North Atlantic

Environmental Preview Report

Table of Contents

1.0 Name of Undertaking 3
EPR-001 3
2.0 Proponent 3
EPR-002 3
EPR-003 3
EPR-004 4
3.0 The Undertaking 4
EPR-005 4
3.1 Rationale for the Undertaking 5
EPR-006 5
4.0 Description of the Undertaking 6
EPR-007 6
4.1 Geographical Location/Physical Components/Existing Environment 7
EPR-008 7
EPR-009 11
EPR-010 14
EPR-011 14
EPR-012 17
EPR-013 17
EPR-014 19
EPR-015 21
EPR-016 23
EPR-017 25
EPR-018 27
EPR-019 33
EPR-020 33
EPR-021 33
EPR-022 37
EPR-023 37
EPR-024 37
EPR-025 39
EPR-026 40

EPR-027 40
EPR-028 40
EPR-029 41
EPR-030 42
EPR-031 45
EPR-032 50
EPR-033 51
EPR-034 51
EPR-035 54
EPR-036 54
EPR-037 56
EPR-038 59
EPR-039 65
EPR-040 66
EPR-041 66
EPR-042 69
EPR-043 69
EPR-044 69

4.2 Construction 70

EPR-045 70
EPR-046 72
EPR-047 72
EPR-048 73
EPR-049 73
EPR-050 73
EPR-051 76
EPR-052 76
EPR-053 76
EPR-054 77
EPR-055 77
EPR-056 77
EPR-057 78
EPR-058 78

EPR-059 81
EPR-060 82
EPR-061 82
EPR-062 83
EPR-063 83
4.3 Operation and Maintenance 84
EPR-064 84
EPR-065 86
EPR-066 87
EPR-067 88
EPR-068 88
EPR-069 89
EPR-070 90
EPR-071 90
EPR-072 91
EPR-073 91
EPR-074 91
EPR-075 91
EPR-076 92
EPR-077 92
EPR-078 92
EPR-079 93
EPR-080 93
5.0 Alternatives 95
EPR-081 95
EPR-082 96
EPR-083 97
6.0 Potential Environmental Effects 97
EPR-084 97
EPR-085 98
EPR-086 99
EPR-087 99
EPR-088 100
EPR-089 104

EPR-090 104
EPR-091 106
EPR-092 109
EPR-093 110
EPR-094 111
EPR-095 111
EPR-096 112
EPR-097 114
EPR-098 117
EPR-099 117
EPR-100 117
7.0 Mitigation 118
EPR-101 118
EPR-102 119
EPR-103 121
EPR-104 122
EPR-105 123
EPR-106 124
EPR-107 124
EPR-108 125
EPR-109 126
EPR-110 128
EPR-111 129
EPR-112 130
EPR-113 131
EPR-114 131
EPR-115 132
EPR-116 135
EPR-117 137
EPR-118 138
EPR-119 139
EPR-120 140
EPR-121 140
EPR-122 141

EPR-123 142
EPR-124 142
EPR-125 143
EPR-126 143
EPR-127 144
EPR-128 145
EPR-129 146
EPR-130 147
EPR-131 148
EPR-132 149
EPR-133 152
EPR-134 154
ERP-135 154

8.0 Decommissioning and Rehabilitation 155
EPR-136 155
EPR-137 155
EPR-138 155
EPR-139 155
EPR-140 156
EPR-141 156
EPR-142 156

9.0 Project-related Documents 157
EPR-143 157

10.0 Commitments made in the EPR 160
EPR-144 160

11.0 Public Information Meeting 169
EPR-145 169
EPR-146 170
EPR-147 172
EPR-148 172

12.0 Approval of the Undertaking 173
EPR-149 173

List of Figures

Figure EPR-008A Study area boundaries associated with the Project 9
Figure EPR-008B Revised Project Area and Local Assessment Area 10
Figure EPR-009A Preliminary layout of the Wind Farm 12
Figure EPR-009B Wind Farm turbine and crane foundations plan and section 13
Figure EPR-011 Preliminary Pre-FEED layout of the HGP and HP 16
Figure EPR-013 Source water intake for the hydrogen production and hydrogenation plants 18
Figure EPR-014 Existing water use licences in the LAA 20
Figure EPR-015 Source water continuous monitoring stations 22
Figure EPR-016 Streams, waterbodies, water crossings and wetlands located in the PA 24
Figure EPR-017 Water control structure at Barrisway Pond 26
Figure EPR-018A Location of surface water outfall 30
Figure EPR-018B Location of the proposed outfall (existing outfall) and nearby bathymetry 31
Figure EPR-018C Location of the proposed outfall (new outfall) and nearby bathymetry 32
Figure EPR-021 The location and distribution of eelgrass beds 35
Figure EPR-030 Bat detectors deployed in the PA and RAA 44
Figure EPR-031 Avifauna ARU detectors deployed in the PA and RAA 46
Figure EPR-034 T'Railway Provincial Park in relation to Project components 53
Figure EPR-036 Wind Farm concrete batch plant 55
Figure EPR-037A Quarry permits within the Local Assessment Area 57
Figure EPR-037B Active and archived quarry permits in the RAA 58
Figure EPR-038A Mineral occurrence locations within the LAA 60
Figure EPR-038B Mineral licence boundaries referenced in the Registration 62
Figure EPR-038C Updated mineral licence holdings in the Project Area and LAA 63
Figure EPR-041 Geodetic Control Network monuments identified within the LAA 68
Figure EPR-045 Surface water resources in the LAA 71
Figure EPR-050 Locations of marine sampling sites, Braya EEM, and 2024 sampling 75
Figure EPR-080 Proposed 138 kV Customer-Owned Transmission Line Connection 95
Figure EPR-096 Agriculture operations in and near the Project area 113
Figure EPR-097 Turbine viewsheds from public roads and TCH 116

List of Tables

Table 2.0 Proponent contact information 3
Table EPR-038A Chronological Active and Historical Mineral Licences in Relation to Project Components 61
Table EPR-038B Project infrastructure buffer zones 64
Table EPR-058A Quarry material class definitions 79
Table EPR-058B Sample M35 Design Mix classification 80
Table EPR-058C Classes and estimated quantities of quarry materials for the Project 80
Table EPR-060 Percentage overlap of Project infrastructure with mineral licences 82
Table EPR-133 Communication tools 153
Table EPR-144 Index of Commitments made in the EPR 161
Table EPR-146 Topics discussed at the February 7, 2026 open house 170
Table EPR-149 List of Potential Permit/Approval/Licence/Authorisation Requirements for the Project. 174

List of Appendices

Appendix 1 Revised Project Area Description and Environmental Effects Assessment
Appendix 2 Revised EA Section 4.0 – Environmental Effects
Appendix 3 Revised EA Appendix E – Transportation Impact Study and Traffic Management Plan
Appendix 4 North Atlantic Project Wastewater Sources; Process and Surface Wastewater.
Appendix 5 Additional Information Related to the Air Dispersion Modelling Assessment
Appendix 6 Revised EA Appendix N – Waste Management Plan
Appendix 7 EPR Public Information Session Material
Appendix 8 Revised EA Section 8.0 – Stakeholder and Indigenous Consultation

List of Acronyms and Abbreviations

Aquatic Invasive Species	AIS
Atlantic Canada Conservation Data Centre	AC CDC
Autonomous recording units	ARUs

Avalon Isthmus North Atlantic Refining Corp. Green Energy Project	Project
Braya Renewable Fuels'	Braya
Braya Renewable Fuels' Refinery	Braya Refinery
Bull Arm Fabrication Inc.	BAF
Canadian Coast Guard	CGC
Carbon Dioxide	CO2
Conductivity/temperature/depth	CTD
Deadweight tonnage	DWT
Decommissioning and Rehabilitation Plan	DRP
Degree Celsius	°C
Department of National Defense	DND
Ecological Land Classification	ELC
Ecologically and Biologically Significant Area	EBSA
Emergency Response Plan	ERP
Environment and Climate Change Canada	ECCC
Engineering, Procurement, and Construction Management	EPCM
Environmental Assessment	EA
Environmental Assessment Committee	EAC
Environmental Climate Change	ECC
Environmental Effects Monitoring Plan	EEMP
Environmental Preview Report	EPR
Environmental Preview Report Guidelines	Guidelines
Environmental Protection Plan	EPP
Erosion and Sediment Control Plan	ESCP
Fisheries and Oceans Canada	DFO
Food, Social, and Ceremonial	FSC
Forestry and Argiculture	FFA
Front End Engineering Design	FEED
Geometric Design Guide	GDG
Green Energy Project	The Project
Green House Gas	GHG

Hectares	ha
Hydrogen Generation Plant	HGP
Hydrogenation Plant	HP
Industrial / commercial / institutional	ICI
Key Indicator	KI
Kilometre	km
kilopascal	kPa
Land and Resource Use	LRU
Liquid Organic Hydrogen Carrier	LOCH
Local Assessment Area	LAA
Marine Communications and Traffic Services	MCTS
Marine Protected Areas	MPAs
Megawatt	MW
Meteorological Service of Canada	MSC
Methylcyclohexane	MCH
Metre	m
Miawpukek First Nation	MFN
Migratory Birds Convention Act	MBCA
Millimetre	mm
Mineral Occurrence Data System	MODS
National Fire Protection Association	NFPA
National Topographic System	NTS
Newfoundland and Labrador	NL
NL Ambient Air Quality Standards	NL AQS
NL Department of Energy and Mines	NL DEM
NL Department of Environment, Conservation and Climate Change	NL DECCC
NL Department of Forestry Agriculture and Lands	NL DFAL
NL Department of Forestry Agriculture and Lands Wildlife Division	NL DFAL-WD
NL Department of Transportation and Infrastructure	NL DTI
NL Endangered Species Act	NL ESA
NL DECCC-Water Resources Management Division	NL DECCC-WRMD

NL Environmental Protection Act	NL EPA
North Atlantic Refining Corp	North Atlantic
North Atlantic Refining Limited	NARL
Northwest Atlantic Fisheries Organization	NAFO
Not Normal Flow	NNF
Operation and Maintenance	O&M
Original EA Registration Document	Registration
Particulate matter	PM
Part ship loose	PSL
Percent highly-annoyed	%HA
Placentia Bay-Grand Banks Large Ocean Management Area	PBGB LOMA
Post-construction mortality monitoring program	PCMP
Pre-Front End Engineering Design	Pre-FEED
Project Area	PA
Protected public water supply area(s)	PPWSA(s)
Public Participation Plan	PPP
Regional Assessment Area	RAA
Request for Review	RFR
Reverse osmosis	RO
Right of Way	ROW
Sikumiut Environmental Management Limited	SEM
Small Craft Harbour	SCH
Solid Waste Disposal	SWD
Species at Risk	SAR
Species at Risk Act	SARA
Species of Conservation Concern	SCC
System Impact Study	SIS
The North Atlantic EPR	Report
Tinnes per Annum	tpa
Total suspended particulates	TSP
Total suspended solids	TSS

Trans-Canada Highway	TCH
Transportation Association of Canada	TAC
United States dollar	USD
Valued Component(s)	VC(s)
Water Management Plan	WMP
Water Use Licence	WUL

Introduction

Newfoundland and Labrador (NL) has significant wind energy potential. To harness that potential, North Atlantic Refining Corp. (North Atlantic) is proposing to develop a renewable energy project in the Come By Chance/Sunnyside area on the island portion of Newfoundland and Labrador, Canada. The Avalon Isthmus North Atlantic Refining Corp. Green Energy Project (the Project), also known as The North Atlantic Wind to Hydrogen Project, represents a transformative opportunity to redefine Newfoundland's role in the global clean energy economy. With strong wind resources, strategic geography, and supportive policy frameworks, this Project will deliver clean hydrogen, economic opportunity, and climate leadership for the region, Canada, and global partners.

The purpose of the North Atlantic Wind to Hydrogen Project is to establish and operate an onshore Wind Farm to power the production of green hydrogen for export to global markets. North Atlantic proposes to develop a 324 megawatt (MW) Wind Farm on 4,600 hectares (ha) in the Sunnyside area, a Hydrogen Generation Plant (HGP) capable of producing 30,000 tonnes per annum (tpa) of hydrogen, and a Hydrogenation Plant (HP) capable of processing 60,000 tpa of hydrogen at the existing Come by Chance Industrial Site, which includes the North Atlantic Refining Limited (NARL) Logistics Terminal and Braya Renewable Fuels' (Braya) refinery (Braya Refinery). While the HP will be capable of processing 60,000 tpa of hydrogen, North Atlantic acknowledges that any expansion of wind power and hydrogen production capacity beyond 30,000 tpa will require a separate submission under the Province's **NL Environmental Protection Act** (NL EPA).

As an important step in the Project's planning and approval process, the Project submitted their Registration Document (Registration) on July 17, 2025 (Registration Number: 2363), in accordance with the NL EPA (Part X) and the Environmental Assessment Regulations. The Registration was prepared by North Atlantic with assistance from Sikumiut Environmental Management Limited (SEM). The format of this submission is consistent with the "Guidance for Registration of Onshore Wind Energy Generation and Green Hydrogen Production Projects" as well as the "**Environmental Assessment Act**: A Guide to the Process". The Project does not include any activities requiring federal assessment as listed in the Physical Activities Regulations under the **Impact Assessment Act**, 2019.

Upon Minister decision on September 2, 2025, it was determined that the Proponent would be required to prepare and submit an Environmental Preview Report (EPR). Subsequent to this, North Atlantic received the EPR Guidelines related to the Project on November 6, 2025. This EPR (Report) has been prepared by North Atlantic with assistance from SEM. The format of this submission is consistent with the "Environmental Preview Report Guidelines" (EPR Guidelines) (DOC-2025-1937) prepared by the appointed Environmental Assessment Committee (EAC) for this Project. The responses have been prepared in a call-and-response format, with a corresponding table of concordance to facilitate cross-referencing to the listed items outlined in the Registration and EPR Guidelines. Where applicable,

references and hyperlinks to the Registration document are provided to identify existing information sources, rather than repeating previously submitted material. This document focuses on providing clarification and supplementary information, as needed, to fully address the EPR item posed in the EPR Guidelines.

The Environmental Assessment (EA), including this EPR, has been developed using information available through the Project's Pre-Front End Engineering Design (Pre-FEED). Updated engineering details have been incorporated where available; however, full Front End Engineering Design (FEED) will not commence until after the submission of this Report.

1.0 Name of Undertaking

EPR-001 *The undertaking has been assigned the Name "Avalon Isthmus North Atlantic Refining Corp. Green Energy Project."*

The undertaking has been assigned the name "Avalon Isthmus North Atlantic Refining Corp. Green Energy Project" (the Project) and is also known as the North Atlantic Wind to Hydrogen Project, as described in Section 1.0 of the Registration.

2.0 Proponent

The Proponent for this undertaking, as outlined in Section 1.1 of the Registration, is North Atlantic, an NL based company with more than 30 years of experience in the fuel supply industry. Headquartered in St. John's, NL, with established relationships as a global fuel importer, North Atlantic is an experienced and capable company with a strong commitment to advancing a low-carbon economy for the province and globally. North Atlantic is an affiliate of Silverpeak, an alternative investment management firm with approximately $25 billion United States dollar (USD) of gross asset value (Silverpeak, 2023). Silverpeak is committed to achieving the long-term goals of its companies, with investments across all major asset classes and core values that reflect collaboration and integrity.

Table 2.0 provides North Atlantic contact information in response to EPR-002 to EPR-004.

Table 2.0 Proponent contact information

North Atlantic Contact Information	
EPR-002 *Name of the Proponent and the corporate body, if any.*	
Corporate Body	North Atlantic Refining Corp.
Proponent Address	131 Kelsey Drive, St. John's, NL, A1B 0L2
EPR-003 *Name of the chief executive officer if a corporate body.*	
Name	Ted Lomond
Official Title	Chief Executive Officer
Address	131 Kelsey Drive, St. John's, NL, A1B 0L2

Telephone Number	1 (709) 682-8963
E-Mail Address	tedlomond@northatlantic.ca
EPR-004 *Name and provide the official title of the principal contact person for purposes of environmental assessment.*	
Name	Jeff Murphy
Official Title	Vice President, Capital Projects
Address	131 Kelsey Drive, St. John's, NL, A1B 0L2
Telephone Number	1(709) 770-9754
E-Mail Address	jeffmurphy@northatlantic.ca

3.0 The Undertaking

EPR-005 *State the nature of the Project.*

North Atlantic is well-positioned and fully equipped to execute the Project, prioritising minimal environmental effects while optimizing socio-economic benefits. A detailed description of the Proposed Undertaking is presented in Section 2.0 of the Registration. For ease of reference, the high-level overview is provided below based on that section.

The Project will produce green hydrogen at the HGP, which will then be converted into a Liquid Organic Hydrogen Carrier (LOHC) at the HP for export to offtakers in Europe. The Project will utilise behind-the-meter wind generated power to produce green hydrogen through electrolysis with freshwater as feedstock. External NL Hydro grid power will be supplied during periods of low wind to maintain HGP production. The proposed onshore Wind Farm will consist of between 43-55 wind turbines, each capable of generating approximately 7.2 MW of power, resulting in a total installed capacity of 324 MW. The wind turbine model will feature an approximate hub height of 119 metre (m) and a rotor diameter of 162 m. The HGP will be developed with an installed electrolyzer capacity of 240 MW, enabling the production of approximately 30,000 tonnes of hydrogen per annum. The HGP will utilise PEM electrolyzers, which are highly efficient and well-suited for integration with variable renewable energy sources due to their operational flexibility. To enhance stability and facilitate transport to European markets, the produced hydrogen will undergo catalytic hydrogenation, a process in which it is chemically bonded to toluene to form of Methylcyclohexane (MCH). This conversion process will be carried out at the HP, which is

expected to produce approximately 650,000 tonnes of MCH per year in order to transport 30,000 tonnes of green hydrogen per year. Where feasible, the Project will leverage existing infrastructure, including North Atlantic port facilities and tank farm, for the storage and transportation of toluene and MCH (i.e., LOHC). By integrating wind power with hydrogen production and LOHC conversion technologies, the Project aims to support the global transition to sustainable energy by exporting green hydrogen to international markets.

3.1 Rationale for the Undertaking

EPR-006 *State the purpose/rationale/need for the Project. If the proposal is in response to an established need, this should be clearly stated. Identify needs that are immediate as well as potential future needs.*

The rationale for the undertaking is discussed in Section 2.2 of the Registration and reflects the Project's advantageous geographic position for supplying the emerging global hydrogen market (Section 2.2.1 of the Registration), its alignment with provincial and federal commitments to address climate change (Section 2.2.2 of the Registration), and access to a strong and consistent wind resource (Section 2.2.3 of the Registration). The following overview from Section 2.2 of the Registration is provided for context and ease of reference and does not repeat the full discussion contained therein.

The global transition to green energy marks a transformative paradigm shift toward a cleaner, more sustainable future. This transition will unlock new opportunities for the province in innovation, economic growth, and climate resilience. With solutions scaled to match this challenge, North Atlantic is advancing future business by driving strategic growth in the renewable energy sector.

The primary goal of the Project is to produce economically viable green hydrogen for export. This goal targets increasing market demands while contributing to the reduction of greenhouse gas (GHG) emissions and the global shift to decarbonisation.

Through the Project, North Atlantic will:

Produce green hydrogen that will enable substantial reductions in carbon dioxide (CO2) emissions. Unlike conventional hydrogen production methods that require fossil fuels, this clean fuel can be used in various sectors, including transportation, industry, and power generation, to replace carbon-intensive fuels like natural gas, diesel or coal. As a result, the Project is expected to contribute to Canada's and the world's climate goals, helping reduce GHG emissions and combat climate change.

Support workforce development by fostering new skills and creating jobs in NL's evolving green energy sector. The Project will serve as a catalyst for developing a skilled green energy workforce in NL. By

investing in training programs, North Atlantic aims to equip workers with the knowledge and skills required for careers in hydrogen production, renewable energy infrastructure, and wind turbine maintenance. The Project is expected to create both short-term construction jobs and long-term operational employment, resulting in a firmly anchored green energy workforce for years to come.

Drive economic growth by delivering significant benefits to local communities and the province. Beyond its environmental and employment effects, the Project is poised to bring broad economic benefits to the region, including: (1) direct investment in infrastructure, facilities, and equipment; (2) contracting and spinoff opportunities for local businesses during the construction and operational phases; (3) increased tax revenue for municipal, provincial and federal governments; (4) community engagement and partnerships, ensuring that residents and other stakeholders share in the Project's success; and (5); positioning NL as a hub for clean energy exports, unlocking new trade opportunities and attracting additional green technology investments.

While planned as a stand-alone and viable undertaking on its own, the Project will represent a critical early contribution in the establishment of a new industry for the province. North Atlantic brings decades of experience in refinery and terminal operations to this Project. As an established company in the province, it has strong stakeholder relationships and a clear understanding of the energy landscape. By leveraging its expertise, existing infrastructure and utilizing some of the best onshore wind resources in the country, North Atlantic is developing technically and economically viable green energy solutions that align with the growing international demand for renewable energy.

4.0 Description of the Undertaking

EPR-007 *Provide a complete overview of the Project in the following subsections, including the preferred selection of Project location, design, construction, operation and maintenance, and decommissioning and rehabilitation.*

A complete overview of the Project is provided in the Registration, including the preferred selection of Project location, design, construction, operation and maintenance (O&M), and decommissioning and rehabilitation. Section 2 of the Registration presents an overview of the study areas (Section 2.1 of the Registration) and general Project description (Section 2.3 of the Registration), as well as detailed description of the Project components, including the HGP (Section 2.3.1 of the Registration), HP (Section 2.3.2 of the Registration), and Wind Farm (Section 2.3.3 of the Registration). Section 2 also describes Project construction (Section 2.3.4 of the Registration), O&M (Section 2.3.5 of the Registration), and decommissioning and rehabilitation (Section 2.3.6 of the Registration) activities.

Section 3 of the Registration provides a comprehensive overview of the existing environment and valued components (VCs) (Section 3.1 of the Registration), including the atmospheric, aquatic, terrestrial

environments, land and resource use, heritage and cultural resources, and socio-economic environment. Section 3 also summarizes the baseline studies (Section 3.2 of the Registration) conducted to generate information and data required to support the evaluation of environmental effects, to develop mitigation measures, and establishment of baseline conditions for follow-up monitoring programs for each of the VC's.

The following sections of this Report provide clarification and supplementary information to the Registration by addressing each of the items listed in the EPR Guidelines for the Description of the Undertaking.

4.1 Geographical Location/Physical Components/Existing Environment

EPR-008 *This section shall provide a written description and geographic locations (including maps, imagery and site plans) of all Project components and the existing environment that may be affected by the Project, including, but not limited to, the following:*

This section provides written descriptions and geographic locations (including maps, imagery and site plans) of all Project components and the existing environmental features that may be affected by the Project, addressing EPR-009 to EPR-044 as outlined in the Table of Concordance. Where information was previously provided in the Registration, references to the applicable sections are included, and figures are referenced or repeated where appropriate.

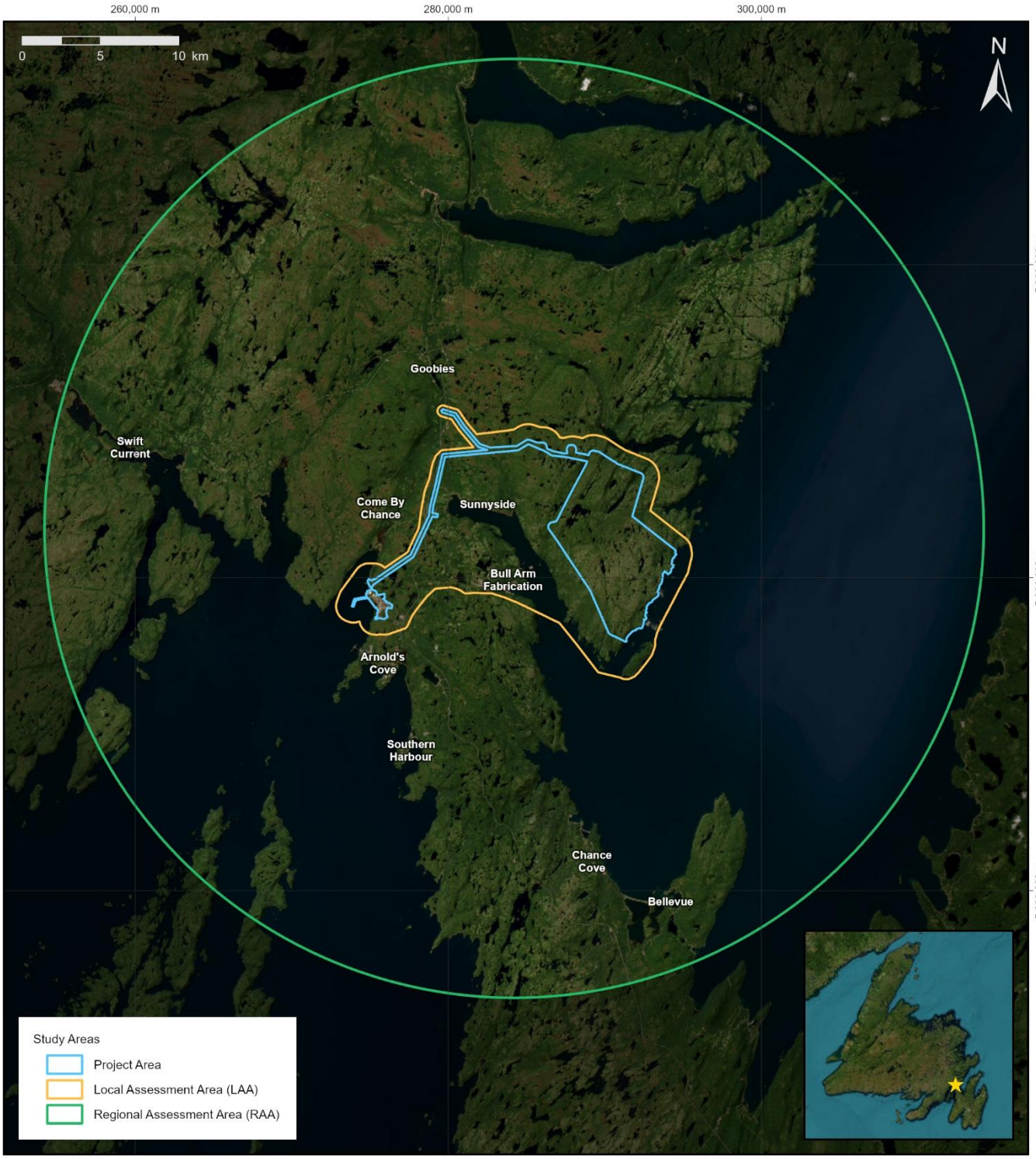
The Project footprint consists of three primary components that support the production, processing, and export of green hydrogen: a Wind Farm; HGP; and HP. The HGP and HP will be located within the existing Come By Chance Industrial Site. The proposed Wind Farm will be situated on 4,600 ha of Crown land reserve in the Sunnyside area, east of the town, atop an upland rocky barren. Linear infrastructure, consisting of roads and transmission lines, will link the Wind Farm to the HGP and HP.

Section 2.0 of the Registration discusses the Project components that will interact with the natural and human environment over a range of spatial scales. To address this, three study areas were delineated: a Project Area (PA), a Local Assessment Area (LAA), and a Regional Assessment Area (RAA) (Figure 2.1.1-1 of the Registration, updated in Figures EPR-008A and EPR-008B). Each study area is defined, and its boundary rationale is provided in Section 2.1.1 of the Registration, reflecting the scope of the biophysical study. Adaptations made to the study areas for socio-economic and heritage and cultural resource studies are detailed in Section 3.2 of the Registration (Baseline Studies).

Since the Registration, a re-assessment of the Project's Wind Farm access road location was completed in consultation with the Newfoundland and Labrador Department of Transportation and Infrastructure (NL

DTI). As a result of this review, a 3.85 kilometre (km) section of the access road has been moved north along the Trans-Canada Highway (TCH), extending beyond the previously defined PA and LAA. This new section is shown in Figures EPR-008A and EPR-008B. Appendix 1 provides details on the revised PA and LAA, and the results of a field and desktop assessment of the new road segment, along with a consideration of the Project effects for this segment relative to the original PA and LAA. Across all Key Indicators, the environmental conditions associated with the revised 3.85 km access road segment were consistent with those previously assessed in the original Registration. The nature, magnitude, and extent of potential effects remain unchanged, and established mitigation measures will be applicable and effective. Therefore, the addition of this segment does not alter the conclusions of the original environmental effects assessment, and residual effects remain not significant.

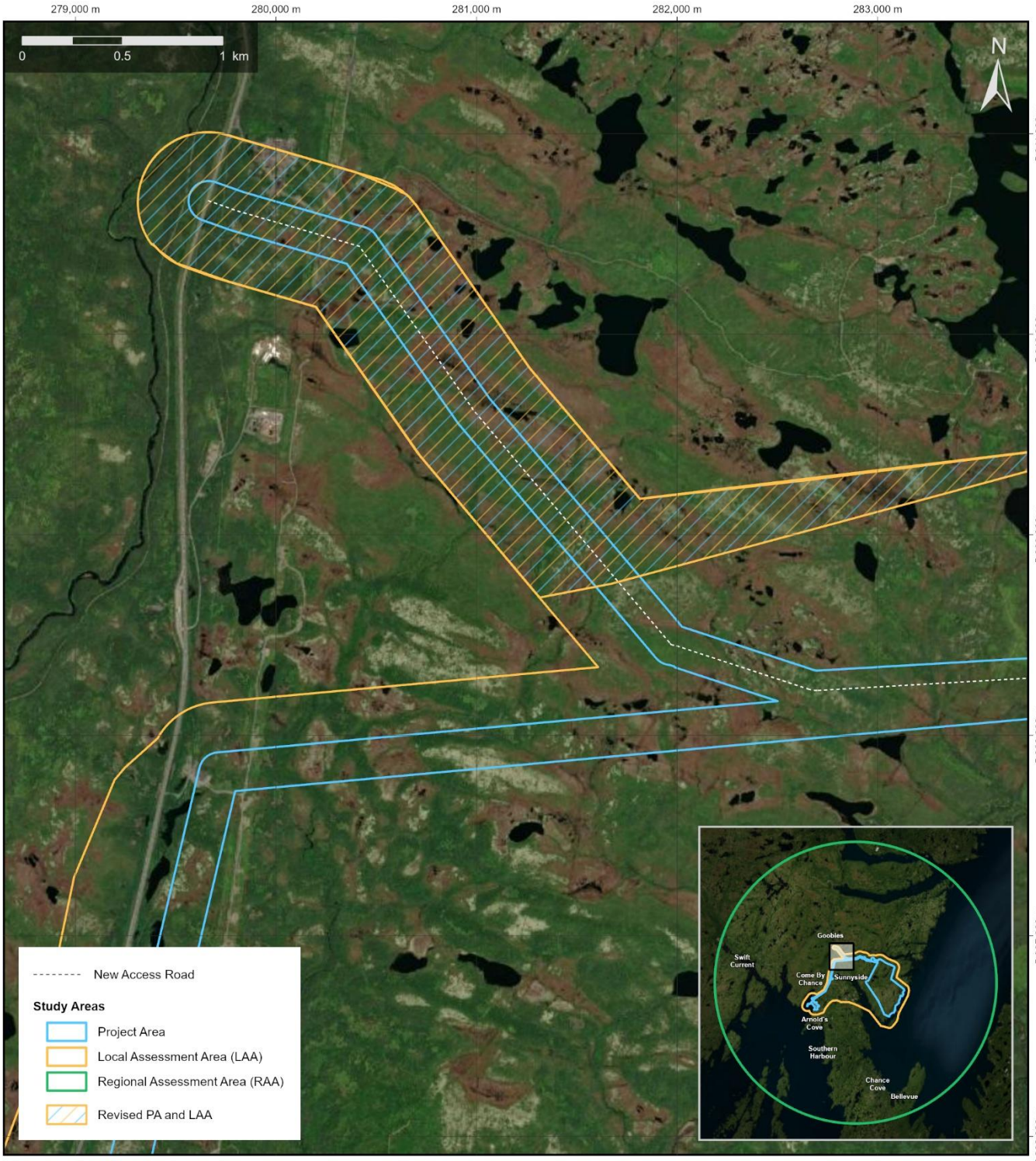
EPR-039 provides additional details on the road design and traffic management.



North Atlantic	FIGURE TITLE: Study Area Boundaries Associated with the Project	NOTES:	PREPARED BY: J. Crocker	DATE: 2026-03-16
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-16	
			APPROVED BY: C. Collins 2026-03-16	
			CRS: WGS 1984 UTM Zone 22N	
			sem	

SEM MAP ID: 016-015-GIS-EPR-008A-Rev0

Figure EPR-008A Study area boundaries associated with the Project



North Atlantic	FIGURE TITLE: Study Area Boundaries - Edited for Access	NOTES:	PREPARED BY: J. Crocker	DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18	
			APPROVED BY: C. Collins 2026-03-18	
			CRS: WGS 1984 UTM Zone 22N	
			sem	

SEM MAP ID: 016-015-GIS-EPR-008B-Rev0

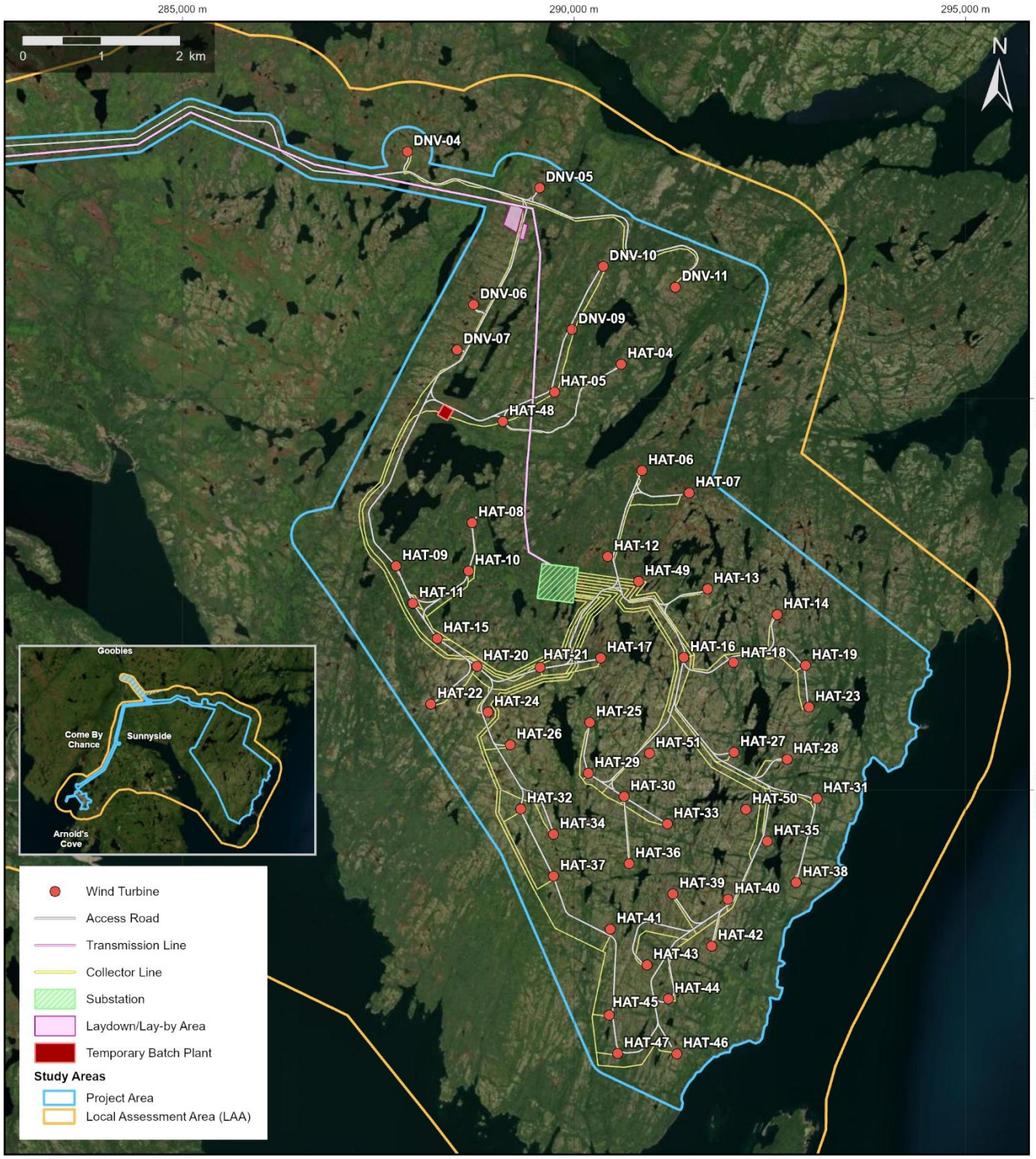
Figure EPR-008B Revised Project Area and Local Assessment Area

EPR-009 *Further details regarding locations and plans for the following components:*

i. wind farms, wind turbines and base construction, connecting road networks between wind turbines, access roads, electrical transformer stations, and collector and transmission lines;

All components including wind farms, wind turbines, connecting road networks between wind turbines, access roads, electrical transformer stations, and collector and transmission lines have been detailed to the extent possible in Section 2.3 of the Registration with the exception of turbine base construction and the temporary batch plant required for the Construction Phase of the project to assist with concreate foundation construction. The preliminary layout of these components in addition to Wind Farm related laydown areas were mapped in Figures 2.3-1 and 2.3-2 of the Registration and have been consolidated into one map in Figure EPR-009A.

In Figure EPR-009B a wind turbine example drawing showing both the turbine and crane foundations has been provided. All measurements are in metres. This design is an example of an allowable bearing pressure of 1,000 kilopascal (kPa). Under the crane foundation, any loose material will be removed and replaced with concrete.



North Atlantic	FIGURE TITLE: Preliminary Layout of the Wind Farm	NOTES: The location of proposed project infrastructure is considered preliminary and is subject to change.	PREPARED BY: J. Crocker; DATE: 2026-03-24
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-24
			APPROVED BY: C. Collins 2026-03-24
			CRS: WGS 1984 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-009A-Rev0

Figure EPR-009A Preliminary layout of the Wind Farm

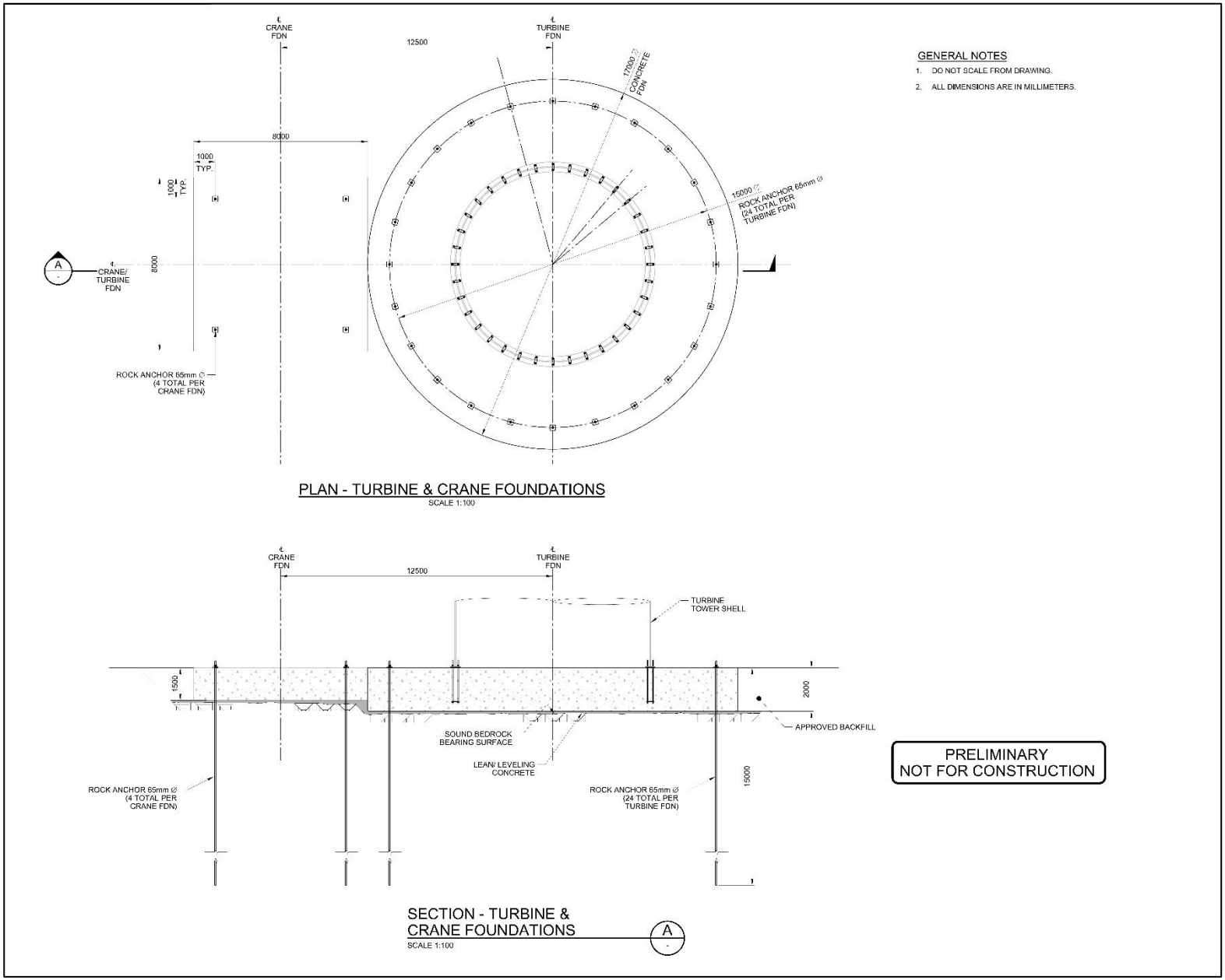


Figure EPR-009B Wind Farm turbine and crane foundations plan and section

EPR-010 *Further details regarding locations and plans for the following components:*

ii. marine terminal and works, existing infrastructure required for the Project and any planned expansion or modification to the existing marine terminal, berths and infrastructure to accommodate the Project, including details on the deadweight tonnage (DWT) of ships the existing and proposed terminal is designed to handle;

The Project will utilise the existing marine terminal infrastructure at the NARL Logistics Terminal, including the established jetty, berths, and associated handling systems. As outlined in Sections 1.2 and 2.1.2 of the Registration, the existing terminal is already designed to accommodate the deadweight tonnage (DWT) of vessels required for Project operations. The facility consists of three berths with depths up to 30 m and can accommodate tankers with a capacity of up to 326,000 DWT. Additional Project-related activities associated with product loading will occur fully within the capacity of current facilities, and no expansion of in-water infrastructure is required.

Further detail regarding the use of marine terminal infrastructure is provided in Sections 2.3.2.10 and 2.3.4.5 of the Registration, which describe hydrogenation and export-related processes, including the use of existing storage tanks and loading systems. While minor adjustments to the loading arms and conveyance system will be required to support the handling of MCH, these modifications are limited to existing landside equipment and do not involve any in-water works, piling, dredging, or physical alteration of the jetty structure.

During discussions with Fisheries and Oceans Canada (DFO), North Atlantic confirmed that no new marine terminal or jetty construction is proposed, and no expansion of the existing marine footprint is required. The existing jetty and berthing infrastructure will be used as is, with only abovedeck mechanical adjustments being incorporated into the Project. This approach avoids new effects to marine habitat and demonstrates that the Project will remain within the limits of currently approved and previously assessed marine infrastructure.

EPR-011 *Further details regarding locations and plans for the following components:*

iii. laydown areas, buildings and pipelines (in water and overland);

Further detail regarding the preliminary locations and plans for Project laydown areas, buildings, and pipelines is provided in Section 2.3 of the Registration; however, additional clarification is included here to support the EPR.

Laydown areas, as described in Section 2.3.4.6 of the Registration, will be used for temporary storage and the inspection of Wind Farm components, materials, and equipment prior to installation/use.

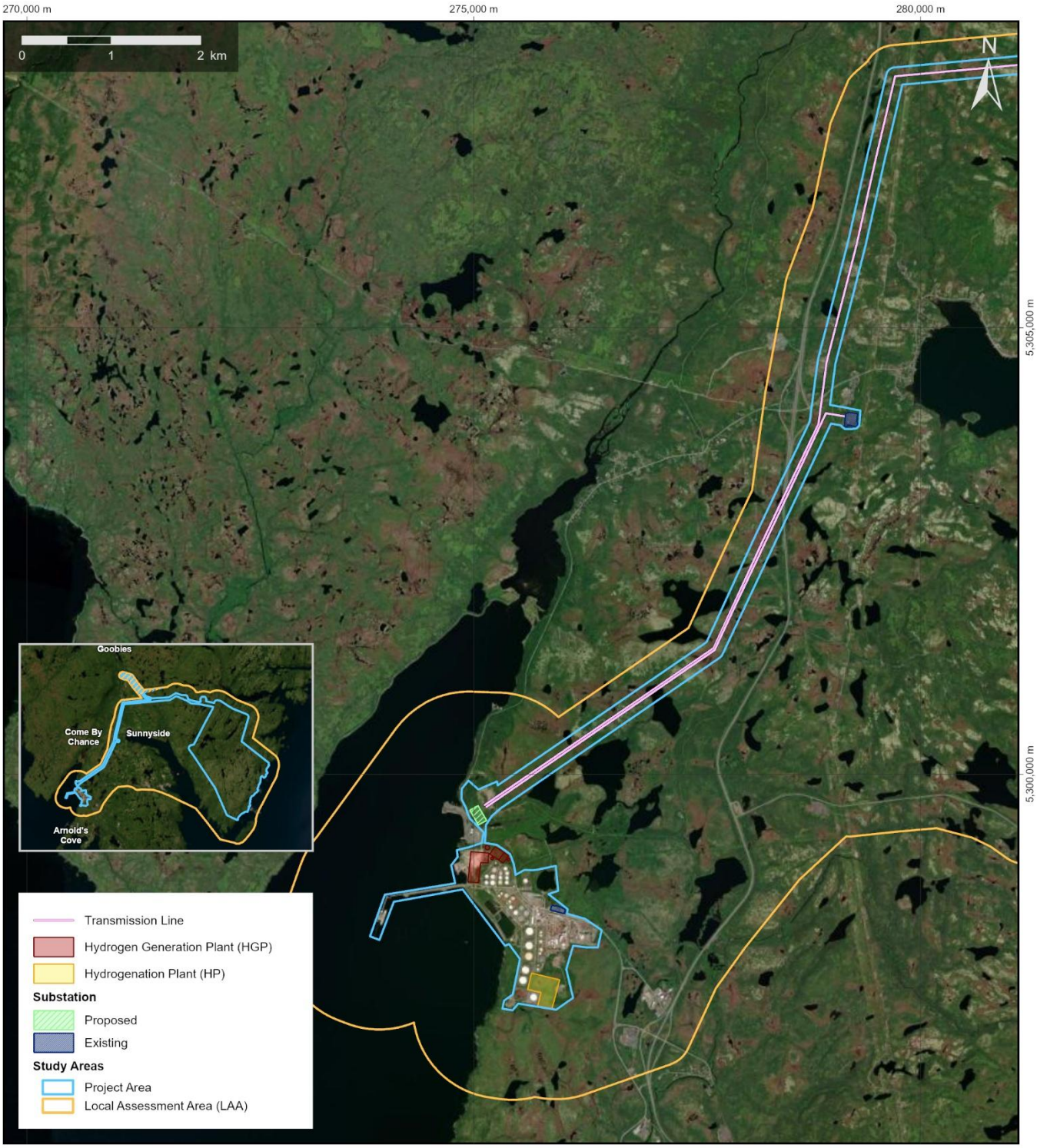
Approximately 1 ha of clear, level space is required for temporary storage of Wind Farm components, materials, and equipment prior to site installation/use. The proposed laydown area at the Bull Arm Fabrication Site will be capable of storing up to ten wind turbines at a time (i.e., blades, towers, nacelles, and hubs) and the location will be determined following FEED. Other laydown areas will include the northwest corner of the Wind Farm area, where the access road and transmission line intersect with the turbine area (Figure EPR-009A). This laydown will be used for the storage of Wind Farm components after transport from the Bull Arm Fabrication Site, prior to construction. Once prepared, wind turbine pad sites can be used as temporary laydown areas prior to, during and after installation.

Buildings required for the Wind Farm are described in Section 2.3.3.5 of the Registration. A new office, warehouse, electrical services building and substation will be located near the HGP. The locations of these buildings are consistent with the general site layouts provided in Figure 2.3-2 of the Registration and will be further refined during FEED.

Pipelines associated with the Project include both overland and in-water components. The primary overland pipelines consist of:

- A freshwater supply pipeline from Lady Cove Pond to the Temporary Concrete Batch Plant;
- An inter-facility pipeline carrying hydrogen feedstock and utilities between the HGP and the HP; and
- Ancillary pipelines for process water, treated effluent, and firewater, all of which will follow established or newly constructed utility corridors to minimize land disturbance.

Figure EPR-011 presents a consolidated map showing the locations of buildings and associated transmission line starting from the access road to the Wind Farm. The exact location of the raw water pipeline from Lady Cove Pond to the temporary batch plant and the internal water/utility pipeline between the HGP and HP, are not yet available and will be finalized during the FEED phase. The water-intake pipeline at Lady Cove Pond represents the only in-water component; its exact location will also be confirmed following completion of FEED.



North Atlantic	FIGURE TITLE: **Preliminary Layout of the Hydrogen Generation Plant and Hydrogenation Plant**	NOTES: The location of proposed project infrastructure is considered preliminary and is subject to change.	PREPARED BY: J. Crocker	DATE: 2026-03-19
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-19	
			APPROVED BY: C. Collins 2026-03-19	
			CRS: WGS 1984 UTM Zone 22N	
			sem	

SEM MAP ID: 016-015-GIS-EPR-011-Rev0

Figure EPR-011 Preliminary Pre-FEED layout of the HGP and HP

EPR-012 *Further details regarding locations and plans for the following components:*

iv. temporary workforce accommodations and plans for related drinking water and wastewater services;

No new temporary accommodation camp is proposed for the Project. Construction personnel will primarily be housed within nearby communities, including Sunnyside, Come By Chance, Arnold's Cove, and St. John's, and will commute daily to the PA. Depending on contractor requirements during peak construction periods, North Atlantic may also utilize existing accommodations at the Bull Arm Fabrication Site. Final decisions regarding workforce lodging will be made prior to construction by the Engineering, Procurement, and Construction Management (EPCM) contractor.

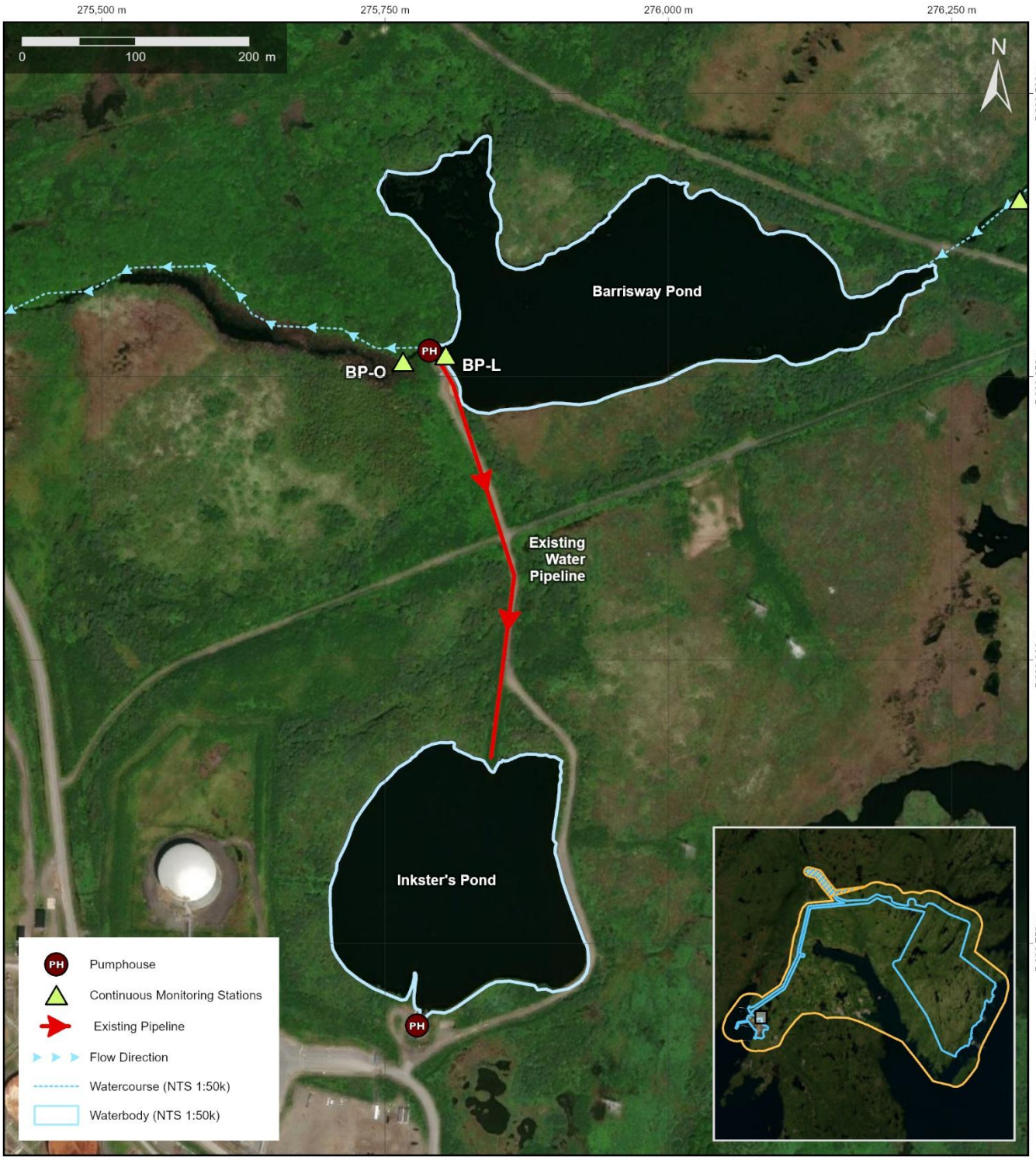
As noted in Section 2.3.4 of the Registration, the Bull Arm Fabrication Site contains established, purpose-built construction camp infrastructure capable of supporting industrial-scale workforces. These facilities include dormitory-style accommodations, dining and catering services, recreational areas, and all necessary supporting utilities. The camp is equipped with existing potable water and wastewater treatment systems and can be made available through coordination with Bull Arm operators.

Use of existing facilities at Bull Arm eliminates the need to construct new temporary accommodation infrastructure and reduces pressure on local housing markets. Workforce transportation between Bull Arm and the PA will be managed through coordinated daily shuttle services. This approach minimizes traffic volumes, reduces community housing impacts, and supports safe, controlled access to and from the PA throughout the construction period.

EPR-013 Detailed information on the source water supply for hydrogen production and hydrogenation plants and supporting facilities and infrastructure, including:

i. location of water intake for the Project;

The Project will obtain freshwater for hydrogen production, hydrogenation processes, and supporting facilities from Inkster's Pond, within the Inkster's Pond Industrial Water Supply Area, as described in Section 2.3 of the Registration and presented in Figure EPR-013. Extensive details on the Surface Water Supply and the Hydrology of the surrounding area is presented in Appendix C of the Registration. The local baseline hydrology survey overview is described and shown in Figure C-3.3.-1 (pg. 21) of the Registration. There is an active surface water intake at Barrisway Pond, where water is withdrawn via an existing pumphouse and infrastructure (Figure C-6.1-5 of Appendix C in the Registration). Withdrawn water is conveyed to Inkster's Pond via a pipeline which is partially buried, and this pond serves as a holding reservoir for activities as shown in Figure C-6.1-7 of Appendix C in Registration and illustrates the site conditions, pump locations and flow directions. No new or additional surface water intakes are proposed for the Project. To confirm, the infrastructure overviewed is existing and will be leveraged for the Project's use.



North Atlantic	FIGURE TITLE: Source Water Intake for the Hydrogen Production and Hydrogenation Plants	NOTES: Watercourse and Waterbody data sourced from Canadian National Topographic System (NTS) 1:50k series.	PREPARED BY: J. Crocker; DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18
			APPROVED BY: C. Collins 2026-03-18
			CRS: WGS 1984 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-013-Rev0

Figure EPR-013 Source water intake for the hydrogen production and hydrogenation plants

EPR-014 *Detailed information on the source water supply for hydrogen production and hydrogenation plants and supporting facilities and infrastructure, including:*

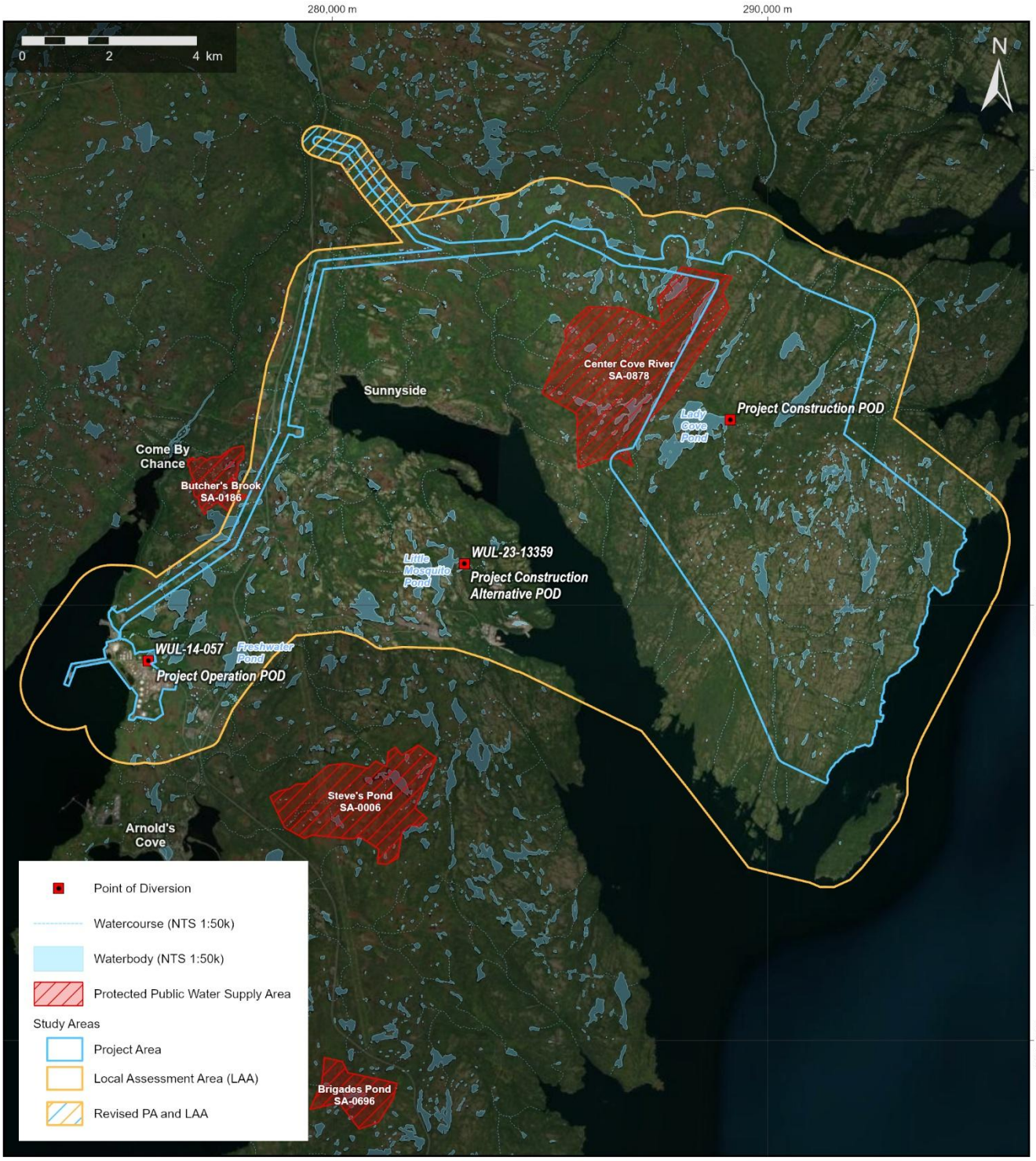
ii. location of other major and licenced water use withdrawals; and

The location of major licensed water withdrawals that occur within the LAA and have been described in Appendix C Figure C-3.3-1 of the Registration.

Braya Renewable Fuels – Inkster's Pond Withdrawal (WUL14057). Braya holds a Water Use Licence (WUL14057) authorizing withdrawal of 4,500,000 m³ from Inkster's Pond. This licence was issued to North Atlantic Refining Inc. as the General Partner of NARL Refining Limited Partnership, the former operator of the Braya Refinery on November 13, 2024. This intake is mapped in Land and Resource Use (LRU) Figure 3.1.4-2 and Appendix C (Surface Water Study) Figure C-3.3-1 of the Registration. Information regarding this withdrawal is discussed in Sections 2.1.2, 2.3.4.9, 3.1.2-2, and Appendix C (Surface Water Study). This licensed withdrawal is the primary industrial water source in the area and will be shared with this Project.

Bull Arm Fabrication – Little Mosquito Pond Withdrawal (WUL-23-13359). Water withdrawal from Little Mosquito Pond supplies domestic and industrial water to the Bull Arm Fabrication Site. The previous licence for this withdrawal (WUL-18-9212) expired on October 12, 2023, and was replaced by the current licence WUL-23-13359. The expired withdrawal location for WUL-18-9212 is mapped in LRU Figure 3.1.4-2. As described in Section 3.1.2-2, Little Mosquito Pond provides process water to Bull Arm Fabrication Inc. and was referenced in Section 2.3.4.9 as a potential alternative supply for the Project.

Both licensed withdrawal locations are shown in Figure EPR-014.



North Atlantic	FIGURE TITLE: Existing Water Use Licenses in the LAA	NOTES: Industrial Water Supplies and Protected Public Water Supply Areas sourced from NL Government's Water Resources Portal. Watercourse and Waterbody data sourced from Canadian National Topographic System (NTS) 1:50k series.	PREPARED BY: J. Crocker; DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18
			APPROVED BY: C. Collins 2026-03-18
			CRS: WGS 1984 UTM Zone 22N
			sem

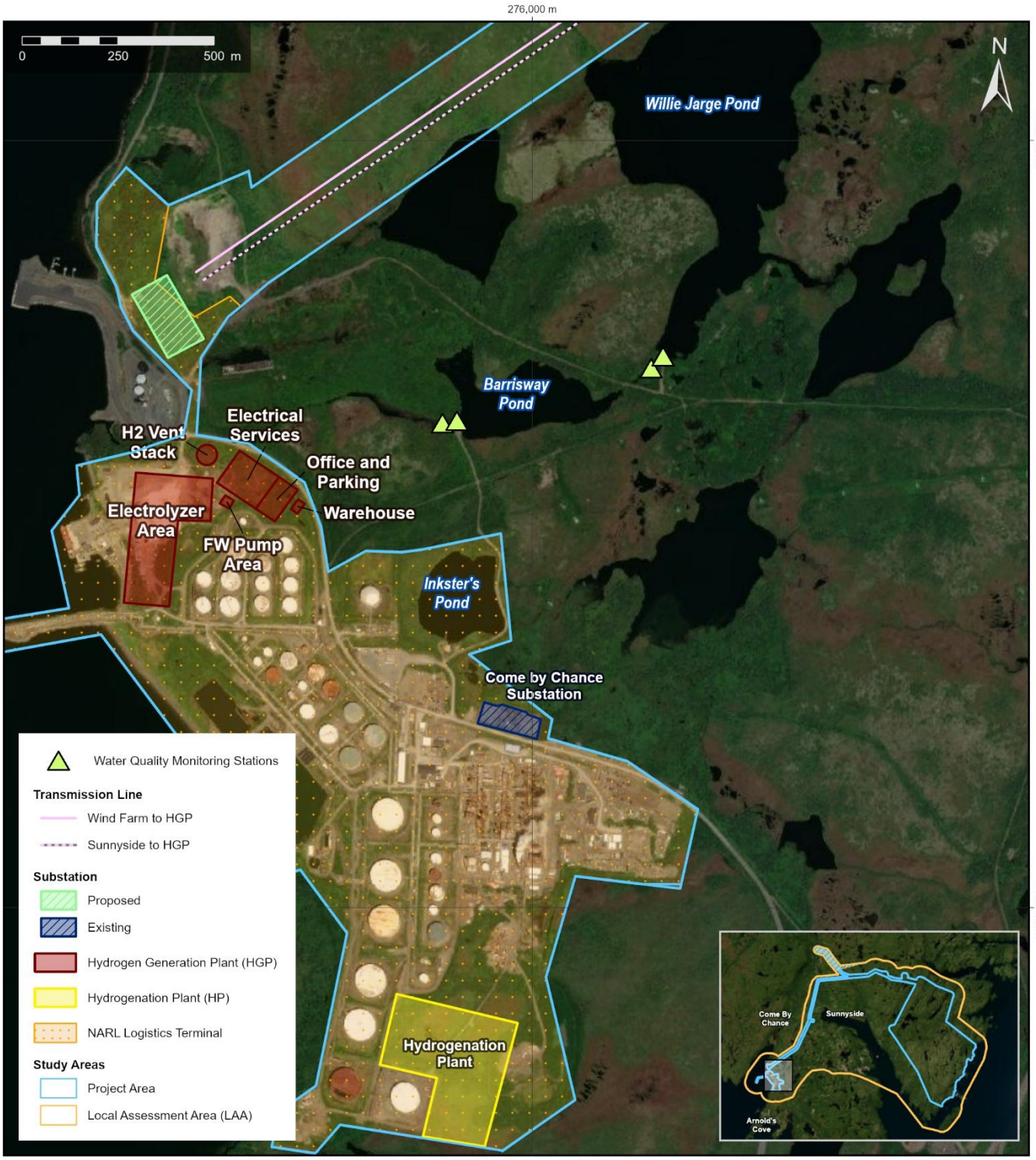
SEM MAP ID: 016-015-GIS-EPR-014-Rev0

Figure EPR-014 Existing water use licences in the LAA

EPR-015 *Detailed information on the source water supply for hydrogen production and hydrogenation plants and supporting facilities and infrastructure, including:*

iii. water quality monitoring locations;

Baseline water quality data was collected at ponds within the Inkster's Pond Industrial Water Supply Area, as described in Appendix C and Appendix B1 of the Registration. Surface water quality samples were taken from Rushy Pond, Willie Jarge Pond, Barrisway Pond, and Inkster's Pond on a seasonal basis during the monitoring period and was summarized in Appendix B1 Section 7.3 of the Registration. These sites aligned with where continuous hydrometric stations were installed and were shown in Figure B1-5.0-1. A map of water quality monitoring locations is provided below in Figure EPR-015.



North Atlantic	FIGURE TITLE: Source Water Continuous Monitoring Stations	NOTES: The location of proposed project infrastructure is considered preliminary and is subject to change.	PREPARED BY: J. Crocker; DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18
			APPROVED BY: C. Collins 2026-03-18
			CRS: WGS 1984 UTM Zone 22N
			sem

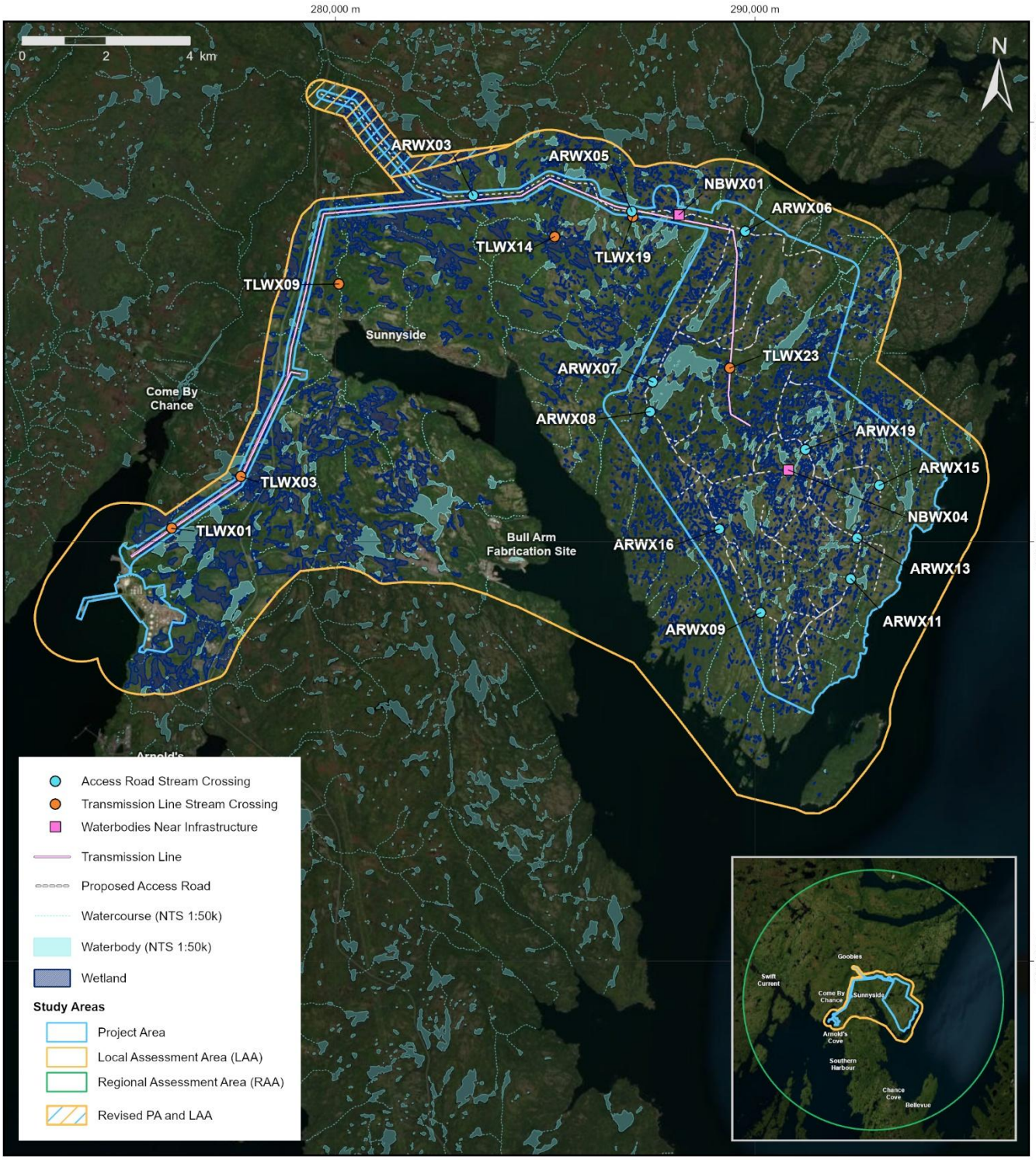
SEM MAP ID: 016-015-GIS-EPR-015-Rev0

Figure EPR-015 Source water continuous monitoring stations

EPR-016 *Identification of existing streams, waterbodies, water crossings and wetlands located within the Project footprint;*

The aquatic baseline study (Section 3.2.2 of the Registration) characterizes the freshwater environment within the PA, including all streams, waterbodies, and potential water crossings that may interact with Project components. Existing streams, ponds, and water crossings were identified and mapped in Figure 3.2.2-1 of the Registration, based on field surveys and desktop analysis. Wetlands within the PA were delineated through the Ecological Land Classification (ELC) program and are described in Section 3.2.3.2 of the Registration; these features are mapped in Figure 3.2.3-1.

For the purposes of this Report, the wetlands identified in the ELC have been consolidated with mapped streams, waterbodies, and water crossings into a single integrated figure (Figure EPR-016). This combined mapping provides a comprehensive depiction of all freshwater features located within the Project footprint, ensuring that all environmentally sensitive aquatic and wetland areas are clearly identified to support assessment of potential effects and development of appropriate mitigation measures.



North Atlantic	FIGURE TITLE: Existing Streams, Waterbodies, Water Crossings and Wetlands Within the Project Area	NOTES: The location of proposed project infrastructure is considered preliminary and is subject to change. Watercourse and Waterbody data sourced from Canadian National Topographic System (NTS) 1:50k series.	PREPARED BY: J. Crocker; DATE: 2026-03-19
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-19
			APPROVED BY: C. Collins 2026-03-19
			CRS: WGS 1984 UTM Zone 22N
			sem

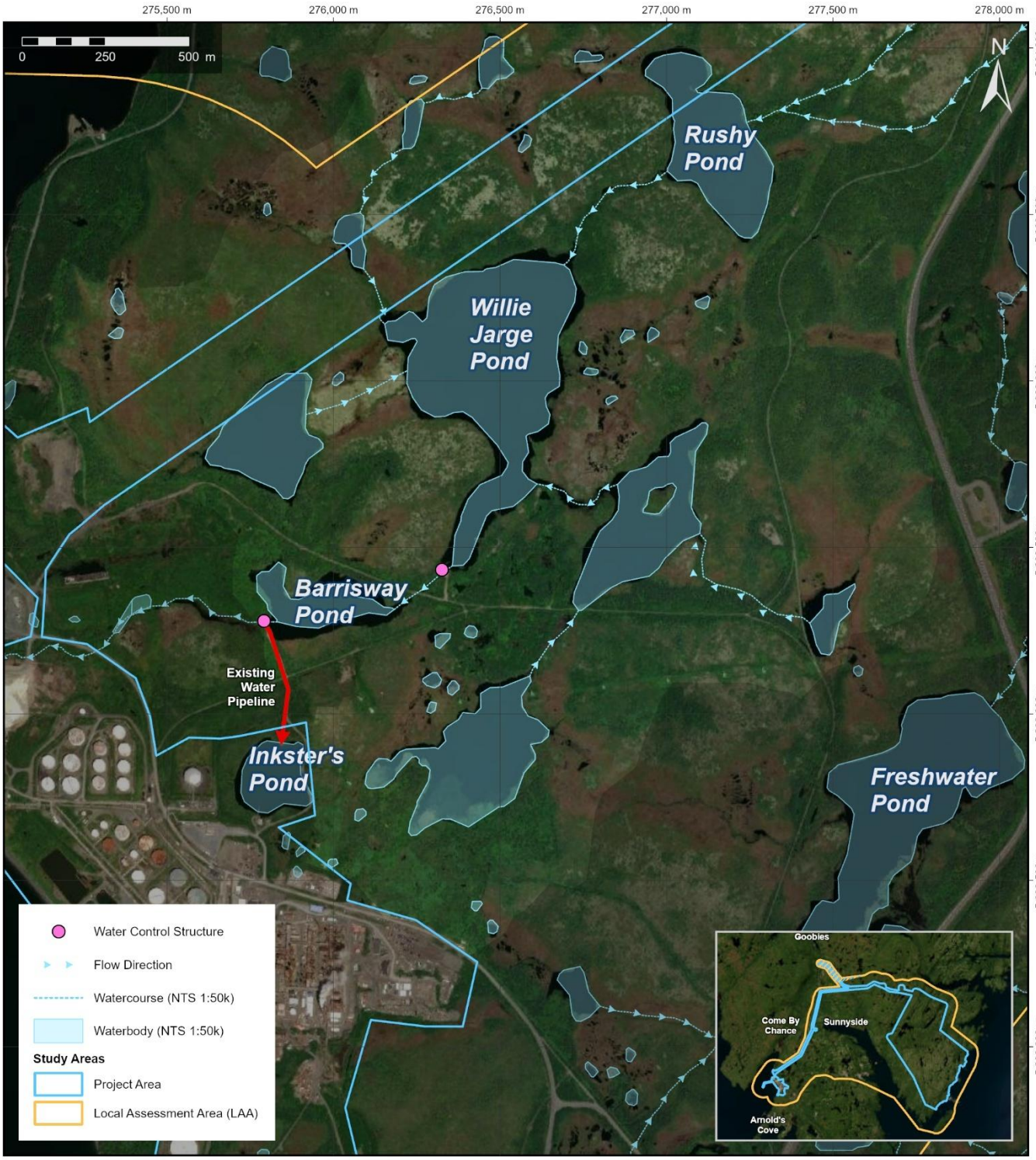
SEM MAP ID: 016-015-GIS-EPR-016-Rev0

Figure EPR-016 Streams, waterbodies, water crossings and wetlands located in the PA

EPR-017 *Existing and proposed dams to be used for water management to support the Project;*

There are no proposed dams to be constructed for water management to support the Project.

The Project proposes to operate existing infrastructure which is already in operation within Inkster's Pond Industrial Water Supply Area. A hydraulic control structure is currently operated at Barrisway Pond, which regulates water that is pumped via an existing pipeline to Inkster's Pond (Figure EPR-017). This infrastructure is currently in operation and is described in detail in Section 3.1.2.3 (Surface Water) of the Registration. A more detailed description exists in Appendix C, Section 6.1.5 of the Registration. No modifications to this control structure are planned as part of the proposed undertaking. There is also a hydraulic control structure equipped with a concrete spillway, fishway, and a low-level outlet pipe with a valve at Willie Jarge Pond. No physical modifications to this structure are planned as part of the proposed undertaking.



North Atlantic

FIGURE TITLE:
Water Control Structures in the Project Area

PROJECT TITLE:
North Atlantic Wind to Hydrogen Project

NOTES:
Watercourse and Waterbody data sourced from Canadian National Topographic System (NTS) 1:50k series.

PREPARED BY:	DATE:
J. Crocker	2026-03-18
REVIEWED BY:	C. Bursey2026-03-18
APPROVED BY:	C. Collins 2026-03-18
CRS:	WGS 1984 UTM Zone 22N

sem

SEM MAP ID: 016-015-GIS-EPR-017-Rev0

Figure EPR-017 Water control structure at Barrisway Pond

EPR-018 *Outfall location(s) for the hydrogen production and hydrogenation plants and other facilities being considered for the final discharge point(s) with clearly defined maps and relevant information related to the site(s) including, but not limited to:*

i. outfall design and associated infrastructure;

The two outfalls being considered for this Project are called “existing” (47.799625°N, 54.002390°W) and “new outfall” (47.8038900°N, 54.0061863°) in the Registration. Figure 2.3.1.6-1 of the Registration clearly illustrates the existing marine outfall and the proposed new outfall north of the jetty. For ease of reference, this map is provided again below in Figure EPR-018A with additional details provided for the existing outfall in Figure EPR-018B and new outfall in EPR-018C.

Existing Outfall

The Braya Refinery wastewater treatment system includes a long-established marine outfall that discharges treated effluent into Placentia Bay. Section 2.3.1.6 (Surface Water Runoff) describes this system in detail, noting that:

- The Braya treatment facility consists of four holding basins, a water collection area, and a concrete channel outfall located approximately 100 m northwest of “Duck Pond”;
- The outfall conveys treated water to Placentia Bay;
- Discharge is regulated under Certificate of Approval AA22045668; and
- The structure consists of a concrete channel approximately 32 in wide by 22 in high and extends from the final holding basin to the beach.

The Appendix B2 marine dispersion modelling referenced in the Registration further evaluates the environmental effects of effluent released through this existing outfall, including temperature and salinity mixing under summer and winter scenarios.

This outfall will continue to manage several wastewater sources from the HP and portions of the HGP, including treated surface water runoff and specific process related wastewater streams. No changes are to be made to this outfall.

New Outfall

Sections 2.3.1.4 (Wastewater) and 2.3.1.5 (Demineralization Water) of the Registration describe the requirement for a new dedicated outfall to manage the HGP's demineralization reject water. Key points confirmed in Section 2 include:

- A new outfall discharge location north of the existing jetty will be constructed specifically to manage this stream (Section 2.3.1.6; Figure 2.3.1.6-1);
- The discharge pipe is planned to terminate 7.139 m below the water surface, within a 3-inch diameter tube; and
- Detailed effluent dispersion modelling for this new outfall is included in Appendix B3 of the Registration, which shows rapid dilution and compliance with CCME temperature/salinity criteria.

Section 2.4.2.4 (Wastewater Treatment System – Alternatives) confirms that this new outfall was selected after evaluating an alternative that would have used the Braya outfall. The new outfall was chosen as modelling predicts lower environmental effects, reduced mixing distances, and better alignment with the HGP's operational needs. Final engineering (alignment, diffuser design, construction methods) will be determined during FEED and submitted during permitting.

HP Wastewater Management via Existing Outfall and Systems

The Registration confirms that no new outfall is required for the HP. Additional details on the effluent / wastewater streams can be found in Appendix 4 North Atlantic Project Wastewater Sources: Process and Surface Wastewater. The HP could continue to use existing Braya drainage and treatment systems or be combined with the HGP, specifically:

- Section 2.3.2.6 - Process Wastewater (HP toluene purification water sent to Braya's wastewater treatment plant);
- Section 2.3.2.7 - Demineralization System Reject Water (small volume of demineralized reject water routed to Braya's wastewater treatment system); and
- Section 2.3.2.8 - Surface Water Runoff (HP stormwater collected, separated via oil and water separator, and conveyed to Braya wastewater treatment).

These streams will ultimately discharge through the existing marine outfall described above, alternatively, the HP wastewater could be directed to the new outfall, if deemed more advantageous during the FEED process.

North Atlantic	FIGURE TITLE: **Outfall Locations of the Hydrogen Generation Plant and Hydrogenation Plant**	NOTES: The location of proposed project infrastructure is considered preliminary and is subject to change.	PREPARED BY: J. Crocker	DATE: 2026-03-16
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-16	
			APPROVED BY: C. Collins 2026-03-16	
			CRS: WGS 1984 UTM Zone 22N	
			sem	

SEM MAP ID: 016-015-GIS-EPR-018-Rev0

Figure EPR-018A Location of surface water outfall

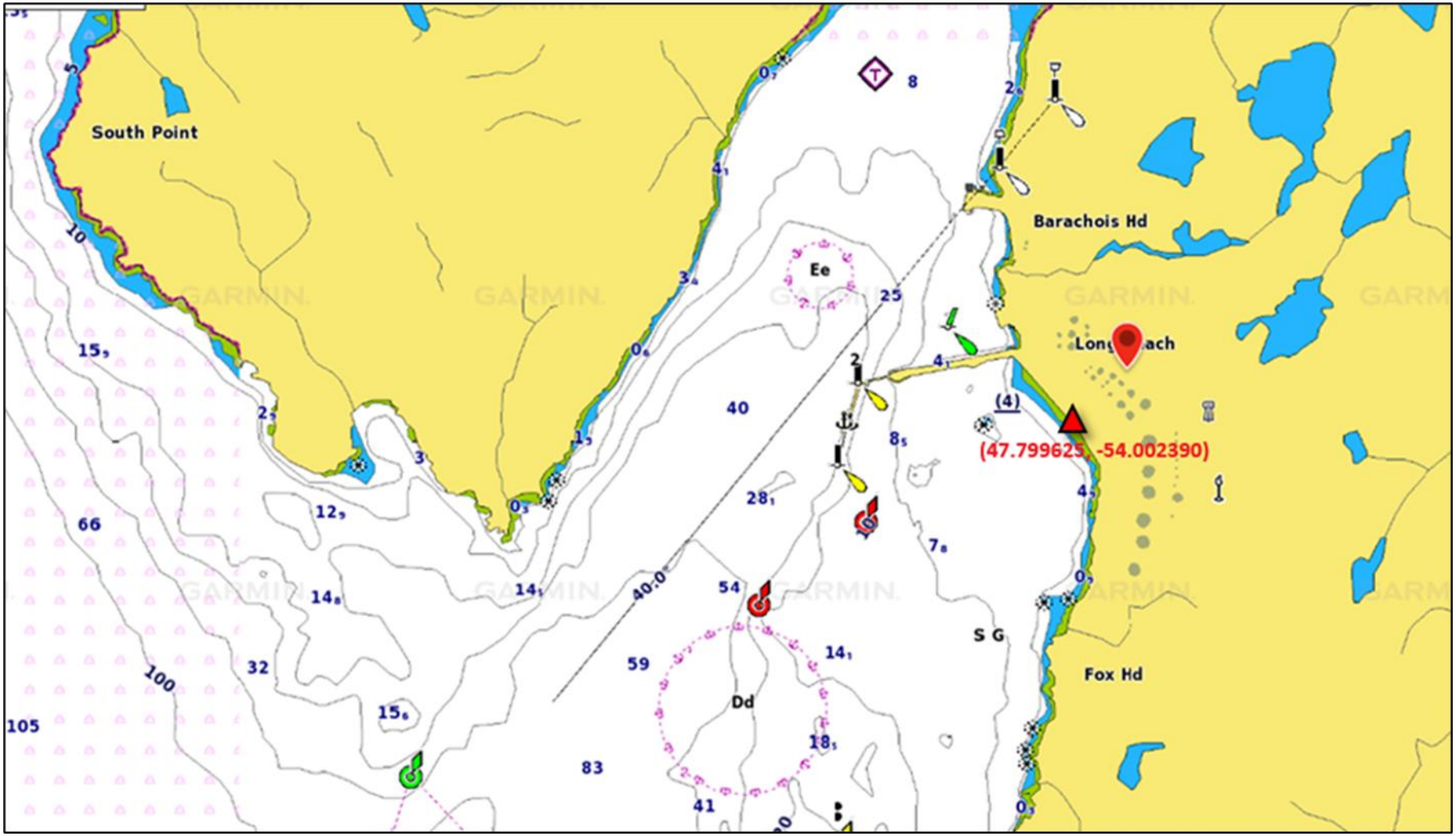


Figure EPR-018B Location of the proposed outfall (existing outfall) and nearby bathymetry

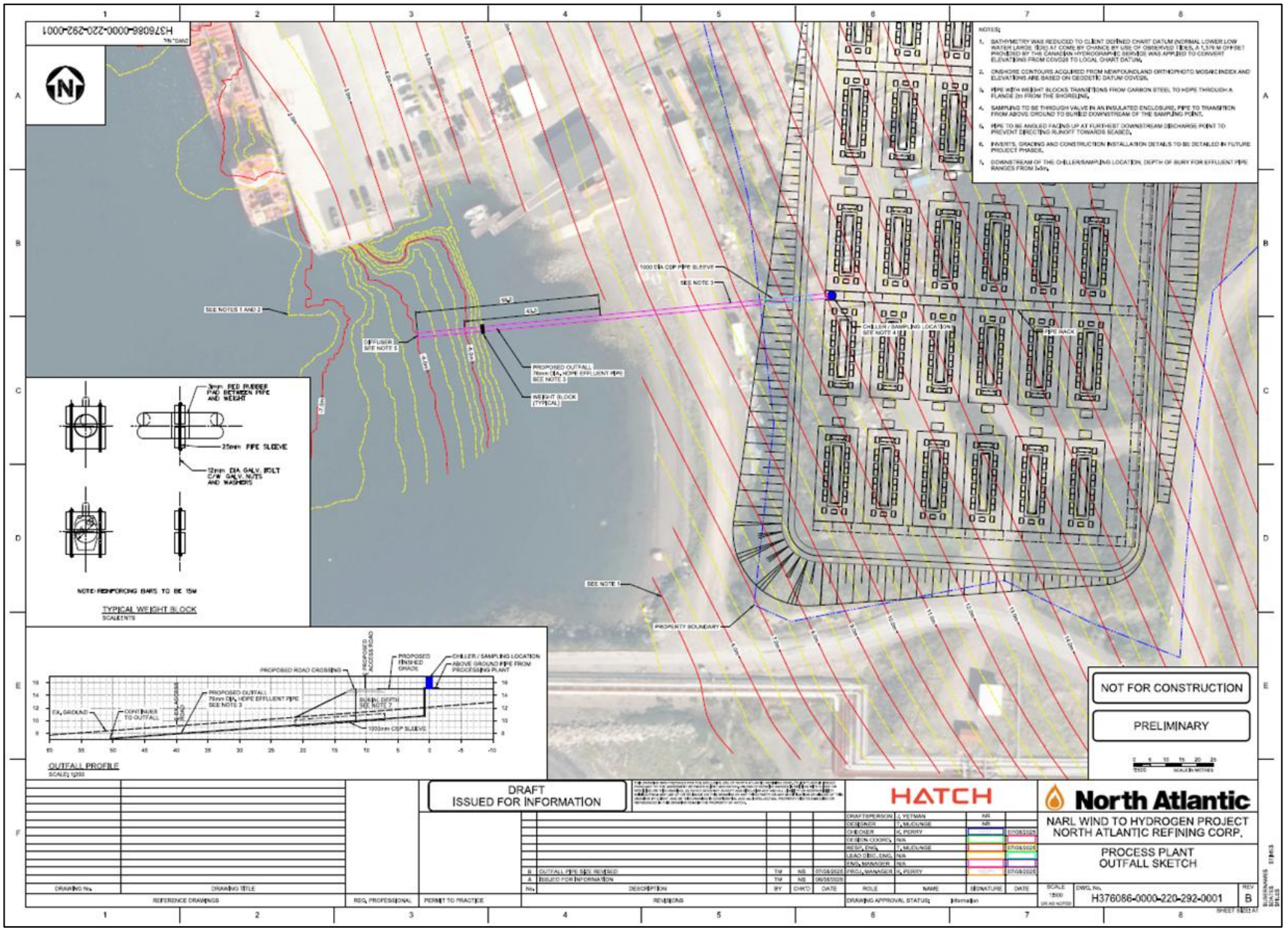


Figure EPR-018C Location of the proposed outfall (new outfall) and nearby bathymetry

EPR-019 *Outfall location(s) for the hydrogen production and hydrogenation plants and other facilities being considered for the final discharge point(s) with clearly defined maps and relevant information related to the site(s) including, but not limited to:*

ii. benefits and limitations of the site(s);

The Project assessed the use of existing and new outfall infrastructure to minimize environmental effects and overall project footprint. Utilizing Braya's existing outfall provides clear benefits by reducing the need for additional infrastructure. However, as discussed in Section 2.4.2.4 of the Registration, dispersion modelling identified limitations associated with directing all effluent through the Braya outfall, particularly related to temperature mixing distances. Section 3.2.2.7 (Physical Oceanography) of the Registration compares modelling results from Appendices B2 and B3 of the Registration and demonstrates that while the existing Braya outfall remains suitable for some discharges such as HP effluent and overall facility surface water runoff, it was not selected for the HGP due to thermal dispersion challenges. These findings supported the selection of a new outfall location north of the jetty for HGP at a minimum demineralization wastewater.

EPR-020 *Outfall location(s) for the hydrogen production and hydrogenation plants and other facilities being considered for the final discharge point(s) with clearly defined maps and relevant information related to the site(s) including, but not limited to:*

iii. other users and potential conflicts of interest; and

There is one other user of the existing outfall, Braya, identified in the Registration. No conflicts have been identified, and outfall management will be coordinated between North Atlantic and Braya to ensure continued compliant operation. Supporting details regarding shared use of Braya's wastewater treatment system and outfall infrastructure are provided throughout Sections 2.1.2, 2.3.1.6, 2.3.2, 2.3.2.6–2.3.2.8, 2.4.2.4, and Section 3.2.2.7 of the Registration, as well as in the effluent dispersion modelling studies in Appendices B2 and B3 of the Registration.

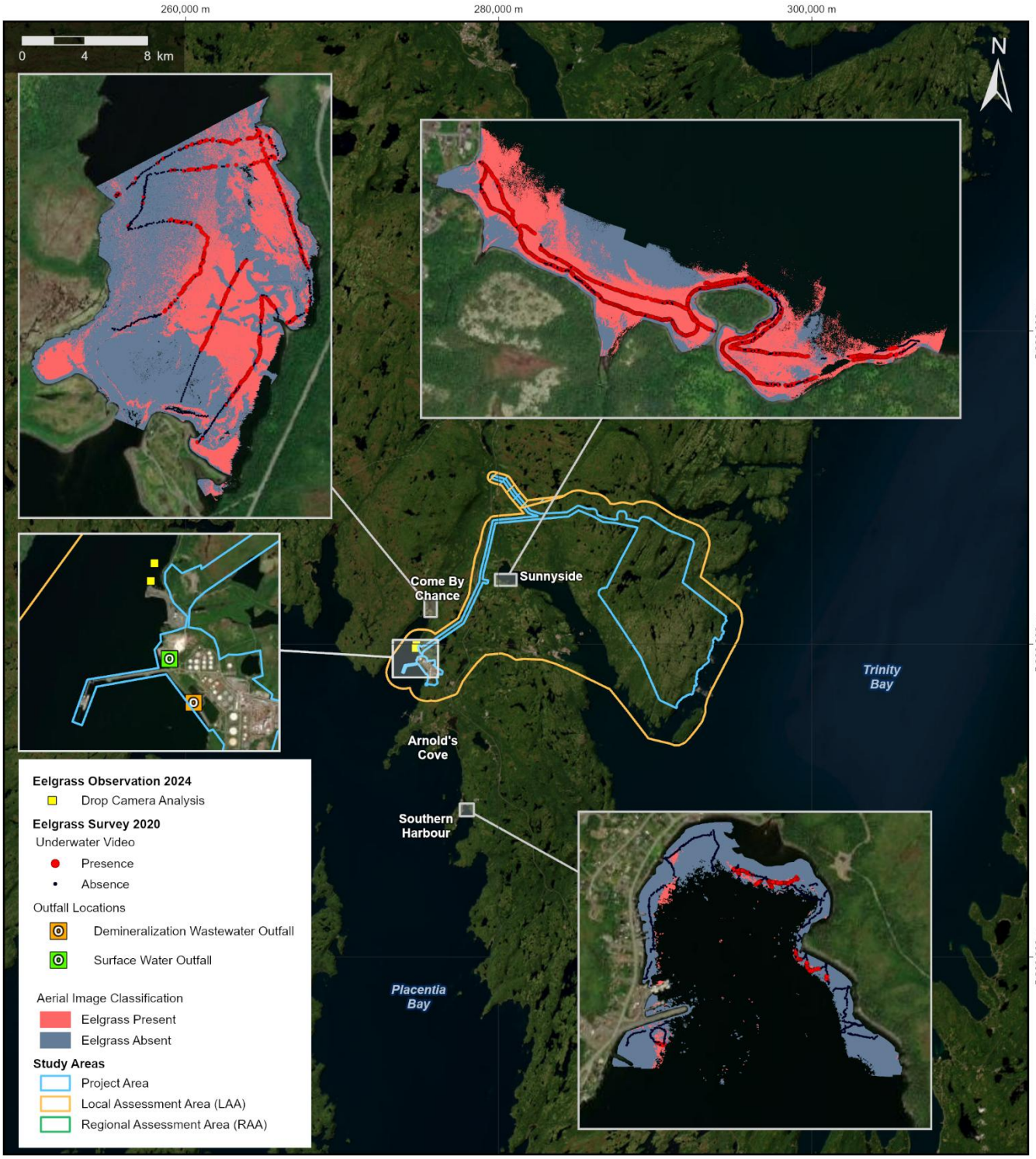
EPR-021 *Outfall location(s) for the hydrogen production and hydrogenation plants and other facilities being considered for the final discharge point(s) with clearly defined maps and relevant information related to the site(s) including, but not limited to:*

iv. information on coastal areas and estuaries and important ecological features identified in the Placentia Bay Ecologically and Biologically Significant Area (see https://open.canada.ca/data/en/dataset/b7ede61e-9859-46d3-bba7-d5cb346638e8),including interaction with planned shipping activities;

Coastal areas and estuarine ecosystems within Placentia Bay represent some of the most ecologically sensitive and biologically productive environments in the region. As the Project interacts with marine and nearshore areas, including through the siting of wastewater outfalls and the operation of marine vessels, it is essential to characterize the ecological significance of these environments and evaluate how Project activities may overlap with key habitats, species, and conservation priorities. The following section provides an overview of the ecological features identified within the Placentia Bay Ecologically and Biologically Significant Area (EBSA), summarizes the proximity of Project infrastructure to sensitive coastal and estuarine habitats, and outlines considerations related to planned marine operations, including vessel traffic and associated biosecurity risks.

Areas of conservation concern were discussed in Section 3.1.2.12 of the Registration (Marine Conservation Concern – Marine Habitats of Conservation Concern). This reads, Placentia Bay is a designated EBSA within the Placentia Bay–Grand Banks Large Ocean Management Area (DFO, 2019), reflecting its importance for rare species, vulnerable habitats, and critical ecological communities across both the RAA and LAA (DFO, 2007a). Extending from St. Lawrence to St. Mary's Bay, the EBSA includes offshore habitats for corals, sponges, leatherback turtles, and areas important to Blue Whales (*Balaenoptera musculus*), as well as coastal features such as salmon rivers, capelin spawning beaches, eelgrass meadows, seabird colonies, salt marshes, wetlands, and scallop beds. Although no Marine Protected Areas (MPAs) or **Species at Risk Act** (SARA) defined critical habitats occur near the RAA or LAA, the area is managed through multiple conservation measures, including protected areas such as Jack's Pond Provincial Park and recognition of the Placentia Bay Extension and Bar Haven as Special Marine Areas.

Placentia Bay supports a genetically distinct Atlantic salmon population and extensive capelin spawning activity that underpins the bay's food web. Eelgrass beds (as shown in Figure EPR-021 and described in Section 3.1.2.12 of the Registration) are an ecologically significant and legally protected species that provide essential nursery habitat, water quality benefits, and shoreline stabilization but face ongoing pressure from invasive European Green Crab (*Carcinus maenas*). Collectively, these interconnected habitats and species highlight Placentia Bay's high ecological value and sensitivity, underscoring the need for continued conservation and careful management.



North Atlantic	FIGURE TITLE: Eelgrass Distribution in the RAA	NOTES: Aerial Image Classification Layer sourced from the National Eelgrass Task Force (NETForce) dataset on the Government of Canada's Open Data Portal.	PREPARED BY: J. Crocker; DATE: 2026-03-19
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-19
			APPROVED BY: C. Collins 2026-03-19
			CRS: WGS 1984 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-021A-Rev0

Figure EPR-021 The location and distribution of eelgrass beds

Outfall Locations

Two wastewater outfall locations, illustrated in Figure EPR-018, were selected for possible effluent discharge. Appendix B3 of the Registration presents information on dispersion of effluent if North Atlantic were to create new outfall north of the Jetty. A second option was also considered where both effluent discharge from North Atlantic and Braya were combined in Braya's existing outfall infrastructure. While both outfall locations are situated within the Placentia Bay EBSA, the closest known eelgrass location is 0.889 km away (Figure EPR-021).

Interaction with Planned Shipping Activities

For this Project, LOHC vessels, and possibly tugboats if required, will be shipping product from the NARL Logistics Terminal 12 – 15 times a year, as discussed in Section 3.2.2.8 (Marine Navigation and Ship Traffic). Cargo ships involved in Project construction must obtain the necessary certification and approval to operate in Canadian and Newfoundland waters. Both national and international vessels navigating these waters are subject to regulations under the **Canadian Navigable Waters Act**, the **Canada Shipping Act**, 2001, the **Transportation of Dangerous Goods Act**, and various other relevant legislation. As discussed in Section 3.2.2.9 (Marine Biosecurity) of the Registration, marine traffic can increase risks of introduction and spreading of marine pests and diseases. Marine biodiversity and ecosystems in Newfoundland are threatened from these risks. One of the most significant biosecurity risks to Newfoundland's ports is aquatic invasive species (AIS). In terms of the Project, shipping vessels will be the main concern for AIS introduction and spread. AIS can be transported via vessel cargo, hull biofouling, and ballast water. Both ballast water discharge and biofouling can inadvertently introduce and spread harmful species and pathogens into the RAA (Transport Canada, 2022). To mitigate the potential spread of AIS, North Atlantic will adhere to recommended best practices and guidelines. Shipping vessels will be inspected for biofouling by AIS such as Vase Tunicate (*Ciona intestinalis*) and European Green Crab (*Carcinus maenas*). The following measures will be implemented to prevent AIS introduction and spread:

- Raising AIS awareness in frequently traveled waters;
- Taking precautions with vessel traffic and gear movement between affected and unaffected areas;
- Cleaning, draining, and drying gear and ropes to prevent waterborne AIS transfer between locations;
- Conducting routine vessel maintenance, including hull cleaning and the use of antifouling paint to prevent biofouling; and

- Identifying and reporting AIS sightings to DFO.

EPR-022 *Clarification on the location(s) of sanitary wastewater discharge from Project infrastructure;*

There are no changes expected to sanitary wastewater discharge locations at this time, exact location of infrastructure will be determined with the Project FEED study.

EPR-023 *Updated references for the sources of information describing the freshwater and marine environments in the Proponent's environmental assessment registration document (registration document);*

All references used in the Registration were reviewed and determined to be current or, where older, still appropriate as authoritative primary sources for baseline freshwater and marine environmental information. One excerpt from Section 3.1.2.5 (Freshwater Sensitive Time Periods and Working Windows, p. 120) of the Registration was identified as lacking sufficient referencing. A revised version of that excerpt is provided below.

"Streams and waterbodies on the Sunnyside Peninsula and Isthmus areas potentially provide migratory, spawning, nursery, rearing, and feeding habitats for these five species of fish based on baseline field data collected for the Project. Brook trout in these streams and waterbodies are likely resident and are not from anadromous stock, while brown trout and Atlantic salmon may come from anadromous populations (Scott & Crossman, 1964; O'Connell, 1982; Smith, 1988; Scott & Scott, 1988; Cowan & Baggs, 1988; Gibson, 1993; Stanley & Trial, 1995; Scruton *et al.*, 1997; Scruton *et al.*, 2000; Scott & Crossman, 1998)."

EPR-024 *Fish and fish habitat (defined in the Fisheries Act), including but not limited to:*

- *fish surveys and a field-based habitat assessment upstream and downstream of all streams crossed or otherwise impacted (directly and indirectly) by the undertaking, and identify spawning and rearing habitats for salmonids (consult with Fisheries and Oceans Canada (DFO) and the Department of Fisheries, Forestry and Agriculture (FFA) for approval of field survey methodologies);*

Fish and fish habitat information for the Project was developed using a scientifically defensible, risk-based approach and informed by consultations with DFO and Newfoundland and Labrador Department of Forestry Agriculture and Lands (NL DFAL) Wildlife Division (NL DFAL-WD). The fish and fish habitat assessment provided in the Registration and the supporting baseline study report satisfy their requirements at this stage; the information provided supported the assessment of potential effects and the identification of appropriate mitigation strategies.

Accordingly, this Report draws on existing baseline information provided in Appendix B1, Section 2.1 of the Registration to describe relevant components of the biophysical environment, including fish presence, habitat characteristics, and potential interaction pathways with Project components.

Survey methodologies and proposed field programs were provided simultaneously to NL DFAL-WD and DFO prior to conducting field surveys, and no changes to the approach were required. A summary of what was provided as methodologies is provided below:

Identification of Watercourses and Waterbodies

All watercourses and waterbodies, permanent and intermittent, that may be directly or indirectly affected by the Project were identified through desktop review and professional judgement, including interpretation of 1:50,000 National Topographic System (NTS) mapping, aerial and satellite imagery, publicly available datasets, watercourse connectivity, existing literature, and field reconnaissance. Water features not depicted on NTS mapping were identified through desktop methods and verified in the field where appropriate.

Selection of Sites for Field-Based Investigation

Given the scale of the Project, a representative subset of streams and waterbodies was selected for field-based fish and fish habitat assessment. Site selection was designed to capture variability across the PA and was based on:

- Representation of lotic and lentic systems;
- Geographic distribution across Project components;
- Potential for interaction with Project activities; and
- Avoidance of redundancy where multiple crossings occurred on the same watercourse.

This representative approach is consistent with DFO guidance for environmental assessment characterization, where the objective is to adequately describe baseline conditions rather than finalize sites specific **Fisheries Act** permitting requirements. In addition, other considerations included accessibility, safety, the preliminary nature of project layouts, and the absence of scheduled salmon rivers in the study area.

Survey Coverage and Rationale

At the Sunnyside site, field investigations were completed at 11 of 20 stream crossings associated with access roads and collector lines (55%), two (2) of four (4) waterbodies within 30 m of access roads (50%), and five (5) of 25 transmission line crossings (20%). Greater emphasis was placed on road and collector line crossings due to their higher likelihood of instream interaction, while fewer transmission line crossings were selected as no instream works are currently planned for those locations.

At the Come By Chance site, all identified crossing locations were initially investigated in the field in 2023, with 11 of 24 crossings (45%) carried forward for detailed fish and fish habitat characterization.

Habitat Characterization and Timing

Where potential or confirmed fish habitat was identified, field-based habitat characterization was completed approximately 100 m upstream and downstream of crossings, in accordance with DFO recommendations. Habitat type, substrate, flow conditions, and evidence of fish use were documented to support baseline characterization. No scheduled salmon rivers were identified within the PA. Atlantic Salmon were only captured at one stream site (TLWX09) out of all of the selected assessed streams and waterbodies.

Surveys were completed in 2023 (Come By Chance) and 2024 (Sunnyside and transmission line areas). The Proponent acknowledges that all waterbodies and watercourses that may be directly or indirectly affected by the Project will require appropriate characterization to support a subsequent **Fisheries Act** review. The survey methods and results presented in Appendix B1 of the Registration and summarized in this Report are intended to characterize existing conditions based on current Project knowledge.

EPR-025 *Fish and fish habitat (defined in the Fisheries Act), including but not limited to:*

- *characterization of fish and fish habitat for in-water works undertakings or activities in Lady Cove Pond;*

A field-based fish and fish habitat survey at Lady Cove Pond will be conducted to support a **Fisheries Act** Authorization before construction. The exact intake location and withdrawal details are not yet sufficiently defined (see Section 2.3.4.9 of the Registration) and will not be available until after FEED is finalized. Consistent with regulatory advice, baseline surveys will be completed prior to any in water works or water withdrawal activities to characterize existing conditions and inform effects assessment, mitigation, and follow-up. A Request for Review (RFR) will be submitted to DFO for the proposed in water works and water withdrawal. The same approach will apply should an alternative waterbody or crossing

be selected, with consideration of seasonal water level variability associated with recent climatic conditions.

EPR-026 *Fish and fish habitat (defined in the Fisheries Act), including but not limited to:*

- *methodology for field work, and the rationale if it is amended in the field;*

The methodology for fish and fish habitat field work is described under EPR-024 and is further detailed in Appendix B1 of the Registration. Field methodologies were implemented by qualified biologists and followed accepted federal and provincial best practices for fish and fish habitat assessment. Where site conditions warranted minor adaptive decisions in the field (e.g., site accessibility or absence of fish habitat), these adjustments did not alter the overall study design or objectives and were documented accordingly.

EPR-027 *Fish and fish habitat (defined in the Fisheries Act), including but not limited to:*

- *identification of scheduled salmon rivers;*

Information on scheduled salmon rivers was included in the Registration and is summarized in this Report to support assessments based on existing survey data. As documented in Section 3.1.2.4 of the Registration, baseline surveying confirmed that no scheduled salmon rivers are located within the PA.

While no scheduled salmon rivers occur within the Project footprint, Section 4.2.2 of the Registration considers the potential for indirect effects on scheduled salmon rivers that may occur outside the PA, including the potential for sediment-laden runoff or downstream water quality effects associated with construction and operation activities. These indirect pathways are addressed through effects assessment and mitigation measures related to erosion and sediment control, water management, and surface water protection addressed in Section 4.5.2 of the Registration.

As noted by the regulator, additional information may be required at the RFR stage under the **Fisheries Act**. Where indirect effects are identified and have the potential to affect scheduled salmon rivers, field survey requirements may be more detailed or intensive than those applied to other watercourses. The Proponent acknowledges this requirement and will address it as part of subsequent regulatory review, as appropriate.

EPR-028 *Fish and fish habitat (defined in the Fisheries Act), including but not limited to:*

- *description of fish and fish habitat in Barasway Pond and its potential connectivity to Inkster's Pond in relation to Project activities; and*

Barrisway Pond and Inkster's Pond are connected through existing, managed water infrastructure whereby water is pumped from Barrisway Pond to Inkster's Pond via a control structure (see EPR-017), rather than through a natural surface water connection. No changes are proposed to the infrastructure at Barrisway Pond as a result of this Project. Fish and fish habitat in Barrisway Pond was studied and described in Appendix B1, Sections 5.3 to 5.4 of the Registration. If it is determined that a **Fisheries Act** Authorization is required for Barrisway, it will be completed post EPR, once refinement of Project design is achieved following FEED. This will be completed through engagement with DFO and NL DFAL-WD.

EPR-029 *Fish and fish habitat (defined in the Fisheries Act), including but not limited to:*

- *description of marine use in the Project area by other users who may be impacted by increased vessel traffic associated with the Project, including DFO Small Craft Harbours, commercial and recreational fishers, aquaculture operators, and other marine users;*

Marine use within the PA and surrounding region (Trinity Bay and Placentia Bay) is diverse and well-established, involving commercial, industrial, and recreational activities. The area supports commercial fisheries targeting species such as snow crab, sea scallops, and lobster, with fishing effort occurring both nearshore and along transit routes used by Project vessels.

The region also contains infrastructure and services associated with DFO Small Craft Harbours, including facilities at Sunnyside and Arnold's Cove that support local fishing fleets as shown in Figure 3.2.2-5 of the Registration. While no aquaculture operations were identified within the RAA, other marine users include recreational fishers, boaters, tourism operators, and ferry services connecting coastal destinations. The PA is also situated within an established vessel traffic system in Placentia Bay, characterized by major shipping lanes, oil tanker routes, and regulated traffic separation schemes, indicating already high levels of marine traffic.

Further details on marine use in the PA, including DFO small craft harbours, commercial and recreational fishers, and aquaculture operators, is described in Section 3.2.2.8 of the Registration. As described in Section 2.3.5.6 of the Registration, approximately one MR vessel per month is anticipated during the O&M Phase for LOHC transport. A Land and Resource Use Baseline Study was also included as Appendix R of the Registration, presenting the results of a survey that included questions related to recreational fishing in the area. A total of 16 participants responded to the survey, providing information on the type and quantity of marine fish and other aquatic species harvested, number of hours spent fishing in the area, quality of fishing, as well as the purpose and general timing of the harvest. Comments received from DFO on the survey indicated that the number of responses was adequate given the size of the region. North Atlantic commits to continued engagement with other marine users, including completion of a creel survey prior to 2029, in advance of operations. As fisheries and fishing can shift over years, this would be to inform prior to actual operations.

North Atlantic has been and will continue to engage with the Placentia Bay Traffic Committee. The mandate is to enhance safe, efficient and environmentally sound maritime operations in the Placentia Bay area for both local and transiting vessels by fostering a productive exchange of information among maritime community and other stakeholders and establishing and promoting best practices. The geographic scope of the includes the area encompassed by all Canadian waters contained within the area bounded by a line bearing 180° True from Bass Point, 46°55′05″N, 55°15′55″W, and a line bearing 180° True from Cape St. Mary's Light, 46°49′22″N, 54°11′49″W as defined by the Vessel Traffic Services Zones Regulations.

EPR-030 *Details on bat survey data, methods, habitat and species list, including, but not limited to:*

- *how the habitat suitability study,*
  - *informed additional monitoring;*
  - *illustrated where turbine locations would impede highly suitable bat habitat; and*
  - *informed the potential bat mortality estimates post-construction phase;*
- *how the collected bat data will be used to inform Project site selection and turbine micro-siting to avoid higher risk areas for bats;*

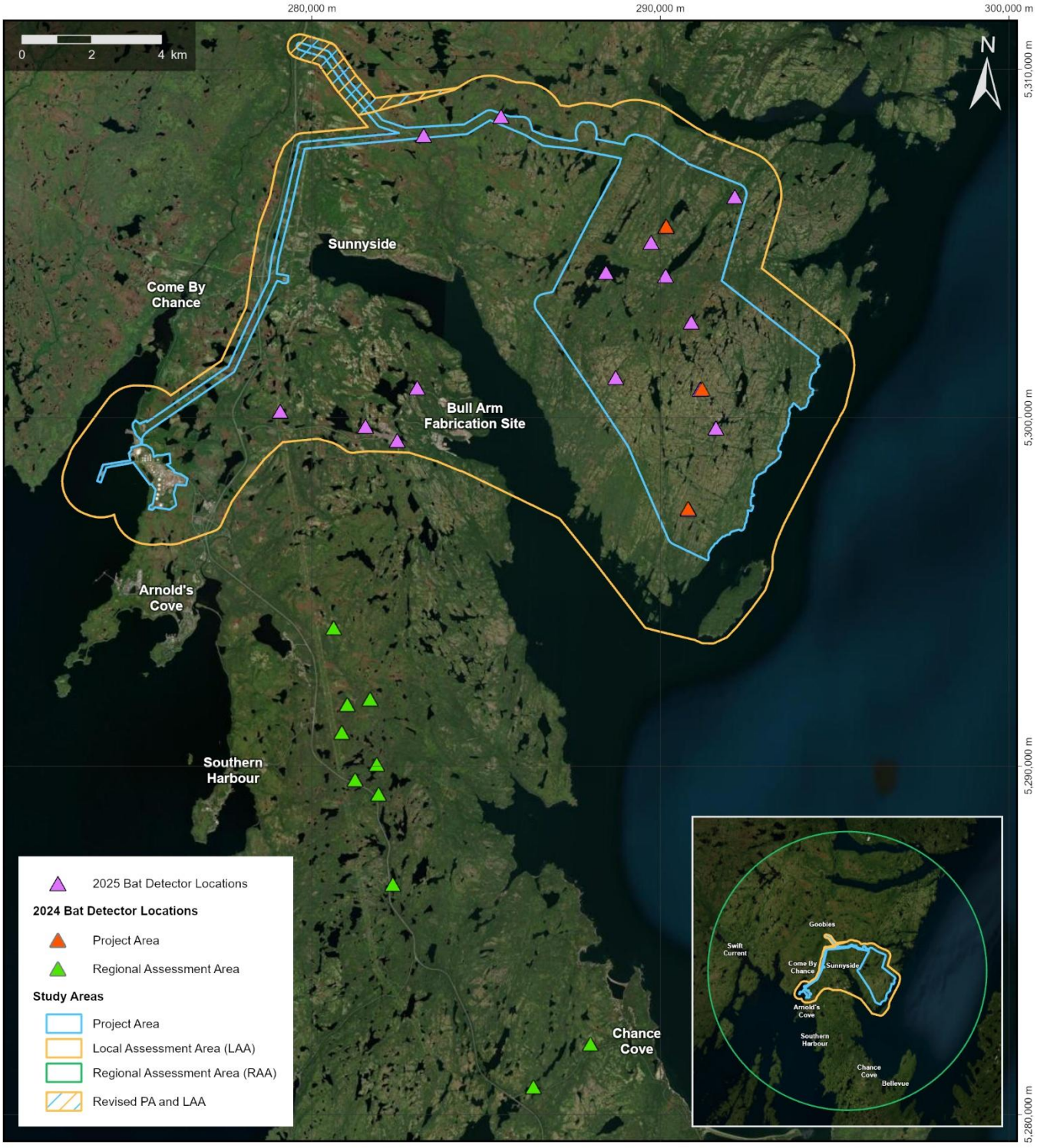
The Habitat Suitability Study informed additional monitoring by identifying ecological land cover types and landscape features within the PA that were most likely to support bat activity, including wetlands, riparian corridors, forested areas, forest edges, and linear features that may facilitate bat movement. These areas were prioritized for acoustic bat monitoring to ensure survey efforts were focused on habitats with higher predicted suitability for SAR bats. Results of the Habitat Suitability Study also illustrated where proposed turbine locations overlapped with, or were adjacent to, highly suitable bat habitat, facilitating identification of areas with elevated potential interaction risk. Further information can be found in Section 3.2.3 and Appendix D2 of the Registration.

The bat baseline data was used to guide turbine micro-siting by avoiding, where practicable, placement within or immediately adjacent to high-suitability habitats (e.g., wetlands, which are preferred foraging areas for *Myotis* spp.) and establishing buffers around sensitive areas.

In addition, the Habitat Suitability Study results, in combination with a wealth of site-specific acoustic survey data collected over two years of study (Figure EPR-030) and regional bat activity information, were used to identify turbines where targeted additional monitoring and/or mitigation may be required. To this end, an array of turbines with a higher relative risk have been identified for adaptive smart

curtailment (which integrates inputs such as wind speed, temperature, time of year, time of night, barometric pressure, and bat activity to inform when turbines should be curtailed). This information will be used to inform both placement and operational curtailment parameters that will be incorporated into design, construction and the operational phases of the project.

While quantitative bat mortality estimates are not available given the lack of data from Newfoundland and the incompatibility of data from other jurisdictions, the identification of turbines in the most suitable bat habitats provided a relative metric by which to establish which turbines may have a greater risk of bat mortality. In addition, as per the commitments outlined in Section 4.5.3, Table 4.5.3 of the Registration, a Post-construction Mortality Program will be established in consultation with NL DFAL-WD. North Atlantic is committed to an adaptive management approach wherein mitigation measures are adjusted as necessary to avoid or reduce the number of Project-related bat mortalities.



North Atlantic	FIGURE TITLE: Bat Detectors Deployed in the Project Area and Regional Assessment Area	NOTES:	PREPARED BY: J. Crocker	DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18	
			APPROVED BY: C. Collins 2026-03-18	
			CRS: WGS 1984 UTM Zone 22N	
			sem	

SEM MAP ID: 016-015-GIS-EPR-030-Rev0

Figure EPR-030 Bat detectors deployed in the PA and RAA

EPR-031 *Details on avifauna survey methodology described in the registration document, in particular:*

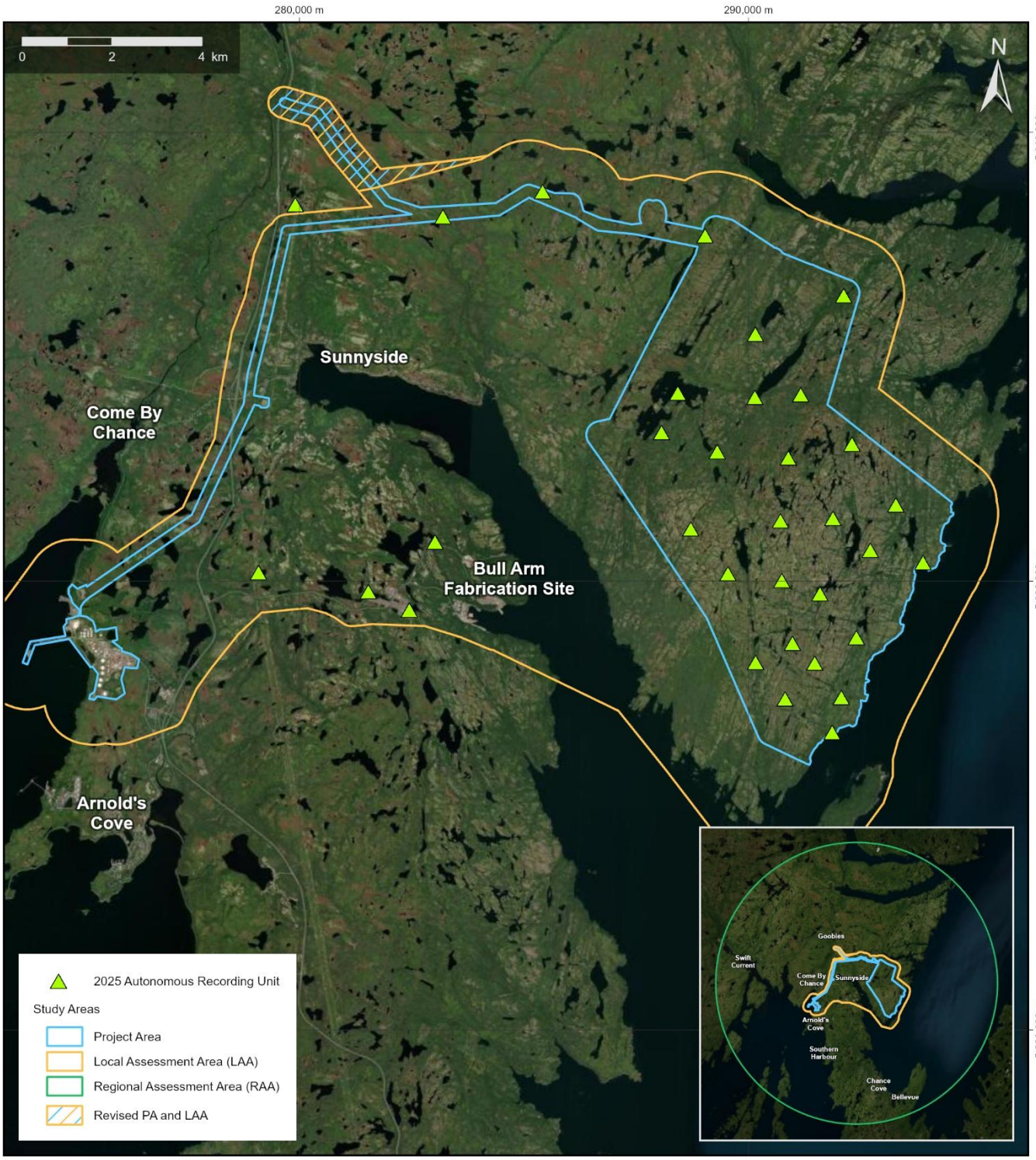
- *shorebird-specific surveys, passage migration surveys, and acoustic monitoring for night flight calls; and*

- *details and survey methods for species at risk in Project area, including, but not limited to CCDC data and updated information for all species at risk (SAR) and species of conservation concern (SOCC) for the Project;*

Shorebirds were surveyed using a combination of dedicated shorebird surveys and opportunistic observations conducted during broader waterbird and avifauna field programs. Survey effort focused on coastal environments, intertidal areas, beaches, estuaries, wetlands, and inland waterbodies within and adjacent to the PA, with particular emphasis on the Trinity Bay shoreline (on the Wind Farm side of the PA). Further details on survey methods can be found in Section 3.2.3 and Appendix D1 of the Registration. The Trinity Bay coast provides the most extensive and functionally important shorebird habitat in the local landscape, including intertidal foraging areas and sheltered coastal features that are used by shorebirds during migration and staging periods, making it the most relevant area for assessing potential effects.

Shorebird surveys were timed to coincide with key biological periods for shorebirds, including spring and fall migration as well as the breeding season for locally nesting species. Observations were conducted from shoreline vantage points and wetland edges using binoculars and spotting scopes, allowing for accurate identification, enumeration, and behavioural assessment of shorebirds using foraging and staging habitats. Survey locations were selected around the PA and LAA to maximize visibility of areas where shorebirds were most likely to concentrate and where potential overlap with turbine-related airspace or associated infrastructure could occur. Survey methods were non-intrusive and designed to minimize disturbance, with no use of call playback or active flushing.

As discussed in Section 3.2.3 and Appendix D1 of the Registration, during surveys, observers recorded species identity, abundance, behaviour (e.g., foraging, transiting), habitat type, and spatial use relative to shoreline features and waterbodies. When shorebirds were observed in flight, general flight height and direction were documented to inform understanding of movement patterns and potential interaction pathways. Shorebird observations were also recorded incidentally during other survey types, including waterbird surveys, seabird surveys, and avifauna point counts conducted near suitable habitat. In addition, autonomous recording units (ARUs) were deployed around the PA and LAA to support the detection of avifauna, including vocalizing shorebird species. A total of twelve ARUs were installed at strategically selected locations, including sites near the Trinity Bay shoreline (Figure EPR-031).



North Atlantic	FIGURE TITLE: Avifauna ARU Detectors Deployed in the Project Area and Local Assessment Area	NOTES:	PREPARED BY: J. Crocker	DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18	
			APPROVED BY: C. Collins 2026-03-18	
			CRS: WGS 1984 UTM Zone 22N	
			sem	

SEM MAP ID: 016-015-GIS-EPR-031-Rev0

Figure EPR-031 Avifauna ARU detectors deployed in the PA and RAA

While ARUs were not deployed specifically to target shorebirds, their continuous recording capability provided supplementary information on shorebird presence and seasonal use of the PA, particularly for species that vocalize during crepuscular or nocturnal periods. No nocturnal shorebird surveys or radar-based migration surveys were conducted. This approach was considered appropriate, and discussed with regulators, given that the Project is not located within the core of the Atlantic flyway and because the majority of shorebird migration through the region would occur at high altitudes well above turbine blade-swept zones. In addition, the consistently windy conditions characteristic of the Project's hilltop setting would substantially reduce the effectiveness of nocturnal acoustic monitoring and radar for detecting migrating shorebirds.

Collectively, these methods provided sufficient coverage to characterize shorebird species composition, seasonal presence, habitat use, and movement patterns within the PA and LAA, with particular emphasis on the Trinity Bay shoreline where the potential for interaction with Project infrastructure is greatest.

Avian Species at Risk (SAR) were addressed through an integrated survey program designed to characterize species presence, habitat use, seasonal timing, and flight behaviour across the PA and surrounding landscape. This included an Atlantic Canada Conservation Data Centre (AC CDC) data request, made for the entire PA with a 5 km buffer, which also included the LAA and part of the RAA. AC CDC results are presented in Section 3.2.3 and Appendix D1 of the Registration. Survey methods were selected based on species-specific ecology, expected detectability, and habitat availability, and included a combination of desktop review, targeted field surveys, ARUs, dedicated shoreline and seabird surveys, raptor sky scans, and opportunistic observations from both ground-based and helicopter-based platforms. Surveys were conducted across all biologically relevant seasonal windows, including spring migration and early breeding, breeding season, fall migration, and overwintering periods, to ensure that both resident and migratory SAR were adequately assessed. Habitat-informed site selection guided the placement of point counts, ARUs, and visual survey locations, with particular emphasis on habitats known to support SAR based on regional occurrence data. Flight height, direction, and behaviour were recorded whenever possible to inform the assessment of potential interactions with wind turbine infrastructure. All acoustic detections of SAR and Species of Conservation Concern (SCC) were manually reviewed by qualified biologists to confirm species identity and eliminate false positives. Radar-based migration surveys were not undertaken, as the Project is not located within the core of the Atlantic flyway, and because nocturnal flight calls would not be reliably detected in the consistently windy hilltop environment, particularly given that most migratory birds pass through the region at altitudes well above turbine blade-swept zones. Survey methods were non-intrusive and avoided nest disturbance or call playback, consistent with accepted regulatory best practices for SAR. Further information can be retrieved from Section 3.2.3 and Appendix D1 of the Registration. Details about the surveys undertaken for each species are provided below.

Short-eared Owl (*Asio flammeus*), listed as Threatened under the **Newfoundland and Labrador Endangered Species Act** (NL ESA) and as Special Concern under SARA, was addressed through a combination of targeted visual surveys, incidental observations, and acoustic monitoring. Survey effort focused on open barrens, wetlands, and coastal tundra-like habitats known to support foraging and breeding by this species. Observations were recorded during point counts, raptor sky scans, and helicopter transits, with additional emphasis on crepuscular and nocturnal periods through ARU deployment. Acoustic monitoring was programmed to capture periods of peak owl activity, and detections were interpreted in the context of habitat use, seasonal timing, and observed flight behaviour to distinguish breeding, foraging, and migratory use of the PA. Further details are provided in Section 3.2.3 and Appendix D1 of the Registration.

The Red Crossbill (*Loxia curvirostra percna*), listed as Threatened under both provincial and federal legislation, was primarily addressed using acoustic monitoring supplemented by breeding bird point counts. ARUs were strategically placed in mature coniferous forest and barrens with scattered spruce to capture vocalizations of this highly mobile and irruptive subspecies. All Red Crossbill detections from ARUs were manually verified to confirm subspecies identity and avoid false positives. Visual observations recorded during breeding surveys documented flock size, behaviour, and habitat associations to assess potential breeding or foraging use of the PA and LAA. Further details are provided in Section 3.2.3 and Appendix D1 of the Registration.

Evening Grosbeak (*Hesperiphona vespertina*), listed as Vulnerable under NL ESA and as Special Concern under SARA, was addressed through breeding bird point counts, incidental observations, and acoustic monitoring. ARUs were particularly important for detecting this species during periods of low abundance or irruptive movement when visual encounters are uncommon. Manual verification of acoustic detections was undertaken to ensure accuracy, and observations focused on seasonal presence, flocking behaviour, and forest habitat use rather than targeted nest searches, reflecting the low expected breeding density within the PA. Further details are provided in Section 3.2.3 and Appendix D1 of the Registration.

Olive-sided Flycatcher (*Contopus cooperi*) is listed as Threatened under SARA and Threatened provincially in Newfoundland and Labrador. Surveys for this species included point counts at dawn and dusk during the breeding season, which are standard for detecting foliage-gleaning flycatchers, and ARUs to capture vocalizations over extended periods. While no individuals were recorded in the PA or LAA, these methods are considered sufficient to detect Olive-sided Flycatcher if present, given their distinctive calls and preference for open forest edges. Further details are provided in Section 3.2.3 and Appendix D1 of the Registration.

Gray-cheeked Thrush (*Catharus minimus*) is listed as Special Concern under SARA and Special Concern provincially. Detection efforts included breeding bird point counts, targeted transect observations, and 12

ARUs deployed for the migratory periods and throughout the breeding season. Further details are provided in Section 3.2.3 and Appendix D1 of the Registration.

Barn Swallow (*Hirundo rustica*) and Bank Swallow (*Riparia riparia*), both listed as Threatened under SARA and as Vulnerable or Threatened under NL ESA, were addressed through visual observations during point counts, incidental sightings, and focused shoreline and waterbody surveys. Survey effort emphasized identifying potential nesting and foraging habitat, including exposed banks, open landscapes, and anthropogenic structures, although suitable nesting substrates were largely absent from the PA. When observed, flight height, direction, and behaviour were recorded to distinguish local foraging activity from transiting movements through the area. Further details are provided in Section 3.2.3 and Appendix D1 of the Registration.

Common Nighthawk (*Chordeiles minor*), listed as Vulnerable under NL ESA and as Special Concern under SARA, was addressed through crepuscular and evening acoustic monitoring supplemented by incidental visual observations. ARUs were programmed to capture dusk and dawn periods when nighthawk activity is highest. Potential detections were manually reviewed to confirm species identity, and observations focused on flight behaviour and use of open barrens and wetland-adjacent habitats within and near the PA. Further details are provided in Section 3.2.3 and Appendix D1 of the Registration.

Shorebird SAR, including Red Knot (*Calidris canutus rufa*), Lesser Yellowlegs (*Tringa flavipes*), Hudsonian Godwit (*Limosa haemastica*), and Red-necked Phalarope (*Phalaropus lobatus*), were addressed through dedicated shorebird surveys conducted around Trinity Bay and other coastal and wetland habitats, as well as opportunistic observations during waterbird surveys. Survey effort focused on identifying staging, foraging, and resting habitat use rather than nocturnal migration. Radar surveys were not conducted due to the Project's location outside the central Atlantic flyway and the limited effectiveness of radar and nocturnal acoustic monitoring in the high-wind hilltop environment, particularly given that most shorebird migration occurs at altitudes well above the Project's infrastructure. Further details are provided in Section 3.2.3 and Appendix D1 of the Registration.

Seabird SAR, including Leach's Storm-Petrel (*Hydrobates leucorhous*), were addressed through dedicated coastal seabird surveys using high-quality optics from shoreline vantage points with broad fields of view. Surveys targeted appropriate coastal habitats such as cliffs, beaches, and nearshore waters and were conducted during suitable weather conditions. Although coastal habitat represents a very small proportion of the PA and no turbines are proposed near the shoreline, survey effort along the coast was intentionally focused upon due to the known attraction of seabirds, particularly Leach's Storm-Petrel, to artificial lighting. Observations focused on flight behaviour, direction, and proximity to shore to inform assessment of potential interaction pathways.

Peregrine Falcon (*Falco peregrinus anatum/tundrius*), known to nest in insular Newfoundland as of 2018, was addressed through raptor sky scans, incidental helicopter observations, and detections during point count surveys for forest-associated species. Elevated vantage points were selected to maximize visibility of soaring and migrating raptors, and observations recorded flight height, direction, and behaviour to differentiate foraging activity from migratory movements. No active nest searches were undertaken unless incidental evidence of nesting or repeated territorial behaviour was observed (which didn't occur). Further details are provided in Section 3.2.3 and Appendix D1 of the Registration.

EPR-032 *Verification of detected species of Carex tonsa (Shaved Sedge), Eriophoroum gracile (Slender Cottongrass) and Polypodium virginianum (Rock Polypody) to inform an Environmental Effects Monitoring Plan (EEMP); and*

To support the Environmental Effects Monitoring Plan (EEMP), verification of potentially occurring sensitive plant species was initiated for *Carex tonsa* (Shaved Sedge, Threatened provincially and federally), *Eriophorum gracile* (Slender Cottongrass, Special Concern provincially and federally), and *Polypodium virginianum* (Rock Polypody, S2S3). Preliminary photographic documentation was reviewed by provincial experts to assess the likelihood of species presence. Mitigation measures, including avoidance or minimization of habitat disturbance, will be applied consistently for both confirmed and presumed occurrences of the following species.

Carex tonsa: Photos provided during the initial survey did not capture diagnostic features required for definitive identification, specifically the presence of flower heads. Observed leaf morphology and habitat conditions differed from documented Newfoundland occurrences (typically sandy soils, not barren gravel/lichen substrates). Definitive identification will require targeted field surveys during peak flowering (late June) to document flower heads within the leaf bases. These surveys will include close-up diagnostic photography and specimens (if required).

Eriophorum gracile: Identification from preliminary photos was inconclusive. Features such as the uppermost leaf sheath and blade could not be reliably assessed, and the species has not been previously recorded east of Grand Falls. Follow-up surveys in the next growing season will focus on capturing high-resolution images of the upper leaf sheath and blade characteristics to confirm or rule out the occurrence. Specimens will be collected if necessary.

Polypodium virginianum: The two Polypodium species in Newfoundland are morphologically very similar and distinguishable only by microscope. Given this limitation, observations will be recorded at the genus level (Polypodium sp.). Collection of a specimen was deemed optional by the Province; mitigation measures would apply equally to either species. Occurrences will be incorporated into the EEMP to ensure appropriate monitoring and mitigation.

EPR-033 *Details on avifauna, including Leach's Storm-petrel and Bank Swallow (listed under the provincial Endangered Species Act (ESA) and Species at Risk Act (SARA);*

Leach's Storm-petrel (*Hydrobates leucorhous*) is listed as Threatened under NL ESA, but not yet under SARA. Avian survey methods in the PA included diurnal point counts, incidental observations, and passive acoustic monitoring using ARUs. Leach's Storm-petrel is highly pelagic with offshore island nesting colonies (none of which are in proximity to the PA), so it was expected that detection of this SAR was unlikely. Artificial lights associated with wind turbines, meteorological towers, and other infrastructure can potentially attract individuals, particularly during periods of low visibility or inclement weather, increasing the risk of collisions. Although no Leach's Storm-petrels were detected during human or ARU surveys, the potential for attraction remains, given the species' documented susceptibility to artificial lighting in offshore and coastal areas. To minimize this risk, lighting on turbines and ancillary infrastructure will be limited where operationally feasible and designed to reduce light spill, using downward-directed, low-intensity, or shielded fixtures. Post-construction monitoring during migration periods will be conducted to detect any attraction or mortality events, with adaptive management strategies for curtailment of turbines. These measures will be incorporated into the Post-construction Mortality Program to ensure potential impacts from artificial lighting are minimized.

Bank Swallow is listed as Threatened provincially and federally. Survey methods for Bank Swallow included point counts, shoreline and riparian habitat assessments, incidental observations during fieldwork, and passive acoustic monitoring using ARUs. No active colonies or nesting individuals were observed within the PA, and no suitable banks were observed that would be conducive to Bank Swallow nesting. This combination of methods provided confidence that Bank Swallow is not present within the Wind Farm area or the PA in general.

Detailed information on avian SAR, including proposed mitigation measures, may be found in Sections 3.2.3, 4.2.3, 4.5.3, and Appendix D1 of the Registration. Additional details are provided in EPR-031.

EPR-034 *Identification of all land tenure within the Project area, including the T'Railway Provincial Park, in relation to Project components;*

Land tenure within the PA is discussed in Section 3.1.4.2 of the Registration. Crown land titles within the PA are distributed throughout the Project footprint, as illustrated in Figure 3.1.4-3 of the Registration. More than 30 parcels of tenured land, including grants, licences, leases, transfers, permissions, and several applications, are intersected by the PA, as summarized in Table 3.1.4-3 of the Registration.

The T'Railway Provincial Park is identified under the **Provincial Parks Act** in Table 3.1.4-1 of the Registration and is shown on Figure 3.1.4-1 (Sunnyside and Come By Chance zoning map). Interaction between Project infrastructure and the T'Railway Provincial Park is limited to a single crossing where the

proposed transmission line intersects the T'Railway corridor, as illustrated in Figure EPR-036. Tree clearing will be required along the estimated 63 m Right of Way (ROW) corridor for the transmission line to allow for equipment access and installation. Tree clearing will be required up the side of the T'Railway path. Any disturbance to the T'Railway path due to equipment operation will be rehabilitated through grading and reseeding. It is anticipated that a temporary T'Railway closure may be required during the installation and commissioning of the transmission line at the location where the T'Railway and transmission line intersect for public safety. A T'railway Provincial Park Permit Application will be obtained prior to the start of work from Parks NL to ensure proper procedures are followed. This interaction is also addressed in Section 3.1.4.4 (Tourism and Recreation), Table 3.1.4-5 of the Registration, which identifies the Newfoundland and Labrador Department of Tourism, Culture, Arts and Recreation, Parks Division and the Newfoundland T'Railway Council as referral agencies.

North Atlantic	FIGURE TITLE: **T'Railway Provincial Park in Relation to Project Components**	NOTES: The location of proposed project infrastructure is considered preliminary and is subject to change.	PREPARED BY: J. Crocker; DATE: 2026-03-17
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-17
			APPROVED BY: C. Collins 2026-03-17
			CRS: WGS 1984 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-034-Rev0

Figure EPR-034 T'Railway Provincial Park in relation to Project components

EPR-035 *Identification of agricultural operations within and near the Project area;*

Agricultural operations within and near the PA were identified and assessed as part of the land and resource use characterization presented in Section 3.1.4.3 of the Registration. Mapping of agricultural land use is provided in Figure 3.1.4-5 (Natural Resource Use) of the Registration.

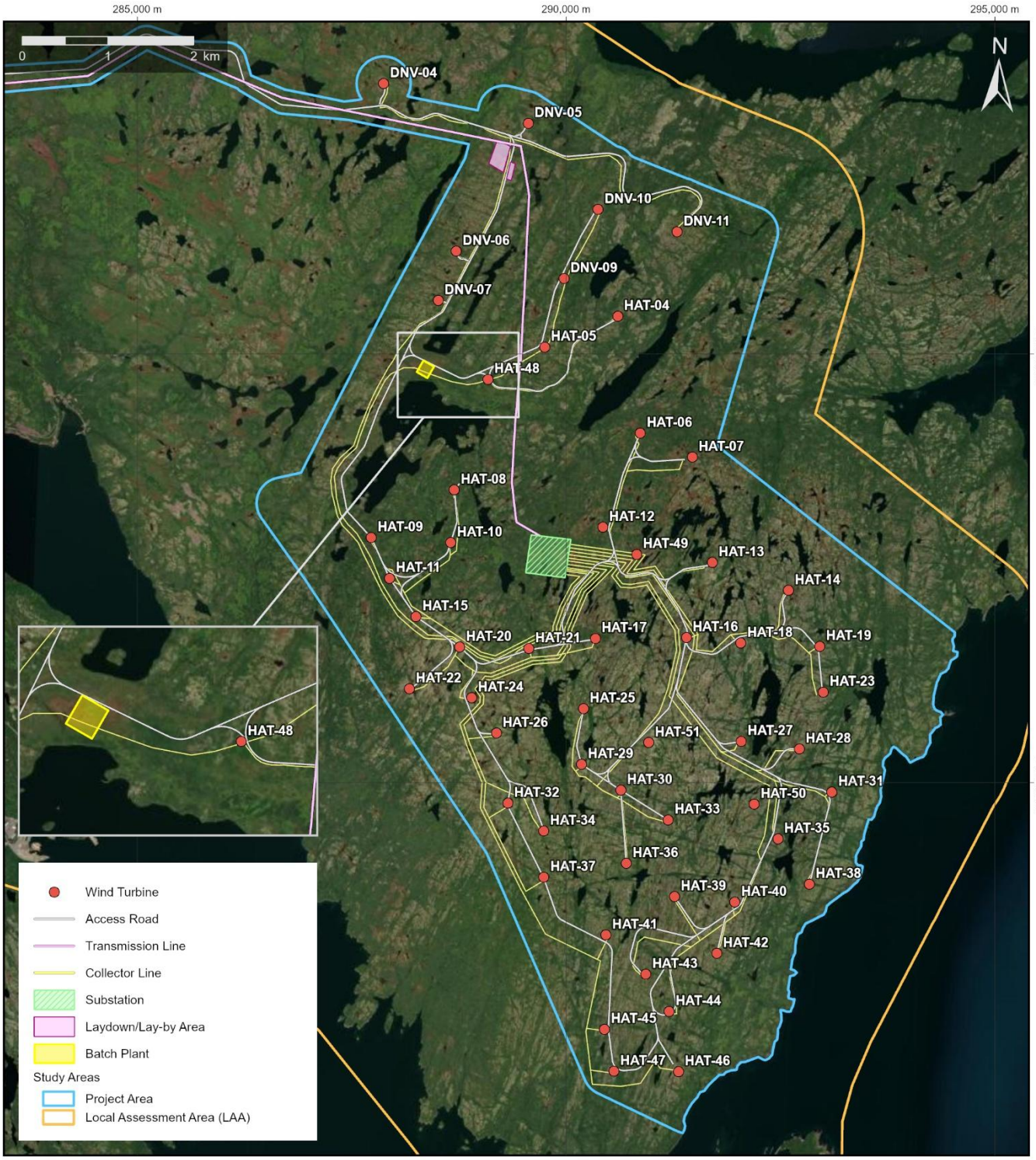
Based on the results of this assessment, no agricultural operations or agricultural lands are located within the PA. As such, the Project does not intersect with, or directly affect, any existing agricultural activities.

EPR-036 *Locations for concrete batch plants, if required for the Project;*

A concrete batch plant will be required to support construction of the Wind Farm, specifically for facility foundations, wind turbine foundations, and associated structures such as cable trench encasements, as described in Section 2.3.3.5 of the Registration.

As outlined in Section 2.3.4.7 of the Registration, the Project will utilize a wet batch plant, where aggregate, cement, water, and admixtures will be mixed at the plant prior to transport to individual turbine foundation locations. The batch plant is proposed to be located within the Wind Farm area to minimize haul distances, reduce traffic volumes, and improve construction efficiency.

The proposed batch plant location is situated on the western side of the Wind Farm area, just north of Lady Cove Pond, as illustrated in Figure EPR-036, with water sourcing to come from Lady Cove Pond. The exact footprint and layout of the batch plant and associated pipelines will be developed during FEED and final construction planning.



North Atlantic	FIGURE TITLE: **Wind Farm Concrete Batch Plant**	NOTES: The location of proposed project infrastructure is considered preliminary and is subject to change.	PREPARED BY: C. Burke; DATE: 2026-03-17
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-17
			APPROVED BY: C. Collins 2026-03-17
			CRS: WGS 1984 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-036-Rev0

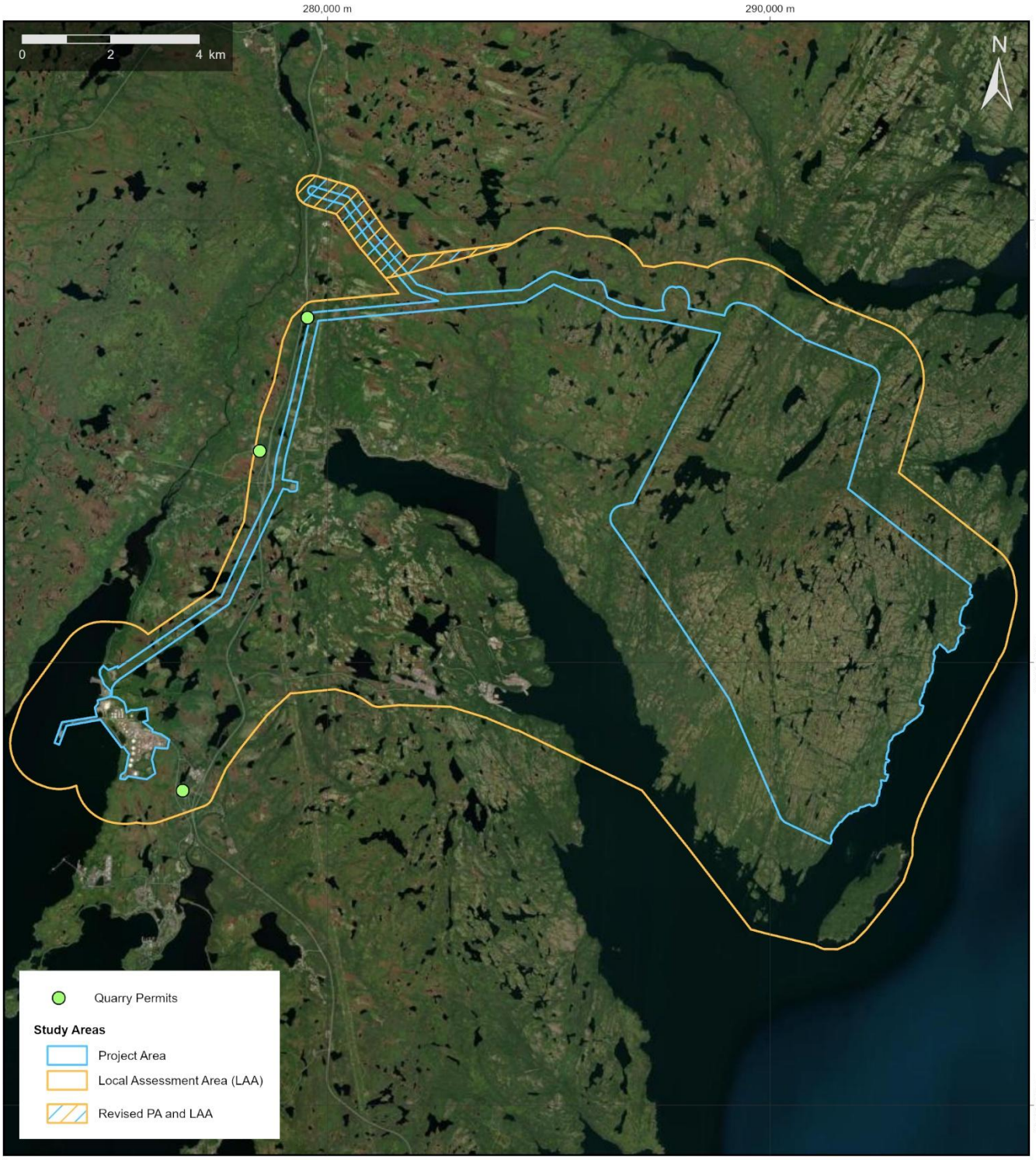
Figure EPR-036 Wind Farm concrete batch plant

EPR-037 *Location of new or reactivated quarry sites, including boundaries, that may be needed to supply materials to the project;*

Three existing active quarry sites within the LAA have been identified and mapped in Figure EPR-037A. These existing quarries may be used to supply materials required for Project development. No new reactivated quarry locations have been identified at this time. Should an historical quarry require reactivation or should a new quarry be required, North Atlantic will coordinate with the appropriate regulatory authorities and quarry operators to obtain the necessary approvals. Decisions regarding quarry sourcing will be informed by commercial discussions between North Atlantic, quarry owners, and the EPCM contractor.

At the time of the Registration, North Atlantic committed to exploring candidate quarry areas within approximately 10 km of the Wind Farm to minimize environmental interactions, reduce haul distances, and streamline construction schedules (Section 2.3.4.11 of the Registration). This proximity was intended to reduce traffic impacts, fuel consumption, emissions, and travel time and to ensure accessible haul routes. Additional considerations included preferentially reopening inactive or expanding existing quarries to minimize new disturbance, ensuring that required engineering grade aggregate types are available, and ensuring compliance with the **NL Quarry Materials Act** and Environmental Assessment Regulations for any site exceeding regulatory thresholds.

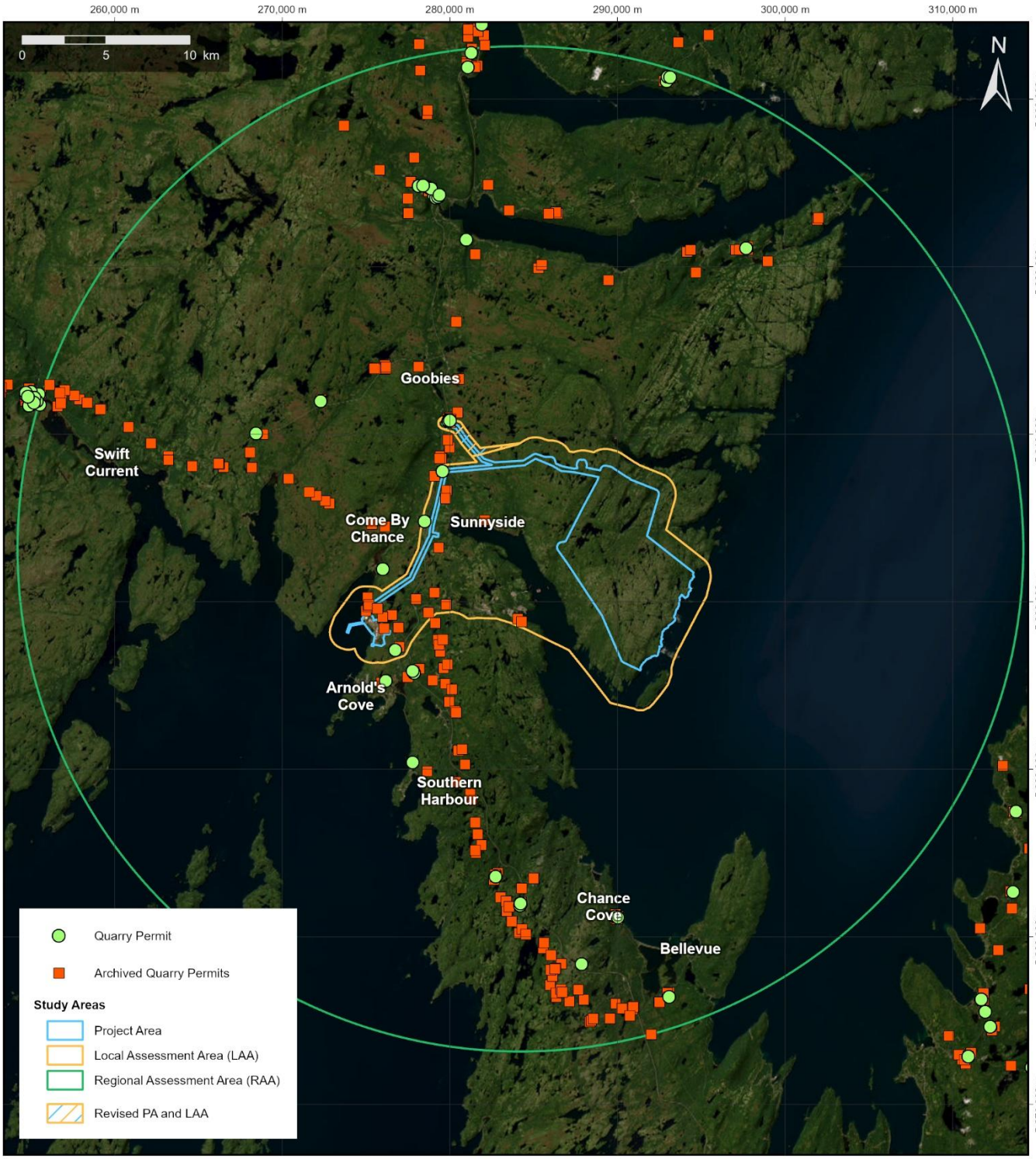
In the EPR, North Atlantic has expanded the spatial analysis beyond the originally proposed 10 km radius and has mapped quarry considerations to the full boundaries of the RAA (see Figure EPR-037B). This approach provides regulators with up-to-date information on all existing active and archived quarries in the broader region and ensures quarry sourcing decisions are aligned with environmental, logistical, and regulatory constraints.



North Atlantic	FIGURE TITLE: Quarry Permits within the Local Assessment Area	NOTES: Quarry permit data retrieved from the NL Geoscience Atlas. Claims are up to date as of March 10, 2026.	PREPARED BY: J. Crocker	DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18	
			APPROVED BY: C. Collins 2026-03-18	
			CRS: NAD 1983 UTM Zone 22N	
			sem	

SEM MAP ID: 016-015-GIS-EPR-037A-Rev0

Figure EPR-037A Quarry permits within the Local Assessment Area



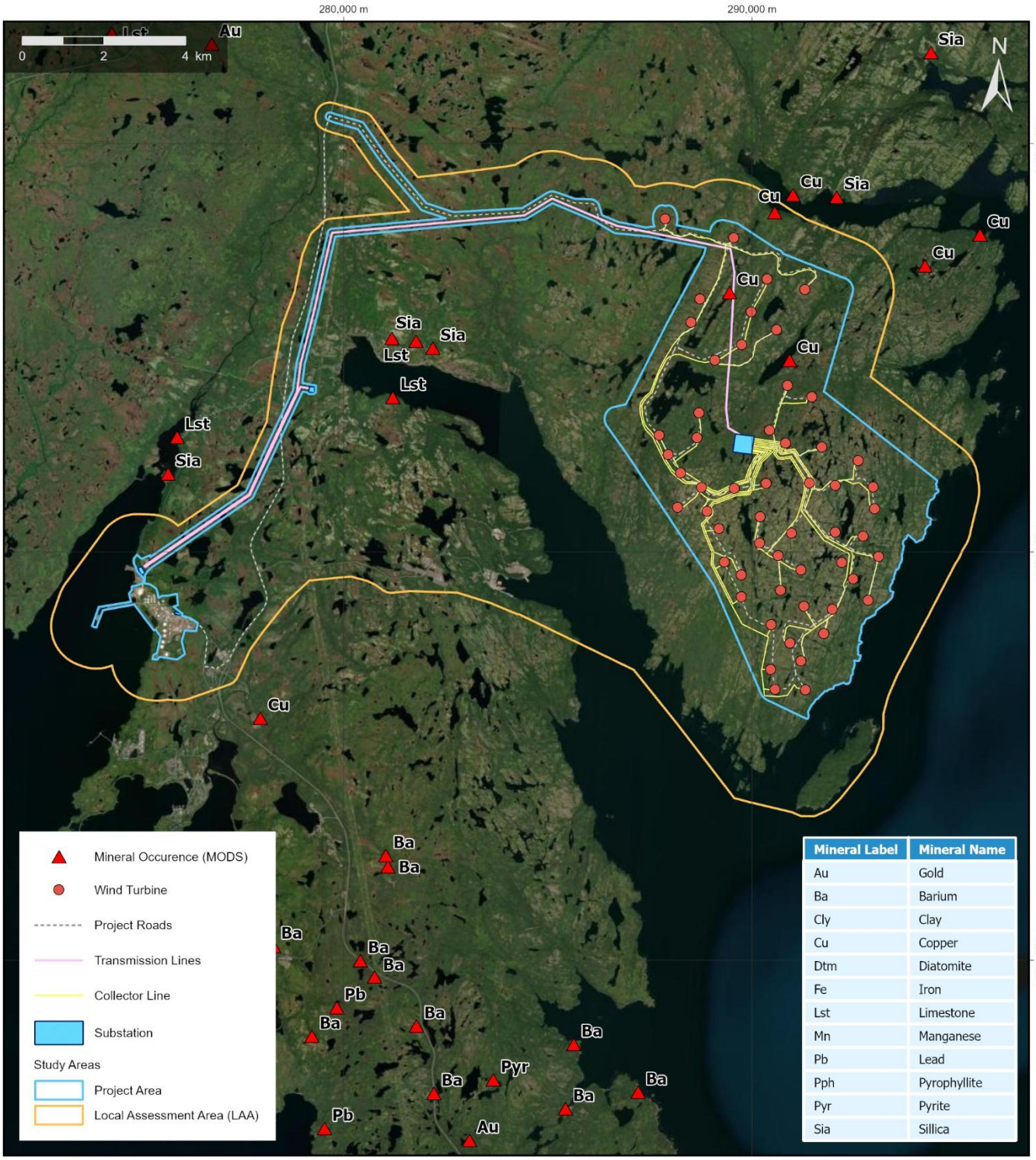
North Atlantic	FIGURE TITLE: **Current and Archived Quarry Permits within the Regional Assessment Area**	NOTES: Quarry permit data retrieved from the NL Geoscience Atlas. Claims are up to date as of February 5, 2026.	PREPARED BY: J. Crocker; DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18
			APPROVED BY: C. Collins 2026-03-18
			CRS: NAD 1983 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-037B-Rev0

Figure EPR-037B Active and archived quarry permits in the RAA

EPR-038 *Overlap of planned Project infrastructure, buffer zones, and land tenure with areas corresponding to mineral licences, recognized mineral occurrences and permitted quarry sites;*

The overlap of planned Project infrastructure and land tenure with areas corresponding to mineral licences and permitted quarry sites were discussed in Section 3.1.4-4 of the Registration and quarry permits were mapped in Figure 3.1.4-5. As ownership of mineral licences and quarry permits are subject to change at any time; accordingly, the relevant datasets have been updated to reflect the most current information for this Report. Current information on the locations of existing active quarries is discussed and mapped in EPR-037A, and Mineral Occurrence Data System (MODS) points within the LAA are provided in Figure EPR-038A.



North Atlantic	FIGURE TITLE: **Mineral Occurrence Locations Within Local Assessment Area**	NOTES: MODS (Mineral Occurrence Data System) data retrieved from the NL Geoscience Atlas. Mineral data up to date as of February 5, 2026.	PREPARED BY: J. Crocker	DATE: 2026-03-17
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-17	
			APPROVED BY: C. Collins 2026-03-17	
			CRS: NAD 1983 UTM Zone 22N	
			sem	

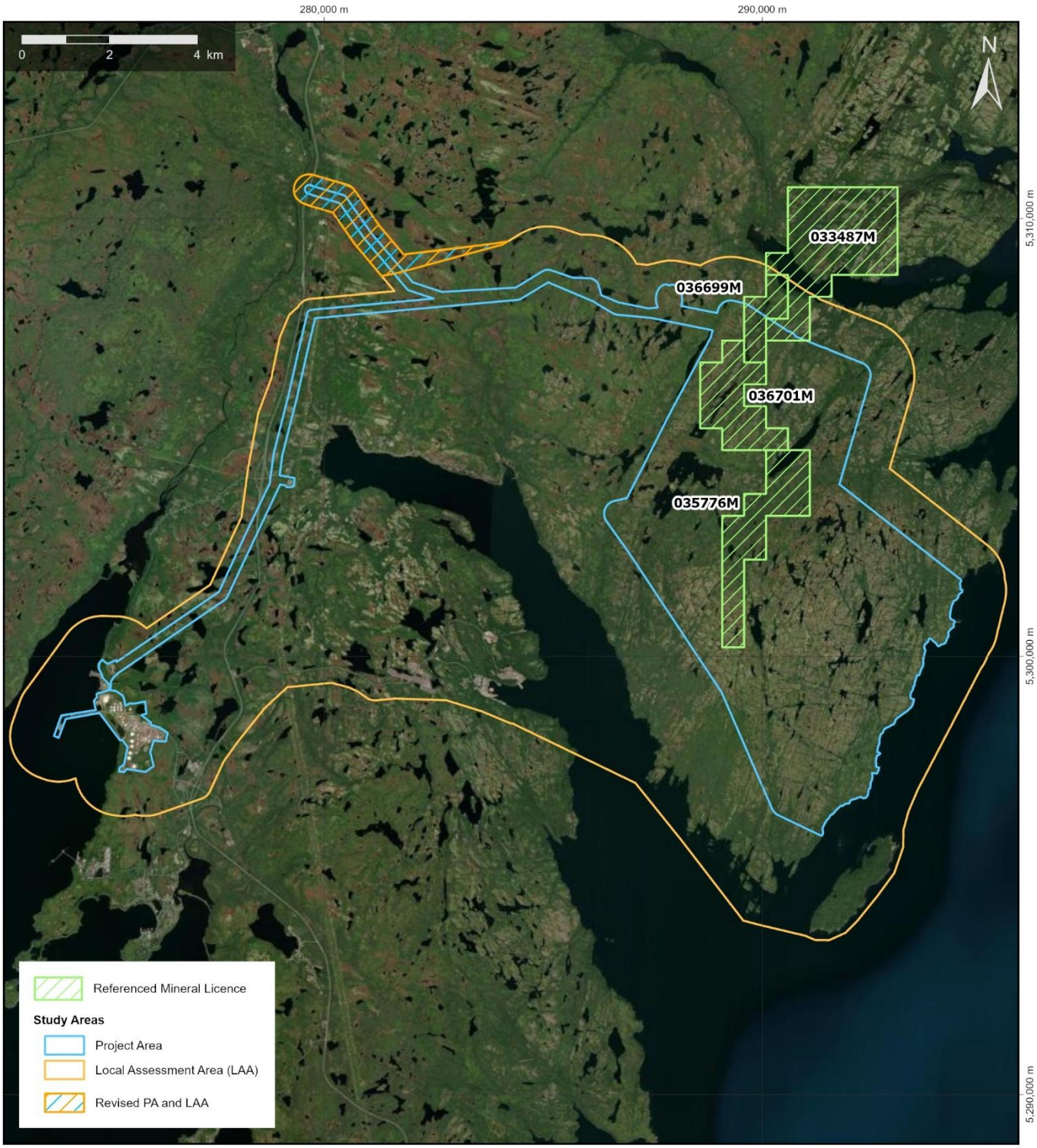
SEM MAP ID: 016-015-GIS-EPR-038A-Rev0

Figure EPR-038A Mineral occurrence locations within the LAA

Mineral licences identified in the Registration are mapped in Figure EPR-038B and have since been updated in Figure EPR-038C. All licences are summarized in Table EPR-038A, which identifies whether each licence was active at the time of the Registration, this Report, or both, along with their current status, issue dates, new applications, and other relevant details.

Table EPR-038A Chronological Active and Historical Mineral Licences in Relation to Project Components

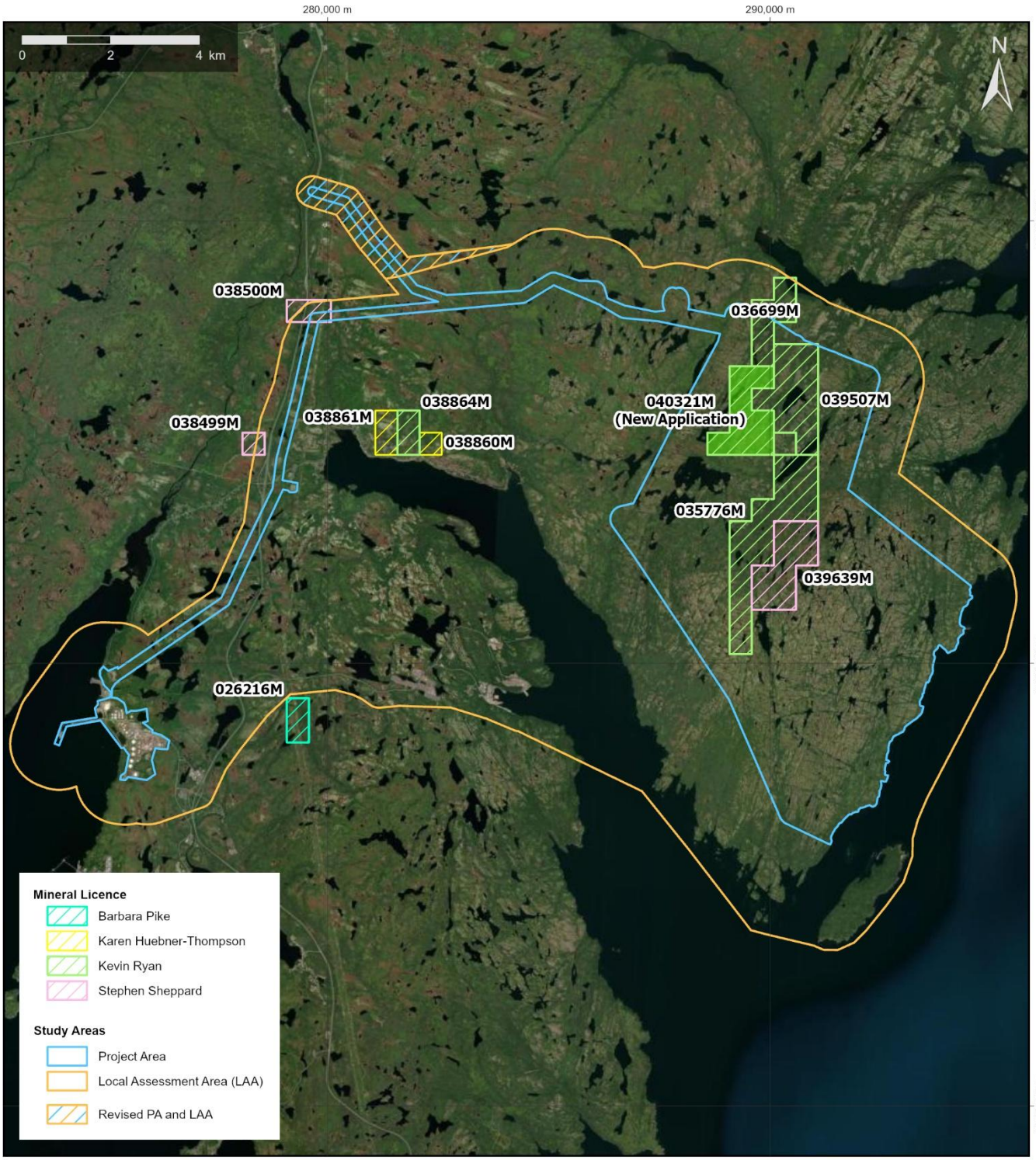
Described in EA/EPR	Project Area	Owner	Licenser Number	Status	Number of Claims	Issued Date	Renewal Date
EPR	LAA/PA	Barbara Pike	026216M	Issued	2	2018-07-23	2028-07-24
EA	PA/LAA	James Rogers	033487M	Cancelled	26	2021-10-17	2026-10-17
EA/EPR	PA	Kevin Ryan	035776M	Issued	15	2023-04-05	2028-04-05
EA/EPR	LAA/PA	Kevin Ryan	036699M	Issued	5	2023-09-28	2025-10-28
EA	PA	Shawn Duquet	036701M	Cancelled	12	2023-09-29	2028-10-29
EA	PA	Stephen Sheppard	037647M	Cancelled	8	2024-04-13	2029-04-13
Wind Hydrogen Hub Land Reserve established for North Atlantic on 2024-07-23							
EPR	LAA/PA	Stephen Sheppard	038499M	Issued	1	2024-10-12	2029-11-11
EPR	LAA/PA	Stephen Sheppard	038500M	Issued	2	2024-11-11	2029-11-11
EPR	LAA	Karen Huebner-Thompson	038860M	Issued	1	2025-03-06	2030-03-06
EPR	LAA	Kevin Ryan	038864M	Issued	2	2025-03-06	2030-03-06
EPR	LAA	Karen Huebner-Thompson	038861M	Issued	2	2025-06-06	2030-03-06
EPR	LAA	Kevin Ryan	039507M	Issued	10	2025-08-20	2030-08-20
EPR	PA	Stephen Sheppard	039639M	Issued	8	2025-09-25	2030-09-25
EPR	PA	Kevin Ryan	040321M	New Application	8	Not Issued (Date of request 2026-02-17)	TBD



North Atlantic	FIGURE TITLE: **Mineral Licence Boundaries Referenced in the Registration**	NOTES: Licence data retrieved from the NL Geoscience Atlas. Licences are up to date as of March 10, 2026.	PREPARED BY: J. Crocker; DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18
			APPROVED BY: C. Collins 2026-03-18
			CRS: NAD 1983 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-038-Rev0

Figure EPR-038B Mineral licence boundaries referenced in the Registration



North Atlantic	FIGURE TITLE: **Updated Mineral Licence Holdings in the Project Area and Local Assessment Area**	NOTES: Licence data retrieved from the NL Geoscience Atlas. Claims are up to date as of March 10, 2026. Highlighted area represents most recent Licence from Kevin Ryan.	PREPARED BY: J. Crocker; DATE: 2026-03-19
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-19
			APPROVED BY: C. Collins 2026-03-19
			CRS: NAD 1983 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-038D-Rev0

Figure EPR-038C Updated mineral licence holdings in the Project Area and LAA

North Atlantic is committed to working with Mineral License holders and will engage actively in understanding their work requirements in the shared areas. The Project will require the establishment of buffer distances that may restrict certain activities related to mineral exploration. These buffers (**Table EPR-038B**) will be implemented to maintain the structural integrity of Project infrastructure and to safeguard Project personnel, Mineral License holders, and other applicable parties. North Atlantic will consult with all applicable parties, including quarry permit and mineral licence holders, to ensure a clear understanding of access requirements and potential buffer restrictions. Although North Atlantic will hold a Crown Lands Licence granting surface rights within the PA, access to the lands for other users will continue to be permitted on a case-by-case basis.

Table EPR-038B Project infrastructure activity buffer zones

Project Component	Activity	Buffer
Roads	Travel/work in winter during Ice Throw risk timing (approximately 33 days/year)	421.5 m radius from Turbine
Wind Farm - Turbines	No activity	Within 20 m concrete foundation
	Limitations on activity (coordination with North Atlantic required)	20 m safety factor outside footprint of foundation
	Blasting/Explosives (quarries)	50 to 100 m
	Permitted Exploration Activities (drilling)	>40 m dependent on extent of drilling
	Permitted Exploration Activities (prospecting on mineral licences)	>20 m O&M dependent on safety factor
	Travel/work in winter during Ice Throw risk timing (approximately 33 days/year)	421.5 m radius from Turbine
Transmission Lines	Blasting/Explosives (quarries)	50 to 100 m
	Permitted Exploration Activities (drilling)	20 m outside of structural components
	Permitted Exploration Activities (prospecting on mineral licences)	No restrictions

EPR-039 *Details regarding provincial roadways and traffic management including, but not limited to:*

i. proposed access locations, either permanent or temporary, to any provincially owned roadway (access must comply with the Department of Transportation & Infrastructure (TI) Access Policy and emphasis should be on seeking access from secondary roads);
ii. use of the provincial road network for the transportation of materials, equipment, turbine components, and other materials especially as it relates to overweight/dimension loads;
iii. identification of catchment areas where existing drainage patterns could be altered and affect existing drainage infrastructure along provincial roadways;
iv. identification of planned utility corridors where crossing of a provincially owned roadway is required;
v. proximity of wind turbine installations to provincial roadways;

i) The Wind Farm access road will be designed in accordance with the Newfoundland and Labrador Policy for Highway Access Management. For more information on the Wind farm access road design considerations, see Section 2.3 of Appendix 3. The Highway Access Management Policy provides the framework for reviewing and approving access to provincially maintained roads in NL. A Highway Access Management Permit is required for the construction of the new Wind Farm access to the TCH, a provincially owned roadway. The permit application includes the description of the location of the proposed access, including route number, road name, community, and proximity to known landmarks. The proposed Wind Farm access road will connect to the TCH and be located northeast of Come By Chance, approximately 2 km north of the Come By Chance Weigh Station and 4 km south of the TCH and Provincial Highway 210 intersection.

Refer to Appendix 1 for details on the revised PA and LAA desktop assessment based on the new intersection. The new intersection for the Wind Farm will be designed according to the Geometric Design Guide for Canadian Roads 2017 (GDG) published by the Transportation Association of Canada (TAC) and the regulatory standards for the province of Newfoundland and Labrador. The GDG will be used to design road elements in the Construction Phase and in the O&M Phase.

ii) The different activities during the Construction Phase (Wind Farm access road construction and wind turbine mounting) will increase traffic on the TCH. For more information on the traffic plan for the Construction Phase, see Section 2.4 of Appendix 3. The vehicles transporting staff, equipment, parts and heavy machinery will all contribute to additional traffic on the highway. The Bull Arm port will be the main location for receiving Wind Farm components. All oversized and overweight vehicles planned to be used for the Wind Farm construction will travel along the TCH from the Bull Arm site to the Wind Farm access road. There are no height or width restrictions on the TCH between the Bull Arm intersection and the proposed Wind Farm access road. The characteristics of the transport vehicles used for the Project will

be reviewed to determine if a Special Permit is required. Other permits will be required for slow moving vehicles or for an over mass mobile crane.

iii) The detailed engineering design for the access road will identify potential catchment areas where existing drainage patterns could be altered and affect existing drainage infrastructure. This assessment will form part of the design scope. Once the detailed engineering design is completed, it will be shared with NL DTI and other regulatory bodies for consideration.

iv) The transmission line is expected to cross above the TCH at a distance of 980 m south of the Come By Chance interchange as shown in Figure EPR-011. Once North Atlantic has a detailed construction plan for the transmission line, location of where it will cross the TCH will be shared with the NL DTI and other relevant regulatory bodies for consideration.

v) The proposed Wind Farm is situated at approximately 10 km from the provincial TCH and will therefore not result in any driver distraction during the Construction Phase. North Atlantic will implement appropriate measures to minimize public driver distraction during the transport of oversized and overweight components to the PA (see EPR-121).

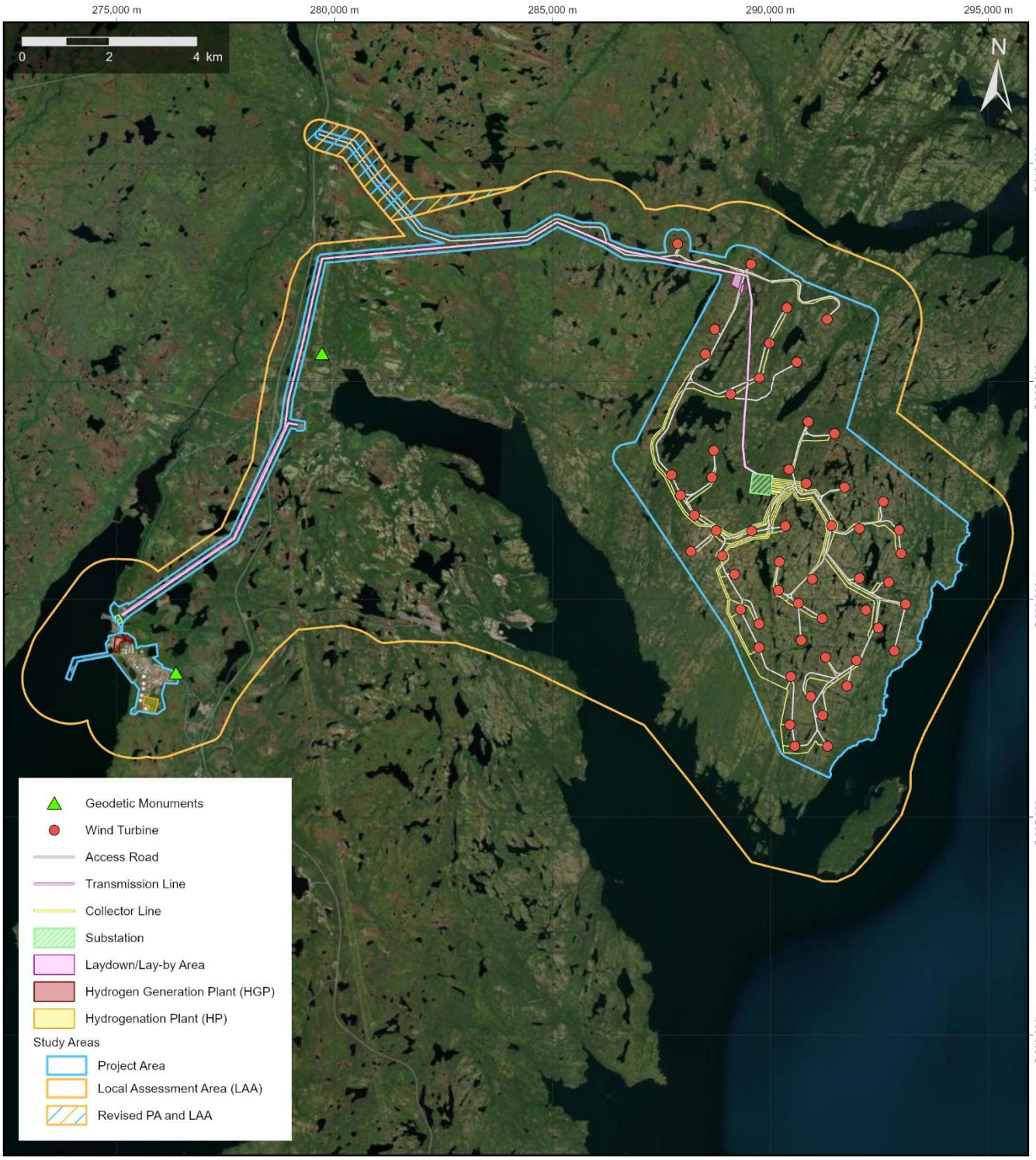
EPR-040 *Identification of any proposed development within the 15-metre shoreline reservation and how the proposed development will adhere to regulations in Section 7 of the Lands Act;*

There are no proposed developments within 15 m shoreline reservation. Final infrastructure locations, including any components potentially near waterbodies, will be confirmed during completion of the FEED. Should any Project component ultimately be proposed within the 15 m shoreline reservation, North Atlantic will comply with the requirements of Section 7 of the **Lands Act** and will obtain the appropriate authorizations prior to construction.

EPR-041 *Identification of any proposed development that will affect existing control monuments which form part of the provincial Geodetic Control Network. The locations of the provincial control survey markers can be viewed on the NL Geodetic Network at https://experience.arcgis.com/experience/c874b19fda7d455380b8c3731b016f94 and a list of monuments and/or shapefiles can be obtained by contacting the Department of Fisheries, Forestry and Agriculture;*

The Project will not interact with or affect any existing control monuments that form part of the provincial Geodetic Control Network. No Project components are proposed in locations that would disturb, obscure, or otherwise compromise geodetic control survey markers.

The locations of Geodetic Control Network monuments identified within the LAA have been mapped to demonstrate their spatial relationship to Project infrastructure. These locations are shown in Figure EPR-041.



North Atlantic	FIGURE TITLE: **Location of Geodetic Monuments Within the Local Assessment Area**	NOTES: The location of proposed project infrastructure is considered preliminary and is subject to change.	PREPARED BY: J. Crocker; DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18
			APPROVED BY: C. Collins 2026-03-18
			CRS: WGS 1984 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-041-Rev0

Figure EPR-041 Geodetic Control Network monuments identified within the LAA

EPR-042 *A summary of consultation with Canadian Coast Guard (CGC) regarding potential interaction of the Project with CGC operations, email martin.gregoire@dfo-mpo.gc.ca;*

As documented in Section 8.2, Table 8.2-1 of the Registration (Summary of Regulatory Consultation), the Canadian Coast Guard (CCG) was consulted on February 10, 2025, when North Atlantic submitted information for the assessment of potential interactions between the Project and CCG operations, including wind turbine siting.

On February 12, 2025, the CCG provided its response, confirming that it does not anticipate any interference issues associated with the Project and clarified that further consultation would be required if the quantity of turbines, turbine height or placement was adjusted. An updated analysis will be sought after completion of FEED when a final layout has been confirmed to ensure no interference issues are associated with the final design.

EPR-043 *A summary of consultation with Department of National Defense (DND) regarding potential interaction of the Project with DND operations, email Jeffrey.Bateman2@ecn.forces.gc.ca; and*

SEM reached out to Jeffrey.Bateman2@ecn.forces.gc.ca on behalf of North Atlantic on February 10, 2026, to request a review of the project. A follow up email was sent on February 26, 2026. No response was received to either email request.

EPR-044 *A summary of consultation with the Meteorological Service of Canada (MSC) regarding potential interaction of the Project with MSC operations, email ryan.arseneault@ec.gc.ca.*

As documented in Section 8.2, Table 8.2-1 (Summary of Regulatory Consultation) of the Registration, the Meteorological Service of Canada (MSC) was consulted on February 11, 2025, when North Atlantic submitted information for the assessment of potential interactions between the Project and MSC operations, including wind turbine siting.

On February 21, 2025, the MSC provided its response, confirming that it does not anticipate any interference issues associated with the Project and clarified that further consultation would be required if the quantity of turbines, turbine height or placement was adjusted. An updated analysis will be sought after completion of FEED when a final layout has been confirmed to ensure no interference issues are associated with the final design.

4.2 Construction

Project construction activities are described in Section 2.3.4 of the Registration. The information presented reflects the level of detail available at the time of submission and is sufficient to support environmental assessment and regulatory review. Additional refinement and confirmation of construction details will occur during the FEED phase.

This section describes the proposed Project construction activities in detail, including supporting maps and figures, and addresses the applicable EPR requirements, specifically EPR-045 through EPR-063, as identified in the Table of Concordance.

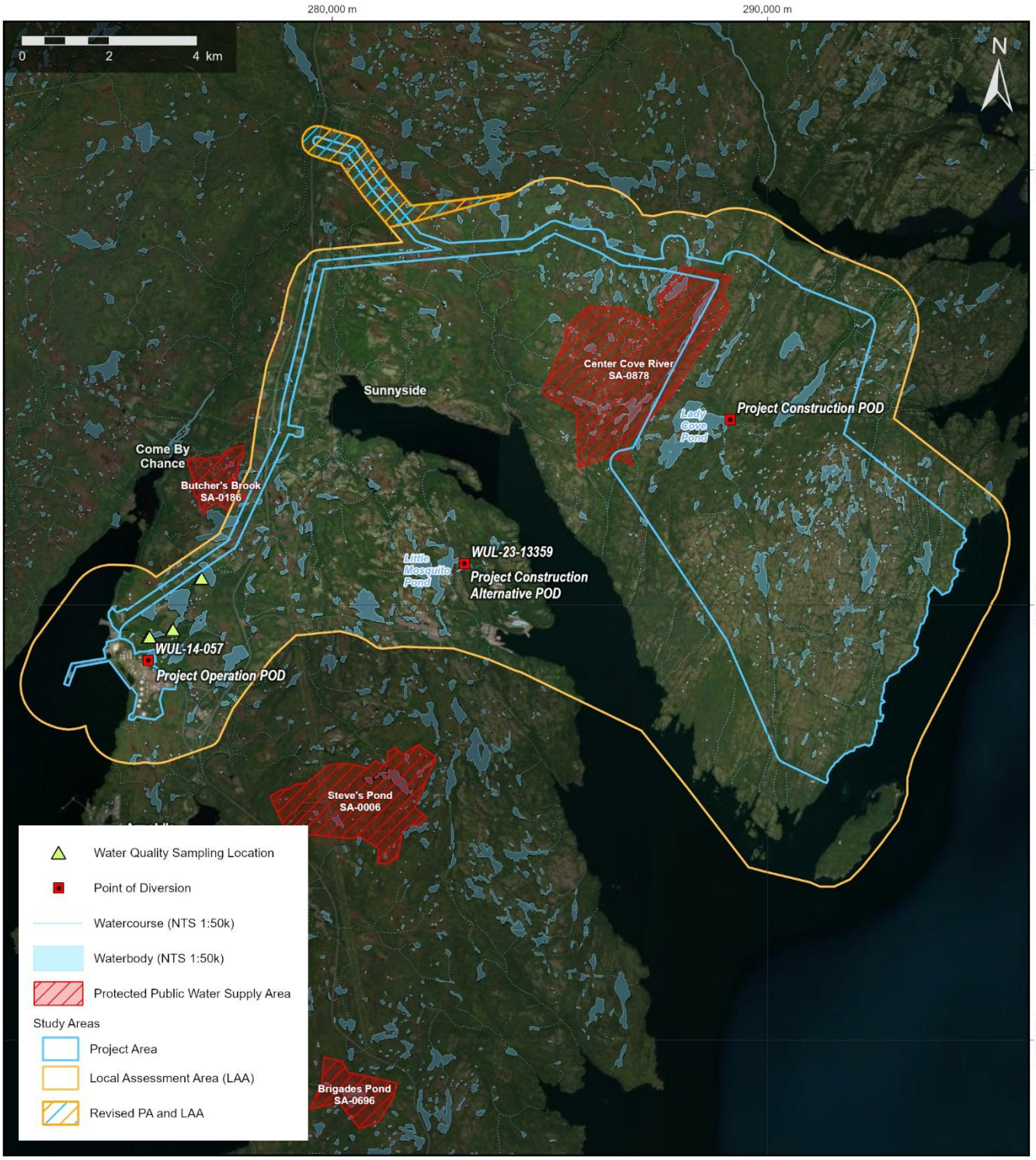
EPR-045 *Detailed information on the source water supporting facilities and infrastructure that will be used during construction, including, but not limited to:*

i. a description of the protected public water supply area (PPWSA);
ii. location and description of the water intakes for the Project including water withdrawal rates and drawdown levels; and
iii. water quality monitoring locations;

Source water during construction will be required primarily for concrete production associated with wind turbine foundations and associated works. Water required during the Construction Phase will be sourced from Lady Cove Pond, with Little Mosquito Pond identified as a contingency supply. An estimate of water required during construction was outlined in Appendix C, Section 1.1.1 of the Registration and the locations were illustrated in Figure C-1.0-2 (reproduced as Figure EPR-045). No permanent intake structure is proposed, withdrawals will occur using temporary shoreline intake equipment, which will be removed following construction.

i) Lady Cove Pond is not located within a Protected Public Water Supply Area. However, it is approximately 400 m from the Center Cove River Public Water Supply (WS-S-0846), which is depicted on Figure C-1.0-2 of Appendix C of the Registration. Construction water withdrawals are not anticipated to affect the Center Cove River PPWSA because Lady Cove Pond is not in the Center Cove River watershed.

ii) The water intake has been preliminarily sited on the northeast shore of Lady Cove Pond and will be used only during the Construction Phase. Water demand during construction was provided in Appendix C Table C-1.1-2 of the Registration. Estimates included 31,225 m³ distributed over two years with 80% of construction water demand anticipated between May and October. During construction, the estimated maximum monthly water requirement from Lady Cove Pond represents 0.5% of the mean annual flow. Based on the relatively low construction water demand, no measurable or sustained drawdown of Lady Cove Pond is anticipated.



North Atlantic	FIGURE TITLE: Locations of Existing Water Intakes in the Project Area	NOTES: Industrial Water Supplies and Protected Public Water Supply Areas sourced from NL Government's Water Resources Portal. Watercourse and Waterbody data sourced from Canadian National Topographic System (NTS) 1:50k series.	PREPARED BY: J. Crocker; DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18
			APPROVED BY: C. Collins 2026-03-18
			CRS: WGS 1984 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-045-Rev0

Figure EPR-045 Surface water resources in the LAA

Prior to construction a Water Use Licence will be obtained for withdrawal at Lady Cove Pond. The Project will comply with all applicable licence conditions. Construction water use will be tracked based on pump run time and volumes at the source water body.

iii) No water quality monitoring locations are proposed for the construction water supply. Water withdrawn from Lady Cove Pond will be used exclusively for concrete production and there will be no associated discharge to the downstream environment. All activities will follow the Environmental Protection Plan (EPP).

EPR-046 *Design and construction details on end of pipe intake screening on newly constructed source water intakes to prevent impingement and entrainment of fish, and a commitment to consult with DFO for a Fisheries Act review;*

Detailed engineering design information for End-of-Pipe intake screening on newly constructed source water intakes will be developed during the FEED phase of the Project.

North Atlantic commits to consulting with DFO as part of the **Fisheries Act** review process for any new water intake construction. Intake screening will be designed and installed in accordance with DFO's Code of Practice for the End-of-Pipe Fish Protection Screens for Small Water Intakes to prevent fish impingement and entrainment. Screening design specifications, including approach velocities, mesh size, materials, and installation methods, will be confirmed during FEED and provided to DFO for review and approval prior to construction.

EPR-047 *Design and sizing of an end of pipe water intake screen on an alternate water supply, if deemed necessary by advanced design and modeling, to prevent fish impingement or entrainment;*

If an alternate water supply is required, the Proponent will prepare and provide assumed design and sizing parameters for an end-of-pipe intake screen to prevent fish impingement and entrainment. The final intake screen design, including approach velocity, mesh size, materials, and installation configuration, will be completed during the FEED phase.

The intake screen will be designed and installed in full compliance with all commitments outlined under EPR-046, including consultation with DFO as part of the **Fisheries Act** review process. Screening design will adhere to DFO's Code of Practice for the End-of-Pipe Fish Protection Screens for Small Water Intakes to ensure effective protection of fish and fish habitat.

Final design details will be confirmed prior to construction and submitted to DFO for review and approval, as required.

EPR-048 *Design and construction details for new and existing dams;*

No new dams are proposed as part of the Project. The Project does not require the construction, modification, or decommissioning of any dam structures for water management or water supply purposes.

As described under EPR-017, there are no existing dams associated with Inkster's Pond, and the Project does not involve any new impoundment or dam construction. A pre-existing control structure at Barrisway Pond, which regulates water pumped to Inkster's Pond, is already in operation and will remain unchanged. No modifications to this control structure are planned as part of the proposed undertaking.

Accordingly, no design or construction activities related to dams are anticipated for any phase of the Project.

EPR-049 *Design and construction of the outfall(s) for the hydrogen production and hydrogenation plants and other facilities being considered for the final discharge point(s) in the marine environment;*

Two outfall locations were assessed, and details are provided in EPR-018. Additional details are provided below on their interactions with the marine environment.

The marine outfall for Option 1 (47.799625°N, 54.002390°W), is an existing outfall used for Braya's current productions. The structure consists of a concrete channel approximately 32 inch wide by 22 inch high and extends from the final holding basin to the beach. Through this channel, treated water is discharged into Placentia Bay (see Figure EPR-018B). This discharge is strictly regulated under environmental approvals to ensure compliance with safety and environmental standards.

The marine outfall for Option 2 (47.8038900°N, 54.0061863°W), is located approximately 60 m offshore into the receiving coastal waters (See Figure EPR-018C). Separated wastewater from the HGP oil-water separation system will feed into a 3 inch diameter pipe positioned on the seabed at a depth of approximately 7.14 m below the water surface, with a maximum flow rate of 50.3 m^3/h (equivalent to 1,207,200 L/day). Additional facilities and details involved with the outfall infrastructure will be available in the FEED report once finalized.

EPR-050 *Characterization of the receiving waters for wastewater effluent after construction, including a detailed study design of sampling and analysis methods;*

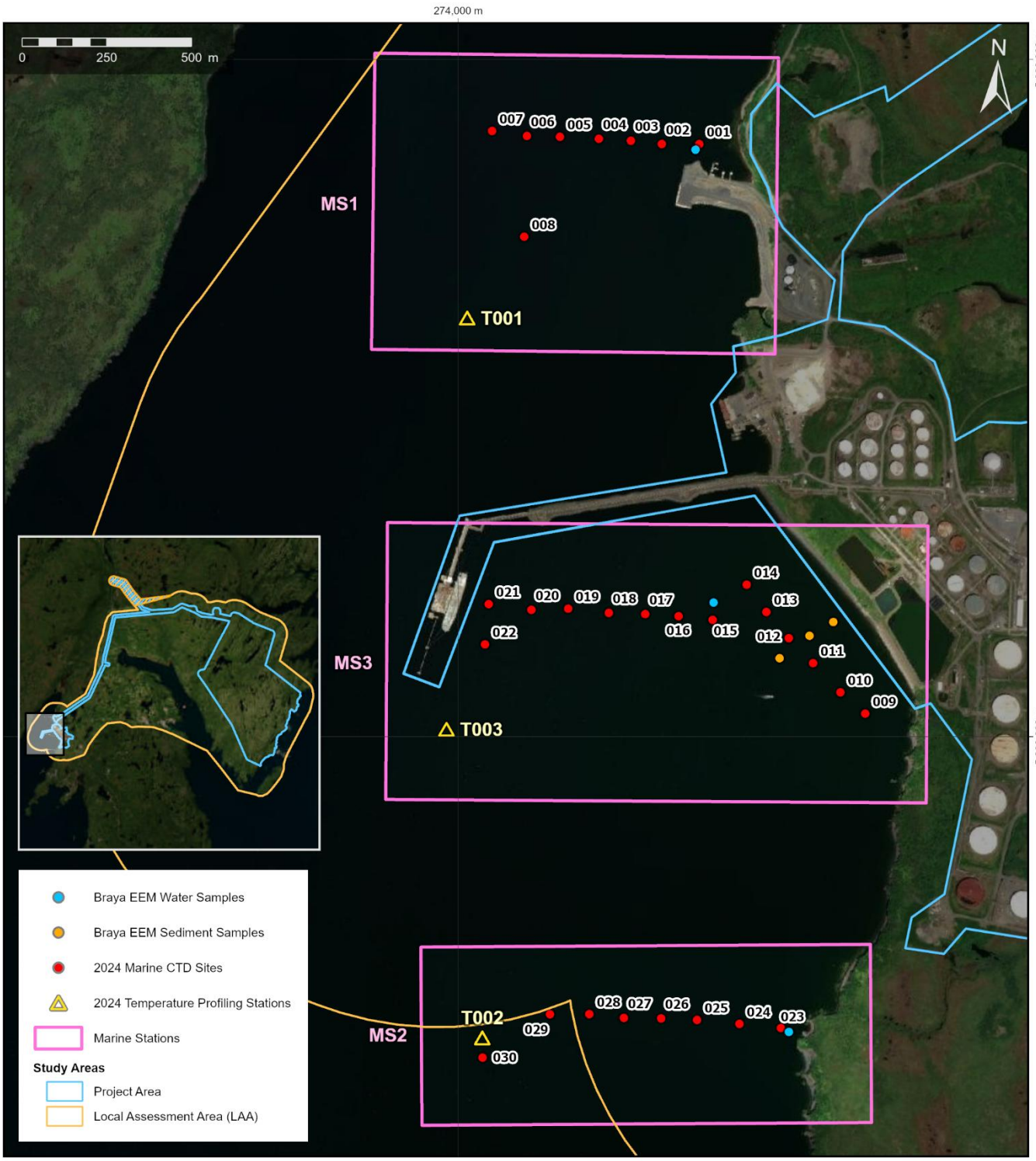
Current characterization of receiving waters for wastewater effluent is described in Section 3.2.2.6 (Marine Water Quality) of the Registration, including information from 2023 Braya Environmental Effects Monitoring Program (Braya, 2024a), 2024 Braya Environmental Effects Monitoring Program (Braya,

2024b), and *in-situ* water quality (Appendix B1 of the Registration) at three Marine Stations were mapped if Figure B1-6.0-1 and reproduced here for ease of reference (Figure EPR-050). Additionally, in Section 3.2.2.7 (Physical Oceanography) of the Registration, the Dispersion Modelling Study describes the dispersion of effluent in the selected outfall location.

Appendix B1 Section 6.0 of the Registration, describes the marine survey results, including water quality, sediment quality, conductivity/temperature/depth (CTD) profiling, phytoplankton community, zooplankton community, mussel tissue analysis, and dropdown camera video analysis.

After construction, characterization of the receiving waters for wastewater effluent will be completed. The study design and analyses will be similar to the marine baseline as described in Appendix B1 Section 2.5 (Marine Baseline Evaluation Methods) of the Registration. This would include:

- Water quality survey;
- Sediment quality survey;
- CTD profile measurement;
- Water column temperature profiling;
- Phytoplankton survey;
- Zooplankton survey;
- Drop camera surveys;
- Benthic invertebrate community survey; and
- Mussel tissue analysis.



North Atlantic	FIGURE TITLE: Locations of Marine Sampling Sites: Braya EEM Sampling Sites, and 2024 Sampling	NOTES:	PREPARED BY: J. Crocker	DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18	
			APPROVED BY: C. Collins 2026-03-18	
			CRS: WGS 1984 UTM Zone 22N	
			sem	

SEM MAP ID: 016-015-GIS-EPR-050-Rev0

Figure EPR-050 Locations of marine sampling sites, Braya EEM, and 2024 sampling

EPR-051 *Infilling, blasting, piling, and other in-water works planned in freshwater and marine environments;*

In-water construction activities associated with the Project are expected to be limited in scope. Infilling may occur within freshwater environments where required to support infrastructure such as culverts or access road crossings. Final infilling requirements will be confirmed during the FEED phase. Blasting will not occur in any freshwater or marine environments. As confirmed in EPR-010, no new in-water marine terminal works, piling, or dredging are required.

North Atlantic will obtain a Permit to Alter a Body of Water from the NL Department of Environment, Conservation and Climate Change Water Resources Management Division (NL DECCC-WRMD) prior to undertaking any activity within or adjacent to waterbodies that triggers regulatory approval. This includes, but is not limited to, the installation of culverts or bridges, construction or modification of dams, fording locations, pipe crossings or water intakes, stream modifications, infilling or dredging.

All infilling activities will be planned and executed in accordance with the Project's Construction EPP, with specific mitigation measures outlined in Section 9.0 of the Registration. Stream crossings and associated construction approaches are informed by the survey methodologies described in EPR-024, and preliminary water crossing locations are identified in EPR-016 and shown in Figure EPR-016. These locations will be refined during FEED.

EPR-052 *Setback/buffer distances between construction activities and fish and fish habitat, in consultation with DFO and the provincial FFA division (refer to Best Management Practices for the Protection of Freshwater Fish Habitat in Newfoundland and Labrador at https://www.dfo-mpo.gc.ca/publications/pnw-ppe/nfl-freshwater-eaudouce-tnl/protection-eng.html);*

Setback/buffer distances between construction activities and fish and fish habitat will be discussed and confirmed with both DFO and the provincial FAA division as the Project progresses. These setback buffer distances will be in line with the Best Management Practices for the Protection of Freshwater Fish Habitat in Newfoundland and Labrador This will be part of the habitat assessment undertaken related to **Fisheries Act** Authorizations. North Atlantic is aware of the Best Management Practices for the protection of Fish and Fish Habitat and have incorporated the guidance into the pre-planning of the Project.

EPR-053 *Details pertaining to access and construction of the T'Railway Provincial Park in areas where the Project intersects the T'Railway Provincial Park;*

Details related to access and construction through the T'Railway Provincial Park, including any temporary closures required during transmission line installation, will be provided as Project design is finalized.

As described under EPR-034, interaction with the T'Railway Provincial Park is limited to a single crossing location associated with the proposed transmission line. No additional Project components are proposed within the park corridor. Specific permits, final transmission line routing, construction methods, and any required access or closure measures affecting the T'Railway Provincial Park will be addressed during the FEED phase and through the associated regulatory permitting process, in consultation with Parks NL, the Newfoundland and Labrador Department of Tourism, Culture, Arts and Recreation and other relevant provincial authorities.

EPR-054 *Design and construction details for any concrete batch plant(s) including water source(s), surface water and effluent management;*

Detailed design and construction information for any concrete batch plant(s) required to support the Project will be developed and finalized during the FEED phase. North Atlantic commits to sharing the detailed design information once FEED is completed, to support subsequent regulatory review and permitting prior to construction.

EPR-055 *Dust lift off sources (e.g., dirt roads, laydown areas, etc.) during construction;*

Potential sources of dust during construction include vegetation clearing, topsoil stripping, grading, excavation for roads and turbine foundations, trenching, material handling, concrete works, and vehicle movement. It is anticipated that dust lift off will increase during dry or windy conditions. Dust liftoff is anticipated to occur during Construction, though emissions are expected to be localized, temporary, and manageable using standard best practices. A discussion regarding dust sources during the Construction Phase are provided in Section 2.3.4.12 and 4.2.1.3 of the Registration. See EPR-116 for mitigations during construction.

Table 2.3.4-3 of the Registration provides an estimate of the construction water requirements for Dust Suppression.

EPR-056 *Design and construction details for any new waterbody crossings, including bridges and culverts;*

Design and construction details for any new waterbody crossings, including bridges and culverts, will be developed and finalized during the FEED phase of the Project. Once available, these details will be provided to support subsequent regulatory review and permitting and will reflect applicable federal and provincial standards and best management practices for the protection of fish and fish habitat.

EPR-057 *Details on the use of existing access roads during construction, with emphasis on the maintenance of road crossings (e.g., culverts, bridges, etc.);*

Details regarding transportation routes, traffic planning, and load requirements are provided in the revised Appendix E – Transportation Impact Study and Traffic Management Plan located in Appendix 3. The description below focuses specifically on the use of existing access roads during construction as it relates to culverts, bridges, and other water-crossing structures.

During the Construction Phase, the Project will utilize several existing roads that contain established water crossings, including the Bull Arm Access Road, provincial highways, and existing industrial roads at the Come By Chance site. Because these roads are owned and maintained by different parties, North Atlantic will coordinate with each responsible owner to ensure that crossings remain structurally sound and protective of adjacent watercourses.

The Bull Arm Access Road, owned and maintained by Bull Arm Fabrication Inc. (BAF), on behalf of the Government of Newfoundland and Labrador, will be used to transport turbine components from the Bull Arm Fabrication Site to the TCH. Prior to construction, all culverts and bridges along this route will be identified, inspected, and assessed by qualified personnel to confirm they can safely support anticipated construction loads. Any required reinforcement or corrective measures will be undertaken in coordination with BAF.

Water-crossing structures along provincially owned roads, including the TCH and the Arnold's Cove interchange, are maintained by the NL DTI. These crossings will be used as-is however, if inspections indicate that Project-related loads could exceed structural capacity, North Atlantic will consult with NL DTI to determine any additional protection or upgrades required before heavy transport occurs.

Within the Come By Chance Industrial Site, existing internal roads are owned and maintained either by North Atlantic or Braya, depending on the parcel. North Atlantic will be responsible for ensuring that water crossings on roads under its ownership are inspected and upgraded as necessary prior to construction activities.

EPR-058 *Classes (e.g., crushed aggregate, sand, gravel) and estimated quantities of quarry materials that may be required for the Project, including for road construction and upgrading, preparation and construction of tower base sites, preparation of laydown areas and other construction uses;*

The exact aggregate quantities, particle sizes, and specific material classifications are dependent on the detailed engineering design. For road works, this information will be finalized during roadway detailed

design, and for concrete works, it will be confirmed through the final concrete mix design report, both of which will form part of the FEED phase.

In the interim, standard industry material descriptions and typical gradations (Table EPR-058A) have been used to estimate the quantities (Table EPR-058B), as outlined defined below:

- **Base Course material:** The material would typically be crushed quarry rock, engineered to meet gradation and compaction requirements. The material is spread and compacted to a specified 250 /150 /100 millimetre (mm) layer over well-compacted grade. Aggregate material compacted to 100% Maximum Standard Proctor Dry Density in accordance with ASTM D698

- **Subbase Course material**: Subbase course consists of well-graded granular aggregate, produced from crushed or processed natural rock, containing coarse and medium aggregate with limited fines. The material is placed in a 600 mm layer over well-compacted subgrade and compacted to 100% Maximum Standard Proctor Dry Density in accordance with ASTM D698, providing structural support and drainage for access road construction.

- **General rock fill:** General rock fill consists of reused blasted bedrock generated during on-site rock excavation activities. The material comprises coarse, irregular rock fragments with minimal fines, and no controlled aggregate gradation. It is placed as bulk fill for access roads, turbine pads, laydown areas, substations, and building platforms, and compacted to 100% Maximum Standard Proctor Dry Density in accordance with ASTM D698. No off-site quarry material is required for this fill.

- **Other Fill material:** Other material fill consists of reused on-site excavated material, placed and compacted over well-compacted grade to 100% Maximum Standard Proctor Dry Density in accordance with ASTM D698 for use along the transmission line corridor.

- **For concrete**: Wind Turbine Foundation and crane foundation : characteristic strength 35 MPa (M35 Grade) : Ratio (cement : fine aggregate : coarse aggregate) - 1:1.6:2.9

Table EPR-058A Quarry material class definitions

Class	Component	Typical Size Range	Purpose
Base Course material	Coarse aggregate	~20–37.5 mm	Load-bearing skeleton
	Medium aggregate	~5–20 mm	Fills voids, improves interlock
	Fine aggregate (crusher fines)	<5 mm	Locks particles together during compaction

Class	Component	Typical Size Range	Purpose
Supply & Install Subbase Course material	Coarse aggregate	~50–75 mm	Primary load distribution
	Medium aggregate	~10–50 mm	Structural interlock
	Fines (limited)	<5 mm	Aid compaction
General rock fill	Large rock fragments	~100 mm to 500+ mm	
	Smaller spalls	~50–100 mm	
	Fines	Minimal to none	

Table EPR-058B Sample M35 Design Mix classification

Class	Component	Quantity per 1 CUM of M35 Concrete
Concrete	Cement	400 kg
	Fine aggregate (sand)	640 kg
	Coarse aggregate (10 mm + 20 mm)	1,160 kg

Table EPR-058C Classes and estimated quantities of quarry materials for the Project

Class	Project Component	Base Qty (m^3)	Growth Factor	Final Qty (m^3)
Aggregate Materials - Base Coarse	Access Roads	54,668.79	10.0%	60,135.7
	Lay-by Areas	553.00	10.0%	608.3
	Turbine Pads/ Laydown Area	48,798.00	10.0%	53,677.8
	Transmission Line	9,641.20	10.0%	10,605.3
	Laydown Area	6,770.00	10.0%	7,447.0
	Substation - Wind Farm	1,509.00	10.0%	1,659.9
	Substation - Electrolysis Yard	2,863.00	10.0%	3,149.3
	O&M Building - Wind Farm	1,509.00	10.0%	1,659.9
	Batch Plant - Wind Farm	3,389.00	10.0%	3,727.9
Aggregate Materials - Sub Base Coarse	Access Roads	272,802.68	10.0%	300,082.9
	Lay-by Areas	1,237.00	10.0%	1,360.7
	Turbine Pads/ Laydown Areas	152,986.00	10.0%	168,284.6

Class	Project Component	Base Qty (m^3)	Growth Factor	Final Qty (m^3)
	Laydown Area	13,662.00	10.0%	15,028.2
	Substation - Wind Farm	3,072.00	10.0%	3,379.2
	Substation - Electrolysis Yard	5,804.40	10.0%	6,384.8
	O&M Building - Wind Farm	3,072.00	10.0%	3,379.2
	Batch Plant - Wind Farm	6,858.00	10.0%	7,543.8
General Rock Fill	Access Roads	643,531.00	10.0%	707,884.1
	Access Roads	544,381.55	10.0%	598,819.7
	Lay-by Areas	8,667.34	10.0%	9,534.1
	Turbine Pads/ Laydown Areas	191,162.00	10.0%	210,278.2
	Substation - Wind Farm	4,743.00	10.0%	5,217.3
	Substation - Electrolysis Yard	27,411.75	10.0%	30,152.9
	O&M Building - Wind Farm	4,528.76	10.0%	4,981.6
	Batch Plant - Wind Farm	34,174.14	10.0%	37,591.6
Other Material Fill	Transmission Line	76,663.00	10.0%	84,329.3
	Transmission Line	87,237.40	10.0%	95,961.1
Concrete Work	Wind Turbine Foundation	22,325.00	0.0%	22,325.0
	Crane Foundation	4,700.00	0.0%	4,700.0
	Lean Concrete	3,055.00	5.0%	3,207.8

EPR-059 *Location of proposed candidate quarry sites, including boundaries, that may need to be developed or reactivated to supply materials to the Project, including the type(s) of materials that each site may supply (e.g., sand and gravel, bedrock-sourced crushed aggregate) and the operations that may be associated with each site (e.g., blasting, crushing, screening, concrete production);*

At this stage of the Project, North Atlantic has not determined which quarry sites will supply specific material types for construction. This will be determined as a result of commercial discussions and negotiations between North Atlantic, quarry owners and the EPC contractor. Currently, getting approval to move ahead with the project is considered a milestone that would need to occur ahead of Service contracts.

Existing active quarry sites within the LAA, as shown in Figure EPR-037A, are considered potential primary candidate sources of construction materials for the Project as they are currently active and operational. Archived quarry sites identified within the RAA, as illustrated in Figure EPR-037B, are

considered alternate (secondary) quarry options for construction material supply. Should these archived sites require reactivation, or should new sites be required to meet material demands, North Atlantic will coordinate with the appropriate regulatory authorities and quarry operators to obtain the necessary approvals.

EPR-060 *Any areas that will become inaccessible to mineral licence holders or quarry operators during the construction phase of the Project or to which access or operational restrictions will apply;*

Table EPR-060 outlines the areas of overlap between Project infrastructure, specifically wind turbine foundations and the substation, and existing mineral licences. The area identified as completely inaccessible is limited to the turbine foundation footprint, calculated using a 20 m radius around each turbine base. More details are provided in EPR-038.

Consistent with EPR-038, North Atlantic will consult with applicable parties, including mineral licence holders, and will provide access upon request, subject to safety requirements and ongoing discussions. Access management measures will be addressed through consultation and will be informed by operational conditions overviewed in EPR-038 and applicable operational safety considerations.

Table EPR-060 Percentage overlap of Project infrastructure with mineral licences

Mineral Licence	Mineral Licence Area (Sq. Metre)	No of WTG inside Mineral Licence	Area of WTG's Inside Mineral Licence (Sq. Metres)	Substation area (Sq. Metres)	% Overlap
039507M	2490997	3	3,769.92	0	0.151%
033488M	NA	0	0	0	No Overlap
026216M	NA	0	0	0	No Overlap
038500M	NA	0	0	0	No Overlap
036699M	1246504	1	1,256.64	0	0.101%
035776M	3736993	2	2,513.28	40000	1.138%
039639M	1992420	4	5,026.56	0	0.252%
038860M	NA	0	0	0	No Overlap
038861M	NA	0	0	0	No Overlap

EPR-061 *Detailed analysis of runoff changes in catchment areas associated with TI infrastructure, as a result of construction activities;*

Detailed analysis of runoff changes in catchment areas associated that would be associated with NL DTI infrastructure would be restricted to the intersection point for the access road to the TCH. Other than this

point the project does not interact with any project infrastructure. This EPR report highlights the new chosen intersection point that was selected with consultation with the NL DTI. The detailed design for the access road with all the corresponding requirements has not been completed at this time.

North Atlantic commits to ensuring that run off changes are minimized and taken into consideration in the design. This will involve ongoing consultations with the NL DTI during design development and the permitting process to understand runoff.

EPR-062 *Assessment of the increase to streamflow caused by Project development that may impact existing water crossings including bridges and culverts; and*

At the time of this Report, quantification of potential increases in streamflow and associated impacts on existing water crossings (e.g., culverts and bridges) cannot be completed due to the absence of finalized infrastructure footprints and engineered crossing details. As described in Section 4.5.2 (Aquatic Environment) of the Registration, all culvert and bridge installations and any interaction with existing water crossings will be designed and implemented in accordance with applicable provincial and federal standards. They will be designed to minimize changes to streamflow. The design will also take into consideration DFO guidance for fish passage, erosion and sediment control, and the protection of fish and fish habitat. Standard best management practices will be applied to minimize alterations to natural flow regimes and to maintain hydraulic capacity under both typical and extreme flow conditions.

The FEED study final design, and construction planning and will be provided to regulatory authorities, as appropriate, in support of subsequent permitting approvals.

EPR-063 *Design details for all proposed access requirements and infrastructure for utility corridors including location and clearance requirements, either permanent or temporary, to provincially owned roadways.*

There are no planned changes to provincially owned roadways as part of the project, with the exception of having to add some extra infrastructure to the access point where the project access road will intersect with the project. However, the project requires utility corridors and associated access points where infrastructure intersects provincially owned roadways. At this stage, only preliminary alignments and conceptual access requirements have been defined. All final design details will be completed during detailed engineering in consultation with the NL DTI.

Utility corridors will generally parallel existing roadways to limit new disturbance, and all clearances will conform to NL DTI standards and relevant Canadian engineering codes. All temporary works will follow NL DTI's traffic control requirements to maintain safe public access.

Permanent access points required for O&M will be located to preserve safe sightlines and road geometry and will be designed according to NL DTI's access management guidelines. Detailed engineering drawings and specifications will be submitted to NL DTI for review and approval before construction begins.

4.3 Operation and Maintenance

The O&M activities for the Project are multifaceted, covering renewable energy generation, water electrolysis, hydrogen handling, and chemical processing. Each phase of the value chain (i.e., Wind Farm, HGP, and HP) requires tailored strategies to ensure safe, efficient, and continuous operation. The activities associated with O&M are outlined in Section 2.3.5 of the Registration. The descriptions provided in this section reflect the level of engineering detail available at this stage of environmental assessment and will be further refined and confirmed during the FEED process. This section outlines all aspects of O&M activities, supported by relevant maps and figures, and responds to the EPR requirements identified for this phase, specifically items EPR-064 through EPR-080 in the Table of Concordance. Together, these details provide the necessary context to assess long-term interactions between the Project and the biophysical, socio-economic, and regulatory environments.

EPR-064 *An updated Water Balance Study that has been calibrated using site-specific hydrologic data from Inkster's Pond watershed, including:*

i. withdrawal rates used in the monthly and event scale models for both the projects requirements as well as Braya's operations;

ii. detailed environmental low flow threshold calculations;

iii. additional details to support water usage rates including, but not limited to:

- *water required for hydrogen production;*

i) A water balance study for Inkster's Pond watershed was completed and documented in Appendix C of the Registration. The study incorporated site-specific hydrologic monitoring data (i.e., water levels and flow) collected within the watershed and this data used to calibrate both monthly and event-scale hydrologic models, as described in Appendix C Sections 6.1 and 7.2.1 of the Registration. The specifics of how this study was conducted was reviewed with the NL DECCC-WRMD and was determined to meet the criteria described in the above EPR guideline.

Project-related water withdrawal rates were outlined in Appendix C Section 1.1.2.1 of the Registration and include:

- HGP requires a continuous feed water of 0.021 m^3/s, with a maximum assessed feedwater rate of 0.028 m^3/s applied in the hydrologic models.

- The HP requires up to 0.0017 m³/s for boiler feedwater and cooling water make-up, which was applied as a continuous withdrawal in the hydrologic models.

Existing water withdrawal rates associated with Braya Renewable Fuels' operation were incorporated using a representative historical withdrawal volume of 1,404,100 m³/year (0.045 m³/s), as described in Appendix C Section 1.1.2.2 of the Registration. The Project and Braya withdrawals were assessed concurrently in both monthly and event-scale models.

ii) Environmental threshold flow conditions were calculated based on the Low Flow Frequency Study for Newfoundland and Labrador (Zadeh, 2012). The 7-day 1:10-year low flow (7Q10) was used as the environmental threshold flow for the assessment. The 7Q10 flows were calculated following the Low Flows Estimation Sheet (NL DECCC, 2017), based on the drainage areas of each pond within the Inkster's Pond watershed. These threshold flow values were described in Appendix C Section 3.3.4 of the Registration and were compared against site-specific baseline monitoring data.

During O&M, water withdrawals will be maintained within approved regulatory conditions to ensure that downstream environmental flow requirements are maintained. Monitoring and operational controls will be described in the Water Management Plan to be finalized ahead of operations (see EPR-125).

iii) Water usage rates applied in the Surface Water Study are based on Project operation requirements are described in Appendix C Section 1 of the Registration and supporting Pre-FEED documentation (NARL Wind-to-Hydrogen Project Pre-FEED Report, Hatch 2024).

Water required for hydrogen production is associated with feedwater supplied to the HGP for operation of PEM electrolyzers. Based on the Project's Pre-FEED design, a reverse osmosis treatment process conservatively assumes 50% reject water. For additional details on HGP demineralized water and wastewater systems, see Appendix 4.

As mentioned in (i), a continuous feedwater demand for the HGP of 0.021 m³/s was specified for normal operations, with a maximum feedwater rate of 0.028 m³/s defined for peak operation. These feedwater rates reflect the Pre-FEED design basis and include allowance for reject water. For the purposes of the Surface Water Study, the maximum feedwater rate was applied in the monthly and event-scale models to assess water availability under peak operating conditions.

Cooling water for the HP will be supplied from the HP demineralized water system. Raw water from Inkster's Pond is supplied using a conservation rate of 0.0017 m³/s, as outlined in the Pre-FEED design basis, into the demineralized water treatment unit. This amount supports the make up for both the cooling water and the boiler systems in the HP. Both systems operate as a closed-loop, thus will not require

continuous water intake under normal operating conditions. Additional details on the HP demineralized water intake for boiler feedwater and cooling water make-up can be found in Appendix 4.

EPR-065 *Detailed information on the source water supply and any supporting facilities and infrastructure, if the water supply for operations and maintenance is different from that of the construction phase. This information shall include, but not be limited to:*

i. a description of the protected public water supply area (PPWSA), if applicable;

ii. location and description of water intakes and outfalls for the Project including water withdrawal rates and drawdown levels; and

iii. water quality monitoring locations and details;

Water required during the O&M Phase of the Project will be sourced from the Inkster's Pond Industrial Water Supply Area, which is different from the water source proposed for the Construction Phase. Water supply infrastructure for O&M is existing, established, and has historically supported industrial operations. The existing industrial water supply is licenced for an annual withdrawal volume of up to 4,500,000 m³. This context is described in Appendix C Section 1.1.2 of the Registration.

i) Water for Project usage will not be sourced from protected public water supply areas (PPWSAs). Nearby PPWSAs were described in Section 3.1.2.3 of the Registration and will not be impacted by the Project.

ii) Water for the O&M Phase will be withdrawn via existing pumping infrastructure within the Inkster's Pond Industrial Water Supply system. Water is pumped from Barrisway Pond to Inkster's Pond, which functions as a holding reservoir. Inkster's Pond itself has no natural surface water inflow or outflow. No new intakes or modifications to existing intake infrastructure are proposed for Project operations.

Hydrologic modelling was conducted to simulate water availability under existing and future withdrawal scenarios (Appendix C Section 7.0 of the Registration). The event-scale model was validated against monitoring data and conservatively estimated drawdown.

Under existing withdrawals, the event-scale model predicted maximum drawdowns of 0.88 m at Barrisway Pond (compared to 0.45 m observed during baseline monitoring) and 0.57 m at Willie Jarge Pond (compared to 0.28 m observed during baseline monitoring). When including Project withdrawals, the maximum drawdown increased to 1.75 m at Barrisway Pond and 1.37 m at Willie Jarge Pond. Long-term modelling (using data from 2000 to 2023) indicated that average hydrologic conditions can sustain the future withdrawal rates. The maximum simulated drawdown occurred during a prolonged low-flow period from July to October 2024. Despite this, there was still approximately 137,000 m³ of live storage capacity. Long-term modelling indicates that average hydrologic conditions can sustain the Project's

withdrawal rates and the ponds will drawdown within the range of seasonal variability observed during the baseline period.

No new intakes or modifications to existing intake infrastructure are proposed for Project operations. Pond water levels and storage volumes were predicted in the Appendix C Section 7.0 of the Registration under Project-only and combined (Project and Braya) withdrawal scenarios using calibrated monthly and event-scale hydrologic models. Model results characterize seasonal variations in pond levels associated with recharge, precipitation patterns, and pumping between Barrisway Pond and Inkster's Pond.

Water during construction will be sourced from Lady Cove Pond, with Little Mosquito Pond identified as a contingency supply only if needed. An estimate of water required during construction was outlined in Appendix C Section 1.1.1 of the Registration, and the locations were illustrated in Figure C-1.0-2. No permanent intake structure is proposed, withdrawals will occur using temporary shoreline intake equipment, which will be removed following construction.

iii) During the O&M Phase, water quality monitoring is planned to be conducted at the following locations:

- Willie Jarge outlet stream (downstream of the hydraulic control structure);
- Barrisway Pond outlet stream (downstream of the hydraulic control structure); and
- Final discharge point of the HGP and HP (pending final design; either prior to discharge to Braya holding basin or newly constructed outfall).

Monitoring of the outlet streams will confirm that water quality conditions are consistent with approved regulatory requirements and that water withdrawals are not resulting in downstream effects.

Monitoring at the final discharge point will confirm that operational discharges meet approved effluent discharge criteria prior to mixing with Braya effluent or direct discharge to the receiving environment.

Detailed monitoring coordinates, sampling frequency, reporting procedures will be finalized in a Water Management Plan (see EPR-125). The Water Management Plan will be submitted to Newfoundland and Labrador NL DECCC for review and approval before operations begin.

EPR-066 *Detailed information on source water treatment for hydrogen production;*

Raw water is drawn from Inkster's Pond and sent into the electrolyzer cabinets to be treated through reverse osmosis (RO) for generation of demineralized water. The demineralization process is necessary to remove minerals and other impurities from the source water, preventing equipment damage and

mitigating buildup in these sensitive systems. The produced demineralized water is utilized for hydrogen production, with the RO wastewater measured for parameters of concern, routed to treatment if necessary, and eventually discharged at the final outfall location. Additional details and flow diagram for the HGP source water treatment can be found in Appendix 4.

EPR-067 *Historical metered flow data for other licenced water users who may be impacted by the Project;*

As discussed in EPR-014, Braya Renewable Fuels holds the existing Water Use Licence (WUL14057), which authorizes withdrawal of up to 4,500,000 m³ per year from Inkster's Pond. Historical metered withdrawal data associated with this licence is not available to North Atlantic, as these data are submitted directly by Braya to the Government of Newfoundland and Labrador as part of their licence reporting requirements.

In the absence of access to Braya's metered withdrawal records, the hydrologic assessment presented in Appendix C of the Registration used a conservative modelling approach. Two water use scenarios were incorporated into both the monthly and event scale hydrologic models to evaluate water availability under existing and future conditions (Appendix C, Section 3.4.1 of the Registration). The *existing conditions* scenario accounted only for current licensed withdrawals (Appendix C, Section 1.1.1 of the Registration), while the *future conditions* scenario incorporated both existing withdrawals and those associated with the Project (Appendix C, Section 1.1.2 of the Registration). This approach ensures that Project related effects on water availability and potential drawdown are not underestimated.

The Government of Newfoundland and Labrador already maintains Braya's monthly water-use reports as part of its regulatory oversight of WUL14057. North Atlantic Refining Corp. will likewise submit water-use data to the province in accordance with the conditions of its own Water Use Licence, once issued.

EPR-068 *Identification and description of source(s) of fire flow water for the hydrogen production and hydrogenation facilities;*

Fire-flow water for both the HGP and the HP will be supplied from the Project's primary water source at Inkster's Pond and is considered Not Normal Flow (NNF) during typical operation, meaning does not require continuous make-up water. Fire-water storage and distribution systems flow diagrams have been outlined in Appendix 4 for both HGP and HP in Figures 1 and 2 respectively. Further design of these systems will occur during FEED to meet applicable safety codes, regulatory requirements, and best practices for industrial fire protection.

As described in Section 2.3.1.3 of the Registration, the HGP will include a dedicated fire-water storage system integrated into the raw water supply infrastructure. Key design elements include:

I. An 8-hour raw water storage tank supporting the HGP's operational demand (capacity: 1,706 m³).

II. A dedicated fire-water storage tank with a capacity of 2,544 m³.

III. Fire-water system sizing designed to provide two hours of fire-flow capacity, consistent with National Fire Protection Association (NFPA) standards and engineering best practices.

IV. Distribution of raw water through a central header supplying the 57 electrolyzer stamps.

As outlined in Sections 2.3.2.4 and 2.3.2.12, the HP will also utilize Inkster's Pond as its fire-water source. At this facility:

- A dedicated fire-water storage tank with a capacity of 1,817 m³.
- Fire-water system sizing designed to provide a minimum of two hour of continuous fire protection to the largest demand flow rate of water.
- A dedicated fire protection system, including fire hydrants, sprinklers, and deluge systems, is required due to the flammability of hydrogen, toluene, and MCH.

EPR-069 *Characterization of effluent streams before and after any proposed treatment, along with a comparison of any effluent discharges to all applicable limits specified in the Environmental Control Water & Sewage Regulations, 2003, including identification and quantification of the expected concentrations of potential parameters of concern. This should take into consideration how steps in the process would be expected to influence the final effluent quality, including, but not limited to:*

i. wastewater generated from the treatment of source water;

ii. use of any chemicals in operation/maintenance of the electrolysis equipment; and

iii. water contact with process gas;

i. Wastewater generated from the source water treatment for the HGP and HP have been outlined in Sections 2.3.1.4, 2.3.1.5, and 2.3.2.7 of the Registration. Both facilities have a dedicated treatment process in which raw water from Inkster's Pond is used to generate demineralized water. Appendix 4 provides a detailed wastewater or effluent stream overview of all process streams, including associated flow diagrams (Figure 1 to 4 respectively). Appendix 4 also shows the wastewater generated from the treatment of source water.

ii. The only chemical within the electrolyzer cabinets is glycol for temperature control, which is housed within a closed-loop system. There is no effluent associated with this process.

iii. There are no instances in both the HGP and HP where water is in contact with process gas.

EPR-070 *Effluent treatment options being considered based on potential parameters of concern that were identified in the effluent characterization, and the preferred option(s) for treatment;*

Appendix 4 details the effluent and wastewater characterization in relation to Schedule A of Environmental Control Water and Sewage Regulations, 2003 in Table 1. All streams are in compliance with Schedule A and can be routed to the final discharge point. North Atlantic will monitor wastewater and effluent streams for parameters of concern and route to further treatment, if necessary.

From Section 2.3.2.6 of the Registration document, the reaction which generates methylcyclohexane from toluene and hydrogen is not tolerant of the presence of water. As such, a distillation column will be installed upstream of the HP reactors to strip (i.e., treat) water from the toluene stream that feeds into the reactor. This stream is expected to be relatively pure given it is drawn from a distillation column however its assumed characterization is shown is Appendix 4. As such, this stream will be condensed and sent to an oil-water separation unit, which will be designed during the FEED study to limit any parameters of concern to remain compliant with Schedule A. Separated oil (i.e., condensate) from the separation system will be periodically pumped out and trucked to a licensed industrial wastewater treatment facility for treatment and disposal, with the wastewater routed to the final point of discharge. Additional details and flow diagrams can be found in Appendix 4.

EPR-071 *For any wastewater streams that are proposed be directed to the existing Braya Refinery wastewater treatment facility, an assessment of the effectiveness of this treatment system to treat both existing refinery wastewater and the additional streams from this Project. This assessment should provide sufficient information to clearly demonstrate that consistent compliance with the currently applicable limits specified in Environmental Control Water & Sewage Regulations, 2003 is achievable and expected;*

Table 1 of Appendix 9 – North Atlantic Project Wastewater Sources; Process and Surface Wastewater, wastewater and effluent streams from the HGP and HP demonstrates compliance with Schedule A of Environmental Control Water and Sewage Regulations, 2003.

Any streams that may be routed to the existing Braya Refinery wastewater treatment facility is not foreseen to impact the effectiveness of this system to treat both the refinery wastewater and additional streams from this Project.

EPR-072 *Details on the operation and maintenance of concrete batch plant(s) including water source(s), and surface water and effluent management, if required to support the Project;*

A concrete batch plant will not be required for the O&M Phase of the Project. Use of a concrete batch plant will be limited to the Construction Phase only, primarily to support the construction of wind turbine foundations and associated infrastructure. As such, there will be no batch plant operation during the O&M Phase, and no ongoing requirements for batch plant water supply, surface water management, or effluent management during Project operations.

Commitments to provide details regarding the temporary construction-phase concrete batch plant, including its final proposed location, water source(s), surface water controls, and effluent management measures, following completion of the FEED phase, are provided under EPR-054.

EPR-073 *Dust lift off sources during operation and maintenance;*

Dust liftoff during the O&M Phase is anticipated to be limited to periodic vehicle traffic, routine maintenance, and occasional surface drying of gravel access roads. No continuous sources of dust liftoff sources are anticipated when the wind farm is in service. It is anticipated that the magnitude of dust lift off will increase during dry or windy conditions. A discussion regarding dust sources during the O&M Phase are provided in Section 2.3.5.7 and 4.2.1.3 of the Registration. See EPR-116 for mitigations during O&M Phase.

EPR-074 *Inclusion of DFO in the list of contacts for spill occurrences;*

North Atlantic commits to including DFO as a designated notification contact for all spill and unauthorized release incidents that could potentially affect fish or fish habitat during all phases of the Project, including construction, O&M, and decommissioning and rehabilitation.

DFO contact information will be incorporated into the Project's Emergency Response Plan (ERP) and Spill Management and Reporting Procedures, alongside relevant provincial and municipal authorities. All actual or suspected spills or releases with the potential to interact with freshwater or marine environments will be reported to DFO in accordance with applicable federal requirements, including the **Fisheries Act**, and in coordination with reporting to the provincial spill reporting system.

This commitment applies to all Project components, including the wind farm, access roads, transmission lines, hydrogen facilities, marine terminal operations, and associated infrastructure.

EPR-075 *Details on required modifications to any existing accesses granted under the construction phase, if necessary, once the Project moves to the operation and maintenance phase;*

No modifications to existing access points granted during the Construction Phase are anticipated for the O&M Phase of the Project. Access requirements established during construction are expected to remain suitable for operational needs, and no additional changes to existing accesses are proposed at this time.

Should future operational requirements necessitate modifications to access arrangements, any such changes would be reviewed and implemented in compliance with applicable provincial access policies and regulatory requirements, and in consultation with relevant authorities, as required.

EPR-076 *Details related to any additional access requirements, either permanent or temporary, to provincial roadways, demonstrating compliance with the TI Access Policy;*

There is only one access requirement for all phases of the Project, including construction, O&M, and decommissioning and rehabilitation. No additional permanent or temporary access points to provincially owned roadways are proposed at this time.

Details regarding this access, including compliance with the NL DTI Access Policy, are provided in revised Appendix E – Transportation Impact Study and Traffic Management Plan located in Appendix 3. This appendix will describe access location, design considerations, and management measures to ensure safe and compliant use of the provincial road network throughout the life of the Project.

EPR-077 *Details on the potential extent of flicker and ice throw from wind turbines near public roadways;*

Details on both shadow flicker and ice throw interactions are provided in the Registration in Sections 4.2.7.1 and 4.5.7, and Appendix K and L, respectively. Table 4.2.7-1 of the Registration identifies the specific peripheral distances from turbine sites within which interactions may occur. Based on these distances, no interactions with existing public roadways are anticipated.

Standard mitigation and enhancement measures applicable to the Human Health and Quality of Life VC are provided by phase in Section 4.5 Table 4.5-7 of the Registration and discussed in EPR-121. Project-specific plans (e.g., the Traffic Management Plan) will also include mitigation measures that are applicable to this VC.

EPR-078 *Details on the use of the provincial road network for the transportation of materials, equipment and supplies, especially as it relates to over-weight/over-dimension loads;*

During the O&M Phase, the Project will continue to use the same road network that was used during the Construction Phase. As those routes will already have been assessed and upgraded where necessary

during construction planning and execution, no new road infrastructure or additional assessments are anticipated for O&M related traffic.

As described in Appendix E Section 2.4.1 of the Registration and Appendix 3, once the Project enters the O&M Phase, the Wind Farm access road will be used primarily by maintenance vehicles conducting routine servicing and monitoring of the Wind Farm. These activities involve light duty vehicles and do not require overweight or oversized transport under normal operating conditions.

According to Appendix E Section 2.5 of the Registration, overall O&M traffic on the TCH, the Bull Arm Access Road, the Wind Farm access road, and the Main Road/Refinery Road will remain minimal. Routine traffic will consist largely of personnel travelling in personal vehicles. For the HGP and HP, any large or oversized replacement components required during the operational life of the facilities will be delivered via the existing tug berth. This approach minimizes dependence on the provincial road network and ensures that any increase in vehicle traffic will not result in capacity issues.

As outlined in Appendix E Section 3.1 of the Registration, overweight or oversized vehicles will not be required for typical maintenance activities. These vehicles will only be needed in the event of major turbine component replacement. In such instances, North Atlantic will obtain all applicable permits in accordance with Department of Transportation and Infrastructure requirements, consistent with processes already in place during the Construction Phase.

Overall, O&M Phase use of the provincial road network will mirror the patterns established during construction, with the necessary upgrades already completed. The limited and predictable nature of O&M traffic ensures continued safe use of the provincial transportation system without adverse effects on roadway capacity or integrity.

EPR-079 *Clarification of whether any new access roads constructed on Crown land for operational use by the Project would remain open for public access to existing resource developments including agriculture, forestry, mineral exploration, cottage access or other existing use;*

As per Section 4.3.3.3 of the Registration, access road will be publicly accessible through the majority of the Project lifespan. During periods of increased risk (i.e., during windfarm construction), the access road may be closed to the public.

EPR-080 *Details on electricity and energy including:*

i. a summary of consultations that have been conducted to inform whether electrical service has been requested or is presently available and options for obtaining electricity service;

ii. an analysis of findings and conclusions with respect to compliance obligations with the legislation (e.g., Public Utilities Act and the Electrical Power Control Act, 1994) and regulation of the electricity system; and

iii. explanation as to whether the transmission line will be identified as a Regulated Asset.

I. Since receiving the land reserve in June 2024, North Atlantic has been in ongoing discussions with NL Hydro regarding electrical service requirements for the Project. During this time, North Atlantic has:

a. Confirmed the need for electrical service to the site and discussed options for supply through the Island Interconnected System

b. Submitted a formal Interconnection Request to NL Hydro on 22nd April 2025.

c. Participated in regular technical and planning discussions with NL Hydro's System Planning team to evaluate the feasibility and configuration of the required electrical infrastructure.

d. Initiated a System Impact Study (SIS) by executing the agreement on 16th Dec 2025 , which is currently underway.

II. This project will not be subject to the **Public Utilities Act** as North Atlantic does not meet the definition of "public utility" therein. Both the **Public Utilities Act** and the **Electrical Power Control Act** are premised on the assumption that all power generation assets in the province are to be developed and regulated for the benefit of servicing the public demand/need for power. Our project will create generation assets intended to support industrial objectives. As the power generated is not intended for primary use by local consumers, the assumptions underlying the existing legislation are not applicable.

III. The 138 kV, 7 km transmission line required to supply the Project will not be identified as a Regulated Asset. The line is a customer-owned, customer-specific connection designed solely to serve the electrical load of the HP. As illustrated in the system configuration, the 7 km line forms a direct link between the Project and the NL Hydro system and is not part of NL Hydro's transmission network. The line does not provide service to any other customers and is not intended to support the broader electricity system. See Figure EPR-080.

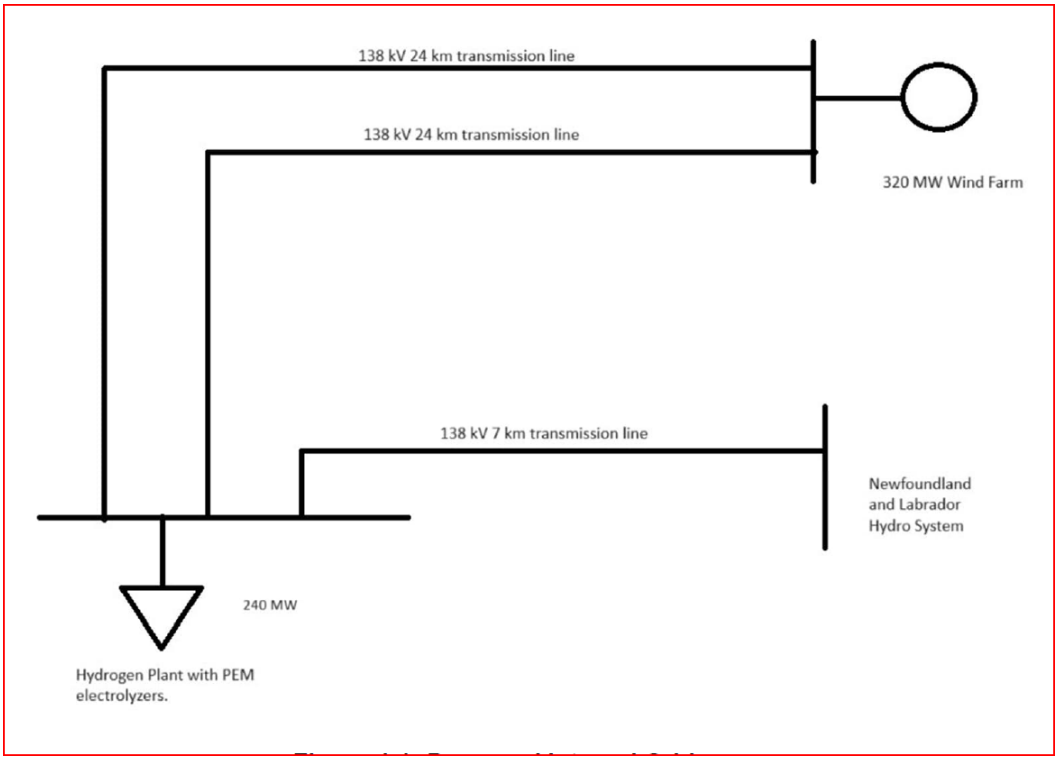


Figure EPR-080 Proposed 138 kV Customer-Owned Transmission Line Connection

5.0 Alternatives

North Atlantic evaluated a range of technically and economically feasible alternatives with the objective of developing an optimal Project – one that is financially viable, employs proven yet innovative technologies, minimizes environmental effects, and aligns with broader sustainability objectives in an environmentally responsible manner. A detailed description of the alternative methods of carrying out the undertaking is provided in Section 2.4 of the Registration.

In this EPR, North Atlantic has responded to EPR-081 through EPR-083, from the Table of Concordance, to present the rationale for the alternatives considered, including water supply options and outfall locations. Consistent with the EPR Guidelines, this section identifies and describes alternative means and locations for carrying out the Project where feasible. Where no reasonable alternatives exist, a clear rationale is provided to explain why such alternatives were not technically or economically practicable.

EPR-081 *Identify and describe water source alternatives;*

Alternative water sources were considered near the NARL Logistics Terminal and were described in Section 2.4.2.3 of the Registration. Alternative freshwater sources include Freshwater Pond

approximately 2 km east of the Terminal, water within the Little Mosquito Pond watershed approximately 6 km east of the Terminal, and water within the Butcher's Pond PPWSA, approximately 5 km northeast of the Terminal. Freshwater Pond has a smaller drainage area than Inkster's Pond industrial Water Supply Area. Utilising water for hydrogen production at Little Mosquito Pond and Butcher's Brook watersheds will impact industrial operations at the Bull Arm Fabrication Site and Come By Chance's public water supply, respectively.

These locations are shown in Figure EPR-014.

EPR-082 *Identify and provide clear mapping of outfall location alternatives for the final discharge point of the hydrogen production facility, including but not limited to:*

i. outfall design and associated infrastructure;

ii. a description of in-water works including Project footprint;

iii. other users and potential conflicts of interest; and

iv. information on coastal areas and estuaries including location of eelgrass beds within the Project footprint;

Outfall design and associated infrastructure, including all alternatives assessed, are described in EPR-018. Additional design refinement will occur during FEED, including the finalization of outfall alignment. As outlined in EPR-051, no in-water works are planned for the marine environment. Consideration of other marine users and potential conflicts of interest has been addressed in EPR-020.

Areas of conservation concern were discussed in Section 3.1.2.12 (Marine Conservation Concern – Marine Habitats of Conservation Concern) of the Registration. Placentia Bay is a designated EBSA within the Placentia Bay–Grand Banks Large Ocean Management Area (DFO, 2019), reflecting its importance for rare species, vulnerable habitats, and critical ecological communities across both the RAA and LAA (DFO, 2007a). Extending from St. Lawrence to St. Mary's Bay, the EBSA includes offshore habitats for corals, sponges, Leatherback Turtles (*Dermochelys coriacea*), and areas important to Blue Whales, as well as coastal features such as salmon rivers, capelin spawning beaches, eelgrass meadows, seabird colonies, salt marshes, wetlands, and scallop beds. Although no MPAs or SARA-defined critical habitats occur near the RAA or LAA, the area is managed through multiple conservation measures, including protected areas such as Jack's Pond Provincial Park and recognition of the Placentia Bay Extension and Bar Haven as Special Marine Areas.

As described in Section 3.1.2.12 of the Registration, eelgrass beds are vital to the bay's biodiversity, offering nursery habitat for fish, supporting migrating birds, and enhancing water quality. These beds that spread across the bay's shallow, sheltered areas, provide essential ecological functions such as sediment stabilization, water filtration, and habitat for marine life. However, they are at risk due to invasive

species like the European green crab (Matheson *et al*., 2016). As an Ecologically Significant Species (DFO, 2009b), eelgrass is protected under the **Fisheries Act**. Matheson et al. (2016) examined the impact of European green crab invasion on designated eelgrass beds in Bar Haven North, Woody Island, Swift Current, North Harbour, Southern Harbour, and Great Brule, all within the RAA. More recently, in 2020, DFO mapped out three distinct eelgrass beds; two within Placentia Bay (Southern Harbour and Come By Chance) and one within Trinity Bay (Path End). A visual representation of both the Placentia Bay and Trinity Bay eelgrass resources is presented in Figure EPR-021.

EPR-083 *Identify, as applicable, which proposed candidate quarry sites are considered alternate sites as contrasted with primary sites.*

Existing active quarry sites within the LAA, as shown in Figure EPR-037A, are considered the primary candidate quarry sites for the Project. Archived quarry sites identified within the RAA, as illustrated in Figure EPR-037B, are considered alternate (secondary) quarry options.

The identification of specific quarries to supply construction materials, including the determination of available material types and quantities, will be undertaken at a later stage of Project development by the EPCM contractor. Existing mapped quarries within the RAA provide flexibility to address Project material requirements should primary sources be unavailable or insufficient.

6.0 Potential Environmental Effects

Environmental effects represent the potential positive or negative interactions between Project activities and the surrounding environment within the PA, LAA, and RAA. North Atlantic has adopted a precautionary approach to Project planning, ensuring that preventative and protective measures are incorporated wherever a potential adverse interaction is identified. This section provides detailed information to describe and assess the potential effects of all phases of the Project on existing environmental conditions, addressing the requirements outlined in EPR-084 through EPR-100. To support an accurate and comprehensive assessment, a revised Section 4.0 has been appended to this EPR (Appendix 1), with all updates clearly underlined. The information presented in the following EPR items informs the Predicted Environmental Effects and summarizes the corresponding outcomes of the updated effects assessment.

EPR-084 *Water quality and quantity in Inkster's Pond and related watershed;*

Surface water resources were identified as a Key Indicator (KI) in the environmental assessment due to their importance for industrial water supply and aquatic ecosystem integrity (Section 4.2.2 of the Registration).

As described in Section 4.2.2.2 (Surface Water Resources) of the Registration, surface water within the LAA includes the Inkster's Pond Industrial Water Supply Area and associated watersheds near the proposed wind turbine and transmission line infrastructure. A baseline field monitoring program was conducted to characterize water quality, levels, flows, and seasonal dynamics within Inkster's Pond and associated managed waterbodies, including Barrisway Pond and Willie Jarge Pond. Field data collected from May 2024 to May 2025, were supplemented with long-term regional hydrometric and climate data from Water Survey of Canada. This analysis confirmed that the monitoring period captured the full hydrologic range, including a 120-day low-flow period and high-flow events associated with snowmelt and peak precipitation. Average unit flows during the baseline period ranged from 35.0 to 36.1 L/s/km², comparable to the regional long-term average of 37.2 L/s/km², indicating representative baseline conditions.

Potential Project interactions with surface water resources are assessed in Section 4.2.2.3 (Surface Water Resources). Surface water may interact with the Project during all phases through land disturbance near watercourses, alteration of surface drainage patterns, surface water withdrawals, and the risk of accidental releases. During construction, activities such as clearing, grading, excavation, and road building may temporarily increase exposed soils and alter runoff pathways, with the potential to increase total suspended solids (TSS) in adjacent watercourses.

During O&M, water will be withdrawn from Inkster's Pond to support hydrogen production and emergency fire protection. These withdrawals may result in small changes to downstream surface water quantity; however, the proposed maximum withdrawal rate of 0.030 m³/s represents approximately 11% of the average outflow at the Barrisway Pond diversion point and is not expected to result in a substantive alteration of hydrologic conditions. Decommissioning activities are expected to interact with surface water in a manner similar to O&M and may result in temporary increases in TSS if disturbed soils are not adequately managed.

As summarized in Section 5.2 of the Registration, residual effects on the surface water resources including Water quality and quantity in Inkster's Pond are expected to be low given the implementation of appropriate mitigations. Unplanned events during any Project phase, including spills or fire/explosion scenarios, represent a potential risk to surface water quality. An ERP has been developed to minimize the likelihood and severity of such events (Appendix M of the Registration).

EPR-085 *Surface water resources, streams, waterbodies and wetlands in or near the Project area;*

Surface water resources associated with the Project, including Inkster's Pond and Lady Cove Pond, are described and assessed in Sections 4.2.2.2 (Baseline Conditions) and 4.2.2.3 (Project-Environment Interactions) of the Registration. These sections characterize baseline surface water conditions and evaluate potential Project interactions related to water quantity and quality.

Streams and waterbodies located within or near the PA are also addressed in Sections 4.2.2.2 and 4.2.2.3, under the Freshwater Fish and Fish Habitat KI, where existing conditions, connectivity, and potential interaction pathways with Project activities are described.

Wetlands within and adjacent to the PA are assessed as part of the terrestrial environment and are described in Sections 4.2.3.2 (Baseline Conditions) and 4.2.3.3 (Project-Environment Interactions) of the Registration. These sections characterize wetland distribution, function, and sensitivity, and evaluate potential Project-related effects and mitigation measures.

Residual Project effects on surface water resources including streams and waterbodies are assessed in Section 5.2 and Table 5.2-1 of the Registration. As summarized, residual effects on the surface water resources and freshwater KIs are expected to be low given the implementation of appropriate mitigations.

Residual Project effects on wetlands are assessed in Section 5.3 and Table 5.3-1 of the Registration. As summarized, North Atlantic, having committed to robust mitigation measures for wetlands throughout the Construction, O&M, Decommissioning and Rehabilitation Phases of the Project, will effectively reduce any potential negative effects on wetlands to a low magnitude and limited geographic extent. It is anticipated that wetlands, where they interact with the Project, will maintain their functionality and will not experience significant adverse effects.

EPR-086 *Water levels in groundwater, in consideration of the Project's water use requirements and existing water users;*

Groundwater in the PA is not planned to be utilized to meet Project requirements and there will be few aspects of the Project that will interact with groundwater as outlined in Section 4.2.2.2 of the Registration. The potential effects of the Project on groundwater are considered minimal as per Section 4.2.2.3 of the Registration.

Residual effects for groundwater resources are assessed in Section 5.2 and Table 5.2-1 of the Registration and are determined to be negligible to low throughout all Project phases.

EPR-087 *Public drinking water and/or wastewater systems, specifically if the Proponent is proposing to connect the temporary accommodations camp to a public water/wastewater system;*

The Project does not require the development of a new temporary accommodations camp and will therefore not connect to any public drinking water or wastewater systems. Construction and O&M personnel will be housed within existing accommodations infrastructure or within nearby communities, eliminating the need for new water or wastewater servicing.

During peak construction periods, workers will be accommodated primarily in local communities (e.g., Sunnyside, Come By Chance, Arnold's Cove) and in the St. John's region, with daily commuting to the PA. In addition, North Atlantic may utilize the existing accommodations and supporting utility infrastructure at the Bull Arm Fabrication Site as identified in Section 4.2.6.4 of the Registration, which includes established potable water supply and wastewater treatment systems designed for industrial-scale workforces. Use of these existing facilities avoids the need for new servicing infrastructure and minimizes demands on municipal systems. Because no new accommodations camp is proposed and no changes to municipal water or wastewater systems are anticipated, no adverse interactions with public drinking water or wastewater infrastructure are expected.

EPR-088 *Marine fish habitat (including eel grass) and fish populations (including mammals), by species, associated with:*

i. effluent discharge;
ii. in-water works, such as fording, removal of aquatic and/or stream side vegetation, installation of culverts, bridges and water crossings, infilling, piling, dewatering, and changes to natural flow regime;
iii. increased ocean noise; and
iv. risk of vessel strikes.

A total of 43 marine SCC (fish, mammals, and reptiles) in Placentia Bay and the Avalon Peninsula were identified; however, only two marine finfish (Atlantic cod [*Gadus morhua*], American plaice [*Hippoglossoides platessoides*]) were expected to be found commonly in the LAA and RAA. The life histories and habitat requirements of these two species were assessed in the context of potential interactions with the Project in Section 4.2.2.3 of the Registration.

Placentia Bay is a designated EBSA within the Placentia Bay-Grand Banks Large Ocean Management Area (PBGB LOMA) and this designation encompasses both the LAA and RAA. No MPAs or critical habitats, as defined under SARA and NL ESA, were within the LAA and RAA. Sensitive marine habitats that occur within the RAA, but not within the LAA, include capelin spawning sites, eelgrass meadows, salt marshes, wetlands, and scallop beds.

Effluent Discharge

As described in Section 3.2.2.7 (Physical Oceanography) and Section 4.2.2.2 of the Registration, an effluent dispersion modelling study was conducted for two scenarios: use of Braya's existing outfall and a new outfall north of the jetty. Using Braya's existing outfall, temperature changes met the <1 degrees Celsius (°C) guideline within short distances under most scenarios, with the most challenging case (high-temperature effluent in summer with no current) requiring 33.73 m for compliance. Salinity changes remained within the 10% guideline due to minimal difference between effluent and ambient salinity. Using

the new outfall north of the jetty, the most challenging scenario (high-temperature effluent in winter with no current) required only 5.22 m to meet the <1 °C guideline. Again, salinity changes remained within acceptable limits.

Although scenarios with no current were modelled, such conditions are highly unlikely in this region. As shown in Appendix B1 of the Registration, regular upwelling and downwelling occur due to local oceanographic and atmospheric processes. Freshwater inputs from Piper's Hole and adjacent rivers further contribute to mixing near the outfall locations.

The high-temperature scenarios (32 °C effluent) represent a theoretical maximum and are not expected during routine operations. In the rare event such temperatures occur, significant thermal effects could arise within the 5.22 m zone during winter. Sedentary and stenothermal species, which cannot easily relocate, are of primary concern. Mobile organisms such as marine mammals, reptiles, adult fish, and shellfish are expected to avoid the thermal plume.

Elevated temperatures may alter key seawater properties, including viscosity, gas solubility, and electrical conductivity (CCME, 1999). A major biological concern is reduced dissolved oxygen availability, which can decrease productivity or cause stress in marine organisms. Algae and seagrass exhibit varying thermal tolerances; eelgrass (Zostera marina) can survive up to ~30 °C (Lüning and Freshwater 1988), while some brown algae (e.g., *Alaria esculenta*) are more sensitive. Benthic species identified during video surveys (Appendix B1 of the Registration), including sea stars, hermit crab *spp.*, Winter Flounder (*Pseudopleuronectes americanus*), and anemones, are unlikely to be affected because modelling indicates the thermal plume will rise toward the surface, preventing substantial seabed warming.

Localized warming may promote plankton or algal blooms and can interfere with sensitive life stages of fish and crustaceans (CCME, 1999), particularly if discharges coincide with key spawning or larval periods (Section 3.1.2.11 (Marine Sensitive Time Periods and Working Windows) of the Registration). Invasive European green crab, already present in the RAA, could benefit from warmer, brackish conditions, potentially worsening impacts on native species and eelgrass (Section 3.1.2.12 (Marine Conservation Concern) of the Registration). Salinity effects from effluent are expected to be minimal in extent and duration and therefore unlikely to influence the surrounding ecosystem.

As stated in Section 4.2.2.3 of the Registration, North Atlantic anticipates a minimal connection between the Project and the marine environment, combined with adherence to applicable regulatory standards, will result in few potential environmental effects during Construction, O&M, and Decommissioning and Rehabilitation Phases. The residual effects assessed in Section 5.2 and Table 5.2-1 of the Registration further support this conclusion.

In-water Works

Construction activities associated with the Project, as described in Section 2.3.4 (Construction Activities) of the Registration, will occur primarily on land, with only limited in-water work required. The key marine-based construction activity is the installation of a new outfall north of the jetty, which will be placed and secured using a long-arm excavator. Additional marine-related construction includes minor adjustments to the loading arms and conveyance system required to support the handling of MCH, including the addition of a 609.6 mm (24 inch) toluene/MCH transfer pipeline equipped with leak detection and emergency shutoff systems. These modifications are limited to existing landside equipment and do not involve any in water works, piling, dredging, or physical alteration of the jetty structure. Transport of construction materials and equipment to the jetty area will also involve limited interaction with the marine environment.

During construction, temporary increases in noise, vibration, and lighting may occur due to activities such as mobile equipment operation, use of stationary construction equipment, and general site preparation. Although these emissions originate mostly from land-based equipment, they may still be detectable by marine organisms in the immediate vicinity of the Project site. Marine interactions from these construction activities remain minimal due to the short duration and small spatial footprint of the works, as well as the limited extent of in-water construction.

Potential effects on marine fish, fish habitat, and sensitive habitats are therefore expected to be low as identified in Section 4.2.2.3 of the Registration. The use of a long-arm excavator confines disturbance to a small area directly adjacent to the shoreline, reducing the likelihood of meaningful habitat alteration. The majority of sensitive marine habitats, including eelgrass meadows, capelin spawning beaches, salt marshes, and scallop beds, are located within the broader RAA but not within the LAA, further reducing risk. Treated effluent from facility operations, including surface water runoff, demineralization wastewater, and sanitary effluent, will meet applicable regulatory discharge criteria. The new outfall will discharge demineralization water from the HGP, while the existing Braya outfall will be used for remaining effluents.

Given the limited magnitude, duration, and spatial extent of in-water works, combined with compliance with regulatory standards and mitigation practices, the Project is expected to result in minimal effects on marine fish, fish habitat, and sensitive habitats. The residual effects assessed in Section 5.2 and Table 5.2-1 of the Registration further support this conclusion.

Increased Ocean Noise

The Fisheries and Aquaculture KI in Section 4.2.2 of the Registration, accounts for the Projects effects on changes to marine traffic volumes. In Section 4.2.2.3 increased ocean noise and vibration from increased vessel traffic may cause auditory masking. Additionally, fish activities and aquaculture

operations can be affected by the increased ocean noises and vibrations. However, these interactions and potential effects during the O&M will remain low as there will be minimal increase to vessel traffic, fishing activities that are normally in the LAA are limited, and no aquaculture operations in Placentia Bay are close to or planned for the RAA.

In addition to the Fisheries and Aquaculture KI, the Project also evaluates Marine Fish and Fish Habitat in Section 4.2.2. While not previously discussed in detail in the Registration, Project noise was considered and the following information has been added to Appendix 2 revised Section 4.2.2.3. Construction activities such as mobile equipment operation, use of stationary construction equipment, blasting, general site preparation, and general operational activities near the port site will generate noise in the LAA. Anthropogenic noise can interfere with whale communication, increase susceptibility to acoustic masking, and alter feeding and movement behaviours (Cunningham and Mountain, 2014; Erbe et al., 2019; Holt *et al*., 2021). Increased noise and vibration may also affect fish by elevating stress, impairing predator detection, and causing temporary hearing loss (Brown *et al*., 2021; Ivanova *et al*., 2018, 2019; Popper *et al*., 2014). Pinniped haul-out behaviour is also highly sensitive to elevated noise levels (London *et al*., 2012). Overall, increased ocean noise levels can affect marine animal behaviours, possibly decreasing abundances in nearby areas. However, as described in Section 2.3.5.6 of the Registration, approximately one MR vessel per month is anticipated during the O&M Phase for LOHC transport, the impacts would be low considering the existing marine traffic in Placentia Bay in addition to the mitigations outlined in Section 4.5.2 of the Registration.

Risk of Vessel Strikes

The Project acknowledges the risk of vessel strikes and has added the following information to the Marine Fish and Fish Habitat KI in Appendix 2 revised Section 4.2.2.3. Although the Project will introduce only a limited number of vessel transits relative to existing activity in Placentia Bay, vessel strikes are a well-known cause of injury and mortality for marine mammals, sea turtles, and large fish species. Collisions occur when vessel traffic overlaps with the presence of marine wildlife and are more likely in areas that are used by wide ranging species such as cetaceans, which are known to occur throughout Placentia Bay. Many marine animals surface only briefly and with minimal visual profile, making them difficult for vessel operators to detect. Some species may not be able to sense or avoid approaching vessels, especially when vessel speeds are elevated (NOAA, 2026).

Species specific behaviours can further increase collision risk. North Atlantic Right Whales (*Eubalaena glacialis*), while not commonly documented in Placentia Bay relative to other regions of Atlantic Canada, can be present in the RAA. Their lack of a dorsal fin makes them especially difficult for mariners to see, and mothers with calves often rest or nurse at the surface. Individuals feeding at or just below the surface are similarly vulnerable because these behaviours increase the amount of time they remain within the strike zone (Soldevilla *et al*., 2017). Other species, such as Rice's Whale (*Balaenoptera ricei*), exhibit

nighttime surface-oriented behaviour, spending up to 88% of their time within 15 m of the surface, which further heightens their susceptibility to vessel strikes during low visibility periods (Soldevilla *et al*., 2022).

The severity of a vessel strike is strongly influenced by vessel speed. Lethal outcomes become increasingly likely at speeds between 10 and 15 knots, and collisions above 15 knots are frequently fatal for large whales (Vanderlaan and Taggart, 2006). As modern commercial vessels often travel at or above these speeds, any transiting vessels operating at higher velocities has the potential to cause serious or fatal injury if a collision occurs.

Although Placentia Bay is not part of the Gulf of St. Lawrence Right Whale management area, Transport Canada has established extensive mandatory and voluntary protection measures in Atlantic Canada to reduce risks to North Atlantic Right Whales and other species. These measures include speed-restricted zones, dynamic and seasonal management areas, restricted access zones, and voluntary slowdowns in key migration corridors. These tools are designed to reduce both the probability and severity of vessel strikes by limiting vessel speeds when whales are present or expected to occur (TC, 2025).

For Placentia Bay specifically, while whale densities may be lower than in the Gulf of St. Lawrence, the area does support seasonal presence of several whale species, including Humpback Whales (*Megaptera novaeangliae*), Minke Whales, Fin Whales (*Balaenoptera physalus*), and occasional rare or endangered species passing through during migration. Any vessel transiting to or from the Project site introduces some potential for interaction with marine mammals. However, the relatively limited number of vessel movements associated with the Project, combined with established federal mitigation practices, such as adhering to posted speed advisories, maintaining vigilant marine mammal watch procedures, and following industry best practices, substantially reduces the likelihood of vessel strikes.

EPR-089 *Risk to dams from blasting activities;*

Section 3.1.2 Figure 3.1.2-1 of the Registration illustrates the locations of nearby dams, noting the nearest turbine is 2.5 km away from the nearest dam. Given the substantial separation distance, blasting activities for turbine foundations and access roads are not expected to interact with or pose any structural risk to dam infrastructure. During the FEED process, North Atlantic will confirm blasting methods, and adjust methods, charge size, and setback distances consistent with provincial guidelines and industry best practices to ensure vibrations remain well below allowable thresholds.

EPR-090 *Small Craft Harbours (SCH), commercial and recreational fishers, aquaculture operators, and other marine users, including consultation with these stakeholders;*

Consultation with Small Craft Harbours (SCH), commercial and recreational fish harvesters, aquaculture operators, and other marine users is summarized in EPR-029. Fisheries and aquaculture were evaluated

as a KI in Section 4.2.2 of the Registration, which reviewed available information on commercial, recreational, and Indigenous fisheries within the RAA. Commercial freshwater fisheries within the RAA are negligible due to the Atlantic salmon moratorium and declining American eel licence activity, while recreational fisheries primarily target brook trout, Atlantic salmon, rainbow smelt, and brown trout. Seasonal marine groundfish harvesting, particularly for Atlantic cod, occurs annually from July to September (Section 4.2.2.2 of the Registration).

Potential interactions between Project activities and fishing or aquaculture operations during the Construction Phase are primarily associated with increased vessel traffic. This may result in temporary restrictions on access to fishing areas, increased risk of gear disturbance or damage, and a heightened potential for the introduction or spread of AIS. Several AIS of concern, including golden star tunicate, oyster thief, vase tunicate, and violet tunicate, are known to affect shellfish aquaculture operations and marine fish habitat (Section 4.2.2.3 and Section 3.2.2.9 (Marine Biosecurity) of the Registration). However, both commercial and recreational fishing activity near the LAA is limited, and aquaculture operations are located well outside the LAA, reducing the likelihood of interaction.

During the O&M Phase, marine infrastructure operation and associated vessel movements may result in temporary access limitations for marine users or localized effects on fish productivity, including potential changes in water quality or acoustic conditions. Noise and vibration generated by vessel activity may contribute to auditory masking for marine species (Section 4.2.2.3 of the Registration). Given the limited overlap between the Project's marine footprint and existing fisheries and aquaculture activity, interactions during this phase are expected to remain minor.

Potential effects during the Decommissioning and Rehabilitation Phase are anticipated to be similar to those during construction, with vessel traffic constituting the primary interaction pathway. Following decommissioning, marine infrastructure is expected to remain available for future industrial use (Section 4.2.2.3 of the Registration).

Consideration of Indigenous fisheries is provided in Section 4.2.4.4 of the Registration, which assesses the potential for Project-environment interactions with Food, Social, and Ceremonial (FSC) fisheries. While there are no Indigenous land claims on the island of Newfoundland, FSC licences issued to members of the Miawpukek First Nation (MFN) encompass a substantial marine area, including Bay d'Espoir and Northwest Atlantic Fisheries Organization (NAFO) Division 3Ps, extending from Placentia Bay westward to Burgeo. These licences support the harvesting of fish, shellfish, trout, and seals, contributing to MFN's cultural and economic well-being. Although an adjacent fishing licence/enterprise exists near the PA, no information is available confirming that FSC harvesting occurs within Placentia Bay. Given the Project's limited marine footprint, distance from primary FSC harvesting areas, and minimal anticipated interaction with traditional harvesting activities, the Project is expected to have negligible interaction with and no measurable effect on this KI.

Residual effects on Fisheries and Aquaculture are assessed in Sections 5.2 and Table 5.2-1 of the Registration and are determined to remain low throughout all Project phases.

EPR-091 *Spatial and temporal effects on species at risk and of conservation concern including those listed under NL ESA and SARA including bats, muskrat, lichens, plants, and birds (those protected by the Migratory Birds Convention Act (MBCA) and others such as owls and raptors) and their habitats, associated with:*

i. direct and indirect effects of Project construction, operation and maintenance, decommissioning and rehabilitation;

ii. interactions with wind turbines, including estimated mortality rates; and

iii. noise, vibrations and light, and in particular effects on feeding, breeding, movement and migratory patterns;

The potential effects of the Project on terrestrial SCC and SAR, including bats, muskrat, lichens, plants, and birds (including those protected by the **Migratory Birds Convention Act** (MBCA) and others such as owls and raptors) and their habitats, is described in Section 4.2.3.3 of the Registration. Additional context is provided below and has been added to Appendix 2 revised Section 4.2.3.3.

It is not currently practicable to provide estimated mortality rates, based on a paucity of relevant scientific data for Newfoundland and Labrador. However, as per the commitments outlined in Section 4.5.3, Table 4.5.3 of the Registration, a Post-construction Survey Program will be established in consultation with NL WD to inform mortality rates. North Atlantic is committed to an adaptive management approach wherein mitigation measures are adjusted as necessary to avoid effects of the project.

Vascular Plants (including SAR and SCC)

Construction activities pose the greatest potential risk to SAR plants through direct habitat loss, soil compaction, and altered drainage. These effects are anticipated to be negative, low to moderate in magnitude, localized, frequent during construction, and potentially long-term if populations are directly affected; however, they are partially to fully reversible with appropriate avoidance, mitigation, and rehabilitation measures. Indirect effects include changes to microhabitat conditions and the potential introduction of invasive species.

During O&M, effects on plants are expected to be minimal and largely confined to access routes and maintenance areas. Noise, vibration, and light are not expected to affect plant physiology. Decommissioning and rehabilitation may result in short-term disturbance that is localized but should be similar to construction but also provide opportunities for restoration.

Fauna (including Muskrat)

For muskrat and other small mammals, construction may result in temporary habitat disturbance, vegetation removal, or localized changes to hydrology near wetlands or drainage features. These effects are expected to be negative, low in magnitude, frequent during construction, localized, short-term, and largely reversible, occurring within landscapes already influenced by natural and anthropogenic disturbance.

During O&M, turbines do not present direct interaction or mortality risk to muskrat. Noise, vibration, and light are not expected to meaningfully affect feeding, breeding, or movement patterns. Operational effects are therefore considered negligible to low, localized, and reversible. Decommissioning effects would mirror construction but over a shorter duration, while accidents or malfunctions are unlikely to affect this group beyond localized, short-term disturbance.

Avifauna (MBCA-protected species, SAR birds, owls and raptors)

In Section 4.2.3.3 of the Registration, avifauna is discussed based on various groups based on their habitat use and associated Project-environment interactions including Passeriformes, Raptors, Marine and Freshwater Birds, and Avian Species at Risk. The following provides a summary of the assessment and has been added to Appendix 2 revised Section 4.2.3.3.

During Construction, direct effects on birds are expected to be limited to short-term disturbance and localized habitat alteration resulting from vegetation clearing, increased human activity, vehicle traffic, and elevated noise levels. These effects are anticipated to be negative in nature, low in magnitude, frequent during active construction, localized to the Project footprint and immediate surroundings, short-term, and highly reversible, occurring largely within a broader regional context where similar disturbances are already present. Indirect effects may include temporary displacement from feeding, nesting, or roosting habitats; however, no critical breeding or colony habitats for SAR birds have been identified within the PA.

During O&M, birds may interact with wind turbines through collision risk, with potential mortality varying by species, season, flight behaviour, and flight height. Collision risk is expected to be low in magnitude, periodic, and localized, given the limited use of the PA by high-risk species and the absence of major migratory concentration areas. Nocturnal species such as Leach's Storm-petrel may be attracted to artificial lighting under certain conditions, particularly during low visibility events, which could increase collision risk. Operational noise and vibration may result in minor behavioural avoidance within proximity to turbines but are not expected to result in measurable population-level effects. Effects during operation are expected to be long-term but reversible, with a moderate to high level of mitigation potential through lighting design, operational controls, and post-construction monitoring.

Decommissioning and Rehabilitation effects on birds would be similar in nature to Construction but shorter in duration and spatial extent, consisting primarily of temporary disturbance and noise.

Rare Lichens

Lichens may be sensitive to physical disturbance, substrate removal, and changes in microclimate. Construction may result in direct loss of individuals through vegetation clearing and ground disturbance, as well as indirect effects from dust deposition and altered exposure to light, wind, and moisture. These effects are expected to be negative, low in magnitude, localized to disturbance areas, short- to medium-term, and partially reversible, depending on substrate recovery and recolonization rates.

During O&M, effects on lichens and bryophytes are expected to be minimal and limited to incidental disturbance along access routes. Noise, vibration, and light are not expected to directly affect these species. Decommissioning may result in localized disturbance but also opportunities for habitat rehabilitation, reducing long-term effects.

Bats

Bat species potentially occurring in the PA include Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*), Hoary Bat (*Lasiurus cinereus*), Silver-haired Bat (*Lasionycteris noctivagans*), and Eastern Red Bat (*Lasiurus borealis*), all of which are SAR due to population declines. Effects of the Project on bats during the Project are outlined in Section 5.3 Table 5.3-1 of the Registration. Additional detailed information has been provided below.

During Construction, direct effects are expected to be limited to short-term, localized disturbance of foraging habitat resulting from vegetation clearing, increased human activity, and elevated noise levels. These effects are anticipated to be negative in nature, low in magnitude, frequent during active construction, localized to the Project footprint, short-term, and highly reversible, with alternative foraging habitat available in the surrounding landscape.

During O&M, bats are susceptible to turbine-related mortality through blade strikes. In other jurisdictions outside the PA, the highest risk is associated with migratory species such as Hoary Bat, Silver-haired Bat, and Eastern Red Bat during late summer and fall. Operational effects for this Project are expected to be negative, low in magnitude (due to the lack of bat activity or suitable bat habitat in or near the Wind Farm and further confirmed by the lack of detections for migratory species in the area), seasonal and periodic, localized to turbine locations, and long-term in duration. Noise and vibration are not expected to directly affect bats; however, turbine presence could influence movement patterns and foraging behaviour. The mitigation potential is high, with operational curtailment during high-risk periods in real

time, monitoring using ultrasonic detectors, and adaptive management measures incorporated into the Avian and Bat Management Plan.

Decommissioning and rehabilitation effects are expected to be similar in nature to Construction but shorter in duration, consisting primarily of temporary disturbance. Accidents or Malfunctions are anticipated to be infrequent and spatially limited, with minimal additional risk beyond normal operational conditions.

Insects (including SAR insects)

Construction may affect insects through direct habitat loss, vegetation removal, and disturbance of host plants or larval substrates. These effects are expected to be negative, low in magnitude, localized, short-term, and reversible, provided suitable habitat remains available in adjacent areas. Indirect effects may include dust deposition and minor changes in microclimate.

During operation, turbines present minimal direct collision risk for most insect species, although some nocturnal insects may be attracted to lighting. Noise and vibration are not expected to have measurable effects. Operational effects are therefore considered low, localized, and reversible, with mitigation potential through lighting management and habitat protection.

Summary in Relation to Effects Table

Across all species groups, effects are predominantly negative but low in magnitude, localized, and reversible, with the highest sensitivity associated with birds and bats during operation due to turbine interactions. Construction-related effects are generally short-term and manageable, while operational effects are long-term but mitigable through design, monitoring, and adaptive management measures incorporated into the EEMP. Accidents and malfunctions are expected to be infrequent, localized, and short-term, with limited potential for population-level effects.

EPR-092 *Dust lift off and effects on sensitive receptors in aquatic and terrestrial environments;*

Dust generation associated with Project activities has the potential to affect sensitive receptors in both aquatic and terrestrial environments. As outlined in EPR-055 and EPR-073, dust lift-off is expected to occur primarily from sources such as unpaved access roads, laydown areas, vehicle movements, and general construction activities. Additional details on fugitive dust emissions are provided in Section 4.2.1.3 of the Registration, which notes that fugitive dust can degrade local air quality, pose health risks to workers and nearby communities, and contribute to the deposition of particulate matter on ecologically sensitive areas. Dust emissions from the Construction Phase are temporary in nature; however, planned

mitigation measures, summarized in Section 4.5.1 of the Registration in addition to EPR-116, are intended to minimize these interactions.

Effects on sensitive aquatic receptors may occur where dust deposition results in changes to water quality, including increased sediment loads. As referenced in Section 4.2.3.3 (Wetlands) of the Registration, dust generation, erosion, and sedimentation from road construction can alter natural water flow patterns across wetland systems and may lead to degradation or alteration of wetland habitat. Deposition of airborne particulates into wetlands and waterbodies may affect water clarity, nutrient cycling, and ecological function. These effects can be particularly pronounced in wetlands due to their hydrologic sensitivity and reliance on stable water quality conditions.

Terrestrial receptors, including vegetation, wildlife habitats, and ecologically sensitive plant communities, may also be affected by dust accumulation, particularly in areas adjacent to access roads, construction zones, and material handling areas. Dust deposition can alter leaf surface conditions, reduce photosynthetic efficiency, and affect lichen and moss communities that are particularly sensitive to airborne particulates.

Discussion on the mitigation measures for aquatic and terrestrial receptors to be implemented by the Project are identified in EPR-116.

EPR-093 *Emissions from construction related to vehicles, blasting activities, drilling and concrete production if applicable;*

Project activities during the Construction Phase will result in emissions of air contaminants from several sources. As described in Section 4.2.1.3 of the Registration, the primary contributors to atmospheric emissions during construction include fossil fuel-fired mobile and stationary equipment, blasting operations, vehicular traffic on unpaved roads, wind erosion of exposed surfaces (e.g., stockpiles, laydown areas), material handling, and transportation of Project components. These activities will release particulate matter (PM), combustion by-products, and other air contaminants into the local environment.

During the O&M Phase, additional airborne releases will occur from flaring systems, cooling towers, marine transport operations, and backup power generation; however, emissions associated specifically with construction activities are expected to be lower in magnitude than those generated during operation. Similarly, during the Decommissioning and Rehabilitation Phase, atmospheric emissions will arise from equipment use and material handling but at levels anticipated to be less than those observed during operations.

An Air Dispersion Modelling Study (Appendix H2 of the Registration) was undertaken to evaluate the geographic extent and magnitude of potential air emissions during the O&M Phase and to assess

potential impacts on air quality relative to provincial air quality standards. Although modelling focused on operational emissions, Construction-phase emissions are expected to be captured within the lower-emission scenarios evaluated. The modelling incorporated emission rates, source locations, and sensitive receptor locations, and compared predicted concentrations to Newfoundland and Labrador Ambient Air Quality Standards (NL AQS) using background concentrations from the Atmospheric Environment Baseline Study (Appendix A of the Registration). Results from model re-evaluation are provided in Appendix 5 and demonstrate that no exceedances of the NL Air Pollution Control Regulations are expected for PM10 or PM2.5. These results have been incorporated into Appendix 2 revised Section 4 Environmental Effects Assessment of the Registration.

GHG emissions will also be generated during all Project phases, with the majority of construction-related emissions classified as Scope 1, resulting from fossil fuel combustion in mobile and stationary equipment, and blasting operations. Scope 3 emissions will arise from marine transport of construction materials and major components such as nacelles, blades, and towers. Annual GHG estimates for the Construction and O&M Phases are presented in Table 4.2.1-6 of the Registration, with additional emissions inventory details provided in Appendix H1 of the Registration.

Accidents or malfunctions (e.g., flaring events, fires, or explosions) have the potential to generate short-duration airborne releases; however, these events are expected to result in emissions lower than those generated during normal operations.

Overall, emissions associated with construction, while temporary, are expected to be managed effectively through standard mitigation measures and compliance with applicable regulatory requirements.

EPR-094 *Access to land within areas covered by mineral licences, existing quarry operations and the potential to reactivate any dormant quarry sites;*

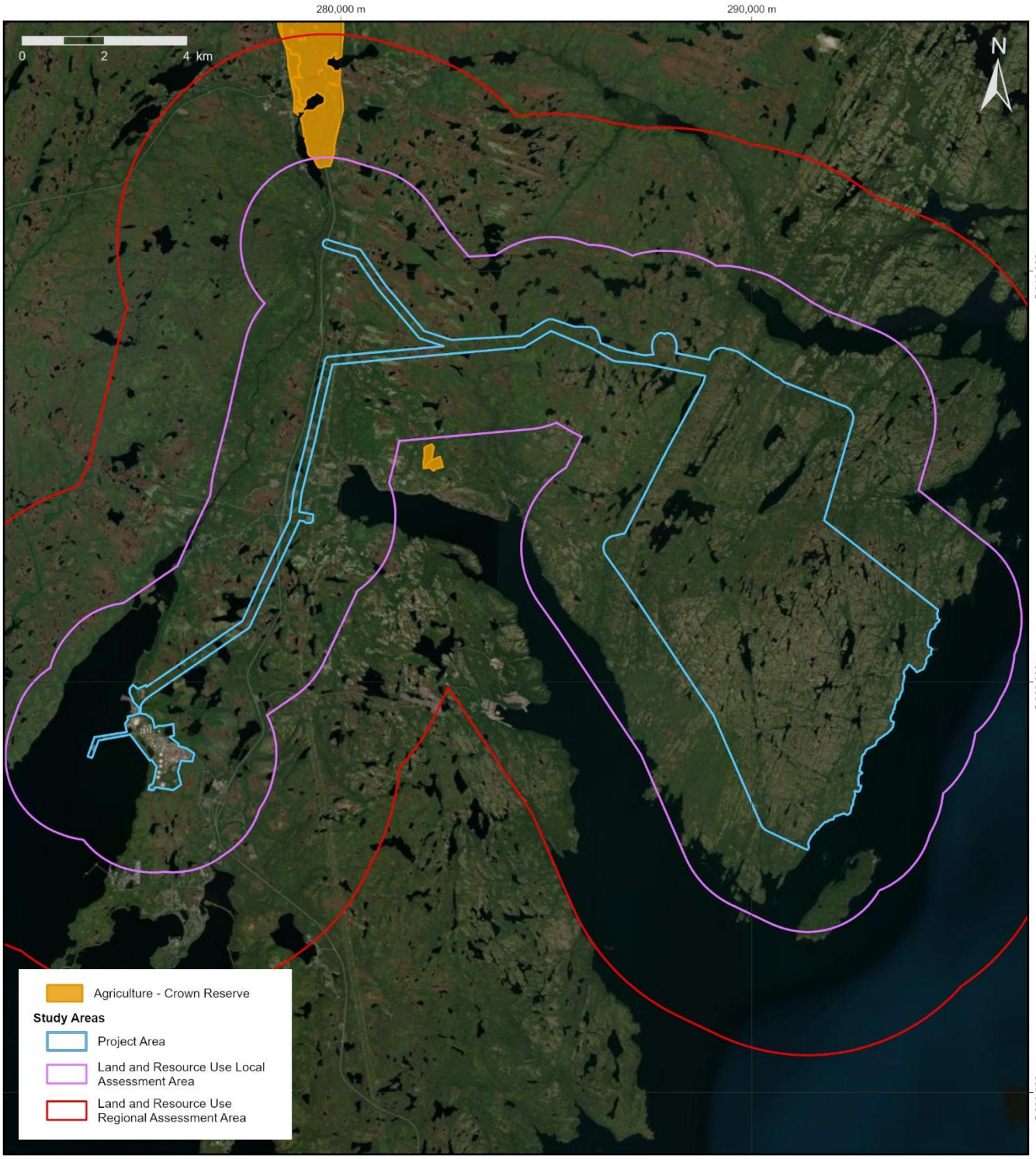
Mineral licences and quarry operations are assessed in Section 4.2.4.4 of the Registration. Access to land within areas covered by mineral licences, existing quarry operations, and the potential reactivation of dormant quarry sites is addressed in EPR-038 and EPR-060. One existing active quarry, located in the northwest corner of the LAA adjacent to the TCH, is in close proximity to the proposed Project transmission line; however, no direct interaction is anticipated. North Atlantic will consult with the active quarry operator to communicate construction timelines and mitigate any potential access-related impacts.

EPR-095 *Confirmation of whether sufficient firm power supply currently exists on the Island Interconnected System to supply the Project as proposed, or how adding sufficient supply on the Island Interconnected System might impact the system, including reliability and system costs for ratepayers;*

During conversations with NL Hydro, it has been confirmed that the required 7 MW has been stated as not an issue for the system and should not affect reliability of the system. The cost is solely with North Atlantic and will not affect ratepayers of the province.

EPR-096 *Agriculture operations in and near the Project area;*

Agricultural operations in and near the PA are described in Section 3.1.4 of the Registration. Figure EPR-096 (Figure 3.1.4-5 of the Registration) illustrates that the PA and the LAA defined specifically for the Land and Resource Use VC do not intersect with agricultural land. Because this LAA is unique to the Land and Resource Use VC and differs from LAAs used for other VCs, its boundaries more precisely capture potential interactions with agricultural activities. Based on this assessment, the Project will not directly interact with agricultural operations.



North Atlantic	FIGURE TITLE: Agricultural Operations Near the Project Area	NOTES: Contains information licensed under the Open Government Licence - Newfoundland and Labrador	PREPARED BY: J. Crocker; DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18
			APPROVED BY: C. Collins 2026-03-18
			CRS: WGS 1984 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-096-Rev0

Figure EPR-096 Agriculture operations in and near the Project area

EPR-097 *Provincial roadways and drainage infrastructure from Project access points, over-weight/over-dimension loads, changes in drainage and flow patterns and potential driver distraction from turbines;*

The proposed Wind Farm is situated at approximately 10 km from the provincial TCH and will therefore not result in any driver distraction during the Construction Phase. The existing roads and intersections between the TCH and the PA were originally designed for heavy vehicles, and the design is therefore expected to be adequate for most of the anticipated construction traffic. North Atlantic commits to undertaking measures intended to minimize impact on the road network during all phases of the Project including obtaining required permits and approvals from relevant authorities. More information will be available at that time that will help clarify the weights of the loads and the types of vehicles to be used in construction and the frequency of the overweight truck travel on the roadways.

As noted in Section 4.3.3.3 of the Registration, overweight and over dimension loads will require an Overweight and Over Dimension Special Permit and will be transported during reduced traffic hours to minimize safety risks and disruptions to provincial road users as well as limiting driver distraction.

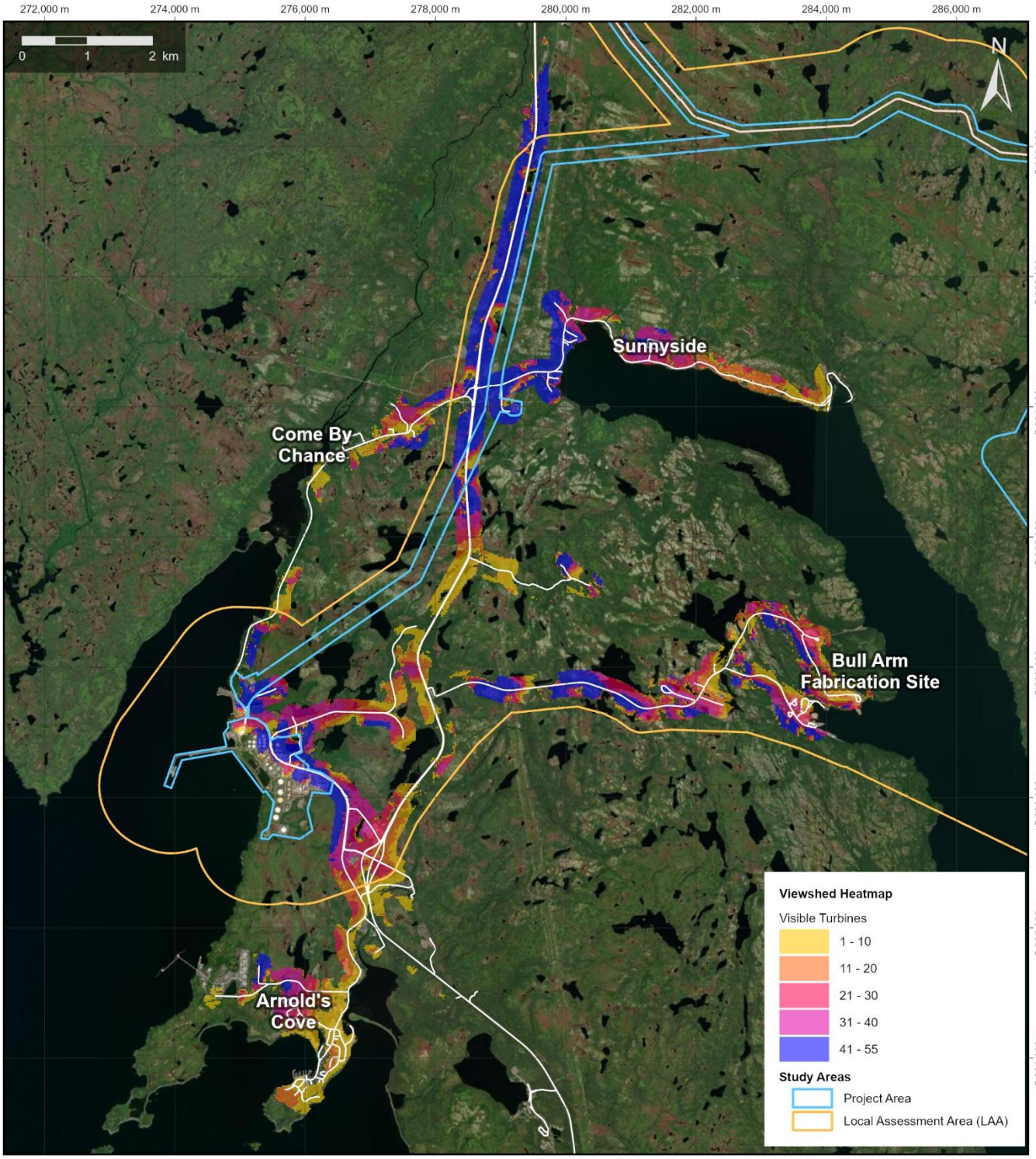
Section 2.3.4.2 of the Registration outlines that in addition to new road construction, existing road infrastructure at the Bull Fabrication site and the Come By Chance Industrial Site will be upgraded as necessary to support heavy equipment, routine maintenance, and potential future expansion. Road construction between the TCH and the Wind Farm will require grading and earthworks; therefore, potential changes in local drainage and surface water flow patterns will be designed into the detailed engineering for the road. Mitigation measures will address erosion and sediment control, maintenance of existing drainage structures, and the protection of provincial infrastructure.

During Construction, driver distractions will be limited to day-light hours since no turbine components will be transported at night. In addition, North Atlantic will provide notice to the public in accordance with Appendix P of the Registration and using the communication tools as outlined in EPR-133.

During O&M, visual interactions between the Wind Farm and provincial roadways were evaluated using both a 3D digital model and 2D viewshed analysis, as described in Section 8.3.1.6 of the Registration. For clarity, a modified 2D viewshed is provided in Figure EPR-097, illustrating turbine visibility from public roads, including the TCH. The 2D viewshed is based on elevation data and indicates that 41 to 55 turbines may be visible from certain sections of the TCH; however, this analysis is conservative and does not account for line-of-sight obstructions/impediments (i.e., fog, vegetation, berms, etc.) which, in most locations, is expected to substantially reduce visibility. Some segments with low vegetation may offer clear sightlines, weather permitting, potentially creating momentary distraction for drivers. The closest turbine to any location along the TCH is more than 8 km away, reducing their visibility in inclement weather (e.g., fog, rain, snow) and their prominence on the landscape.

Additionally, Appendix K of the Registration confirms that there is no risk of shadow flicker along the TCH, further reducing the potential for visual disturbance or distraction for motorists.

Overall, potential effects on provincial roadways, including drainage interactions, transport requirements, and driver distraction, will be fully addressed with detailed engineering, permitting, and implementation of appropriate mitigation measures developed in consultation with the NL DTI.



North Atlantic	FIGURE TITLE: Turbine Visibility From Public Roads and TCH	NOTES: Viewshed model created from the Geodesic Viewshed tool where Observer Height = 1.5m and maximum visible Turbine Blade Height = 200m. DEM Provided by Government of NL GIS and Mapping division. Viewsheds displayed based on a 200m buffer from public roads within the project area.	PREPARED BY: J. Crocker; DATE: 2026-03-18
	PROJECT TITLE: North Atlantic Wind to Hydrogen Project		REVIEWED BY: C. Bursey 2026-03-18
			APPROVED BY: C. Collins 2026-03-18
			CRS: WGS 1984 UTM Zone 22N
			sem

SEM MAP ID: 016-015-GIS-EPR-097-Rev0

Figure EPR-097 Turbine viewsheds from public roads and TCH

EPR-098 *Risk of wildfire due to Project activities;*

Risk of wildfires arising from project activities has been acknowledged within the Registration, where forest fires were identified as an environmental condition that may impact project safety, infrastructure, and operations. As noted in section 4.4.4 (Forest Fires) of the Registration, wildfires have the potential to damage project infrastructure, disrupt schedules, and loss in production during O&M Phase, creating reduced visibility and air-quality hazards. Project infrastructure will be designed and operated to reduce risk of damage from wildfire. Areas such as transmission rights-of-way and wind turbine pads will be maintained to ensure vegetation is controlled. Fire detection and protection systems will be installed in all high-risk areas, including fuel and hazardous materials storage locations. North Atlantic will also implement in-line fire detection systems at processing facilities and within the control room. Dedicated fire-water tanks will be maintained on site to support emergency response and suppression requirements.

EPR-099 Domestic wood harvesters within the Project area;

Domestic wood harvesting activities occur with portions of the PA, as identified in Section 3.1.4.3 of the Registration. Figure 3.1.4-5 illustrates the natural resource use in the area, noting the overlap between the project area and domestic harvest blocks, notably Sunnyside (D0201) and Deer Harbour (D0273). The Registration notes that domestic woodcutting is a recognized land use assessed under Sections 3.1.4 and 4.2.4, with potential interactions during construction, operation, and decommissioning.

North Atlantic has prepared a Domestic Woodcutting Consultation Plan (Appendix T of the Registration), which includes a mitigation strategy to minimize impact, such as micro-siting along existing linear corridors, and a detailed consultation strategy. North Atlantic remains committed to ensuring that domestic woodcutters are engaged throughout the project lifecycle and that any effects on traditional harvesting activities are minimized through proactive communication and defined mitigation measures.

EPR-100 Traditional, cultural and recreational activities, including cottage areas.

Traditional, cultural, and recreational activities within and near the PA, LAA, and RAA are documented within Section 4.2.5 of the Registration. Appendix F of the Registration provides additional context on cultural land use and confirms the region has been used by multiple cultural groups. The project will avoid confirmed high-potential areas were possible and apply archeological monitoring where avoidance is not feasible. All ground disturbance work will follow the Chance Find Protocol as outlined in Appendix F Section 3.0 (Contingency Plan) of the Registration, including work stoppage and notifying the PAO if cultural materials or human remains are encountered. The Registration identifies hunting, angling, snowmobiling, and general outdoor recreational activities, and several cottage clusters occurring withing the broader region. North Atlantic recognizes the importance of maintaining continued access,

environmental quality, and viewscapes for cottage owners are part of the broader project-environment interaction considerations.

North Atlantic is committed to evaluating the impacts on recreational and subsistence resource use, managing project-environment interactions, maintaining access for cottage and recreational use, avoiding waterbodies and wetlands, minimizing construction related disturbances, and protecting recreational and traditional activity sites as identified in Appendix F of the Registration.

7.0 Mitigation

This section outlines the measures that will be implemented to enhance beneficial effects and mitigate adverse effects across all phases of the Project, including construction, O&M, and decommissioning and rehabilitation. In accordance with the EPR Guidelines, the following subsections address mitigation requirements for EPR-101 through EPR-135, as identified in the Table of Concordance. The EPR also identifies the parties responsible for implementing each mitigation measure, along with the associated accountability framework, including obligations for contractors and subcontractors. Mitigation measures previously identified in the Registration are summarized in Section 4.5 of the Registration, and any additional measures identified through this Report will be incorporated into Appendix 2, Revised Section 4.5. Similarly, updates to relevant plans and management frameworks will be reflected in Appendix 2, Revised Section 4.6.

EPR-101 *The Project's water use requirements on water levels in groundwater, surface water and wetlands in Project's vicinity;*

Project water use requirements for all phases of the project have the potential to influence water levels. Mitigation measures related to Project water use are described in Section 4.5.2 and Table 4.5-2 of the Registration.

Construction-related water withdrawals are expected to be temporary and represent a small amount of available monthly water yield at Lady Cove Pond (approximately 0.5%). These withdrawals are not expected to affect groundwater levels, surface water elevations, or wetlands.

During operations, water will be withdrawn from the Inkster's Pond Industrial Water Supply Area within limits outlined in the Surface Water Study (Appendix C of the Registration). As outlined in Table 4.5-2 of the Registration, mitigation measures include maintaining water withdrawals within approved regulatory limits, monitoring water levels, and ensuring downstream environmental flow conditions are met. No groundwater extraction is proposed. Water management procedures and monitoring commitments will be documented in a Water Management Plan ahead of operations.

No significant water use is anticipated during decommissioning. Any temporary water use will be limited and managed under the Decommissioning and Abandonment Plan that will be developed for approval prior to this phase of the project.

EPR-102 *Wetland disturbance;*

North Atlantic acknowledges the benefits that wetland ecosystems provide to the environment and society, and will adhere to all applicable legislation that governs wetlands. The following is a wetland specific subset of the legislation provided in Section 2.5.2 Table 2.5.2-1 of the Registration. Provincially, development activities taking place in wetlands require a Permit to Alter a Body of Water under Section 48 of the **Water Resources Act**. Also relevant is the Water Resource Management Division's Policy for Development in Wetlands. Further measures may be required as a condition of release under the NL EPA and its associated Environmental Assessment Regulations. North Atlantic will adhere to any conditions necessary for Project approval. In addition, the Government of Canada maintains a Federal Policy on Wetland Conservation, which will be adhered to by the Project.

The Project will avoid or minimize wetland disturbance where practicable, throughout all Project phases. Preliminary road and transmission line routes were determined based on surface characteristics, including the presence of wetlands (Section 2.4.1.2, p. 82 of the Registration). Wetlands were mapped as part of the ELC and will be avoided by the Project wherever possible (or buffered by 30 m) (Section 2.3.4.10, p. 53 of the Registration).

The Section 4.5.3, Table 4.5.3 of the Registration outlines mitigation measures specific to wetlands. A robust series of mitigations will be adhered to during the Construction Phase to ensure that any negative effects on wetlands are avoided or minimized:

- Where construction must interact with a wetland, a Permit to Alter a Body of Water will be sought from NL DECCC-WRMD (p. 53 and 430 of the Registration). If the wetland has an intake and discharge of water where there is potential for fish and fish habitat, DFO should also be consulted. In addition to the Permit for Alterations to a Body of Water, the proponent may also be required to submit a Request for Review under the **Fisheries Act** (Added to Appendix 2 revised Section 4.5.3 Table 4.5-3).

- Where construction activities occur within 30 m of a wetland, install and maintain construction fencing to clearly define the construction footprint area to prevent damage to vegetation (p. 430 of the Registration).

- Maintain erosion and sediment control measures until re-vegetation of disturbed areas is complete (p. 431 of the Registration).

- Access road runoff will be diverted through drainage ditches into vegetated areas or through sediment barriers to prevent exposed soil or road materials from entering waterbodies or wetlands (p. 431 of the Registration).

- Erosion and sediment control measures will be implemented prior to and during construction near wetlands and waterbodies to prevent siltation and disturbance (p. 430 of the Registration).

- Undisturbed buffer strips ≥30 m wide will be maintained surrounding wetlands, except for where access roads are close to such crossings (p. 430 of the Registration).

- Permanent infrastructure will be sited outside of wetlands to the extent feasible (p. 430 of the Registration).

- Site maintenance, vehicle maintenance, and fueling will be done in specified areas more than 30 m away from wetlands and waterbodies. Such locations will include drainage control features (p. 430 of the Registration).

- Any stockpiled material will be stored at least 30 m away from wetlands (p. 430 of the Registration).

- In siting the quarry necessary for the Project, avoidance of wetlands will be mandatory for North Atlantic (p. 55 of the Registration, added to Appendix 2 revised Section 4.5.3 Table 4.5-3).

Some wetlands may be altered by the presence of Project infrastructure. However, wetlands can function properly with some disturbance, given that appropriate mitigation measures are in place. North Atlantic, having committed to robust mitigation measures for wetlands, will effectively reduce any potential negative effects on wetlands to a low magnitude and limited geographic extent. It is anticipated that wetlands, where they interact with the Project, will maintain their functionality and will not experience significant adverse effects (Section 5.3, p. 467 of the Registration). Additional mitigation measures have been outlined to minimize the effects of an environmental emergency (Unplanned Events) such as a hazardous materials spill, in the unlikely event that one occurs. The following risk management measures were committed to in Section 4.3.3.1 of the Registration:

- Mandatory health and safety orientation for all Project personnel and visitors prior to commencing work. Where applicable, training will be provided to personnel on storage and handling of task-specific hazardous materials (p. 401 of the Registration).

- Designating areas of site maintenance, vehicle maintenance, and vehicle refuelling which are 30 m or more from sensitive environments (i.e., wetlands and watercourses) (p. 401 of the Registration).

- Ensuring spill response materials are readily available and regularly stocked in 'spill kits' placed strategically throughout the PA. Spill kits may include absorbent pads, spill booms and bagged sand (p. 401 of the Registration).

- Assigning designated storage areas for hazardous materials, with materials being stored in secondary containment where applicable (p. 401 of the Registration).

- Enforcing a robust spill reporting and clean up protocol, which will include details regarding contaminated material disposal (p. 402 of the Registration).

EPR-103 *Effects of vegetation control measures taken around transmission lines and substations and its effects on the Center Cove River PPWSA, plant or lichen species at risk and species of conservation concern;*

During the O&M Phase of the Project, vegetation control measures will be undertaken to prevent large woody growth underneath electrical infrastructure (e.g., transmission lines, collector lines, substations). Herbicides may be used for this purpose, in which case federal and provincial regulations will be adhered to, and herbicide use will follow industry best practices (Section 5.3, p. 467 of the Registration).

No herbicides will be used in the Centre Cove River PPWSA. Manual vegetation clearing efforts (e.g., tree trimming and brush clearing) will be undertaken in this area (Section 4.5.3, Table 4.5-3, p. 432 of the Registration). Manual vegetation clearing (e.g., along the transmission line right of way and within the Centre Cove River PPWSA) will occur outside of the breeding season for birds, if possible. Otherwise, nest surveys will be conducted prior to clearing, and any nests will be avoided until the young have fledged (Section 2.3.5.5, p. 65 of the Registration).

In addition, Section 4.5.3, Table 4.5-3 of the Registration outlines the following mitigation measures specific to vegetation control:

- Vegetation control measures will be implemented in accordance with industry standards and best practices (e.g., NL Hydro vegetation management program) (p. 431 of the Registration).

- Herbicides will be applied in accordance with the federal **Pest Control Products Act**, administered by the Pest Management Regulatory Agency, and the NL EPA and its associated Pesticide Control Regulations (p. 431-432 of the Registration).

- If rare plant or lichen SAR or SCC are discovered within the vegetation clearing area, their presence will be reported to NL DFAL-WD. Where appropriate, buffer zones will be established in consultation with NL DFAL-WD. If an area containing SAR must be cleared, other mitigation measures (e.g., transplanting) will be considered, in accordance with guidance received from NL DFAL-WD (p. 432 of the Registration).

- No herbicides will be used in the Centre Cove River PPWSA. Manual vegetation clearing efforts (e.g., tree trimming and brush clearing) will be undertaken in this area (p. 432 of the Registration).

EPR-104 *Effects of effluent discharge on sensitive fish habitat and the marine environment in the receiving waters, including monitoring, sampling, and follow-up reporting;*

Mitigations for this effect was described in Section 4.5.2 (Aquatic Environment) of the Registration, the Project design will incorporate mitigation measures to minimize potential effects on the aquatic environment. The following are mitigation measures that will be adopted and incorporated into the Project's EPP in order to minimize the effects of effluent discharge on sensitive fish habitat and the marine environment in the receiving waters:

- Water quality at the marine outfall will be monitored to ensure compliance with applicable regulatory approvals and discharge criteria. This will ensure that levels of parameters are lower than the thresholds allot for protection of the receiving environment (p. 421 of the Registration).

- Ensure adherence to all applicable legislation and regulations governing the marine environment (p. 421 of the Registration).

- Ensure compliance with DFO's **Fisheries Act** / Aquatic Invasive Species Regulations, Transport Canada's Ballast Water Control and Management Regulations, and IMO International Convention on the Control of Harmful Anti-fouling Systems on Ships (p. 421 of the Registration).

An Environmental Effects Monitoring Program will be developed prior to O&M in consultation with relevant government departments. This plan will incorporate methods to:

- Monitor fish populations for change in community structure, abundance/biomass, and growth, including American Eel and Atlantic Salmon (p. 421 of the Registration).

- Monitor fish habitat conditions (p. 421 of the Registration).

EPR-105 *Effects of near water works on fish spawning or migration, including the use of monitoring, sampling, and follow up reporting;*

As described in Section 4.5.2 (Aquatic Environment) of the Registration, the Project design will incorporate mitigation measures to minimize potential effects on the freshwater aquatic environment. The following are mitigation measures that will be adopted and incorporated into the Project's EPP in order to reduce the effects of near water works on fish spawning or migration:

- In-water works will be limited and aligned with DFO timing windows to protect sensitive fish life stages (p. 420 of the Registration).
- Fish screens will be installed and regularly maintained at any instream water intakes to prevent fish entrainment (p. 420 of the Registration).
- If fording is necessary, DFO's Code of Practice for Temporary Fords will be followed (p. 420 of the Registration).
- Culvert and bridge installation will follow provincial and federal standards, including DFO guidance on fish passage and sediment control (p. 420 of the Registration).
- Heavy equipment will not operate directly in watercourses unless permitted to do instream work (p. 420 of the Registration).
- Refuelling and maintenance of equipment will occur a minimum of 30 m away from waterbodies (p. 420 of the Registration).
- All equipment will be inspected for leaks and cleaned before use. Spill kits and fire extinguishers will be on site, and operators will be trained in their use (p. 420 of the Registration).
- During instream works, turbidity monitoring and visual assessments will be conducted to monitor water quality. Post-construction, bank stability will be verified (p. 420 of the Registration).
- Following construction or decommissioning, disturbed watercourses will be stabilized and restored as close as possible to natural conditions (p. 420 of the Registration).
- Erosion and sediment control measures will be in place during and after watercourse crossing construction (p. 420 of the Registration).
- Project construction and operation water consumption will not exceed the permitted annual volume specified in the Project's water use licences (p. 421 of the Registration).

- Ensure compliance with DFO's **Fisheries Act** / Aquatic Invasive Species Regulations, Transport Canada's Ballast Water Control and Management Regulations, and IMO International Convention on the Control of Harmful Anti-fouling Systems on Ships (p. 421 of the Registration).

- Ensure adherence to all applicable legislation and regulations governing the marine environment (p. 421 of the Registration).

Development of an Environmental Effects Monitoring Plan to:

- Monitor fish populations for change in community structure, abundance/biomass, and growth (p. 421 of the Registration).

- Monitor American eel and Atlantic salmon populations for change in abundance and biomass (p. 421 of the Registration).

- Monitor fish habitat conditions (p. 421 of the Registration).

EPR-106 *The use of timing windows, in consultation with DFO, to avoid adverse effects on fish and fish habitat.*

As described in Section 4.5.2 (Aquatic Environment) of the Registration, the Project design will incorporate mitigation measures to minimize potential effects on the aquatic environment. Post release from the EA process North Atlantic will work with DFO to ensure a clear understanding of the recommended timing windows to complete required the Fisheries Authorizations and Construction and Operations EPP. In-water works will be limited and aligned with DFO timing windows to protect sensitive fish life stages for all activities. Activities will be in compliance with DFO's **Fisheries Act** / Aquatic Invasive Species Regulations, Transport Canada's Ballast Water Control and Management Regulations, and IMO International Convention on the Control of Harmful Anti-fouling Systems on Ships (p. 420-421 of the Registration).

EPR-107 *Risks to marine water quality, with clear connections between the type and nature of the monitoring and the risk to be evaluated;*

As described in Section 4.5.2 (Aquatic Environment) of the Registration, the Project design will incorporate mitigation measures to minimize potential effects and therefore risks on the aquatic environment. The following are mitigation measures that will be adopted and incorporated into the Project's EPP in order to reduce risks to marine water quality:

- A minimum buffer of 15 m will be established around the high-water mark of waterbodies to minimize ground and vegetation disturbance (p. 420 of the Registration).
- Required permits will be obtained for any work within 15 m of the high-water level. Work will occur during the low flow season where practical (p. 420 of the Registration).
- Culvert and bridge installation will follow provincial and federal standards, including DFO guidance on fish passage and sediment control (p. 420 of the Registration).
- All equipment will be inspected for leaks and cleaned before use. Spill kits and fire extinguishers will be on site, and operators will be trained in their use (p. 420 of the Registration).
- Ensure adherence to all applicable legislation and regulations governing the marine environment (p. 421 of the Registration).
- Ensure compliance with DFO's **Fisheries Act** / Aquatic Invasive Species Regulations, Transport Canada's Ballast Water Control and Management Regulations, and IMO International Convention on the Control of Harmful Anti-fouling Systems on Ships (p. 421 of the Registration).
- Water quality at the marine outfall will be monitored to ensure compliance with applicable regulatory approvals and discharge criteria (p. 421 of the Registration).

EPR-108 *Effects on marine fish habitat (including eel grass) and fish populations (including mammals), by species associated with in-water works such as water intakes, fording, removal of aquatic and/or stream side vegetation, installation of culverts, bridges and water crossings, infilling, dewatering, and changes to natural flow regime;*

As described in Section 4.5.2 (Aquatic Environment) of the Registration, the Project design will incorporate mitigation measures to minimize potential effects on the marine and freshwater aquatic environment. The following are mitigation measures that will be adopted and incorporated into the Project's EPP in order to reduce effects on marine fish habitat (including eelgrass, discussed in EPR-021) and marine and freshwater fish populations (including mammals such as muskrat, beaver, etc.), associated with in-water works such as water intakes, fording, removal of aquatic and/or stream side vegetation, installation of culverts, bridges and water crossings, infilling, dewatering, and changes to natural flow regime:

- A minimum buffer of 15 m will be established around the high-water mark of waterbodies to minimize ground and vegetation disturbance (p. 420 of the Registration).
- In-water works will be limited and aligned with DFO timing windows to protect sensitive fish life stages (p. 420 of the Registration).

- Fish screens will be installed and regularly maintained at any instream water intakes to prevent fish entrainment (p. 420 of the Registration).

- If fording is necessary, DFO's Code of Practice for Temporary Fords will be followed (p. 420 of the Registration).

- Refuelling and maintenance of equipment will occur a minimum of 30 m away from waterbodies (p. 420 of the Registration).

- All equipment will be inspected for leaks and cleaned before use. Spill kits and fire extinguishers will be on site, and operators will be trained in their use (p. 420 of the Registration).

- Monitor fish populations for change in community structure, abundance/biomass, and growth (p. 421 of the Registration).

- Monitor American eel and Atlantic salmon populations for change in abundance and biomass (p. 421 of the Registration).

- Monitor fish habitat conditions (p. 421 of the Registration).

- Ensure adherence to all applicable legislation and regulations governing the marine environment (p. 421 of the Registration).

- Ensure compliance with DFO's **Fisheries Act** / Aquatic Invasive Species Regulations, Transport Canada's Ballast Water Control and Management Regulations, and IMO International Convention on the Control of Harmful Anti-fouling Systems on Ships (p. 421 of the Registration).

EPR-109 *Effects of the Project on SCH, commercial and recreational fishers, aquaculture operators, and other marine users, including consideration of a shipping exclusion zone, if applicable;*

As described in Section 4.5.2 (Aquatic Environment) of the Registration, the Project design will incorporate mitigation measures to minimize potential effects on the aquatic environment. The following are generic mitigation measures that will be adopted and incorporated into the Project's EPP in order to reduce effects of the Project on SCH, commercial and recreational fishers, aquaculture operators, and other marine users, including consideration of a shipping exclusion zone, if applicable:

- In-water works will be limited and aligned with DFO timing windows to protect sensitive fish life stages (p. 420 of the Registration).

- Fish screens will be installed and regularly maintained at any instream water intakes to prevent fish entrainment (p. 420 of the Registration).

- The water withdrawal pipe or intake will be fitted with a screen to protect fish from impingement or entrainment. Measures will be taken to avoid pollution and to minimize disturbance of fish and fish habitat (p. 420 of the Registration).

- Ensure adherence to all applicable legislation and regulations governing the marine environment (p. 421 of the Registration).

- Ensure compliance with DFO's **Fisheries Act** / Aquatic Invasive Species Regulations, Transport Canada's Ballast Water Control and Management Regulations, and IMO International Convention on the Control of Harmful Anti-fouling Systems on Ships (p. 421 of the Registration).

- Water quality at the marine outfall will be monitored to ensure compliance with applicable regulatory approvals and discharge criteria (p. 421 of the Registration).

Additionally, marine use within the RAA of Placentia Bay and adjacent bays is diverse and supports a mix of commercial, recreational, and subsistence fisheries. Within the Placentia Bay RAA, four core fishing harbours, Fairhaven, Arnold's Cove, North Harbour, and Garden Cove, support small-scale commercial harvesters, recreational fishers, and marine-based tourism and leisure craft. In Trinity Bay, the communities of Chance Cove and Sunnyside provide similar access points. These harbours serve as key launch sites for vessels participating in seasonal fisheries, including groundfish, shellfish, and other inshore species. Recreational fishing activity across communities such as Come By Chance and Arnold's Cove may fluctuate throughout the year in response to land access, vessel traffic, and operational levels at nearby industrial docks. A notable increase in recreational fishing typically occurs between July and October, coinciding with the groundfish recreational fishery season. No aquaculture sites occur within the RAA, and therefore no known interactions with aquaculture operators are anticipated.

As discussed in Section 3.2.2.8 (Marine Navigation and Ship Traffic) of the Registration, marine transportation infrastructure is well-established in Placentia Bay, with four major ports located within the RAA: Arnold's Cove, Whiffen Head, Come By Chance, and Bull Arm. The Port of Come By Chance provides deep-water docking capable of handling large industrial vessels, supporting operations associated with the Braya Refinery, the Newfoundland Transshipment Terminal, the NARL Logistics Terminal, and other industrial activities. Similarly, Bull Arm functions as a deep-water industrial port designed to service offshore fabrication projects and remains accessible year-round. The Eastern Channel between Long Island and the Avalon Peninsula contains two-way shipping lanes used by tankers, ferries, bulk carriers, container ships, cargo vessels, and fishing boats (DFO, 2017b). Vessels

over 20 m entering Placentia Bay must report to the Canadian Coast Guard's Marine Communications and Traffic Services (MCTS), and the Bay is designated a compulsory pilotage area under the Atlantic Pilotage Authority, which administers two pilot zones: Placentia Bay Zone A and Argentia Zone B. These features illustrate the longstanding integration of industrial and commercial marine activity within the same navigational corridors that local harvesters and other marine users rely upon.

Cargo ships involved in Project construction must obtain the necessary certification and approval to operate in Canadian and Newfoundland waters. Both national and international vessels navigating these waters are subject to regulations under the **Canadian Navigable Waters Act**, the **Canada Shipping Act, 2001**, the **Transportation of Dangerous Goods Act**, and various other relevant legislation.

With respect to the Project, marine interaction is expected to increase minimally due to vessel and port usage. These vessel movements will make use of existing harbour infrastructure and established shipping lanes, resulting in minimal interference with fishing activities or navigational routes used by other marine users.

EPR-110 *The EPR shall discuss measures that will be implemented to enhance beneficial effects and mitigate adverse effects, for all phases of the Project, including construction, operation and maintenance, and decommissioning and rehabilitation. The EPR shall identify who is responsible for implementing the mitigation measures and the system of accountability, including the obligations of contractors and subcontractors. This section should include, but not be limited to, measures that would be implemented to enhance beneficial effects and mitigate adverse effects on the following:*

Effects on all species of bats listed under the NL ESA, using data obtained from pre-construction monitoring of bats to help inform turbine micro-siting, including the following measures:

i. standard curtailments for bats that would be implemented for the operational lifespan of the Project, except where an adaptive management framework incorporates other proven tools to effectively detect bats and mitigate bat mortalities, and where the Wildlife Division has formally approved the modification. Operational curtailments are mandatory from thirty (30) minutes before sunset to thirty (30) minutes after sunrise, from July 1-October 1 when temperatures are 6.0°C or higher. During these times, turbine blades must be programmed to cut-in only when wind speeds exceed 6.0 m/s, and must be locked or feathered at wind speeds ≤6.0 m/s;

North Atlantic will adhere to operational curtailment measures for the turbines that are deemed to be at highest risk to bats (e.g., those in suitable habitat such as near wetlands, forest edges, etc.) – these

turbines will be determined based on the extensive bat dataset from 2023-2025 (and beyond) (Section 4.5.3, Table p. 431 of the Registration). Other turbines in poor quality habitat (e.g., rocky barrens) would be subject to an adaptive smart curtailment program which incorporates real time data and predictive models to mitigate collisions by adjusting turbine operations as necessary (i.e., triggering higher cut-in speeds only when bat activity is detected). Optimized smart curtailment incorporates AI models and machine learning with site specific information on species, topography, and turbine locations, allowing for maximum energy output while minimizing risk of collisions. North Atlantic is committed to establishing mitigation for bat collisions through consultations with NL DFAL-WD (Section 7.2, p. 503 of the Registration) and will ensure that the smart curtailment strategy receives formal approval before implementation.

In addition, Section 4.5.3, Table 4.5-3 of the Registration document for the Project outlines the following mitigation measures specific to the protection of bat species during the O&M Phase:

- North Atlantic will consult with NL DFAL-WD and design and implement a science-based Bird and Bat Mitigation and Monitoring Plan. This plan will consider deterrents, optimized smart curtailment based on real data (which continues to be collected through 2025 and beyond), and thermal imaging/AI systems for real-time detection and mitigation for bats and raptors and SAR (p. 431 of the Registration).

- Continue to collect bat and bird data through pre-Construction, post-Construction and O&M Phases to inform smart curtailment (p. 431 of the Registration).

- Based on the extensive bat dataset from 2023-2025, determine which turbines pose the greatest risk to bats. Discuss options for optimized smart curtailment of select turbines with NL DFAL-WD (p. 431 of the Registration).

- A post-Construction mortality monitoring program (PCMP) will be established, and carcass searches will be conducted at all wind turbines between April and October for the first year (and beyond, if necessary). The mortality monitoring program will be developed in consultation with the NL DFAL-WD. New mitigation measures will be implemented if high fatality rates are observed (p. 431 of the Registration).

EPR-111 *Effects on all species of bats listed under the NL ESA, using data obtained from pre-construction monitoring of bats to help inform turbine micro-siting, including the following measures:*

ii. tree-clearing limited to outside the time period between May 1 to September 1 to avoid direct mortality to roosting bats. Where trees must be removed from May 1 to September 1, the

Proponent shall conduct a pre-clearing bat roosting survey of all large trees and snags with a diameter at breast height of greater than 25 cm. Contact the Wildlife Division for survey protocols; and

Section 4.5.3, Table 4.5-3 of the Registration includes mitigation measures designed to prevent or minimize harm to bat communities in the PA, including both resident and migratory species.

To avoid direct mortality to roosting bats, tree-clearing will be limited to outside the time period between May 1 to September 1. Where trees must be removed from May 1 to September 1, a pre-clearing bat roosting survey of all large trees and snags with a diameter at breast height of greater than 25 cm shall be conducted. Surveys will be undertaken in consultation with NL DFAL-WD, and in following with survey protocols provided by NL DFAL-WD.

EPR-112 *Effects on all species of bats listed under the NL ESA, using data obtained from pre-construction monitoring of bats to help inform turbine micro-siting, including the following measures:*

iii. application of a no-cut buffer of 250-metres to an active bat colony until September 1, after which a subsequent survey is required to confirm that bats are no longer present. Roosting locations must be immediately reported to the Wildlife Division (endangeredspecies@gov.nl.ca). Photographic records and geospatial data (including GPS coordinates and maps) of bat colonies/residences must be included. Colony trees shall be maintained on the landscape;

Section 4.5.3 Table 4.5-3 of the Registration includes mitigation measures designed to prevent or minimize harm to bat communities in the PA, including both resident and migratory species.

Where practicable, significant Construction Phase activities that may disturb nesting or breeding wildlife (e.g., vegetation clearing, blasting) will be scheduled to avoid key breeding seasons. Buffer zones will be established around nests, wetlands, waterbodies, and habitat for SAR or SCC, in consultation with the NL DFAL-WD. When avoidance of the breeding season is not feasible, preclearing surveys will be conducted to identify birds, rare plants, and potential bat roosting trees (Section 2.3.4.10, p. 52, 53 of the Registration).

If an active bat colony is discovered, a no-cut buffer of 250 m will be applied until September 1, after which a subsequent survey will be undertaken to confirm that bats are no longer present. Roosting locations will be reported to NL DFAL-WD immediately, including photographic records and geospatial data (including GPS coordinates and maps) of bat colonies/residences. In addition, colony trees shall be maintained on the landscape (Added to Appendix 2 revised Section 4.5.3 Table 4.5-3).

EPR-113 *Effects on avifauna, including species at risk (Bank Swallow, Leach's Storm-petrel and Lesser Yellowlegs) regarding habitat loss and/or creation of artificial habitat as part of Project activities, and sensory disturbance associated with attraction to artificial lighting;*

Potential interactions with avifauna SAR are detailed in Section 4.2.2.3 of the Registration. Habitat loss and sensory disturbance (e.g., from artificial lighting) may affect avifauna, including SAR, in the PA; however, North Atlantic has committed to a robust suite of mitigation measures designed to minimize the effects of the Project on these species. The Registration outlines the following mitigation measures:

- Project footprint and disturbed areas will be minimized and limited to the space required to accommodate necessary infrastructure. Existing roads, trails, and disturbed areas will be used wherever feasible (p. 427 of the Registration).

- Understanding that wetlands provide important habitat for a variety of wildlife species, Project infrastructure will be sited to avoid wetland areas wherever possible (p. 366 of the Registration).

- Limit artificial lighting to what is necessary to maintain safety of site workers (p. 418 of the Registration).

- Should nighttime work be required, lighting to be limited to what is necessary for safety and efficiency (p. 418 of the Registration).

- Use downward-facing lighting directed towards Project infrastructure, as practicable, to minimize disturbance to wildlife activity. Where possible and permitted, equip downward-facing lighting with motion and heat sensors (p. 418 of the Registration).

- Set wind turbine and meteorological tower lighting levels to the minimum allowed by Transport Canada for aeronautical safety (p. 418 of the Registration).

- Project lighting will be limited to that which is necessary for safe and efficient Project activity (p. 431 of the Registration).

- A wildlife-friendly lighting plan will be followed (p. 431 of the Registration).

EPR-114 *Effects on Short-eared Owl, including a requirement to conduct a Short-eared Owl survey by a qualified third-party during the breeding season (May 15 – August 15) within seven days of any ground disturbance required for the Project. Survey protocol is available from the Wildlife Division. A Section 18 permit under the Endangered Species Act is required and available from wildlifepermits@gov.nl.ca;*

Short-eared Owl (*Asio flammeus*) is a Species at Risk listed as Threatened under NL ESA and as Special Concern under SARA (under consideration for status change to Threatened). Field surveys in 2025 resulted in the observation of one Short-eared Owl in the LAA, approximately 80 m from the PA boundary (Appendix D1, Section 3.4.1.1 of the Registration).

Short-eared Owl typically breeds in open habitat (e.g., grasslands) of at least 50-100 ha, preying primarily on small mammals like voles and other rodents (COSEWIC, 2021). Habitat destruction/alteration and climate change are thought to be the greatest threats to Short-eared Owl populations (COSEWIC, 2021). Short-eared Owls in the PA may be affected by habitat disturbance and fragmentation in suitable habitat within certain portions of Rocky Barren, Wetland, and Developed/Disturbed Land ecotypes (Section 4.2.3.3, p. 368 of the Registration).

Section 4.5.3, Table 4.5-3 of the Registration outlines a series of mitigation measures specific to avifauna and Species at Risk. In addition to these measures, a qualified third-party shall undertake a Short-eared Owl survey within seven days of any ground disturbance required for the Project, should it occur during the Short-eared Owl breeding season (May 15 – August 15). Surveys will be undertaken in consultation with NL DFAL-WD, and in following with survey protocols provided by NL DFAL-WD. All required permits will be obtained prior to completing this work, including a Section 18 permit under the NL ESA (Added to Appendix 2 revised Section 4.5.3 Table 4.5-3).

EPR-115 *Effects on wildlife species, particularly during sensitive time periods, such as breeding and migration;*

Vegetation clearing, access road construction, blasting, and other construction activities will result in habitat alteration for wildlife. In addition, wildlife species may be disturbed or displaced due to temporary increases in noise, vibration, artificial lighting, and human presence (Section 5.3, p. 464-465 of the Registration). Wildlife species are particularly vulnerable during sensitive time periods, such as breeding and migration. In addition, certain species are at a heightened risk of interactions due to their migratory behaviour (e.g., Hoary Bat, Leach's Storm-petrel). The Registration includes a robust suite of mitigation measures designed to prevent or minimize any potential effects of the Project on wildlife species during sensitive time periods. A summary of the relevant commitments and mitigation measures that North Atlantic will adhere to is provided below:

- Where practicable, significant Construction Phase activities that may disturb nesting or breeding wildlife (e.g., vegetation clearing, blasting) will be scheduled to avoid key breeding seasons. Buffer zones will be established around nests, wetlands, waterbodies, and habitat for SAR or SCC, in consultation with the NL DFAL-WD. When avoidance of the breeding season is not feasible, preclearing surveys will be conducted to identify birds, rare plants, and potential bat roosting trees (p. 427-428 of the Registration).

- During all construction activities associated with the linear corridor, best management practices (BMPs) will be followed, including avoidance of critical wildlife breeding seasons (p. 48 of the Registration, added to Appendix 2 revised Section 4.5.3 Table 4.5-3).

- North Atlantic will ensure that the workdays during Construction are kept to daytime hours to limit the disturbance to local communities and wildlife in areas with sensitive receptors (p. 53 and p. 418 of the Registration).

- Site clearing and grubbing will be conducted outside the temporal window of the bird breeding season where feasible (p. 427 of the Registration).

- If vegetation must be removed during the bird nesting season of April 1 to August 31, mitigations will be applied in accordance with the MBCA (p. 427 of the Registration).

- Pre-clearing surveys for active migratory bird nests will be carried out for work done during the breeding season, and buffer / set-back distances from active nests will be established (p. 427 of the Registration).

- A qualified Avian Biologist will be present during clearing activities to supervise vegetation removal and carry out nest surveys (p. 427-428 of the Registration).

- A buffer zone shall be established around the active bird nest or confirmed bird nesting activity if one is discovered. The radius of the buffer will vary depending on the species, level of disturbance, and landscape context. The buffer will be developed in consultation with NL Wildlife Division. The nest is expected to be protected by the minimum buffer area of 10 m surrounding the nest from minor work such as vegetation clearing, building access roads, general heavy machinery use, and vehicle operation (p. 428 of the Registration).

- During the bat roosting season, any trees proposed for removal and any suitable rock crevices or caves in areas proposed for blasting will be searched by a qualified Biologist for signs of maternity roosts. A buffer will be established around any active roosts found within the construction footprint site, in consultation with NL DFAL-WD (p. 428 of the Registration).

- Project lighting will be limited to that which is necessary for safe and efficient Project activity (p. 431 of the Registration)

- A wildlife-friendly lighting plan will be followed (p. 431 of the Registration).

- Use downward-facing lighting directed towards Project infrastructure, as practicable, to minimize disturbance to wildlife activity (p. 418 of the Registration).

- Limit the affected area of blasting to minimize disturbance to wildlife while carrying out blasting operations in accordance with relevant Federal and Provincial guidelines and standards (p. 429 of the Registration).

- Time delay blasting cycles or blast mats will be used to control debris generated from blasting (p. 429 of the Registration).

- Prior to blasting, a qualified Biologist is to undertake an area search of the intended blasting area to determine whether wildlife is present on the day of blasting (p. 429 of the Registration).

- If wildlife is encountered in the blasting zone, deterrence measures are to be employed, up to implementation of a delay in blasting until the wildlife have vacated the area (p. 429 of the Registration).

- An Environmental Monitor will be present during construction activities such as clearing vegetation, dewatering, and blasting to ensure adherence to environmental regulations (p. 429 of the Registration).

- A Wildlife Response Protocol will be developed and implemented (p. 432 of the Registration).

- The work area will be kept clean and free from leftover foods which can attract wildlife (p. 432 of the Registration).

- Project personnel are to record and report all wildlife sightings and human-wildlife interactions and conflicts to the Environmental Coordinator (p. 432 of the Registration).

- Human-wildlife interactions will be reported to NL DFAL (p. 432 of the Registration).

- Establish Project speed limits that are protective of wildlife (p. 432 of the Registration).

- Inform staff to be vigilant for wildlife while driving on site (p. 432 of the Registration).

- Include speed limit requirements in construction and operations wildlife trainings (p. 433 of the Registration).

EPR-116 *Effects of dust lift off on sensitive receptors;*

Dust lift off has the potential to affect sensitive aquatic and terrestrial receptors during all phases of the Project. North Atlantic will implement a comprehensive suite of mitigation measures to minimize the generation and transport of fugitive dust and to ensure compliance with the Air Pollution Control Regulations, 2022. The following measures will be applied, consistent with commitments outlined in the Registration Section 4.5.1 and expanded upon for the purposes of this Report:

- Implement control measures such as road watering, application of approved chemical suppressants, or installation of physical barriers on exposed surfaces, including unpaved roads, laydown areas, and stockpiles, to reduce dust generation during both Construction and O&M.

- Ensure that all stationary and mobile dust sources, including concrete batch plants, cooling towers, generators, and vehicles (including ocean-going vessels using the marine terminal), are equipped with appropriate dust and emission control systems.

- Operate concrete batch plants only when dust control systems (e.g., silo baghouses) are fully functional, with no visible dust emissions permitted during operation.

- Conduct transport and handling of granular materials in a manner that minimizes airborne particulate, including the use of covered loads, reduced drop heights, and low-speed vehicle operation in high-risk areas.

- Strategically locate stockpiles by considering prevailing wind directions and the proximity of sensitive receptors such as wetlands, waterbodies, rare plant habitat, and residential areas, ensuring environmental effects are minimized.

- Maintain vehicles and equipment in good working order, ensuring mufflers, seals, filters, and dust suppression components are functional to limit combustion and mechanical dust emissions.

- Limit idling of vehicles and equipment wherever practicable, with engines shut down when equipment is stationary for extended periods.

- Implement measures to reduce emissions, consistent with best available technology and manufacturer specifications.

A tiered mitigation strategy will be implemented during Construction that combines preventative, active, and targeted controls to manage dust. The following measures will be implemented to reduce and control dust emissions during Construction:

a) Adherence to speed limits to minimize traffic-related dust.

b) Progressive sequencing to reduce dust generation during construction activities

c) Stabilize surfaces to reduce dust generation

d) Granular materials will be transported in a manner to minimize dust generation

e) Cover or moisten surfaces of stockpiles to reduce dust generation, particularly during extended periods between usage

f) Scheduling construction activities around wind events

g) Maintaining clean work areas during construction activities

h) If additional dust suppression is required, water will be applied to surfaces at least once daily; watering frequency will be determined based on surface and meteorological conditions.

i) Other dust suppressant agents (e.g., calcium chloride) may be considered as an alternative option to watering, in consultation with NLDECC

j) Under no circumstances will oil (waste or otherwise) be applied to surfaces for dust control

k) Design measures outlined by the blasting contractor in the Explosives and Blasting Management Plan will be followed to reduce dust generation

l) If required, nuisance dust will be controlled by temporary wind breaks, gravel surfacing, and vegetation cover on exposed surfaces

m) Should localized dust issues persist, wheel wash systems will be installed, or certain activities will be paused during periods of extreme weather

Dust will be monitored visually, and mitigation will be adapted based on site conditions. With these measures in place, dust lift off effects are expected to remain short-term, localized, reversible, and negligible during Construction.

In addition, a tiered mitigation strategy will also be implemented during O&M that combines preventative, active, and targeted controls to manage dust. The following measures will be implemented to reduce and control dust emissions during O&M:

a) Adherence to speed limits to minimize traffic-related dust.

b) If additional dust suppression is required, water will be applied to surfaces at least once daily; watering frequency will be determined based on surface and meteorological conditions.

c) Other dust suppressant agents (e.g., calcium chloride) may be considered as an alternative option to watering, in consultation with NLDECC

d) If required, nuisance dust will be controlled by temporary wind breaks, gravel surfacing, and vegetation cover on exposed surfaces

e) Should localized dust issues persist, wheel wash systems will be installed.

Dust will be monitored visually, and mitigation will be adapted based on site conditions. With these measures in place, dust lift off effects are expected to remain short-term, localized, reversible, and negligible during O&M.

North Atlantic intends to conduct the Project using systems that are maintained and operated in accordance with manufacturer specifications to ensure optimal performance. The Project will fully comply with the Air Pollution Control Regulations, 2022.

Based on dispersion modelling completed as part of the Registration, dust emissions generated during Construction, O&M, and Decommissioning and Rehabilitation are not anticipated to result in adverse health effects. These modelling results will continue to inform dust management practices, and mitigation measures will be adjusted as necessary through adaptive management should monitoring identify any emerging risks.

EPR-117 *Assurance of full compliance with the air quality standards as specified in Schedule A of the Air Pollution Control Regulations, 2022, and clear demonstration that obtaining full compliance for all parameters of concern, including PM2.5 and PM10, is feasible and expected at all points outside of the Project's fence line;*

The air dispersion modelling assessment conducted for the Registration (Appendix H2 of the Registration) showed predicted exceedances of the ambient air quality standards near the Project fenceline for particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$), which was associated with the operation of the cooling towers. The cooling towers are emission sources for particulate matter (total suspended particulates (TSP), PM_{10} and $PM_{2.5}$) only. The location of cooling towers has been changed from the Registration, allowing for re-examination of modelled emissions. Furthermore, availability of source water data and equipment specifications allowed for re-calculation of emissions. Results from model re-evaluation are provided in Appendix 5 and demonstrate that no exceedances of the NL Air Pollution Control Regulations are expected for PM_{10} or $PM_{2.5}$. These results have been incorporated into Appendix 2 revised Section 4 Environmental Effects Assessment of the Registration.

The Proponent intends to operate the Project using appropriate pollution control equipment that is maintained and operated per manufacturers' specifications for best performance. To that end, the Proponent intends to operate the Project in compliance with the provisions of the Air Pollution Control Regulations, 2022.

EPR-118 *Resolution of land use and land tenure conflicts within the Project area;*

Section 3.1.4 of the Registration identifies several land use and land tenure types within and adjacent to the PA, including Crown Land, private industrial holdings, mineral claims, domestic woodcutting areas, recreational lands, and protected public water supply areas, which may present potential land tenure conflicts. These considerations are addressed through mitigation measures outlined in Section 4.5.4, Table 4.5-4, including a combination of avoidance, micro-siting, regulatory compliance, and ongoing stakeholder engagement.

During the Construction Phase, the Project will mitigate land use conflicts by securing all required municipal and provincial permits, avoiding Protected Public Water Supply Areas wherever possible, and maintaining active engagement with land users, stakeholders, and relevant government departments. Noise and dust will be minimized through proper equipment maintenance, dust suppression, and implementation of Noise Study recommendations. Access for recreational users and harvesters will be maintained where feasible.

Throughout O&M Phase, North Atlantic will continue proactive engagement with local harvesters to address any changes in access or land use. Decommissioning activities will mirror construction-phase mitigation approaches, including targeted engagement, noise and dust control, and scheduling the movement of large components during low-traffic periods, while managing temporary disruptions to recreational and harvesting activities.

Accidents or malfunctions, potential risks to industrial, recreational, and harvesting land uses will be reduced through designated hazardous materials storage with secondary containment, regular vehicle maintenance, installation of fire detection and protection systems in high-risk areas, and careful scheduling of large-component transport to maintain safety and minimize disruption.

Mineral land holdings will be managed through direct communication with license holders, micro-siting to avoid active mineral areas, and maintaining appropriate operational buffers. North Atlantic will address all land use and land tenure considerations within the PA in accordance with the engagement and communication protocols outlined in the Public Participation Plan (PPP) (Appendix P of the Registration).

EPR-119 *Preservation of the natural landscape and aesthetic appeal of the region, including viewscapes;*

As described in EPR-097, the installation and operation of the Wind Farm will result in varying degrees of visibility of turbines across the PA, LAA, and RAA. Viewscape considerations are addressed as part of the Tourism and Recreation KI in Section 4.2.4 of the Registration, with Section 4.2.6.4 of the Registration specifically noting that the Wind Farm will alter existing views, particularly in the community of Sunnyside. In response to community feedback, the Project design has been refined, for example, the transmission line was relocated further north to align with the original access road and reduce visibility from Sunnyside and recreational areas.

North Atlantic is committed to preserving the natural landscape and maintaining the aesthetic character of the region, including key viewscapes valued by residents, cottage owners, and recreational users. As part of ongoing public information and consultation activities, visualizations of the Project have been shared with communities since early planning stages. This has included presentation of viewscapes during engagement sessions and the development of a publicly accessible 3D interactive digital model (Section 8.3.1.6 of the Registration). The model enables stakeholders to view the Wind Farm from any location within the study area, including private residences, and displays all major Project components such as turbines, access roads, substations, and transmission lines. Residents have indicated that the tool is highly effective in visualizing anticipated changes to the landscape. The model will continue to be updated throughout the EA process and was used again during the public information session on February 7, 2026.

Mitigation measures related to maintaining regional aesthetic quality and reducing effects on viewscapes are outlined in Table 4.5-4 of the Registration, including:

- Ongoing engagement with land users and provincial agencies to address visual and land-use concerns;
- Ensuring vehicles and equipment are properly maintained to avoid unnecessary visual or dust-related disturbance;
- Implementing dust suppression as required;
- Applying mitigation measures identified in the Noise Study; and
- Scheduling transport of large turbine components during reduced-traffic periods (e.g., overnight) to minimize disruption to communities.

The Project will continue to minimize disturbance to the natural environment wherever practicable by exploring design refinements and micrositing approaches that limit visibility in sensitive areas and maintain key sightlines. Consideration of viewscapes, natural character, and recreational use will remain integrated into final design development. Public feedback, including input from cottage owners, will continue to inform mitigation strategies, ensuring the preservation of landscape aesthetics and the broader recreational value of the region.

EPR-120 *Effects on agriculture operations within and near the Project area, including the former Crown Lands Agriculture Lease Reserve Directive 267-22-E, held in reserve to be issued as a Crown Lands Agriculture Lease and can be viewed on the Provincial Land Use Atlas website at https://www.gov.nl.ca/landuseatlas/details/;*

The former Crown Lands Agriculture Lease Reserve directive 267-22-E is shown on Figure EPR-096 and illustrates that the PA and the LAA defined specifically for the Land and Resource Use VC do not intersect with agricultural land. Therefore, no mitigation measures are required.

EPR-121 *Effects of turbines on public roadways, including driver distraction and ice throw;*

During the Construction Phase, potential driver distraction along provincial roadways, particularly the TCH will be minimized through several proactive measures. No turbine components will be transported during nighttime hours, ensuring that oversized or unusual vehicle movements occur only during daylight when visibility is highest. Public notices will be issued in accordance with Appendix P of the Registration and using the communication tools described in EPR-133 to inform road users of construction activities and anticipated transport schedules.

To further reduce distraction risk, North Atlantic will incorporate measures that encourage safe viewing behaviour, including the development of a designated visitor viewpoint along the Wind Farm access road. Signage will be installed in high-visibility areas along the TCH to direct public interest away from the highway and toward this safe, dedicated location.

North Atlantic recognizes ice throw as a potential safety hazard during periods of rotor icing and will implement a suite of mitigation measures in alignment with industry best practices and regulatory expectations. Commitments made in Section 4.5.7 Table 4.5-7 of the Registration include:

- North Atlantic to further investigate ice throw mitigation technologies and consider implementation if required (heated blades, low friction coatings).

- Ice protection devices (either mobile units deployed as needed, or permanent installations at each wind turbine) will be further investigated and considered for implementation to provide an

entryway for workers to leave their vehicle and enter the wind turbine base while being protected from the risk of falling ice.

- Installation of public education and hazard-warning signage around turbines, explaining ice-throw risks and advising the public to avoid maximum ice-throw zones during icing periods.

- Add public education and warning signage that explain hazards to prevent members of the public from entering maximum ice throw areas during periods of rotor icing.

- Educate and train employees in potential risks in accordance with best practices and guidelines.

- North Atlantic to further develop Project site plan and if required, critical equipment at the substation can be protected with casing/ caging or moved to mitigate consequence of ice throw.

Together, these measures will ensure that risks associated with driver distraction and ice throw are effectively managed and remain low throughout the life of the Project.

EPR-122 *Effects on provincial highways at Project access points from over-weight/over-dimension loads and changes to existing drainage infrastructure;*

Located in Appendix 3, the revised Appendix E of the Registration (Traffic Management Plan, Section 3.1), outlines requirements related to Oversized and Overweight Materials (also referenced in Section 4.6.2, Table 4.6.2-1). All oversized and overweight vehicles required for Wind Farm construction will be transported along the TCH from the Bull Arm site to the Wind Farm access road. As part of FEED, the existing road geometry, including turning radii, vertical and horizontal alignment, will be assessed to confirm that wind turbine blades and other large components can be safely maneuvered. The alignment of the proposed Wind Farm access road will be designed to meet the geometric requirements associated with oversized transport.

There are no physical impediments to oversized or overweight vehicle movement along the portion of the TCH within the PA, and this section contains no bridges or underpasses. One overpass exists at the Come By Chance interchange; however, construction traffic that does not require a special permit is highway-capable can safely use the Arnold's Cove interchange (Exit 26A). While oversized or overweight transport is not anticipated during construction of the HGP or HP, roadways appear capable of accommodating such loads should they be required. In those cases, appropriate permitting will be obtained.

As an additional mitigation measure, all culverts along the intended transport route for oversized and overweight vehicles will be identified, inspected by a qualified inspector, and structurally assessed.

Where culverts are found to be inadequate to support anticipated loadings, appropriate reinforcement or upgrades will be undertaken prior to transport.

Oversized and overweight transport during the operational life of the Wind Farm is not expected, except in circumstances where major turbine components must be replaced. In such instances, required permits will be secured in advance.

In accordance with the Vehicle Regulations, 2002 under the **Highway Traffic Act**, an Overweight and Over-Dimensional Special Permit is required for vehicles that exceed the designated limits listed in Schedules A and B. Applicable maximum weight and dimension thresholds are detailed in Table E-3.1-2 of the Traffic Management Plan. Loads exceeding single-trip limits require additional Ministerial review and approval.

EPR-123 *Effects on quarries and mineral exploration, including:*

i. consultations with quarry permit holders;

ii. the potential to reactivate any dormant quarry sites; and

iii. consultations with mineral licence holders;

During the Construction Phase, North Atlantic will minimize potential effects on quarries and mineral exploration through targeted consultation and responsible project planning. Consultation with quarry permit holders will be undertaken as required to inform quarry-sourcing decisions and to coordinate access, scheduling, and safety considerations. At this stage, no dormant quarry sites have been identified for reactivation; however, should reactivation be required in the future, it would proceed only following appropriate regulatory approvals, site-specific evaluation, and consultation consistent with the approach applied to active quarry permit holders. Throughout both the Construction and O&M Phases, as discussed in Section 4.5.4 Table 4.5-4, North Atlantic will also engage mineral licence holders and will provide access upon request, subject to applicable safety requirements and ongoing discussions, ensuring that mineral exploration activities can continue in a safe and coordinated manner. This is discussed in more detail in EPR-039

EPR-124 *Measures to avoid the Geodetic Control Network;*

As identified in EPR-041, the Project will not interact with or affect any existing control monuments that form part of the provincial Geodetic Control Network. No Project components are located in areas that would disturb, obscure, or otherwise compromise geodetic control survey markers. Therefore, no mitigation measures are required.

EPR-125 *A Water Management Plan that describes water management for the entire Project (i.e., wind farm, access roads, quarries, hydrogen facilities, etc., including a commitment to establish, in consultation with the Department of Environment and Climate Change (ECC), a real-time water monitoring network for surface and groundwater quality and quantity in potentially affected watersheds to facilitate:*

i. the installation of real-time monitoring stations and collection of baseline data prior to the start of Project construction;

ii. plans for the long-term operation and maintenance of real-time monitoring stations;

iii. measures to mitigate effects to surface water quality and quantity and predict adverse residual effects, as well as address measures to be taken if water quality and quantity were to be affected by the Project and how real-time water monitoring stations will be used for this purpose; and

iv. a plan to remove and restore watercourse crossings or maintain them for the life of the Project;

A comprehensive Water Management Plan will be developed for the Project and will apply to all components, including the Wind Farm, access roads, quarries, and hydrogen facilities. Baseline information on source-water monitoring locations is summarized in EPR-015. NL DECCC-WRMD has confirmed through consultation that real-time monitoring data is not required at the EPR stage; however, real-time monitoring devices will need to be installed prior to Project operations. Site selection for these stations will occur during FEED, based on drainage patterns, effluent discharge points, and Project water-use locations, followed by consultation with NL DECCC-WRMD to confirm final station placement.

The Water Management Plan will incorporate the mitigation measures outlined in Section 4.5.2 of the Registration, with additional details finalized during FEED. These measures will address erosion and sediment control, protection of waterbodies and wetlands, fish-protection requirements for water intakes, watercourse crossing design, spill prevention, and compliance with all applicable federal and provincial legislation. The Water Management Plan will also outline procedures for monitoring water quality and quantity throughout construction, operation, and decommissioning.

During FEED, detailed drainage information will be generated to address potential compartmentalization created by new road alignments, stormwater routing, and water crossing interactions. These details will be incorporated into the Water Management Plan once engineering design is sufficiently advanced.

An overview of this plan has been added to Appendix 2 revised Section 4.6.2 Table 4.6.2-1.

EPR-126 *An Erosion and Sediment Control Plan that would be implemented prior to Project construction and for the life of the Project, to be developed on consultation with ECC as a standalone plan, separate from the Water Management Plan;*

An Erosion and Sediment Control Plan (ESCP) will be developed and implemented prior to the start of early works and will be carried through the full life of the Project, with revisions made as required. The ESCP will be finalized following completion of FEED and will be developed in consultation with DFO and the NL DECCC-WRMD.

The ESCP will integrate the mitigation measures outlined in Section 4.5 of the Registration, including but not limited to:

- Infrastructure sited on stable ground to minimize erosion and sedimentation risks, in accordance with the site geotechnical study (AllRock, 2025).
- Culvert and bridge installation completed in accordance with provincial and federal standards, including DFO guidance on fish passage and sediment control.
- Erosion and sediment control measures installed before, during, and after watercourse crossing construction.
- Erosion and sediment controls near wetlands and waterbodies implemented prior to and during construction to prevent siltation and disturbance.
- Maintenance of erosion and sediment controls until disturbed areas are fully re-vegetated.
- Access road runoff management through drainage ditches, vegetated areas, or sediment barriers to prevent exposed soil or road materials from entering wetlands or waterbodies.

The ESCP will form a core component of the Project's environmental protection framework and will guide construction, operations, and decommissioning activities to ensure protection of water resources and compliance with all applicable regulatory requirements.

An overview of this plan has been added to Appendix 2 revised Section 4.6.2 Table 4.6.2-1.

EPR-127 *A Domestic Harvesting Consultation Plan to mitigate adverse effects on domestic harvesting opportunities;*

A Domestic Woodcutting Consultation Plan has been prepared as Appendix T of the Registration, and described in Section 4.6.2.3, Table 4.6.2-1 of the Registration and includes the following components:

a) Purpose and Objectives.

b) Existing Conditions.

c) Environmental Effects and Mitigation Measures.

d) Consultation Strategy.

This plan ensures that appropriate stakeholders are identified and engaged in a meaningful manner throughout all phases of the Project. It outlines the planned consultation methods and activities with domestic wood harvesters and other related stakeholders within the PA to support continued access, minimize project-related effects on harvesting activities, and maintain transparency as the Project progresses.

EPR-128 *An Environmental Protection Plan that describes measures that will be undertaken to:*

i. prevent the introduction and spread of aquatic invasive species during construction, operation and maintenance, and decommissioning and rehabilitation;

ii. maintain a minimum 50-metre undisturbed buffer from the highwater mark of waterbodies and wetlands that appear on 1:50,000 National Topographic Scale maps or on the topographic layer of the provincial land use atlas; and

iii. minimize effects on ecologically significant components, including wildlife, wildlife habitat, and species at risk;

An EPP will be developed for the Project, as referenced in Section 4.6.2.3 Table 4.6.21 of the Registration. Section 9 of the Registration provides an annotated table of contents for the Construction Phase EPP, which will be completed and submitted for consultation prior to Construction. Future iterations of the EPP for the Operations & Maintenance Phase and the Decommissioning & Rehabilitation Phase will be developed and tailored to reflect the relevant site activities and associated protection procedures.

Applicable mitigation measures in Section 4.5 and commitments made within the Registration and this EPR will be incorporated into the EPP to ensure that the Project minimizes effects on ecologically significant components, including wildlife, wildlife habitat, and species at risk.

AIS, as discussed in EPR-021 and EPR-090, will be addressed through mitigation measures outlined in Section 4.5.2 of the Aquatic Environment.

The Registration also includes measures that will be incorporated into the EPP to protect waterbodies and wetlands, including:

- Establishing a minimum 15 m buffer from the high-water mark of waterbodies to minimize ground and vegetation disturbance.

- Storing grubbed wood and stripped soil at least 50 m from watercourses, with erosion protection measures in place until transported for disposal.

- Obtaining required permits for any work within 15 m of the high-water level and undertaking such work during low-flow periods where practical.

Following consultation with relevant regulatory authorities, North Atlantic has used the 1:50,000 topographical map to plan for a 50 m buffer wherever possible for Project infrastructure including wind turbines, roads, transmission lines and the temporary batch plant, and all other infrastructure wherever practicable for the Project. North Atlantic will engage with the relevant regulatory authorities in this regard for infrastructure placement. Applicable permits, including Permits to Alter, will be sought wherever needed.

EPR-129 *An Avifauna Management Plan that describes the appropriate measures to minimize the effects of construction, operations and maintenance, and decommissioning and rehabilitation on migratory birds protected by the MBCA, and non-migratory birds that are listed under SARA, to be developed in consultation with FFA and ECCC;*

An Avifauna Management Plan will be developed and implemented to minimize potential effects of the Project on migratory birds protected under the MBCA and on bird species listed under SARA or the provincial **Wild Life Act**. The Plan will be developed in consultation with Fisheries, Forestry and Agriculture and Environment and Climate Change Canada and will be informed by the results of pre-construction avifauna surveys, SAR assessments, and ongoing monitoring.

During Construction, the Plan will include measures to avoid or minimize disturbance, injury, or mortality to birds and their nests, including timing considerations for vegetation clearing where feasible, pre-construction nest surveys in suitable habitat, establishment of protective buffers around active nests, and procedures for managing incidental encounters with birds or nests. Construction activities will be confined to the approved Project footprint to limit habitat disturbance, and construction lighting will be minimized and designed to reduce attraction of nocturnal bird species.

During O&M, the Plan will address potential interactions between birds and wind turbines, including collision risk and behavioural displacement. The wind farm will have real-time monitoring of birds/bat s with operational curtailment built into the turbine design. Other measures will include turbine and ancillary lighting designed to minimize attraction of nocturnal birds, implementation of operational controls where warranted, and post-construction monitoring to document bird use of the PA and any mortality events. Monitoring results will be reviewed in consultation with NL DFAL-WD and Environment and Climate Change Canada (ECCC), and adaptive management measures will be implemented if monitoring indicates elevated risk to MBCA or listed species.

During Decommissioning and Rehabilitation, activities will be planned and scheduled to minimize disturbance to birds through appropriate timing, reduction of noise and lighting where feasible, and avoidance of sensitive breeding or migration periods.

The Avifauna Management Plan will define roles and responsibilities, training requirements for Project personnel, reporting protocols, and procedures for adaptive management, and will be integrated with the Environmental Effects Monitoring Plan.

An overview of this plan has been added to Appendix 2 revised Section 4.6.2 Table 4.6.2-1.

EPR-130 *An Environmental Effects Monitoring Plan (EEMP) for species of conservation concern (e.g., muskrat, plants, and birds not protected by the MBCA such as raptors and corvids) and their habitats during construction, operations and maintenance, and decommissioning and rehabilitation, to be developed in consultation with Environment and Climate Change Canada and FFA, to address the following:*

i. direct and indirect effects on wildlife species;

ii. anticipated interactions with wind turbines, collector/transmission lines; and

iii. noise, vibrations and light, and in particular effects on feeding, breeding, movement and migratory patterns;

An EEMP for SCC (e.g., muskrat, plants, and birds not protected by the MBCA, including raptors and corvids) and their habitats will be developed for the Project. The EEMP will apply to all phases of the Project, construction, O&M, and decommissioning and rehabilitation, and will be developed in consultation with ECCC and NL DFAL, as referenced in Section 4.6.2.3, Table 4.6.2-1 of the Registration.

The EEMP will include, at minimum, the following components:

a. Species at Risk Impact Monitoring and Mitigation Plan.

b. Post-Construction Monitoring Plan.

Together, these components will outline the mitigation, monitoring, and adaptive management frameworks for SAR and SCC as they relate to Project activities. The EEMP will also support meeting the requirements for the issuance of a Section 19 permit under the NL ESA. The EEMP will incorporate results from the environmental effects assessment presented in Section 4.2.3, which evaluates:

- Direct and indirect effects on wildlife species;
- Anticipated interactions with wind turbines and collector/transmission lines; and

- Potential effects of noise, vibration, and lighting, particularly regarding feeding, breeding, movement, and migratory patterns.

The EEMP will also integrate additional information and commitments presented throughout this Report, including but not limited to EPR-030 through EPR-033.

EPR-131 *A detailed Waste Management Plan for the construction and operation phases of the undertaking that includes, but is not limited to, the following:*

i. a comprehensive list of all wastes that will be generated and the general characteristics of these wastes;

ii. storage information, transport information, and final disposal information;

iii. further details on use of a landfill;

iv. details on use of the existing regional waste management system;

v. details on any development within the buffer of a current or former waste disposal site;

vi. details on hazardous waste (HW) disposal;

vii. a site diagram detailing where wastes are generated and stored;

viii. details on secondary containment;

ix. details on oil/water separators and other waste systems;

x. further details on "tank bottoms" waste;

xi. further details on filter cartridges and membranes;

xii. further details on waste related to potential spill clean-up;

xiii. further details on spent reaction catalyst; and

xiv. further details on waste management of fatigued or damaged blades, including the life expectancy of blades, frequency of blade breakage, and fire damage.

A Waste Management Plan has been prepared for the Project and is included as Appendix N of the Registration. The Waste Management Plan is a living document for the North Atlantic Wind-to-Hydrogen Project. The Waste Management Plan presents effective waste management activities, including but not limited to transportation and disposal, storage, roles and responsibilities, and training for both hazardous and non-hazardous waste.

Appendix N from the Registration has been updated to include additional information on waste generation and waste management practices during the project life, found in Appendix 6.

Existing and additional information includes, but is not limited to the following:

Section 7.0 details the types of wastes for the project, the general characteristics of this waste are inherent in their categories and titles. The categories presented are industry standards. What can be communicated at this stage of the project prior to selection of final design and release from the Environmental Assessment phase about storage, transport and disposal in detailed in Section 7.1 and throughout the different categories of waste categories in Section 7.2 and 7.3. Following release from the Environmental Assessment phase of the project North Atlantic will progress the permit and approval process referred to in Section 7.3.3. New inclusions to the document for specific items include:

- Inclusion of wind turbine disposal and recycling practices, including blades outlined in Section 7.2.2 of Waste Management Plan. Section 2.3.6 of the Registration further expands upon current disposal and recycling practices for wind turbine components.

- Details regarding the disposal of filter cartridges and membranes outlined in Section 7.3.1.2 of Waste Management Plan.

- Elaboration of tank bottom waste and disposal, required during the Construction Phase only.

- Details regarding the spent catalyst.

Further information regarding waste management practices during construction can be found in Sections 2.3.4.14 and 2.3.4.15 of the Registration.

The PA, specifically the Transmission Line does intersect with the buffer of a waste disposal site or former waste disposal site in Sunnyside. Development within the Sunnyside Waste Management Site (solid waste disposal [SWD] Zone) must be reviewed and approved by the NL DECCC, along with other relevant departments such as Department of Government Services, before the Town will issue an approval (Town of Sunnyside, 2016). Discussions regarding this topic are on going with the Town of Sunnyside and further details will be developed during the FEED study.

As producers of industrial / commercial / institutional (ICI) waste management services in the private sector, it is not anticipated that there will be effects to any residential collection or waste management in the LAA. Section 3.1.6.5 of the Registration provides further information on community and regional services, including waste management.

EPR-132 *An updated Transportation Impact Study and Traffic Management Plan that includes the following information:*

i. an analysis of the capacity of the existing provincial road infrastructure to accommodate the transportation of oversized and overweight loads during the lifetime of the Project, including

existing roads, bridges, culverts and sign structures, and identification of areas of concern and planned mitigations;

ii. frequency of travel over the proposed routes;

iii. estimated increased deterioration to existing road infrastructure as a result of transportation of oversized and overweight loads and the estimated increased maintenance requirements;

iv. commitment that measures will be implemented to mitigate deficiencies in the roads, bridges, and culverts and that any engineering design or investigation costs will be at the Proponent's expense; and

v. a traffic management plan for vehicular traffic during the transportation of oversized and overweight loads;

An updated TIS/TMP can be found in Appendix 3.

i) As per Section 3.2 of Appendix 3, the existing roads and intersections between the TCH and the PA were originally designed for heavy vehicles, and the design is therefore expected to be adequate for most of the anticipated construction traffic. An Overweight and Over Dimensional Special Permit is required for vehicles that exceed the designated limits listed in the Vehicle Regulations, 2002 under the **Highway Traffic Act** and in Schedule A and B. Vehicle dimensions, wheelbase, overhangs, axle weight, and tire loading are all elements that could lead to the need for a Special Permit. The characteristics of the transport vehicles used for the Project will be reviewed to determine if a Special Permit is required. Other permits will be required for slow moving vehicles or for an over mass mobile crane. The existing road geometry, including turning radius and vertical and horizontal alignment, will be assessed to verify the ability for the wind turbine blades to manoeuvre, given the size of the wind turbine components. The road alignment of the proposed Wind Farm access road will be designed to meet the geometric requirements associated with transporting oversized and overweight vehicles. There are no physical impedances to oversized or overweight vehicles in the PA section of the TCH with no bridges or underpasses. There is one overpass located at the Come By Chance interchange. While the use of oversized and overweight vehicles is not anticipated during the HGP or HP Construction Phase, the roadways associated with the PA appear capable of accommodating such vehicles, with no significant pinch points identified along the route. Construction traffic that does not require a special permit is highway capable and can therefore travel over the overpass at the Arnold's Cove interchange (Exit 26A). However, if oversized and overweight vehicles are required to deliver equipment to the HGP or the HP, a permit will be requested. Culverts along the travel path of oversized and overweight vehicles will be identified and then inspected by a qualified inspector. If any culvert is found to be structurally inadequate to support the anticipated loads, appropriate reinforcement measures will be implemented. For the wind turbine maintenance, no overweight or oversized vehicles are required except when large parts need to be replaced. In that case, the applicable permits will be requested. North Atlantic commits to undertaking measures intended to minimize impact on the road network during all phases of the Project including obtaining required permits and approvals from relevant authorities.

ii) As per Section 2.4.1 of Appendix 3, up to fifty-five wind turbines are expected to be mounted at the Wind Farm in two phases and construction traffic will be affected by the construction procedures for each wind turbine. The wind turbine parts will be delivered in segments and mounted at the specified locations. Dedicated trucks/ trailers are assigned to transport the different segments of the wind turbine (Hatch 2024).

The wind turbines will be mounted in sequence, allowing delivery of components to the PA in stages. Each wind turbine consists of thirteen components as indicated in Table E-2.4-1 (Appendix 3). The Wind Farm is expecting to have 45 wind turbines resulting in a total of 630 deliveries during phase 1 of construction. The remaining ten (10) wind turbines will be constructed in a subsequent phase. All components of the wind turbine will be delivered using a single vehicle, except for the PSL (part ship loose) kit, which will require two vehicles to deliver the element. The PSL kit will travel on a standard tractor trailer while all other wind turbine components will be delivered using specialized vehicles. Two types of Schnabel delivery vehicles are anticipated for this Project: one for blade transport and the other configured for remaining wind turbine components (tower, nacelle, drive train and hub). While the cargo may differ, both will utilize Schnabel-type transport systems (shown in Annex 1 of Appendix 3) due to their ability to carry oversized loads. The construction schedule for phase 1 provides 18 months for the delivery and installation of Wind Farm components. During this period, an estimated 135 deliveries will be required for blade transportation and 495 deliveries of other components. A delivery is defined as a vehicle driving to the site. To meet the installation schedule, it was assumed that one Schnabel-type vehicle will be dedicated to blade transport, while two Schnabel-type vehicles will be allocated for transporting other components, assuming each vehicle completes one delivery per day, which was an assumption based on the delivery and installation schedule. At the same time, transport trucks will be used to deliver the PSL kit and it is assumed that two deliveries using the transport trucks could be completed per day. Therefore, for phase 1 a total of 270 trips are required for the blade delivery trucks and 810 trips are needed for other components, assuming two Schnabel-type vehicles are commissioned for this task. For the PSL kit, 180 trips are required. A trip is defined as a one-way journey between an origin and a destination. Two trips are required for each delivery because the parts leave the origin location and arrive at the construction site and then the vehicle returns to the origin location to receive the next shipment.

For the additional ten (10) wind turbines, there will be 140 deliveries of wind turbine components. Therefore, the impact on the TCH will be less than for the initial wind turbine construction. In phase 2, there will be 280 trips for all the components to be delivered to the construction site compared to the 1,260 trips in phase 1.

iii) An estimated increase in deterioration to existing road infrastructure may result from the transportation of oversized and overweight loads; North Atlantic will assess potential pavement impacts and identify any required maintenance as part of the detailed engineering design. More information will be available

at that time that will help clarify the weights of the loads and the types of vehicles to be used in construction and the definitive frequency of the overweight truck travel on the roadways. This information will be shared with the NL DTI and other relevant regulatory bodies for consideration,

iv) North Atlantic commits to implement measures to mitigate deficiencies in roads, bridges, and culverts, and all associated engineering design and investigation costs as a result of Project activities.

v) A detailed Traffic Management Plan is provided in Appendix 3. During the transportation of oversized and overweight loads from the Bull Arm area to the proposed Wind Farm access road, vehicular traffic on TCH will be able to overtake oversized vehicles using designated passing lanes. In sections without passing lanes, escort vehicles will assist by reducing vehicle speeds and alerting approaching traffic. Oversized vehicles completing a right turn into the proposed Wind Farm access road can do so without conflicting with TCH traffic. For oversized vehicles turning left out of the proposed Wind Farm access road, the loads will be removed, allowing the vehicles to use hydraulic systems to reduce their overall length. Escort vehicles will also assist by managing eastbound and westbound traffic, if required.

EPR-133 *Public Engagement Plan that provides readily accessible opportunities for interested persons (e.g., local residents, fish harvesters, business owners, aquaculture industry, adjacent title holders, SCH, Fish, Food and Allied Workers Union) to meet with the Proponent by telephone, virtually, or at a place adjacent to or in the geographical area of the Project to discuss Project information and share related concerns as they arise;*

A comprehensive Public Participation Plan (PPP) has been prepared for the Project and is included as Appendix P of the Registration (Additional reference in Section 4.6.2.3, Table 4.6.2-1 of the Registration). The PPP outlines the framework and processes that North Atlantic will use to provide accessible, ongoing opportunities for interested persons, including local residents, fish harvesters, business owners, aquaculture operators, adjacent title holders, and Small Craft Harbours representatives, to meet with the Proponent and discuss Project information as questions or concerns arise.

Appendix P includes the following components:

a) Scope and Objectives;

b) Roles and Responsibilities;

c) Engagement Strategy;

d) Communication and Engagement Tools;

e) Inquiry and Complaints Resolution Protocol;

f) Engagement During Project phases;

g) Indigenous Engagement;

h) Emergency Response;

i) Monitoring and Reporting; and

j) Evaluation and Updating.

The Public Participation Plan describes how engagement and consultation will be facilitated throughout Construction, O&M, and Decommissioning and Rehabilitation. It also outlines when and how public and key stakeholder participation will occur; the tools and communication methods that will be used; and the process for receiving, documenting, and responding to concerns. This framework ensures that meaningful, transparent engagement is maintained for the full life cycle of the Project.

North Atlantic has developed a suite of communication and engagement tools to support effective consultation, ensure consistent sharing of Project information, and provide clear channels for responding to questions. These tools are summarized in Table P-3.0-1 of Appendix P and are reproduced here as Table EPR-133 for ease of reference.

Table EPR-133 Communication tools

Tool	Description	Frequency
Project website	A regularly updated Project website is hosted at www.greenenergyhub.ca. The website will be the main source of information related to construction plans, community updates, and environmental documents.	Ongoing
Email address	Dedicated email address for inquiries, greenenergy@northatlantic.ca	Ongoing
Email distribution list	A Project email distribution list was compiled during the Registration phase. Interested stakeholders have been invited to add their email address to the list. This distribution list will continue to be used to share notifications, PSAs, newsletter, and other information.	Ongoing
Newsletter	A newsletter will be posted to the website and distributed to recipients on the email distribution list. The newsletter will provide regular updates on Project activities, upcoming events, and spotlight team members.	Quarterly

Tool	Description	Frequency
Social media	Social media accounts will be used to share Project information and updates, and notifications for public information sessions.	Ongoing
Posters	Public notifications such as posters and handouts in the local communities will be used to raise awareness of public information sessions	Ongoing
Press releases	Press releases will be used to inform the media of public information sessions and other Project updates.	As required
Public Service Announcements (PSA)	PSAs will be used to inform residents of upcoming activities, such as construction work, transport of goods, traffic advisories, etc. They will be shared with media, as well as adjacent communities.	As required

EPR-134 *A commitment to follow the Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (https://publications.gc.ca/collections/Collection/Fs97-6-2107E.pdf) as mitigation measures for quarry blasting;*

North Atlantic commits to following the guidelines for the Use of Explosives In or Near Canadian Fisheries Waters as mitigation for any quarry blasting associated with the Project. These guidelines will be applied to ensure the protection of fish and fish habitat during all blasting activities.

As Project engineering and design advance, North Atlantic commits to reassessing blasting requirements during FEED. This reassessment will include confirmation of site-specific blasting methods, required setback distances, charge sizing, and any additional mitigation necessary to remain fully compliant with the federal guidelines. Updated blasting plans and mitigation measures will be incorporated into the Construction-Phase EPP and provided to regulators as required.

ERP-135 *A commitment to adhere to Best Management Practices for the Protection of Freshwater Fish Habitat in Newfoundland and Labrador (https://waves-vagues.dfo-mpo.gc.ca/library-bibliotheque/41030217.pdf) regarding fuel storage and other setback guidance.*

North Atlantic commits to adhering to the *Best Management Practices for the Protection of Freshwater Fish Habitat in Newfoundland and Labrador* (DFO) regarding fuel storage, equipment operation, and setback distances for all Project phases, including Construction, O&M, and Decommissioning and Rehabilitation.

These best management practices will be fully integrated into the Project's EPP and will guide site planning, equipment refuelling and maintenance, sediment and erosion controls, watercourse protection measures, and all activities occurring near freshwater systems. Setbacks and buffer zones will be applied in accordance with the DFO guidance, and additional permitting (e.g., Permits to Alter a Body of Water) will be obtained where required.

North Atlantic will ensure that contractors and subcontractors are informed of and comply with all applicable requirements under these best management practices.

8.0 Decommissioning and Rehabilitation

Section 2.3.6 of the Registration states the Project Decommissioning and Rehabilitation Plan (DRP) associated with all aspects of work within the PA will be developed once all Project infrastructure and detailed designs have been finalised. Consultations following issue of the EPR Guidelines with relevant government departments, including NL Departments of Mines and Energy and EAD confirmed that this was satisfactory. It was also discussed that the initial plan will be updated and therefore considered adaptive as new methods, potentially new government regulations and guidance as well as best available technology develops over the life of the project. The Plan will be prepared in accordance with applicable federal and provincial guidelines and in consultation with relevant regulatory authorities. Items specific to EPR-136 to EPR-142 are addressed below.

EPR-136 *Further information on the decommissioning of the freshwater intake;*

The freshwater intake will be shared between North Atlantic and Braya so this will need to be taken into consideration. North Atlantic will consult with Braya on their operational plans for the water intake and relevant government departments on the best way forward related to this shared infrastructure. This will be addressed in the DRP.

EPR-137 *Further information on the decommissioning of the outfalls in the marine environment;*

Decommissioning activities that apply to the marine outfall will be incorporated into the DRP, for both the new and existing outfalls, The existing marine outfall in currently in use by Braya and a plan forward for this infrastructure will need their involvement. The plan will be finalized through consultation with relevant regulatory agencies as part of the permitting process.

EPR-138 *Clear indication for the cost responsibility of decommissioning the electrical power infrastructure such as the transmission lines and associated equipment;*

The cost responsibility of the North Atlantic owned power infrastructure decommissioning rests with North Atlantic. The 138 kV, 7 km transmission line required to supply the Project is described in EPR–080 and shown in Figure EPR–080.

EPR-139 *Proposed decommissioning timelines and activities, including dismantling and removal of infrastructure and facilities (e.g., wind turbines, access roads, water crossings, transmission*

lines, hydrogen/ammonia facility) and site rehabilitation, including a revegetation plan to reduce invasive species.

Proposed decommissioning timelines and activities will be part of the DRP that will be developed. The infrastructure and facilities noted in EPR–139 will be addressed as part of this plan and any suggested rehabilitation will also be included.

EPR-140 *Information on the decommissioning/removal of any access constructed on provincially owned roadways as part of the previous phases of the Project;*

North Atlantic understands that this request pertains to the access point connecting to the TCH. A decommissioning plan for the access point infrastructure will be developed at the conclusion of the Project in consultation with NL DTI and other relevant government departments and stakeholders. The decision on whether the access will be removed or retained will be informed through this consultation process.

EPR-141 *Information on the decommissioning/removal of any infrastructure within catchment areas to TI drainage infrastructure that could increase drainage runoff; and*

The DRP will address decommissioning/removal of any infrastructure within catchment areas to NL DTI infrastructure that could increase drainage runoff. Should the decommissioning process affect drainage infrastructure that increases runoff, North Atlantic commits to evaluating impacts and developing solutions to manage the change in drainage.

EPR-142 *Details regarding waste management during decommissioning.*

Section 2.2 in the revised Appendix N Waste Management Plan (Appendix 6) refers to waste management during the decommissioning stage of the project. It includes the following:

- Removal of all hazardous chemicals, reagents, and materials from the Wind Farm, HGP, and HP facilities for off-site disposal by a licensed waste management contractor;
- Removal and disposal of all non-salvageable and non-hazardous demolition debris into a licensed off-site waste disposal facility;
- Demobilised materials and equipment will be removed from the site to an appropriate storage, transfer, recycling, or licensed waste management facility; and
- Repurposing and recycling of wind turbine blades at the end of the project will be investigated. North Atlantic does not intend to bury or incinerate any wind turbine blades onsite and commits

to exploring options for repurposing or recycling wind turbine components upon decommissioning, where possible.

9.0 Project-related Documents

EPR-143 *The Proponent shall prepare a complete and detailed bibliography of studies used to prepare the EPR. Supporting documentation shall be referenced in the EPR and attached as an Appendix to the EPR.*

- *Provide all digital geospatial data related to wildlife survey sites, survey tracks, dates, and observational records for all wildlife species surveyed such as avifauna/raptors, lichen, marten, muskrat, insects, and plants are to be provided. Diagnostic photos of S1 (provincial, critically imperiled) and S2 (provincial, imperiled) plants must also be included. With respect to bats, all raw bat acoustic recording data files and associated geospatial location data related to the Autonomous Recording Units (ARUs) must be submitted to the Wildlife Division.*

A detailed bibliography of the studies used in the preparation of this Report is provided below.

All available data has been provided to date, and no additional digital geospatial data related to wildlife survey sites are available for this Report.

References

AllRock. (2025). *Geotechnical investigation: North Atlantic Refining Corp. NARL wind-to-hydrogen project*. https://www.allrockconsulting.com

Braya Renewable Fuels LP. (2024a). *Braya 2023 marine environmental effects monitoring program*.

Braya Renewable Fuels LP. (2024b). *Braya 2024 marine environmental effects monitoring program*.

Brown, N. A. W., Halliday, W. D., Balshine, S., & Juanes, F. (2021). Low-amplitude noise elicits the Lombard effect in plainfin midshipman mating vocalizations in the wild. *Animal Behaviour, 181*, 29–39. https://doi.org/10.1016/j.anbehav.2021.08.025

Canadian Council of Ministers of the Environment. (1999). *Canadian water quality guidelines for the protection of aquatic life: Temperature (marine)*. https://ccme.ca/en/res/temperature-marine-en-canadian-water-quality-guidelines-for-the-protection-of-aquatic-life.pdf

Committee on the Status of Endangered Wildlife in Canada. (2021). *COSEWIC assessment and status report on the short-eared owl (Asio flammeus) in Canada*. Environment and Climate Change Canada. https://ecprccsarstacct.z9.web.core.windows.net/files/SARAFiles/legacy/cosewic/sr%20Short-eared%20Owl%202021_e.pdf

Cowan, G. I. McT., & Baggs, E. M. (1988). Incidences of lacustrine spawning of the ouananiche, *Salmo salar*, and the brook charr, *Salvelinus fontinalis*, on the Avalon Peninsula, Newfoundland. *Journal of Fish Biology, 32*(2), 311–312. https://doi.org/10.1111/j.1095-8649.1988.tb05365.x

Cunningham, K. A., & Mountain, D. C. (2014). Simulated masking of right whale sounds by shipping noise: Incorporating a model of the auditory periphery. *The Journal of the Acoustical Society of America, 135*, 1632–1640. https://doi.org/10.1121/1.4864470

DFO. (2007a). *Placentia Bay integrated management plan*. Government of Canada. https://www.mi.mun.ca/media/marineinstitutewwwmimunca/mi/programsandcourses/marinespatialplanning/files/PBIMCIntegratedManagementPlan.pdf

DFO. (2009b). *Does eelgrass (Zostera marina) meet the criteria as an ecologically significant species?* Canadian Science Advisory Secretariat Science Advisory Report 2009/018. https://waves-vagues.dfo-mpo.gc.ca/library-bibliotheque/337549.pdf

DFO. (2017b). *Integrated management planning: Placentia Bay, Newfoundland and Labrador*. Government of Canada. https://www.dfo-mpo.gc.ca/oceans/publications/imnfld-tnlgi/index-eng.html

DFO. (2019). *Re-evaluation of the Placentia Bay–Grand Banks area to identify ecologically and biologically significant areas*. Canadian Science Advisory Secretariat Science Advisory Report 2019/040.

Erbe, C., Dähne, M., Gordon, J., Herata, H., Houser, D. S., Koschinski, S., Leaper, R., McCauley, R., Miller, B., Müller, M., Murray, A., Oswald, J. N., Scholik-Schlomer, A. R., Schuster, M., Van Opzeeland, I. C., & Janik, V. M. (2019). Managing the effects of noise from ship traffic, seismic surveying and construction on marine mammals in Antarctica. *Frontiers in Marine Science*. https://doi.org/10.3389/fmars.2019.00647

Gibson, R. J. (1993). The Atlantic salmon in fresh water: Spawning, rearing and production. *Reviews in Fish Biology and Fisheries, 3*(1), 39–73. https://doi.org/10.1007/BF00043297

Hatch. (2024). *NARL wind-to-hydrogen project pre-FEED report* (Report No. H371912-0000-100-146-0001).

Holt, M. M., Tennessen, J. B., Ward, E. J., Hanson, M. B., Emmons, C. K., Giles, D. A., & Hogan, J. T. (2021). Effects of vessel distance and sex on the behavior of endangered killer whales. *Frontiers in Marine Science, 7*. https://doi.org/10.3389/fmars.2020.582182

Ivanova, S. V., Kessel, S. T., Espinoza, M., McLean, M. F., O'Neill, C., Landry, J., Hussey, N. E., Williams, R., Vagle, S., & Fisk, A. T. (2019). Shipping alters the movement and behavior of Arctic cod (*Boreogadus saida*), a keystone fish in Arctic marine ecosystems. *Ecological Applications, 30*(3), e02050. https://doi.org/10.1002/eap.2050

Ivanova, S. V., Kessel, S. T., Landry, J., O'Neill, C., McLean, M. F., Espinoza, M., Vagle, S., Hussey, N. E., & Fisk, A. T. (2018). Impact of vessel traffic on the home ranges and movement of shorthorn sculpin (*Myoxocephalus scorpius*) in the nearshore environment of the high Arctic. *Canadian Journal of Fisheries and Aquatic Sciences, 75*(12), 2390–2400. https://doi.org/10.1139/cjfas-2017-0418

London, J. M., Ver Hoef, J. M., Jefferies, S. J., Lance, M. M., & Boveng, P. L. (2012). Haul-out behavior of harbor seals (*Phoca vitulina*) in Hood Canal, Washington. *PLoS ONE, 7*(6), e38180. https://doi.org/10.1371/journal.pone.0038180

Lüning, K., & Freshwater, W. (1988). Temperature tolerance of northeast Pacific marine algae. *Journal of Phycology, 24*, 310–315.

Matheson, K., McKenzie, C., Gregory, R., Robichaud, D., Bradbury, I., Snelgrove, P., & Rose, G. (2016). Linking eelgrass decline and impacts on associated fish communities to European green crab (*Carcinus maenas*) invasion. *Marine Ecology Progress Series, 548*, 31–45. https://doi.org/10.3354/meps11674

NL DECC. (2017). *Estimation of low flows for the province of Newfoundland and Labrador: A user's guide*. https://www.gov.nl.ca/ecc/waterres/reports/estimation-streamflow/

O'Connell, M. (1982). *The biology of anadromous Salvelinus fontinalis and Salmo trutta in river systems flowing into Placentia Bay and St. Mary's Bay, Newfoundland*. https://library-archives.canada.ca/eng/services/services-libraries/theses/Pages/item.aspx?idNumber=1319163885

Popper, A. N., Hawkins, A. D., Fay, R. R., Mann, D. A., Bartol, S., Carlson, T. J., Coombs, S., Ellison, W. T., Gentry, R. L., Halvorsen, M. B., Løkkeborg, S., Rogers, P. H., Southall, B. L., Zeddies, D. G., & Tavolga, W. N. (2014). *Sound exposure guidelines for fishes and sea turtles*. Springer. https://doi.org/10.1007/978-3-319-06659-2

Scott, B., & Scott, G. (1988). *Atlantic fishes of Canada* (Canadian Bulletin of Fisheries and Aquatic Sciences No. 219). https://publications.gc.ca/site/eng/9.616187/publication.html

Scott, W., & Crossman, E. (1964). *Fishes occurring in the fresh waters of insular Newfoundland*. http://www.archive.org/details/fishesoccurringi0Oscot

Scott, W., & Crossman, E. (1998). *Freshwater fishes of Canada*. Galt House Publications Ltd. https://publications.gc.ca/site/eng/9.870340/publication.html

Scruton, A., Sooley, R., Moores, L., Barnes, A., Buchanan, A., & McCubbin, N. (1997). *Forestry guidelines for the protection of fish habitat in Newfoundland and Labrador*. Fisheries and Oceans Canada.

Scruton, D. A., Riley, S. C., Bennett, B. A., Bowdring, T., & Clarke, K. D. (2000). *A review of habitat suitability criteria applicable to four salmonid species in Newfoundland, Canada* (Canadian Manuscript Report of Fisheries and Aquatic Sciences No. 2548).

Silverpeak. (2023, December 31). *Company overview*. https://www.silverpeak.com/

Smith, K. (1988). *The Atlantic salmon* (Underwater World Factsheet; Cat. No. Fs 41-33/19-1988E). Department of Fisheries and Oceans.

Soldevilla, M. S., Hildebrand, J. A., Frasier, K. E., Aichinger Dias, L., Martinez, A., Mullin, K. D., Rosel, P. E., & Garrison, L. P. (2017). Spatial distribution and dive behavior of Gulf of Mexico Bryde's

whales: Potential risk of vessel strikes and fisheries interactions. *Endangered Species Research, 32*, 533–550. https://doi.org/10.3354/esr00834

Soldevilla, M. S., Debich, A. J., Garrison, L. P., Hildebrand, J. A., & Wiggins, S. M. (2022). Rice's whales in the northwestern Gulf of Mexico: Call variation and occurrence beyond the known core habitat. *Endangered Species Research, 48*, 155–174. https://doi.org/10.3354/esr01196

Stanley, J., & Trial, J. (1995). *Habitat suitability index models: Nonmigratory freshwater life stages of Atlantic salmon* (Vol. 3). U.S. Department of the Interior.

Town of Sunnyside. (2016). *Sunnyside development regulations*.

Transport Canada. (2022). *Preventing the spread of aquatic invasive species*. Government of Canada. https://tc.canada.ca/en/campaigns/protecting-our-coasts-oceans-protection-plan/better-protected-coastal-ecosystems/preventing-spread-aquatic-invasive-species

Transport Canada. (2025). *Protecting North Atlantic right whales from collisions with vessels in the Gulf of St. Lawrence*.

Vanderlaan, A. S. M., & Taggart, C. T. (2006). Vessel collisions with whales: The probability of lethal injury based on vessel speed. *Marine Mammal Science, 23*(1), 144–156. https://doi.org/10.1111/j.1748-7692.2006.00098.x

Zadeh, S. (2012). *Low flow frequency study for Newfoundland and Labrador* (Master's thesis, Memorial University of Newfoundland). https://www.gov.nl.ca/ecc/files/waterres-reports-estimation-streamflow-2017-low-flow-frequency-study-for-newfoundland-and-labrador-zadeh-2012.pdf

10.0 Commitments made in the EPR

EPR-144 *The EPR shall provide a list of all commitments made regarding environmental effects mitigation, monitoring and follow-up. Each commitment must be cross-referenced to the section of the EPR where it has been made.*

North Atlantic confirms that all commitments made in Section 12.0 of the Registration remain in full effect and will be implemented as part of the Project. In addition, Table EPR-144 provides a comprehensive, consolidated list of all commitments related to mitigation, monitoring, and follow-up that have been made throughout the EPR. Each commitment is cross-referenced to the specific EPR section where it is described, demonstrating how North Atlantic will meet all requirements outlined under EPR-144.

Table EPR-144 Index of Commitments made in the EPR

Commitment	EPR Section
Through the Project, North Atlantic will: Produce green hydrogen that will enable substantial reductions in carbon dioxide (CO2) emissions. Unlike conventional hydrogen production methods that require fossil fuels, this clean fuel can be used in various sectors, including transportation, industry, and power generation, to replace carbon-intensive fuels like natural gas, diesel or coal. As a result, the Project is expected to contribute to Canada's and the world's climate goals, helping reduce GHG emissions and combat climate change.	EPR-006
Through the Project, North Atlantic will: Support workforce development by fostering new skills and creating jobs in NL's evolving green energy sector. The Project will serve as a catalyst for developing a skilled green energy workforce in NL. By investing in training programs, North Atlantic aims to equip workers with the knowledge and skills required for careers in hydrogen production, renewable energy infrastructure, and wind turbine maintenance. The Project is expected to create both short-term construction jobs and long-term operational employment, resulting in a firmly anchored green energy workforce for years to come.	EPR-006
Through the Project, North Atlantic will: Drive economic growth by delivering significant benefits to local communities and the province. Beyond its environmental and employment effects, the Project is poised to bring broad economic benefits to the region, including: (1) direct investment in infrastructure, facilities, and equipment, (2) contracting and spinoff opportunities for local businesses during the construction and operational phases, (3) increased tax revenue for municipal, provincial and federal governments, (4) community engagement and partnerships, ensuring that residents and other stakeholders share in the Project's success, and (5) positioning NL as a hub for clean energy exports, unlocking new trade opportunities and attracting additional green technology investments.	EPR-006
The proposed laydown area at the Bull Arm Fabrication Site will be capable of storing up to ten wind turbines at a time (i.e., blades, towers, nacelles, and hubs) and the location will be determined following FEED.	EPR-011
The locations of control, offices, and utility buildings at the HGP and HP will be further refined during FEED	EPR-011
The exact location of the raw water pipeline from Lady Cove Pond to the temporary batch plant and the internal water/utility pipeline between the HGP and HP, are not yet available and will be finalized during the FEED phase.	EPR-011
The water-intake pipeline at Lady Cove Pond represents the only in-water component; its exact location will also be confirmed following completion of FEED.	EPR-011
During construction, water withdrawal from Lady Cove Pond will be managed in accordance with regulatory requirements and standard environmental protection practices. The intake system will be equipped with an appropriately sized end-of-pipe fish-protection screen to prevent impingement and entrainment of fish. Measures will be implemented to prevent pollution, minimize disturbance to aquatic habitat, and protect fish and fish habitat throughout installation and operation of the intake.	EPR-013

Commitment	EPR Section
Final engineering of the outfall (alignment, diffuser design, construction methods) will be determined during FEED and submitted during permitting.	EPR-018
To mitigate the potential spread of AIS, North Atlantic will adhere to recommended best practices and guidelines. Shipping vessels will be inspected for biofouling by AIS such as Vase tunicate and European green crab.	EPR-021
There are no changes expected to sanitary wastewater discharge locations at this time, exact location of infrastructure will be determined with the Project FEED study.	EPR-022
A field-based fish and fish habitat survey at Lady Cove Pond will be conducted to support a **Fisheries Act** Authorization before construction. The exact intake location and withdrawal details are not yet sufficiently defined (see Section 2.3.4.9 of the Registration) and will not be available until after FEED is finalized. Consistent with regulatory advice, baseline surveys will be completed prior to any in water works or water withdrawal activities to characterize existing conditions and inform effects assessment, mitigation, and follow-up. A Request for Review (RFR) will be submitted to DFO for the proposed in water works and water withdrawal. The same approach will apply should an alternative waterbody or crossing be selected, with consideration of seasonal water level variability associated with recent climatic conditions.	EPR-025
Where indirect effects are identified and have the potential to affect scheduled salmon rivers, field survey requirements may be more detailed or intensive than those applied to other watercourses. The Proponent acknowledges this requirement and will address it as part of subsequent regulatory review, as appropriate.	EPR-027
If it is determined that a Fisheries Act Authorization is required for Barrisway, it will be completed post EPR, once refinement of Project design is achieved following FEED. This will be completed through engagement with DFO and NL DFAL-WD.	EPR-028
North Atlantic commits to continued engagement with other marine users, including completion of a creel survey prior to 2029, in advance of operations.	EPR-029
A Post-construction Mortality Program will be established in consultation with NL DFAL-WD. North Atlantic is committed to an adaptive management approach wherein mitigation measures are adjusted as necessary to avoid or reduce the number of Project-related bat mortalities	EPR-030
The exact footprint and layout of the batch plant and associated pipelines will be developed during FEED and final construction planning	EPR-036
Should an historical quarry require reactivation or should a new quarry be required, North Atlantic will coordinate with the appropriate regulatory authorities and quarry operators to obtain the necessary approvals. Decisions regarding quarry sourcing will be informed by commercial discussions between North Atlantic, quarry owners, and the EPCM contractor.	EPR-037
North Atlantic is committed to working with Mineral License holders and will engage actively in understanding their work requirements in the shared areas. […] North Atlantic will consult with all applicable parties, including quarry permit and mineral licence holders, to ensure a clear understanding of access requirements and potential buffer restrictions.	EPR-038

Commitment	EPR Section
Once North Atlantic has a detailed construction plan for the transmission line, location of where it will cross the TCH will be shared with the NL DTI and other relevant regulatory bodies for consideration.	EPR-039
The new intersection for the Wind Farm will be designed according to the Geometric Design Guide for Canadian Roads 2017 (GDG) published by the Transportation Association of Canada (TAC) and the regulatory standards for the province of Newfoundland and Labrador. The GDG will be used to design road elements in the Construction Phase and in the O&M Phase.	EPR-039
Should any Project component ultimately be proposed within the 15 m shoreline reservation, the North Atlantic will comply with the requirements of Section 7 of the **Lands Act** and will obtain the appropriate Permit to Alter and any other required authorizations prior to construction.	EPR-040
Final infrastructure locations, including any components potentially near waterbodies, will be confirmed during completion of the FEED. Should any Project component ultimately be proposed within the 15 m shoreline reservation, North Atlantic will comply with the requirements of Section 7 of the **Lands Act** and will obtain the appropriate authorizations prior to construction.	EPR-040
An updated analysis by CGC will be sought after completion of FEED when a final layout has been confirmed to ensure no interference issues are associated with the final design	EPR-042
An updated analysis by MSC will be sought after completion of FEED when a final layout has been confirmed to ensure no interference issues are associated with the final design.	EPR-044
Detailed engineering design information for End-of-Pipe intake screening on newly constructed source water intakes will be developed during the FEED phase of the Project. North Atlantic commits to consulting with DFO as part of the **Fisheries Act** review process for any new water intake construction. Intake screening will be designed and installed in accordance with DFO's Code of Practice for the End of Pipe Fish Protection Screens for Small Water Intakes to prevent fish impingement and entrainment. Screening design specifications, including approach velocities, mesh size, materials, and installation methods, will be confirmed during FEED and provided to DFO for review and approval prior to construction.	EPR-046
If an alternate water supply is required, the Proponent will prepare and provide assumed design and sizing parameters for an end of pipe intake screen to prevent fish impingement and entrainment. The final intake screen design, including approach velocity, mesh size, materials, and installation configuration, will be completed during the FEED phase. The intake screen will be designed and installed in full compliance with all commitments outlined under EPR 046, including consultation with DFO as part of the **Fisheries Act** review process. Screening design will adhere to DFO's Code of Practice for the End of Pipe Fish Protection Screens for Small Water Intakes to ensure effective protection of fish and fish habitat. Final design details will be confirmed prior to construction and submitted to DFO for review and approval, as required.	EPR-047

Commitment	EPR Section
Additional facilities and details involved with the outfall infrastructure will be available in the FEED report once finalized	EPR-049
North Atlantic will obtain a Permit to Alter a Body of Water from the NL Department of Environment, Conservation and Climate Change Water Resources Management Division (NL DECCC-WRMD) prior to undertaking any activity within or adjacent to waterbodies that triggers regulatory approval.	EPR-051
Setback/buffer distances between construction activities and fish and fish habitat will be discussed and confirmed with both DFO and the provincial FAA division as the Project progresses. These setback buffer distances will be in line with the Best Management Practices for the Protection of Freshwater Fish Habitat in Newfoundland and Labrador[	EPR-052
Specific permits, final transmission line routing, construction methods, and any required access or closure measures affecting the T'Railway Provincial Park will be addressed during the FEED phase and through the associated regulatory permitting process, in consultation with Parks NL, the Newfoundland and Labrador Department of Tourism, Culture, Arts and Recreation and other relevant provincial authorities	EPR-053
Detailed design and construction information for any concrete batch plant(s) required to support the Project will be developed and finalized during the FEED phase . North Atlantic commits to sharing the detailed design information once FEED is completed, to support subsequent regulatory review and permitting prior to construction	EPR-054
Design and construction details for any new waterbody crossings, including bridges and culverts, will be developed and finalized during the FEED phase of the Project. Once available, these details will be provided to support subsequent regulatory review and permitting and will reflect applicable federal and provincial standards and best management practices for the protection of fish and fish habitat.	EPR-056
For road works, this information will be finalized during roadway detailed design, and for concrete works, it will be confirmed through the final concrete mix design report, both of which will form part of the FEED phase.	EPR-058
Should these archived sites require reactivation, or should new sites be required to meet material demands, North Atlantic will coordinate with the appropriate regulatory authorities and quarry operators to obtain the necessary approvals.	EPR-059
North Atlantic will consult with applicable parties, including mineral licence holders, and will provide access upon request, subject to safety requirements and ongoing discussions. Access management measures will be addressed through consultation and will be informed by operational conditions and applicable safety considerations.	EPR-060
North Atlantic commits to ensuring that run off changes are minimized and taken into consideration in the design. This will involve ongoing consultations with the NL DTI during design development and the permitting process to understand runoff.	EPR-061
Fire-water storage and distribution systems will be designed during FEED to meet applicable safety codes, regulatory requirements, and best practices for industrial fire protection.	EPR-068

Commitment	EPR Section
Commitments to provide details regarding the temporary construction-phase concrete batch plant, including its final proposed location, water source(s), surface water controls, and effluent management measures, following completion of the FEED phase, are provided under EPR-054.	EPR-072
North Atlantic commits to including DFO as a designated notification contact for all spill and unauthorized release incidents that could potentially affect fish or fish habitat during all phases of the Project, including construction, O&M, decommissioning, and rehabilitation	EPR-074
During the FEED process, North Atlantic will confirm blasting methods, and adjust methods, charge size, and setback distances consistent with provincial guidelines and industry best practices to ensure vibrations remain well below allowable thresholds	EPR-089
a Post-construction Mortality Program will be established in consultation with NL DFAL-WD. Mortality estimates will be developed after data has been collected. North Atlantic is committed to an adaptive management approach wherein mitigation measures are adjusted as necessary to avoid or reduce the number of Project-related wildlife mortalities.	EPR-091
North Atlantic will consult with the active quarry operator to communicate construction timelines and mitigate any potential access-related impacts.	EPR-094
North Atlantic commits to undertaking measures intended to minimize impact on the road network during all phases of the Project including obtaining required permits and approvals from relevant authorities.	EPR-097
Overweight and over dimension loads will require an Overweight and Over Dimension Special Permit and will be transported during reduced traffic hours to minimize safety risks and disruptions to provincial road users as well as limiting driver distraction.	EPR-097
Potential changes in local drainage and surface water flow patterns will be assessed during the FEED phase. Mitigation measures will address erosion and sediment control, maintenance of existing drainage structures, and the protection of provincial infrastructure.	EPR-097
North Atlantic remains committed to ensuring that domestic woodcutters are engaged throughout the project lifecycle and that any effects on traditional harvesting activities are minimized through proactive communication and defined mitigation measures	EPR-099
North Atlantic is committed to evaluating the impacts on recreational and subsistence resource use, managing project-environment interactions, maintaining access for cottage and recreational use, avoiding waterbodies and wetlands, minimizing construction related disturbances, and protecting recreational and traditional activity sites as identified in Appendix F of the Registration.	EPR-100
North Atlantic acknowledges the benefits that wetland ecosystems provide to the environment and society, and will adhere to all applicable legislation that governs wetlands. The following is a wetland specific subset of the legislation provided in Section 2.5.2 Table 2.5.2-1 of the Registration.	EPR-102
The Project will avoid or minimize wetland disturbance where practicable, throughout all Project phases	EPR-102

Commitment	EPR Section
In siting the quarry necessary for the Project, avoidance of wetlands will be mandatory for North Atlantic[	EPR-103
North Atlantic will adhere to operational curtailment measures for the turbines that are deemed to be at highest risk to bats (e.g., those in suitable habitat such as near wetlands, forest edges, etc.) – these turbines will be determined based on the extensive bat dataset from 2023-2025 (and beyond) (Section 4.5.3, Table p. 431 of the Registration)	EPR-110
North Atlantic is committed to establishing mitigation for bat collisions through consultations with NL DFAL-WD (Section 7.2, p. 503 of the Registration) and will ensure that the smart curtailment strategy receives formal approval before implementation	EPR-110
North Atlantic will consult with NL DFAL-WD and design and implement a science-based Bird and Bat Mitigation and Monitoring Plan. This plan will consider deterrents, optimized smart curtailment based on real data (which continues to be collected through 2025 and beyond), and thermal imaging/AI systems for real-time detection and mitigation for bats and raptors and SAR. (p. 431 of the Registration).	EPR-110
If an active bat colony is discovered, a no-cut buffer of 250 m will be applied until September 1, after which a subsequent survey will be undertaken to confirm that bats are no longer present. Roosting locations will be reported to NL DFAL-WD immediately, including photographic records and geospatial data (including GPS coordinates and maps) of bat colonies/residences. In addition, colony trees shall be maintained on the landscape (Added to Appendix 2 revised Section 4.5.3 Table 4.5-3).	EPR-112
North Atlantic has committed to a robust suite of mitigation measures designed to minimize the effects of the Project on these species	EPR-113
In addition to these measures, a qualified third-party shall undertake a Short-eared Owl survey within seven days of any ground disturbance required for the Project, should it occur during the Short-eared Owl breeding season (May 15 – August 15). Surveys will be undertaken in consultation with NL DFAL-WD, and in following with survey protocols provided by NL DFAL-WD. All required permits will be obtained prior to completing this work, including a Section 18 permit under the NL ESA (Added to Appendix 2 revised Section 4.5.3 Table 4.5-3).	EPR-114
North Atlantic will adhere to robust suite of mitigation measures outlined in the Registration designed to prevent or minimize any potential effects of the Project on wildlife species during sensitive time periods	EPR-115
Dust lift off has the potential to affect sensitive aquatic and terrestrial receptors during all phases of the Project. North Atlantic will implement a comprehensive suite of mitigation measures to minimize the generation and transport of fugitive dust and to ensure compliance with the Air Pollution Control Regulations, 2022.	EPR-116
North Atlantic intends to conduct the Project using pollution-control systems that are maintained and operated in accordance with manufacturer specifications to ensure optimal performance. The Project will fully comply with the Air Pollution Control Regulations, 2022	EPR-116

Commitment	EPR Section
Strategically locate stockpiles by considering prevailing wind directions and the proximity of sensitive receptors such as wetlands, waterbodies, rare plant habitat, and residential areas, ensuring environmental effects are minimized.	EPR-116
Throughout O&M Phase, North Atlantic will continue proactive engagement with local harvesters to address any changes in access or land use.	EPR-118
North Atlantic will address all land use and land tenure considerations within the PA in accordance with the engagement and communication protocols outlined in the Public Participation Plan (Appendix P of the Registration).	EPR-118
North Atlantic is committed to preserving the natural landscape and maintaining the aesthetic character of the region, including key viewscapes valued by residents, cottage owners, and recreational users.	EPR-119
Throughout O&M Phase, North Atlantic will continue proactive engagement with local harvesters to address any changes in access or land use	EPR-119
As part of FEED, the existing road geometry, including turning radii, vertical and horizontal alignment, will be assessed to confirm that wind turbine blades and other large components can be safely maneuvered. The alignment of the proposed Wind Farm access road will be designed to meet the geometric requirements associated with oversized transport	EPR-122
Real time monitoring devices will need to be installed prior to Project operations. Site selection for these stations will occur during FEED, based on drainage patterns, effluent discharge points, and Project water use locations, followed by consultation with NL DECCC-WRMD to confirm final station placement	EPR-125
During FEED, detailed drainage information will be generated to address potential compartmentalization created by new road alignments, stormwater routing, and water crossing interactions. These details will be incorporated into the WMP once engineering design is sufficiently advanced.	EPR-125
An Erosion and Sediment Control Plan (ESCP) will be developed and implemented prior to the start of early works and will be carried through the full life of the Project, with revisions made as required. The ESCP will be finalized following completion of FEED and will be developed in consultation with DFO and the NL DECCC-WRMD.	EPR-126
North Atlantic commits to undertaking measures intended to minimize impact on the road network during all phases of the Project including obtaining required permits and approvals from relevant authorities.	EPR-132
North Atlantic will assess potential pavement impacts and identify any required maintenance as part of the detailed engineering design	EPR-132
North Atlantic commits to implement measures to mitigate deficiencies in roads, bridges, and culverts, and all associated engineering design and investigation costs as a result of Project activities.	EPR-132

Commitment	EPR Section
The PPP outlines the framework and processes that North Atlantic will use to provide accessible, ongoing opportunities for interested persons, including local residents, fish harvesters, business owners, aquaculture operators, adjacent title holders, and Small Craft Harbours representatives, to meet with the Proponent and discuss Project information as questions or concerns arise	EPR-133
North Atlantic commits to following the guidelines for the Use of Explosives In or Near Canadian Fisheries Waters as mitigation for any quarry blasting associated with the Project. These guidelines will be applied to ensure the protection of fish and fish habitat during all blasting activities. As Project engineering and design advance, North Atlantic commits to reassessing blasting requirements during FEED. This reassessment will include confirmation of site-specific blasting methods, required setback distances, charge sizing, and any additional mitigation necessary to remain fully compliant with the federal guidelines. Updated blasting plans and mitigation measures will be incorporated into the Construction-Phase EPP and provided to regulators as required.	EPR-134
North Atlantic commits to adhering to the Best Management Practices for the Protection of Freshwater Fish Habitat in Newfoundland and Labrador (DFO) regarding fuel storage, equipment operation, and setback distances for all Project phases, including construction, operations and maintenance, and decommissioning and rehabilitation. These best management practices will be fully integrated into the Project's EPP and will guide site planning, equipment refuelling and maintenance, sediment and erosion controls, watercourse protection measures, and all activities occurring near freshwater systems. Setbacks and buffer zones will be applied in accordance with the DFO guidance, and additional permitting (e.g., Permits to Alter a Body of Water) will be obtained where required. North Atlantic will ensure that contractors and subcontractors are informed of and comply with all applicable requirements under these best management practices	EPR-135
North Atlantic will consult with Braya on their operational plans for the water intake and relevant government departments on the best way forward related to this shared infrastructure. This will be addressed in the DRP.	EPR-136
Typical decommissioning activities noted in Section 2.3.6 of the Registration will apply to the marine outfall and will be incorporated into the detailed Decommissioning Plan once final design details are confirmed during FEED. These activities are expected to include: • Demolition and removal of all above grade buildings, foundations (to 300 mm below grade), and other infrastructure (e.g., overhead piping, electrical cables) that are no longer required. • Cleanup of all surface yards, including removal and appropriate disposal of all equipment and materials. • Removal of fences or gates, scarifying of gravel access roads, and restoration of natural drainage patterns wherever practical.	EPR-137
A decommissioning plan for the access point infrastructure will be developed at the conclusion of the Project in consultation with NL DTI and other relevant government departments and stakeholders.	EPR-140

Commitment	EPR Section
Should the decommissioning process affect drainage infrastructure that increases runoff, North Atlantic commits to evaluating impacts and developing solutions to manage the change in drainage.	EPR-141
North Atlantic does not intend to bury or incinerate any wind turbine blades onsite and commits to exploring options for repurposing or recycling wind turbine components upon decommissioning, where possible[.	EPR-142

11.0 Public Information Meeting

EPR-145 *An Open House Public Information Session shall be held at a place adjacent to or in the geographical area of the undertaking, or as the minister may determine, in order to:*

a. provide information about the undertaking to the people whose environment may be directly affected by the undertaking, including, but not limited to residents, commercial and industrial establishments, local tourism establishments and operators;

North Atlantic has been engaging with area stakeholders regarding the Project since 2022. Prior to the Project Registration, North Atlantic hosted a pop-up community office at the Bull Arm Information Centre for six days during December 2024. In addition, North Atlantic hosted a series of public information sessions in Sunnyside, Come By Chance, Southern Harbour, and Arnold's Cove in January 2025. For detailed information regarding North Atlantic's comprehensive stakeholder and Indigenous relations initiatives please see Section 8.0 of the Registration.

On February 7, 2026, North Atlantic hosted a community information session in Sunnyside as part of the environmental assessment for the Project. The purpose of the session was to describe all aspects of the proposed Project and activities associated with it, and to provide an opportunity for interested persons to request information or state their concerns. The session was organized around topic specific stations with subject matter experts available to answer questions and capture issues or concerns to be addressed in the EPR. Participants were invited to stay for soup and sandwiches and chat with the team. 16 people participated in the event, including representatives from the Sunnyside Town Council.

The open house was advertised through North Atlantic's social media channels, which was shared by community partners, as well as community posters in public buildings, an e-newsletter, personalized invitations, and word of mouth. The public notifications and the information presented at the open house are available in Appendix 7.

EPR-146 *An Open House Public Information Session shall be held at a place adjacent to or in the geographical area of the undertaking, or as the minister may determine, in order to:*

b. record and respond to the concerns of the local community regarding the environmental effects of the undertaking. Concerns may be addressed in a separate chapter of the EPR; and

Since 2022, North Atlantic has hosted more than 100 meetings and events to discuss all aspects of the proposed Project. Issues and concerns raised by stakeholders and Indigenous groups have been captured, catalogued, and documented in Section 8 of the Registration. A revised Section 8 of the Registration is presented in Appendix 8.

Issues and concerns raised by the local community during the recent open house on February 7, 2026, are documented in the table EPR-146.

Table EPR-146 Topics discussed at the February 7, 2026 open house

Topic	Question/Comment/Concern	EPR Reference and Response
EPR	How do you establish mitigations when large turbines haven't been here before?	Wind turbine technology is not new. Wind turbines on the island, St. Lawrance and Fermeuse, as well as other jurisdictions provide information and data that we can use in our project planning and design.
	Why are there so many bird monitoring stations?	Birds are a particular concern as wind turbines are tall structures. The stations provide information for our baseline study on bird activity.
	How long after the EA is complete will construction start?	EA approval is required before we can proceed to our next phase of project planning. After EA approval, North Atlantic will make a final investment decision on whether to proceed with the Project. Currently, Construction is planned to start in 2027.
Project Design	Will all turbines produce the same amount of power?	Each wind turbine has a power curve of how much power it can produce at different wind speeds.
	Will turbines cut out at times when power is not needed or because of environmental constraints?	The operation of a wind turbine can be curtailed. Each operates independently, and the amount of power produced can be adjusted based on power demand or environmental factors.
	Do wind turbines contain oil and is it possible to leak into the environment?	Each wind turbine holds 400 liters of oil/lubricant, which is contained in the turbine

Topic	Question/Comment/Concern	EPR Reference and Response
		system which has real time monitoring as protections to prevent spills/leaks.
	Will the turbines generate noise?	For noise impact, noise from the wind turbines has been assessed against 'percent-highly-annoyed' (%HA), as per Health Canada guidance documentation. It is a tool used to assess project-related noise levels against existing baseline noise levels. Noise from the wind turbines, based on manufacturer supplied data, achieves compliance with this method, with consideration also to internal noise and low frequency noise. More information is available in Section 4.2.1.3 of the Registration.
	Will the viewscape be impacted?	A 3D rendering of the wind farm was developed to provide a visual perspective from various locations in and adjacent to the Project area. The 3D visual model is accessible here: https://experience.arcgis.com/experience/60fc2e3478ae491cbd3273f5c4834b7a
	How close can individuals get to the turbines? Will the area around the turbines be closed?	While the area around each turbine will be restricted, there will be access through the wind farm via the access road.
	Are the electrolyzers pre-built?	Components of the electrolyzer units are pre-built. The units will be installed by the local workforce.
	Is ammonia not being used for safety reasons?	The project is not generating ammonia because, currently, there is no market for large quantities of ammonia.
Project Planning	What is the water source and is there enough?	The Project plans to use Inkster's Pond. Hydro studies show that the recharge rate is sufficient for the Project's requirements.
	Are there any changes in the Project since 2025?	Yes, the Project is being refined regularly, for example, some of the turbine locations have been adjusted. Also, a new highway access point is being assessed.
	How many turbines will be stored at Bull Arm at any time?	The number of wind turbines stored will be determined based on construction and shipping schedules.
Community	Sunnyside is on a boil order. Will this impact water supply?	The Project will not use water from the Protected Public Water Supply Area (PPWSA).

Topic	Question/Comment/Concern	EPR Reference and Response
	Will a Project office be established in Sunnyside?	North Atlantic is considering this as an option.
	How are you engaging with Indigenous groups?	North Atlantic is engaged with the two Indigenous groups on the island, Qalipu and Miawpukek, and our outreach and updates will continue throughout the life of the Project.
	How will the new waste facility in Sunnyside be impacted?	There is no direct interaction. However, North Atlantic will engage with the waste facility on waste management related discussions for the project.
Marine Environment	Will the project impact fishing in Bull Arm?	No impact to fishing in Bull Arm is expected.
Local Benefits	How will you focus on local job opportunities from a contractor perspective?	North Atlantic will develop a Benefits Plan that will include local employment and business commitments.

EPR-147 *An Open House Public Information Session shall be held at a place adjacent to or in the geographical area of the undertaking, or as the minister may determine, in order to:*

c. inform the requirements of Section 5 (Alternatives) of these guidelines.

The community information session held at the Sunnyside Recreation Centre on February 7, 2026, provided a complete overview of all components of the Project, including location, infrastructure requirements, environmental studies, construction, employment and business, and alternatives to the Project. Please see Appendix 7 for all collateral material presented at the information session.

EPR-148 *You are required to notify the Minister and the public of the scheduled meeting not fewer than 7 days (recommended 15 days) before that meeting. Public concerns shall be addressed in a separate section of the EPR. Protocol for these public sessions will comply with Section 10 of the Environmental Assessment Regulations, 2003. Public notification specifications are outlined in Appendix A.*

North Atlantic provided notification of the information session to Minister Tibbs via a personalized letter sent on December 18, 2025. North Atlantic also advertised the information sessions through its Project newsletter, via social media channels such as Facebook, X, and LinkedIn, and posters in community buildings. The communications were posted continually for at least 7 days prior to the event. The chairperson of the EAC (Eric Watton) was also provided with copies of advertisements. Please see

Appendix 7 for copy of the advertisement and public notification. Public Meeting concerns are addressed in Table EPR-146.

12.0 Approval of the Undertaking

EPR-149 *List the main permits, licenses, approvals, and other forms of authorization required for the undertaking, together with the names of the authorities responsible for issuing them (e.g., federal government department, provincial government department, municipal council, etc.). Include regulatory strategy to identify timelines associated with each phase of the Project (development activity, construction, maintenance, operation, decommissioning and rehabilitation). You are required to submit one paper copy and an electronic version of the EPR, for posting to the Environmental Assessment website, together with a covering letter. The Minister reserves the right to request additional electronic and paper copies of the EPR, as needed. The EPR submission may be mailed to the following address:*

Minister Environment, Conservation and Climate Change
P.O. Box 8700
St. John's NL A1B 4J6
Email: EAProjectComments@gov.nl.ca

A list of the main permits, licenses, approvals, and other forms of authorization required for the undertaking, together with the names of the authorities responsible for issuing them (e.g., federal government department, provincial government department, municipal council, etc.). is provided below in Table EPR 148. A list is also provided in the Registration and can be found in Section 2.5.2, Table 2.5.2-1.

A regulatory strategy for the permitting licenses, approvals and other forms of authorization listed will be further developed once North Atlantic is released from the EA process. Engagement with the regulators will be a key component of development of such a plan. Engagement will be planned to support the timelines for all Project phases, including development activity, construction, operation, maintenance, and decommissioning. Early and ongoing communication that started during the planning and execution of the Registration will continue with regulators, stakeholders, and the public supports effective planning and Project success.

Through early engagement, North Atlantic will identify ensure that regulatory requirements, approval processes, and key milestones for each phase of the Project are planned effectively. This will inform a clear regulatory strategy that outlines required permits, timelines, and dependencies across the Project lifecycle.

By aligning engagement, regulatory planning, and technical studies from the outset, the Project can reduce risks, avoid delays, and support timely approvals. Continuous engagement throughout all Project phases will ensure regulatory requirements are met and timelines remain coordinated.

Table EPR-149 provides a list of potential permit / approval / licence / authorisation requirements for the Project.

Table EPR-149 List of Potential Permit/Approval/Licence/Authorisation Requirements for the Project.

Permit / Approval / Licence / Authorisation	Legislation / Regulation Reference	Agency
Municipal		
Development Permit	**Urban and Rural Planning Act** • Town of Come By Chance Development Regulations • Town of Sunnyside Development Regulations	Town of Come By Chance and Town of Sunnyside
Provincial		
Environmental Assessment Approval	**Environmental Protection Act** and Environmental Assessment Regulations	Department of Environment, Conservation and Climate Change - Environmental Assessment Division
Certificate of Approval for Construction and/or Operation of Industrial Facilities	**Environmental Protection Act**	Department of Environment, Conservation and Climate Change - Pollution Prevention Division, Industrial Compliance Section
Certificate of Approval for Generator Operation	**Environmental Protection Act** and Air Pollution Control Regulations	
Development Activity in a PPWSA	**Water Resources Act**	Department of Environment, Conservation and Climate Change - Water Resources Management Division
Permit to Alter a Body of Water (Culvert, Bridge, Dam, Fording, Pipe Crossing/Water Intake, Stream Modification, Infilling/Dredging, Flood Risk Area, Miscellaneous works within 15 m)		
Water Use Licences		
Commercial Cutting Permit	**Forestry Act**	Department of Fisheries, Forestry, and Agriculture
Operating Permit		
Crown Lands Lease	**Lands Act**	Department of Fisheries, Forestry, and Agriculture - Lands Branch
Archaeological Investigation Permit	**Archaeological Investigation Permit Regulations, Historic Resources Act**	
Provincial Parks Regulations (Section 10)	**Provincial Parks Act**	Department of Tourism, Culture, Arts and Recreation

Permit / Approval / Licence / Authorisation	Legislation / Regulation Reference	Agency
Permit to Engage in an Economic Activity	**NL Endangered Species Act** (NL ESA)	Department of Fisheries, Forestry, and Agriculture – Wildlife Division
Activity under the **Endangered Species Act** (Section 19)		
Permit to Control Nuisance Animals	**Wildlife Act**	
Quarry Development Permit	**Quarry Materials Act**, Quarry Materials Regulations	Department of Industry, Energy, and Technology, Mining and Mineral Development
Building Accessibility Registration Exemption Request and Fire and Life Safety Plans Review (National Building Code of Canada)	**Building Accessibility Act, Fire Protection Services Act**	Department of Government Services
Certificate of Approval for Waste Management System (Landfill or Incinerator if applicable)	**Environmental Protection Act,** Air Pollution Control Regulations, Storage of PCB Wastes Regulations and Waste Management Regulations, 2003	
Certificate of Approval for a Sewage/Septic System	**Health and Community Services Act**	
Food Establishment Licence	**Food Premises Act**	
	Food Premises Regulations	
Fuel Storage Tank Registration	Storage and Handling of Gasoline and Associated Products Regulations, 2003, under the **Environmental Protection Act**	
Blasters Safety Certificate	**Occupational Health and Safety Act**	
Pressure System Permits (including	**Public Safety Act,** Pressure Vessel and Compressed Gas Regulations	
Pressure Plant and Pressure Piping		
System Registrations)		
Electrical Permits	**Public Safety Act,** Electrical Regulations	
Vehicle Regulations	**Highway Traffic Act**	Department of Transportation and Infrastructure
Electrical System Interconnection	**Electrical Power Control Act**	NLH / Public Utilities Board of NL
Electrical Connection to Provincial Grid	**Public Utilities Act**	
Preliminary Permit to Develop Land (Highway Access Permit)	**Urban and Rural Planning Act,** Protected Road Zoning Regulations**,** & **Works, Services and Transportation Act**	
Used Oil or Glycol Storage Application for Registration / Approval	Used Oil and Used Glycol Control Regulations, Used Oil Control Regulations	
Pesticides Control Regulations	**Environmental Protection Act**	

Permit / Approval / Licence / Authorisation	Legislation / Regulation Reference	Agency
Certificate of Approval for Transportation of Waste Dangerous Goods / Hazardous Waste		Department of Environment, Conservation and Climate Change; Pollution Prevention Division, Waste Management Section
Federal		
Fisheries Act Authorisation Permitting harmful alteration, disruption or destruction of fish habitat, and/or the death of fish.	**Fisheries Act**	Fisheries and Oceans Canada
DND Letter of Non-Objection	**Civil Air Navigation Services Commercialisation Act**	Department of National Defense
License to Store, Manufacture, or Handle Explosives	**Explosives Act**	Natural Resources Canada
Migratory Bird Permit	**Migratory Birds Convention Act**	Environment and Climate Change Canada – Canadian Wildlife Service
Nest Removal Permit		
Permits Authorising an Activity	**Species at Risk Act**	
Affecting Listed Wildlife Species		
Storage Tank Regulations	Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, **Canadian Environmental Protection Act, 1999**	Environment and Climate Change Canada
Weather Radar Assessment	ECCC Guidelines for Wind Turbine and Weather Radar Siting	
Notice Regarding Substances Located at a Facility (Schedule 2)	Environmental Emergency Regulations, 2019	
Notice Regarding the Preparation of an Environmental Emergency Plan (Schedule 3)		
Notice Regarding the Bringing Into Effect of an Environmental Emergency Plan (Schedule 4)		
Notice Regarding Simulation Exercises (Schedule 5)		
Reporting Requirements of the National Pollutant Release Inventory (NPRI)	**Canadian Environmental Protection Act, 1999**	
Environmental Emergency Regulations		
Land Use Approval (General)	**Civil Air Navigation Services Commercialisation Act**	Nav Canada
Land Use Approval (Cranes)		
Emergency Response Assistance Plan	**Transport of Dangerous Goods Act**	Transport Canada

Permit / Approval / Licence / Authorisation	Legislation / Regulation Reference	Agency
Aeronautical Assessment for Obstruction Evaluation	**Aeronautics Act;** Canadian Aviation Regulations	
Approval under the **Canadian Navigable Waters Act** (CNWA)	**Canadian Navigable Waters Act (CNWA)**	