

1.0 Introduction

The purpose of this strategic environmental assessment (SEA) is to provide a broad scale review and assessment of important resources in the Western Newfoundland and Labrador Offshore Area in light of potential oil and gas activities over the next five years. The terms ‘offshore’ or ‘offshore area’ refer to the jurisdictional area of the C-NLOPB, as defined in the *Canada-Newfoundland Atlantic Accord Implementation Act* and the *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act* (the *Accord Acts*) to mean “those submarine areas lying seaward of the low water mark of the Province and extending, as any location as far as (a) any prescribed line, or (b) where no line is prescribed at that location, the outer edge of the continental margin or a distance of two hundred nautical miles from the baselines from which the breadth of the territorial sea of Canada is measured, whichever is greater.”

Strategic environmental assessment (SEA) is defined as ‘The systematic and comprehensive process of evaluating the environmental effects of a policy, plan or program and its alternatives.’ (www.ceaa-acee.gc.ca). The SEA is in support of the federal government’s sustainable development initiatives and is defined in a 1999 Directive from Cabinet.

The SEA is essentially a planning document intended to assist the C-NLOPB in their decision process concerning which areas may or may not be suitable for offshore exploration, and/or which areas may require special mitigations if exploration activity is to proceed. This SEA provided support for the bid process on Parcels 4 to 7 in the Study Area (Figure 1.1). Four Northwest Atlantic Fisheries Organization (NAFO) Unit Areas (4Ra, 4Rb, 4Rc, and 4Rd) occur within the Study Area (Figure 1.1). These Unit Areas are used throughout the SEA in order to reference locations within the Study Area.

Some general potential issues in regard to offshore oil and gas development in Newfoundland and Labrador waters include the following:

- Effects of seismic noise on marine animals
- Accidental oil spills or blowouts
- Benthic habitat disturbance
- Health effects on fish
- Effects on commercial fisheries (contamination and displacement issues)
- Bird attraction to rigs
- Water/sediment quality degradation, especially in regard to cumulative effects

The following specific issues are relevant for the ‘Western Newfoundland and Labrador Offshore Area’ Study Area:

- Effects of oil and gas activities on the marine ecosystem from the low water mark to the offshore (>500m depth)

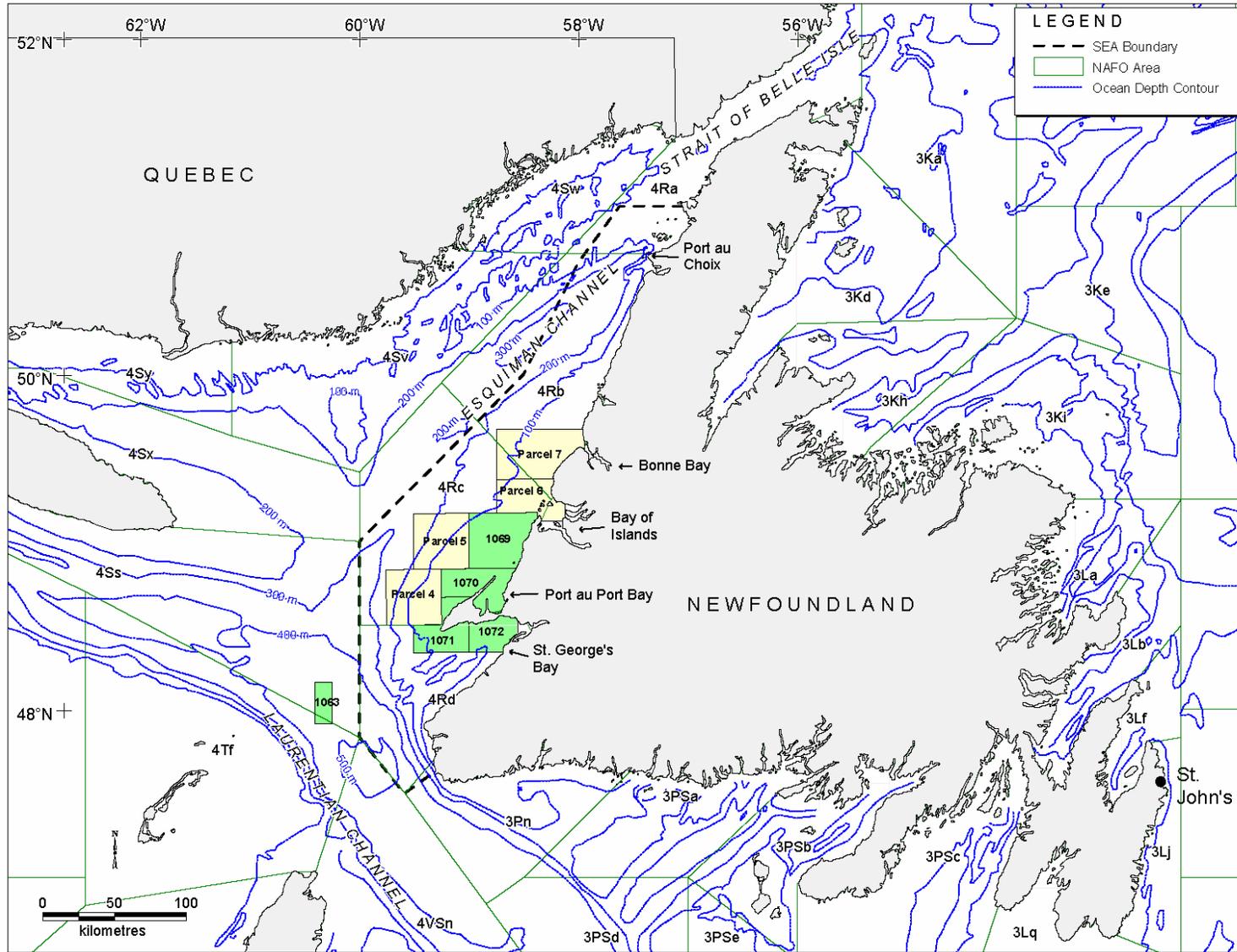


Figure 1.1. SEA Study Area Showing Locations of Parcels Up for Bids and Four Active Exploration Licences.

- Effects of oil and gas activities on finfish and their respective fisheries
- Effects of oil and gas activities on invertebrates (e.g., lobster, snow crab, northern shrimp) and their respective fisheries
- Effects of oil and gas activities on important bird areas
- Effects of oil and gas activities on waterfowl and sea-associated birds
- Effects of oil and gas activities of marine mammals and sea turtles
- Effects of oil and gas activities on species listed under the *Species at Risk Act (SARA)*
- Extra sensitive area and times within the Study Area
- Notable data gaps
- Aesthetics associated with oil and gas activities

1.1 Objectives/Purpose

As stated above, this SEA is intended to aid the C-NLOPB in determining whether exploration rights should be offered in whole or in part for an area, and may also identify general restrictive or mitigative measures that should be considered for application to exploration activities. This would be pursuant to the *Accord Acts*. In the following sections, this SEA will:

- Overview the existing environment within the Study Area,
- Discuss potential environmental effects of oil and gas activities in the Study Area,
- Identify knowledge and data gaps within the Study Area,
- Highlight areas and issues of concern within the Study Area, and
- Recommend mitigations and planning relevant to potential oil and gas activities within the Study Area.

1.2 Scoping

Scoping for the SEA was conducted in the following manner.

- Previous SEAs (e.g., Orphan Basin, Laurentian Sub-Basin, Scotian Shelf) were reviewed.
- C-NLOPB invited the public to comment on the Draft Scoping Document in April 2005. With the assistance of a Working Group consisting of representatives from federal and provincial government departments and agencies, local Regional Economic Development (RED) Boards, the fisheries union (FFAW), and non-governmental organizations, the C-NLOPB drafted the Draft Scoping Document.
- A series of scoping consultations were held during June and July 2005 (see Appendix 1).

1.3 History of Oil and Gas Activities in Western Newfoundland and Labrador Offshore Area

An oil seep was discovered in the Parson's Pond area (Unit Area 4Rb) in the early 19th century. An oil exploration program was initiated in this area in 1867, resulting in the confirmation of the existence of crude oil. In 1893, the Newfoundland Oil Company drilled in Parson's Pond area and struck both oil and gas (www.noianet.com/history/timeline.php).

During the 1990s, western Newfoundland received significant attention from the petroleum industry as a result of a new interpretation of the geology, a new regulatory regime, and an oil discovery on the Port au Port Peninsula. In 1994, Hunt Oil and PanCanadian Petroleum Limited spudded an exploration well in the Port au Port area. The next year, these same companies drilled to 3,100 m from an onshore location on the Port au Port Peninsula to an offshore location in Port au Port Bay. This well was eventually abandoned. Five more exploration wells were spudded on Newfoundland's west coast during the 1996-99 period. In 1999, Canadian Imperial Venture Corp. farmed into the Hunt-Pan Canadian Permit covering most of the Port au Port Peninsula, including the exploratory well Port au Port #1 drilled in 1994. In May 2000, oil finally flowed on the Port au Port Peninsula. Later in 2000, a development plan was filed with the Government of Newfoundland and Labrador for the Garden Hill oil and gas development, and an American firm, American Reserve Energy Corporation, drilled near Flat Bay (www.noianet.com/history/timeline.php).

Presently, there are five offshore exploration licences (ELs) in the Study Area, totaling 0.56 million hectares. Past exploration activity in the Study Area has included the drilling of five offshore wells (four drilled from land) and the collection of more than 13,000 line km of 2-D seismic data. The last drilling of a well in the Study Area occurred in 1999.

A recent seismic program proximate to the Study Area occurred in 2002 in the vicinity of EL 1063. In 2005, a 3-D seismic program proposed for an area within the Study Area (EL 1069) underwent a screening level of assessment under the *Canadian Environmental Assessment Act (CEA Act)*. In July 2005, Vulcan Minerals Inc. announced that drilling had commenced on its Storm #1 location (EL1072; Flat Bay, St. George's Bay) in Unit Area 4Rd.

In March 2005, the C-NLOPB announced a Call for Bids pertaining to four parcels (4 to 7) in the Western Newfoundland and Labrador Offshore Area (Figure 1.1). The Call for Bids closed on December 1, 2005.

1.4 Organization of the SEA

The SEA is organized according to the following major sections:

- Introduction
- Physical Environment
- Biological Environment
- Environmental Effects of Exploration and Production Activities
- Summary and Conclusions
- Literature Cited