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Maritimes Region | **Region des Maritimes**

Proceedings of a Maritimes Science Advisory Process to Review the Assessment Report and Proposed Conservation Objectives for St. Anns Bank Area of Interest (AOI)

Compte rendu d'un processus consultatif scientifique de la Région des Maritimes visant l'examen du rapport d'évaluation et des objectifs de conservation proposés pour la zone d'intérêt (ZI) de la région du banc de Sainte-Anne

25-26 January 2012 | **25 et 26 janvier 2012**

Eddy Kennedy
Meeting Chair

Eddy Kennedy
Président de la réunion

Bedford Institute of Oceanography
1 Challenger Drive, P.O. Box 1006
Dartmouth, Nova Scotia
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June 2012 | **Juin 2012**

Canada

Foreword

The purpose of these Proceedings is to document the activities and key discussions of the meeting. The Proceedings include research recommendations, uncertainties, and the rationale for decisions made by the meeting. Proceedings also document when data, analyses or interpretations were reviewed and rejected on scientific grounds, including the reason(s) for rejection. As such, interpretations and opinions presented in this report individually may be factually incorrect or misleading, but are included to record as faithfully as possible what was considered at the meeting. No statements are to be taken as reflecting the conclusions of the meeting unless they are clearly identified as such. Moreover, further review may result in a change of conclusions where additional information was identified as relevant to the topics being considered, but not available in the timeframe of the meeting. In the rare case when there are formal dissenting views, these are also archived as Annexes to the Proceedings.

Avant-propos

Le présent compte rendu a pour but de documenter les principales activités et discussions qui ont eu lieu au cours de la réunion. Il contient des recommandations sur les recherches à effectuer, traite des incertitudes et expose les motifs ayant mené à la prise de décisions pendant la réunion. En outre, il fait état de données, d’analyses ou d’interprétations passées en revue et rejetées pour des raisons scientifiques, en donnant la raison du rejet. Bien que les interprétations et les opinions contenus dans le présent rapport puissent être inexacts ou propres à induire en erreur, ils sont quand même reproduits aussi fidèlement que possible afin de refléter les échanges tenus au cours de la réunion. Ainsi, aucune partie de ce rapport ne doit être considéré en tant que reflet des conclusions de la réunion, à moins d’indication précise en ce sens. De plus, un examen ultérieur de la question pourrait entraîner des changements aux conclusions, notamment si l’information supplémentaire pertinente, non disponible au moment de la réunion, est fournie par la suite. Finalement, dans les rares cas où des opinions divergentes sont exprimées officiellement, celles-ci sont également consignées dans les annexes du compte rendu.

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SUMMARY

A Maritimes Science Advisory Process to review the assessment report and conservation objectives for St Anns Bank Area of Interest was held on 25-26 January 2012 at the Northwest Atlantic Fisheries Organization Headquarters in Dartmouth, Nova Scotia. Participation in this meeting included Fisheries and Oceans Canada (DFO), the Canada-Nova Scotia Offshore Petroleum Board, Nova Scotia Department of Energy, non-government organizations, academics, aboriginal organizations, fishing industry, and the petroleum industry.

SOMMAIRE

Un processus consultatif scientifique de la Région des Maritimes visant l'examen du rapport d'évaluation et des objectifs de conservation proposés pour la zone d'intérêt (ZI) de la région du banc de Sainte-Anne a été organisé les 25 et 26 janvier 2012 à l'administration centrale de l'Organisation des pêches de l'Atlantique Nord-Ouest à Dartmouth, en Nouvelle-Écosse. Les participants à cette réunion comprenaient des représentants de Pêches et Océans Canada (MPO), de l'Office Canada-Nouvelle-Écosse des hydrocarbures extracôtiers, du ministère de l'Énergie de la Nouvelle-Écosse, des organisations non gouvernementales, du milieu universitaire, des organisations autochtones, de l'industrie de la pêche et de l'industrie pétrolière.

INTRODUCTION

The Chair of the meeting, E. Kennedy, welcomed participants (Appendix 1) and thanked them for coming to the DFO science advisory process to review the conservation priorities, conservation objectives, and the methodology proposed to complete the ecological risk for St Anns Bank Area of Interest (AOI). In addition, there would be an opportunity for the participants to provide comments on the background material provided for the meeting, i.e., the draft Ecological Overview Report.

The Chair noted that this was a science peer-review and advisory meeting, meaning the primary goals of the meeting were 1) to provide an objective review of the working paper to ensure the information was complete, and 2) to review the science advisory report based on this information.

The Chair provided a brief overview of the Canadian Science Advisory Secretariat (CSAS) science advisory process and invited the participants to review the meeting Terms of Reference (Appendix 2) and Agenda (Appendix 3). No revisions or corrections were made to the Terms of Reference or Agenda.

To assist in this review, B. Hatcher (Cape Breton University) and C. DiBacco (DFO Science, Maritimes Region) acted as external reviewers. In addition, the chair encouraged other participants to provide a critical review of the information presented based on their knowledge and expertise.

To guide discussions, a working paper had been prepared. A Science Advisory Report (SAR) was also to be produced as a result of this meeting. This Proceedings report is the record of the discussion of the meeting.

ASSESSMENT

Overview of Marine Protected Area Establishment Process
Presenter: D. Fenton

Presentation Highlights

There are global and national commitments to establish Marine Protected Areas (MPAs), with eight MPAs established in Canada. It is a requirement under the Health of the Oceans Initiative to identify an additional six AOIs to become *Oceans Act* MPAs. MPAs are identified through a series of five steps outlined in the National Framework for Establishing and Managing MPAs. The Maritimes Region is currently completing Step 2 (Ecological Overview and Assessment of AOI) of the five step process.

Within the Maritimes Region, candidate AOIs were identified through a data-driven Marxan analysis in 2007-2009 by the Oceans and Coastal Management Division (Horsman et al. 2011). Consultations were conducted with stakeholders and a report outlining the results was completed. An AOI Advisory Committee will be created to help stakeholders outside of DFO to participate in the establishment of the AOI.

An Ecological Overview and Assessment Report, comprised of an ecosystem overview, a social and economic overview, and an assessment component will be completed to help design the MPA.

Discussion

There was clarification that the MPA is designated at Step 4 of the 5 step process.

St Anns Bank: Biodiversity, Productivity and Habitat
Presenter: N. Shackell

Presentation Highlights

A Marxan analysis, which allows the overlay of a large number of data layers to optimize conservation objectives, was completed to help design a network of MPAs and select the next AOI. Design principles included representation (e.g., seabed features and environmental conditions) and distinctive or significant features (e.g. important habitat, areas of high biodiversity, presence of sensitive species). St Anns Bank did not possess the highest biodiversity, productivity or habitat values; however, the area was consistently selected as a network component in the analysis.

St Anns Bank is a representative area of the Eastern Scotian Shelf (ESS) where its habitat diversity leads to species diversity. Half of the species found on the ESS are found in St Anns Bank, with species being found at the full range of depths. This variation in depth may be linked to species diversity. Individuals within a species are also found at a range of depths, likely indicating the presence of different life-history stages. The highest fish density was found on the shelf slope.

Discussion

There was a discussion regarding the data that was used to complete the analysis. It was suggested that the use of data from DFO's summer research vessel, snow crab, and halibut long line surveys may provide a biased view of species presence and timing within St Anns Bank.

There was a discussion concerning the potential for gaps in the Marxan analysis that may impact its conclusions. Given the large number of layers, it is considered unlikely that the addition or absence of several layers would considerably change the analysis/outcome. The outcome may look different, however, if weighting of layers were altered. Despite the infinite number of solutions, St Anns Bank was repeatedly selected as part of the network.

Ecological Overview of St Anns Bank
Presenter: A. Serdynska

Presentation Highlights

An ecological overview of St Anns Bank is currently being prepared and will serve as the basis for the assessment report, conservation objectives and the delineation of the AOI boundaries. Subject matter experts provided references, guidance and review of the appropriate sections within the overview. Summaries of the physical setting, biology, trophic level and ecosystem were presented.

Discussion

A participant inquired how the relative ranking of importance of areas to each species was evaluated if the stock definition for the species was not taken into account. It was noted that St Anns Bank may appear as hotspots for a number of species if their full distribution was not considered. The presenter indicated that the analysis was completed for each stock when the stock definition was known. It was clarified that the maps represent densities of fish and not the preferred habitat of a species. Implying they are preferred habitat may be misleading as preferred habitat may also represent areas where important life history stages are completed, and the maps are compiled from data that represent one point in the life cycle.

A participant inquired how the MPA will be managed by DFO, given the proximity of the MPA to the Gulf Region and the potential for impacts from the Gulf of St Lawrence. A close partnership is required with the Gulf Region as there may be connectivity issues from a network planning standpoint.

Conservation Priorities for St Anns Bank
Presenter: J. Ford

Presentation Highlights

Conservation priorities for St Anns Bank were selected through a variety of criteria, including policy (e.g., *Oceans Act*), network (e.g., representation) and ecological (e.g., abundance) considerations, and have been grouped under three categories: productivity, biodiversity and habitat. Conservation priorities are being used to develop MPA conservation objectives. The list of draft conservation priorities for the AOI were presented and include: 4Vn American plaice, 4T and 4Vn Atlantic cod, redfish, herring, white hake, sponges, sea pen, Atlantic wolffish, porbeagle, leatherback turtle, seabirds, cetaceans, fish diversity, and representative habitat. The audience was asked to consider whether there are other priorities/criteria that need to be considered and whether the criteria have been applied consistently.

Discussion

The status of two other candidate MPAs for the ESS was questioned. The presenter indicated that the other two areas are not currently being evaluated; however, they will likely re-emerge in the context of MPA network planning.

It was also questioned whether the point of reference for the AOI was the ESS or the whole Scotian Shelf. It was clarified that the AOI is referenced in context of the ESS Integrated Management Large Ocean Management Area; however, the point of reference may change depending on the species that is being considered and the data that is available. Unless indicated otherwise, the ESS is the frame of reference.

Differences between the Laurentian Channel and St Anns Bank AOIs were indicated. It was noted that there are no guidelines/rules to ensure consistency between AOIs. Each region is completing their assessment differently because it is a new process and case by case consideration is important.

Listing ecosystem components was considered, by some participants, to be a reductionistic approach to the application of priorities with the AOI. The list of components, as currently presented, provides an opportunity for debate by those groups/individuals interested in a particular species.

There was a discussion concerning the ecological connectivity of the St Anns Bank. A gap analysis was suggested to identify critical information gaps. It was recommended that further consideration be given to core processes that support the integrity and resilience of the AOI. It was proposed that connectivity be addressed through the inclusion of indices that indicate the degree to which the AOI is self-sustaining. A classification of species, based on the degree to which they complete their lifecycle in the AOI, would be considered useful. It was suggested that the use of data to assess the degree of ecological closure and connectivity be examined. It was noted that connectivity does not work well in the temperate climates, and predictions from particle tracking and hydrodynamics have been unsuccessful.

MPAs serve to complement, not replace, other management measures. It was recommended the reason(s) for including a conservation priority is/are clear and explicit (e.g., protection of spawning habitat), and a conservation priority should be included if the MPA has a high likelihood of achieving the stated benefits. It was also noted that the achievability and measurability of each priority be examined.

The list of conservation priorities was reviewed. Participants agreed that the following priorities should be included in the AOI: sponge and sea pen concentrations, fish diversity hotspot, Atlantic wolffish, herring, leatherback turtles, representative environments (i.e., inshore bank, shelf, and slope/channel), distinctive features (Big Shoal, Scaterie Bank, High Relief Area), preferred and important species habitat, depleted species (e.g., Atlantic cod, Atlantic wolfish, Porbeagle shark, Leatherback turtle, and Sooty Shearwater), and a balanced or healthy trophic structure including the following functional groups: primary producers, planktonic herbivores, pelagic tertiary producers, demersal predators, and top predators.

There was disagreement amongst participants as to whether the following priorities should be included: American plaice, 4TVn and 4Vn cod, redfish, white hake and seabirds. There was concern that fishing effort would be re-distributed outside of the AOI for a number of species, which could have negative impacts on the population as a whole (e.g., American plaice and porbeagle), while the mobility of other species would limit their protection within the AOI (4TVn cod, redfish, and white hake). Given the high abundance of seabirds within the ESS, it was unclear as to why they were included as a priority.

Further discussion was required for the following priorities: Unique/distinctive habitats, cetaceans, and bank, slope, shelf habitat. Due to a lack of life history information within the AOI, it was recommended further research be completed before cetaceans are added as a conservation priority. It was noted that a more detailed benthic classification map is required to identify distinctive habitats within the AOI.

It was suggested that indices examining the ratio of water column productivity to benthic productivity be examined. It was noted that water column related objectives would be difficult to assess and should be placed in the overarching statements within the habitat objectives.

Regional Ecosystem Approach to Management Framework
Presenter: H. Breeze

Presentation Highlights

The Maritimes Ecosystem Approach to Management (EAM) Framework indicates that management planning requires the specification of objectives, strategies, and tactical management measures. The steps within the framework are 1) to understand the EAM area;

2) establish operational reference points; and 3) management planning. Establishing marine protected areas can contribute to meeting the objectives of the EAM framework in the region by helping to meet biodiversity, productivity and habitat objectives, as well as contribute to other management strategies.

Discussion

A participant inquired if there were any aspects of the EAM framework and the AOI evaluation that diverged significantly. It was clarified that there were additional steps that need to be taken in the AOI evaluation. For example, unlike the AOI evaluation, the EAM framework assumes the management unit is well defined.

A participant also inquired whether the management unit was the boundary of the MPA or if it will vary depending on the activity that will be managed. It was noted that the management unit may vary depending on the scale of the activity.

Risk Assessment Overview
Presenter: H. Breeze

Presentation Highlights

Risk assessment is conducted throughout the department for several purposes (e.g., stock assessment and environmental assessment) due to its structured, documented and transparent approach. Risk is generally assessed in terms of likelihood and severity with management deciding their risk tolerance. Ecological Risk Assessment (ERA) looks at multiple hazards and valued ecosystem components to determine if there is an interaction, likelihood, and results. A variety of risk controls are typically associated with final risk scores. Risk management includes the entire process of identifying, evaluating, prioritizing, managing risk, as well as communicating and monitoring risk.

Several approaches, including the DFO COE for Coastal Management's Ecological Risk Analysis framework, an Australian qualitative risk assessment process, and the approach used to assess the Laurentian Channel AOI, were reviewed in preparation for the AOI Assessment. Next steps are to refine the approach; gather information on human activities, associated threats, and the vulnerability of valued components; and then to apply the approach.

Discussion

A participant questioned why a new approach was being developed rather than adopting an existing framework within the department, e.g., ecological risk assessment framework. It was noted that while existing frameworks are similar, most approached do not incorporate multiple activities.

It was clarified that the risk used in the approach does not incorporate the risk to the ecosystem as a whole. Because of the difficulty of incorporating risk at the ecosystem level, risk was examined for ecosystem components.

It was suggested that a clearer definition of likelihood is needed. It was clarified that likelihood is defined as the likelihood of an adverse impact on a receptor.

One participant noted that, in a risk assessment, there is usually a targeted hazard and an impact. However, this approach appears to be trying to incorporate much less defined hazards.

This approach seems to be trying to manage the whole system. MPAs are a preventive measure, but this assessment and approach seems to be attempting to fix a broken system.

Assessment Scope and Ecological Risk Assessment
Presenter: J. Ford

Presentation Highlights

The assessment will describe the impact of activities on ecosystem components. The approach focuses on the risk of interactions between the conservation priorities/objectives and a suite of human activities that currently occur within the AOI. There is no clear National policy direction on what is allowed in a MPA - just guidance to determine if activities are compatible with the conservation objectives. The ERA was described as a simple, qualitative but structured approach modified from Fletcher (2005), which was developed to accommodate a wide range of interaction types and data sources. It involves the use of criteria to estimate the likelihood and consequences of an interaction. Scores assigned to likelihood and consequence criteria are then combined to estimate risk. Risk scores are used to determine the degree, not type, of management response.

Activities to be considered within the MPA assessment include: active fisheries (e.g., snow crab, lobster), oil and gas, shipping and tourism. However, activities that have never occurred on the ESS (e.g., offshore aquaculture, seabed mining), sporadic fisheries (e.g., shark longline, shrimp trawl) and activities that would be considered on a case by case basis (e.g., research activities) will not be considered in the assessment.

Examples of how the approach would be applied to 1) the halibut bottom longline fishery and Atlantic wolfish, and 2) redfish midwater trawls and sea pens were presented.

Discussion

A participant questioned whether activities that are not currently considered in the assessment will be assessed in the future. It was noted that details/information regarding activities that do not currently occur were considered too vague to accurately reflect them within the assessment. However, they would be evaluated in the future should a proposal be submitted.

Assessment Approach

A participant commented that the assessment is too narrow in scope and should consider the impacts from upstream human activities such as contaminants, shipping noise and marine debris for example. It was noted that there may be existing management measures that could be implemented to deal with impacts outside of the MPA.

It was noted that climate change plays a large role on the magnitude of risk of other impacts. A participant responded by indicating that while climate change may be incorporated into the next round of MPA design, there should be a focus on activities that the department has regulatory authority.

Interactions Matrix

It was suggested that the scoring of “quality of information” should match the proposed colour coding with fewer categories.

Likelihood Matrix

It was recommended that the overlap/duplication of values and terms within the descriptors of the likelihood and consequence tables be revised. It would also be considered useful if similar ranges were used throughout DFO documents.

It was suggested that the timeframe, especially in terms of likelihood, be clearly stated.

It was recommended that a sensitivity analysis, indicating the impact of fishing rate and stock status on scoring be provided. Group testing of the approach was also recommended to gather confidence that the approach is providing meaningful information.

Consequence Criteria

It was proposed that the terms used to describe consequence criteria (e.g., minor, severe) be removed and replaced with low, medium and high. Alternatively, it was suggested that numeric values could be assigned to these descriptors and used in the risk scoring to determine whether management action is required.

It was noted that the consequence levels for the various considerations did not appear comparable. Current fishery management measures will influence criteria as listed in the table and will allow for inconsistencies amongst considerations. For example, full exploitation of target biomass (productivity) is equivalent to a 40-60% impact on habitat in the proposed consequence scoring scheme.

It was proposed, that when available, precautionary approach reference points should be incorporated into the criteria related to productivity of target and depleted species.

A participant noted that better definitions of the terms “recovery”, “impact” and “likelihood” are required. The approach should clearly indicate the criteria used to define each term. For example, it should be noted whether the likelihood is considering the likelihood of effect or likelihood of an event. Also, the level of impact should be clearly stated before matching it to a generic definition of consequence.

It was proposed that the habitat guidance be changed to reflect the scale of the MPA.

Risk Scoring

It was suggested that the wording used to describe the suggested management response in terms of risk score be revised. The phrases “urgency of response” or “relative risk” may be more appropriate as it can be difficult to separate the degree of management response with the type of response.

It was suggested that the risk score be evaluated as the multiplication of the likelihood and consequences scores. It was noted that the multiplication of likelihood and consequence scores within the current matrix will not supply every number from 0-30. The probability of falling into a particular category is not evenly distributed and should be revised.

Use of Spatial Information
Presenter: J. Ford

Presentation Highlights

The AOI assessment will need to support spatial decisions, especially the use of zoning schemes that address the types of activities that may be permitted within the MPA. It will be necessary to consider the spatial patterns of both the conservation priorities and the activities being assessed.

Discussion

It was clarified that 3D zoning options could be considered.

It was recommended that overlays of benthic habitat and fishing intensity/threats maps be used to inform zoning decisions.

A participant felt the current approach appears to undermine ecosystem based management. An alternative would be an adaptive approach which monitors several measurable goals and allows regulators to adapt management strategies based on monitoring results. This approach would not duplicate current fisheries management or recovery tools. It was noted that this approach is non-linear and very complex and is unlikely to be supported as stressors which are manageable and measurable are likely to be selected.

It was noted that a framework outlining how to draw boundaries around an MPA may be required.

It was noted that additional work is required on the assessment method. All participants agreed that the goal is to ensure there are low impacts of activities to the conservation objectives and there is further need to assemble additional information and understand the interactions with the MPA.

NEXT STEPS

The working paper presented at this meeting was not recommended for conversion to a Research Document due to the substantial changes required to the proposed assessment approach. Therefore, no research document will be produced from this meeting. It was felt that no follow-up RAP would be required.

Copies of the draft Science Advisory Report and proceedings will be circulated to participants.

ACKNOWLEDGEMENTS

The chair thanked the assessment team for their hard work, the external reviewers for the comments, and the rest of the participants for their valuable contribution.

Appendix 1. List of Participants.

Maritimes Science Advisory Process to Review the Assessment Report and Proposed Conservation Objectives for St Anns Bank Area of Interest (AOI)

NAFO Headquarters Boardroom, Dartmouth, NS
25-26 January 2012

ATTENDEES

Name	Affiliation
Bennett, Lottie	DFO Maritimes / CSA
Breeze, Heather	DFO Maritimes / OCMD
Bundy, Alida	DFO Maritimes / PED
Chapman, Bruce	Groundfish Enterprise Allocation Council
Choi, Jae	DFO Maritimes / PED
den Heyer, Nell	DFO Maritimes / PED
D'Entremont, André	Canadian Association of Petroleum Producers
Denny, Leon	Crane Cove Seafood
DiBacco, Claudio	DFO Maritimes / ERD (Reviewer)
Diz, Daniela	WWF-Canada
Fenton, Derek	DFO Maritimes/OCMD
Ford, Jennifer	DFO Maritimes / OCMD
Hatcher, Bruce	Cape Breton University
Himmelman, Kim	NS Department of Energy
Kenchington, Trevor	DFO / ERD
Kennedy, Eddy	DFO Maritimes / ERD
King, Marty	DFO / OCMD
Li, Bill	DFO Maritimes / ERD
MacDonald, Claire	DFO Maritimes / FAM
MacDonald, Elizabeth	Canada-NS Offshore Petroleum Board (CNSOPB)
MacDonald, Gordon	CFA 23 (S-ENS), Traditional Fleet
McNeeley, Joshua	Maritimes Aboriginal Peoples Council (MAPC)
Nicholas, Hubert	Unama'ki Institute of Natural Resources (UINR)
Perley, Neil	Maliseet Nation Conservation Council (MNCC)
Ratchford, Cheryl	NS Department of Energy
Serdynska, Anna	DFO / OCMD
Shackell, Nancy	DFO Maritimes / OSD
Simon, Jim	DFO Maritimes / PED
Stortini, Christine	DFO / Dalhousie University
Theriault, Eric	Canada-NS Offshore Petroleum Board (CNSOPB)
Trzcinski, Kurtis	DFO Maritimes / PED
Westhead, Maxine	DFO Maritimes / OCMD
Wilson, Marielle	DFO Maritimes / P&E
Wilson, Scott	DFO Maritimes / PED
Worcester, Tana	DFO Maritimes / CSA

Appendix 2. Terms of Reference.

Review of the Assessment Report and Proposed Conservation Objectives for the St Anns Bank AOI (AOI), Maritimes Region

Maritimes Region Science Peer Review

NAFO Headquarters Boardroom
2 Morris Drive, Dartmouth, NS

January 25-26, 2012

Chairperson: Eddy Kennedy

Context

A marine protected area (MPA) is a coastal or oceanic area given special status to conserve and protect its habitat and wildlife. Pursuant to Section 35 of Canada's *Oceans Act*, Fisheries and Oceans Canada (DFO) has the authority to designate an MPA in support of:

1) the conservation and protection of commercial and non-commercial fishery resources, including marine mammals, and their habitats;
2) the conservation and protection of endangered or threatened marine species, and their habitats;
3) the conservation and protection of unique habitats;
4) the conservation and protection of marine areas of high biodiversity or biological productivity; and
5) the conservation and protection of any other marine resource or habitat as is necessary to fulfill the mandate of the Minister (of Fisheries and Oceans Canada).

Under the Health of the Oceans (HOTO) Initiative, DFO is to identify a series of Areas of Interest (AOI) for candidate MPAs located in different regions across Canada, with a goal of designating an additional six MPAs pursuant to the *Oceans Act*. The identification of MPA AOIs is a first step in the assessment process that supports decisions toward formal MPA designations.

In the DFO Maritimes Region, St Anns Bank, located on the Eastern Scotian Shelf in the offshore of Nova Scotia, has been selected as an MPA AOI under the HOTO Initiative. The St Anns Bank AOI includes St Anns Bank, Scaterie Bank, and a portion of the Laurentian Channel. These marine areas provide diverse habitats for a range of commercial fish species (e.g. redfish and halibut), non-commercial marine species (e.g. sponges, corals, and anemones) and several at-risk marine species. The area is also a key migration route for many marine mammals and several commercial and non-commercial fish species.

An Ecological Overview and Assessment Report for St Anns Bank is being compiled by the Oceans and Coastal Management Division, DFO Maritimes, to characterize the ecosystem component and functions of the area and to identify existing or emerging threats to them that may result from natural variation and human activity. Conservation objectives for the St Anns Bank AOI will be proposed.

A Maritimes Region Science Advisory Process will be conducted to provide a scientific peer review of the assessment report and proposed conservation objectives.

Objectives

The objectives of the meeting are:

- To present the St Anns Bank Ecological Overview
- To review the conservation objectives for the St Anns Bank AOI
- To review the draft Ecological Assessment methodology, including conservation priorities, and the risks and benefits assessment.

Expected Publications

- CSAS Science Advisory Report
- CSAS Proceedings
- CSAS Research Documents

Participation

- DFO Science
- DFO Ecosystem Management
- DFO Fisheries Management
- DFO Policy and Economics
- Environment Canada
- Canada-Nova Scotia Offshore Petroleum Board
- Transport Canada (shipping)
- Industry Canada (cables)
- Department of National Defence (naval)
- Aboriginal Communities and Organizations
- Nova Scotia Provincial Representatives
- Industry
- Non-Government Organizations
- Academics

Appendix 3. Agenda

Review of the Assessment Report and Proposed Conservation Objectives for the St Anns Bank AOI (AOI), Maritimes Region

Maritimes Region Science Advisory Process

NAFO Headquarters Boardroom
2 Morris Drive, Dartmouth, NS
25-26 January 2012

Chair: Eddy Kennedy

DRAFT AGENDA

25 January 2012 – Wednesday

9:00 – 9:15 Introduction (chair)
9:15 – 10:30 Presentation on St Anns Bank ecological overview
- Overview of MPA establishment process and purpose of assessment
- Context: ecosystem considerations for MPA assessment
- Highlights of ecological overview

10:30 – 10:45 Break

10:45 – 12:00 Review of conservation priorities (CP)

12:00 – 1:00 Lunch (not provided)

1:00 – 2:00 Review of conservation objectives (CO)
2:00 – 3:15 Review of science advisory report (text related to CO and CP)

3:15 – 3:30 Break

3:30 – 3:50 Ecosystem approach to management and St Anns Bank AOI
3:50 – 4:20 Overview of ecological risk assessment methods

4:20 – 4:30 Day 1 wrap-up

26 January 2012 – Thursday

9:00 – 9:15 Review of Day 1
9:15 – 10:30 Review of draft ecological assessment methodology
- Presentation of assessment examples

10:30 – 10:45 Break

10:45 – 12:00 Review of interactions matrix

12:00 – 1:00 Lunch (not provided)

1:00 – end Review of SAR (text related to methodology)