

# **Strategic Environmental Assessment Newfoundland and Labrador Offshore Area**

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Canada-Newfoundland Offshore Petroleum Board**

**24th Annual Conference  
International Association for Impact Assessment  
Impact Assessment in the Oil and Gas Sector  
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# Presentation Outline

- ❖ Overview of C-NOPB
- ❖ Oil and Gas activity in NL Offshore area
- ❖ C-NOPB Regulatory Process
- ❖ C-NOPB SEA process
- ❖ Lessons Learned



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- ❖ Lessons Learned

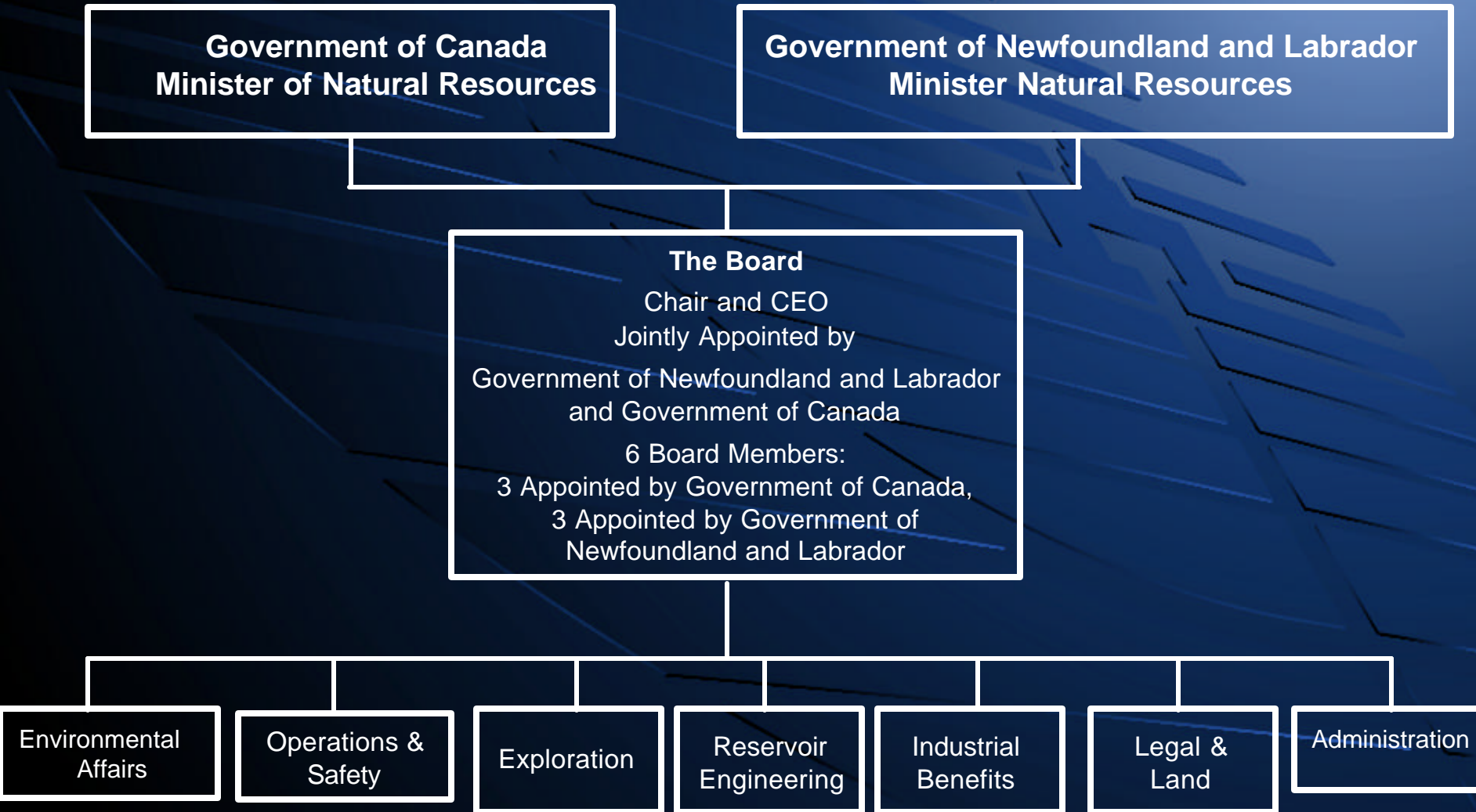


# Canada-Newfoundland Offshore Petroleum Board (C-NOPB)

- ❖ Established in 1986 under Canada-Newfoundland Atlantic Accord
- ❖ Legislation proclaimed in 1987
  - Canada - Newfoundland Atlantic Accord Implementation Act, S.C. 1987, c.3
  - Canada - Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act, R.S.N. 1990, c.C-2
- ❖ Reports to:
  - Government of Canada
  - Government of Newfoundland and Labrador



# C-NOPB Organization Chart



# Responsibilities

- ❖ Ensuring activities are conducted in a safe, environmentally prudent manner
- ❖ Assessing and ensuring conservation of petroleum resources
- ❖ Promoting industrial and employment benefits
- ❖ Administering rights issuance and land tenure system



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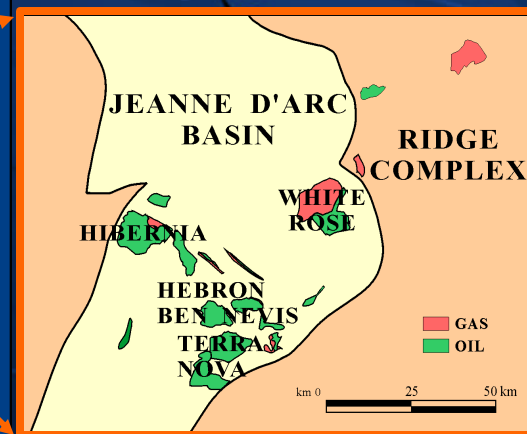
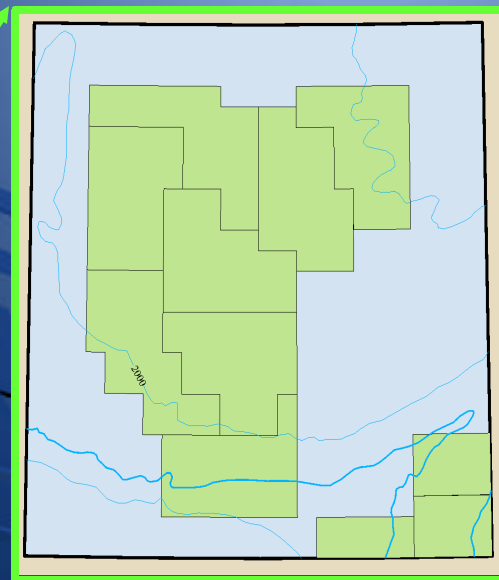
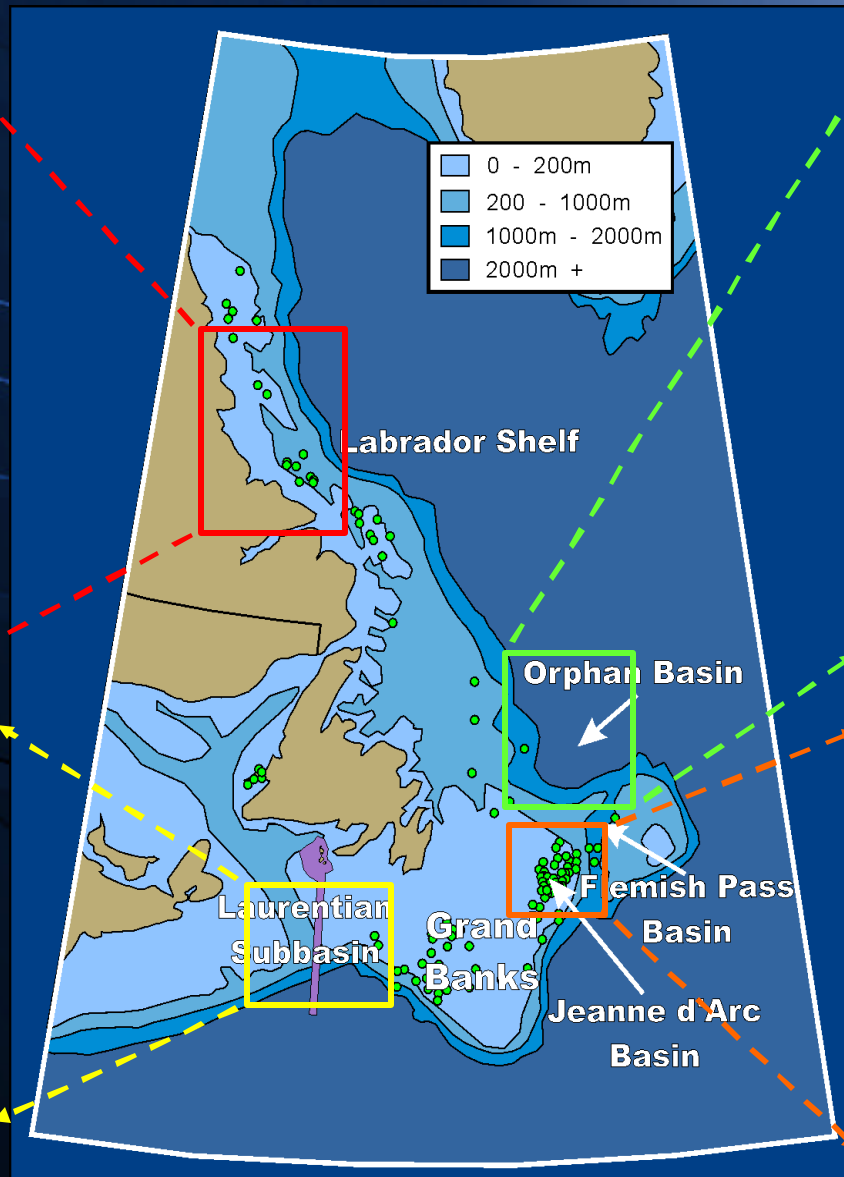
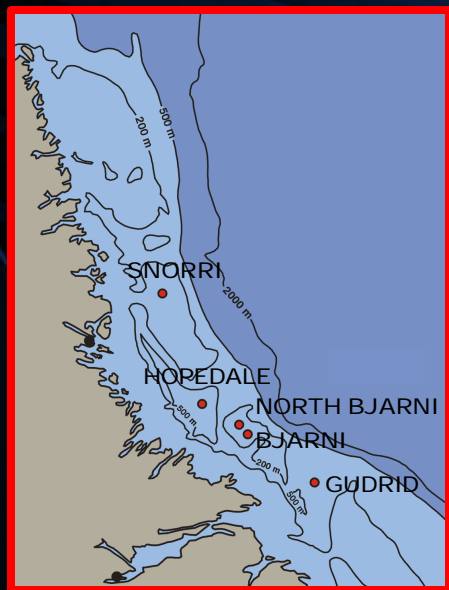
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# Atlantic Ocean Floor

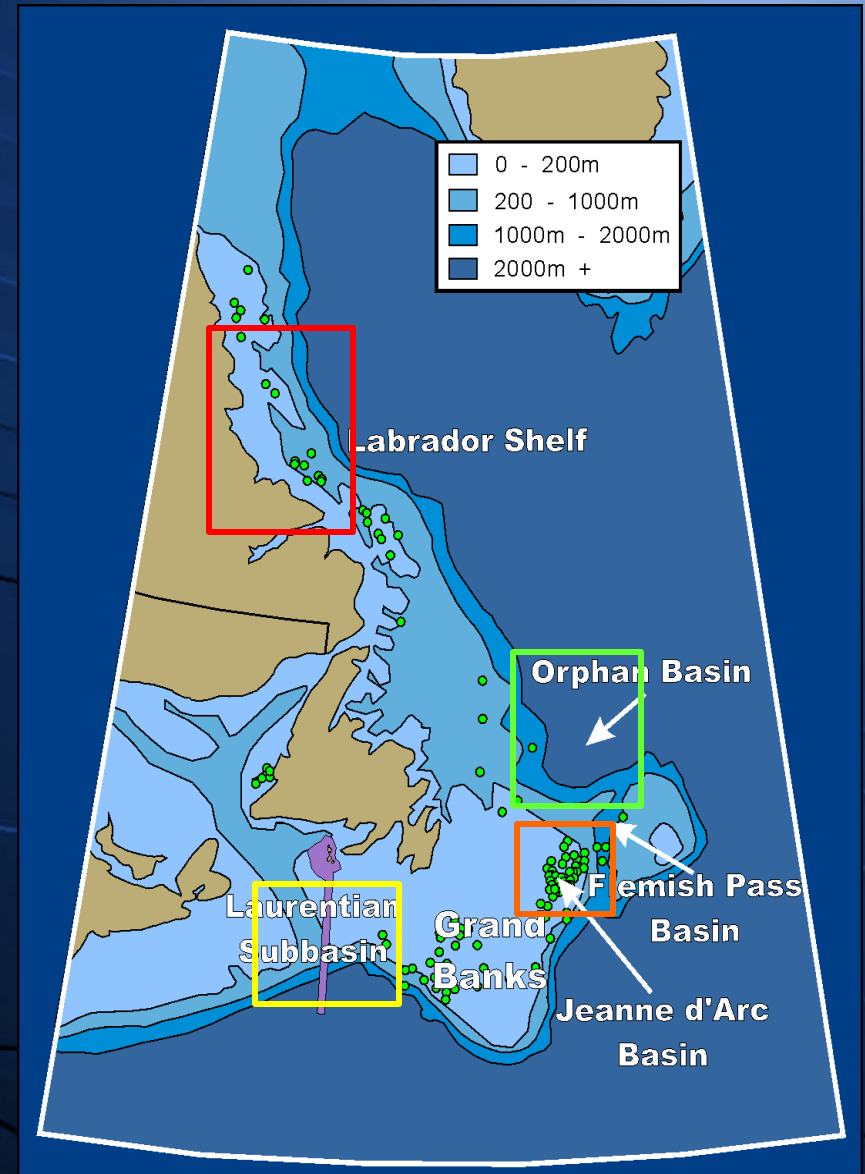


# Newfoundland & Labrador Offshore Area



# Newfoundland & Labrador Offshore Area

- ❖ Jurisdictional Area: ~185 million ha
- ❖ 23 Significant Discoveries
- ❖ 36 Exploration Licences
- ❖ Wells Drilled/Spudded: 240+
- ❖ ~1.3 million km of Seismic Data (up to 2002)
- ❖ 2 production facilities operating (Hibernia and Terra Nova)
- ❖ 1 development in construction phase (White Rose)



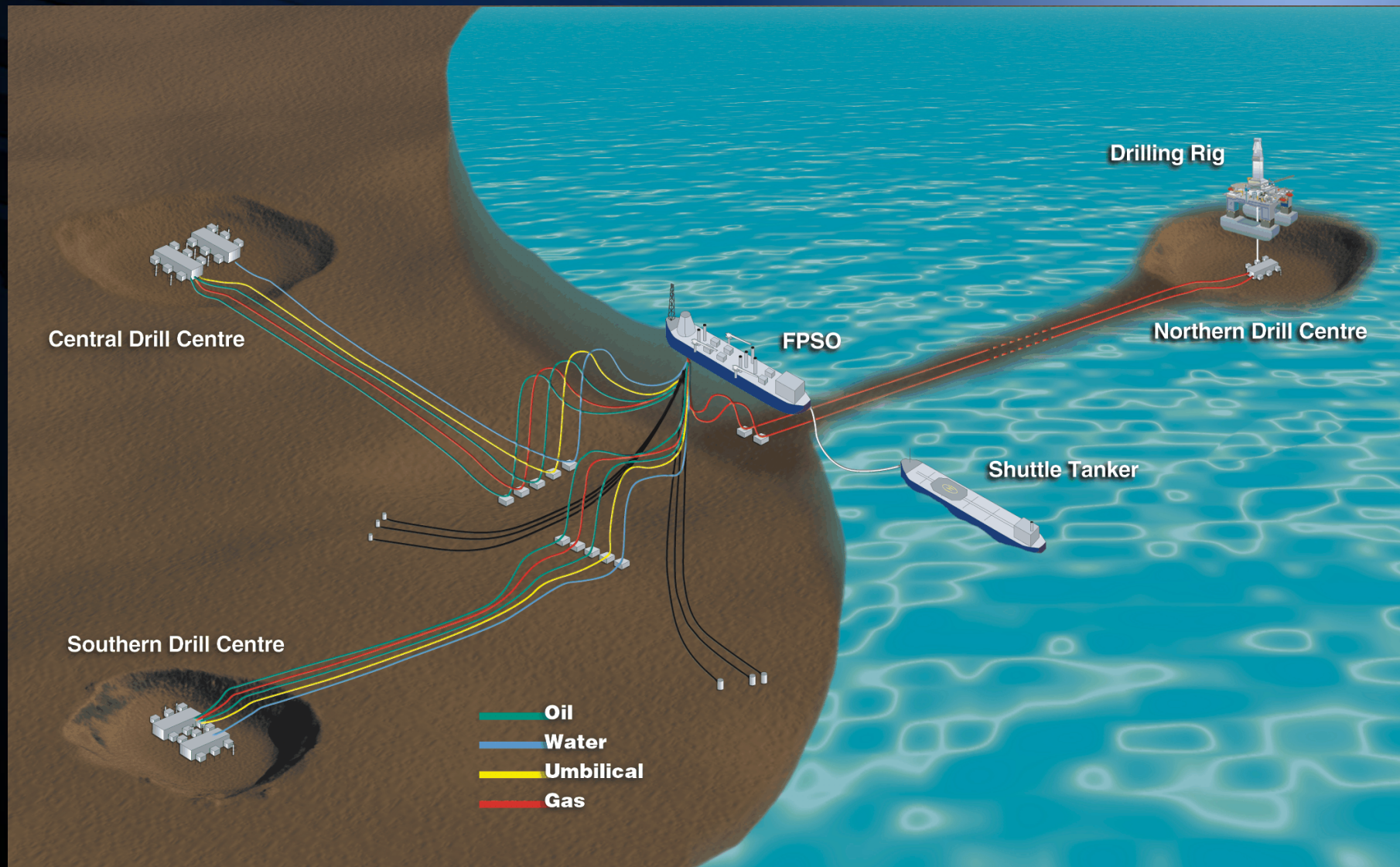
# Hibernia GBS



# Terra Nova FPSO



# White Rose Conceptual Design



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# C-NOPB Regulatory Regime

## ❖ Rights Issuance

- Strategic Environmental Assessment

## ❖ Work Authorizations/Approvals

- Project Specific EA
- Individual Activities Require Authorization

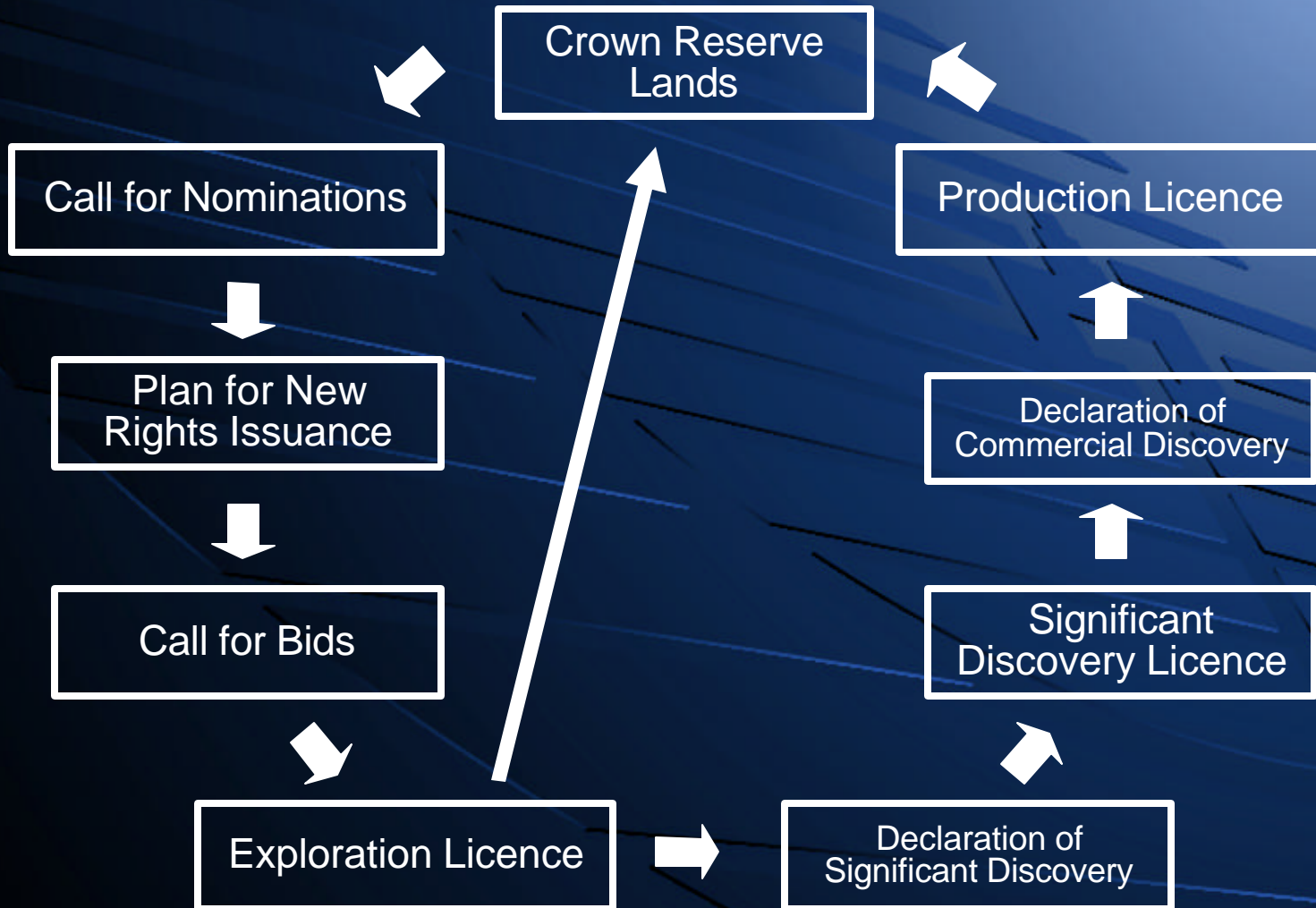
## ❖ Development Plan Approval

- Accord Act Public Review
- CEAA Comprehensive Study Review or Panel Process

## ❖ Monitoring/Auditing



# C-NOPB RIGHTS ISSUANCE



# Call for Bids Cycle

- ❖ Minimum 120 day call period.
- ❖ Call for Nominations opens Sept - Oct
- ❖ Nominations Close Nov - Dec
- ❖ Board submitted Plan for Rights January
- ❖ Issuance to Ministers (Fundamental Decision)
- ❖ Ministers' Decision March
- ❖ Call for Bids Issued April
- ❖ Call for Bids Closes Nov - Dec
- ❖ Issuance of Exploration Licences January (following year)



# C-NOPB EA Process

- ❖ Each activity requires an authorization
  - e.g. Drilling programs; seismic surveys
- ❖ EAs are undertaken as part of authorization process
- ❖ Board is a Federal Authority under CEAA;
- ❖ Most offshore oil/gas activities are captured under CEAA
- ❖ C-NOPB leads coordinated review process
- ❖ DFO, EC, NL Dept. Fisheries & Aquaculture; NL Dept. Environment, and other federal authorities involved in review



# Development Plan Approval

- ❖ Development Application requires C-NOPB Approval
- ❖ Public Review process under the Accord Acts, and CEAA process under CEAA
- ❖ CEAA assessment
  - CSR Process, or
  - Panel review
- ❖ Board and CEAA processes concurrent, may be integrated
- ❖ Once Accord Act review and CEAA Review completed, Decision for authorization requires approval from federal and provincial “energy” Ministers



# Monitoring and Auditing

- ❖ Environmental/Safety auditing program
  - Drilling, production installations
  - Onshore and offshore
  - Regulatory requirements and operator's procedures
- ❖ Environmental monitoring
  - Daily operational monitoring including weather/ice
  - Waste treatment compliance monitoring (monthly)
  - Environmental effects monitoring (annually)
- ❖ All spills, exceedances followed up



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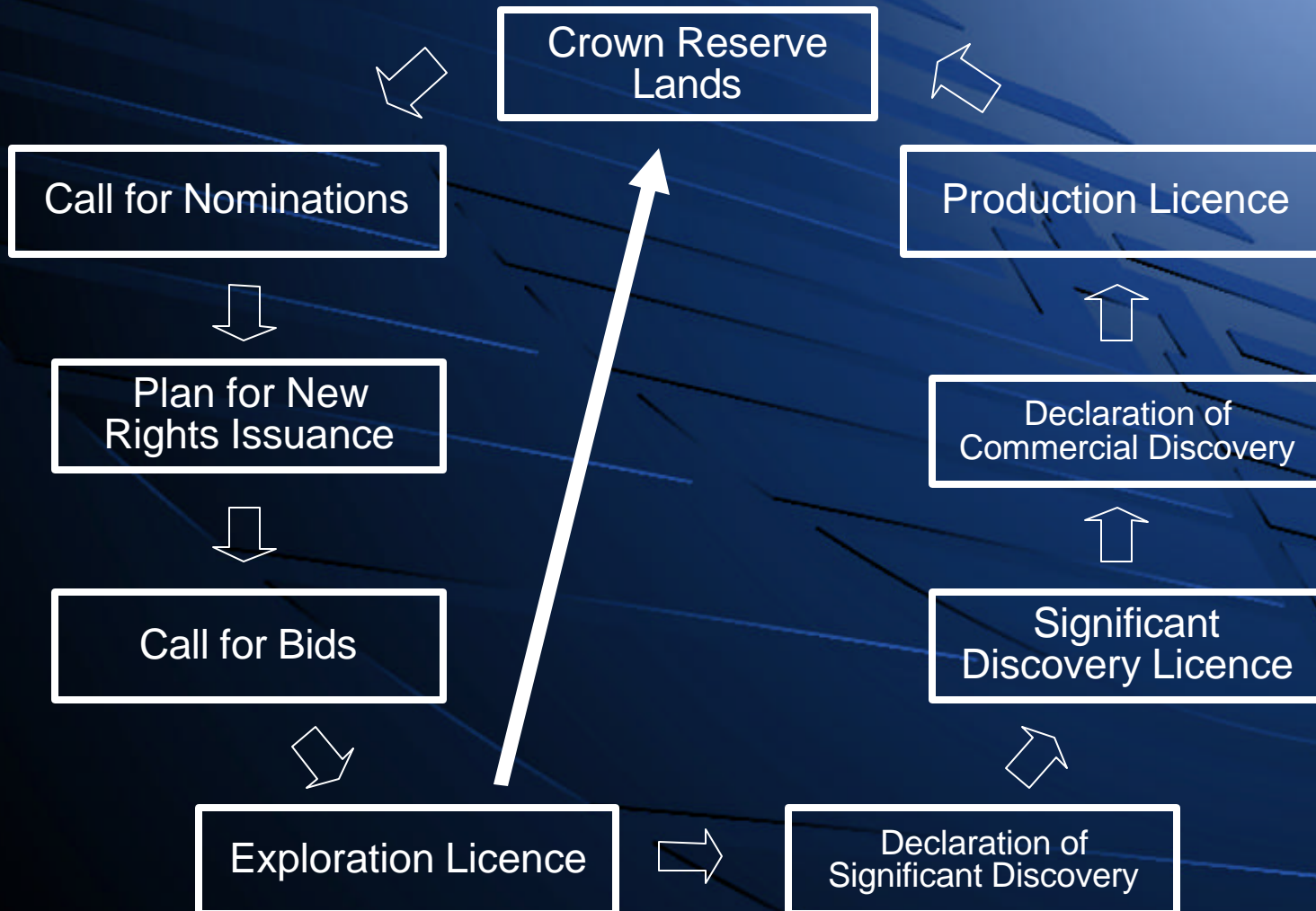


# Strategic Environmental Assessment

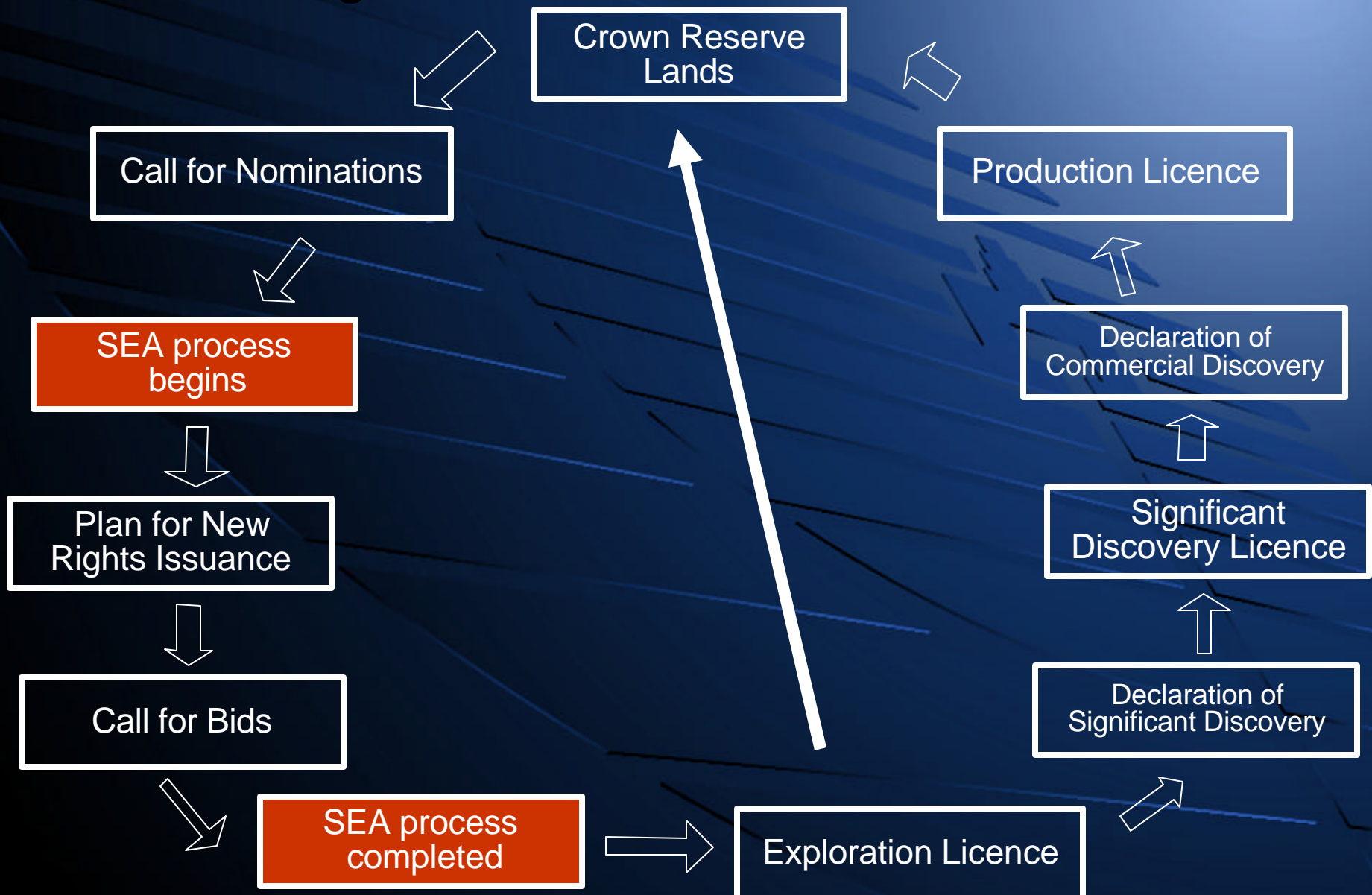
- ❖ C-NOPB, following 1999 Cabinet Directive, decided to undertake SEA
- ❖ Guiding Principles
  - Early Integration
  - Examine Alternatives
  - Self-Assessment
  - Appropriate level of Analysis
  - Accountability
- ❖ May be undertaken before or during Rights Issuance
- ❖ SEA conducted in NL offshore area that may have potential for offshore oil/gas activity
- ❖ SEA Process is evolving
- ❖ 2 SEAs to date



# C-NOPB Rights Issuance



# SEA and Rights Issuance

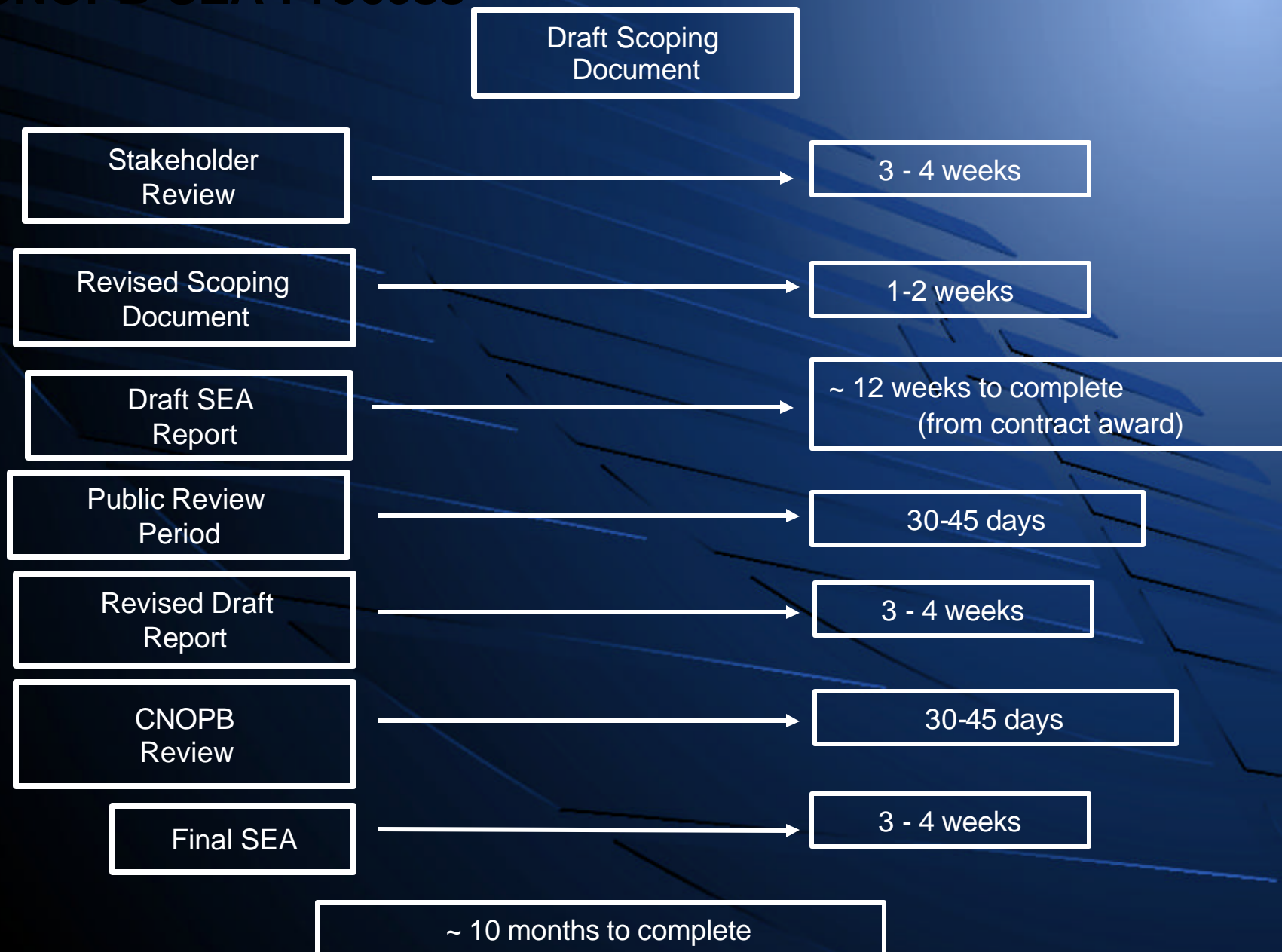


# Strategic Environmental Assessment

- ❖ Broad-based approach to environmental assessment
- ❖ Considers larger ecological setting
- ❖ Potential issues and interactions identified early (e.g., sensitive areas, species at risk)
- ❖ Consider all reasonably foreseeable exploration-related activities (including seismic surveys and other geoscientific programs)
- ❖ Assist to scope and focus subsequent EAs
- ❖ **NOT** a substitute for project-specific EAs; complementary



# CNOPB SEA Process



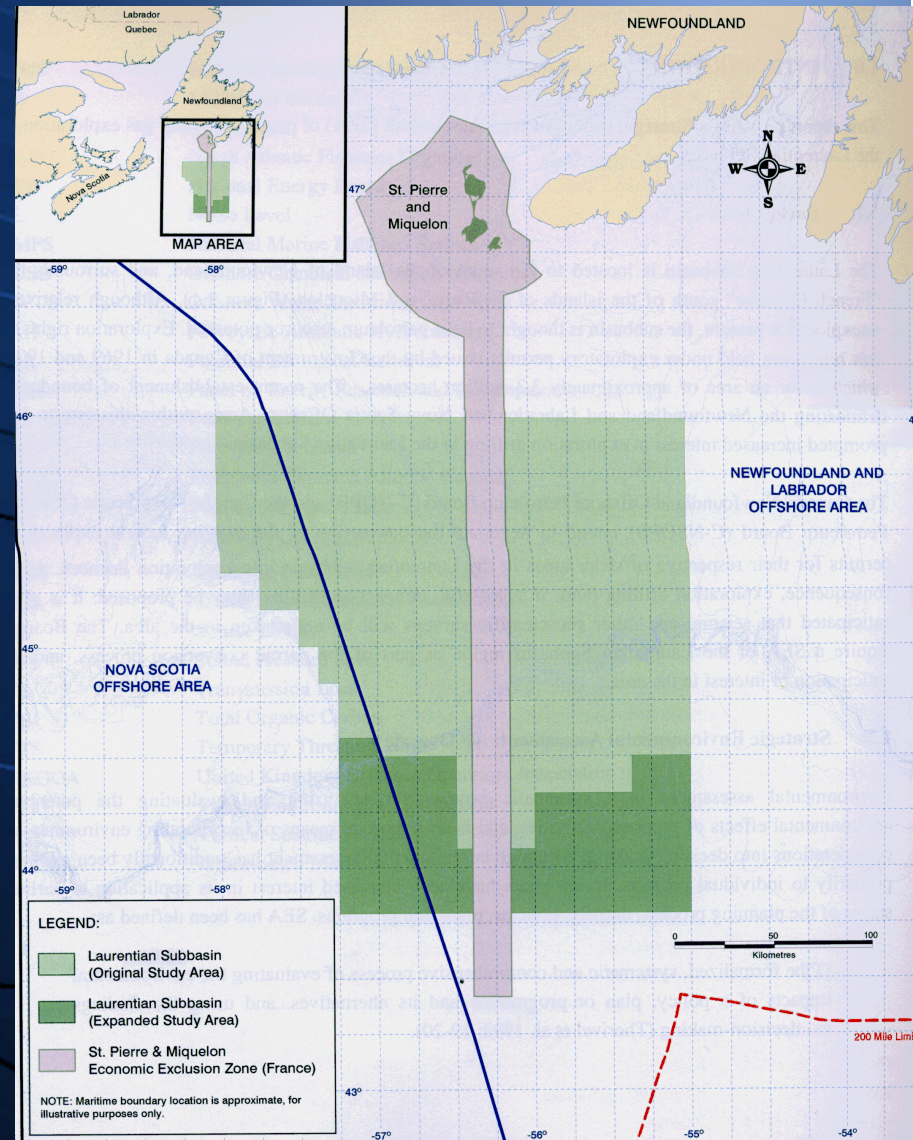
# SEA Objectives

- ❖ Present an overview of biological and physical environments in a study area
- ❖ Identify issues of concern (e.g., sensitive areas, species at risk)
- ❖ Identification of mitigation, monitoring and potential research/study requirements
- ❖ **“Strategic decision” - Use information in deciding issuance of land and/or restrictions on activities**



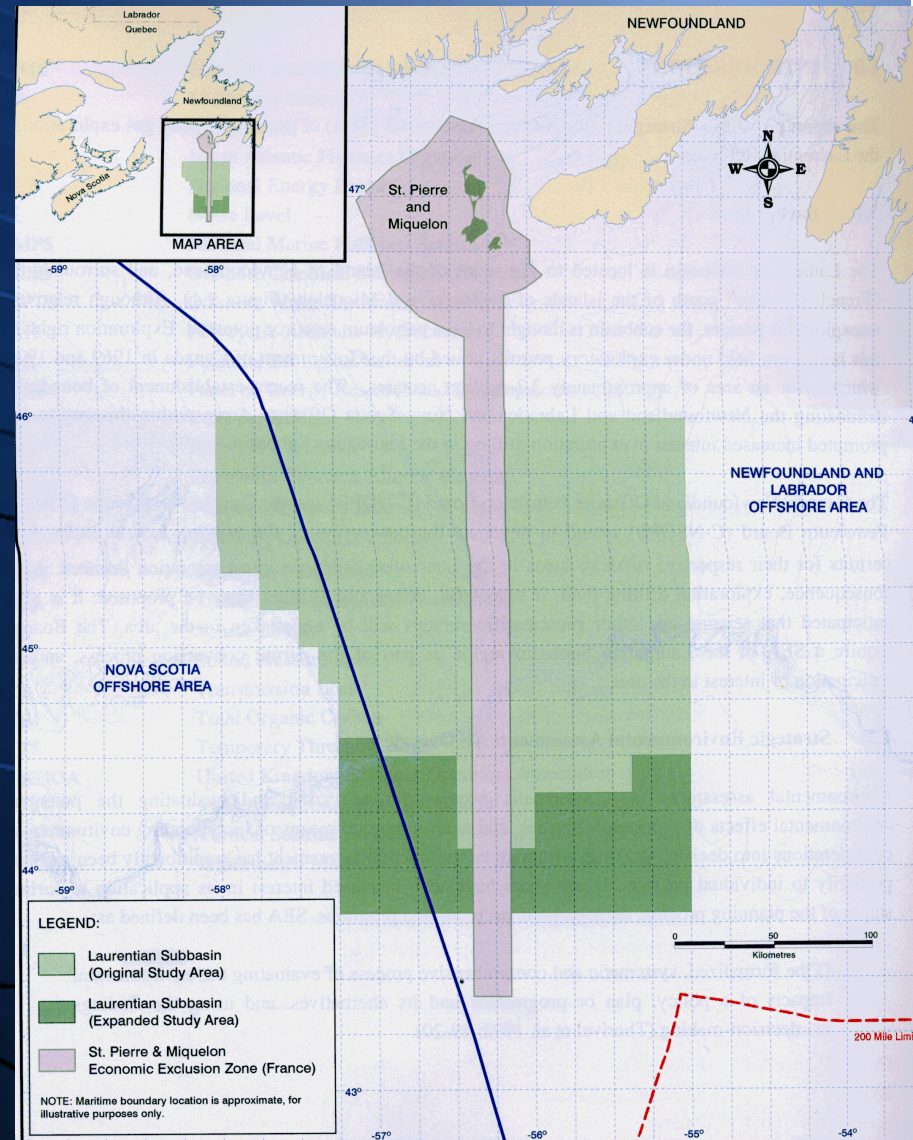
# Laurentian Subbasin SEA Highlights

- ❖ 1st SEA; started in late 2002
- ❖ Joint C-NOPB / C-NSOPB initiative
- ❖ undertaken as part of conversion process of federal exploration permits



# Laurentian Subbasin SEA

- ❖ process commenced November 2002
- ❖ involved regulatory agency/key stakeholder input at preliminary draft report stage
- ❖ did not include scoping
- ❖ regulatory and public comment period on draft report
- ❖ study area revised mid-review
- ❖ additional public comment period for addendum incorporating revised study area
- ❖ Boards accepted SEA November 2003



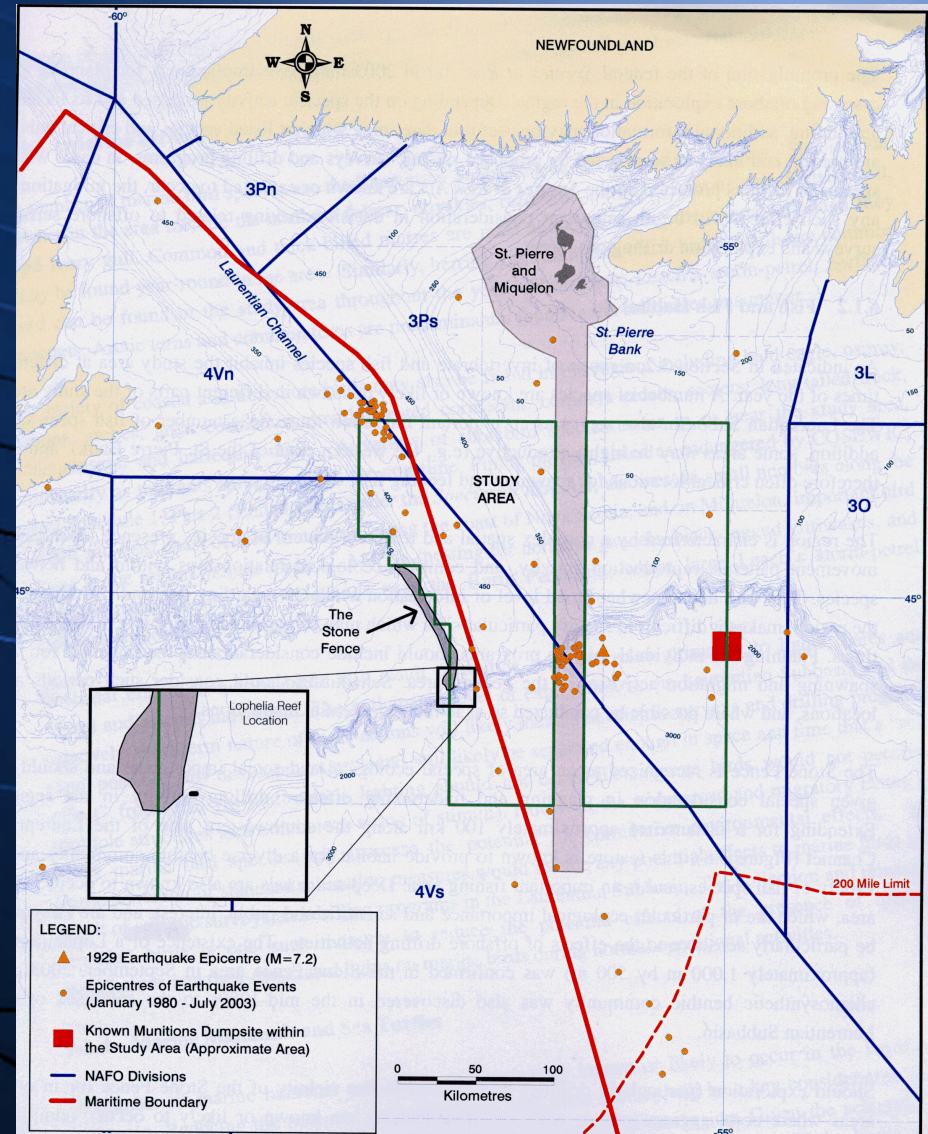
# Laurentian Subbasin SEA

## ❖ VECs include

- fish/fish habitat
- marine birds
- marine mammals/sea turtles
- species at risk
- commercial fisheries

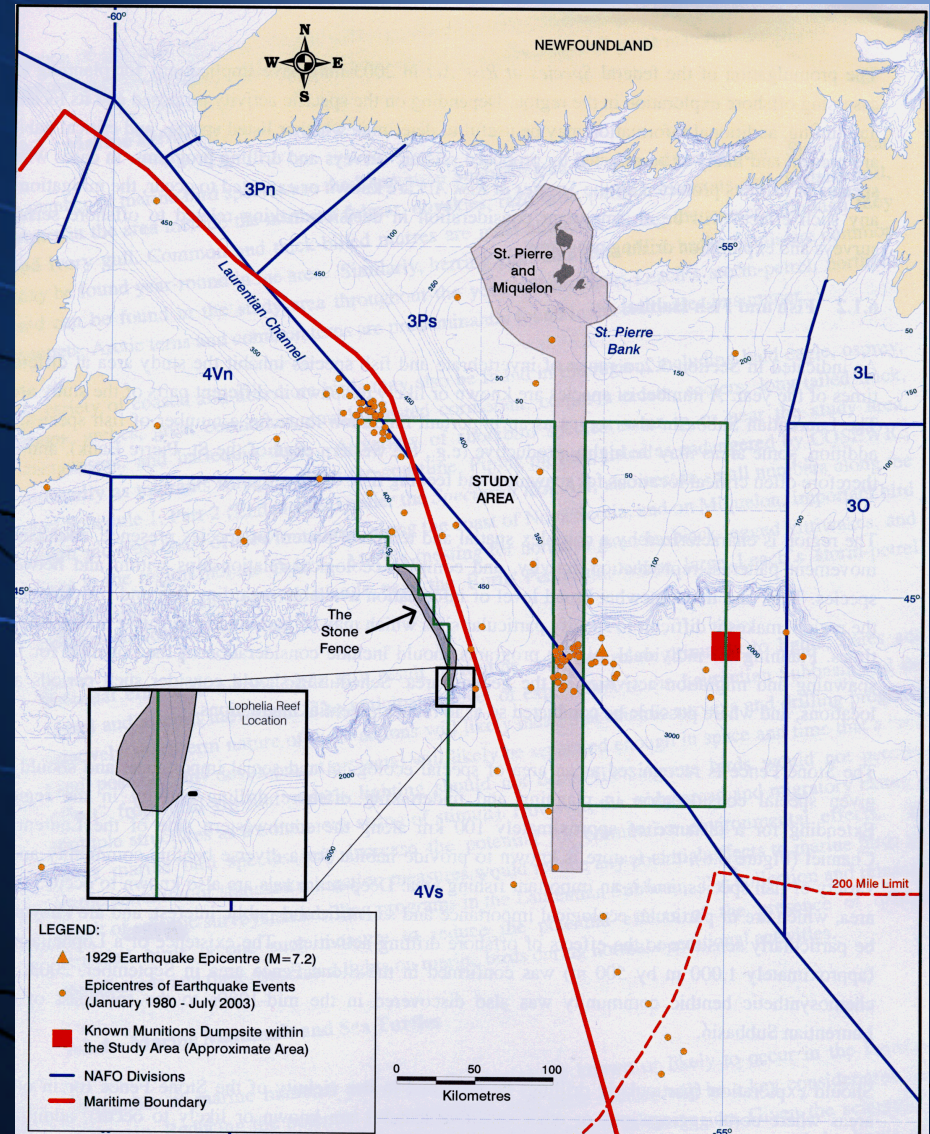
## ❖ Species at risk identified:

- Atlantic cod, wolffish
- Ivory gull, Roseate tern
- Northern Right whale; Fin whale;  
Blue whale; Northern bottlenose ;



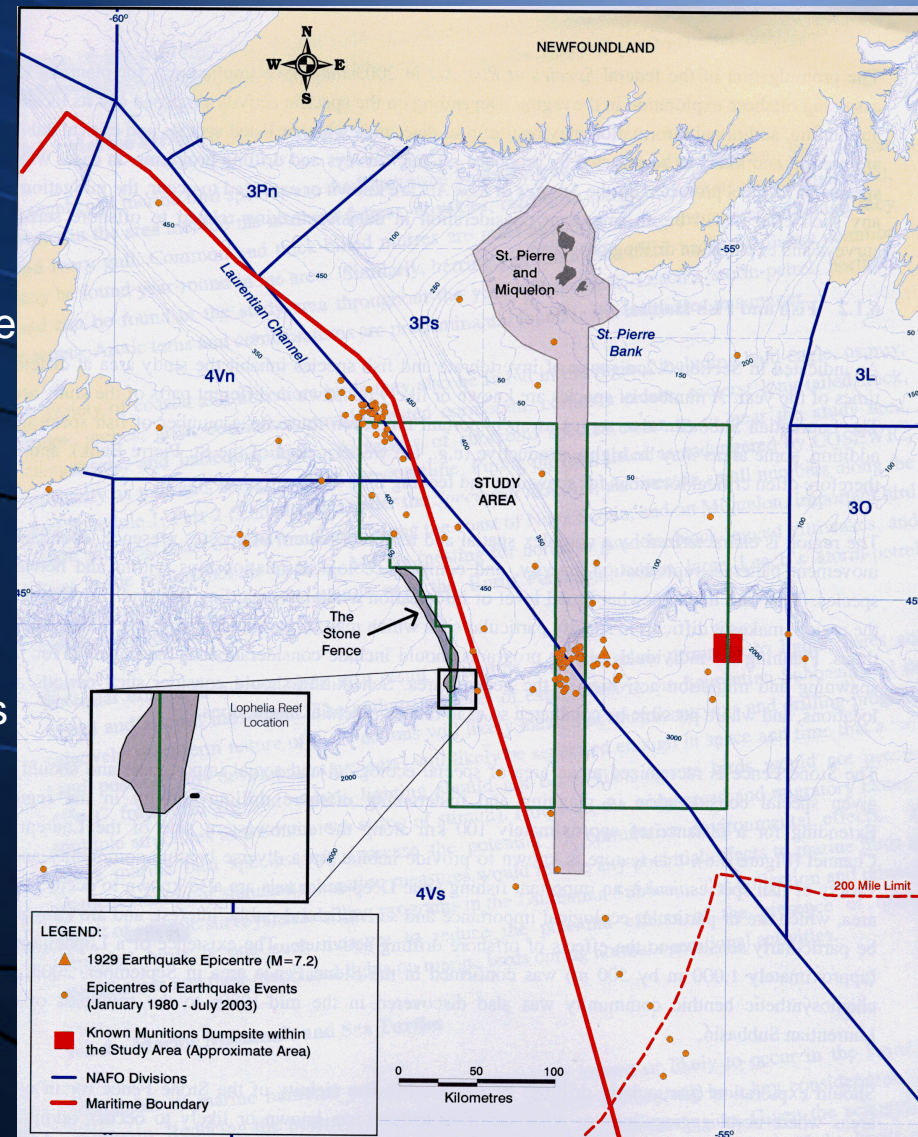
# Laurentian Subbasin SEA

- ❖ Area regarded as “seismically active”
- ❖ Data gaps identified
  - marine mammals
  - distribution of VECs (fish eggs/larvae; seabirds)
  - location of fish spawning areas
- ❖ Marine munitions dump identified
- ❖ *Lophelia* coral reef identified in Stone Fence area;

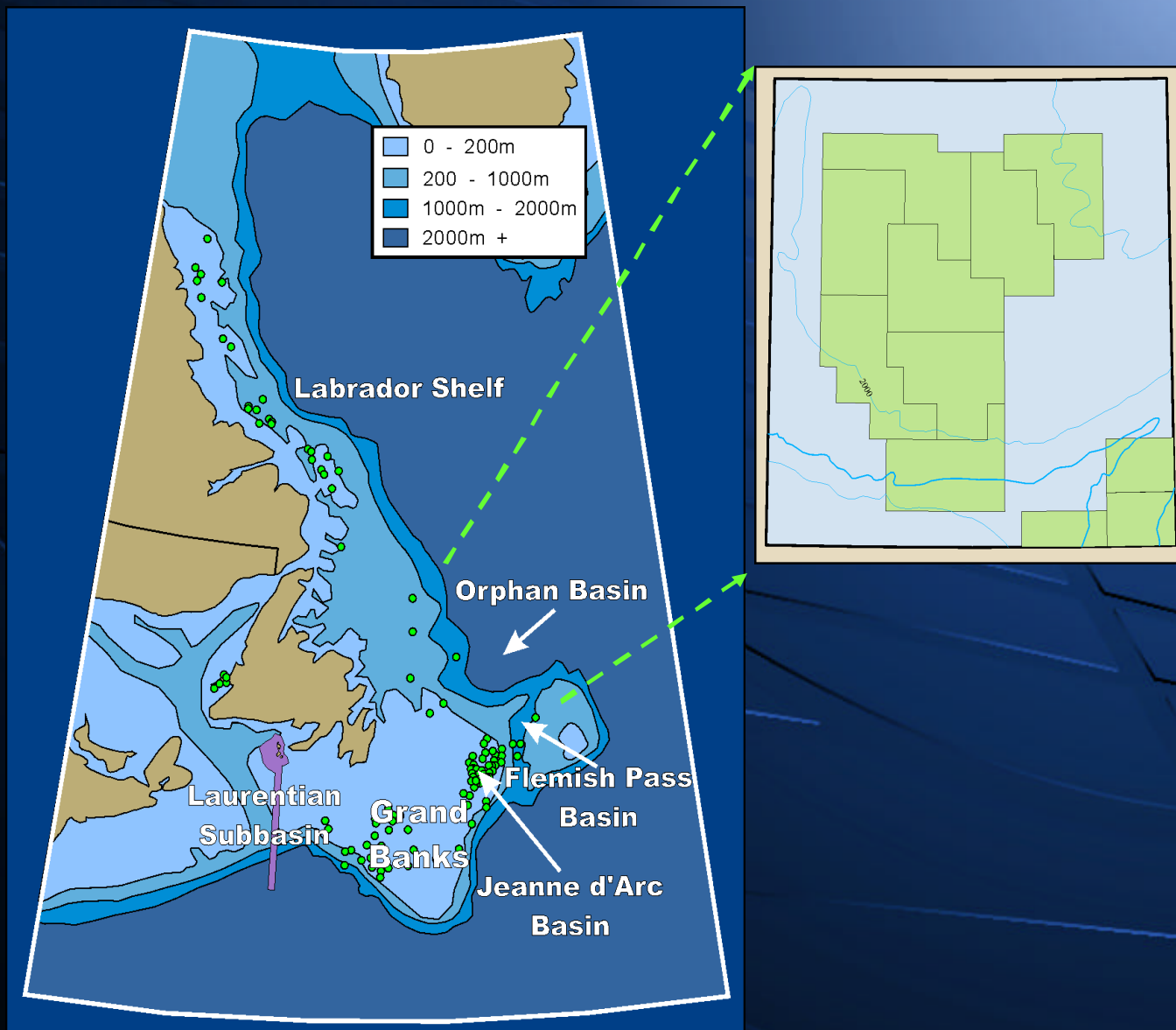


# Laurentian Subbasin SEA - Conclusions

- ❖ Munitions dumpsite
  - no physical disturbance of seabed allowed until the C-NOPB is satisfied that activities will not pose a threat to human safety or the environment
- ❖ *Lophelia* coral reef
  - CNSOPB may impose restrictions in the area on activities involving the use moorings
  - activities assessed to ensure that treatment, handling, and disposal of wastes will be conducted in a manner that minimizes or eliminates potential effects
- ❖ Project-specific EA may require collection of baseline data in order to assess impact predictions

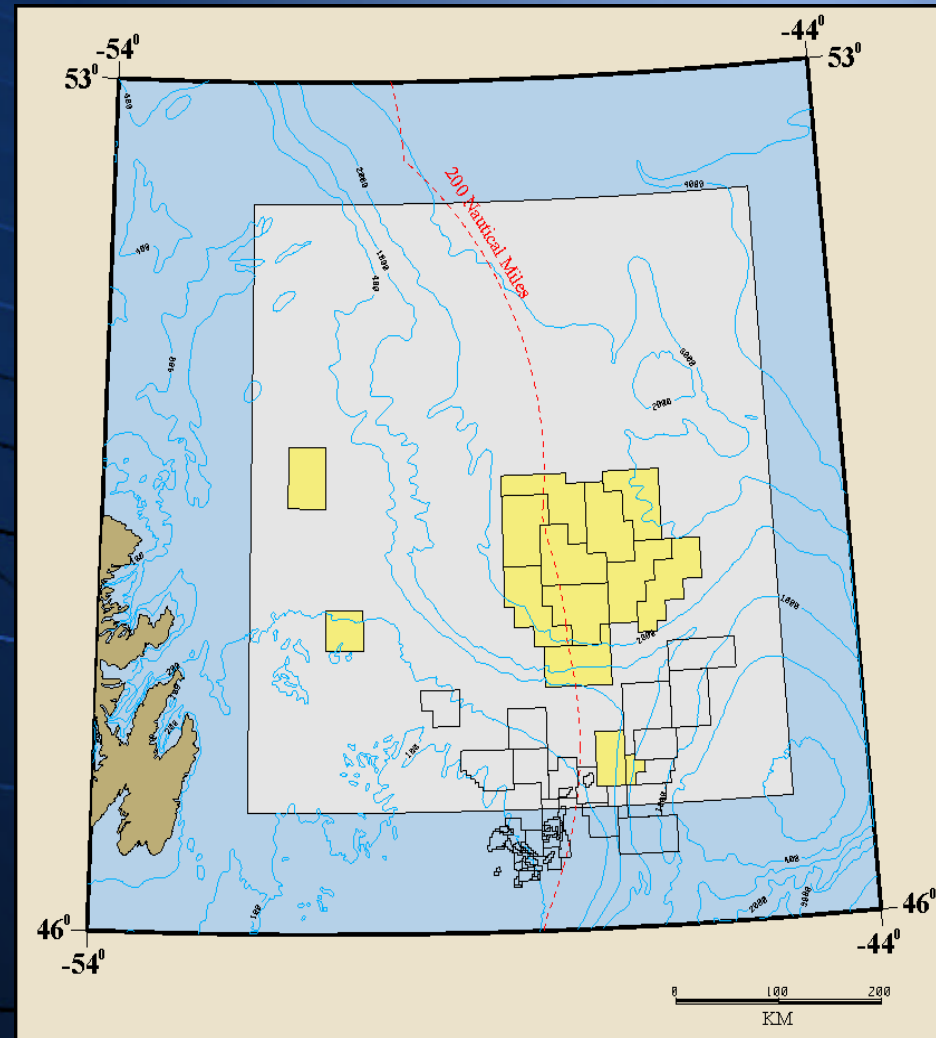


# Orphan Basin SEA



# Orphan Basin SEA

- ❖ Process started in January 2003
- ❖ Public consultations on scope of SEA
- ❖ approx. 45-day public/regulatory comment period on draft SEA
- ❖ SEA accepted by C-NOPB November 2003



# Orphan Basin SEA

## ❖ VECs included

- fish/fish habitat
- marine birds
- marine mammals
- sea turtles
- species at risk
- commercial fisheries

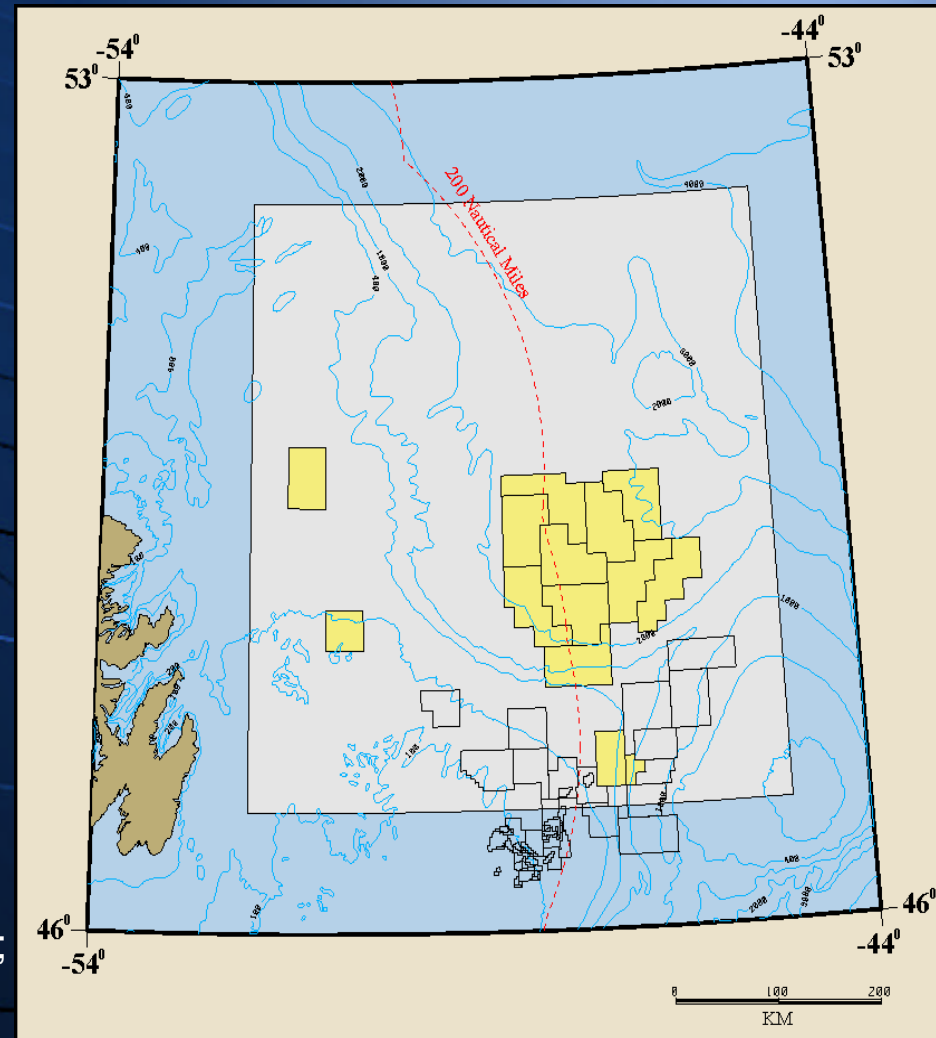
## ❖ SAR identified in area include:

- Atlantic cod
- wolffish
- Ivory gull
- northern bottlenose whale

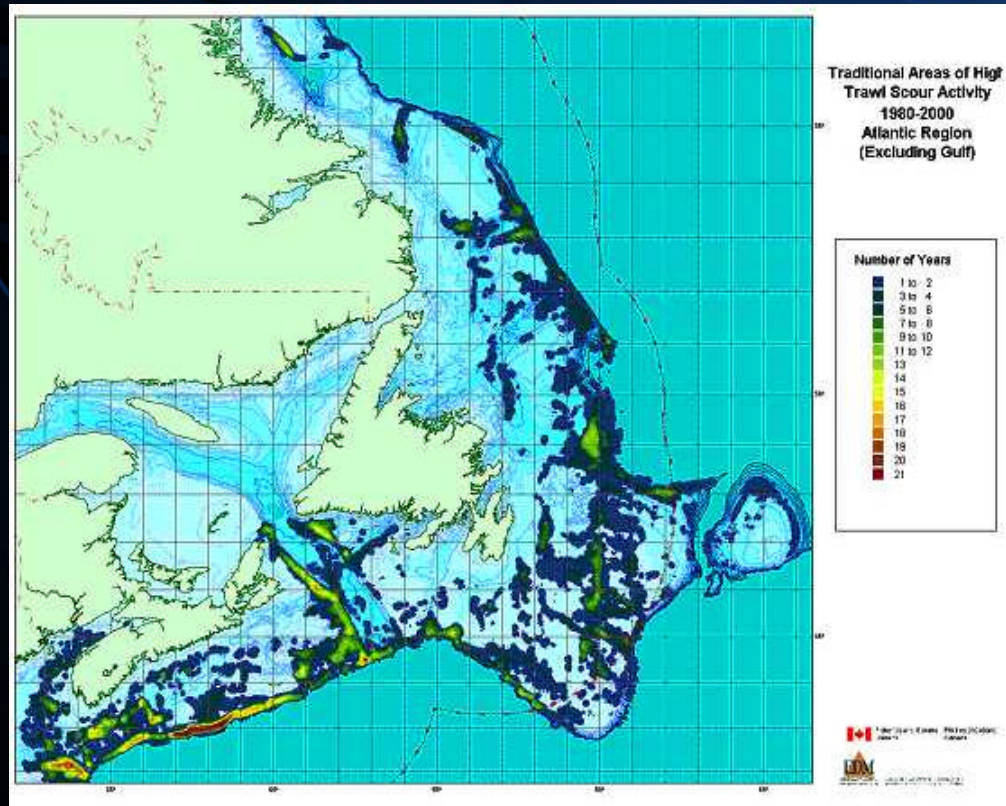
## ❖ data gaps identified

- marine mammals
- international fishery data
- distribution of VECs (fish eggs/larvae; seabirds)
- location of fish spawning area

## ❖ sensitive fish habitat identified ('cod box')

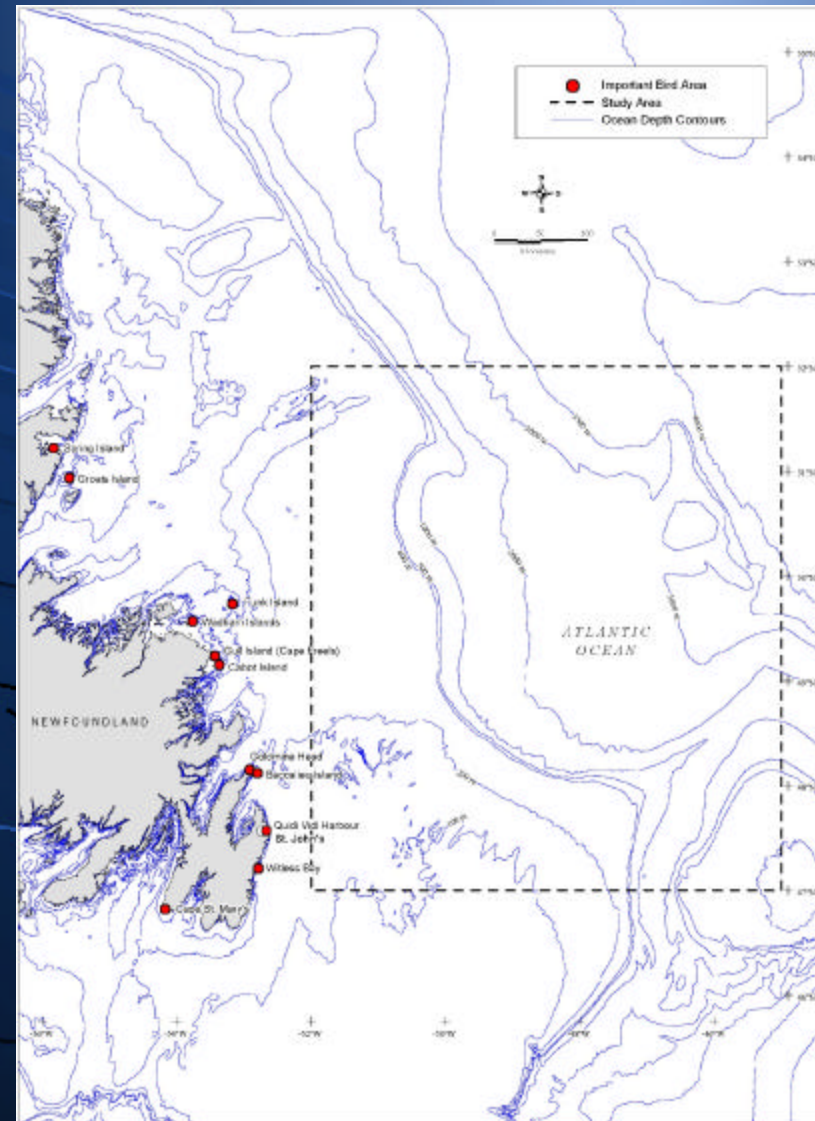


# Orphan Basin SEA



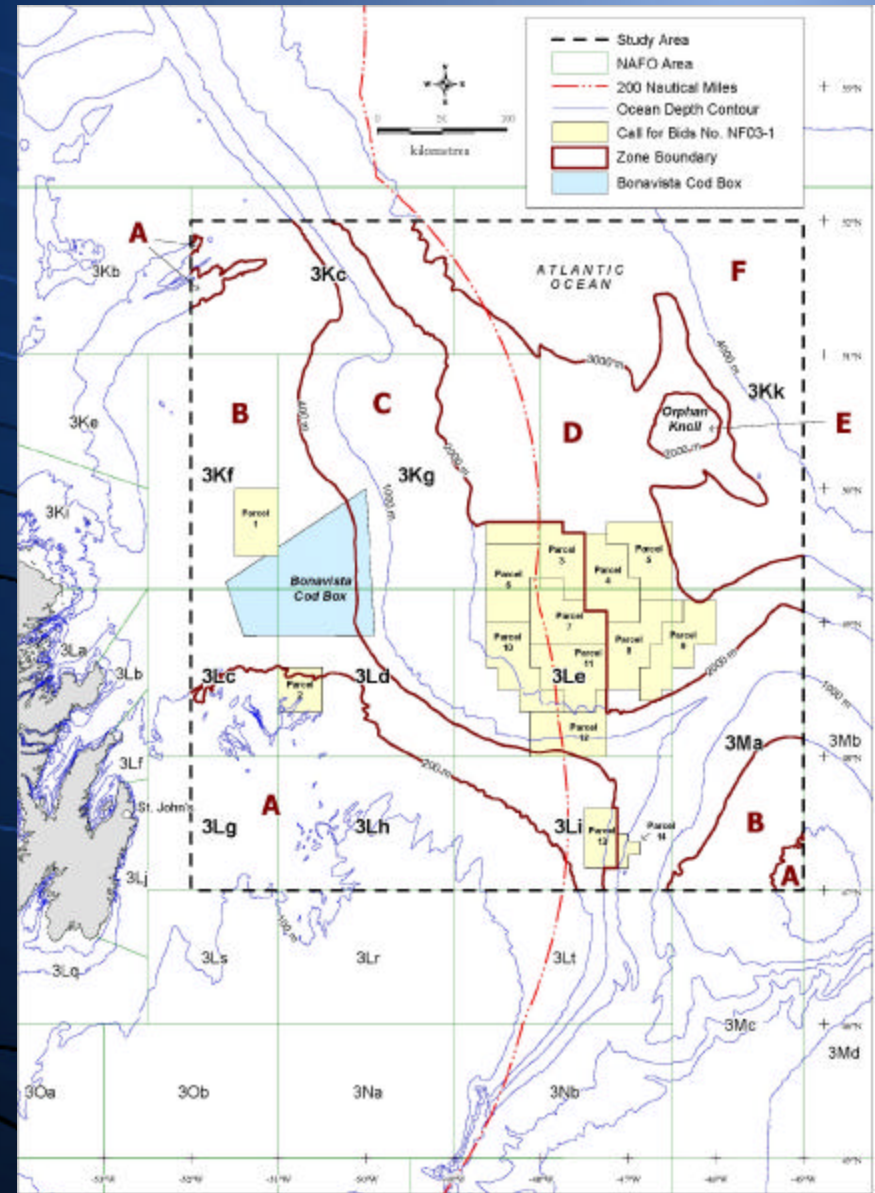
Historical trawling activity 1980-2000

Important Bird Areas



# Orphan Basin SEA - Conclusions

- ❖ Potential zoning considerations
  - Zones A - F based on physical features under consideration-
- ❖ use of standard mitigations can reduce potential impacts for effects on VECs
- ❖ “Cod Box” - sensitive fish habitat
  - possible restrictions on activities within Cod Box area
  - restrictions on activities within portion of Parcel 1
  - special or non-standard mitigations may be applied to immediate vicinity of Cod Box ; likely to apply to all of Parcel 1 and portion of Parcel 2
- ❖ Project-specific EA may require collection of baseline data in order to assess impact predictions



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# Lessons Learned

- ❖ Many different views - “what is SEA”
- ❖ Start as early as possible in planning stages
- ❖ Early consultations with regulatory agencies and stakeholders
  - scoping
  - review of report
- ❖ Spatial extent of study area
- ❖ Process is evolving
- ❖ Was a key tool in Board’s rights issuance process
- ❖ May not be needed in all circumstances - e.g. 2004 Call for Bids



# Questions?

