

**Canada's Submission on Actions taken pursuant to Paragraphs 83 to 90 of the
United Nations General Assembly Resolution 61/105 to Identify, Manage and
Protect Vulnerable Marine Ecosystems**

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1.0 Introduction

In 2006, Canada participated actively at the United Nations in the negotiations that led to the adoption by consensus of the new precautionary commitment for vulnerable marine ecosystems (VMEs) in Resolution 61/105. Since then, we have promoted the application and implementation of this new approach at the regional and global levels, working to ensure an ongoing process to protect VMEs. In addition, while the scope of Resolution 61/105 applies to areas beyond national jurisdiction, much effort has also continued to take place at the national level with regards to the protection of VMEs.

During the fall of 2009, at its sixty-fourth session, the United Nations General Assembly (UNGA) will conduct a review of actions taken by States and Regional Fisheries Management Organizations and Arrangements (RFMOs/As) to address paragraphs 83 to 90 of UNGA Resolution 61/105, concerning the protection of VMEs, in order to provide additional recommendations, where necessary (paragraph 91 of Resolution 61/105). To this end, UNGA, at its last session, requested the Secretary-General, in cooperation with the Food and Agriculture Organization (FAO), to report to the General Assembly on actions taken to date (paragraph 107 of Resolution 63/112). We are confident that the Secretary General's report will help focus and facilitate the review in the fall.

The submission is divided in three main parts: part one provides the context to understand the significance of Resolution 61/105 for overall high seas governance; part two focuses on the actions by the Northwest Atlantic Fisheries Organization (NAFO), to which Canada is a Contracting Party (CP), in implementing Resolution 61/105; part three highlights developments to protect VMEs on the domestic front since 2006. The submission also contains several annexes that further provide concrete examples of Canadian actions.

2.0 Context

2.1 The Significance of Resolution 61/105

Resolution 61/105 was a watershed moment in the history of high seas fisheries as it provided a roadmap in regards to the identification and protection of VMEs allowing, at the same time, responsible fisheries to continue. While stakeholders and the general public saw primarily in those commitments our collective desire to protect features such as sponges and corals, fisheries scientists, managers, and fishermen, recognized that the Resolution represented a regime shift for fisheries management: The commitment called for consideration of the effects of fishing activities on VMEs and, as a result, effects to be mitigated or fishing activities should not be allowed to proceed.

RFMOs/As are the principal vehicle for the implementation of this new approach, however the Resolution also provided for flag State implementation. (Flag States authorization would come into play for the most part in unregulated areas or in circumstances where RFMOs/As are still at the development stage.)

Resolution 61/105 provided a way forward by identifying the essential elements (assessments of activities, identification of VMEs and protocols for encounters with

VMEs) of a framework, rather than prescribing the specifics of implementation; it was sufficiently flexible to allow existing RFMOs/As to integrate the new concepts in their running operations.

2.2 *Deadline and Beyond*

Much has been said about the deadline of December 31, 2008. For some, that date may be the sole yardstick of success. However, the ongoing nature of efforts to protect VMEs was recognized in Resolution 63/112 where States and RFMOs/As were urged "to continue, and expedite where necessary, their efforts to fully and effectively implement measures in accordance with paragraphs 80 and 83 to 87 of Resolution 61/105."

Canada recognized the relevance and importance of having a target date from which we could measure our progress. We recognized though that this date was not necessarily in synchronization with RFMO governance regimes and other relevant international meetings. RFMOs have had to continue to conduct their regular activities while integrating the UNGA commitments. Significant progress has been made by States and RFMOs to implement the Resolution.

2.3 *Other Tools*

It is important to recall that Resolution 61/105 also invited the FAO, as the United Nations' preeminent organization on fisheries policy, to continue its work on deep sea fisheries to support the implementation of Resolution 61/105. Canada and others participated actively in this work at the FAO that led to the adoption of the *International Guidelines for the Management of Deep-sea Fisheries in the High Seas* at the Technical Consultations in August 2008. Resolution 63/112 welcomed the *Guidelines* and further urged States, individually and through RFMOs/As, to implement them.

Canada attaches great importance to the *Guidelines* as they provide tangible direction to fisheries managers and operators in the protection of VMEs against the effects of fishing by further detailing key concepts found in Resolution 61/105, such as the definition of VMEs, the components of an "assessment", and examples of mitigation measures.

Beyond high seas fisheries addressed by this Resolution, Canada is actively supporting a broader approach to protect high seas biodiversity. Canada notes the actions taken by ourselves and others within the context of the Convention on Biological Diversity (CBD) to develop criteria and classification system for identifying ecologically and biologically significant areas (EBSAs), and the scientific guidance for designing representative networks of marine protected areas, which were adopted at the last Conference of the Parties in May, 2008.

In order to provide the international community with appropriate direction on the operationalization of the criteria, Canada advocated an experts' workshop to provide scientific and technical guidance on the use and further development of biogeographic classification systems, and guidance on the identification of areas beyond the national jurisdiction, which meet the scientific criteria. Canada has agreed to host the workshop that will take place in Ottawa during September 29 - October 2, 2009.

3.0 RFMOs and Resolution 61/105

Resolution 61/105 identifies RFMOs/As as vehicles of high seas governance in the implementation of the new precautionary commitments with respect to VMEs. Among the important outcomes, we note the commitment for States and RFMOs to address the impacts of fishing through the initiation of negotiations to establish new RFMOs/As and expedite negotiations already in train as well as the call for existing RFMO/As to adopt new measures to protect VMEs.

Canada was invited to participate in the ongoing negotiations to establish the South Pacific RFMO. Although Canada does not currently fish in the region, it was pleased to share its expertise in international fisheries governance so that gaps in the management of high seas fishing are addressed.

In addition to filling management gaps in parts of the high seas where there are no organizations with a mandate to conserve and manage non-highly migratory fisheries, the new RFMO will provide a mechanism to respond to concerns about the potential effects of high seas bottom fishing. Participants adopted interim arrangements that included measures to freeze their fishing capacity to the 2007 level, to assess the impact of their individual fishing activities, as well as encounter provisions and precautionary provisions for new areas, towards implementing Resolution 61/105.

Canada has actively participated in NAFO activities both as an original CP and bordering coastal state with stocks that straddle the 200-mile limit¹. Canada has taken a strong leadership role to reform NAFO, which was concluded at the 2007 NAFO annual meeting with the adoption by the fisheries commission of the amendments to the 1978 NAFO Convention.

While Canada provided impetus to a regime shift of the Organization towards the effective protection of VMEs, NAFO members have shown collective determination to implement Resolution 61/105. In fact, NAFO actions with regards to VMEs have been sustained and determined and actually preceded the adoption of Resolution 61/105. The accelerated pace at which changes took place lead us to conclude that NAFO stretched its structures to the greatest extent possible in order to protect VMEs by December 31, 2008, and continues to respond to the new commitments.

The changes that have taken place as well as those in train and projected are numerous and cover both the governance and operational levels. They include the creation of new bodies to respond to the need to identify VMEs and assess and mitigate effects of fishing activities, the adoption of new management measures, and a commitment to additional science to support decision making.

¹ Although Canada recognizes that NAFO will be submitting a report in regards to the actions that they have taken, this section seeks to provide a Contracting Party perspective.

We note that:

- At its annual meeting in September 2006, NAFO decided to implement precautionary closures of four seamount areas, which included strict conditions under which exploratory fisheries could occur within these areas. Further management measures are expected to be taken in 2010 on the advice of the Scientific Council based on additional research.
- In 2007, NAFO closed part of NAFO Division 30 to fishing where corals were identified. (Further scientific work will be undertaken by December 31, 2012 at which time the provisions on the Coral Protection Zone will be reviewed.)
- In addition, the NAFO Scientific Council established a Working Group on Ecosystem Approaches to Fisheries Management (WGEAFM), co-chaired by scientists from Canada and the United Kingdom. This group has been tasked with identifying candidate VMEs within the NAFO Regulatory Area (NRA) and assessing the potential for significant adverse impacts (SAI), particularly on those species such as corals and sponges that may involve interactions with commercial fisheries. The Working Group plays an important role in advancing NAFO's position to meet international commitments related to the identification, management and protection of sensitive marine ecosystems and species.
- Within the process of implementing measures to prevent SAI on VMEs, the Ad hoc Working Group of Fishery Managers and Scientists on VMEs was created in 2008 to examine the Scientific Council advice and recommend management measures to the Fisheries Commission for adoption. The task of this Working Group is to evaluate the risks and to recommend mitigating measures to avoid SAI on VMEs in the NAFO Regulatory Area (NRA). It met inter-sessionally and recommended a comprehensive programme on VMEs that aims to cover all aspects of Resolution 61/105, including additional targeted science. Furthermore, joint science has been done through the NAFO/ICES Working Group on Deepwater Ecology (WGDEC) one of the major advances of the meeting being the compilation of the occurrence of coral species throughout the North Atlantic
- At its 2008 annual meeting, NAFO adopted a comprehensive program, initially proposed by the Working Group of Fishery Managers and Scientists, including the closure of the Fogo Seamounts, adoption of an Interim Exploratory Fishery Protocol for new fishing areas, and interim encounter provisions for VMEs in both fished and unfished areas of the NRA. NAFO also undertook a preliminary assessment of existing fisheries based on a comparison of the preliminary historic footprint and the map of possible VMEs. Further assessment is expected to be undertaken when additional scientific information becomes available.

- Pursuant to the Fisheries Commission request of 2008, the Scientific Council delineated corals at its meeting in October 2008 and will undertake work on sponges as well as corals in canyons during 2009.
- At its meeting during March 19-20, 2009, the Ad Hoc Working Group of Fishery Managers and Scientists recommended to the Fisheries Commission that it consider closing the areas with significant coral concentrations based on the Canadian proposal. (The Working Group intends to meet again before the 2009 annual meeting to review the information on sponges as well as corals and sponges in canyons that will be forthcoming after the June 2009 Scientific Council meeting.)

Combined, these changes highlight an irreversible course of action towards the identification and protection of VMEs in the NAFO context.

To support research efforts in NAFO, Canada will undertake research surveys in 2009 and 2010 to enhance our knowledge of the benthic habitat, and will actively participate in the EU/Spanish- led survey planned for 2009 and 2010. The surveys are expected to delineate the location of corals and sponges in the NAFO Regulatory Area (NRA) with much greater precision than has been possible to date. Similarly, Canada has created a Centre of Expertise on Cold Water Corals and Sponge Reefs in St. John's, Newfoundland and Labrador, which is dedicated to compiling current information and available resources on corals and sponges on a national basis including in the NRA.

4.0 Canadian Perspective

At the domestic level, Canada is also taking seriously the protection of VMEs and has at its disposal a tool kit of measures that can be adapted to a given situation. Canada's approach to VME protection considers all ocean activities that may have an impact on VMEs, and is not exclusive to only commercial fisheries.

The management and protection of fisheries resources and the responsibility for Canada's ocean strategy falls under the mandate of the Department of Fisheries and Oceans (DFO). DFO is committed to sustainable development and safe use of Canadian waters and, as such, works towards the integration of environmental, economic, scientific, and social perspectives to ensure that Canada's oceans and freshwater resources benefit this generation and those to come. (see Appendix 1-- Canada's Legislative and Policy Framework, which includes a description of the *Fisheries Act*, the *Oceans Act*, and the *Species at Risk Act*, which all contain measures that can be used for VME protection).

Such an integrated, ecosystem-based approach applies equally to DFO's international and domestic actions and programs. Canada's International Governance Strategy, in particular, seeks to enable greater international consensus and capacity building (e.g., improved knowledge, management, standards, and agreements) so as to advance the implementation of sustainable practices worldwide, which includes the commitments found in Resolution 61/105 in respect of VMEs.

4.1 A Responsible Fishing Nation

Canada is a predominantly coastal fishing nation. We do not currently operate a significant distant water fleet. Canadian flag vessel activity outside of Canada's Exclusive Economic Zone (EEZ) occurs almost exclusively in RFMO/As regulatory waters. All high seas fishing in regulated or unregulated areas as well as activities occurring in another State's waters are subject to domestic licensing requirements².

In 2007, the product value of Canadian fisheries using bottom-contact gear was approximately \$1 billion³. Additionally, there are thousands of jobs on Canada's coasts associated with these fisheries. Bottom trawling fisheries are an important fishing sector in both the east and west coast provinces with some fisheries almost entirely dependent on bottom trawling as a means of harvesting the resource. It is important to note however, that bottom trawling takes place in a relatively small percentage of the total fishing area on the west coast. On the east coast, there has been a large reduction in the groundfish fisheries due to decreases in the allowable catch, which has reduced the total area where bottom trawling occurs. The current fishing effort is now less than 10 per cent of levels prior to 1990.

The Canadian fishing industry has supported the protection of VMEs. For instance, Canada's offshore trawling industry for shrimp and groundfish have instituted a voluntary closure to protect coldwater corals in the Atlantic and Arctic Oceans. The 12,500km² coral protection zone in the Northern Labrador Sea will help prevent coral species from being taken as bycatch in trawl gear. More recently, on April 15, 2009, the Canadian fishing industry members of the Groundfish Enterprise Allocation Council (>100' groundfish license holders) and the Canadian Association of Prawn Producers (>100' shrimp license holders) have voluntarily agreed to closures, i.e., additional coral protection zones in Divisions 3L and 3M of the NRA, identified as a result of the March 2009 meeting of the above-mentioned Ad Hoc Working Group of Fishery Managers and Scientists, in anticipation of formal consideration by NAFO in September 2009.

The most common fisheries management measures used by DFO to protect sensitive areas and species are temporal or area closures and gear restrictions. (See Appendix 2: Inventory of Canadian Fisheries Management Measures to Protect Sensitive Marine Areas and Species from Fishing Practices which provides the highlights of domestic fisheries management actions that exist at the national level.)

² Canada's policy to Manage the Impacts of Fishing on Sensitive Benthic Areas, which is discussed in section 4.3, forms an integral part of the process to licence new fisheries. This policy sets out specific precautionary standards for new fisheries operating within and outside Canadian waters to help protect VMEs.

³ This number includes all fisheries in the Atlantic Coast using Bottom Otter Trawl, Midwater Trawl, Bottom Pair Trawl, Miswater Pair Trawl, Shrimp Trawl, Dredge, Rakes and Tongs and Drag Rakes and in the Pacific Coast using Dredge, Trawl, Midwater Trawl and Shrimp Trawl.

4.2 The Role of Science in Decision-Making

In our EEZ, science advice is used in the decision-making process for fisheries and oceans management. For example, the identification of EBSAs to inform ocean planning is guided by a *Canadian Science Advisory Secretariat (CSAS)* science advisory report⁴ (CSAS Ecosystem Status Report, 2007/004) which advises the use of three primary criteria (uniqueness, aggregation and fitness consequences) and two secondary ones (resilience and naturalness).

Science advice supported the development of *Canada's Policy to Manage the Impacts of Fishing on Sensitive Benthic Areas* (see below) and continues to inform regional fisheries and/ or species specific fisheries management plans (See Appendix 2).

Canada also contributes to the funding and support of scientific research and international collaboration to deliver on the UN commitments to manage fisheries in a sustainable manner and protect vulnerable ecosystems and biodiversity in the highseas from significant adverse impacts. The focus of this research is to identify, characterize and map VMEs, develop rapid cost-effective methods for detecting VMEs, assess SAI and recoverability, provide science advice on the impacts of various fishing gears, and determine those which may have SAI and finally, conduct research and provide advice for the development of science-based encounter protocols. In fiscal year 2008-09, about 19 single and multi-year projects (approximately \$ 1 million/year) were launched to study various aspects of VMEs and their identification and protection (for a list of initiatives see Appendix 3: International Governance Strategy: Science Projects in Support of VMEs).

4.3 Fisheries Renewal

Canada is in the process of implementing a vision for renewed fisheries management. Canada has developed a Sustainable Fisheries Framework that builds on important existing fisheries management practices and tools, such as Integrated Fisheries Management Plans (IFMPs), to form a foundation for implementing an ecosystem approach in the management of our fisheries. The primary goal of the Sustainable Fisheries Framework is to ensure that Canada's fisheries are environmentally sustainable, while supporting economic prosperity. It is expected that the Framework and its associated polices will be completed as part of a three-year Fisheries Renewal program planned to conclude in 2011. (A full review of the Sustainable Fisheries Framework can be found in Appendix 4: The Evolving Approach for Ecosystem Management in Fisheries)

One of the key policies that has been developed to support the Framework is Canada's *Policy to Manage the Impacts of Fishing on Sensitive Benthic Areas*. This policy provides a systematic, transparent, and consistent approach to addressing sensitive benthic areas in Canadian fisheries as it applies to all commercial, recreational, and Aboriginal marine

⁴ DFO, 2004. Identification of Ecologically and Biologically Significant Areas. DFO Can. Sci. Advis. Sec. Ecosystem Status Rep. 2004/006.

fishing activities that are licensed and/or managed by DFO both within and outside Canada's 200-nautical mile EEZ. The policy outlines separate processes for historically fished⁵ and frontier areas⁶.

This two-fold approach was taken in response to the DFO's 2006 *Science Advisory Report, Impacts of Trawl Gears and Dredges on Benthic Habitats, Populations and Communities* which suggests that there is a higher level of scientific uncertainty about benthic habitats communities and species in frontier areas. The report also notes that the greatest impact to vulnerable benthic habitats, communities, and species in a given area can be caused by the first few fishing events. The policy thus requires greater precaution when fishing activities are being considered in frontier areas. It also gives special consideration to historically fished areas that have not been exposed to bottom-contact fishing. In particular, proposals for new bottom-contact fishing in historically fished areas will require risk assessments prior to proceeding.

4.4 Oceans Management

Historically, Canada has always placed an emphasis on the protection of our oceans. In 1996 Canada became the first nation in the world to enact a comprehensive piece of legislation regarding oceans, the *Oceans Act*. The Act is an enabling piece of legislation that allows for the establishment of integrated management processes which ensure that the appropriate management measures are applied for the long-term health of our ecosystem.

Integrated management (IM) is a pillar in ocean planning. It is a collaborative approach to managing Canada's ocean resources. It enables decision makers responsible for ocean-based activities to manage these activities in a manner that will sustain a healthy marine environment and provide due consideration of other ocean users. It aims, through the development of IM plans, to ensure the sustainable use of the resources and their habitats, including VMEs.

The Eastern Scotian Shelf Integrated Oceans Management Plan, released in 2007, is the first IM plan under the *Oceans Act*. This strategic-level plan provides direction and commitment for ecosystem-based and adaptive management of marine activities. The plan contains a comprehensive set of goals, objectives and strategies for collaborative governance and integrated management, sustainable human use and healthy ecosystems. The Eastern Scotian Shelf was initially selected due to its high level of living and non-living marine resources, significant areas of high biological diversity and productivity, and increasing levels of multiple use and competition for ocean space and resources. (Appendix 5: Integrated Oceans Management in Canada provides an overview of integrated oceans management and its linkages to ecosystem-based management.)

⁵ A historically fished area is a marine ecosystem area where there is a history of fishing. This includes current ongoing fishing activity.

⁶ A frontier area is a marine ecosystem area in deep water (deeper than 2000m) or in the Arctic where there is no history of fishing and little if any information available concerning the benthic features (habitat, communities and species) and the impacts of fishing on these features.

4.5 The Role of Marine Protected Areas (MPAs)

Canada uses MPAs as one of its area-based tools for oceans management⁷. Three federal authorities have mandated responsibilities to establish MPAs, namely, Environment Canada, Fisheries and Oceans Canada and the Parks Canada Agency. Each of these federal authorities takes related but different criteria into consideration when identifying MPAs. The *Oceans Act* prescribes a leading and coordinating role for DFO in developing a network of MPAs. (A full description of the MPA programs along with a description of the areas protected can be found in Appendix 6: Marine Protected Areas).

It is interesting to note that the two MPAs designated under the *Oceans Act* since 2006 have a VME connection. Indeed, the Bowie Seamount MPA located in British Columbia, is a biologically rich area, with a dynamic and productive ecosystem. Within the Bowie Seamount MPA (which includes Bowie, Hodgkins and Davidson seamounts) many VMEs have been recorded in high densities and require protection as a vast number of fish and marine mammal species are dependent on the seamounts for their health and survival. As for the Musquash Estuary, it is a unique ecosystem due to its size, expansive salt marshes, and relatively undisturbed natural condition and where certain activities are prohibited according to a zone system.

5.0 Conclusion

The international community (States, International Governmental Organizations, namely the FAO, fishing industry, environmental groups) has responded to the call for action in Resolution 61/105. It is our opinion, from our active participation in RFMOs and global fisheries meetings, that the international community has in fact cooperated resolutely to effectively implement the Resolution. The work is not finished, new knowledge is being acquired and developed and appropriate actions will be taken, bearing in mind that the protection of VMEs is an ongoing process. We have reported primarily on NAFO which is of key interest to us but also is responsible for managing fisheries that fall under 61/105. Our experience in NAFO illustrated that while working within a formal governance mechanism, States were able to adapt quickly and implement, in a series of actions, the Resolution and, in a broader manner, modern management principles such as the precautionary and ecosystem approaches.

We are looking forward to the review of progress that will take place in the fall in the context of the annual negotiations of the Sustainable Fisheries Resolution. It would seem fitting, given the collective will that has been deployed in the implementation of Resolution 61/105, that we continue on our course, without precluding reviews at fixed periods, bearing in mind that the protection of VMEs and facilitating responsible fishing may be a finite goal but that at the same time is also an ongoing process.

⁷ See Appendix 7 for a map of Canada's Marine Ecoregions and Appendix 8 for a map of Canada's Oceans Management Areas, Large Ocean Management Areas, Marine Protected Areas and Areas of Interest