

**WELCOME**



**EVERWIND**

**FUELS**

**Community Information Session**

# Recognition of the Mi'kmaq & their Ancestral Territory

EverWind Fuels understands there is no project without the support, involvement, and expertise of Mi'kmaw communities. Their voice is critical to the project's success. We have and will continue to consult and engage with Mi'kmaw communities and organizations. We acknowledge the ancestral and unceded territory of the Mi'kmaw people, and we acknowledge them as the past, present, and future caretakers of this land, Mi'kma'ki.



**EVERWIND**

**FUELS**



# EVERWIND

# FUELS

EverWind Fuels LLC is a developer of green hydrogen and ammonia production, storage facilities, and associated transportation assets.

The EverWind Fuels team is comprised of over 70 employees, mostly from the local community, who are further supported by full time contractors and consultants.

We are developers, owners, and managers with experience in almost every infrastructure sub-category in North America, and a track record of success and delivering socially and environmentally responsible developments for all of our stakeholders.

# THE POINT TUPPER Clean Energy Project

Eastern Canada is positioned to be a leader in the new hydrogen economy, and it starts right here in Point Tupper, Nova Scotia. EverWind Fuels is embarking on a Clean Energy Project that will create Nova Scotia's first green hydrogen and ammonia production facility and unlock the potential of Nova Scotia's green economy.

The development of a green hydrogen and ammonia production facility at the Point Tupper site will build upon existing infrastructure and utilize local employee expertise, experience and knowledge.

The new production facility will produce approximately **200,000 tonnes** of ammonia (NH<sub>3</sub>) per year!



# Why **POINT TUPPER?**

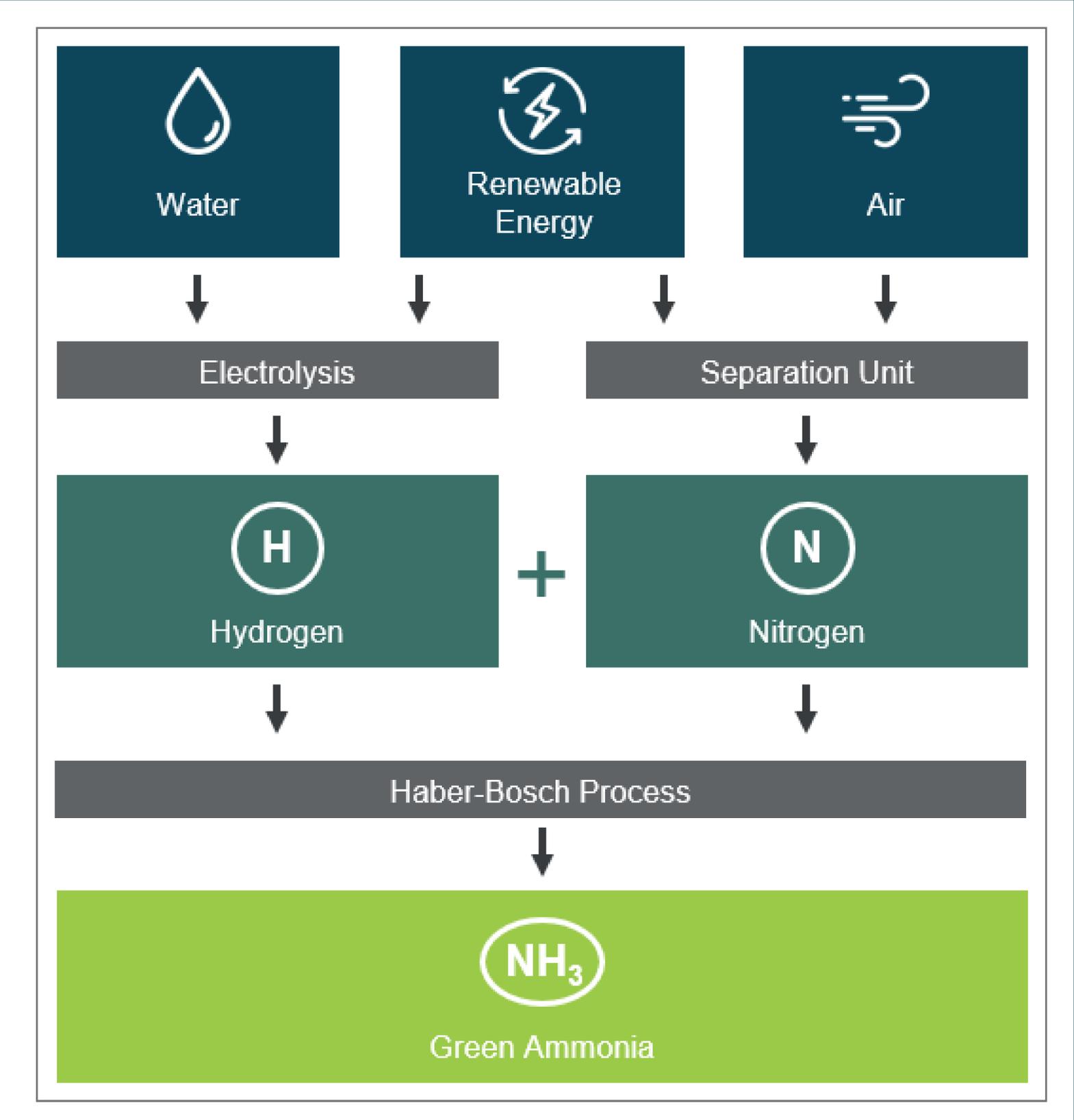
The Point Tupper site in Nova Scotia is ideally suited for hydrogen and ammonia production:

- It is an existing brownfield site with 1,400 acres of land
- There is a highly skilled local workforce that is already established
- Over \$600 million of existing infrastructure is in place
- Zoned for Heavy Industrial Use
- Deepest independent ice-free marine terminal on the North America Atlantic coast
- Supportive and stable regulatory jurisdiction
- Existing utility corridors
- 7.7 MM barrels of existing storage capacity
- Able to berth vessels up to 350,000 DWT (deadweight tonnage)
- Rail connection to Canada and entire US (including Canada Class I Network)

# GREEN AMMONIA Production Process

Green ammonia (NH<sub>3</sub>) is produced through the "Haber-Bosch" process which uses hydrogen and nitrogen to produce ammonia.

A source of water is used to obtain hydrogen (through electrolysis) and air is used to obtain nitrogen (through use of an air separation unit).





**Notes:**  
 1. Data Sources: GeoNOVA, NSTD, NSTIR.  
 2. Projection: NAD83 UTM Zone 20 North.

- Legend:**
- Everwind Property
  - Proposed Green Ammonia Production Facility**
  - Ammonia Storage (120 x 150 m)
  - Ammonia Tanks
  - Green Hydrogen and Ammonia Facility
  - Potential Stormwater Pond (216 x 80 m)
  - Ammonia Pipeline
  - Water Pipeline
  - 230 kV Transmission Line Corridor
  - Substation
  - Pump House
  - Flare Location
  - Transportation**
  - Trans-Canada Highway
  - Highway
  - Road
  - Unpaved Road
  - Utilities (line)**
  - Existing Pipeline
  - Existing Transmission Lines

**EVERWIND**  
**Proposed Green Hydrogen and Ammonia Facility**  
**Layout**



Date: Sept. 2022	Project #: 22-8516
Scale: 1:50,000	Drawing #: <b>1</b>
Drawn By: M. Savelle	
Checked By: N. Myers	

# WHAT MAKES IT GREEN ?

## Traditional Ammonia Production:

**Three BILLION** people on the planet depend on ammonia for food since the use of ammonia fertilizer increases farming production by 70–100%. Presently, ammonia fertilizer is primarily produced by fossil fuels and approximately 2 tons of CO<sub>2</sub> is emitted for every ton of ammonia (contributing to ~2% of global emissions).

## Our Ammonia Production:

By switching to green ammonia production -- which uses electrolysis and air separation to generate hydrogen and nitrogen -- as well as the (future) use of renewable energy to power the process, the carbon footprint of farming can be reduced **by up to 90%**! Ammonia can also be used for transportation, power generation and chemical processing purposes.

# ENVIRONMENTAL ASSESSMENT



The Project is submitting to the province's rigorous Environmental Assessment and Approval (EA) process, which includes a comprehensive analysis of the environmental impacts of the Project.

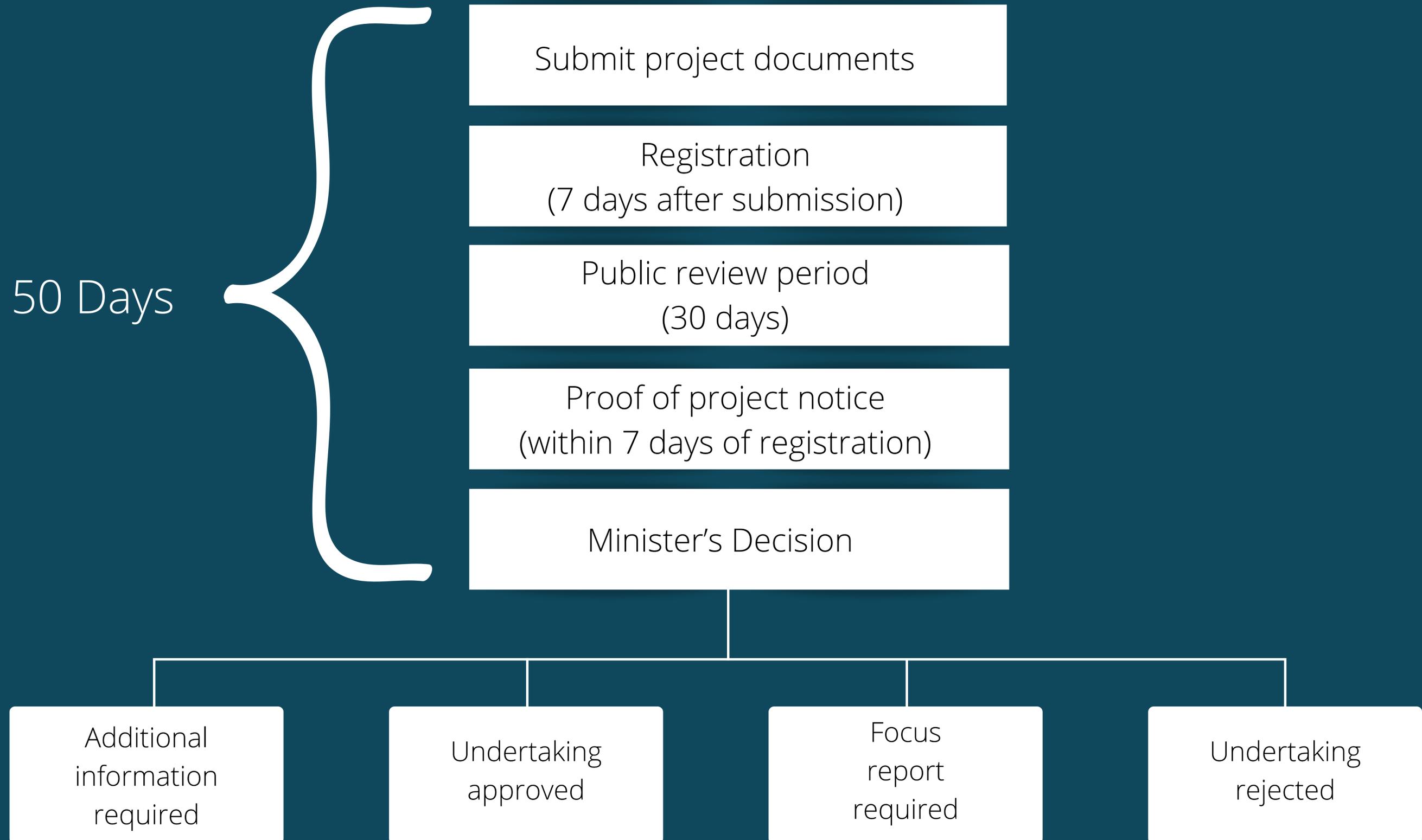
Strum Consulting is guiding this process and conducting a series of field studies including:

- Lichen & Rare Flora Surveys
- Species at Risk Assessments
- Watercourse Surveys and
- Wetland Surveys

Strum is also completing a water use assessment and has commissioned an industry leader in air quality monitoring to evaluate the Project's air emissions and ensure compliance with regional standards, as well as protection of neighbouring communities.



# ENVIRONMENTAL ASSESSMENT Timeline



# WATER USE

This Project is expected to consume approximately 200,000 MTPA (metric tonnes per annum) and 6.3 MLPD (megalitres per day).

Water will be supplied by Landrie Lake from a pumphouse on the southwestern shore of the lake.

Water use will include:

- Process water
- Cooling system
- Fire suppression system
- Potable water



# GREEN AMMONIA **OUTPUTS**

**200,000 tonnes** of ammonia will be produced per year by the Point Tupper Clean Energy Project.

**Air Emissions** generated from the Project processes (most commonly the air separation unit) will include:

- Oxygen
- Hydrogen
- Nitrogen
- Argon

All air emissions shall meet provincial Air Quality Regulations.

**Water Residuals** from the Water Treatment Plant and Cooling System will be treated and discharged to the environment in compliance with the applicable provincial regulations.



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# General Project Contracting

## APPROACH

### Business Development Stage

- Gathering information on Indigenous and local contractors and their capabilities

### Contracting

- Selection of contractors
- Preference to local contractors, where possible.

### Continued Engagement with Local Communities

- Announcement of job openings
- Gathering of CVs in coordination with contractors
- Adapted approach for the Project

### Employee Engagement

- Hiring of Project labour

### Beginning of Construction



**EVERWIND**  
**F U E L S**



## EverWind Point Tupper Terminal

# Best-in-class Safety & Environmental Performance

- >17 Years No Lost Time Incidents
- > 9 Years No Employee Recordable Injury
- > 9 years No Contractor Lost Time Incident
- > 9 years No Contractor Recordable Injury
- > 2 years No Employee First Aid
- > 2 years No Contractor First Aid
- > 5 years No Reportable Spills
- > 6 years No Product Quality Incident
- 40 Employee Emergency Response Team
- 32 Employees NFPA 1081 Industrial Firefighters
- 24 Employees Medical First Responders
- On-site NS Environment Approved Fire Training Facility





## **EverWind Point Tupper Terminal World Class Terminal Operations**

- Largest petroleum transshipment terminal in North America (Originally built by Gulf Oil as an Oil Refinery – closed in 1983)
- 1992 - Re-purposed as a petroleum storage and transshipment terminal
- Largest ice-free, deep-water port on east coast of North America
- 2 Berths; Berth #1 400,000 DWT (deadweight tonnage), Berth #2 100,000 DWT
- 3.61 Million Barrels of Crude Oil storage
- 3.89 Million Barrels of Refined Product storage
- 70 Full-time employees (24 Operations, 24 Maintenance Tradespersons, 22 Support Staff)
- ~100 full-time contractors, ~400 occasional contractors
- 2008 Peak Year; 312 ships, 225,000,000 barrels throughput
- 2021; 128 ships, 98,000,000 barrels throughput
- Acquired by EverWind Fuels from NuStar Energy – May 2022

# AMMONIA SAFETY



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## **Ammonia is used and stored safely in your daily life**

Ammonia is used in ice rinks, refrigerators, fertilizers, and even household cleaners. It is safely stored, transported and used globally **everyday**.

## **Safety culture: 17 years with no lost time incidents**

We are committed to maintaining the same world-class safety culture that has kept terminal employees safe since operation. That means safety is the top priority. All day. Everyday.

## **Experience and Training**

Our 40-employee emergency response team participates in ongoing training and certification. The team handles very similar substances today like High Sulfur Crude, Refined Fuels, and Crude.

## **Best-In-Class Planning, Protections & Monitoring**

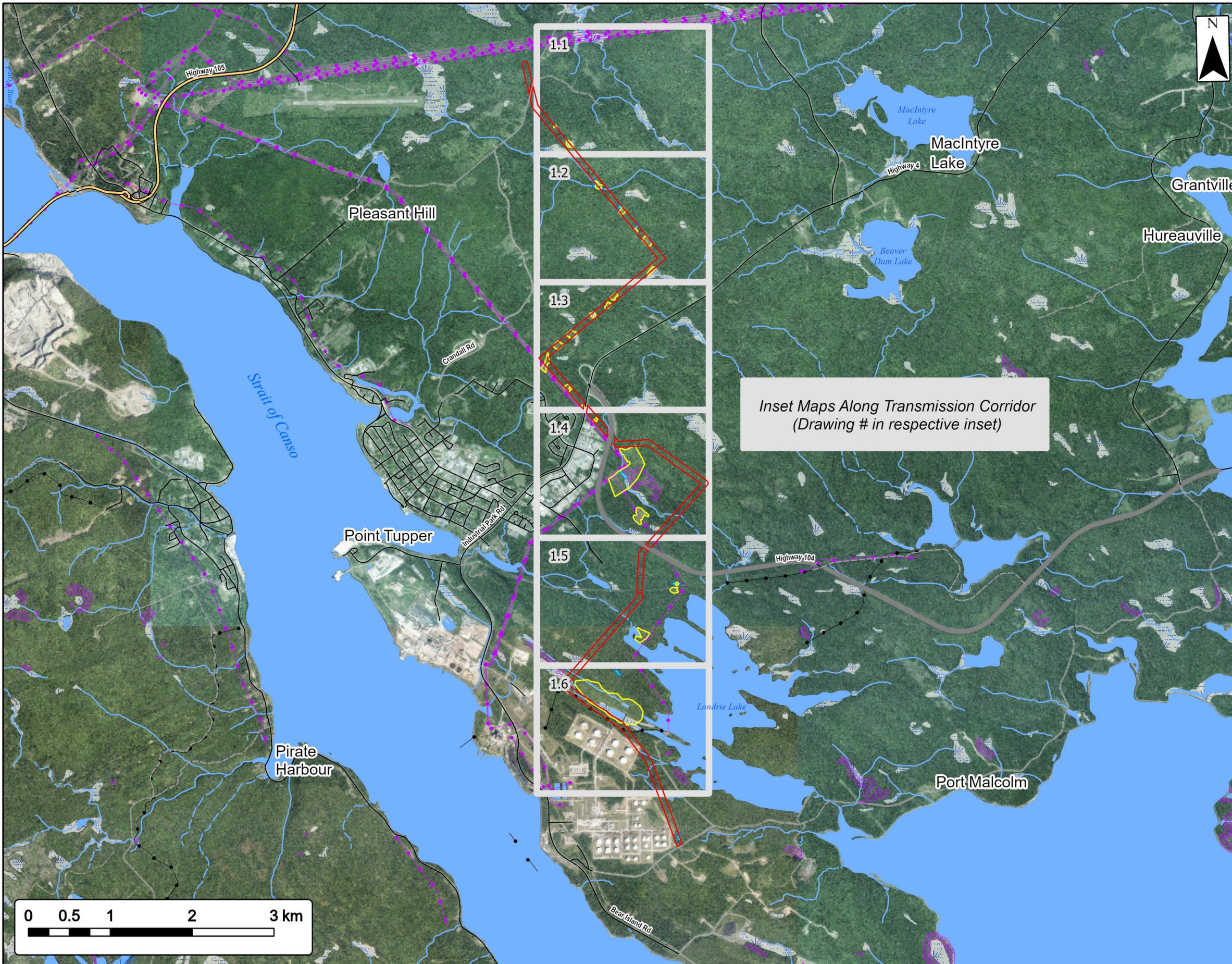
Surface water and groundwater monitoring, equipment and facilities inspections, fire suppression systems, and related protocols are already established.

## **Established Industrial Location**

Our facility is already established and zoned for heavy industrial operations.

The required distance for safe fuel storage and production is 1.5km from the nearest residence. Our facility is more than 5km away. That's more than 3 times the required distance.

**Safety is EverWind's top priority. All day. Everyday.**



*Inset Maps Along Transmission Corridor  
(Drawing # in respective inset)*

**Transmission Corridor Survey**  
Overview



Surveyed Watercourse Segment	
Surveyed Wetland Area	
Potential Boreal Felt Lichen Habitat	
Proposed Transmission Corridor	
<b>Transportation</b>	
Trans-Canada Highway	
Highway	
Road	
Unpaved Road	
<b>Utilities (line)</b>	
Existing Pipeline	
Existing Transmission Lines	
<b>Water Features</b>	
Mapped Lakes and Rivers	
Mapped Stream	
Mapped Indefinite Stream	
Mapped Wet Area	



Coordinate System: NAD83 UTM Zone 20U  
Sources: ESRI Basemaps, GeoNOVA, NISTD, HERE, Garmin, USGS, ITRCan

Date:	Sep 2022	Project #:	22-8516
Scale:	1:45,000	Drawing #:	<b>1</b>
Drawn By:	P. Opra		
Checked By:	N. Myers		



Engineering - Surveying - Environmental  
Bedford - Antigonish - Moncton - St. John's





# EVERWIND FUELS



## Transmission Corridor Survey Overview - Insets



Surveyed Wetland Area (WL)	
Proposed Transmission Corridor	
<b>Transportation</b>	
Unpaved Road	
<b>Utilities (line)</b>	
Existing Transmission Lines	
<b>Water Features</b>	
Mapped Stream	
<b>Wetlands</b>	
Mapped Wet Area	



Date: Sep 2022	Project #: 22-8516
Scale: 1:6,500	Drawing #: 1.1
Drawn By: P. Opra	Checked By: N. Myers
Checked By: N. Myers	



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## Transmission Corridor Survey Overview - Insets



Wood Turtle Habitat	
Surveyed Watercourse Segment (WC)	
Surveyed Wetland Area (WL)	
Proposed Transmission Corridor	
<b>Water Features</b>	
Mapped Stream	
Mapped Indefinite Stream	
<b>Wetlands</b>	
Mapped Wet Area	



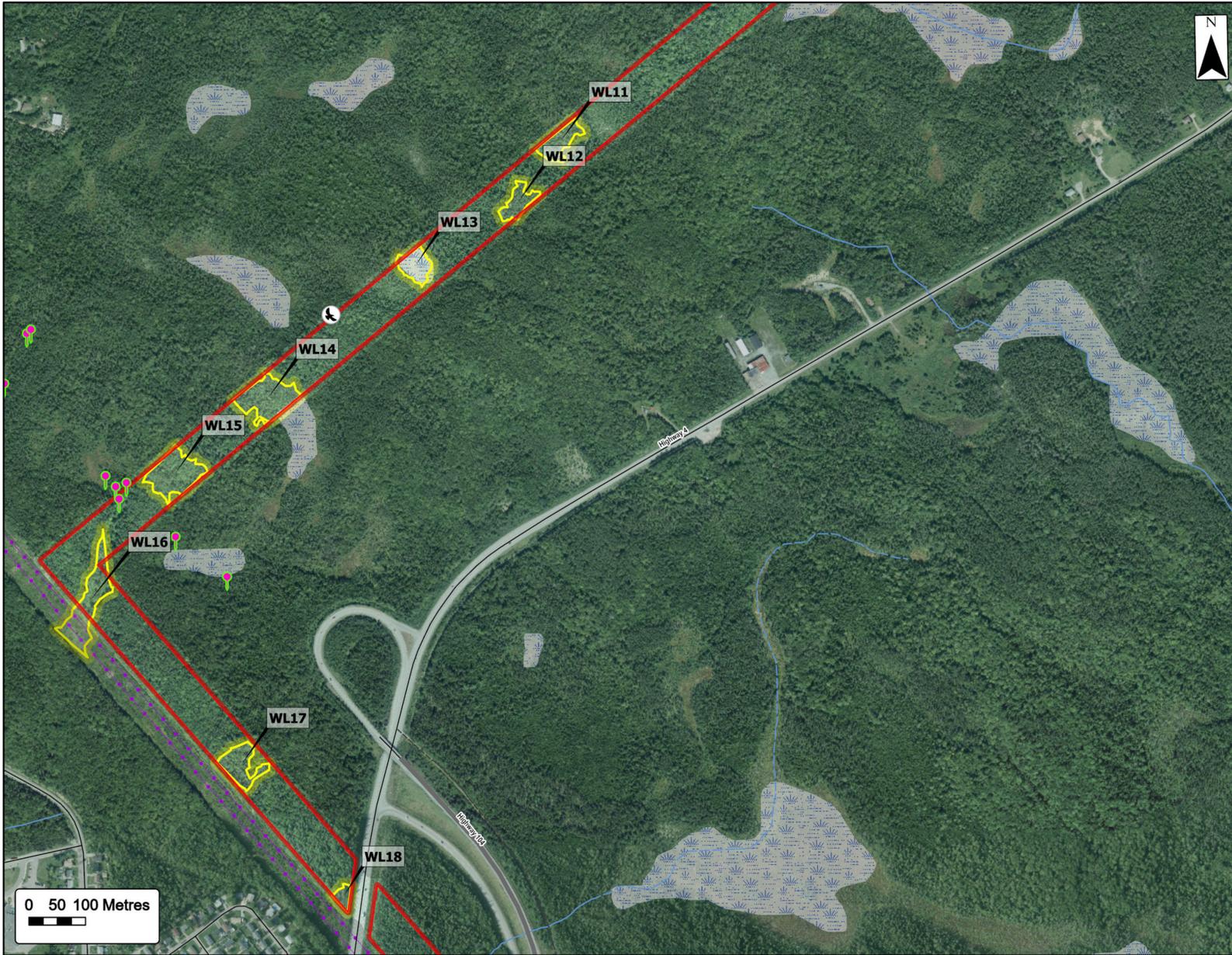
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Drawn By: P. Opra	Checked By: N. Myers
Checked By: N. Myers	



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# EVERWIND FUELS



## Transmission Corridor Survey Overview - Insets



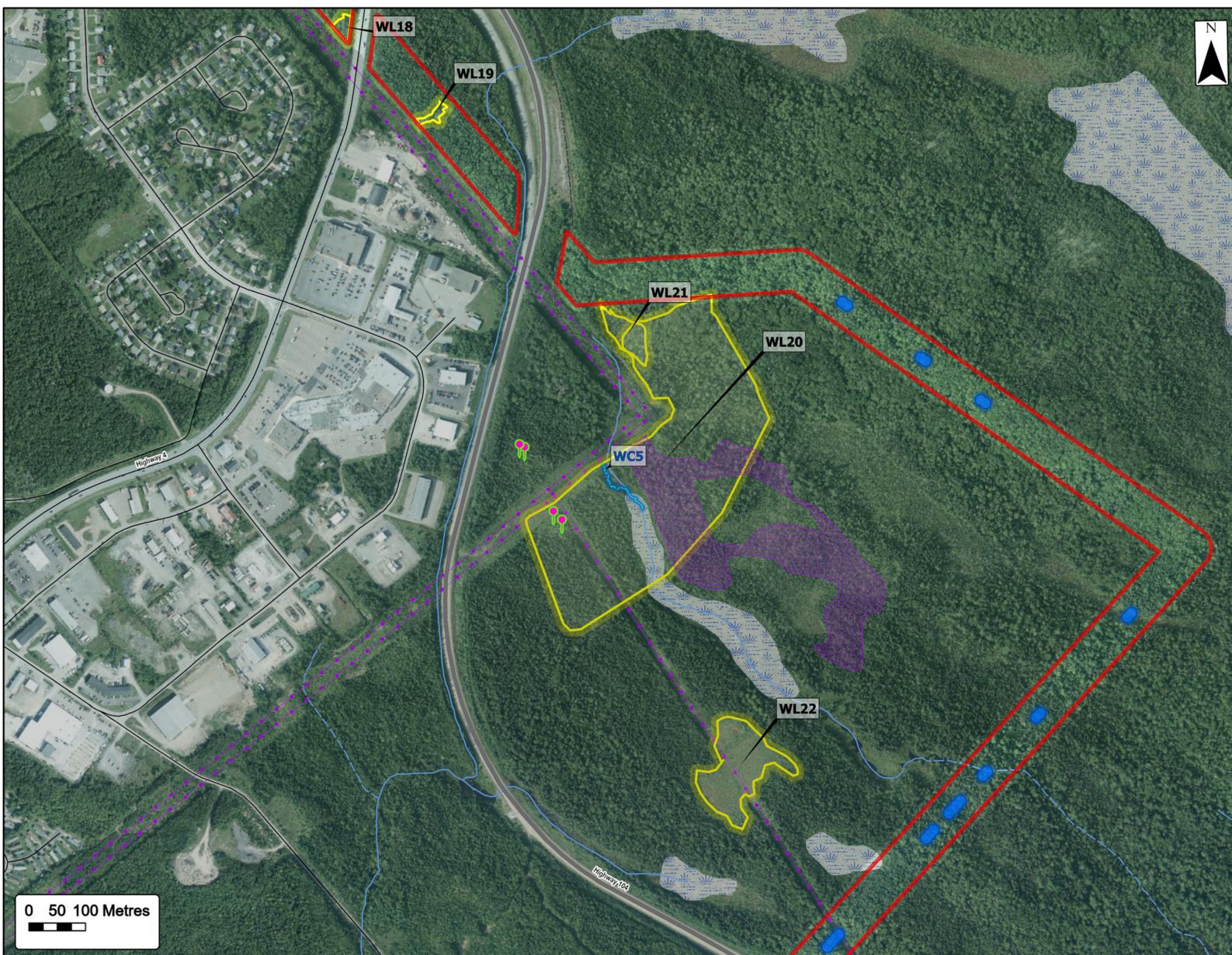
- Protected Flora - Southern Twayblade
- Osprey Calls Observed (~50 m)
- Surveyed Wetland Area (WL)
- Proposed Transmission Corridor
- Transportation**
- Highway
- Road
- Unpaved Road
- Utilities (line)**
- Existing Transmission Lines
- Water Features**
- Mapped Stream
- Mapped Indefinite Stream
- Wetlands**
- Mapped Wet Area



Coordinate System: UTM/ETRS Zone 20N		Sources: ESRI BaseMaps, GeoNOVA, HISTD, HERE, Garmin, USGS, IBCan	
Date:	Sep 2022	Project #:	22-8516
Scale:	1:6,500	Drawing #:	<b>1.3</b>
Drawn By:	P. Opra		
Checked By:	N. Myers		



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## Transmission Corridor Survey Overview - Insets



- Protected Flora - Southern Twayblade
- Surveyed Watercourse Segment (WC)
- Surveyed Wetland Area (WL)
- Proposed Transmission Corridor
- Potential Boreal Felt Lichen Habitat
- Transportation**
- Highway
- Road
- Unpaved Road
- Utilities (line)**
- Existing Transmission Lines
- Water Features**
- Mapped Stream
- Mapped Indefinite Stream
- Wetlands**
- Mapped Wet Area
- Potential Wet Areas (Desktop Analysis)



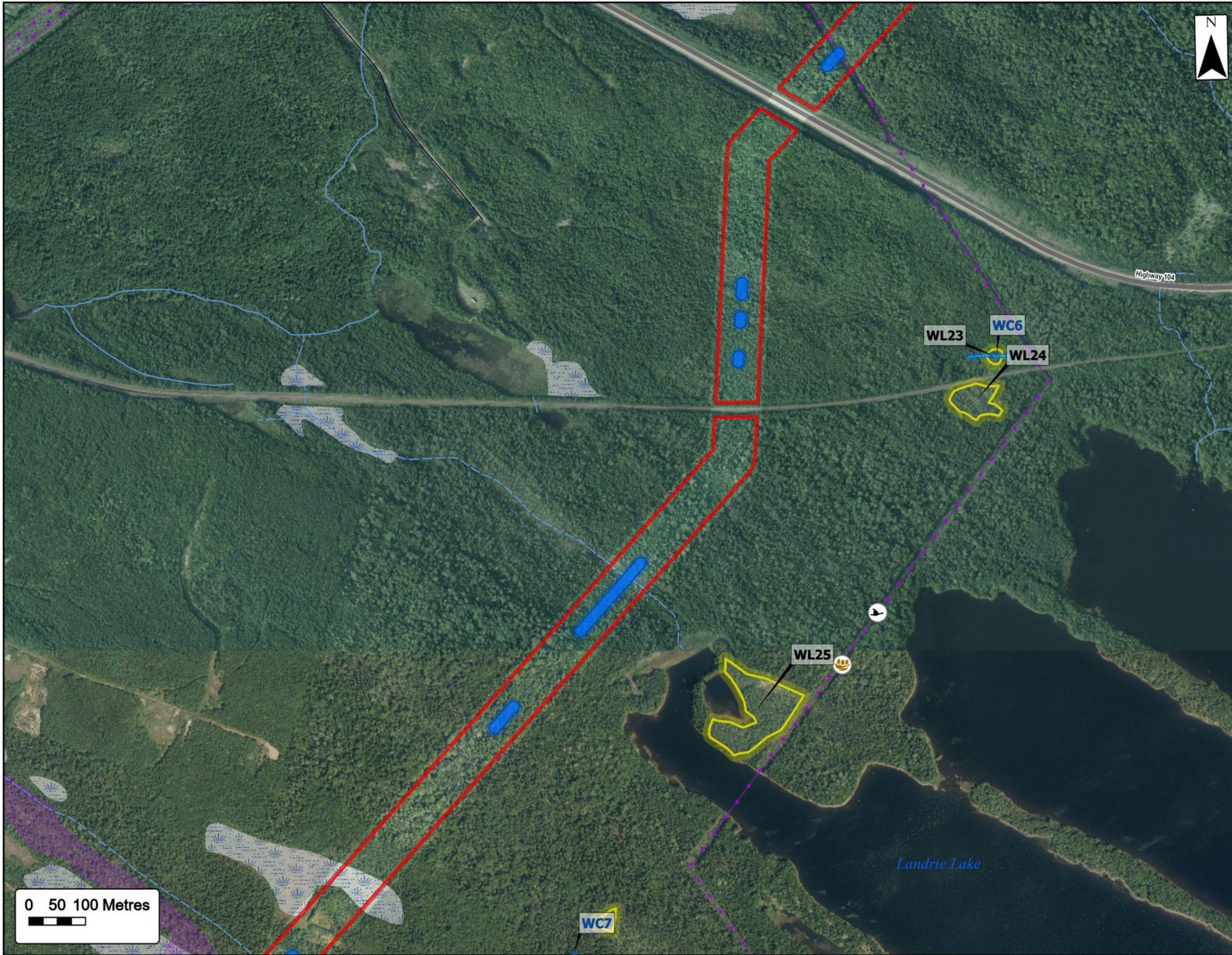
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Drawn By:	P. Opra		
Checked By:	N. Myers		



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# EVERWIND FUELS



## Transmission Corridor Survey Overview - Insets



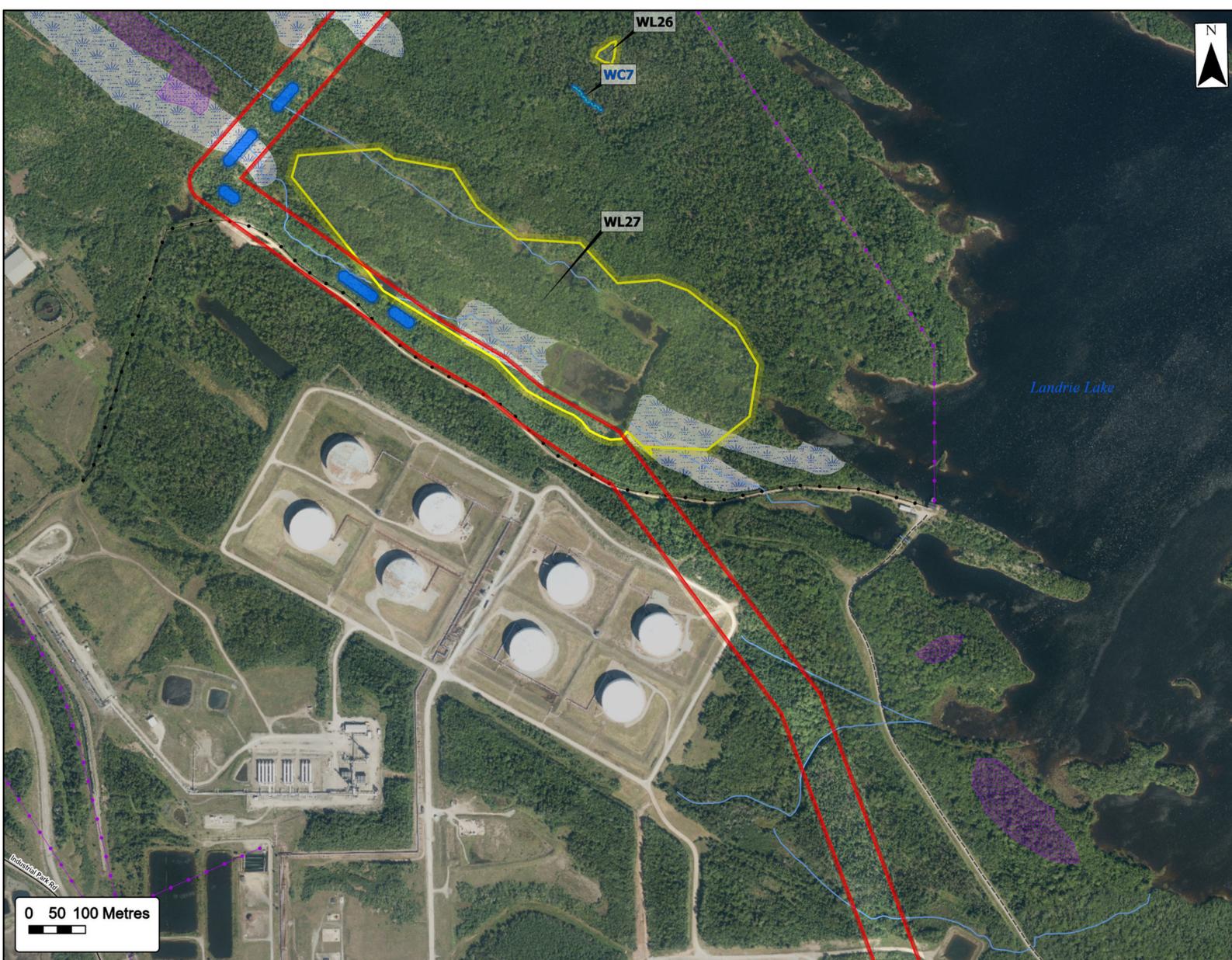
Active Osprey Nest	
Loon Activity Nearby	
Surveyed Watercourse Segment (WC)	
Surveyed Wetland Area (WL)	
Proposed Transmission Corridor	
Potential Boreal Felt Lichen Habitat	
<b>Transportation</b>	
Highway	
Road	
<b>Utilities (line)</b>	
Existing Transmission Lines	
<b>Water Features</b>	
Mapped Stream	
Mapped Indefinite Stream	
<b>Wetlands</b>	
Mapped Wet Area	
Potential Wet Areas (Desktop Analysis)	



Coordinate System: UTM/ETRS Zone 20U		Sources: ESRI BaseMaps, GeoNOVA, HSTO, HERE, Garmin, USGS, IBCan	
Date:	Sep 2022	Project #:	22-8516
Scale:	1:6,500	Drawing #:	1.5
Drawn By:	P. Opra	<b>1.5</b>	
Checked By:	N. Myers		



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## Transmission Corridor Survey Overview - Insets



Surveyed Watercourse Segment (WC)	
Surveyed Wetland Area (WL)	
Proposed Transmission Corridor	
Potential Boreal Felt Lichen Habitat	
<b>Transportation</b>	
Road	
Unpaved Road	
<b>Utilities (line)</b>	
Existing Pipeline	
Existing Transmission Lines	
<b>Water Features</b>	
Mapped Stream	
Mapped Indefinite Stream	
<b>Wetlands</b>	
Mapped Wet Area	
Potential Wet Areas (Desktop Analysis)	



Coordinate System: UTM/ETRS Zone 20U		Sources: ESRI BaseMaps, GeoNOVA, HSTO, HERE, Garmin, USGS, IBCan	
Date:	Sep 2022	Project #:	22-8516
Scale:	1:6,500	Drawing #:	1.6
Drawn By:	P. Opra	<b>1.6</b>	
Checked By:	N. Myers		



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