Table of Contents

| 6.0 | Cumulative Effects | 9 |
|-----|---------------------|---|
| 6.1 | Effects Predictions | 3 |

List of Tables

 Table 6.0-1
 Potential Interactions from Other Projects Contributing to Cumulative Effects.
 441



6.0 Cumulative Effects

The Cumulative Effects of the proposed Project are to be considered, both with respect to within-Project interactions, as well as in terms of the potential environmental effects of the undertaking in combination with other ongoing and planned projects. Within-Project Cumulative Effects have been considered and incorporated into the Effects Assessment conducted for all VCs and associated KIs (See Section 4.0). In order to carry out a broader review of Cumulative Effects, it is necessary to identify these contributing activities which, along with the proposed Project, have the potential to interact with the receiving environment.

Listed below is a description of the contributing project/activities that has been identified for consideration of Cumulative Effects. By definition, the listing includes only candidates that overlap with the boundaries of the Project (i.e., Project Zone of Influence).

Past Activities:

• A key past undertaking is the Operation, Decommissioning and Site Restoration of Naval Air Station Argentia (McAndrew Air Force Base). Of particular note is the current condition and status of the land comprising the POA and its designation as an industrial site.

Ongoing Activities:

- Argentia Peninsula activities, including:
 - Commercial traffic to and from POA, including marine shipping and road traffic associated with POA activity;
 - o Seasonal passenger Marine Atlantic ferry traffic;
 - Cenovus Concrete Gravity Structure Construction (West White Rose Project);
 - Aquaculture on-land support infrastructure (salmon rearing cage sites); and
 - Fish Plant operation.
- Government services and infrastructure, including federal, provincial and municipal (Town of Placentia) activities. These include water and sewer supply/maintenance, roadway upkeep, building construction and facilities maintenance;
- Local tourism industry, including sites operated and maintained by Government (e.g., Castle Hill, Visitors Centres), and private tourism accommodations (such as vacation rental properties);
- Inshore and nearshore Fishery (Argentia Harbour);
- Small quarry operations on the Argentia Peninsula and Argentia Backlands; and
- Long Harbour Nickel Refinery operation.



Planned Activities:

- Expansion of POA:
 - Plans are being developed for expansion to wharfage at POA and an Initial Project Description has been released from further assessment by the Government of Canada Impact Assessment Agency (IAA) as well as the Department of Environment and Climate Change (EA Division).
- Placentia Area Hiking Trails:
 - A local volunteer organization (Hike Placentia Inc.) with support from the Town of Placentia and the POA has proposed the expansion of hiking trails in and near the community, including the Argentia Backlands property of POA. The Undertaking has been approved subsequent to submission of a Project Registration in July 2023. Planning is under way for trail construction.
- Several potential wind-to-hydrogen projects are currently being planned for the island of Newfoundland, however, only one to date has demonstrated a firm intent to proceed as evidenced by the submission of a Registration under the provincial EA process. World Energy GH2 Inc. (Registration Number: 2202) proposes the Port au Port-Stephenville Wind Power and Hydrogen Generation Project (Project Nujio'qonik GH2). The project was released from EA in April 2024.

Each of the identified contributors to Cumulative Effects have been considered with respect to potential temporal and spatial overlap with the assessment boundaries of the Project. Table 6.0-1 provides an overview of the potential interactions that contribute to Cumulative Effects by VC.

Both the past activity at Argentia (Base construction, operation, closure and decommissioning) as well as the present ongoing activities and undertakings (i.e., Argentia Peninsula, Government Services, Tourism, Fishing, and Vale Long Harbour Nickel Processing Plant operations) interact with many of the VCs under consideration with respect to the Project. Past and present undertakings have been considered in the predicted future conditions of the Environment without the Undertaking (Section 3.3) and in the predictions of the Environmental Effects of the Undertaking (Section 4.1). Consequently, the identification of the Project Cumulative Effects will focus on planned projects and activities.



| Table 6.0-1 Potential Interactions from Other Projects Contributing to Cumulative Effe |
|--|
|--|

| | Valued Components | | | | | | | | |
|-------------------------------|--|--|--|---|---|--|---|--|--|
| Projects | Atmospheric | Aquatic | Terrestrial | Land and Resource Use | Heritage, Culture | Communities | Economy, Employment, Business | | |
| Past Activitie | es | | | | · | | | | |
| Argentia Base* | N/A | N/A | Peninsula brownfield status; Argentia Backlands road network | Remediated status; zoning. | WW II installations; relocated communities | Relocated communities | N/A | | |
| Present Acti | vities | | | | | | | | |
| Argentia Peninsula* | Road traffic | Marine vessel traffic, existing marine outfalls | Road traffic | Road usage; water consumption/discharge | N/A | Accommodation, service, facilities consumption | Local hires, contract services | | |
| Government Services* | Vehicle operations | Water supply, sewage discharge | Road traffic | Zoning, land use management | Funding and provision of facilities | Provision of Community services | Employment | | |
| Tourism* | Vehicle operations | N/A | N/A | Camping, hiking, road traffic | Product consumption | Accommodations, service, facilities consumption | Accommodations, employment, goods and services consumption | | |
| Fishing* | Vehicle, boat operations | Commercial fishery - marine | N/A | N/A | Maintain cultural identity | Accommodations, service, facilities consumption | Maintained economic activity, employment, procurement of goods and services. | | |
| Vale Long Harbour* | N/A | N/A | N/A | N/A | N/A | Accommodations, services, facilities consumption | Continuing employment for local residents | | |
| Planned Act | ivities | | | | | | | | |
| Argentia Port Expansion | Construction equipment; vessel operations | Marine environmental quality from increased traffic. | N/A | Continued usage as per zoning designations. | N/A | Increased demand on services during construction | Increased economic activity during construction, operation | | |
| Trails | N/A | N/A | Trail construction | Continued usage as per zoning designations. | N/A | Improved services | Modest expenditures for trail construction, maintenance | | |



| | Valued Components | | | | | | | |
|--|-------------------|---------|------------------|--------------------------|----------------------|-------------|--|--|
| Projects | Atmospheric | Aquatic | Terrestrial | Land and Resource Use | Heritage, Culture | Communities | Economy, Employment, Business | |
| | | | and operation | | | | | |
| Wind- Energy | N/A | N/A | N/A | N/A | N/A | N/A | Potential competition for skilled labour and services. | |
| *Note: Past (Argentia Base) and present (Argentia Peninsula, Government Services, Tourism, Fishing, Aquaculture) undertakings form part of the "existing environment" and are addressed in the effects assessment sections for all VCs and Key Indicators. N/A = not applicable - no interaction identified/predicted. | | | | | | | | |



6.1 Effects Predictions

The Cooper Cove Marine Terminal Expansion (Argentia Port Expansion) as proposed by POA will provide additional wharf space and quayside infrastructure to enhance berthage and cargo flow. The expansion would include a roll-on-roll-off ramp to streamline vessel loading and increased storage to support cargo activities. A phased approach spanning 29 months is proposed and construction would include seabed dredging, armour stone shoreline protection and infilling. A description of the Project can be found on the NL DECC webpage at: https://www.gov.nl.ca/ecc/projects/project-2279/. The undertaking was released from further environmental assessment by the Minister on January 18, 2024. The Impact Assessment Agency of Canada completed its review of the Initial Project Description and on April 08, 2024, posted its Notice of Opinion that an impact assessment would not be required for the project (https://iaac-aeic.gc.ca/050/evaluations/document/157097?culture=en-CA). All phases of the Cooper Cove Marine Terminal Expansion will generate interactions with several of the VCs associated with the Argentia Renewables Project. The Cooper Cove Marine Terminal Expansion area encompasses a section of the Argentia Peninsula brownfield site, as well as the adjacent coastline where dredging and infilling is anticipated. As well, the undertaking is anticipated to result in increased marine traffic for the POA. As a result, there will be interactions with the Atmospheric VC (noise, dust, exhaust emissions) from vehicle traffic. The Cooper Cove Marine Terminal Expansion will interact with the marine component of the Aquatic VC through potential changes in water quality as well as habitat alterations. Further, it will result in a marginal change in current and anticipated vessel traffic for POA. The Community VC interactions will include increased demand on municipal services, especially during Construction Phase. The Economy, Employment and Business VC will see increased levels of activity during all stages of the undertaking.

The Placentia Area Hiking Trails involves the extension to an existing network of trails in the Placentia area, including through the Argentia Backlands (https://www.gov.nl.ca/ecc/projects/project-2257). These will serve both area residents and visitors. Hiking has become a major outdoor activity in the region and the province and has attracted tourists seeking outdoor experiences. In a September 13, 2023 Decision Letter issued by the Minister (https://www.gov.nl.ca/ecc/files/env_assessment_y2023_-2257_Decision-Letter.pdf), the Placentia Area Hiking Trails was released from further assessment subject to conditions including application of buffer zones for vegetation clearing to protect both raptor nesting sites, as well as wetlands and water bodies. A cooperative arrangement has been reached between Argentia Renewables and Hike Placentia Inc. to take advantage of potential synergies and avoid conflicts associated with route selections (access roads, trails) and access. The construction and operation of the trails will generate modest interactions with four VCs - Terrestrial, Land and Resource Use, Communities, and Economy Employment and Business. The Terrestrial VC will be affected by vegetation removal required for trail construction; however, this interaction will be minimized through a process of careful planning of routes and integration into the linear access network required for Construction and Operation and Maintenance Phases of the wind turbines. The interaction with the Land and Resource Use VC will



be fully compatible with the property zoning of the Argentia Backlands area and result in a modest increase in utilization of the area. Interaction with the Communities VC will be positive by making an outdoor recreational resource available to residents and tourists. The interaction with the Economy Employment and Business VC will be small but positive through the purchase of materials and services and employment (other than volunteer efforts) required for trail construction and maintenance.

The Port au Port-Stephenville Wind Power and Hydrogen Generation Project (Project Nujio'qonik GH2) released Environmental the has recently been from Impact Assessment process (https://www.gov.nl.ca/ecc/projects/2202-2/). While physically distant from the Argentia area, the project would potentially involve construction over the same timeframe as the Argentia Renewables Project and would likely draw on similar construction skills and trades. The inclusion of this project in the Cumulative Effects Assessment is therefore confined to consideration of the "Economy, Employment and Business" VC. On a Province-wide scale, the available labour force has the capacity to meet the anticipated demands of the Argentia Renewables Project in combination with other planned projects. For selected trades, additional training resource needs have been identified and measures have been identified and commitments made to meet this anticipated demand.

The West White Rose project, located on the Argentia Peninsula, is nearing completion and scheduled for tow out prior to the commissioning of the Argentia Renewables Project. This West White Rose project is an existing user of the municipal water supply in Placentia and once complete will reduce the demand on the municipal system. The population of Placentia was 3,289, according to the latest census completed in 2021. Compared with the 2021 census, a 6.0% decrease in population was observed since the 2016 census (3,498), and a 9.8% decrease was observed since the 2011 census (3,646). Additional information on the Town of Placentia's population decline is provided in Appendix G -Socio-Economic Baseline Study. Given the above, the cumulative effects of future municipal and industrial users on the municipal system are predicted to be "not significant".

In summary, it is predicted that the effects of the Project at all stages will result in minimal overlap with interactions from other undertakings and activities. As a consequence the Cumulative Environmental Effects of the Project on Valued Components of the environment, in combination with effects from other planned or ongoing undertakings are predicted to be "not significant".

