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Canada's oceans  
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# Oceans Act Marine Protected Areas (DFO)

Presented to the National Advisory Panel on  
Marine Protected Area Standards  
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Ottawa, ON

Canada

# Purpose of this Presentation

Provide an overview of:

1. *Oceans Act* Marine Protected Areas (MPAs)
2. Process to establish *Oceans Act* MPAs (5 steps)
  - i. Conservation Objectives
  - ii. General Prohibitions & Allowed Activities
3. The risk approach applied to *Oceans Act* MPAs
4. Case studies
5. Proposed amendments to Canada's *Oceans Act* and the *Canada Petroleum Resources Act*.

# 1. Oceans Act Marine Protected Areas (OA MPAs)

An OA MPA is a geographically defined marine space in the internal waters, territorial sea or exclusive economic zone of Canada.

Designated under section 35 of the *Oceans Act* for the conservation & protection of:

- Commercial and non-commercial fishery resources & their habitats;
- marine mammals & their habitats;
- endangered or threatened marine species & their habitats;
- unique habitats;
- areas of high biological productivity or biodiversity; and,
- any other marine resource or habitat as is necessary to fulfil the mandate of the Minister.

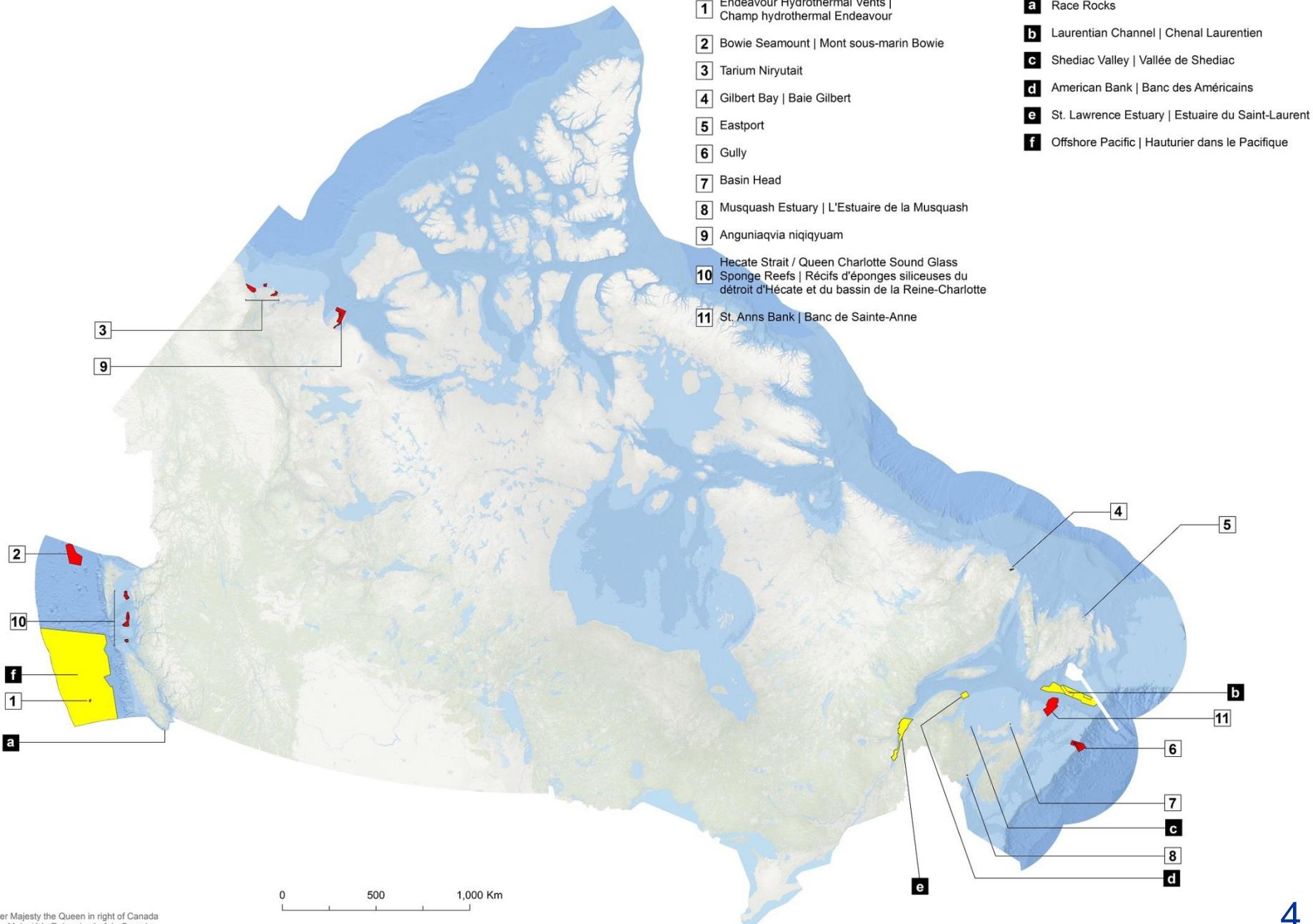
# 1. Oceans Act Marine Protected Areas (OA MPAs)

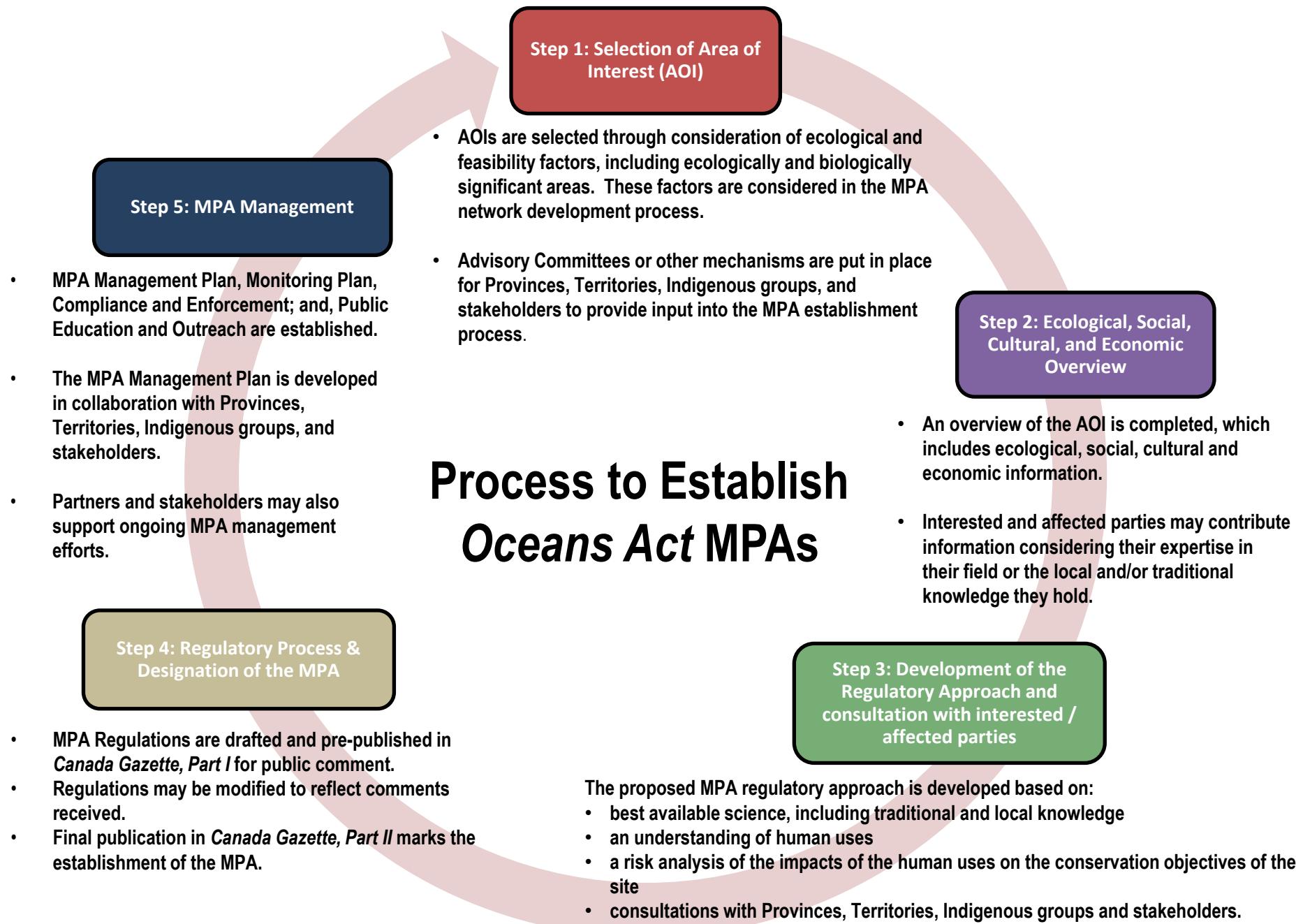
OA MPAs are designated by Governor in Council regulations, on the recommendation of the Minister of Fisheries, Oceans and the Canadian Coast Guard.

MPA regulations may prescribe measures that include but are not limited to:

- the zoning of MPAs,
- the prohibition of classes of activities within MPAs, and
- any other matter consistent with the purpose of the designation.

DFO ensures compliance with MPA regulations through distinct, yet integrated components, including aerial surveillance, vessel surveillance, and electronic monitoring.





# Process to Establish Oceans Act MPAs

## 2. Process to Establish Oceans Act MPAs: Conservation Objectives

The proposed boundary and the conservation objectives are determined based on biophysical & ecological information that characterizes the area.

### Conservation objectives...

- ... specify the desired state of what we want to protect in the MPA.  
Example: To protect the biodiversity, structural habitat and ecosystem function of the glass sponge reefs.
- ...are the key elements on which the design of the MPA (regulatory measures and boundary & zoning) is based.
- ...provide the standard against which to measure success when evaluating MPAs.

## 2. Process to Establish Oceans Act MPAs: General Prohibitions & Allowed Activities

General prohibitions: It is prohibited to carry out any activity that disturbs, damages, destroys or removes from the MPAs any living marine organism or any part of its habitat or is likely to do so.

Certain activities are always allowed in MPAs (standard exceptions to the general prohibitions):

- activities for public safety, national defence, national security, law enforcement or to respond to an emergency.
- scientific research and monitoring activities if they increase knowledge of the MPA, assist with the MPA management and do not contravene the conservation objectives.

Other activities allowed to occur in an MPA are determined based on:

- the risk posed by these human activities on the conservation objectives;
- legal requirements, treaty rights and international agreements; and,
- the views of Provinces, Territories, Indigenous groups, industry, ENGOs, academia, coastal communities and other stakeholders.

### 3. Risk Approach applied to OA MPAs

Key risk question: What is the risk posed by human activities currently occurring in the area or those foreseeable in the near future on the achievement of the conservation objectives?

The level of risk accounts for the impacts of the activity, the likelihood of that impact occurring and the uncertainty about the information regarding impact and likelihood.

Activities that pose a low or negligible risk to the achievement of the conservation objectives are allowed to occur.

Activities that carry too high of a risk (that cannot be mitigated) to the achievement of the conservation objectives are not allowed in the MPA.

### 3. Risk Approach applied to OA MPAs

To be allowed in the MPA, activities may be subject to conditions in order to lower their risk to a point where the conservation objectives could be achieved. Examples of conditions:

- activity may be allowed to occur only in a specific zone of the MPA,
- activity may be allowed to occur only within a specific period of the year,
- use of specific gear,
- vessel speed limit, etc.

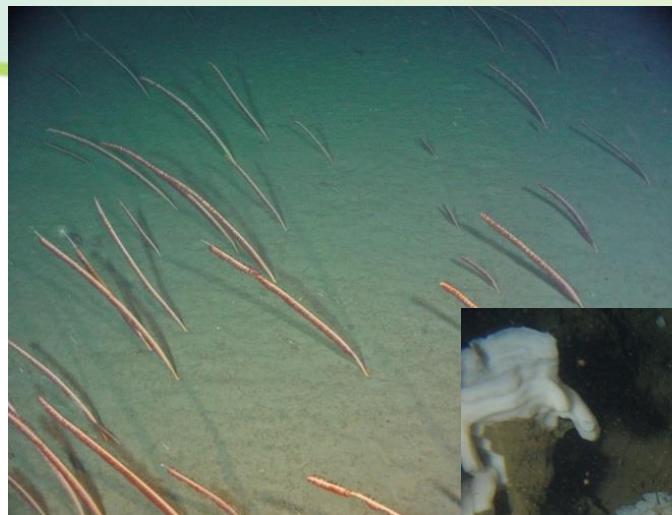
#### **To date, what this has meant is:**

Where the objective of the MPA is to protect a sensitive benthic habitat, such as a coral or sponge concentration, it is very likely that bottom contact activities (e.g., seabed mining, oil and gas extraction, bottom trawl fishing and dredging) will be prohibited.

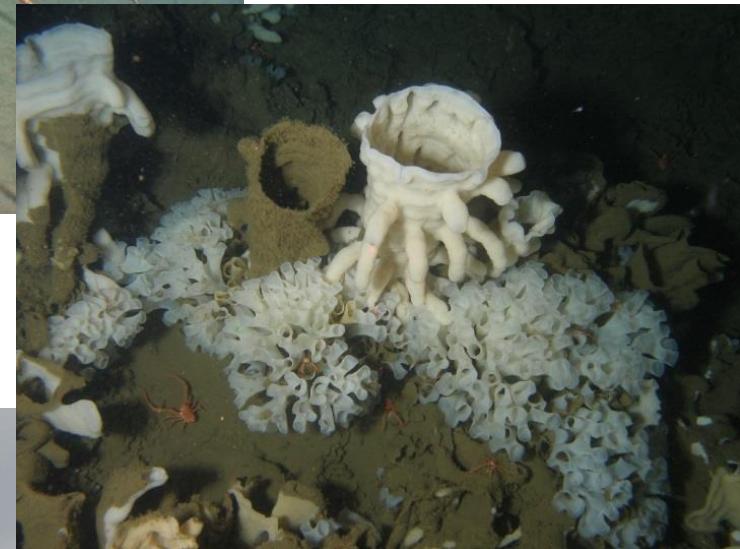
Where the objective of the MPA is to protect a species, the activities to be prohibited or allowed in the MPA will be determined on the basis of the specific protection needs of that species and the risk from human activities on that species. For example, to protect particular species of fish, certain fishing gears will be prohibited.

## 4. Case Studies

### I. St. Ann's Bank MPA



### II. Hecate Strait & Queen Charlotte Sound Glass Sponge Reefs MPA



### III. Tarium Niyutait MPA



# St. Anns Bank MPA

<b>Conservation objectives</b>	To conserve & protect habitat, biodiversity and biological productivity.
<b>Risk analysis results</b>	<p><b><u>Seismic activity</u></b>: High risk to fish (primarily due to impacts on at-risk and depleted species), leatherback turtles and top predators (primarily at-risk cetaceans).</p> <p><b><u>Exploratory drilling</u></b>: High risk to benthic invertebrates from operational discharges (drill muds and cuttings).</p> <p><b><u>Drilling noise</u></b>: Medium risk to leatherback turtles and top predators (marine mammals).</p> <p><b><u>Accidental spills and blowouts</u></b>: High risk to all conservation priorities.</p> <p><b><u>Bottom and midwater trawl</u></b>: High risk to fish conservation priorities and high risk to benthic habitats and sensitive benthic/structure-forming species.</p> <p><b><u>Pot and gillnet fisheries</u></b>: Snow crab and whelk pot fisheries posed medium to high risks to turtles and marine mammals due to entanglement, but low or very low risks to most other conservation priorities. The lobster pot fishery and gillnet fisheries for herring roe and bait received low or very low risk scores for all conservation priorities.</p> <p><b><u>Seal harvesting</u></b>: Low risk to top predators.</p>
<b>Activities allowed (Y/N)</b>	<p><b><u>Oil and gas exploration and production</u></b>: No.</p> <p><b><u>Fishing</u></b>: Yes, with conditions.</p> <p>In Zone 1: only Food, Social and Ceremonial Fishing and fishing for seals are allowed.</p> <p>In Zone 2: commercial and recreational fishing by means of pot, trap, rod and reel, harpoon, bottom longline or handline, gillnet or diving are allowed.</p> <p>In Zones 3 and 4: commercial and recreational fishing by means of pot, trap, rod and reel, harpoon, bottom longline or handline are allowed.</p>

# Hecate Strait MPA

<b>Conservation objectives</b>	To conserve the biological diversity, structural habitat, and ecosystem function of the glass sponge reefs.
<b>Risk analysis results</b>	<p>Due to fragile structure and slow recovery rates of the three species of reef-building sponges, any activities which have the potential to come into contact with the reefs are categorized as high risk.</p> <p>Activities that cause sedimentation in the vicinity of the reef are generally categorized as medium risk.</p>
<b>Activities allowed (Y/N)</b>	<p><u><b>Navigation:</b></u> Yes, but no anchoring is allowed in the Core Protection Zone (CPZ), where the reefs are located.</p> <p><u><b>Oil &amp; gas:</b></u> No.</p> <p><u><b>Fishing:</b></u> No, in the CPZ. Yes, with conditions, in the Adaptive Management Zone (AMZ) and the Vertical Adaptive Management Zone (VAMZ):</p> <ul style="list-style-type: none"><li>• AMZ &amp; VAMZ: if it is not likely to damage, destroy or remove any part of the glass sponge reefs.</li><li>• VAMZ: only commercial fishing using midwater trawl, midwater hook and line, troll, seine or gillnet and recreational fishing using midwater hook and line are allowed.</li></ul>

# Tarium Niriyutait MPA

<b>Conservation objectives</b>	<ul style="list-style-type: none"><li>• To conserve &amp; protect beluga whales and other marine species (anadromous fish, waterfowl and seabirds), their habitats and their supporting ecosystem.</li><li>• To ensure the long-term sustainable management of the summering stock of beluga whales &amp; their habitat.</li><li>• To preserve the harvesting traditions of the Inuvialuit people in the Inuvialuit Settlement Region.</li><li>• To prohibit specific activities or classes of activities that could potentially negatively impact beluga or any part of the ecosystem in the areas upon which they depend.</li></ul>
<b>Results based on a Pathways of Effects Model</b>	<p><b><u>Oil &amp; gas:</u></b></p> <p>Primary issues: exposure of biota to operational waste discharges, seismic noise, and accidental oil spills and/or blowouts. Beluga avoid seismic activity and can maintain distances of several kilometres. This may cause disruptions in habitat utilization. Mercury accumulation as a result of sediment disturbance can also affect the health of Beluga and other marine species within the MPA. However, a formal risk assessment is required in order to determine the extent to which these activities may affect belugas.</p>
<b>Activities allowed (Y/N)</b>	<p><b><u>Oil &amp; gas:</u></b> Yes, with conditions. Oil &amp; gas activities are allowed in order to recognize pre-existing rights. However, activities must adhere to conditions including:</p> <ul style="list-style-type: none"><li>• activities are not likely to result in the disturbance, damage, destruction or removal of a marine mammal.</li><li>• activities are allowed only when the MPAs are ice-covered as there are no belugas present in the MPAs at that time.</li><li>• activities are limited to the Special Management Zone in the Okeevik MPA.</li></ul> <p><b><u>Fishing:</u></b> Yes. Commercial, recreational and Aboriginal fishing carried out in accordance with the <i>Inuvialuit Final Agreement</i> and the <i>Fisheries Act</i> are allowed.</p>

## 5. Proposed Amendments to the *Oceans Act*

Fisheries and Oceans Canada (DFO), Natural Resource Canada (NRCan) and Crown-Indigenous Relations and Northern Affairs (CIRNA) introduced Bill C-55 in Parliament to amend the *Oceans Act* and the *Canada Petroleum Resources Act* in June 2017.

Once Bill C-55 receives Royal Assent, the Minister will have authority to designate Interim Protection MPAs (IP MPAs) using a Ministerial Order Regulation (MO), leading to a two-stage MPA establishment process:

1. A Ministerial Order to designate MPA boundaries and ‘freeze the footprint’ of ongoing activities within an IP MPA (i.e., no new activities are permitted), based on initial science and consultations; and
2. Within 5 years, the IP MPA is replaced by a permanent MPA through Governor in Council regulations based on additional science and consultations (establishment process described previously).

# “Freezing the Footprint” Concept

Amendments identify a new definition of “ongoing activity”:

- a) Has occurred/been carried out within a period of **1 year** immediately before the MO comes into force and does not require a permit/licence/authorization; OR
- b) Has occurred/been carried out within a period of **1 year** immediately before the MO comes into force and does require a permit/licence/authorization; OR
- c) Has not occurred/been carried out before the MO comes into force, but is authorized to be carried out in the time period after the MO comes into force under a permit/licence/authorization which has been issued before the MO comes into force.

Activities that fall under the definition of “ongoing” cannot be prohibited by an MO unless they are regulated under federal fisheries legislation. In those cases, the Minister may further restrict ongoing activities in the IP MPA.

Activities for purpose of emergency response, public safety, national defence, national security or law enforcement, and marine scientific research activities that are consistent with the purpose of the designation are always permitted to occur in an IP MPA.

# Proposed Amendments to the *Canada Petroleum Resources Act*

The amendments of the *Canada Petroleum Resources Act* would allow for the making of prohibition orders prohibiting oil and gas activities in designated Oceans Act Marine Protected Areas (OA MPAs) when and where appropriate;

- Companion piece to the OA MO to “freeze the footprint”

The amendments would create a new authority for the Minister of Natural Resources Canada and the Minister of Crown-Indigenous Relations and Northern Affairs to cancel an offshore oil and gas interest(s) in designated OA MPAs and to provide compensation for the cancelled interest(s).

- Natural Resources Canada or Crown-Indigenous Relations and Northern Affairs would lead negotiations with interest owners.

# Amendments to Bill C-55 by SCOFO

The House of Commons Standing Committee on Fisheries and Oceans amended Bill C-55 in December 2017 to include ecological integrity as a reason for designating MPAs under s.35(1) of the *Oceans Act*.

## The amendments:

- Include under s.35(1) the following “(f) the conservation and protection of marine areas for the purpose of maintaining ecological integrity”
- And add a new s.35(1.1) “For the purpose of paragraph (1)(f), ecological integrity means a condition in which (a) the structure, composition and function of ecosystems are undisturbed by any human activity; (b) natural ecological processes are intact and self-sustaining; (c) ecosystems evolve naturally; and (d) an ecosystem’s capacity for self-renewal and its biodiversity are maintained.”

# Questions?