# Integrating Protected Areas on the Scotian Shelf



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The Gully MPA
Largest submarine canyon in eastern North America

Northern bottlenose whale (*Hyperoodon ampullatus*) 34% of 140 individuals found in the Gully at any one time Assessment Status: Endangered (2002)



### **Corals in the Gully**

- *Campod* surveys (1998-2002)
- **14 + species**



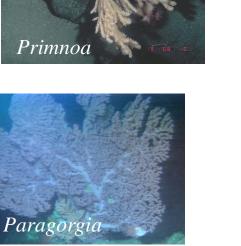




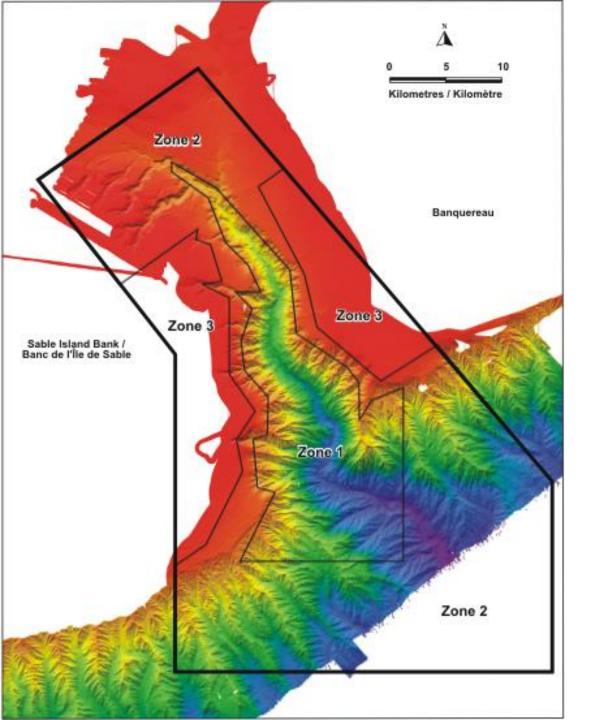












#### **Boundary & Zones**

**Area**: 2360 km<sup>2</sup>

**Zone 1**: Highly restricted deep-water core >600m (few activities permitted)

Zone 2: Protection for trough, canyon sides and outer area (some fisheries allowed)

Zone 3: Shallow-water sandy banks <300m (compatible uses subject to stringent review)

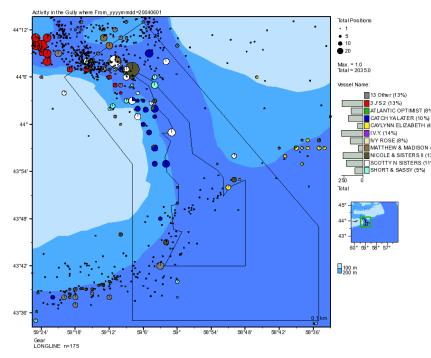
# Managing Fisheries



- Excepted hook & line fisheries access Zones 2 and 3 under Fisheries Act license conditions
- All other fisheries excluded from MPA
- Gully MPA section being added to relevant Integrated Fishery Management Plans
- Monitoring and reporting procedures apply
  - observers, logbooks, dockside monitors
  - surveillance (Fisheries, Navy, Coast Guard etc.)

# Compliance Monitoring System

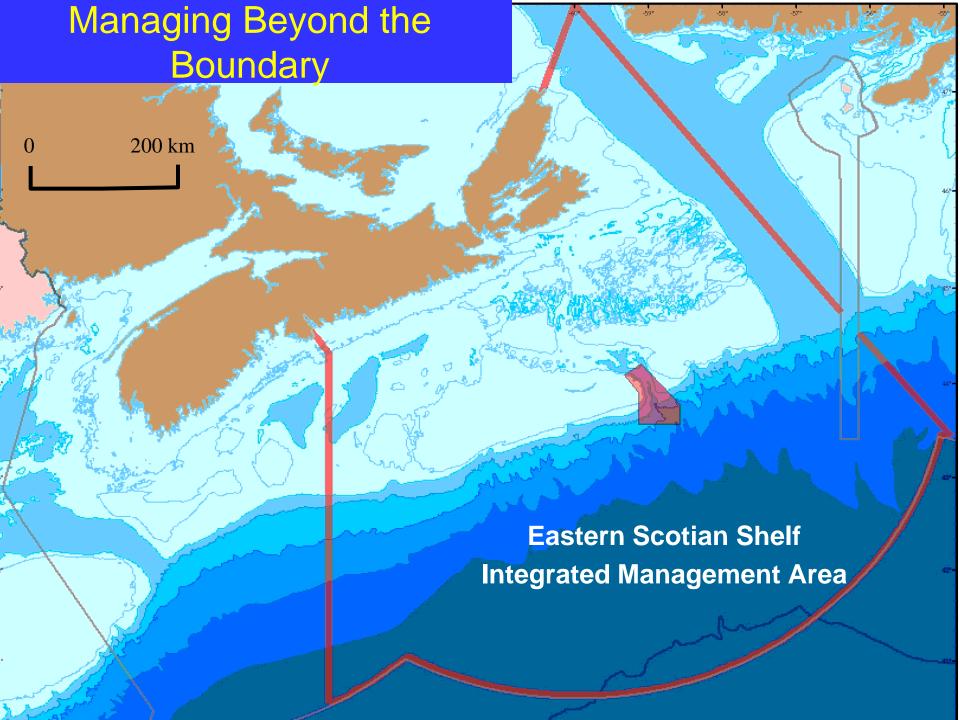
- Compiles multiple and remote data sources
  - vessel monitoring system (hourly by satellite)
  - aerial sightings (daily in some seasons)
  - radio calls to hail in-out of port
  - vessel and observer logbooks
  - Automatic detection of
    - unauthorized fishing
    - misreporting of positions and catch composition
    - loitering and data anomalies



# Research Activities



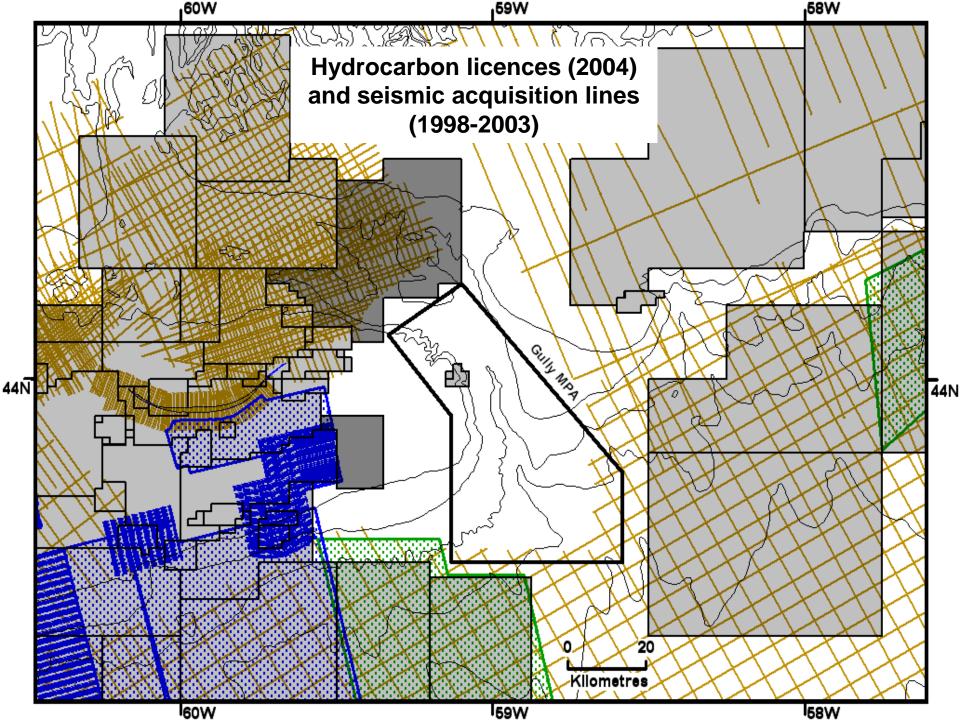
- Research and monitoring are encouraged
  - emphasis on MPA understanding & evaluation
- Domestic must submit plans for approval
  - reviewed by MPA Advisory Committee
  - approved by Minister of Fisheries and Oceans
- Foreign consent under Coasting Trade Act
  - Applications now routed to MPA managers
  - proponents must comply with MPA regulation



# Oil & Gas Exploration

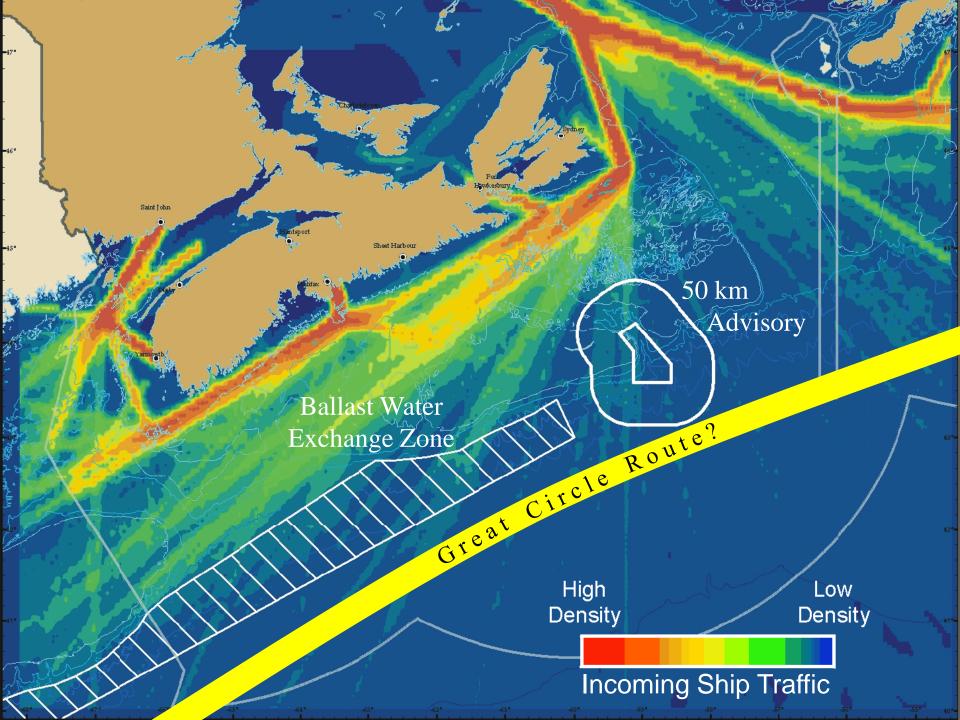


- Prohibited in MPA by policy
- Adjacency protocols being developed
  - expanded environmental assessment
  - mitigation, monitoring and observer requirements
- National seismic guidelines apply
- Voluntary codes of conduct by industry
  - no vessel transit or aircraft in the MPA
- Collaborative research and effects monitoring



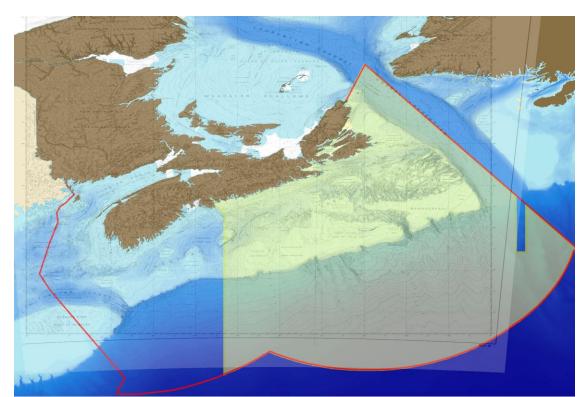
# Marine Transportation

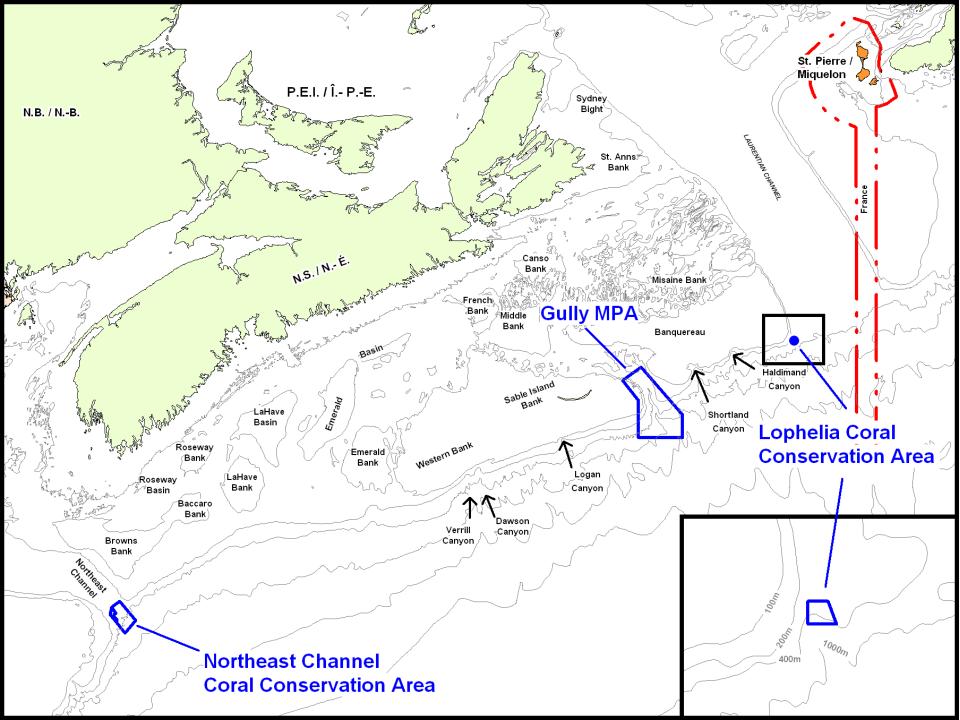
- Navigation rights excepted
  - must comply with Canadian Shipping Act &
  - International Maritime Organization requirements
- Chart updates
  - boundary added to paper and digital products
- Coast Guard Notice to Mariners
  - Guidelines: avoidance, mammals, discharges
- Ballast water exchange zones
  - New regulations accommodate the Gully



# The Eastern Scotian Shelf Integrated Management (ESSIM) Initiative

- First integrated ocean management initiative with an offshore focus under the Oceans Act
- Addressing multiple ocean uses and jurisdictions, increasing space competition, and need for an ecosystem approach
- A collaborative process to develop and implement an integrated ocean management plan



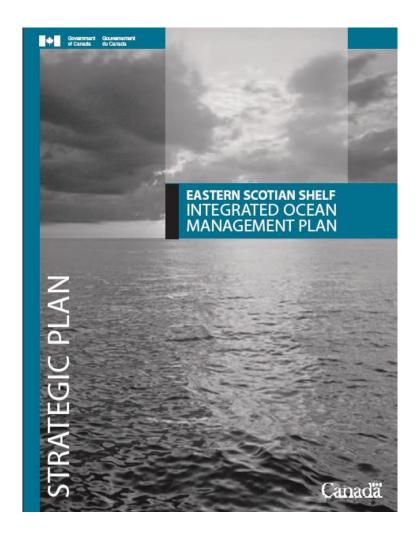


# **Legislative & Policy Context**

- Oceans Act provides legal basis (DFO lead agency)
- Canada's Oceans Strategy affirms integrated management as a priority
- National Integrated Management Policy and Operational Framework provides guidance
- Oceans Action Plan (2004-06) & Health of the Oceans Program (2007-12) support implementation
- Reflects our international commitments

#### The ESSIM Plan

- Strategic level, objectives-based plan for sustainability on the Eastern Scotian Shelf
- Building on, improving and coordinating existing management jurisdictions and responsibilities
- Linking sector-based planning and decision making to an overarching set of objectives, strategies, actions and outcomes



...a shared commitment to work together for our ocean and our future...

# Goals of the plan

#### Collaborative governance and integrated management

- Capacity among stakeholders.
- Knowledge to support integrated management.
- Effective governance structures and processes.

#### Sustainable human use

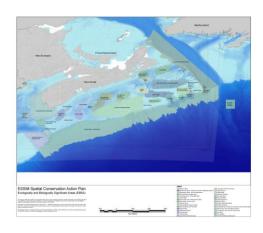
- Ecologically sustainable use of ocean space and resources.
- Sustainable communities and economic well-being.

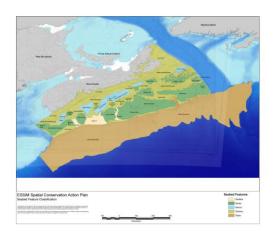
#### Healthy ecosystems

- Resilient and productive ecosystems, with diverse habitats, communities, species and populations.
- Strong marine environmental quality supports ecosystem functioning.

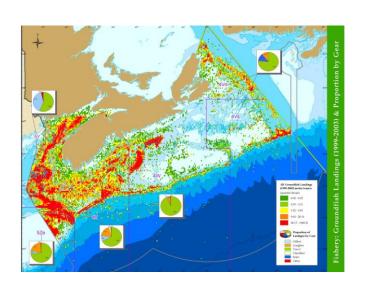
# Spatial conservation action plan

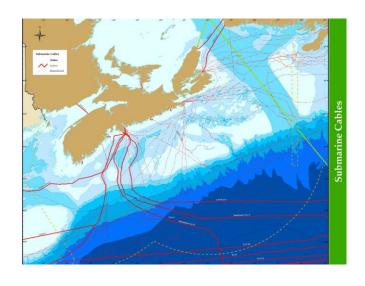
- Share knowledge among stakeholders about the concept and practice of spatial conservation planning, areas that are currently managed for conservation purposes, and areas that have been identified as having conservation value.
- Assess the contribution of existing management areas and identify gaps in conservation efforts.
- Identify and build agreement on areas of conservation priority and make recommendations for action.
- **Steward** the implementation of recommendations (including interim protection options).

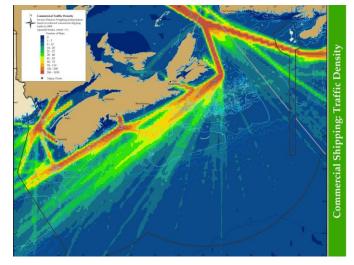


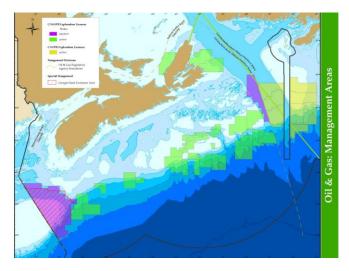


# Multiple use planning

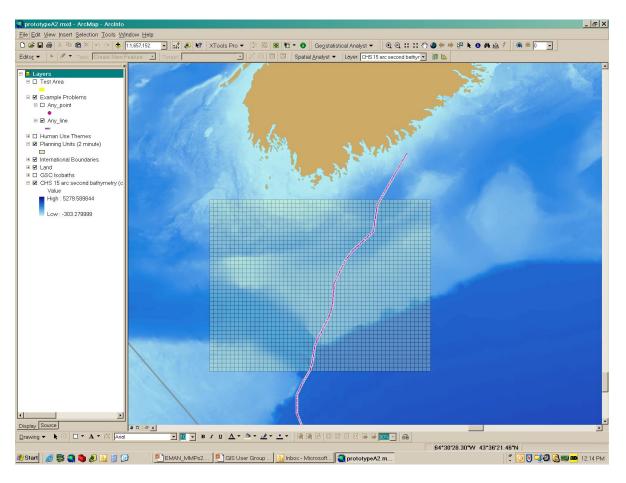




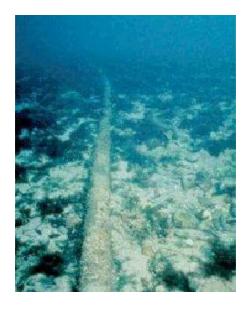




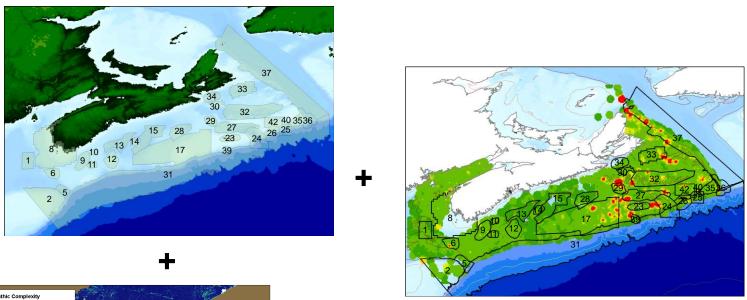
# GIS decision support ("GISMO")

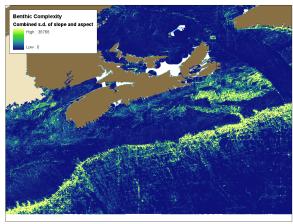


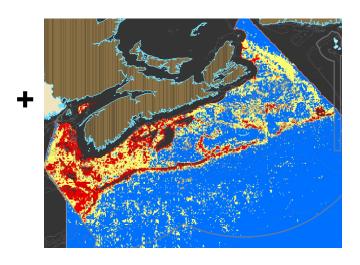




# **MPA** network planning







= 1 "ecological" network (initially 6-10 candidate sites) and 1-2 new Oceans Act "Areas of Interest" this year

# Some Lessons for Integration

- Collaborate and integrate whenever possible
  - use vessels and aircraft of opportunity
  - employ other laws and management frameworks
  - learn by doing; build protocols with experience
- Get the word out widely, listen and respond
  - Target educational materials and outreach through customary sector networks
  - Provide interpretation and at-sea direction for user groups. ("What does it mean for me?")
- Employ non-regulatory & voluntary measures
  - Operator guidelines (e.g., avoidance)
  - Interagency arrangements and agreements
  - Industry stewardship & codes of practice



