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## 1.0 INTRODUCTION

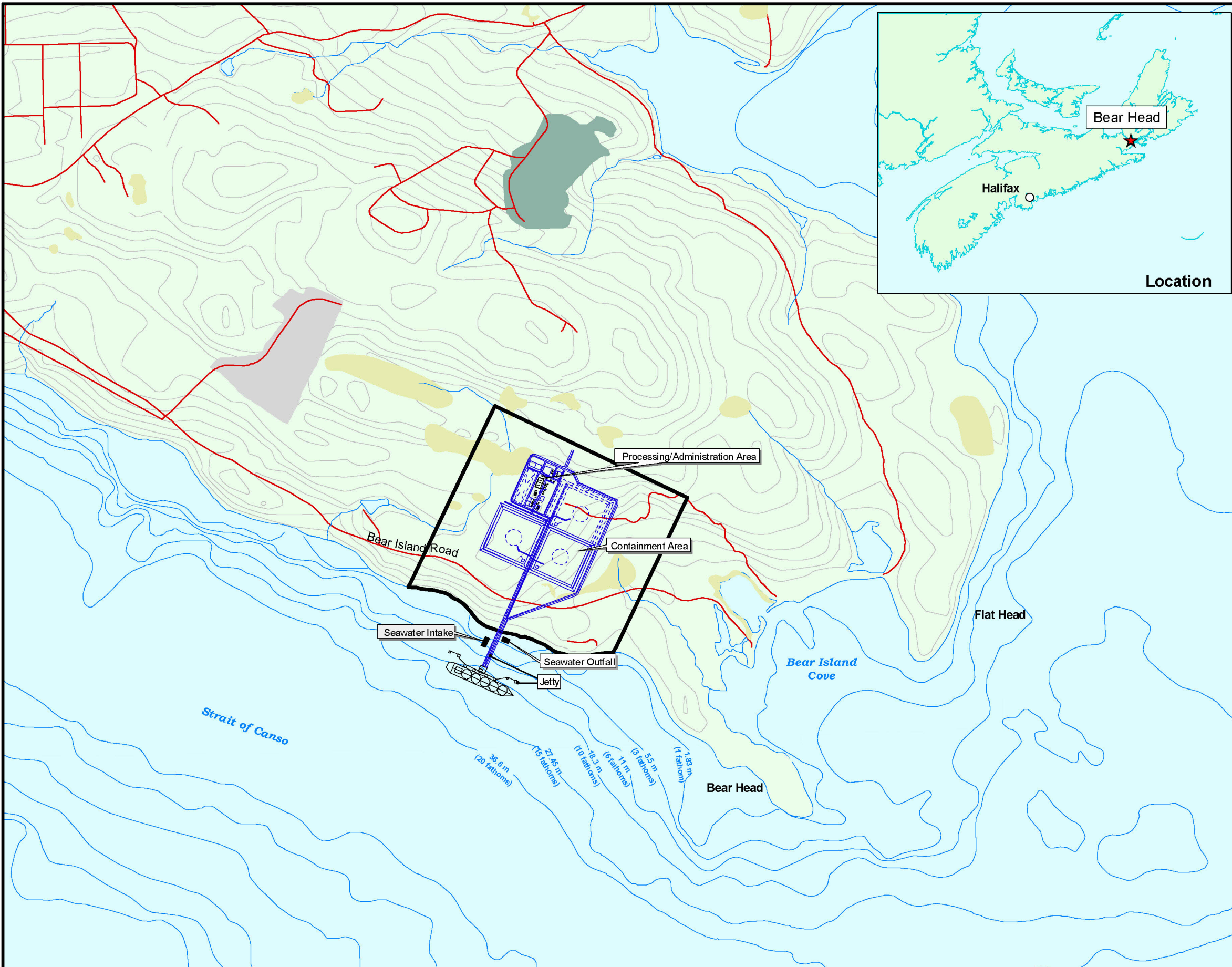
Access Northeast Energy Inc. (ANEI) proposes to construct and operate a Liquefied Natural Gas (LNG) Terminal (the Project) in the Point Tupper/Bear Head Industrial Park in Richmond County, Nova Scotia (Figure 1.1). The Project requires federal and provincial environmental approvals including a federal/provincial environmental assessment (EA). This report provides the basis for an Environmental Screening under the *Canadian Environmental Assessment Act (CEAA)* and satisfies the requirements for a Class I Registration under the Nova Scotia *Environment Act*. Specific requirements for a harmonized federal/provincial review process have been provided to ANEI in a Federal-Provincial Environmental Assessment Agreement dated March 8, 2004. Specific guidance on the scope of the environmental assessment was provided to ANEI by responsible federal and provincial departments in a scoping document, which forms the terms of reference for the assessment.

This report describes and evaluates the potential environmental and socio-economic effects of the Project during all Project phases. The evaluation will include proposed mitigative measures, where required, to eliminate or minimize potential significant impacts arising from Project related activities. The report is based on information collected during field surveys, modelling, consultation with government and non-government agencies and individuals, background research and professional judgement of the Study Team.

### 1.1 Project Overview

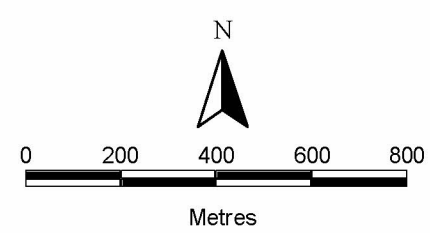
The Project is to be developed on a 64.7 hectare (ha) parcel of land optioned by ANEI (Figure 1.1). The area to be built upon (the “footprint”), excluding the marine jetty, is approximately 17 ha. The land is provincial Crown Land designated for heavy industrial development. The municipal planning strategy has designated the Project area as Port Industrial (I-2) zoning, which includes fuel bunkering, marine terminals and other heavy industrial or port activities as required. A development strategy document prepared for the Municipality of the County of Richmond (2000) targeted this area for petrochemical and marine facility developments.

The Project includes the construction and operation of an LNG terminal and associated facilities, which will be built in two phases. Phase I of the Project involves the construction and operation of an approximately 7.5 million-ton-per-annum (mtpa) capacity LNG terminal with a natural gas sendout capacity of 1,000 million standard cubic feet per day (MMscfd). Phase II provides for the future expansion of the sendout capacity to 1,500 MMscfd (approximately 11.3 mtpa). This report evaluates both phases of the Project.



**Figure 1.1**  
**Access Northeast Energy Inc.**  
**Bear Head LNG Terminal**  
**Project Location**

- Project Boundaries**
- Property Boundary
  - Facility Location
  - Phase II Expansion
  - Service Road
  - LNG Storage Tank
- Topographic Features**
- Contours: 5m
  - Roads
  - Watercourse
  - Land
  - Water
  - Wetland
- Designated Areas**
- Landfill
  - Ashfill
- Other Features**
- Bathymetry



Map Parameters  
 Projection: Universal Transverse Mercator (UTM)  
 Zone: 20  
 Datum: NAD 83  
 Scale: 1:15,000  
 Project Number: NSD17393  
 Date: May 2, 2004



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The LNG terminal consists of three major components: ship unloading facilities; the LNG storage tank area; and regasification areas (vaporization area). The LNG ship berthing facility and jetty will be designed to berth an LNG ship having a capacity of up to 250,000 cubic metres (m<sup>3</sup>). The storage tanks have an individual capacity of 180,000 m<sup>3</sup>. Phase I includes two such tanks for the initial development with a third tank planned for Phase II when market conditions are appropriate.

The Project is currently in the Front End Engineering Design (FEED), which will further refine the Project components described herein.

## **1.2 Identification of the Proponent**

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ANEI is a private Canadian energy company established to develop and operate the most competitive baseload LNG regasification facility on North America's East coast. ANEI's team has in-depth knowledge of the Atlantic Canada business environment and a detailed understanding of the Eastern Canadian and New England energy markets.

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### 1.3 Project Purpose

The Project is designed to meet the significant and growing demand for natural gas and other forms of energy in markets in Canada and the United States. It is anticipated that LNG will be key in providing solutions to this demand and increasing the mix of energy sources to North Americans, thereby also increasing the stability and reliability of the overall energy supply. The proximity of the terminal to existing natural gas transmission infrastructure serving these growing energy markets is one of the advantages of this Project. The Project will provide further opportunity for Nova Scotians, and other Canadians, to participate in, and benefit from, the oil and gas industry, contributing to the economies of Nova Scotia and Canada. Another key advantage of LNG is to increase the supply and long term viability of the natural gas industry in Nova Scotia, thus providing additional supply options which could allow existing consumers to reduce air pollution through the substitution of a cleaner burning fuel.

### 1.4 Regulatory and Planning Context

#### 1.4.1 Approvals

The Project is subject to environmental assessment under both federal and provincial legislation. Federal environmental assessment is regulated under the *Canadian Environmental Assessment Act (CEAA)* and Regulations. The Project Description document (ANEI 2003), required to initiate the federal Regulations Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements (Federal Coordination Regulations) under *CEAA*, was submitted to the Canadian Environmental Assessment Agency (CEA Agency) on October 31, 2003. The Federal Coordination Regulations process identifies the federal departments that are the Responsible Authorities (RAs) with decision making responsibility under *CEAA* along with departments having relevant expertise (Expert Departments). The CEA Agency advised ANEI of the results of the Federal Coordination Regulations process on January 9, 2004. At that time, Fisheries and Oceans Canada (DFO) was identified as an RA for the assessment of this Project under *CEAA*, having been triggered by its requirement for an approval under the *Navigable Waters Protection Act (NWPA)* for the jetty and ship berthing facilities. As of March 31, 2004 responsibility for administration of *NWPA* has been

transferred from DFO to Transport Canada, making Transport Canada an RA. The CEA Agency has indicated that DFO will continue to manage the EA process on behalf of Transport Canada during the period of transition.

Any requirement for an authorization for harmful alteration, disruption or destruction (HADD) of fish habitat under the federal *Fisheries Act*, pending final design consideration, would require DFO to be an RA. Expert departments include DFO, Environment Canada, and the National Energy Board. The CEA Agency will be the Federal Environmental Assessment Coordinator (FEAC) because the assessment is multi-jurisdictional (*i.e.*, federal and provincial). DFO determined that a screening level assessment is required for those components of the Project to be assessed under *CEAA* (*i.e.*, marine facilities). DFO will prepare a screening report pursuant to *CEAA* 18 (1) (b).

Environmental assessment in Nova Scotia is regulated under the province's *Environment Act* and Environmental Assessment Regulations. Projects required to be registered for environmental assessment are divided into two classes, Class I and Class II. A storage facility with a total capacity of 5,000 m<sup>3</sup> intended to hold liquid or gaseous substances including but not limited to, hydrocarbons or chemicals, but not including water, is identified as a Class I Undertaking, thus requiring registration for environmental assessment. The capacity of each storage tank for the Bear Head LNG terminal is 180,000 m<sup>3</sup> thus requiring a Class I Registration. In addition to environmental assessment, other provincial approvals under the *Environment Act* (Activities Designation Regulations) (*e.g.*, Industrial Approval) will be required. ANEI has an exclusive option to purchase the parcel of land from Nova Scotia Business Inc. which was approved by the Provincial Cabinet of Nova Scotia in July 2003. There is no requirement for a Crown Lands permit for the conveyance of the lands to ANEI. Requirements for other government approvals (*e.g.*, municipal permits) will be determined. In general, ANEI will take the necessary steps to ensure that all requisite permits, licences and authorizations are secured from authorities having jurisdiction at the appropriate stage in the proposed development.

In addition to regulatory requirements, the Project will also be developed in accordance with applicable federal and provincial guidelines, policies, industry standards and codes of practice (*e.g.*, CSAZ276-01).

DFO (RA) along with the CEA Agency (FEAC), and the Nova Scotia Department of Environment and Labour (NSDEL) have negotiated a Federal-Provincial Environmental Assessment Agreement (the Agreement) (refer to Appendix A) to ensure that the interests of both federal and provincial government departments and agencies are included in the environmental assessment, and to coordinate their respective environmental assessment processes and responsibilities. The Agreement describes the agreement of the parties to the Agreement to delegate the preparation of the EA report to the proponent (ANEI). The signatory parties to the Agreement also prepared the Scope of the Environmental Assessment for the Proposed Bear Head LNG Terminal (Scoping Document) (November 10, 2003 revised March 15, 2004) (DFO 2004) outlining issues to be addressed in this report.

In the Scoping Document, DFO indicated that it had no *CEAA* triggers related to the onshore components of the Project. DFO determined that the Project to be assessed under *CEAA* is limited to its area of legislative authority, which is the marine infrastructure portion of the Project. NSDEL has indicated that it will assess the entire Project, though provincial jurisdiction is generally limited to the onshore components.

An informal review of the draft environmental assessment document, coordinated by NSDEL was carried out in March and April of 2004. Applicable federal and provincial departments reviewed the documents and provided comments. The comments have been addressed in the revised text of this EA document, and in a disposition table included in Appendix A. The table includes all comments received, and proponent response.

#### **1.4.2 Species at Risk**

Under the federal *Species at Risk Act* (SARA), DFO is responsible for aquatic species at risk and Environment Canada is responsible for all other species at risk, with the exception of those within national parks and protected areas. The Canadian Endangered Species Conservation Council (the Council), which includes representatives from DFO, Environment Canada, Canadian Heritage, and provincial and territorial governments, coordinates government activities related to the protection of species at risk. The Council also provides direction on the activities of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

COSEWIC is responsible for assessing and making a recommendation for the classification of individual species under SARA. Each assessment is reviewed by Environment Canada and the Council before the federal government makes a decision on whether or not to list a species. If placed on the List of Wildlife Species at Risk, extirpated, endangered and threatened species and their habitats have protection. For such listed species, a recovery strategy and action plan is developed. This must include the identification of critical habitat.

Projects that require an environmental assessment must take into account the project's effects on listed species and their critical habitat as defined under SARA. The environmental assessment must include recommendations for any measures necessary to avoid or reduce adverse effects and any necessary follow-up to monitor the impact of the Project. The Project must respect specified recovery strategies and action plans, as well as all prohibitions under SARA.

SARA prohibitions come into force June 1, 2004. Prohibitions apply to all aquatic species, migratory birds covered by the *Migratory Birds Convention Act* (1994), wherever they are found, and listed species on federal lands. Prohibitions can extend outside of federal lands for the protection of critical habitat.

Species at risk may also be listed under the Nova Scotia *Endangered Species Act* (1998). The Nova Scotia Species at Risk Working Group appointed by the Minister of Natural Resources meets regularly to assess and designate species for protection under the provincial legislation. Species listed provincially may or may not correspond to species listed under SARA.

The Project is also subject to any applicable prohibitions under the provincial *Endangered Species Act*. This includes impacts on listed endangered or threatened species, impacts on specific dwelling places or areas occupied by endangered or threatened species, or contravention of any regulation with respect to a designated core habitat.