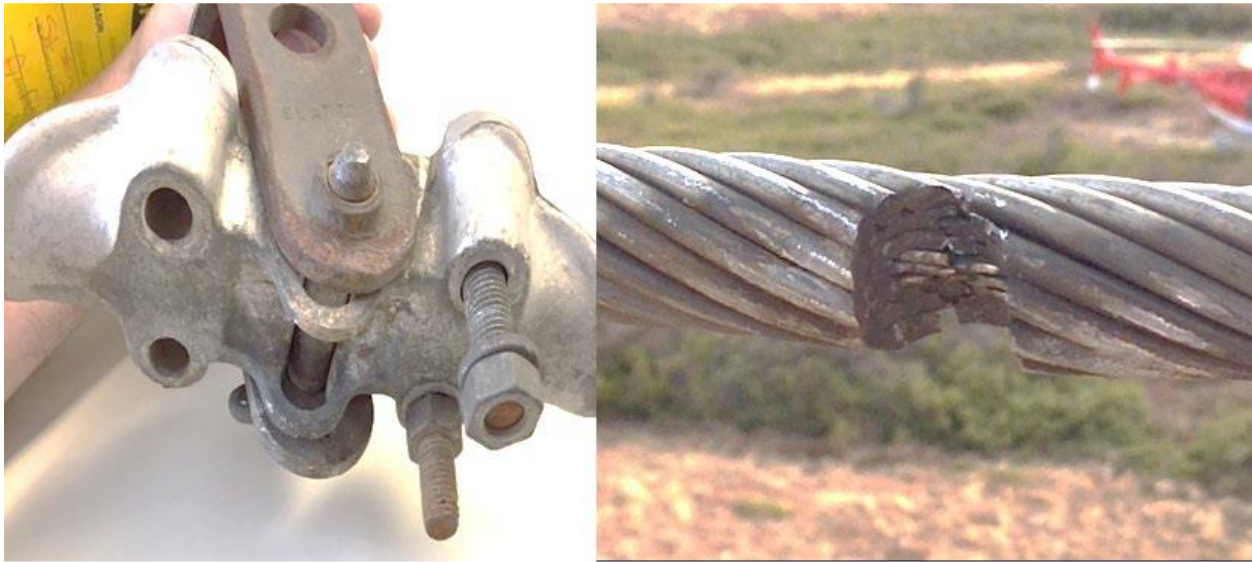
Transmission Line 94L currently lies within a 15m right of way (RoW). In areas where the new transmission line will be constructed roadside, its poles will be placed within the last 1.5m of the road right of way. The easement for the line will extend 7.5m outside of the road RoW limits to ensure a sufficient clearance from nearby trees and brush. Some portions of the line will be constructed in a new RoW that will be approximately 20m wide throughout spans of H-Frame infrastructure. This new RoW will follow the route outlined in this document. There are several Salmon River crossings along the Project route that are unable to be spanned outside the 200m buffer required around scheduled salmon rivers with possible vegetation clearing in some of these areas.

The project will be built in three phases (also referred to as scopes). The first scope was completed under the previously released EA 2184, and entailed the construction of a 21 km section of the line from Newfoundland Power’s Riverhead Substation to its St. Catherine’s Substation. Newfoundland Power is continuing with an additional 3.5km section of line being constructed in 2024, between it’s St. Catherine’s Substation and Route 91.

Phase 2 will continue with a section extending from St. Catherine’s for 20 kilometers toward the Blaketown substation in 2025, followed by phase 3 which will extend the line 27 km to the Blaketown substation in 2026.

#### 1.3.1 Rationale

Deterioration of this line primarily relates to deteriorated poles, cribs, cross braces, and predominance of deteriorated Flexall clamps (see Appendix A). Flexall clamps attach the conductor to the underside of the suspension insulator. These clamps were installed on some transmission lines in the late 1960’s. Recent inspections have found that after over 50 years in service the clevis pins are wearing through the clamp due to line vibration. In some cases, the pin has worn through the underside of the suspension clamp damaging the conductor. Figure 1 shows images of a worn clamp and the damage it caused to the conductor.



*Figure 1 Worn FlexAll Clamp and Associated Damaged Conductor*

Approximately 62% of poles on this line are deteriorated. Noted deterioration includes decay, shell separation and splits in the poles. Approximately 68% of structures that include cross braces are deteriorated. Noted deterioration includes decay and cracks. Approximately 54% of the FlexAll clamps show visible wear.

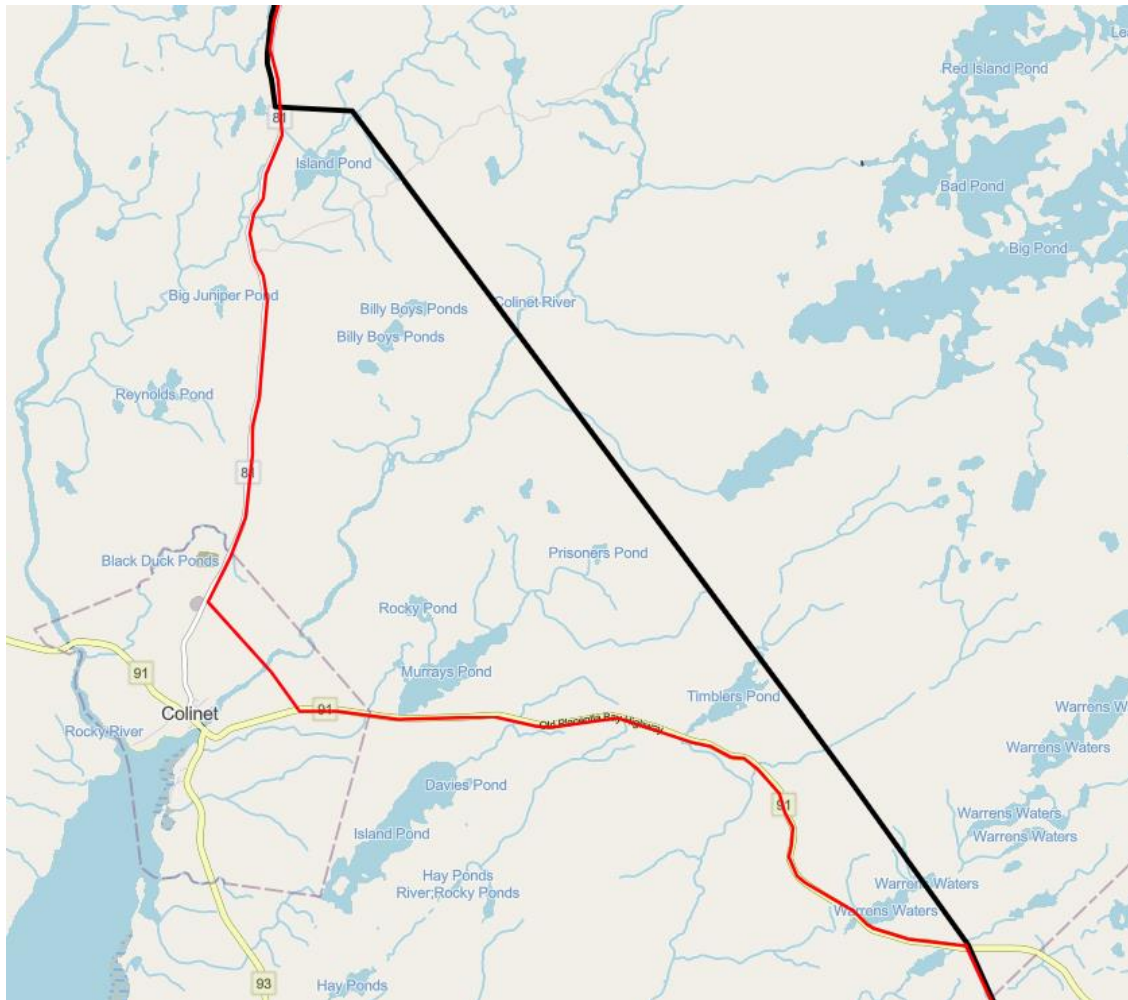
In addition to deteriorated components, this line does not meet current design standards. This includes conductor, guying and framing. For example, approximately 51% of structures on this line were framed without cross braces.

## **1.4 Description of Changes**

Variance from the original registration is limited to two changes in route (near Colinet and Whitbourne) and associated changes in receptors.

### **1.4.1 Colinet**

The original RoW travelled through a remote backcountry area, including a space which borders the Ripple Pond Ecological Reserve. In this newly proposed route, Transmission Line 94L would be constructed parallel to the existing line for the first 3.5 kilometres outside of the SCT Substation until it intersects with Route 91, following the same routing as the originally approved alternative. At this location, it would then deviate from the previously approved route and be constructed roadside along Route 91. The line would then depart Route 91 near Colinet to be constructed behind the Town, travelling Northwest to connect to Route 81 (known as Markland Road). The line will then follow parallel along Route 81. Figure 2 below shows the previously approved route along with the proposed change.



*Figure 2 Demonstration of change to proposed route near Colinet. New proposed route shown in red in comparison to originally proposed Route shown in black.*

Changing to this route to be primarily roadside as opposed to backcountry would mitigate many of the impacts and costs related to access constraints, ground conditions, and habitats.

Additionally, this route will eliminate the need for the construction of approximately 10.5 kilometers of backcountry transmission line. This includes approximately 1.8km of the RoW which borders the proposed Ripple Pond Ecological Reserve. The existing RoW in this area would be allowed to revegetate and return to its natural state. This would reduce impacts to the proposed ecological reserve through construction and reduce accessibility to the area by RoW. The majority of the line in the proposed reroute will now be roadside, in previously disturbed areas.





*Figure 3 The existing Transmission Line and previously proposed RoW (shown here in red) borders the southwestern tip of the Ripple Pond Ecological Reserve (shown here in light Green) near Colinet.*

Under this proposed route change, the construction of the line along Route 91, behind the town of Colinet and along Route 81 would be completed in 2025.

Appendix B provides complete project mapping demonstrating the entire project right-of-way as originally approved as well as the new proposed route. A KMZ file demonstrating the route is included in the attachments.

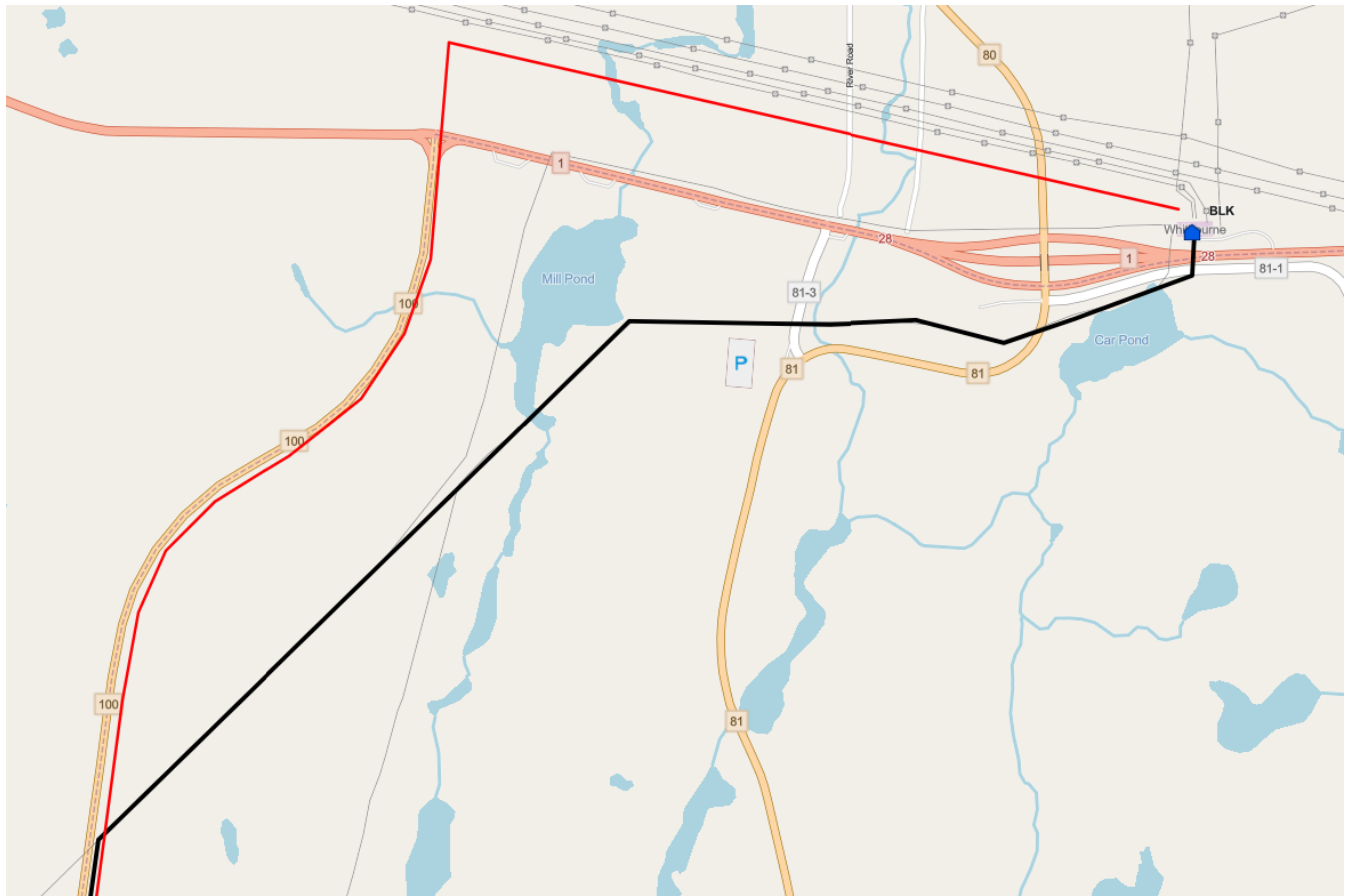
#### **1.4.2 Whitbourne**

Near Whitbourne, the route would be built roadside within the Route 81 road right-of-way, until reaching the intersection with the Newfoundland T’Railway on Bond Road. At this point, the RoW follows the T’Railway west to connect with Route 100, known as the Argentia Access Road (see Figure 4).



*Figure 4 Demonstration of change to proposed route near Markland. New proposed route shown in red in comparison to originally proposed Route shown in black, along with the previously amended route shown in white.*

The line then follows Route 100 North to the Trans-Canada Highway where it crosses to the North side of the TCH and continues East to connect to the Blaketown Substation (See Figure 5).



*Figure 5 Demonstration of change to proposed route near the TCH and Blaketown Substation (BLK). New proposed route shown in red in comparison to originally proposed Route shown in black.*

The proposed rerouting of these sections of the project are again intended to limit the amount of backcountry construction required. By moving to this new route, over 11 kilometres of planned backcountry transmission line will be moved roadside, greatly reducing the environmental impact of the project. The backcountry areas that currently do not contain infrastructure will remain undisturbed, while the backcountry areas that contain the existing transmission line will have the line removed and will be allowed to revegetate and return to their natural condition.

Based on revised project timelines, project activity pertaining to Scope 2 is planned to begin in 2025 and Scope 3 in 2026.

## 2.0 Description of the Undertaking

### 2.1 Geographical Location

The 94L Transmission line, runs between Blaketown (“BLK”) Substation on the Trans-Canada Highway near Whitbourne, and Riverhead (“RVH”) Substation located in Riverhead, St. Mary’s Bay (Appendix B). Transmission Line 94L currently lies within a 15m RoW. The new transmission line will be constructed within the last 1.5m of the road RoW.

The easement for the line will extend 7.5m outside of the road RoW limits to ensure a sufficient clearance from nearby trees and brush. Some portions of the line will be constructed in a new RoW that will be approximately 20m wide throughout spans of H-Frame infrastructure. This new RoW will follow the route outlined in this document.

### 2.2 Physical Features

#### 2.2.1 Key Environmental Features

Newfoundland is part of the Boreal Shield Ecozone which covers much of Canada. Boreal forests are characterized by stands of Black spruce (*Picea mariana*), White spruce (*Picea glauca*), Jack pine (*Pinus banksiana*), and Balsam fir (*Abies balsamea*) mixed with bogs and other wetlands. As a result of glacial scouring, areas of bare rocky outcrops support lichen and low shrubs. The Project is located within the Newfoundland Ecoprovince of the Boreal Shield Ecozone. Its forests are dominated by closed, intermediate to low stands of Balsam fir and Black spruce on steep, moist, upland slopes. White birch (*Betula papyrifera*), Aspen (*Populus sp.*), and Black spruce are typical of disturbed sites and exposed nutrient poor sites are characterized by Black spruce, ericaceous shrubs, such as Lambkill (*Kalmia angustifolia*), Labrador tea (*Rhododendron groenlandicum*), and lichens. Open stands of dwarfed Black spruce and Eastern larch (*Larix laricina*) with ericaceous shrubs are found on raised dome bogs.

The Project passes through somewhat developed roadside habitat, including watercourse and wetland crossings. In sections, the Project does depart from roadside areas to traverse undeveloped habitat. Wetlands in this ecozone consist primarily of open bogs and fens, with treed swamps and riparian floodplains, dominated by Black spruce, ericaceous shrubs, and herbaceous species that thrive in nutrient poor and acidic conditions. Substrates in the bogs are comprised of deep accumulations of peat, deepest in the center of bogs and shallower around granite outcropping and wetland edges.

The landscape in the Project area is punctuated by numerous ponds and lakes. The Project intersects multiple waterbodies associated with Scheduled Salmon Rivers as well as numerous river crossings (section 2.2.1.1).

##### 2.2.1.1 Scheduled Waters Within 200 meters of Project Site

The proposed Project crosses or passes within 200 m of the following scheduled salmon bearing rivers (Schedule 1, Newfoundland and Labrador Fishery Regulations SOR178-443) at 12 locations (Appendix B):

- Tributaries of Salmonier River (4 locations)
- Colinet River & tributaries (2 locations)



- Tributaries Rocky River (6 locations)

Salmonier River empties into the northeastern arm of Saint Mary's Bay near St. Catherine's, and is within Salmon Fishing Area (SFA) 9. This narrow arm reaches approximately 14000m inland from the larger body of Saint Mary's Bay, distinguished by the 100 m wide channel branching from the bay. Approximately 3000m downstream from the outflow of the Salmonier River, Transmission Line 94L crosses Saint Mary's Bay at a 300m width. Significant tributaries include Rattling Brook, Mitchells Brook, Duggans River, and two unnamed streams. The project intersects Salmonier Arm approximately 2km downstream of the Salmonier River. The project crosses Little Harbour River which runs into Salmonier Arm. Other tributary crossings include a wetland near King Pond, the crossing of an unnamed river on the northern side of Salmonier Arm at two locations. Rattling Brook, which flows into Salmonier Arm, and its tributaries are crossed at three locations.

Colinet River discharges into the northwestern arm of Saint Mary's Bay in the town of Colinet, and is within SFA 9. Waterbodies in the watershed include Gull Pond, Little Gull Pond, Third Pond, Fourth Pond, and Little Northwest Pond. Additionally, Colinet River's catchment area has a high proportion of fens and other wetlands which feed into the watercourse. The Project crosses the main stem of Colinet River at one location.

The Rocky River empties into the northwestern arm of Saint Mary's Bay, approximately 500 m from the mouth of the Colinet River. The river was seeded with salmon fry in the mid-1980s. Due to an impassible waterfall near the river mouth, a fishway was installed and became operational in 1987. According to a Fisheries and Oceans Canada report on Atlantic Salmon Fishway counts in Newfoundland and Labrador, the salmon fence is no longer in operation (DFO, 2021). Rocky River and its tributaries contain several large waterbodies, including Island Pond, St. Shore's Pond, White Hearts Pond. Its headwaters originate from the Markland region, specifically Bullrush Pond, Third Pond, Second Pond, and Junction Pond, as well as the Placentia Junction area near Nine Island Pond. The Project as it follows Route 81 (Markland Road) runs relatively parallel with Rocky River and has multiple tributary crossing, but does not cross the river's main stem. Tributary crossings include Black Duck River, Back River in two locations, a tributary stream of Island Pond, the outflow stream of St. Shores Pond, White hearts river, a tributary flowing into White Hearts River, as well as four unnamed tributaries east of White Hearts Marsh and horse gully. In the headwaters of Rocky River, the project crosses the main stem of Hodge River, two tributary streams of Hodge River, and crosses a tributary stream of Reversing pond at two locations. See Appendix B for identified crossing locations of rivers and tributaries of Scheduled Salmon Rivers.

### **2.2.2 Wildlife Species Observations**

A data study of recorded observations within 5km of the project was conducted by ACCDC. Within the study area there were 204 rare flora records and 88 rare animal records found. 27 of these rare flora records are for Boreal Felt Lichen (*Erioderma pedicellatum*), listed as Vulnerable under our provincial Endangered Species Act (ESA) and Special Concern under COSEWIC. 45 of these flora records are for Blue Felt Lichen (*Pectenium plumbeum*), also listed as Vulnerable under our provincial ESA and as Special Concern under COSEWIC. Of the remaining 132 rare flora records, only Acadian Quillwort (*Isoetes tuckermanii* subsp. *acadiensis*) and Hump-backed Elves (*Buxbaumia minakatae*) are considered globally rare, the remainder are simply considered rare for the Island of Newfoundland.

The study found 88 rare animal records, comprised of 6 Short-eared Owl records, 34 Red Crossbill records, 3 Bank Swallow records (all are listed as Threatened provincially and under COSEWIC), 1 Ivory Gull record, 3 Red Knot records (both are listed as Endangered under both COSEWIC and our ESA), 9 Rusty Blackbird records, 1 Peregrine Falcon record, 1 Polar Bear record, 3 Evening Grosbeak records, 2 Barrow's Goldeneye records, 1 Barn Swallow record (all are Special Concern under COSEWIC, Vulnerable under our ESA), 2 Atlantic Salmon records, 3 Lesser Yellowlegs records (both are Threatened under COSEWIC), 2 Gray-cheeked Thrush records (Threatened under our ESA), and 1 American Eel record (Threatened under COSEWIC, Vulnerable under our ESA). The remaining faunal records are for species which aren't listed, but are considered rare on the Island of Newfoundland.

While there have been no observations of Newfoundland Marten (only around Whitbourne & Riverhead) and Banded Killifish area, ACCDC Expert Opinion Maps suggest that are possible, but unlikely.

*Table 2 Flora and Fauna species of Special Concern within 5 km of the Project and/or listed under Newfoundland and Labrador's Endangered Species Act in the region of the project. (Note: COSEWIC status not listed for species listed under SARA).*

Common Name	Scientific Name	General Status (if listed)
<b>Fauna</b>		
Red Knot	<i>Calidris canutus</i>	SARA, NLESA: Endangered
Lesser Yellowlegs	<i>Tringa flavipes</i>	COSEWIC: Threatened
Red Crossbill	<i>Loxia curvirostra</i>	SARA, NLESA: Threatened
Great Cormorant	<i>Phalacrocorax carbo</i>	
Boreal Owl	<i>Aegolius funereus</i>	
Atlantic Salmon	<i>Salmo salar</i>	COSEWIC: Threatened (South Coast - Mistaken Pt to Cape Ray)
Polar Bear	<i>Ursus maritimus</i>	SARA: Special Concern NLESA: Vulnerable
Ivory Gull	<i>Pagophila eburnea</i>	SARA, NLESA: Endangered
Semipalmated Plover	<i>Charadrius semipalmatus</i>	
Barrow's Goldeneye	<i>Bucephala islandica</i>	SARA: Special Concern NLESA: Vulnerable
Rusty Blackbird	<i>Euphagus carolinus</i>	SARA: Special Concern NLESA: Vulnerable
Northern Goshawk	<i>Accipiter atricapillus</i>	
River Jewelwing	<i>Calopteryx aequabilis</i>	
Gray-Cheeked Thrush	<i>Catharus minimus</i>	COSEWIC: Candidate (Mid Priority) NLESA: Threatened
Subarctic Darner	<i>Aeshna subarctica</i>	

Northern Harrier	<i>Circus hudsonius</i>	
Long-tailed Duck	<i>Clangula hyemalis</i>	
Short-eared Owl	<i>Asio flammeus</i>	SARA: Special Concern NLESA: Threatened
American Eel	<i>Anguilla rostrata</i>	COSEWIC: Threatened NLESA: Vulnerable
Bank Swallow	<i>Riparia riparia</i>	SARA, NLESA: Threatened
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	SARA: Special Concern NLESA: Vulnerable
Barn Swallow	<i>Hirundo rustica</i>	SARA: Threatened NLESA: Vulnerable
Peregrine Falcon	<i>Falco peregrinus subsp. anatum</i>	SARA: Special Concern NLESA: Vulnerable
Saffron-winged Meadowhawk	<i>Sympetrum costiferum</i>	
Northern Bluet	<i>Enallagma civile</i>	
Lesser Black-backed Gull	<i>Larus fuscus</i>	
<b>Flora</b>		
American Bugleweed	<i>Lycopus americanus</i>	
American Bur-Reed	<i>Sparganium americanum</i>	
American Shore-grass	<i>Littorella americana</i>	
Bayonet Rush	<i>Juncus militaris</i>	
Berchtold's pondweed, slender pondweed	<i>Potamogeton pusillus subsp. tenuissimus</i>	
Black Grass	<i>Juncus gerardii</i>	
Black-bordered Shingles Lichen	<i>Parmeliella triptophylla</i>	
Blue Felt Lichen	<i>Pectenium plumbea</i>	NLESA: Vulnerable COSEWIC: Special Concern
Blue Jellyskin	<i>Leptogium cyanescens</i>	
Boreal Felt Lichen	<i>Erioderma pedicellatum</i>	NLESA: Vulnerable COSEWIC: Special Concern
Brown-eyed Shingle Lichen	<i>Pannaria rubiginosa</i>	
Canadian Yew	<i>Taxus canadensis</i>	
Corrugated Shingles Lichen	<i>Fuscopannaria ahlneri</i>	
Crested Wood Fern	<i>Dryopteris cristata</i>	
Dotted Line Lichen	<i>Ramalina farinacea</i>	
Electrified Horsehair Lichen	<i>Bryoria bicolor</i>	
Field Basil	<i>Clinopodium vulgare</i>	
Floating Bur-Reed	<i>Sparganium fluctuans</i>	
Floating-Heart	<i>Nymphoides cordata</i>	
Fowler's knotweed	<i>Polygonum fowleri subsp. fowleri</i>	
Goldie's roundleaf orchid	<i>Platanthera macrophylla</i>	
Grassleaf Arrowhead	<i>Sagittaria graminea</i>	
Greater Purple Bladderwort	<i>Utricularia purpurea</i>	

Hemlock Water-parsnip	<i>Sium suave</i>	
Hump-Backed Elves	<i>Buxbaumia minakatae</i>	COSEWIC: Candidate (Group 1, High Priority)
Lake Quillwort	<i>Isoetes lacustris</i>	
Large-Leaf Pondweed	<i>Potamogeton amplifolius</i>	
Linear-Leaved Willow-Herb	<i>Epilobium leptophyllum</i>	
Longleaf Stitchwort	<i>Stellaria longifolia</i>	
Magic Flute Lichen	<i>Menegazzia terebrata</i>	
Many-fruited Pelt Lichen	<i>Peltigera polydactylon</i>	
Maritime Sea-blite	<i>Suaeda maritima</i>	
Marsh Fern	<i>Thelypteris palustris</i> var. <i>pubescens</i>	
Methuselah's Beard Lichen	<i>Dolichousnea longissima</i>	
Mustard Kidney Lichen	<i>Nephroma laevigatum</i>	
Naked Kidney Lichen	<i>Nephroma bellum</i>	
Northern Coral Lichen	<i>Sphaerophorus globosus</i>	
Oldgrowth Rag Lichen	<i>Platismatia norvegica</i>	
Ostrich Fern	<i>Matteuccia struthiopteris</i>	
Pale-footed Horsehair Lichen	<i>Bryoria fuscescens</i>	
Parasitic Velvet Lichen	<i>Lichinodium sirosiphoideum</i>	
Poor-man's Shingles Lichen	<i>Parmeliella parvula</i>	
Powdery Kidney Lichen	<i>Nephroma parile</i>	
Punctured Ramalina Lichen	<i>Ramalina dilacerata</i>	
Small Water-Wort	<i>Elatine minima</i>	
Smooth Lungwort	<i>Ricasolia quercizans</i>	
Stubby Stalked Lichen	<i>Cladonia caespiticia</i>	
Tree Flute Lichen	<i>Menegazzia subsimilis</i>	
Tree Pelt Lichen	<i>Peltigera collina</i>	
Tuckerman's Quillwort	<i>Isoetes tuckermanii</i>	
water smartweed	<i>Persicaria amphibia</i>	
White-Stem Pondweed	<i>Potamogeton praelongus</i>	
Woodland Agrimony	<i>Agrimonia striata</i>	
Yellow Birch	<i>Betula alleghaniensis</i>	

#### 2.2.2.2 Caribou

Although this project is not within a Caribou Management Area, there is potential to encounter Caribou throughout the Project. Caribou on the Island are of conservation concern to the Wildlife Division. The Newfoundland Population of Woodland Caribou is listed as Special Concern on Schedule 1 of SARA. Additionally, the Government of NL has developed a Caribou Strategy to address caribou population declines.



Industrial activity introduces potential for impacts to change in habitat including direct and/or indirect loss or alteration of habitat arising from vegetation clearing and/ or sensory disturbance. Change in movement paths or patterns can also arise from change in habitat and/or sensory disturbance. Change in mortality risk can be directly impacted as a result of vegetation clearing vehicular collisions, and indirectly impacted through increased predation.

#### Environmental Protection Procedures

- Snow clearing is required during the Project, snowbanks will be less than 1m tall to facilitate caribou crossing, and breaks in snowbanks will be provided at approximately 200m intervals, to the extent practicable to provide wildlife crossing opportunities;
- Project vehicles will be required to adhere to posted speed limits;
- Caribou-vehicle collisions, near misses, or observations of road mortality will be reported to the NLP Environment Department and the NL FFA – Wildlife Division;
- The Environment manager will be notified if caribou are observed within 500m of Project activities to determine if the activity should be reduced or delayed (in consultation with the NL FFA -Wildlife Division);
- Personal pets (domestic or wild) will be prohibited on site during construction;
- Project contractors and staff will be prohibited from fishing, hunting, or otherwise interacting (e.g. harassment, feeding) with wildlife at the site while working on the Project; and
- Caribou sightings will be reported to NL Power's Environment Department. Caribou sightings will be reported to the NL FFA – Wildlife Division.

#### **2.2.2.3 Little Brown Myotis, Northern Myotis, and Tri-coloured Bat**

Little brown myotis, Northern Myotis, and Tri-coloured Bat populations in Canada have received increased conservation attention in recent years as emerging fungal disease (white-nose syndrome) has decimated colonies throughout eastern North America. Consequently, these species have been designated as Species at Risk in Canada. There is potential for the occurrence of this species within the Study Area.

If this species is encountered:

- Cease activity and report immediately to the Environmental Manager. The area should immediately be flagged and avoided until further consultation from Fisheries, Forestry and Agriculture – Wildlife Division; and
- Leave bats undisturbed.

#### **2.2.2.4 Rare and Protected Lichen Species**

To prevent adverse impacts to rare and protected lichen species, a ground survey of the project area will be conducted by a Prior to construction of the new line and/or dismantling of the old line, a rare lichen survey must be completed in appropriate habitats by a qualified botanist, and mitigation measures be employed if any thalli are found (e.g., translocations).

Should this species be encountered during project activity:

- Cease activity and report immediately to the Environmental Manager. The area should immediately be flagged and avoided until further consultation from Fisheries, Forestry and Agriculture – Wildlife Division; and
- Leave the lichen undisturbed.

#### **2.2.2.5 Newfoundland Pine Marten**

Newfoundland Pine Marten (SARA-listed as Threatened) may occur in the project area. All project activities should consider the recovery goals, objectives and actions identified in the 2013 Recovery Strategy for the American Marten (*Martes americana atrata*), Newfoundland Population, in Canada.

If this species is encountered:

- Cease activity and report immediately to the Environmental Manager. The area should immediately be flagged and avoided until further consultation from Fisheries, Forestry and Agriculture – Wildlife Division; and
- Leave wildlife undisturbed.

#### **2.2.2.6 Migratory Birds**

To prevent adverse impacts to migratory birds, clearing activities taking place during migratory bird season (April 15<sup>th</sup> – August 15<sup>th</sup>) will be preceded by nest surveying completed by qualified personnel within 7 days of vegetation work. Daily migratory bird assessment surveys will be completed by the vegetation contractor.

### **2.3 Construction and Decommissioning**

Construction of each Phase of the Project will consist of the following three components:

- Brush clearing: Brush clearing is planned to begin in Spring 2022 upon receipt of CBA prior to the proposed construction dates and continue until completion of the CBA.
- Construction: Construction will involve the installation of poles and anchors; cribbing; framing of structures; conductor stringing and sagging, as well as the installation of vibration dampers on applicable sections.
- Dismantling: Dismantling of the existing 94L will be completed after the new line is constructed. Dismantling and removal of the existing transmission line will involve the dismantling, removal, and disposal of the existing line, including poles, anchors, insulators, guys, conductors, and hardware.

Construction will be completed by both line truck/pickups, tension stringers, excavators, pickup trucks, Nodwell (flatdeck), Nodwell (boom), rock buster, stringing equipment, muskeg, and tractor/trailer/flatbed.

Construction and brush clearing will primarily be completed by contractors, with Newfoundland Power crews to assist with distribution crossings and substation connections. A Newfoundland Power site supervisor will monitor the site periodically throughout clearing and construction activities.

#### **2.3.1 Potential Sources of Pollution**

Potential sources of pollutants into environmental features that may result from construction activities include:

- Sedimentation and siltation from soil disturbance;
- Sedimentation and siltation in small watercourses due to fording;
- Accidental spills from construction equipment; and
- Disturbance of wildlife and vegetation.

Construction activities will involve brush clearing and soil disturbance within the 200 m buffer of the watercourse during installation of transmission structures which may cause sedimentation and siltation into the scheduled salmon rivers, negatively impacting water quality. Accidental release of deleterious substances, including fuel and lubricants, from construction machinery may also negatively impact water quality.

To avoid impacts on fish in Newfoundland & Labrador, do not carry out in-water work:

- In estuaries and main stems of scheduled salmon rivers from May 1 to September 30 (migrating period).
- In tributaries and headwaters of scheduled salmon rivers on the island of Newfoundland from October 1 to May 31 (spawning, incubating and hatching period).

Smaller watercourses and streams that are not salmon rivers may be forded during Project construction. Fording permits will be received prior to any fording of waterbodies identifiable on 1:50,000 mapping. Fording may result in alteration to the watercourse substrate as well as the release of fine sediments from the substrate and shoreline which may negatively impact water quality.

Vegetation clearing and construction activities may also disrupt wildlife within the vicinity of the transmission line. Disruption may occur from vegetation clearing, as well as the noise and activity

associated with construction equipment. Newfoundland Power has operating procedures in place to guide employees if wildlife is encountered on the job site. Vegetative management during migratory bird season will be completed in accordance with Newfoundland Power's migratory birds operating procedure.

Newfoundland Power will implement a project specific Environmental Protection Plan (EPP) prior to construction, which includes measures for erosion and sedimentation control, wildlife management, spill prevention, and contingency planning (as necessary). Following the completion of construction activities, areas adversely affected by this project must be restored to a state that resembles natural conditions. Additionally, the environmental management measures outlined in Section 2.3.2 will be implemented to minimize the risk of release of sediment.

### **2.3.2 Environmental Management Measures**

Mitigative measures to minimize the environmental effects of the Project include:

- Implementation of the EPP, including the ESCP, spill prevention plan, and contingency plans (as necessary prior to construction);
- Erosion and Sediment Control structures will be maintained and inspected regularly with particular emphasis before and after forecasted heavy rain events, and with consideration of the timing and types of activities involved;
- Where necessary, ESC measures will remain in place after work is completed until areas have stabilized and natural re-vegetation occurs;
- All overburden will be removed during the excavation phase and will be stored according to provincial regulations and best practice guidelines;
- Exposed soils and stockpiles capable of producing sediment laden-runoff will continue to be stabilized and/or will be covered;
- A complete oil spill clean-up kit must be on the site at all times when gasoline or fuel powered equipment is being used or refueled;
- Refueling will not be completed within 30 m of a watercourse or waterbody edge;
- Stream banks at fording sites that contain loose or erodible material must be adequately stabilized before crossing to minimize any siltation of stream;
- Fording will be carried out during periods of low water levels;
- The natural course of the stream will not be altered during fording; and
- Fording site will be located at shallow sections of channels where there are low approach grades and the channel consists of stable substrate.

### **2.3.3 Pole Removal**

Decommissioning strategies include cutting vintage poles at the ground level and leaving underground portions in place to minimize ground disturbance. Recently replaced treated poles would be removed due to the potential for re-use in other utility maintenance, as well as the longer decomposition period when compared to poles of older vintage.

## **2.4 Operation**

The construction of the Project will be constructed with structures and equipment intended for an operating life of 60 years. Work on the Project during operation will consist of emergency repair.

Vegetation management below the transmission line will be completed manually, no herbicides will be applied. An annual inspection will be completed during the winter months by snowmobile and a detailed inspection without snow will be completed every 4 years.

#### *2.4.1 Climate Change Adaptation Measures in Project Design*

This line is designed to CSA standards. The hardening measures incorporated into this project design will reduce the level of impact to transmission line infrastructure under the influence of the changing climate. Transmission line infrastructure will be subject to the projected climate trend of more frequent and intense storms, wind events, flooding, ice loading, as well as precipitation. Without adaptation measures more frequent maintenance activities would be required, increasing traffic along the RoW as well as access roads. This would attribute to a greater environmental risk. By hardening infrastructure to meet CSA national standards, this risk will be reduced.

#### *2.4.2 Potential Sources of Pollution*

Potential sources of pollutants into environmental features that may result from operation of the Project include:

- Sedimentation and siltation from soil disturbance; and
- Accidental spills from construction equipment.

Operation of the Project will have no potential sources of pollutants into the environment on a daily basis. In the event of emergency repairs, activities may result in sources of pollution similar to construction activities, including sedimentation and siltation from soil disturbance and accidental spills from construction equipment. Environmental management measures outlined for construction activities in Section 2.3.2 also apply to operation activities.

## **2.5 Local Receptors**

The Project runs alongside Routes 100, 81, 91, 90, along with some backcountry areas. The nearest communities to the Project are Whitbourne, Markland, Nuggetville, Mt Carmel-Mitchell's Brook-St. Catherine's, and Riverhead. Residential, commercial and industrial properties are present throughout these communities, as well as in other areas along these routes. The Project also passes through numerous watercourses that are used for recreational purposes, particularly fishing.

The project is within the buffer zone of a former dump site near Colinet, as well as near Whitbourne.

Due to property constraints, sections of new line will be constructed in the same location as other existing Newfoundland Power feeders. In these areas, sections of existing distribution feeders will be attached to the transmission structures in an under-build configuration.

Community receptors are equivalent to those of the originally proposed route, with the addition of the Town of Colinet, as the rerouted right-of-way crosses within the town boundaries. Other new community receptors include residential, commercial, and industrial areas along Route 91 and Route 81, including residences, cottages, and quarries. Side roads may be impacted for short durations during vegetation management and construction at those locations.

Construction activities have the potential to cause minor disturbances to nearby residences and recreational users through the creation of noise and dust from construction equipment, as well as increased traffic on nearby roads. Newfoundland Power has operating procedures in place to guide employees in terms of limiting disturbance during vegetation management (OPR 200.05— Vegetation Management) and vehicular disruptions (OPR 112.14 — Traffic Control). In addition, Newfoundland Power will minimize the impact of Project activities on local receptors through the implementation of the following mitigation measures:

- Implementing a Project specific EPP, including detailed identification of impacts to receptors and management plans for noise and air quality;
- Limiting construction activities to regular daylight working hours;
- Ensuring vehicular traffic coming to and from the site is kept at a required minimum;
- Maintaining equipment in good working order and properly muffled; and
- Minimizing idling of equipment and vehicles.

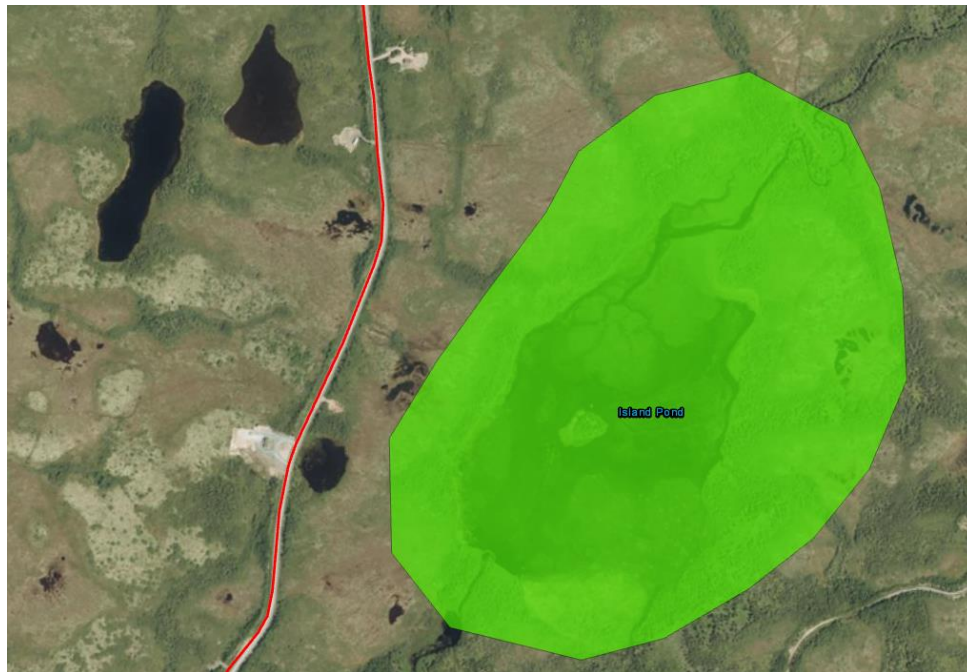
#### *2.5.1 Parks and Natural Areas*

This project will follow the Newfoundland T’Railway Provincial Park from Route 81 (Markland Road) to Route 100 (Argentia Access Road). Communication with the Newfoundland T’Railway Council shall be maintained during project planning in this area to minimize the impact of Project activities to the provincial park. Permits shall be obtained for construction activity within the T’Railway Provincial Park. The RoW also runs along the roadside near Sir Robert Bond Park located in Whitbourne.

Rerouting this project to the roadside reduces impacts to backcountry areas and eliminates the need for traversing remote areas during future operation for purposes such as inspection, maintenance and emergency repair. This proposed route eliminates backcountry access via the RoW, including potential access to the Ripple Pond Ecological Reserve and other backcountry wetland areas such as those near Markland.

Impacts to the Ripple Pond Ecological Reserve will be limited to activities associated with the decommissioning of the pre-existing Transmission Line 94L. After which point, the transmission corridor will be allowed to revegetate naturally.

The new route is in proximity of the Parks Area of Interest, Island Pond. At the nearest point, this newly proposed RoW is roughly 130m from the boundary of the Island Pond area. The existing Transmission Line 94L is within this Parks Area of Interest, therefore the decommissioning of the original will dissect the boundary. Once decommissioned the original RoW will be allowed to revegetate and standard operations will occur on the newly proposed route.



*Figure 6 Island Pond Parks Area of Interest, near Colinet, as shown on the FFA Land Use Details Application. At this location, the new proposed route is located approximately 10m from the centerline of Route 81 (Markland Road).*

This route avoids construction near the Significant Wetland Area and waterfowl area encompassing Goosey Gullies, Simmons Pond, and Soldier Pond.

### 2.3.3 Waste Management

Project wastes during construction will include cut wood waste, domestic waste, industrial waste (i.e. shipment packing from equipment, construction scrap, etc.), as well as domestic and industrial cardboard and paper. Site preparation and construction may result in soil stockpile waste from grubbing and pole construction. Wastes produced by decommissioning will include wood pole structures, insulators and miscellaneous metal hardware, and used conductor.

Wastes will be recycled when possible. Non-recyclable wastes will be placed into appropriate covered containers and transported from site as necessary. Domestic wastes will be removed from site daily to prevent attraction of wildlife. Specific waste streams, storage, and disposal are outlined in Appendix D.

## 2.6 Occupations

The project has been estimated to require a maximum of 35 crew members on site at any given time, including both contractors and Newfoundland Power Employees. Construction of the Project will require the following occupations (with NOC code breakdown) from both Newfoundland Power and Contractor staff:

### Engineering Technicians:

- 2212 Geological and Mineral Technologists and Technicians
- 2231 Civil Engineering Technologists and Technicians
- 2241 Electrical and Electronics Engineering Technologists and Technicians
- 2253 Drafting Technologists and Technicians
- 2254 Land Survey Technologists and Technicians

### Heavy Equipment Operators:

- 7312 Heavy-Duty Equipment Mechanics
- 7412 Heavy Equipment Operators

### Line Workers:

- 7212 Contractors and Supervisors, Electrical Trades and Telecommunications Occupations
- 7244 Electrical Power Line and Cable Workers

### Ground Workers:

- 0711 Construction Managers
- 7217 Contractors and Supervisors, Heavy Construction Equipment Crews
- 7611 Construction Trades Helpers and Labourers
- 7612 Other Trades Helpers and Laborers

Construction and brush clearing will primarily be completed by contractors, with Newfoundland Power crews to assist with distribution crossings and substation connections.



## 3.0 Approval of the Undertaking

Other permits and authorizations are listed in table 3.

*Table 3 Permits, authorizations, and compliance standards potentially applicable to future project activity*

Permit/ Approval	Responsible Authority
<b>Federal</b>	
Compliance standard pursuant to Migratory Birds Convention Act and Regulations	Environment Canada
Compliance standard pursuant to Fisheries Act, Section 36(3), Deleterious Substances	Fisheries and Oceans Canada
DFO Blanket Request for Project Review	Fisheries and Oceans Canada
Approved Label for the Use of Pentachlorophenol Treated Poles & Cross Arms	Health Canada – Pest Management Regulatory Agency
<b>Provincial</b>	
Permit to Alter a Body of Water pursuant to the Water Resources Act, specifically Section(s) 48	Department of Environment and Climate Change – Water Resources Management Division
Permit for Development within a PPWSA pursuant to the Water Resources Act, specifically Section(s) 48	Department of Environment and Climate Change – Water Resources Management Division
NL T 'Railway Provincial Park Temporary Vehicular Access (Commercial Fees) Permit	Department of Tourism, Culture, Arts and Recreation – Parks Division
Parks NL Construction and Use Permit	Department of Tourism, Culture, Arts and Recreation – Parks Division
Forest Fire Season Operating Permit	Department of Fisheries, Forestry, and Agriculture
Permit for Lichen Surveys and Translocations/Transplants subject to Section 18 of the Endangered Species Act	Department of Fisheries, Forestry and Agriculture – Wildlife Division
Commercial Cutting Permit	Department of Fisheries, Forestry, and Agriculture
Development Permit under the Protected Road Zoning Regulations	Digital Government and Service NL – Government Service Centre
Compliance standard pursuant to the Used Oil and Used Glycol Control Regulations	Department of Environment and Climate Change – Pollution Prevention Division
Compliance standard pursuant to the Environmental Control Water and Sewage Regulations	Department of Environment and Climate Change – Water Resources Management Division
Release of the Undertaking under the Environmental Assessment Regulations	Department of Environment and Climate Change – Environmental Assessment Division
Crown Lands Application for new Right of Way	Department of Fisheries, Forestry and Agriculture – Crown Lands Division
Compliance Standard pursuant to Environmental Protection Act, Air Pollution Control Regulations	Department of Environment and Climate Change – Pollution Prevention Division

Compliance standard pursuant to the Environmental Control Water and Sewage Regulations	Department of Environment and Climate Change – Pollution Prevention Division
Compliance Standard pursuant to Workplace Hazardous Materials Information System (WHMIS) Regulations, under the Occupational Health and Safety Act and Regulations	Digital Government and Service NL – Occupational Health and Safety
<b>Municipal</b>	
Approval for Waste Disposal pursuant to the Urban and Rural Planning Act, 2000	Community Council
Permit for Development	The Town of Whitbourne
Municipal Recommendation	Town of Riverhead
Permit for Development for the Town of Mount Carmel-Mitchell's Brook-St. Catherine's	Town of Mount Carmel-Mitchell's Brook – St. Catherine's

### 3.1 Treated Poles in Sensitive Habitats

The type of poles used within sensitive habitats will adhere to Newfoundland Power's OPR 200.03 Chemically Treated Poles and Timbers. When working within environmentally sensitive areas permits shall be obtained from DOECC (see Table 4).

*Table 4 Restrictions for Sensitive Sites*

Type of Treated Wood	Surface Well	Drilled Artesian Well	Rivers, Ponds, Brooks, Lakes and Streams (Outside PPWSA)	Rivers, Ponds, Brooks, Lakes and Streams (Inside PPWSA)
PCP	15m	10m	15m Subject to Regulatory Approval – see notes below	Not Permitted
CCA	5m	3m	5m Subject to Regulatory Approval – see notes below	In Accordance With Table 2

The minimum distances in Table 4 have been established to address concerns as they relate to contamination of water due to the leaching of preservatives. In cases where it is desirable to install plant closer than 15 meters of a river, pond, brook, lake, stream or ocean, appropriate approvals must be obtained from the regulatory bodies in advance of the work proceeding.

In areas where the buffer zone cannot be maintained in accordance with Table 5, approval for exceptions must be obtained in writing by the Manager responsible for the project from DOECC, Water Resources Division.

*Table 5 Go-Forward Policy - DOECC*

Water Body	Width of Buffer Zone
Intake pond or lake	Minimum of 150 meters
River Intake	Minimum of 150 meters for a distance of one kilometer upstream and 100 meters downstream
Main river channel	Minimum of 75 meters
Major tributaries, lakes, or ponds	Minimum of 50 meters
Other water bodies	Minimum of 30 meters

### 3.2 Previous Conditions of Release

Given the proximity of this project to the route proposed and released under EA 2184, the conditions of the EA 2184 will be adhered to, in addition to any new requirements upon review of this amendment. Previous mitigations to be continued as outlined in the project specific EPP include:

- Rare lichen surveying in appropriate habitats and translocation of thalli according to approved methodology and mitigations;
- Identification and mitigation of impacts to listed tree species;
- Migratory bird nest surveying in advance of vegetation removal during the designated migratory bird season, along with daily migratory bird assessment by crews. In addition, clearing during the designated migratory bird season will be avoided when feasible;
- Identification and reporting of wetland locations (Bogs, Marshes, and Fens) including avoidance of wetland areas and use of wetland mats or timber corduroy where necessary.

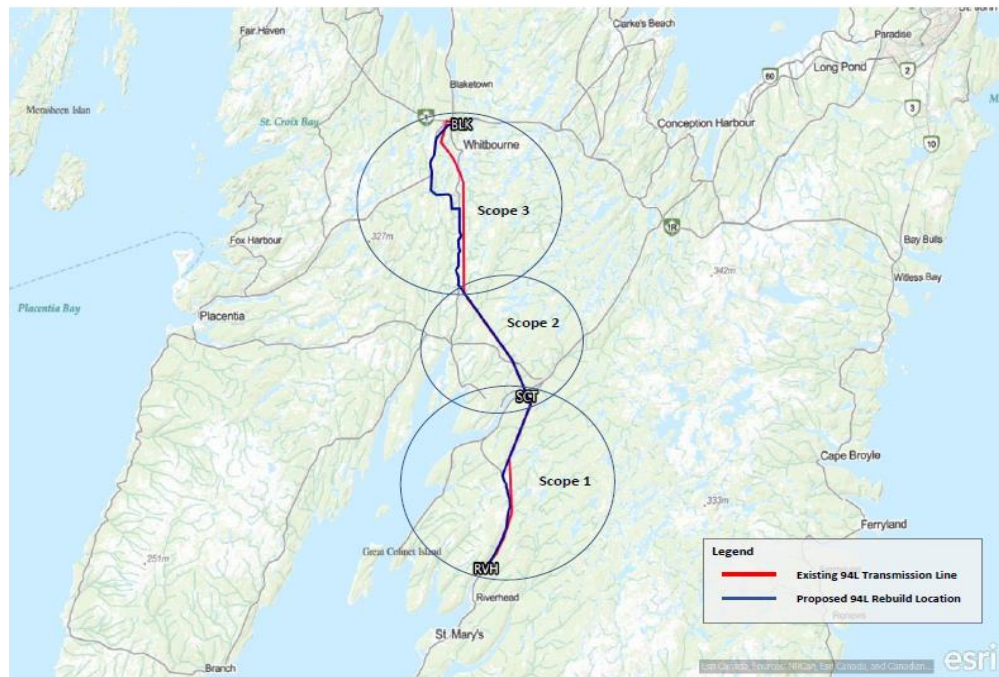
A listing of key requirements can be found on the Project webpage of the Environmental Assessment Division website: [2022-09-02.pdf \(gov.nl.ca\)](#).

## 4.0 Schedule

The Project proposed under EA 2184 was to be completed over the span of three years, beginning in 2022 and ending in 2024. The Project was divided into three scopes of work, approximately 20 kilometers in length, with Newfoundland Power planning to complete one of the scopes in each year of the Project. These scopes included the design and construction of the new line, as well as decommissioning the existing Transmission Line 94L. The **originally proposed** schedule for the Project is outlined in Table 6. The new project schedule is presented in Section 4.2 – Schedule Changes.

*Table 6Originally Proposed schedule for the project by scope.*

Project Component		Originally Proposed Date
Registration of Environmental Assessment		2021
Scope 1	Brush Clearing	2022
	Construction/Dismantling	2022
	Commissioning	2022
Scope 2	Brush Clearing	2023
	Construction/Dismantling	2023
	Commissioning	2023
Scope 3	Brush Clearing	2024
	Construction/Dismantling	2024
	Commissioning	2024



*Figure 7 Scope (phase) approach to the previously proposed and released project RoW.*

#### **4.1 Progress to Date**

Newfoundland Power began surveying, brush clearing, and design activities upon release from Environmental Assessment in September 2022, however, due to seasonal time constraints the construction of Scope 1 was postponed to the next construction season. Construction of the 21.5 kilometers of transmission line between RVH Substation and SCT Substation included in Scope 1 of the Project was completed and put into service in 2023. Due to this proposed alternative route, phases 2 and 3 have been delayed until further approvals are granted.

4.2 Schedule Changes

Scope 2 will be completed in 2025, except for the first 3.5 kilometers which are planned to be constructed in 2024. This 3.5km section has no change to its routing from the originally approved design. The revised Scope 3 will be completed in 2026. Changes are demonstrated in Table 7.

Table 7 Revised Schedule

Project Component		Revised Date
Scope 2	Registration of Environmental Assessment	2024
	Brush Clearing	2025
	Construction/Dismantling	2025
	Commissioning	2025
Scope 3	Brush Clearing	2026
	Construction/Dismantling	2026
	Commissioning	2026

## **5.0 External Funding**

External funding is not required for this project.



## 6.0 REFERENCES

- DFO. (2021, November 12). *Government of Canada*. Retrieved from Atlantic Salmon Fishway Counts:  
<https://inter-l01-uat.dfo-mpo.gc.ca/nfl-tnl/en/atlantic-salmon-fishway-counts>
- Reddin, D. G., Poole, R. J., Clarke, G., & Cochrane, N. (2009). *Salmon Rivers of Newfoundland and St. John's*: Canadian Science Advisory Secretariat.

## Appendix A

### Transmission Line Condition

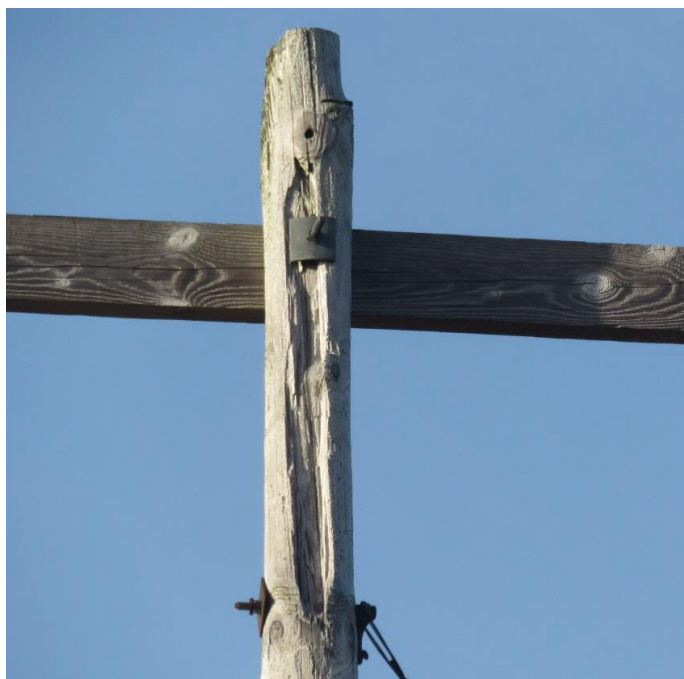


Figure A-1 Deteriorated Pole Top



Figure A-2: Deteriorated Pole – Shell Separation

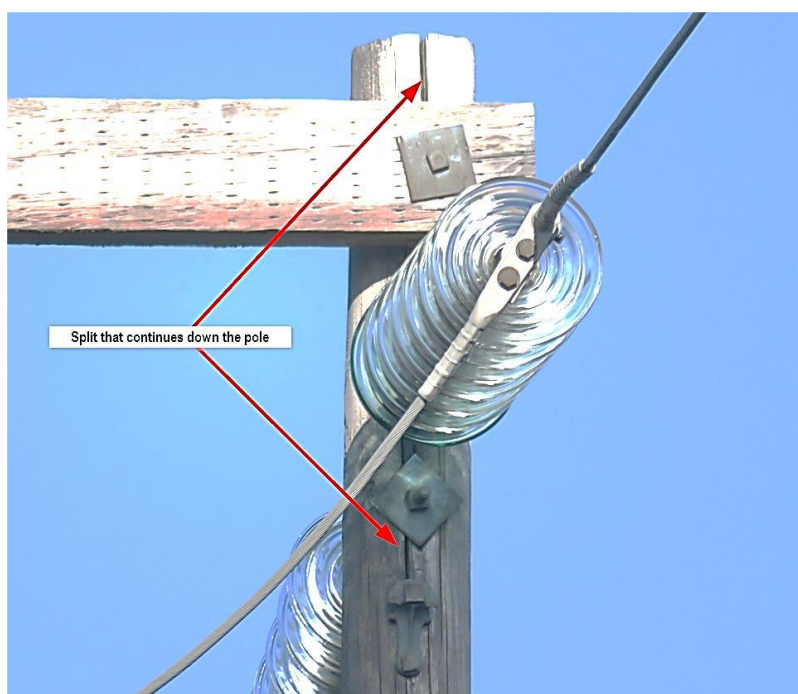


Figure A-3: Split Pole

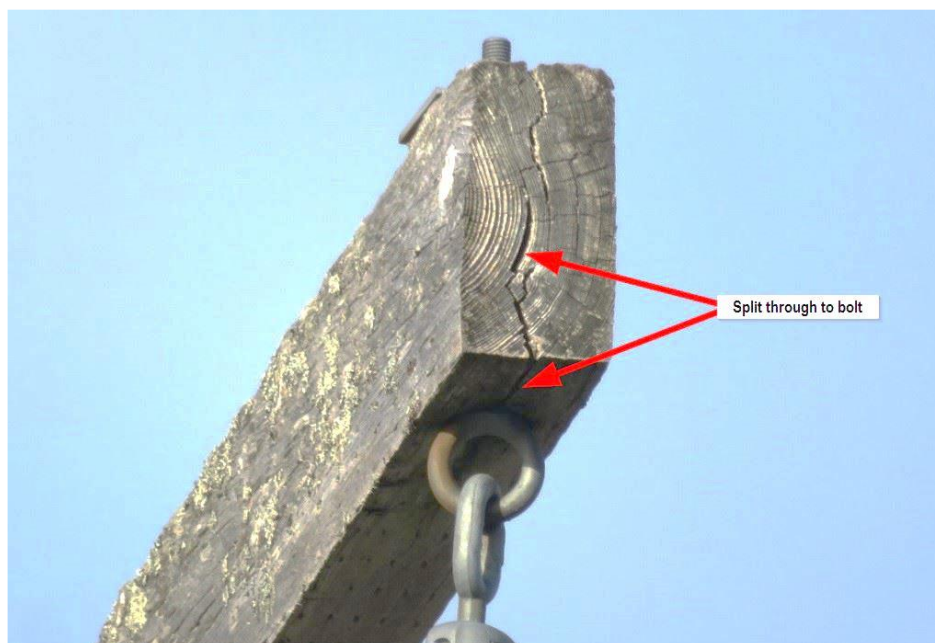


Figure A-4: Split Cross Arm

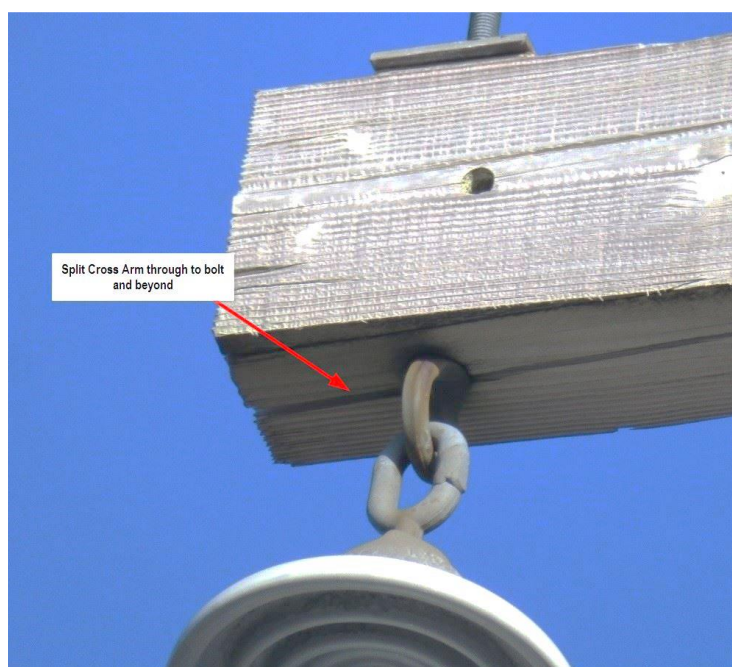


Figure A-5: Split Cross Arm



Figure A-6: Worn Ball Link Eye Bolt



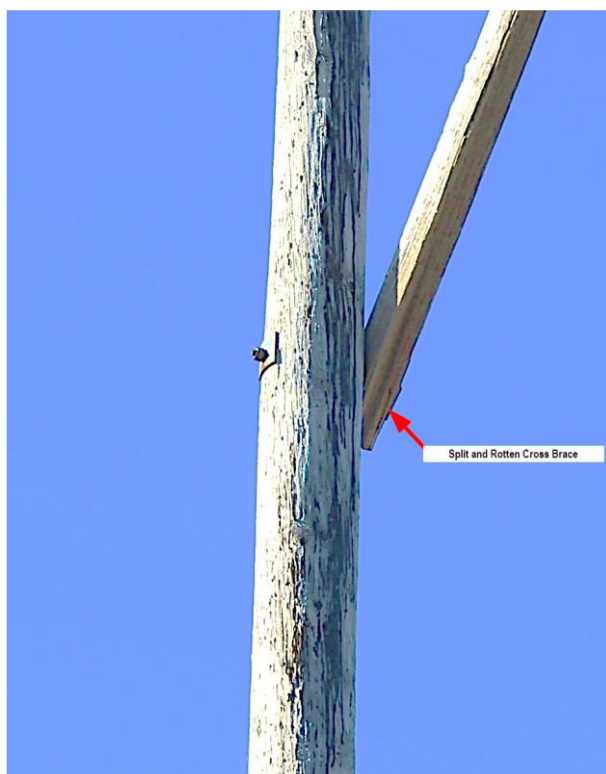


Figure A-7: Deteriorated Cross Brace

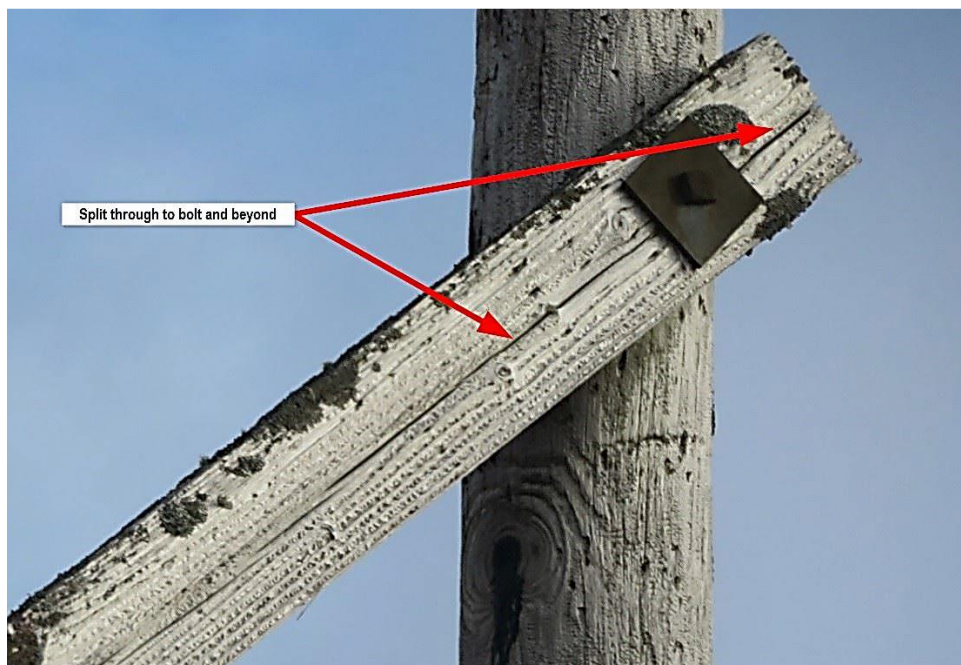


Figure A-8: Cracked, Rotten Cross Brace

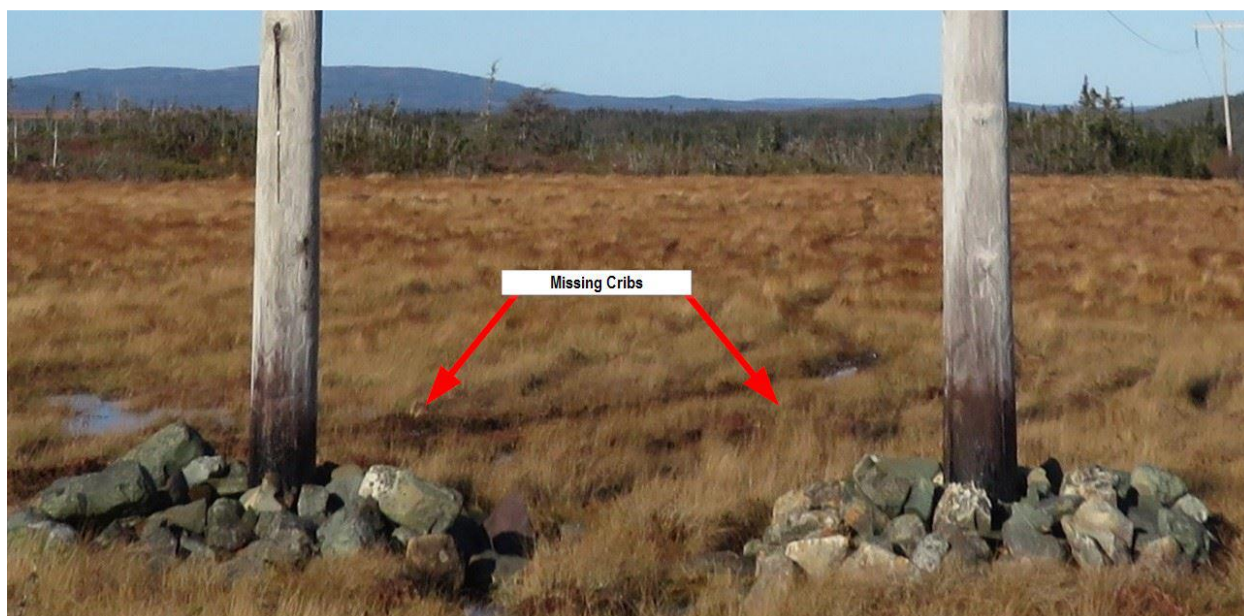


Figure A-9: Missing Cribs

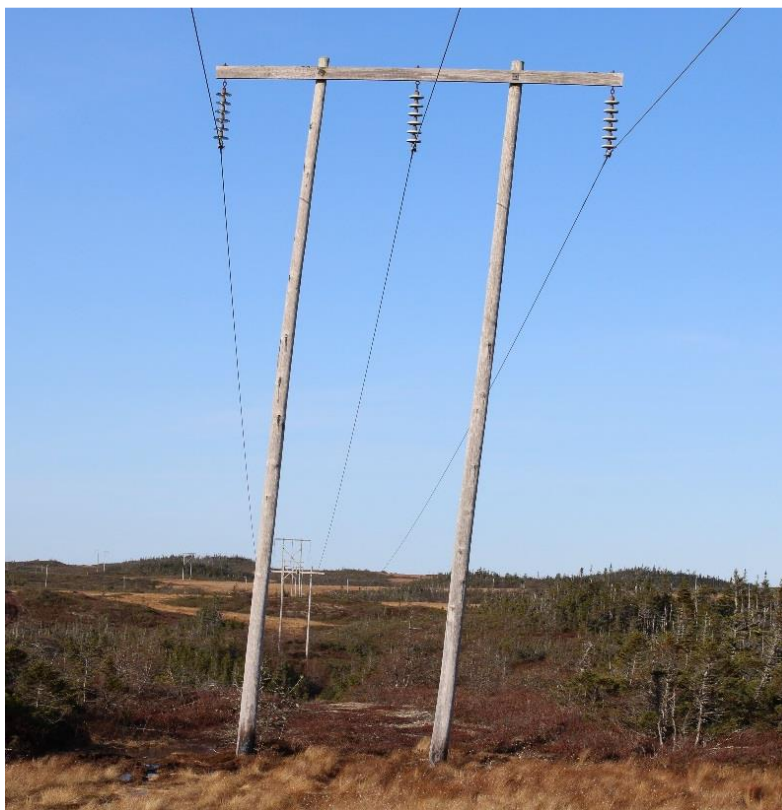
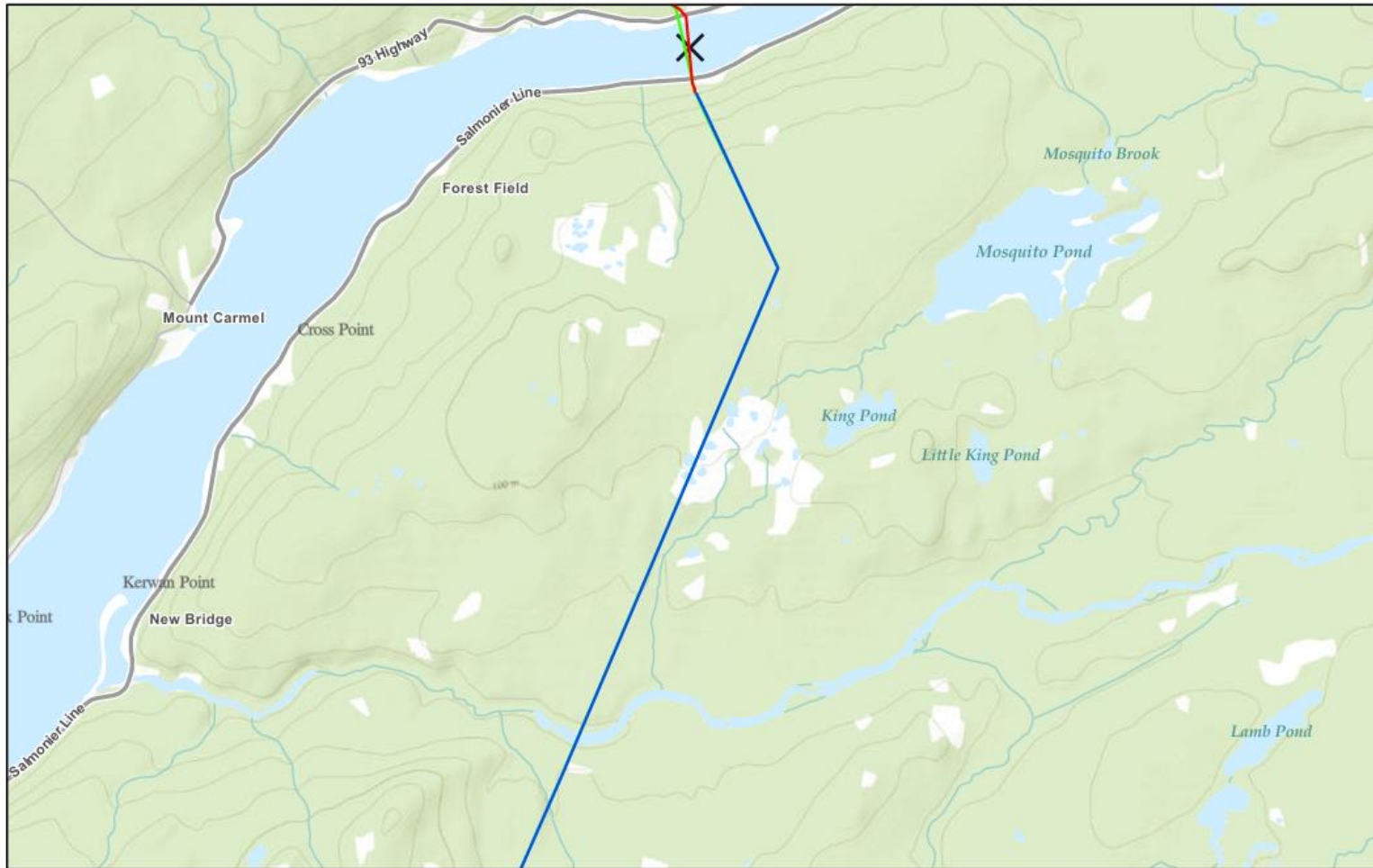


Figure A-10: Leaning Structure – Substandard Construction

## Appendix B

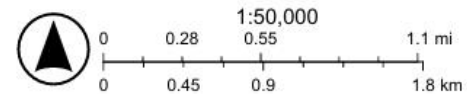
### Project Mapping

Figure B-1: Scope 1 (completed) extending from Riverhead Substation to St. Catherine's Substation. The proposed new transmission line is shown in red, while the previously proposed route released under EA 2184 is shown in Green. Scope 2 begins at the St. Catherine's Substation.



8/20/2024

- 94L Proposed Alternative Route
- 94L Riverhead to St. Catherine's (Construction Completed)
- 94L Original Proposed Route

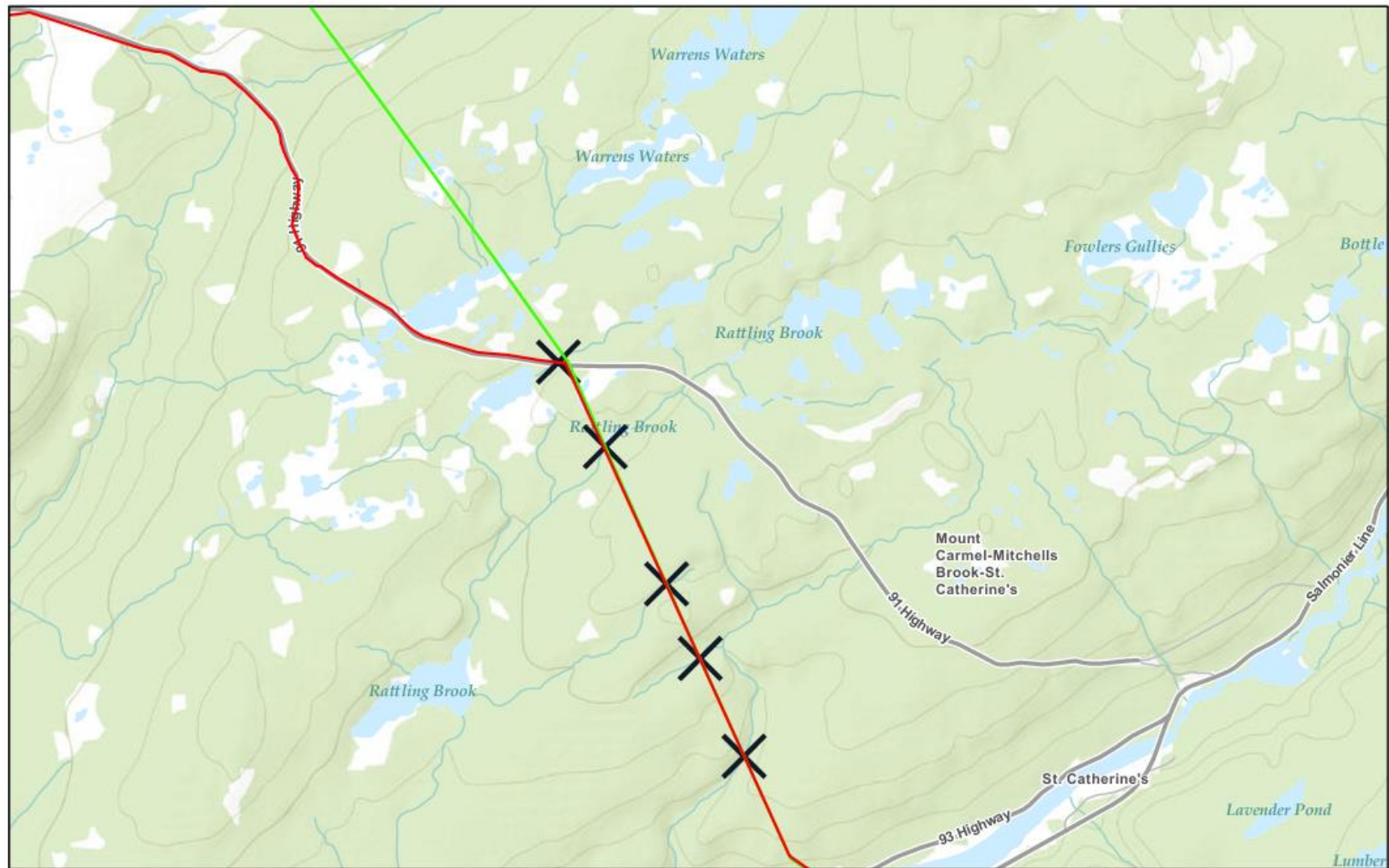


Esri, NASA, NGA, USGS, Sources: NRCan, Esri Canada, and Canadian Community Maps contributors, Esri Canada, Esri, TomTom, Garmin,

K. Filler



Figure B-2: Scope 2 (2024/2025) extends from St.Catherine's Substation approximately halfway to Blaketown Substation. The proposed transmission line is shown in red, while the previously proposed route released under EA 2184 is shown in Green. Crossings of Salmon rivers and tributaries identified on 1:50 000 mapping are identified by a black cross symbol.



8/20/2024

- 94L Proposed Alternative Route
- 94L Original Proposed Route

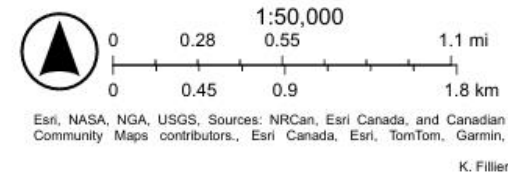
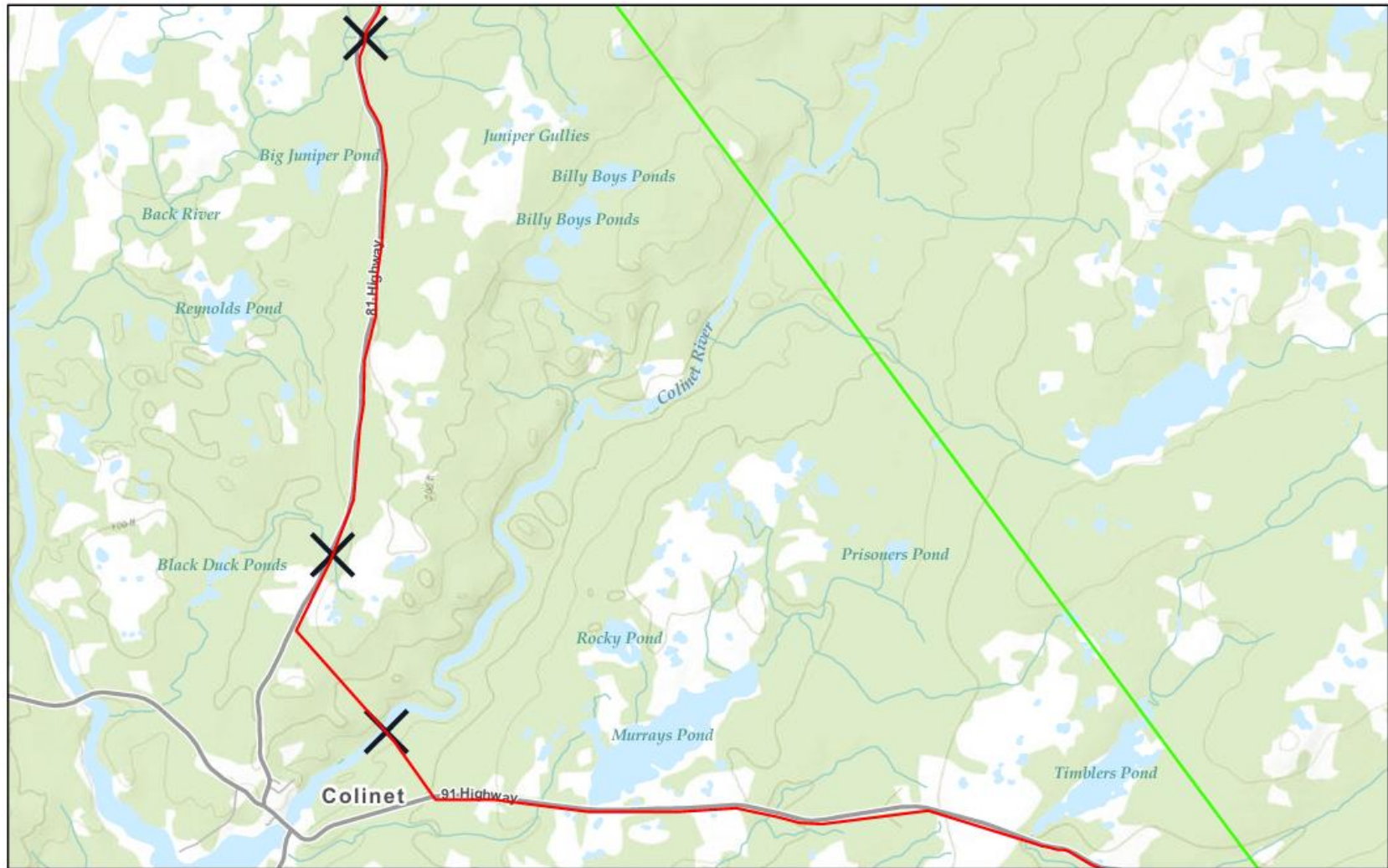




Figure B-3: Scope 2 (2024/2025) extends from St.Catherine's Substation approximately halfway to Blaketown Substation. The proposed transmission line is shown in red, while the previously proposed route released under EA 2184 is shown in Green. Crossings of Salmon rivers and tributaries identified on 1:50000 mapping are identified by a black cross symbol.



8/20/2024

- 94L Proposed Alternative Route
- 94L Original Proposed Route

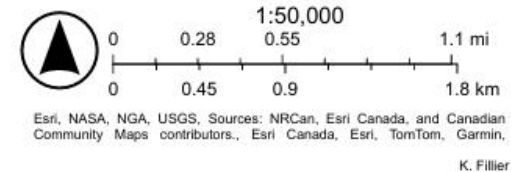
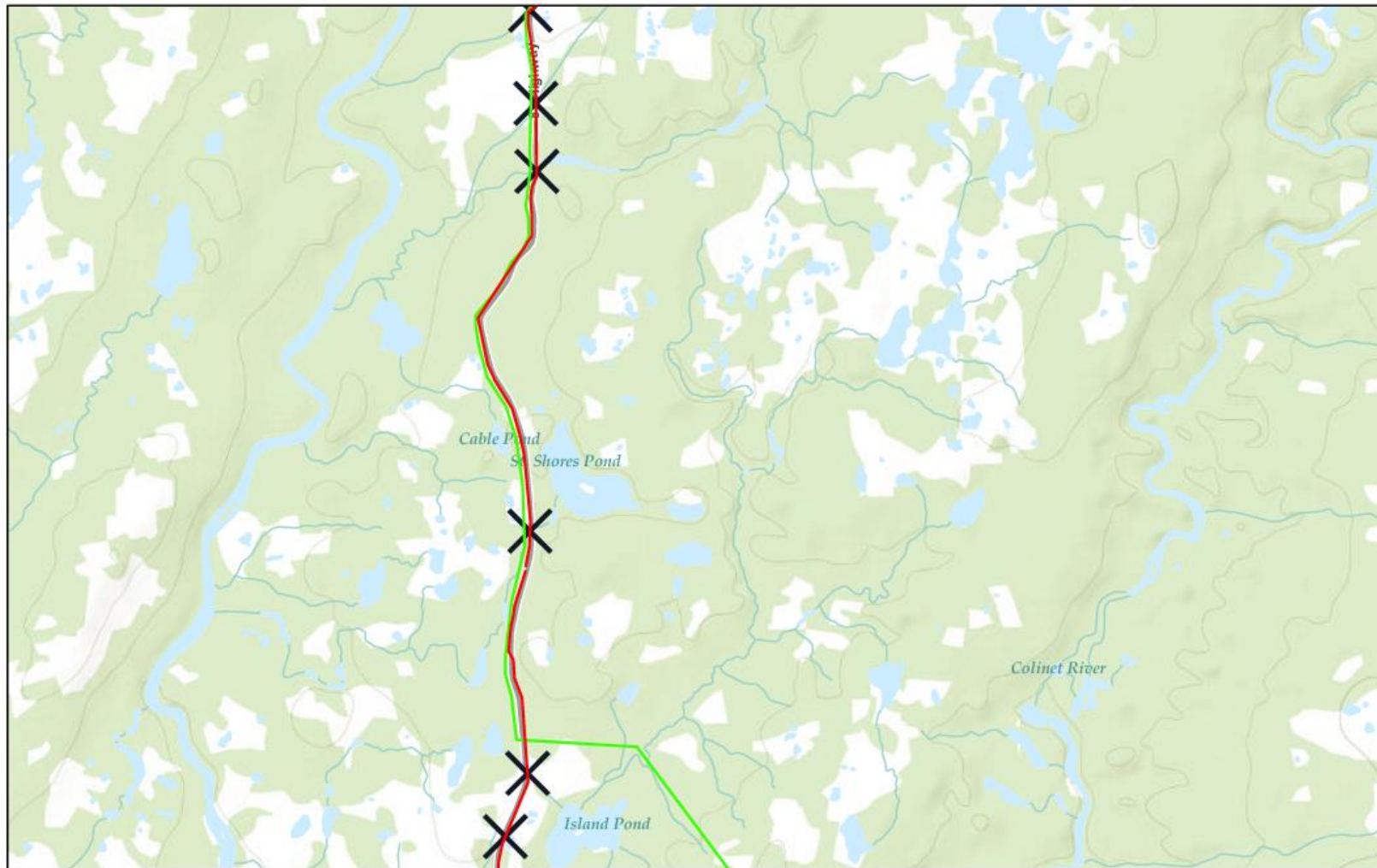


Figure B-4: Scope 2 (2024/2025) ends approximately halfway to Blaketown Substation, where Scope 3 (2026) begins. The proposed transmission line is shown in red, while the previously proposed route released under EA 2184 is shown in Green. Crossings of Salmon rivers and tributaries identified on 1:50000 mapping are identified by a black cross symbol.



8/20/2024

— 94L Proposed Alternative Route

— 94L Original Proposed Route

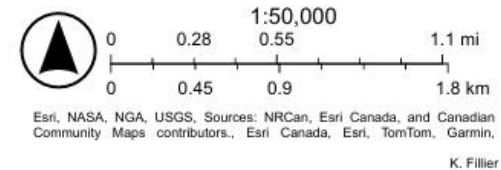
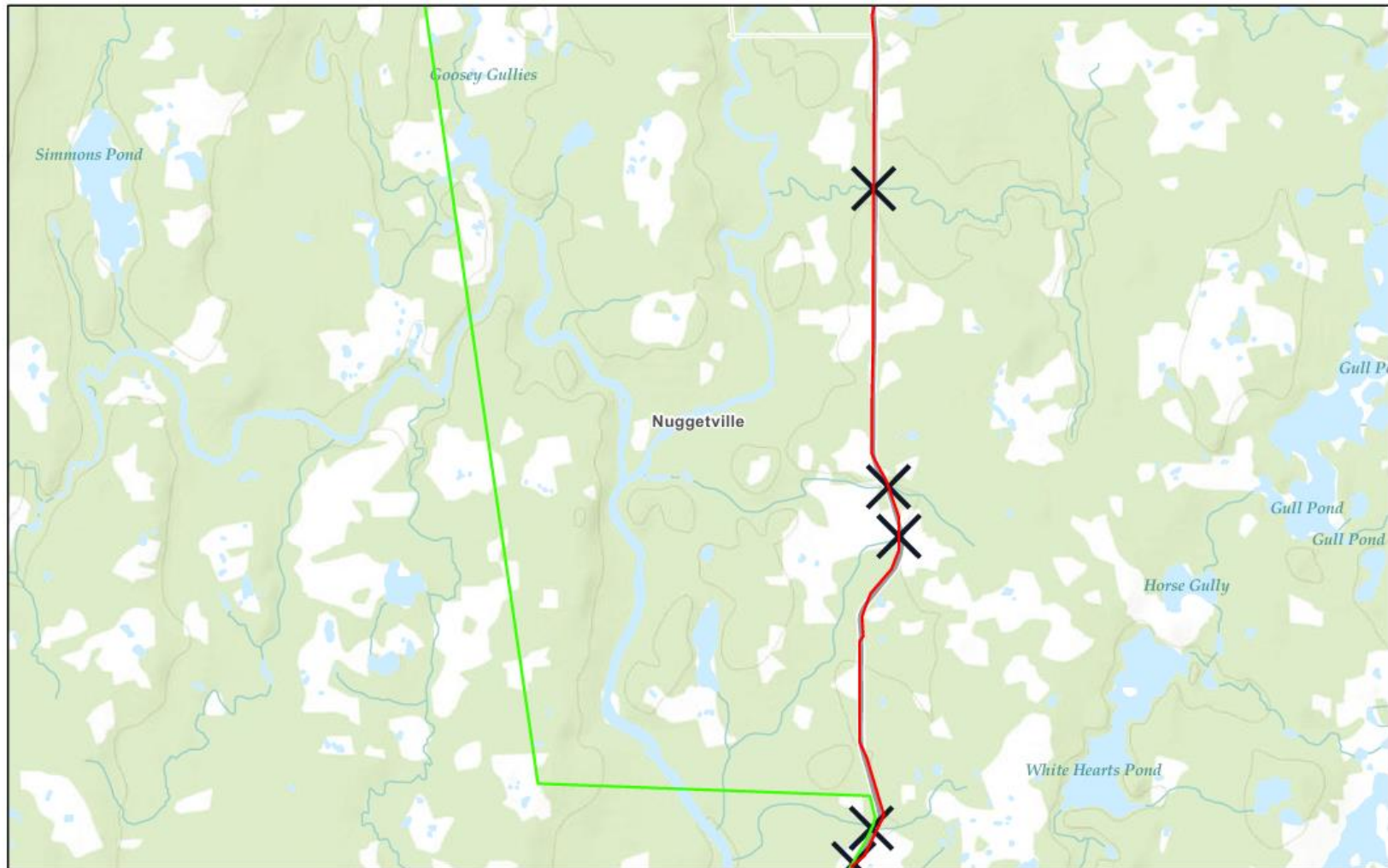




Figure B-5: Scope 3 (2026) extends the transmission line to its endpoint at the Blaketown Substation. The proposed transmission line is shown in red, while the previously proposed route released under EA 2184 is shown in Green. Crossings of Salmon rivers and tributaries identified on 1:50000 mapping are identified by a black cross symbol.



8/20/2024

- 94L Proposed Alternative Route
- 94L Original Proposed Route

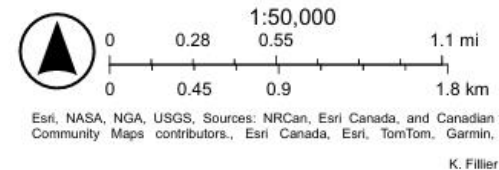
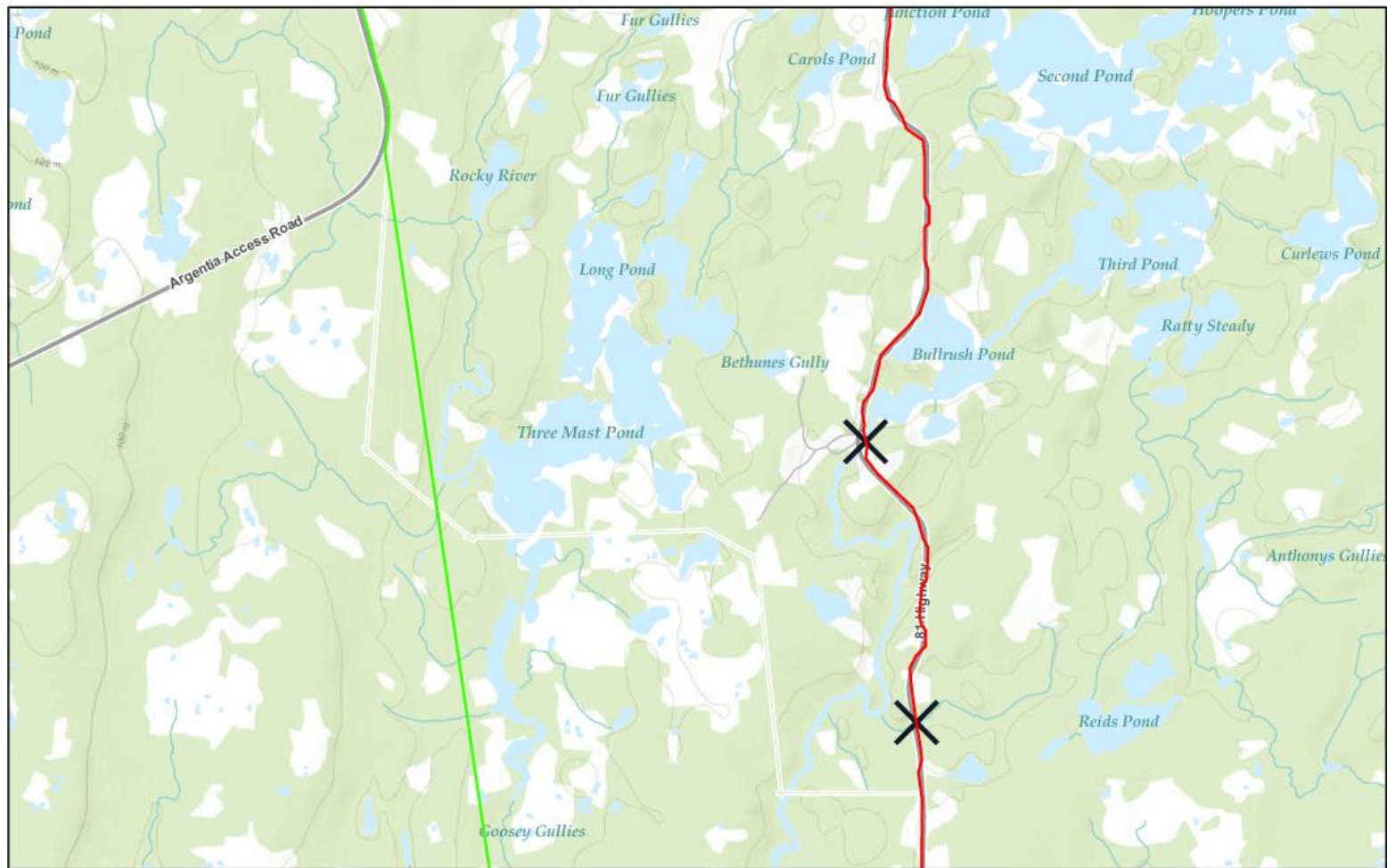


Figure B-6: Scope 3 (2026) extends the transmission line to its endpoint at the Blaketown Substation. The proposed transmission line is shown in red, while the previously proposed route released under EA 2184 is shown in Green. Following the release of EA 2184, a route change was required to avoid sensitive watercourses, the alternately chosen and approved route is shown in white. Crossings of Salmon rivers and tributaries identified on 1:50000 mapping are identified by a black cross symbol.



8/20/2024

- 94L Proposed Alternative Route
- 94L Original Proposed Route

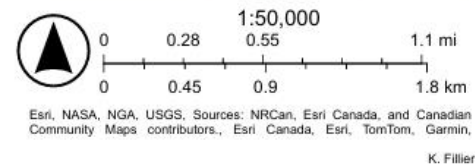
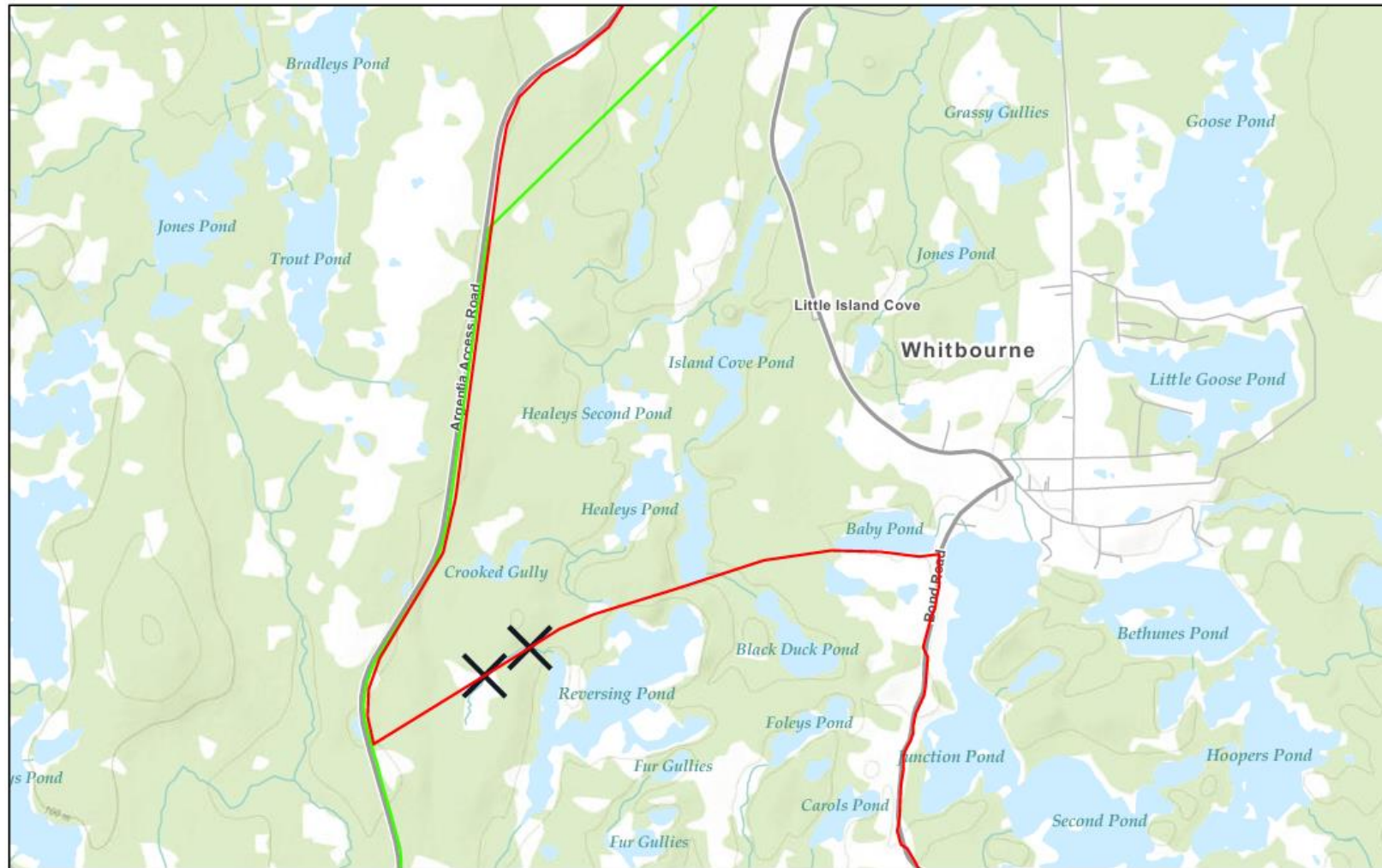




Figure B-7: Scope 3 (2026) extends the transmission line to its endpoint at the Blaketown Substation. The proposed transmission line is shown in red, while the previously proposed route released under EA 2184 is shown in Green. Crossings of Salmon rivers and tributaries identified on 1:50000 mapping are identified by a black cross symbol.



8/20/2024

- 94L Proposed Alternative Route
- 94L Original Proposed Route

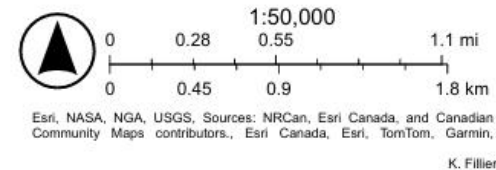
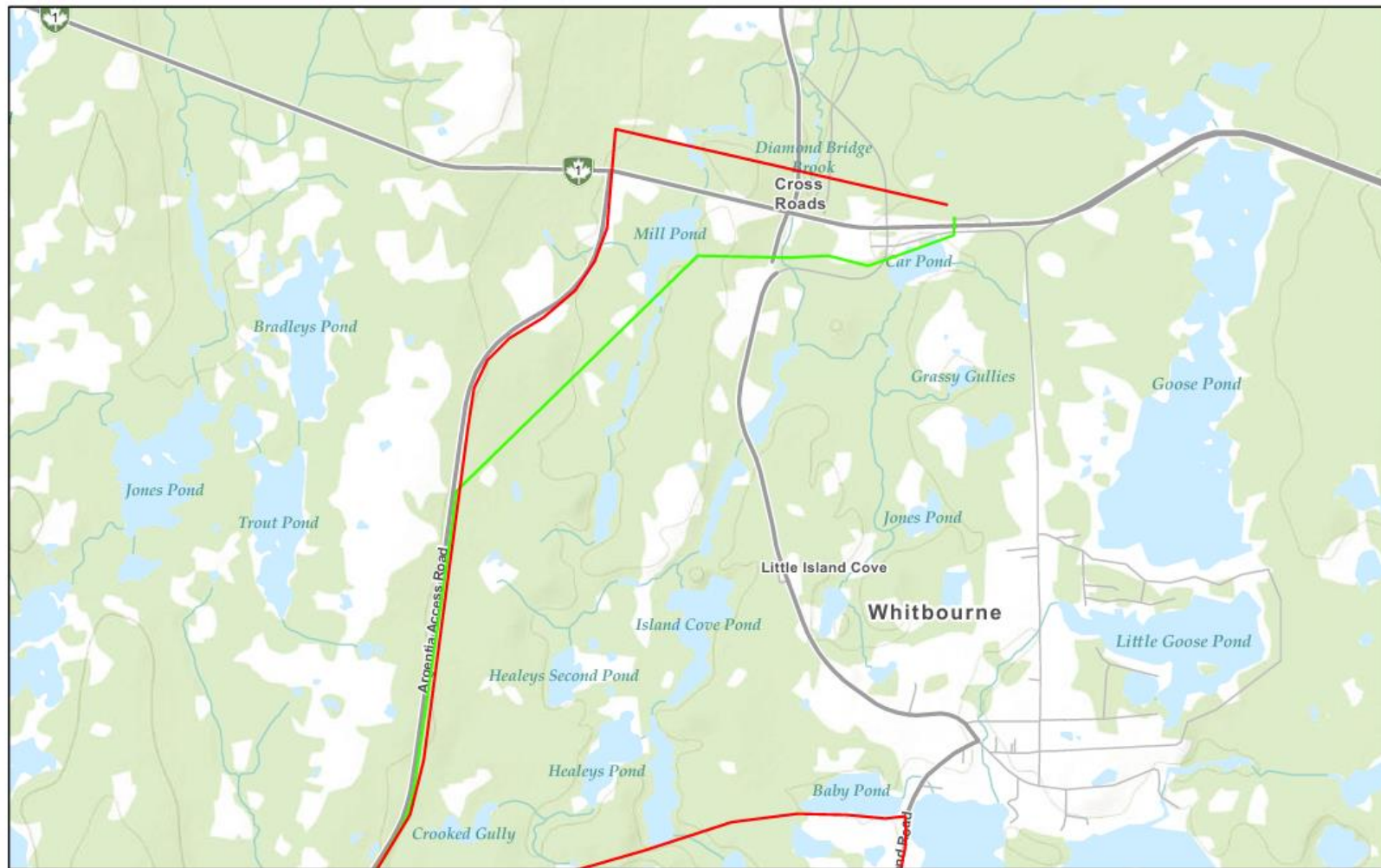
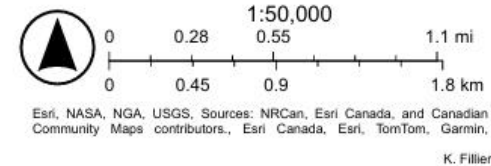


Figure B-8: Scope 3 (2026) extends the transmission line to its endpoint at the Blaketown Substation. The proposed transmission line is shown in red, while the previously proposed route released under EA 2184 is shown in Green.



8/20/2024

- 94L Proposed Alternative Route
- 94L Original Proposed Route



## **Appendix C**

### **Scheduled Salmon Rivers within 200m of the Project**

*Table D-1 Salmon Rivers within 200 meters of project activity (Reddin, Poole, Clarke, & Cochrane, 2009)*

River	Longitude (D° .xx)	Latitude (D° .xx)	Scheduled
Salmonier River	-53.4512	47.1657	Yes
Colinet River	-53.5539	47.2166	Yes
Rocky River	-53.5667	47.2236	Yes

Appendix D

Waste Management Plan

Table1. Waste Generation, Storage, Transport and Disposal.

Waste Source	Waste Type/Quantity	Storage and Transport	Disposal
Decommissioning activity – wood pole structures	Untreated, CCA, PCP and potential creosote treated wood waste. Includes poles, cross bracing and cross arms. All existing pole material will be removed and disposed of properly. Approximately 160 wooden H-Frame transmission structures.	Transported by truck/trailer to approved landfill by contractor.	Disposal of TWW would have to meet the requirements of <a href="#">GD-PPD – 075.1</a> the Provincial Treated Wood Waste Disposal Guidance Document. The contractor may retain suitable CCA or untreated wood material for possible reuse or donation.
Decommissioning activity – insulators and miscellaneous metal hardware	Porcelain and glass insulators.	Temporary storage at existing laydowns. No new laydowns planned to be constructed. Transport by truck to recycler.	Newco Metals will receive the material in Gander for processing.
Decommissioning activity - conductor	Aluminum Steel Core conductor.	Temporary storage at existing laydowns. No new laydowns planned to be constructed. Transport by truck to recycler.	Newco Metals will receive the material in Gander for processing.
Grubbing and Pole Construction – Soil stockpile	Quantities of clean soil and vegetative matter generated on site or transported from an approved quarry site.	Stockpiled within the RoW (with appropriate covering and slope) for use when needed.	Unused soil will be buried along the RoW following construction to support natural revegetation.



Vegetation Clearing – Cut Wood Waste	Cut vegetation (where present), along with some trimming as necessary on existing RoW and access trails.	Chipped or logged and transported off site regularly with no long-term storage on site. Some nonmerchantable timber may be saved for use in corduroy over wetland areas.	Cut wood waste will be transported to a Contractor owned site for dumping or donated.
Field activities - Domestic Waste	Unsorted domestic wastes associated with lunch materials and other consumable items. Includes plastics, glass, organic waste, beverage containers, etc. One to two bags per day.	Work sites to be kept neat and tidy at all times. Suitable containers to be used as appropriate. Waste to be removed from work sites regularly (at least weekly) for proper disposal.	Transport off-site for disposal at approved facility.
Field Activities – Industrial Waste	May include wastes in limited quantities associated with equipment maintenance and general construction activities. May include rags, grease canisters, oil containers, parts, sorbents, etc.	Temporarily stored in suitable containers and removed from work sites regularly (at least weekly) for proper disposal.	Transport off-site for disposal at approved facility.
Domestic and Industrial Carboard and Paper Wastes	May include wastes associated with the shipping and transport of materials, paperwork,	Temporarily stored in suitable containers or bundled and secured and removed from work sites regularly (at least weekly) for recycling.	Transport off-site for disposal at approved facility.