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Northwest Atlantic Fisheries Organization

Report of the NAFO Joint Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) Meeting

14 July 2017
Dartmouth, Nova Scotia, Canada

NAFO
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2017

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1. Opening by the co-Chairs, Robert Day (Canada) and Andrew Kenny (EU)

Andrew Kenny (EU) opened the meeting at 09:15 hours on Friday, 14 July 2017 at the NAFO Headquarters in Dartmouth, Nova Scotia, Canada.

The presiding Chair welcomed representatives from the following Contracting Parties (CPs) – Canada, European Union, Iceland, Norway, Russian Federation, and United States of America. Two delegates participated via teleconference WebEx. The presence of observers was also acknowledged (Annex 1). He informed the Working Group (WG) that co-Chair Robert Day apologized for his absence and that he (Robert Day) could no longer serve as co-Chair due to other commitments.

2. Appointment of Rapporteur

The Senior Fisheries Management Coordinator and Scientific Council Coordinator and (NAFO Secretariat) were appointed co-Rapporteurs of this meeting.

3. Adoption of Agenda

The previously circulated provisional agenda was adopted with one addition. Canada requested the opportunity to provide an informational presentation regarding its domestic marine conservation targets. This was inserted as agenda item 7.a (Annex 2).

4. SC response to FC requests for advice:

a. Consideration of 2014 SC advice regarding extent of the New England and Corner Rise Seamounts (Annex 13 of FC Doc. 16-20)

At the 2016 Annual Meeting, the Fisheries Commission requested the WG consider the 2014 SC advice and "develop recommendations to the FC, as appropriate, on amendment to the current polygons for those seamounts, pursuant to that advice, as well as any additional management advice necessary for their protection, as appropriate." (FC Doc. 16-20).

The 2014 SC advice is: *The polygons of the closures for both the New England and Corner Rise seamounts be revised to the north, east and west in the NAFO Convention Are to include all the peaks that are shallower than 2000 meters (as shown in Figure 15 of the SC 2014 Report).* Figure 1.5.4 of SCS Doc. 16-21 shows a polygon encompassing the seamounts of the NAFO Regulatory Area belonging to the New England complex and outside of the current NAFO seamount closure (Annex 3).

There was general agreement that the peaks shallower than 2000 metres must be protected. However, it was noted by several WG participants that the possible extension to the New England Seamount closure suggested as depicted by SC WG-ESA in 2016 (Figure 1.5.4 of SCS Doc. 16-21, Annex 3) includes very large areas of abyssal plain in addition to the seamounts. The necessity of having such large areas of ocean floor at unfishable depths closed to bottom fishing activities was questioned. It was agreed that SC should be requested to provide advice on possible revised boundaries for the protection of seamounts.

No agreement was reached on the timing to establish a more suitable (fit-for-purpose) boundaries for the New England seamount closure.

The EU expressed that "it was always keen to act on the VMEs and seamounts protection when all scientific data was clear and sound and the objectives behind any measures were clear. For the time being, on this particular point, more work needs to be done on first clarifying the exact boundaries of the area that would need to be closed. In addition, there is no urgency of acting in this case, as there is currently no fishing activity in the area. Instead, this discussion would be better placed in the wider context of the upcoming review of the closures policy to take place in 2020. This would enable a deeper reflection on how to better achieve our objectives and have a fit for purpose policy that is consistent across the field and takes into account the latest available science, instead of continuing the practice of incremental "ad-hoc" actions".

The USA and Iceland noted that the WG should provide advice on refinements to the closure in 2017.

An agreed recommendation was drafted with respect to the New England sea mounts occurring at depths of less than 2000 metres and falling outside of the current closure. (see agenda item 6).

b. Risk assessment of scientific surveys impact on VME in closed areas (2016 FC Request to SC #3)

The WG endorses the 2017 SC advice that scientific bottom trawl surveys in existing closed areas be avoided if possible and additional work be conducted as soon as possible to further evaluate the implications of excluding RV surveys in closed areas on stock assessment metrics. No specific recommendation was drafted.

5. Discussion of ongoing matters:

a. Assessment of NAFO bottom fisheries SAI (2016 FC Request to SC # 6)

The presiding Chair (as member of SC) reported that in 2016 and 2017, SC made further progress on assessing the overlap of NAFO fisheries with VME based on daily catch reports. Work to address other parts of this request will be conducted in 2018, noting that progress can only be achieved with appropriate participation of experts.

The analysis in 2016 focused on methods to potentially evaluate the recovery potential and functional significance of sea pen VME. In addition, a review of the functional significance of other VME species (including sea pen) was initiated.

The activities are funded by EU NEREIDA and are not yet finalized. The EU however indicated that it is actively considering ways of expanding the NEREIDA funding for one more year. Noting that the EU survey encompasses a large area and analysis would take time to complete, Canada had offered to support the analysis.

b. Progress of analysis undertaken by EU NEREIDA funded research project

See agenda item 5.a above.

c. Update on identification and mapping of sensitive species and habitats in the NAFO area

The presiding Chair (as member of SC) provided an up-date on VME biomass records from Spanish trawl surveys in 2016 and Canadian trawl surveys in 2015. It was noted that the VME polygon analysis using Kernel Density Estimation (KDE) analysis conducted in 2014 will be up-dated to include all the recent data from 2014 – 2017 surveys. The results of the updated VME KDE polygon analysis will be assessed at WG-ESA in 2017 and both support of the 2018 reassessment of 'sea pen' closed Area 14 and the more extensive review of closed Areas in 2020. Canadian research in situ photographic surveys in the NAFO Regulatory Area conducted in 2015 and 2016 demonstrate the utility of photographic techniques in quantifying VME species abundance under different habitat conditions. The includes the impacts of fishing which was noted to be particularly important in further quantifying the functional criteria required in support of assessing SAI and the reassessment of bottom fisheries in 2021. New survey data from the New England 'Kelvin' seamount lying

outside of the current closure shows an abundance of VME indicator species, notably large gorgonians and associated epifauna (see agenda item 4.a).

d. Further development and application of the Ecosystems Approach to Fisheries (EAF) Roadmap, including further consideration of any issues raised at the Scientific Council Meeting, 01-15 June 2017

Dr. Pierre Pepin, as member of SC, presented the work undertaken by SC WG-Ecosystem Science and Assessment (WG-ESA) in November 2016 and reviewed by SC in June 2017. Important developments included significant development of Ecosystem summary sheets and further improvements to the models of Fisheries Productivity Potential and the NAFO roadmap. No specific recommendation arose out of this work in 2017 and work will continue. Details on this work can be found in the WG-ESA 2016 meeting report (SCS Doc. 16-14). It was pointed out that implementation of the NAFO Roadmap will require Contracting Parties to identify and commit additional human resources. The scientists in the WG were urged to be more pro-active in "recruiting" fellow scientists to be actively involved in the implementation of the Roadmap.

In his presentation, Dr. Pepin drew attention to changes in survey biomass levels for many of the species sampled in Canadian surveys of the Newfoundland Shelf and Grand Bank. In particular, the total biomass in the fall 3LNO survey has fallen 40% from the 2010-2013 level. This has coincided with a change in plankton species composition and in environmental drivers, and may indicate a change in the productivity of the system.

e. Alfonsino fishery on seamounts in the NAFO Regulatory Area.

The WG noted the SC advice on alfonsino fishery on seamounts as documented in 2013 and 2015 SC Reports and the discussions at the FC in 2015 and 2016 (FC Doc. 15-23 and FC Doc. 16-20) regarding possible management measures.

The SC Chair Kathy Sosebee informed that alfonsino stock in the NAFO Regulatory Area was monitored at its June 2017 meeting. SC concluded that there is no reason to revise scientific advice provided earlier. The WG noted that establishing conservation and enforcement measure for the alfonsino fishery management is beyond the mandate of this Working Group. It agreed that this is issue would be more appropriate for discussion by the Commission.

6. Recommendations to forward to the Commission and Scientific Council

Consideration of 2014 SC advice regarding extent of the New England and Corner Rise Seamounts (Annex 13 of FC Doc. 16-20)

The WG-EAFFM **recommends** that:

- **Scientific Council in its September meeting should develop revised closed area boundaries for potential closures encompassing all seamounts at depth less than 2000m in the New England seamount chain, taking into account that the current proposed boundary includes large areas that do not contain seamounts. The Commission should consider the timing and strategic objective of these closures in the context of the scheduled review of closures in 2020.**

7. Other Matters

a. Presentation: *Canada's Marine Conservation targets for 2017 and 2020: The Role of Fisheries*

For information purposes, Brett Gilchrist of Fisheries and Oceans Canada, made a presentation on Canada's domestic commitments and actions in attaining the UN Sustainable Development Goal 14 and Convention of Biological Diversity Aichi Target 11. A copy of the presentation is included as Annex 4.

b. NAFO Working Group on Improving Efficiency of NAFO Working Group Process

The NAFO Executive Secretary reported on the progress of the WG which comprises the Chairs of the NAFO bodies and other Working Groups.

The Secretariat will forward proposals to the Commission at the Annual Meeting for consideration:

setting aside three (3) two-week periods as windows for Working Groups to meet intersessionally – in February-March, in April-May, and alternating in late July or early August,

revising the Rules of Procedure to streamline the communication mechanism of STACTIC with other bodies,

that this Working Group would continue for another year in order to evaluate the possible consolidation of Terms of Reference of the NAFO Working Groups.

c. Recommendation for a new co-Chair

The WG agreed to recommend Elizabethann English (USA) to replace Robert Day (Canada) as co-Chair.

d. Timely availability of meeting reports

USA expressed its frustration that the SC WG-ESA November 2016 Meeting Report was not available in timely manner. This led to the inadequate time for the delegations to absorb the report and to have internal discussions and consultations on the results of the SC WG-ESA meeting in advance of this meeting. While agreeing that it is regrettable that the WG-ESA report was delayed, some scientists pointed out that this WG is tasked to review the work of SC rather than WG-ESA, and it is therefore the report of the SC June meeting rather than the WG-ESA report that should be the basis for discussion. All concerned were urged to be mindful about the timely finalization and availability of meeting reports.

8. Adoption of Report

The report was adopted via correspondence.

9. Adjournment

The meeting was adjourned the meeting at 17:15 hours on Friday, 14 July 2017.

Annex 1. List of Participants

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Annex 2. Agenda

1. Opening by the co-Chairs, Robert Day (Canada) and Andrew Kenny (EU)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. SC response to FC requests for advice:
    a. Consideration of 2014 SC advice regarding extent of the New England and Corner Rise Seamounts (Annex 13 of FC Doc. 16-20)
    b. Risk assessment of scientific surveys impact on VME in closed areas (2016 FC Request to SC #3)
5. Discussion of ongoing matters:
    a. Assessment of NAFO bottom fisheries SAI (2016 FC Request to SC # 6)
    b. Progress of analysis undertaken by EU NEREIDA funded research project
    c. Update on identification and mapping of sensitive species and habitats in the NAFO area
    d. Further development and application of the Ecosystems Approach to Fisheries (EAF) Roadmap, including further consideration of any issues raised at the Scientific Council Meeting, 01-15 June 2017
    e. Alfonsino fishery on seamounts in the NAFO Regulatory Area.
6. Recommendations to forward to the Commission and Scientific Council
7. Other Matters
    a. Presentation: *Canada's Marine Conservation targets for 2017 and 2020: The Role of Fisheries*
    b. NAFO Working Group on Improving Efficiency of NAFO Working Group Process
    c. Recommendation for a new co-Chair
    d. Timely availability of meeting reports
8. Adoption of Report
9. Adjournment

Annex 3. New England Seamount Closure discussed under agenda item 4a.

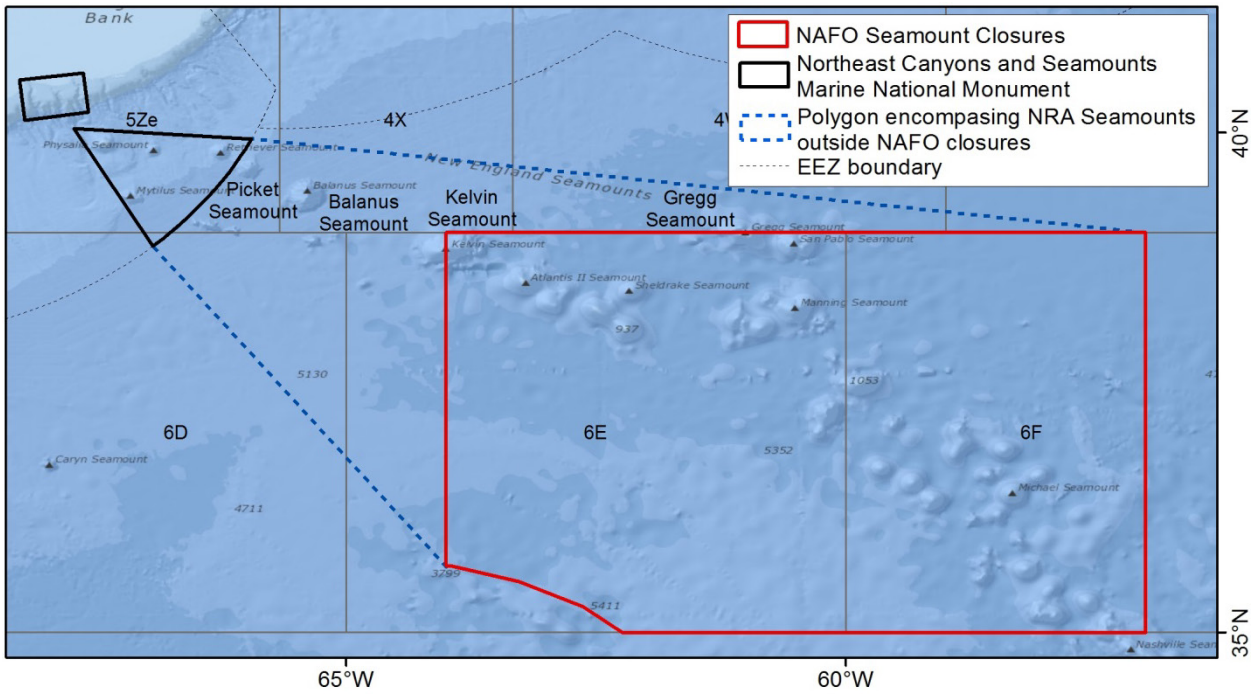
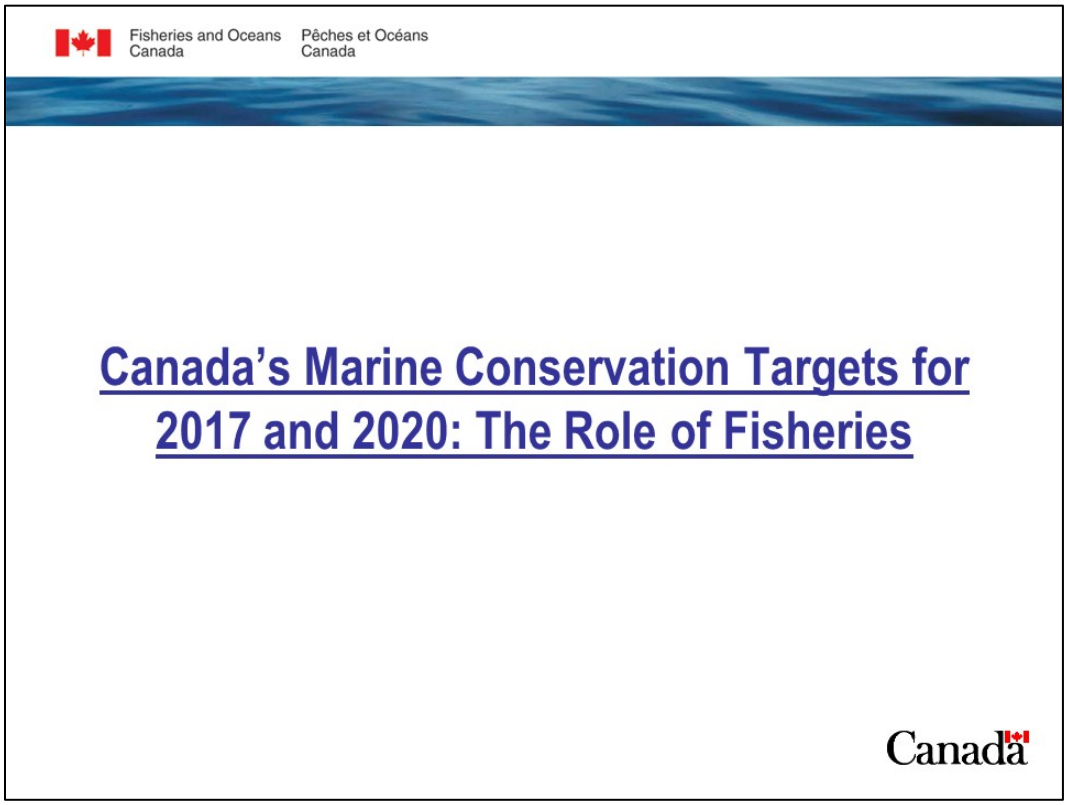
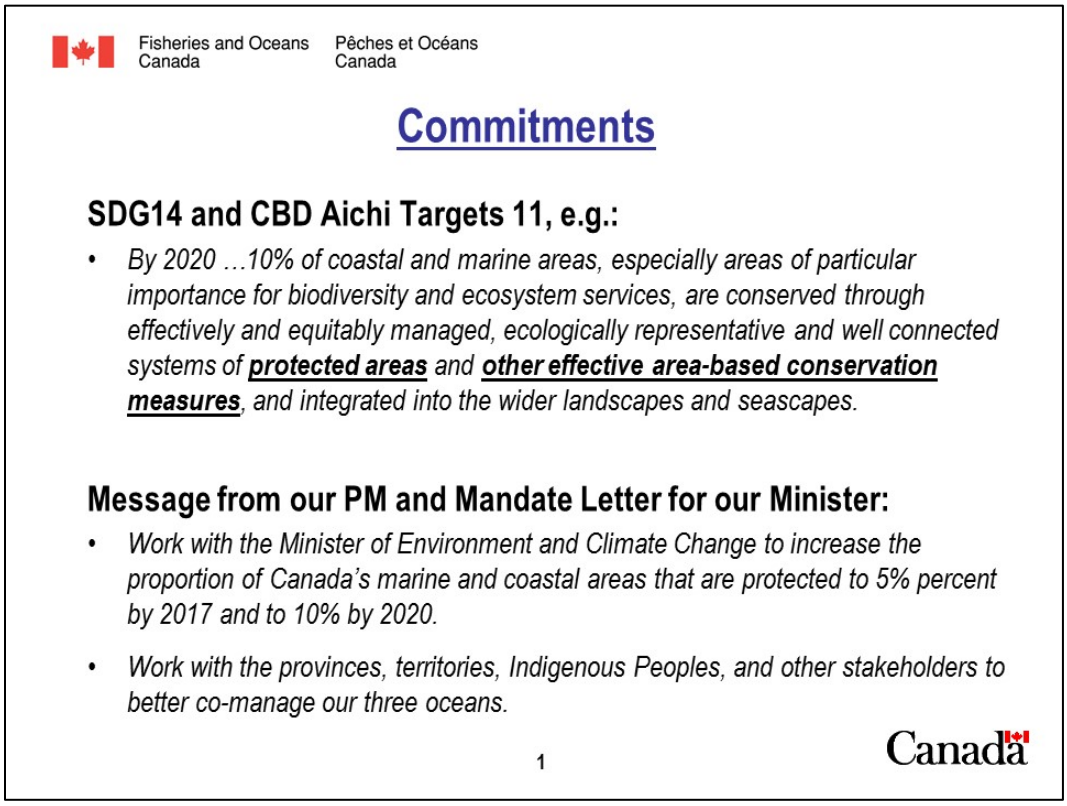


Figure 1. Depiction of NAFO New England Seamount Closure and polygon encompassing NRA seamounts outside the NAFO closure (Source: Figure 1.5.4 of SCS Doc. 16-21).

Annex 4. Presentation: *Canada's Marine Conservation Targets for 2017 and 2020*





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Challenge Ahead and the Tools to Address Them

Coastal/Marine Protection as of 2015: ~50,000 km2 or ~0.9%
Target for 2020: ~ 575,000 km2

Marine Protect Areas (MPAs) - Established by DFO under the ***Oceans Act***
- Conserve ecologically significant and/or distinct marine species, habitats and/or ecosystems through full prohibitions or zone-based restrictions of oceans activity

National Marine Conservation Areas (NMCAs) - Established by Parks Canada
- Protect and conserve representative samples of Canada's oceans and Great Lakes\
- Encourages ecologically sustainable use and protects special/sensitive elements of ecosystems

National Wildlife Area (NWA) - Established by Environment and Climate Change Canada
- wildlife conservation (e.g. seabirds), research - prohibited activities vary by site

Fisheries Management Measures - Established by DFO under the ***Fisheries Act***
- Restrictions on fisheries to protect coastal and marine ecosystems, e.g. area closures, etc.

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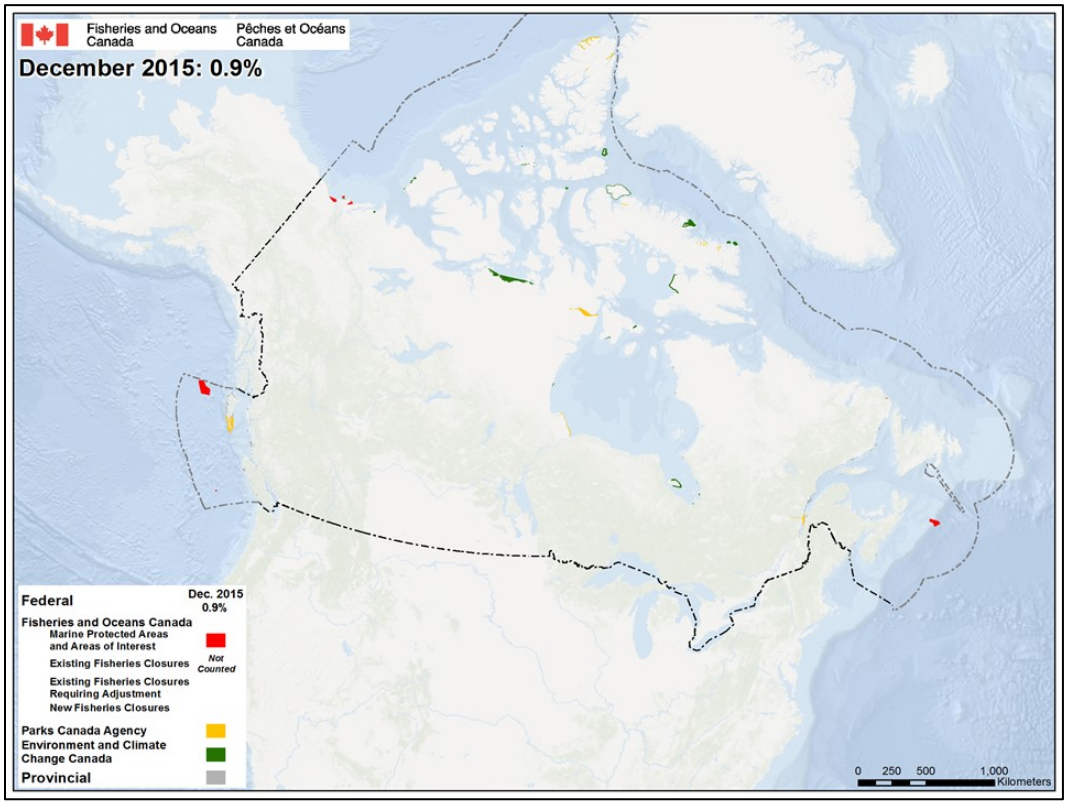

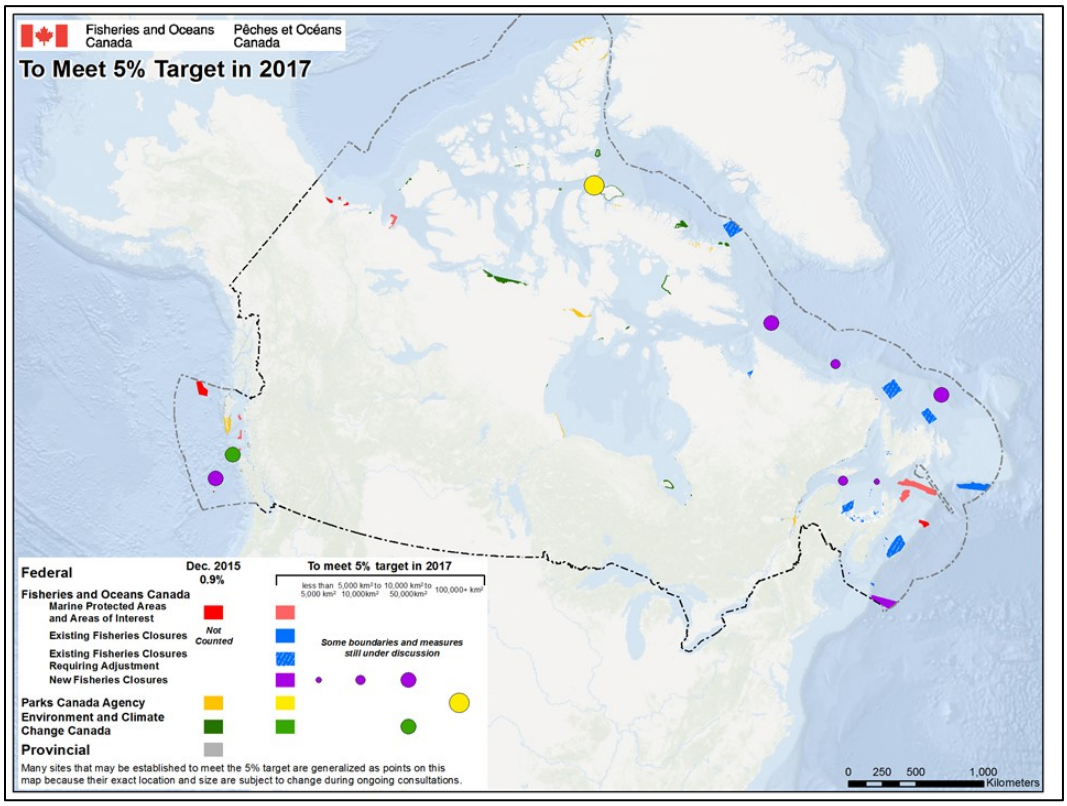

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Principles

1. **Science-based decision making**
   - Data/info sources based on extensive scientific research by Government
   - Traditional ecological knowledge (Indigenous peoples) and local knowledge and experience (industry, NGOs and Academic Institutions)
2. **Transparency**
   - Comprehensive engagement with other federal departments, provincial and territorial governments, Indigenous peoples, industry, NGOs, academia and the public
3. **Advancing reconciliation with Indigenous groups**
   - Respect treaties in existence and support advancing the completion of modern treaties under development; traditional knowledge will be sought

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Canada's MCT Five-Point Plan

1) **Finish What Was Started:**
   - Advance work already underway in areas progressing towards establishment
2) **Protect Large Areas:**
   - Establish new, large Oceans Act Marine Protected Areas in offshore areas where ecologically significant or sensitive areas are located
3) **Protect Areas Under Pressure:**
   - Establish additional *Oceans Act* MPAs in areas under pressure from human activities, for example where we are already advancing MPA network development
4) **Advance Other Effective Area-Based Conservation Measures:**
   - Identify existing and establish new "other measures," such as fisheries closures, particularly to protect sensitive sponge and coral concentrations
5) **Establish MPAs Faster:**
   - Examine how the *Oceans Act* can be updated to facilitate the designation process for MPAs, without sacrificing science, or the public's opportunity to provide input

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Science Advice on "Other Measures"

- No agreed set of international guidelines on "Other Measures", work by IUCN, CBD ongoing
- Canada's 2017 target creates urgent need for guidelines to assess fisheries management measures
- DFO commissioned peer reviewed science advice from the Canadian Science Advisory Secretariat (CSAS) in 2015; report published in 2016 - identified key elements to when testing fisheries management measures:

Geographic location	Duration of implementation
Size of managed area	Location in relation to preferred habitat
Management/conservation objectives	Habitat heterogeneity
Adjacent management practices	Full versus partial protection
Spatial relationships (i.e. connectivity)	

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Important Role of Fisheries-based Measures:

Canadian criteria to determine what qualifies as an "Other Effective Area-Based Conservation Measures":

1. **Clearly defined geographic location**
2. **Conservation or stock management objectives**
   - *Measure must have a conservation or stock management objective AND directly reference at least one of the ecological components of interest in its objective*
3. **Presence of ecological components of interest**
   - *The management measure must contain a habitat important to biodiversity conservation AND a species of regional importance that uses that habitat*
4. **Long-term duration of implementation**
5. **The ecological components of interest are effectively conserved**
   - No human activities incompatible with conservation of the ecological components of interest may occur or be foreseeable within the defined geographic location

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Next Steps

Within Canada

- Consultations with Canadian Provinces, Territories, indigenous partners, industry, NGO and other Canadian stakeholders underway
- Announcements throughout the summer, fall and winter

International

- Work bilaterally and multilaterally to conserve marine and coastal biodiversity and achieve commitments on targets, e.g. Leading work by NAFO on VMEs, NEREIDA, etc.

- CBD process:
  - CoP13 (Dec. 2016): Canada has committed to host a technical workshop on marine "other area-based conservation measures" to support reporting on MCT targets
  - Advice from this expert workshop to be submitted to the CBD's scientific and technical body in July 2018, to inform development of draft guidance on "other measures"
  - Guidance to be submitted to CBD CoP14 for decision (Dec. 2018)

- IUCN undertaking a parallel process to assist with guidance on other effective measures, (eg fisheries management measures), including the hosting of workshops, with a view to providing advice to the CBD

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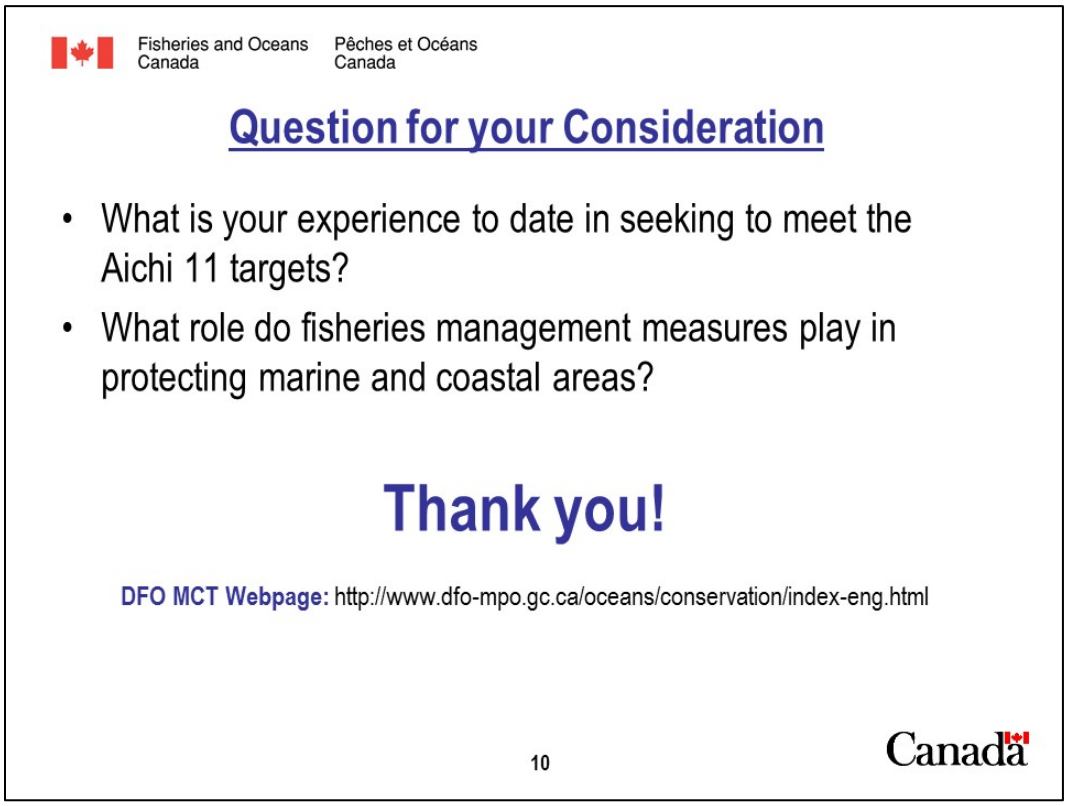
Canada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Question for your Consideration
• What is your experience to date in seeking to meet the Aichi 11 targets?
• What role do fisheries management measures play in protecting marine and coastal areas?
Thank you!
DFO MCT Webpage: http://www.dfo-mpo.gc.ca/oceans/conservation/index-eng.html
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