



Fisheries and Oceans
Canada

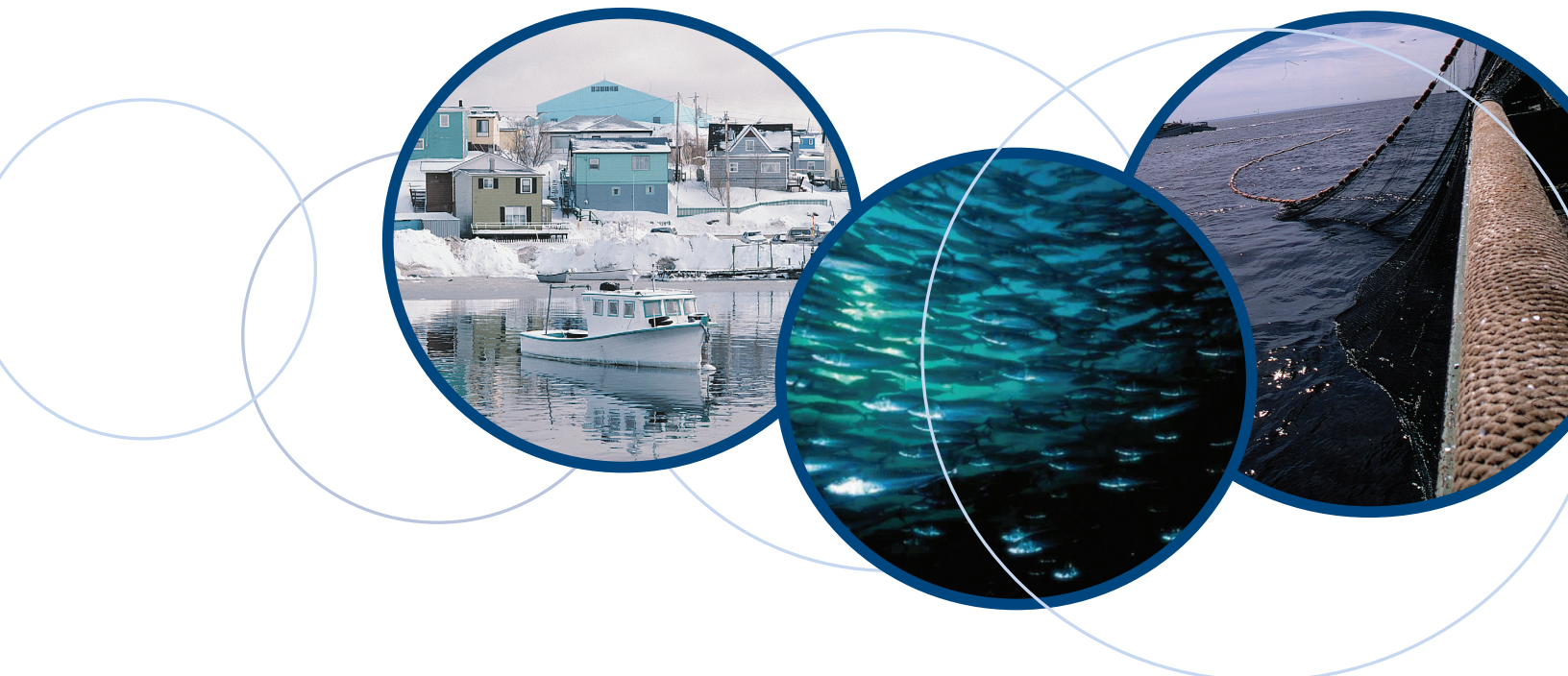
Pêches et Océans
Canada

OUR WATERS, OUR FUTURE

Sustainable Development Strategy

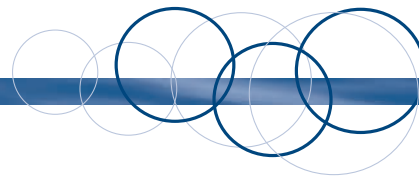
Fisheries and Oceans Canada

2007-2009



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Canada 



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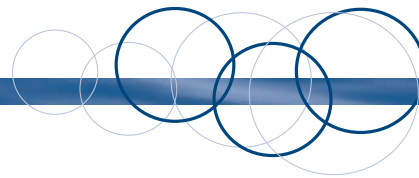
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Minister's message

As Minister of Fisheries and Oceans, I am pleased to present my department's *Sustainable Development Strategy* for 2007–2009. This new strategy is part of our continuing commitment to provide Canadians with sustainable fisheries and aquaculture, as well as healthy and productive aquatic ecosystems.

Canada's public resources must be well managed to ensure their long-term viability. At Fisheries and Oceans Canada (DFO), we believe in working with interested partners and stakeholders to manage our aquatic resources in a collaborative, transparent and accountable manner.



For example, Canada's new government has been active in the global community to better protect fish stocks that straddle Canadian and international waters. Through the High Seas Task Force on Illegal, Unreported and Unregulated fishing and our recent success in improving the effectiveness of the Northwest Atlantic Fisheries Organization, Canada is leading the fight against overfishing and encouraging more responsible governance of high-seas fisheries.


We also believe in sound science as a means to better inform our management decisions and help ensure that development of our fish and ocean resources proceeds responsibly. Science is a key part of an integrated, ecosystems-based approach to managing our fisheries and oceans.

To this end, we were pleased earlier this year to invest in improvements to primary research facilities at the Northwest Atlantic Fisheries Centre in St. John's, Newfoundland and Labrador. We also implemented a small-scale, one-year northern cod fishery for research purposes.

On the West Coast, we launched a new three-year pilot plan for the integration of commercial groundfish fisheries for the 2006 season. The plan, developed by industry stakeholders in consultation with federal and provincial governments and First Nations, promotes the conservation and sustainability of Pacific groundfish stocks.

We also invested in enhancing our conservation and protection presence in the Pacific region and increasing our habitat monitoring capability in key areas there.

In March, we also announced a five-year management plan for the conservation and sustainable development of the Atlantic seal population, which has remained healthy and stable since the mid-1990s. The plan is based on objective-based fisheries management practices and the precautionary approach to manage the annual seal hunt responsibly, without threatening the viability of the seal herd.

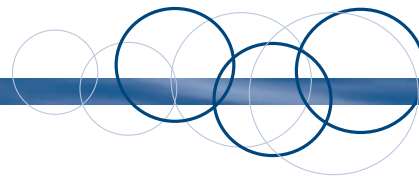


I am proud of these achievements on behalf of Canadians. Moreover, they help demonstrate that Canada's new government is fully committed to integrating sustainable and responsible development principles in managing our fish and ocean resources.

The *Sustainable Development Strategy* is an important part of this commitment and an essential element of departmental planning. It tells the story of the Department's successes, and sets a clear course of action and accountability for the next three years.

The *Strategy* is a key tool in helping DFO conserve and protect our fish and ocean resources, while responsibly delivering their ultimate value to Canadians — today and for generations to come.

The Honourable Loyola Hearn, P.C., M.P.
Minister of Fisheries and Oceans



HIGHLIGHTS

As a department committed to sustainable development, Fisheries and Oceans Canada (DFO) works to protect and conserve Canada's aquatic resources, while supporting the development and use of these resources. The Sustainable Development Strategy (SDS) is an important tool to help the Department deliver on its mandate and to ensure that DFO, like all federal departments and agencies, takes environmental, economic, and social considerations into account in its decision making.

Defining Sustainable Development

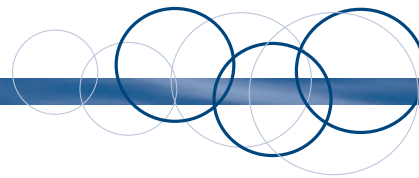
DFO uses the definition generally used in the Government of Canada: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

This document is a companion piece to the Department's 2005–2010 Strategic Plan, *Our Waters, Our Future*. It provides a progress report on past sustainable development commitments, and outlines new initiatives for the current SDS 2007–2009 cycle. DFO's SDS is a national strategy, balanced by practical examples of regional case studies from across Canada.

The DFO methodology for the SDS is based on the new federal approach, results of consultation, and lessons learned from previous SDSs. Built on a logic model framework, the Action Plan of the Strategy guides the work of the Department in terms of what it wants to achieve, what it will do, and how it will measure its results. The overall methodology was simplified, using an Action Plan structure that presents more descriptive and integrated goals, drawn from the Department's corporate planning framework:

- **Healthy and productive aquatic ecosystems** – the sustainable development and integrated management of resources in or around Canada's aquatic environment through oceans and fish habitat management, and the critical science activities that support these two programs. Included under this goal is the commitment to the Oceans Action Plan, Environmental Process Modernization Plan, implementing the Species at Risk Act (SARA), and addressing the threat of aquatic invasive species.
- **Safe and accessible waterways** – providing access to Canadian waterways and ensuring the overall safety and integrity of Canada's marine infrastructure for the benefit of all Canadians. Included under this goal is the commitment to meeting the needs for aids to navigation and strengthening small craft harbour operations.
- **Sustainable fisheries and aquaculture** – ensuring an integrated fisheries and aquaculture program that is credible, science-based, affordable, effective, and that contributes to sustainable wealth for Canadians. Included under this goal is the commitment to implementing Fisheries Management Renewal, creating a new aquaculture governance regime, supporting Aboriginal communities, and the International Fisheries and Oceans Governance Strategy.
- **Environmentally sustainable operations and management** – implementing and maintaining sustainable operations, as well as corporate awareness of the importance of sustainable development and considerations in decision-making. Included under this goal is the commitment to managing the environmental impact of departmental operations and raising corporate awareness.

The SDS will continue to reflect the evolution of sustainable development as a concept, and will serve as a cornerstone for departmental innovation and leadership.



1. Introduction

Canada's fisheries, oceans, and waterways have long played an important role in Canada's development and growth as a nation. They are central elements of the historical, economic, and cultural fabric of Canada's coastal communities, providing a strong and reliable resource base around which Canada's national economy and sense of nationhood continue to grow.

DFO's commitment to these elements has been reflected in a number of initiatives in 2006. For example, DFO contributed to conserving and protecting fish stocks by adding 20 new fishery officer recruits (three in Prince Edward Island, three in New Brunswick, and 14 in Newfoundland and Labrador) and by increasing the number of fishery officers patrolling British Columbia's waterways from 162 to 176.

The Department also announced in 2006 a new three-year pilot plan for the integration of commercial groundfish fisheries that promotes the conservation and sustainability of groundfish stocks. This pilot plan follows the principles of Pacific Fisheries Reform announced in 2005. These principles include sustaining strong fish populations, strengthening DFO programs, making progress on increasing First Nations access to economic fisheries, and improving economic performance of fisheries. The pilot plan will also assist in supporting the *Species at Risk Act*, gaining a better understanding of complex ecosystems required under the *Oceans Act*, and achieve sustainable fisheries.

A multi-year Atlantic Seal Management Plan was also announced in 2006. DFO will continue to use Objective-Based Fisheries Management and the precautionary approach to manage the seal hunt. The Objective-Based Fisheries Management model uses control rules and reference points to trigger management measures for a fishery. It facilitates a market-driven hunt that enables sealers to maximize

their benefits without compromising conservation. These management approaches demonstrate Canada's commitment to the conservation and sustainability of the seal hunt.

Moreover, 2006 was an important year in terms of international management of fisheries. In the following pages, you will find text boxes that provide further details on the most recent developments with the Northwest Atlantic Fisheries Organization (NAFO) and the High Seas Task Force (HSTF).

Mandate

On behalf of the Government of Canada, DFO is responsible for developing and implementing policies and programs that support Canada's scientific, ecological, social, and economic interests in oceans and fresh waters. As a department committed to sustainable development, DFO works to protect and conserve Canada's aquatic resources, while supporting the development and use of these resources. Sustainable development is the lens through which DFO undertakes its business.

DFO is a national and international leader in marine safety, and in managing of oceans and freshwater resources. Departmental programs and presence on Canadian waters help to ensure the safe movement of people and goods. Through the Canadian Coast Guard (CCG) fleet, the Department plays a key role as the provider of on-water support to numerous government departments and is responsible for environmental-response activities.

The Department's guiding legislation includes the *Oceans Act*, which charges the Minister with leading oceans management and providing coast guard and hydrographic services on behalf of the Government of Canada, and the

Fisheries Act, which makes the Minister responsible for managing fisheries, including the management of the impacts of aquaculture,

fisheries and fish habitat. The Department is also one of the three responsible authorities under the *Species at Risk Act* (SARA).

1. Definition of sustainable development

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Internationally, the best known and accepted definition of sustainable development and the one DFO recognizes and adheres to comes from the 1987 Brundtland Commission Report *Our Common Future*.

The principles of sustainable development maintain that social, economic and environmental issues are interconnected and must be integrated into the decision making process. Decisions based on sustainable development help Canadians achieve a healthy environment, a prosperous economy and a vibrant society for current and future generations.

Integrating Sustainable Development Principles

As the Government of Canada is committed to integrating sustainable development principles in its business, federal guidelines were recently developed to help ensure coordination in this fourth round of departmental strategies.

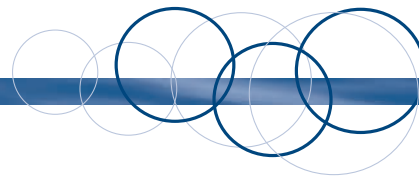
These guidelines identify six priorities:

- clean air;
- clean water;
- climate change;
- **sustainable communities;**
- **sustainable development and use of natural resources; and**
- **governance for sustainable development** (see Annex 1 for more details).

The SDS for DFO is consistent with these federal guidelines but focuses primarily on the priorities highlighted in **bold**. Throughout the Action Plan, you will find references and linkages to the federal priorities and commitments.

Sustainable development is central to DFO's vision and priorities and the SDS constitutes a core element of departmental planning. It outlines objectives and commitments for incorporating sustainable development into daily work, while offering DFO employees a practical working document that will help them attain the results the Department has committed to achieving as part of its regulatory, operational, and natural-resource management roles.

DFO's SDS approach shows consistency and integration with other corporate planning documents, presents a select number of national initiatives, complemented by tangible regional case studies, and strikes a balance between visionary goals and achievability.



In the interest of greater integration, DFO based the 2007–2009 SDS Action Plan on the three departmental outcomes used in the corporate planning framework and the current departmental strategic plan:

1. **Safe and accessible waterways (SAW)**
2. **Healthy and productive aquatic ecosystems (HAPAE)**
3. **Sustainable fisheries and aquaculture (SFA)**

DFO is the custodian of a significant number of office and special-purpose buildings such as CCG bases, light stations, small craft harbours, laboratories, and a large fleet of various vessels and vehicles. The use of these assets has a direct and significant impact on the environment.

For the purpose of the SDS, DFO has added a fourth goal specific to corporate operations and culture and focused on the need to raise awareness and to manage the impacts of departmental operations on the environment.

4. **Environmentally sustainable operations and management**

The following pages present the main activities and expected outcomes developed to help the Department advance on the four SDS goals over the next three years. As the Action Plan demonstrates, DFO has made efforts to identify clearer linkages between the activities, outcomes and goals. Additional information concerning the methodology and the logic model for the SDS can be found in Annex 1.

Vision



2. Action Plan

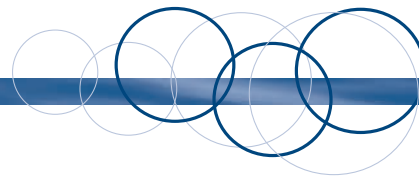
Departmental commitments for 2007–2009

DFO based its SDS methodology on the new federal approach, results of consultation, and lessons learned from the 2005-2006 SDS (see Annex 1 for more information). The overall methodology was simplified, using an Action Plan structure that presents more descriptive and integrated goals:

- *Healthy and productive aquatic ecosystems;*
- *Safe and accessible waterways;*
- *Sustainable fisheries and aquaculture; and,*
- *Environmentally sustainable operations and management.*

The Action Plan provides narrative descriptions for each outcome, responding to the recommendation by the Commissioner of the Environment and Sustainable Development (CESD) that departments include an issue scan in their SDSs to highlight the implications of identified activities for sustainable development. This new format ties the issues analysis more closely to the goals and expected outcomes for 2007–2009. The issue scans are complemented by tables of activities, performance measures and target dates. Built on a logic model framework, the Action Plan guides the work of the Department in terms of what will be done, what will be achieved, and how success will be measured.





GOAL A - Healthy and productive aquatic ecosystems

- Outcome A.1: Through the Environmental Process Modernization Plan, service delivery and effectiveness of fish habitat management is consistent with principles of sustainable development.
- Outcome A.2: Aquatic species at risk are protected or on the way to recovery.
- Outcome A.3: The introduction of aquatic invasive species is minimized and the impact of existing ones is remediated.
- Outcome A.4: Marine activities are proactively managed and the health of Canada's oceans is preserved in collaboration with stakeholders.

GOAL B - Safe and accessible waterways

- Outcome B.1: Efficacy in ensuring an effective response to minimize adverse impacts of marine pollution incidents in Canadian waters is enhanced.
- Outcome B.2: Small-craft harbours operations are consistent with recognized Canadian and international environmental standards.
- Outcome B.3: Implementation of a risk-based priority approach in providing up-to-date navigational information to mariners in a timely and efficient manner.
- Outcome B.4: The right mix of electronic and conventional aids to navigation is obtained to meet the changing needs of mariners and to improve overall cost and eco-efficiencies.

GOAL C - Sustainable fisheries and aquaculture

- Outcome C.1: A new fisheries management governance model is developed to meet the needs of an evolving industry, recognizing principles of sustainable development, as well as the precautionary and ecosystem approach.
- Outcome C.2: A new aquaculture governance regime is developed.
- Outcome C.3: Strengthened collaboration with Aboriginal groups contributing to sustainable Aboriginal communities
- Outcome C.4: Illegal, unreported, and unregulated (IUU) fishing and over-fishing are reduced through greater international cooperation on management, enforcement, and trade measures.

GOAL D - Environmentally sustainable operations and management

- Outcome D.1: Environmental impacts are taken into consideration in DFO's policies, plans and programs through the integration of a strategic environmental assessment (SEA) approach.
- Outcome D.2: DFO staff members understand and are able to respond to environmental concerns as part of their daily work, including environmental compliance requirements when relevant.
- Outcome D.3: The impact of climate change issues on departmental business is better understood.
- Outcome D.4: A Canadian Coast Guard that better understands the environmental impact of its business and directs the operation and development of all assets in accordance with a set of industry leading standards and regulations.
- Outcome D.5: Frameworks for action are developed to direct DFO's environmental management, including storage tank systems, hazardous materials, and contaminated sites.
- Outcome D.6: Vehicle gas emissions and maintenance costs are reduced by proper vehicle utilization.

GOAL A - Healthy and productive aquatic ecosystems

Healthy and Productive Aquatic Ecosystems refers to the sustainable development and integrated management of resources in or around Canada's aquatic environment through oceans and fish habitat management, and the critical science activities that support these two programs.

In the outcome statements and activities that follow, you will see links to the federal goal of *Sustainable Development and Use of Natural Resources*.

Outcome A.1:
Through the Environmental
Process Modernization Plan,
service delivery and
effectiveness of fish habitat
management is consistent
with principles of sustainable
development.

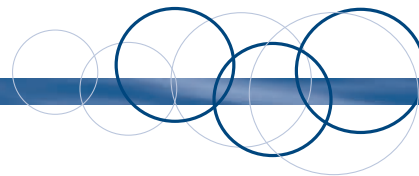
Issue Scan

The Habitat Management Program has faced a number of significant challenges, including increased demands from: industry sectors, which wanted greater predictability, coherence, and timeliness in decision making; provinces, which sought improved co-ordination with their responsibilities and processes; and, environmental groups, which wanted stricter application of the habitat provisions of the *Fisheries Act* and the environmental protection provisions of the *Canadian Environmental Assessment Act*. In response to these

concerns, DFO launched the Environmental Process Modernization Plan (EPMP) aimed at modernizing the Habitat Management Program by making it more effective at protecting fish habitat and more efficient in delivering programs. In practice, this has involved significant programming, policy, organizational, and cultural changes.

DFO works with industry, provincial governments, Aboriginal groups, conservation non-governmental organizations, and others to enhance partnering consistent with the principles and objectives of Environmental Process Modernization. DFO also develops and implements formal partnerships to enhance understanding, adopt common agendas and integrate departmental responsibilities to protect fish habitat with the interests of key stakeholders. For example, DFO has signed two partnership agreements with industry: one involving Canada's seven major National Resource Industry Associations (NRIA), and the other with the Canadian Electricity Association (CEA). As well, DFO has signed federal-provincial-territorial (FPT) agreements on habitat management in the form of memoranda of understanding and related protocols.





Activities	Performance indicators	Target Date
Implement risk management to identify priority referral projects posing the greatest risk to the environment, including regional application of the “Practitioner’s Guide to Risk Management”.	Risk Management Framework implemented in regions; guidance material developed and followed.	2009
Streamline low-risk project referrals, including implementing national and regional Operational Statements (OPS), and integrating them with provincial permitting systems.	<p>Number of National Operational Statements (OPS) developed and approved;</p> <p>Decrease in the number of letters of advice (LOAs) related to low-risk referrals covered by National and Regional Operational Statements; and,</p> <p>Number of OPS integrated into provincial / territorial permitting processes (low risk).</p>	
Implement the Mandatory Training Program.	<p>Number of training modules, training courses and workshops developed;</p> <p>Percentage of Habitat Management staff that have completed mandatory training courses (Habitat Management 101, Information Management 101); and,</p> <p>Percentage of staff that have completed their individual training under the Mandatory Training Program</p>	
Implement Habitat Monitoring and Compliance Modernization (HCM) aimed at improving the Habitat Program’s monitoring ability for both program effectiveness and increased compliance with the fish habitat protection provisions of the <i>Fisheries Act</i> .	More time and resources dedicated to monitoring/auditing.	
Implement measures related to the improved management of Major Projects, resulting in more effective, timely, and coordinated environmental assessments and regulatory decision making in respect of the Major Projects.	<p>Date in project cycle when environmental assessment process begins for Major Projects.</p> <p>Environmental assessments to be triggered progressively closer to the beginning of the review process.</p>	

Activities	Performance indicators	Target Date
Implement the Partnership Agreements and associated work plans with the regional representatives and members of the Canadian Electricity Association and the National Resource Industry Associations.	Number of industry associations who have integrated Operational Statements (OPS) into industry best management practices.	
<p>Continue the development of new arrangements with non-governmental organizations, provincial governments (where applicable), municipalities and others for habitat management.</p> <p>Scientific peer review of advice concerning the evidence linking human activities to impacts on fish habitat, as described in the Pathways of Effect diagrams used in the Risk Management Framework will be undertaken.</p>	<p>Improved understanding and relationships with national and regional stakeholders, and number of partnership agreements and/or arrangements on habitat management being implemented.</p> <p>Risk Management Framework informed by peer reviewed science advice.</p>	

Outcome A.2: Aquatic species at risk are protected or on the way to recovery.

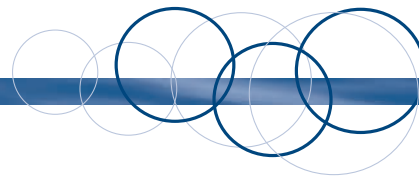
Issue Scan

The *Species at Risk Act* (SARA) was enacted in 2003 and came into force in 2004. Aquatic species at risk are the responsibility of the Minister of DFO, as competent minister under SARA with respect to aquatic species other than individuals in or on federal lands administered by the Parks Canada Agency.

Since the implementation of SARA, the Department has emphasized the need for clear scientific advice, for conducting consultations and ensuring Aboriginal peoples and

stakeholders are properly engaged. The focus has been on species affecting Canadians and their communities, on socio-economic analysis, and on key recovery strategies. Currently there are over 100 aquatic species in the SARA process. DFO has listed 78 species, about 35 more are current candidates for listing. The Department has elected to protect others under the *Fisheries Act*, working with stakeholders and other jurisdictions.

SARA is an important piece of legislation as the Department moves to implement provisions for aquatic species. By integrating science, policies and practices to support SARA, the Department will find balance between industry, economic growth, and ensuring the protection of our species at risk and their habitat. The *Species at Risk Act*, the *Fisheries Act*, and the *Oceans Act* enable DFO to meet this balance.



Activities	Performance indicators	Target Date
Independent Evaluation of the Species at Risk overall program at DFO.	A positive evaluation that indicates overall support for the way DFO has developed and implemented the Species at Risk Program.	2006
As part of a Minister's Round Table required by SARA every two years, DFO will provide the Minister of Environment with a proposed response on stakeholders' recommendations related to aquatic species.	DFO will receive recommendations from stakeholders and a response proposed to the Minister of Environment will follow.	2006 and 2008
Development of recovery strategies for species at risk within two years of listing.	Completion of recovery strategies that are in development by Recovery Teams.	First ones are due in 2006



2. The wolfish project – Phase III

A Québec Region case study

For many years, DFO has been noticing a fairly high presence of wolfish in the landings of several fish species in maritime areas, including in the Magdalen Islands. Logbook and compiled data were found to be incomplete, sometimes discontinuous and were categorizing all types (spotted, wide head and Atlantic) as simply “wolfish”. These three species of wolfish and the leatherback turtle are protected species according to the *Species at Risk Act*.

The “Wolfish” project mainly aims at teaching fishermen to properly differentiate between wolfish species and to identify the leatherback turtle, in order to properly enter data on species at risk into the logbook. It also aims at making them aware of the importance of preserving this species and finally, at encouraging them to throw back into the water any caught wolfish in order to ensure their survival and thus increase their recovery level.

This project has allowed DFO to continuously raise awareness among commercial fishermen through meetings and by distributing information sheets such as those titled *What one must know regarding wolfish and Advice on how to handle and release wolfish*. We then noticed a fairly high incidence of adequately completed logbooks on

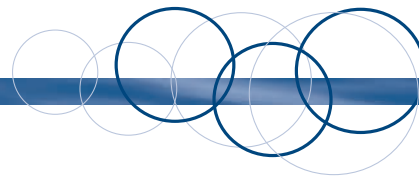
species at risk. As for the leatherback turtle, awareness sessions and information presented to fishermen have allowed DFO to notice a large number of this species at risk in the Magdalen Islands area, the scope of the incidental catch issue and the emergency to act, not only with fishermen but also with the population.

Environmentally speaking, this project clearly helps protect and conserve species at risk in addition to preserving biodiversity.

Economically speaking, this project allows us to acquire new knowledge, to ensure the survival of some species and thus, to maintain for future generations a rich biodiversity in Magdalen Islands. All of this is done at a low cost both for DFO and fishermen.

Socially speaking, these meetings have strengthened ties between DFO and commercial fishermen by getting them directly involved in project implementation in order to benefit from their traditional knowledge and thus contribute to educating them and the general population regarding the identification and protection of species at risk.





Outcome A.3:
The introduction of aquatic invasive species is minimized and the impact of existing ones is remediated

Issue Scan

Aquatic invasive species continue to establish themselves in Canadian coastal and inland waters at an estimated rate of 15 alien species per decade. In the Great Lakes alone, more than 160 alien organisms have taken hold.

Once they are established, aquatic invasive species are a major threat to aquatic biodiversity, ecosystem health, and the fisheries and aquaculture industries that healthy and productive ecosystems sustain. The World Conservation Union rates invasive alien species as the second-worst threat to biodiversity, after habitat loss.

Recognizing the seriousness of this threat, the Canadian Council of Fisheries and Aquaculture Ministers (CCFAM) have developed the

Canadian Action Plan to Address the Threat of Aquatic Invasive Species (Action plan). In keeping with the Action plan, the Department will undertake research to address high-priority species, pathways of invasion, and geographic locations. DFO will also carry out work to support planning activities associated with the rapid response to newly discovered introductions, and the development of a national database of aquatic invasive species. Methodologies for detecting new invasive species, tracking the spread of established populations, and for the assessment of risk will also be examined. The Department will also begin developing a national regulatory framework for aquatic invasive species.

While eradicating aquatic invasive species once they are established is difficult and sometimes impossible, over the longer term, these and other preventative and remedial measures will reduce the number of new aquatic invasive species introduced and the spread of existing species, and help protect the biodiversity and ecosystem integrity of Canadian waters.

Activities	Performance indicators	Target Date
Begin implementing Canada's Action Plan to Address the Threat of Aquatic Invasive Species: <ul style="list-style-type: none"> • Undertake research to address high-priority species, pathways of invasion and geographic locations; • Plan activities associated with the rapid response to newly discovered introductions; and, • Develop a national database for aquatic invasive species, methodologies for detecting new invasions, and tracking the spread of established populations, and assess risk. 	Progress against activities that support the implementation of Canada's Action Plan to Address the Threat of Aquatic Invasive Species. Database, methodologies and tracking system developed. Risk Assessments completed.	2009

Outcome A.4:
Marine activities are proactively managed and the health of Canada's oceans is preserved in collaboration with stakeholders.

Issue Scan

Oceans are an inherent part of Canada's environmental, social, cultural, and economic fabric. The diversity of interests in Canada's oceans requires that modern oceans management arrangements address a number of challenges, including: oceans health; marine habitat loss; biodiversity; growing demands for access to ocean resources; and, regulatory and jurisdictional complexities.

To recognize the need to further implement effective oceans management measures, the Government of Canada has developed an *Oceans Action Plan* (OAP) for the environmental, social, and economic development of Canada's oceans, offshore and coastal areas. The OAP serves as the overarching umbrella for proactively coordinating oceans activities to help move from incremental, single-sector decision making to integrated, collaborative decisions. DFO will continue to work with federal partners to explore the future development of the OAP.

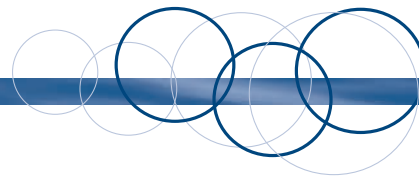
Over the next three years, DFO will strive to improve the way oceans are managed while preserving the health of the marine ecosystem by focusing on two areas: implementing integrated management plans and establishing a network of Marine Protected Areas (MPAs). A number of ongoing activities support this outcome, including: assembling and assessing scientific information related to marine species and habitats; maximizing the use and

development of oceans technologies; and, influencing international priorities and processes.

An essential early step towards improved management is establishing new structures to implement integrated management. These institutional management arrangements provide a forum for bringing together ocean users and stakeholders, including provincial and territorial governments, Aboriginal groups, industry, and coastal communities, to plan for activities in Canada's oceans.



They are also designed to effectively inform ocean-management planning processes nationally and specifically within five priority Large Oceans Management Areas (LOMAs): Beaufort Sea; Pacific North Coast; Gulf of St. Lawrence; Eastern Scotian Shelf; and, Placentia Bay and the Grand Banks. An important output of these planning processes will be integrated management plans for each of the five areas, endorsed by regulators, stakeholders, and interested parties. The plans will provide long-term direction and a common basis for developing and implementing adaptive management strategies and actions for sustainability. A key component of integrated management plans is the development of a set of objectives that focus on ecological health and the social, cultural, and economic well-being of Canadians who depend on ocean resources for their livelihoods. By working with stakeholders to develop a set of common objectives, DFO will facilitate early solutions to possible dissension caused by the diverse needs of multiple users.



Since healthy and productive ocean ecosystems are the foundation for all ocean related activities, a number of activities are under way to better protect and manage unique and sensitive ecosystems. In 2005, DFO announced the designation of three new MPAs in Eastern Canada—Basin Head (Prince Edward Island), Gilbert Bay (Labrador), and Eastport

(Newfoundland). DFO will continue to work with stakeholders to identify, evaluate, establish and manage MPAs across Canada. In partnership with Environment Canada and Parks Canada, DFO also prepared a federal strategy to enhance collaboration in establishing, managing, and monitoring marine protected areas.

Activities	Performance indicators	Target Date
Broaden participation in integrated management structures to strengthen governance.	Number of committees established federally and in each Large Ocean Management Area. Number of sectors represented on committees.	2008
Develop integrated management plans for each of the five Large Oceans Management Areas (LOMAs).	Integrated Management Plans in place for all LOMAs	2008
Create new Marine Protected Areas (MPAs) as departmental contribution to the broader network.	Creation of at least three new MPAs.	2008
Elaborate and implement management plans for designated MPAs to ensure they are achieving their conservation goals.	Management plans in place for designated MPAs.	2009



Photo by: Cheryl Halverson

3. The proposed Manicouagan marine protected area (MPA)

A Québec Region case study

The marine environment in the Manicouagan peninsula area, located on the north shore of the St. Lawrence River, is among the richest and most productive in the Laurentian ecosystem. Estuaries of the three huge rivers in the area create salinity and temperature conditions conducive to the emergence of phytoplankton (microscopic algae) as a result of freshwater flowing into salt water of the St. Lawrence estuary. This high primary productivity attracts a large number of invertebrates, fish and marine mammals who reside in the highly diversified habitats of that area.

The proposal to establish a Marine Protected Area in the vicinity of the Manicouagan peninsula is the result of efforts by area managers, Native communities, users, local stakeholders and neighboring community members and the department. By establishing this and other MPAs, DFO is meeting its national and international obligations to protect and monitor marine biodiversity, in conformity with its sustainable development strategy.

Environmentally, DFO helps to protect and preserve Canadian biodiversity and to better understand marine ecosystems by gathering environmental knowledge and monitoring its sustained use in the Manicouagan area.

Economically, communities can take part in the management of marine resources and habitats while pursuing their activities and potentially expanding activities providing they comply with the objectives of the Marine Protected Area.

Socially, the participation of local people in the project's development and in its management builds on principles of social integration, reflecting the strength and potential of this MPA.



GOAL B - Safe and accessible waterways

This goal relates to providing access to Canadian waterways, and ensuring the overall safety and integrity of Canada's marine infrastructure for the benefit of all Canadians.

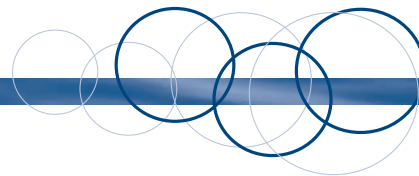
In the outcome statements and activities that follow, you will see links to the federal goals of:

- Sustainable Development and Use of Natural Resources
- Sustainable Communities

Outcome B.1:
Efficacy in ensuring an effective response to minimize adverse impacts of marine pollution incidents in Canadian waters is enhanced.

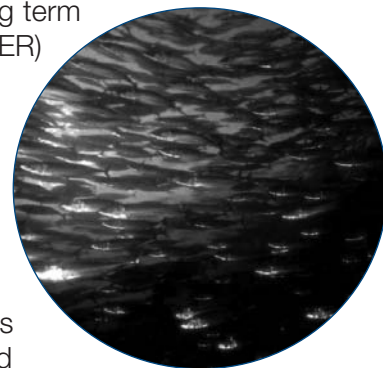
Issue Scan

With the establishment of the CCG as a Special Operating Agency, the Coast Guard has the opportunity to solidify its role as the federal lead for ensuring an effective response to ship source pollution in Canadian waters.



When spills do occur, and where the polluter has been identified and is willing and able to respond, CCG will assume the role of Federal Monitoring Officer (FMO) and will inform the polluter of its responsibilities. Once satisfied with the polluter's intentions and plans, the FMO monitors the polluter's response and provides advice and guidance as required. However, in those cases where the polluter is unknown, unwilling or unable to respond, CCG will assume overall management and ensure an effective response to the incident as On Scene Commander (OSC). In other instances, CCG acts as a resource, providing expertise and equipment where requested. Personnel and equipment are strategically placed throughout Canada to maintain a national operation capable of responding 24/7.

To ensure an effective, long term Environmental Response (ER) program, CCG is developing and implementing a national environmental response strategy that would encompass a training and exercise plan, succession plans, an assessment of its infrastructure holdings, and performance measures and indicators as they pertain to the efficacy of such ER strategy.



Activities	Performance indicators	Target Date
Develop a National Environmental Response Strategy, including a rejuvenated training and exercise program plan, a long term human resources plan, an evaluation of current capability, and related performance measures and indicators.	Effectiveness of response to number of spills.	2009

Outcome B.2:
Small-craft harbours operations are consistent with recognized Canadian and international environmental standards.

Issue Scan

DFO's Small Craft Harbours (SCH) Branch has overall program responsibility for building, operating and maintaining about 1,275 harbours across Canada. These harbours are fundamental to the business of DFO's clients, including more than 56,000 registered fishers (approximately 90% of the commercial fleet), Aboriginal fishers,

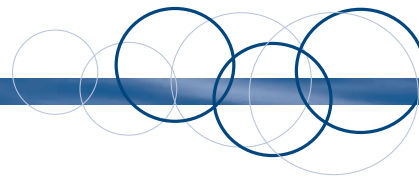
transient boaters, aquaculture businesses, fish processors, and numerous marine-service industries. Fishing harbours serve more than 30,000 vessels and many are staging areas for enforcement and search and rescue activities. Harbour infrastructure protects millions of dollars worth of users' business assets, allows safe user operations, prevents coastal erosion and damage, provides local economic development and employment, offers refuge for mariners in distress, and provides public access to inland and coastal waterways. Often, these harbours are the only visible federal presence in communities, and in some remote locations provide the only outside transportation link.

SCH activities include maintaining and repairing harbour infrastructure, as well as day-to-day operations of its harbour properties. For purposes of construction, repairs, maintenance, and operations, SCH must adhere to existing Canadian and international environmental legislation and standards.

In 1987, SCH introduced the Harbour Authority Program to involve harbour users directly in managing and operating its harbours. Harbour Authorities (HAs) are non-profit incorporated bodies consisting of voluntary boards of directors that sign a lease with the SCH for the harbour properties, and assume responsibility for the long-term management and operation of

facilities. In demonstrating environmental stewardship at SCH harbours they manage, HAs are adopting and implementing Environmental Management Plans (EMPs) at their respective harbour sites. This initiative supports a sustainable, environmentally sound management process to protect the marine environment that exemplifies community based and well managed public resources. EMPs benefit the harbour by: ensuring that the harbours are clean and healthy for fishers and the public; reducing operating costs for clean-ups, waste disposal and maintenance; promoting due diligence to reduce or eliminate liabilities or accidents; and, providing clear guidance under which various activities can be undertaken.

Activities	Performance indicators	Target Date
Small Craft Harbours will maintain compliance with environmental regulations and standards.	All maintenance, repair, or divestiture projects will comply with applicable environmental regulations and standards, including environmental assessments and environmental compensation measures.	2009
Development of Environmental Management Plans for all essential harbours.	95% of all HA-managed harbours in place for at least two years will have developed and submitted the required Environmental Management Plans.	2009



4. Integrated harbour development at Petit de Grat

A Maritimes Region case study

The community of Petit de Grat, which has a principal wharf on Isle Madame off the coast of Cape Breton Island, has become a model for integrating Aboriginal communities into the commercial fishery. In the Marshall Response Initiative, five First Nations acquired vessels and chose Petit de Grat as their homeport. The harbour is near their communities and lucrative fishing grounds.

The bands also had productive relationships with the local Acadian community, and they were welcomed with offers of fisheries-related training, processing, and boat-building services. However, the harbour was congested and could not accommodate the existing vessels, let alone new entrants. A major development project saw three wharves rebuilt and floating docks installed, with a large service area, breakwater wharf, and launching ramp still under construction.

Environmentally, and to compensate for infilling, DFO funded research into artificial reefs and set up three prototypes to encourage

lobster habitat. More marine life was attracted than expected. Researchers are now examining the reefs' benefits for the entire marine ecosystem.

Economically, communities benefit from additional marine activity, tourism, and spin-off employment.

Socially, the project was a collaborative effort. It was co-managed by DFO's Small Craft Harbours, the volunteer Harbour Authority, and Public Works and Government Services Canada. The community and Harbour Authority facilitated discussions with the First Nations throughout.



Outcome B.3:
Implementation of a risk-based priority approach in providing up-to-date navigational information to mariners in a timely and efficient manner.

Issue Scan

The Canadian Hydrographic Service is responsible for the production and maintenance of a large portfolio of digital and paper nautical charts and publications mandated as the carriage requirement by the *Canada Shipping*

Act, and necessary to facilitate marine trade and safe navigation in Canadian waters. Keeping these products up-to-date is essential in ensuring the protection of lives, property, and the marine environment.

To assist in delivering the most effective charting program within existing resources, the Canadian Hydrographic Service has adopted a priority setting model based on a risk assessment approach. Risk classifications of high, medium and low have been used and corresponding sustainable levels of service have been developed for each of these categories. Both the risk assessment and levels of service have been validated through a client consultation process.

Activities	Performance indicators	Target Date
The implementation of the risk based approach and associated levels of services that focus charting resources on areas of highest risk.	Number of levels of service standards achieved.	2009
A communication strategy developed to ensure all stakeholders are aware of these service levels and that expectations of the Canadian Hydrographic Service products are managed in such a way as to ensure safety, satisfaction and protection of the marine environment.	Number of client consultations held.	

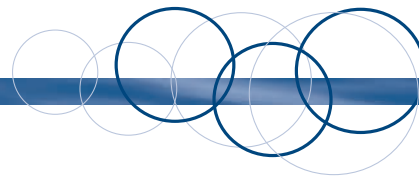
Outcome B.4:
The right mix of electronic and conventional aids to navigation is obtained to meet the changing needs of mariners and to improve overall cost and eco-efficiencies.

Issue Scan

To reach this outcome, DFO must continue to transform its marine services by using technology and innovative approaches to client

service, and alternative service delivery. DFO will accomplish this without compromising safety by consulting with mariners and by minimizing the impact on employees.

Challenges surround asset condition, moving towards a technologically sound aids-to-navigation service, availability of ship time, and responding to mariners changing needs. DFO is investigating and applying new technologies to support the aids-to-navigation service with efficient and cost-effective modes of service delivery. Marine safety is a responsibility that DFO stakeholders and all Canadians must share, and collaborative work is essential to achieve DFO targets.



The opportunities DFO envision for the next few years involve implementing a series of initiatives that will lay the foundation for an efficient and effective aids-to-navigation service for the 21st century. Through these initiatives, the Department will adjust the mix of conventional and electronic aids to navigation to respond to the changing needs of the

mariners, take advantage of new and evolving technology, improve program monitoring practices, and implement alternative service delivery options.



Activities	Performance indicators	Target Date
As part of the <i>Aids to Navigation of the 21st Century</i> , convert lighted aids to light-emitting diode lanterns (better storage of energy, smaller batteries, less maintenance, less movement of ships).	All lighted aids converted.	2009
As part of the <i>Aids to Navigation of the 21st Century</i> , replace steel buoys with plastic (no more sandblasting and painting, recyclable construction, less maintenance, less ships movements).	80% of steel buoys replaced.	

GOAL C - Sustainable fisheries and aquaculture

This goal refers to an integrated fisheries and aquaculture program that is credible, science-based, affordable, and effective, and contributes to sustainable wealth for Canadians.

In the outcome statements and activities that follow, you will see links to federal goals of:

- Sustainable Communities
- Sustainable Development and Use of Natural Resources

Outcome C.1 –
A new fisheries management governance model is developed to meet the needs of an evolving industry, recognizing principles of sustainable development, as well as the precautionary and ecosystem approach.

Issue Scan

DFO is currently considering the renewal of the Fisheries Act to better reflect citizens' expectations and to respond to the evolving needs of the resource. This would help provide a more modern, transparent, effective, and accountable legal framework for the sustainable

5. Seafloor mapping: improving sustainability in the scallop fishery

A Maritimes Region case study

Over the past 10 years, Fisheries and Oceans Canada (DFO), Maritimes Region, Natural Resources Canada, and the fishing industry have collaboratively taken the guess work out of scallop fishing by developing three-dimensional maps that show both the depth contours of the ocean floor and sediment type. These maps help fishers avoid hazards (such as rocks and rough bottom), and DFO survey data shows that gear damage drops from 14% to 2% with multi-beam maps. DFO researchers also analyze the maps against catch and vessel monitoring data. They have found a strong correlation between scallop catches and a sand/gravel bottom, and fishers now use the maps to concentrate on these areas. This results in less towing time, less seafloor disturbance, and less by-catch. One industry representative stated: “It’s the best thing since the hook”.

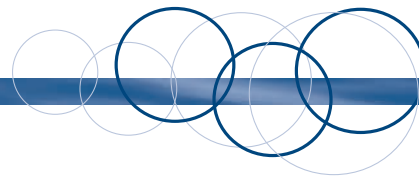
Efficiency Benefits of Multibeam Mapping Imagery			
<i>For one tonne of scallop meat:</i>			
	Without imagery	With imagery	Reduction
Fishing effort	6.37 hours	2.41 hours	62%
<i>For a scallop quota of 13,640 kilos:</i>			
	Without imagery	With imagery	Reduction
Time gear remains on bottom	162 hours	43 hours	73%
Area of bottom towed	1,176 km	311 km	74%
Fuel usage	27,697 litres	17,545 litres	36%

This technology supports DFO’s three goals through the three pillars of sustainable development.

Environmentally, significant reductions in seafloor disturbance and by-catch promote healthy and productive aquatic ecosystems.

Economically, reduced fuel consumption lowers costs to the industry, potentially reduces gear damage, and promotes safe and accessible waterways.

Socially, integrated management among hydrography, marine geology, biological habitat characterization, and the fishing industry has generated information essential for managing sustainable fisheries and aquaculture.



development of fisheries and fish habitat, undertaken in co-operation with fishers, provinces/territories, Aboriginal groups, and other Canadians. Under a renewed Act, a requirement to take into account certain principles, including sustainable development, the ecosystem and precautionary approaches in the conservation and protection of fish and fish habitat could be included.

DFO has engaged resource users, Aboriginal groups, Provinces and Territories, and others with an interest in the fisheries resource in extensive policy and program reviews to develop an approach to modernizing the way fisheries are managed. The results of these reviews have been consolidated into Fisheries Management Renewal (FMR) – a package of program renewal undertakings that promote predictability, stability and transparency, and a strong and healthy fisheries resource. The FMR overarching goal is to develop a new fisheries management governance model that will better enable DFO and resource users to meet conservation objectives, and that will enable resource users to respond more readily to the economic forces that impact their industry. FMR has four objectives: strong conservation outcomes, shared stewardship, stable access and allocation approach and modernized compliance.

Strong Conservation Outcomes will be achieved through sound science, by working with resource users to develop risk management frameworks based on precautionary and ecosystemic approaches, by modernizing the fisheries compliance regime, and by improving fish habitat management. Achieving strong conservation outcomes, through clear conservation frameworks, depends upon a commitment to conservation from those whose activities impact upon the resource.

Shared Stewardship will be achieved by promoting collaboration, participatory decision making and shared responsibility and accountability with resource users and others.

Shared stewardship means those involved in fisheries management work cooperatively – in inclusive, transparent and stable processes – to achieve conservation and management goals. DFO believes that enabling resource users to play a greater role in decision making, and enabling them to take greater responsibility for resource management decisions and their outcomes, will increase their commitment to conservation and their ability to control their economic and social well-being. Because fisheries management oversees a public natural resource on behalf of Canadians, shared stewardship also seeks to include others with an interest in the resource in decision making processes.



Stable Access and Allocation will be achieved through greater security of access, stable sharing arrangements and transparent and predictable decision making processes. Stable access and allocation will allow resource users to focus on conservation and economic viability issues, rather than focusing on securing their share of the resource.

A Modernized Compliance Regime will facilitate new relationships, promote shared stewardship and target systemic compliance issues. DFO will work with resource users to develop cooperative ways to ensure the rules of the fishery are being followed, without having to resort to courts as often. This will require new compliance tools and approaches on a continuum ranging from education to enforcement, a priority setting/risk assessment response model, expanded ticketing system and administrative sanctioning.

FMR objectives are being implemented incrementally, in a manner consistent with the constitutional protection provided to Aboriginal and treaty rights and consistent with international

6. Precautionary and Ecosystem Approaches to Fisheries Management

The emerging fisheries management governance structure brings together a number of initiatives or tools, such as the precautionary approach (PA) and various policies being developed, for example, for sensitive benthic marine areas, forage species and by-catch. These are all elements of an emerging ecosystem approach (EA) to fisheries management. The PA and EA are fundamental to achieving the strong conservation objectives envisioned by Fisheries Management Renewal.

Adopting an ecosystem approach to fisheries management involves better understanding and managing the cumulative impacts of fishing. A comprehensive ecosystem-based approach would involve taking account of, among other things:

- all the interactions the target fish stock has with predators, competitors and prey species;
- the effects of weather and climate;
- the interactions between fish and habitat;
- the effects of fishing on species and habitat

DFO is developing the necessary building blocks to take an EA in fisheries management. The emerging approach includes data collection and ecosystem assessment, setting clear ecosystem and management objectives and the

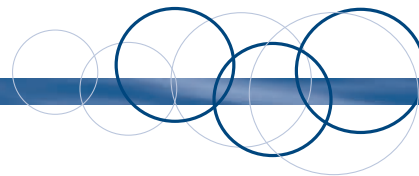
development of decision models. It will be supported by policies on by-catch, sensitive marine benthic areas, emerging fisheries and others and delivered through the Integrated Fishery Management Plans.

Adopting a PA to fisheries management involves setting biologically-based reference points and establishing pre-agreed risk-based actions to be taken at those reference points well in advance of a fishery in order to avoid the stock being reduced to a state of serious harm. For each stock in question, these systems are established in consultation with interested parties (the fishing industry and others).

DFO has completed several years on the elaboration and discussion of the PA and its application to fisheries in Canada. The PA and elements of it have already been applied in some fisheries and the next step is the staged implementation of the PA in all fisheries. As an example of the progress being made in applying PA to fisheries, reference points have been identified for at least 17 species, and these are used to guide management actions. For example, Chum Salmon, Gulf Herring and Harp Seals utilize reference points in their management.

fisheries treaties, and with the understanding that the fisheries resource is important to Canadians in many different ways, such as in commercial, recreational, and Aboriginal fisheries, for aquaculturists, in the tourist industry, to environmentalists, and, of course, to Canadians in fishery-dependent communities.

DFO's sustainable development objectives are significantly advanced by modernizing the way fisheries are managed in Canada through FMR. A modernized governance structure for Canada's fisheries, where industry and others effectively participate in fisheries decision making, will help to ensure that Canada's fisheries resources are harvested in a sustainable manner.



Activities	Performance indicators	Target Date
Work with resource users to develop conservation frameworks (based on Integrated Fisheries Management Plans) that incorporate the precautionary and ecosystem approaches.	Percentage of conservation frameworks that incorporate the precautionary and ecosystem approach.	Annually
Facilitate self-rationalization programs in fisheries to better match harvesting capacity with resource abundance.	Number of fisheries with self-rationalization programs.	2008
Develop “Best Practices” guidelines for entering into co-management or collaborative arrangements with industry and others.	Completed guidelines for entering into such arrangements.	2007
Develop national co-management policy framework.	Completed national co-management policy framework.	2008
Include others with an interest in the resource in decision making processes by building upon the successful shared stewardship roundtables, task groups and summits that bring together provinces, processors, environmentalists, etc. to address specific fisheries issues.	Number of roundtables, task groups and summits that address specific fisheries issues.	Ongoing
Continue to stabilize sharing arrangements in fisheries across Canada.	<p>Number of fisheries with stable sharing arrangements.</p> <p>Number of disputes regarding access and allocation that are settled.</p>	Annually
Develop a strategic and modern compliance regime that facilitates new relationships, promotes shared stewardship with resource users and communities, and targets systemic compliance issues, through new compliance tools and approaches on a continuum ranging from education to enforcement.	<p>Number of education programs and communication and inter-governmental initiatives; number of partnerships and negotiated enforceable management measures; number of major case investigations.</p> <p>Establishment of administrative sanctioning regime.</p> <p>Expanded ticketing system.</p>	Ongoing

7. Management of the Inshore Herring Fishery in the Southern Gulf of St. Lawrence

A Gulf Region case study

Before 1984, the Southern Gulf herring fishery was managed as one complete unit. Beginning in 1984 and based on biological advice, separate herring components (spring and fall spawners) and quotas were implemented to spread the fishing effort over all the major spawning areas. These areas were later identified as specific herring management zones, and this regime continues to this day. In addition, stakeholders recently confirmed their commitment to implementing the Precautionary Approach (PA) in the context of a longer term vision.

Environmentally, focusing on elements such as the PA and ecosystem considerations as well

as spreading fishing effort over all the major spawning grounds will contribute to improving both this fishery and the ecosystem of the Gulf of St. Lawrence.

Economically, this management regime will allow industry to concentrate on the value instead of the volume, deriving a greater value from the fisheries for their benefit and that of their respective coastal communities.

Socially, this regime allows for more local decision making and enhances the potential for increased and more stable benefits to local communities. In addition, this regime also promotes respect and collaboration between all parties.

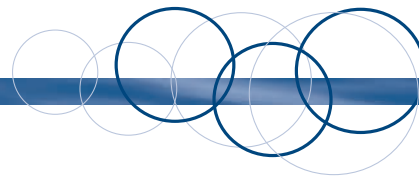
Outcome C.2:
A new aquaculture governance regime is developed.

Issue Scan

Aquaculture is a sustainable response to global demand for fish, and currently contributes over 40% of fish destined for human consumption. As one of the most rapidly growing food production sectors in the world, aquaculture is a new-economy industry, grounded in science and technological innovation. It is vital for the industry to protect and conserve the environment, not only to maintain Canada's natural resources, but also to maintain and sustain economic investments and consequently socio-economic growth.

DFO is the lead federal department for the sustainable management of fisheries and aquaculture, which touches 17 departments and agencies within the Government of Canada. DFO is currently leading a review of the aquaculture management framework to deliver on its commitment to enable sustainable development of Canada's aquatic resources.

To accomplish this, DFO is working with its provincial and territorial partners to renew the way aquaculture is managed in Canada, to ensure it develops in an environmentally responsible and socio-economically sustainable manner and contributes to broader Government of Canada renewal initiatives. Canada is striving to create the conditions needed to realize the full potential of aquaculture by: harmonizing regulations;



clarifying the roles of governments; developing targeted government programming; investing in science; and, improving policy and regulatory regimes such as setting clear rules and standards for industry compliance with compliance monitoring and enforcement.

In recent years, DFO's scientists, in collaboration with other researchers, have undertaken significant research to better understand the interactions between fish farming and the environment, in order to improve the environmental performance of the industry, and identify appropriate mitigation measures that will reduce environmental impacts. The aquaculture industry in Canada is also working hard to continually improve its

environmental performance, and ensure its products meet the highest standards of quality and food safety.

It is important to highlight that each aquaculture operation in Canada (except for certain types of shellfish aquaculture that do not physically change the seabed) is subject to the *Canadian Environmental Assessment Act* (CEAA) before it receives federal approval. Combined with ongoing federal and provincial environmental monitoring programs, environmental assessments of aquaculture projects help ensure that potential significant negative impacts of their operations on the environment are identified and mitigated.

Activities	Performance indicators	Target Date
Consult with provincial and territorial governments to develop and implement a renewed aquaculture management framework that will include governance modernization and programming components.	Percentage of negotiations completed with provinces and percentage of consultations undertaken with all stakeholders.	2007
	Ratification of the renewed aquaculture management framework by Federal, Provincial and Territorial ministers.	2007
	Number of Federal/Provincial/Territorial implementation agreements signed.	2008
Coordinate and engage in collaborative scientific research and development in support of sustainable aquaculture, as well as commercialization of innovations, with partners such as other federal departments and agencies, other levels of government, industry, academia, and the international science community.	<p>Number of collaborative scientific research projects.</p> <p>Use of new knowledge to provide scientific advice on the interactions between aquaculture and the environment.</p>	2009

8. DFO contributing to the sustainability of rural Newfoundland through aquaculture

A Newfoundland and Labrador Region case study

Aquaculture is a growing contributor to global seafood production, and Newfoundland and Labrador is ideally suited for fish farming. In the region, DFO's administration of the aquaculture sector has been integrated with the provincial process to ensure a coordinated, streamlined, "one-window" approach to regulatory approvals. A proponent must apply for an aquaculture licence through the provincial Department of Fisheries and Aquaculture, which is referred to DFO for review and comment. Subsequently, DFO forwards any resulting recommendations to the provincial government for consideration and inclusion in any associated permitting process administered by the province.

Environmentally, the collection of baseline habitat data has been integrated into the provincial aquaculture application process, and monitoring of all aquaculture sites has been implemented as a condition of the provincial aquaculture license. Such activity supports the goal of ecosystem integrity. Increased understanding of the environmental impacts of aquaculture on the marine environment will lead to both an economically and environmentally sustainable industry in Newfoundland and Labrador.

Economically, rural communities benefit from additional marine activity, as well as near-shore and spin-off employment, which will support economic renewal in rural communities that are depressed by increasingly limited traditional fisheries.

Socially, developing and maintaining effective communications with the industry association, growers, the provincial government, and DFO has been vital to the growth of the aquaculture industry. By facilitating this sector, DFO also supports the province's rural social fabric. DFO continues to undertake communications initiatives such as public opinion research, fact sheets, and Web site developments that contribute to the public's understanding of aquaculture and DFO's responsibilities.



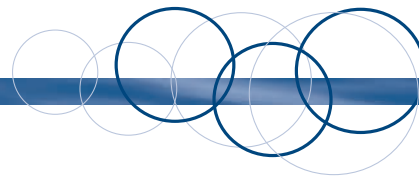
Outcome C.3:
Strengthened collaboration with Aboriginal groups contributing to sustainable Aboriginal communities.

Issue Scan

Through its programs and policies, DFO is committed to strengthening its collaboration with Aboriginal groups on the management

and stewardship of aquatic resources and ocean spaces, and in supporting sustainable Aboriginal communities through greater access to commercial fisheries opportunities where DFO manages aquatic resources.

Facilitating the participation of Aboriginal groups in modern fisheries and aquatic resource management in support of better decision making and positive relationships is a key priority of DFO, including fisheries management, integrated oceans management,



species at risk, habitat management, scientific research and aquaculture development. DFO has several programs under way designed to assist Aboriginal people to obtain capacity to effectively manage their local fisheries and to participate in the various advisory and multi-stakeholder processes used for aquatic resource and oceans management. These include the Aboriginal Fisheries Strategy (AFS), the Aboriginal Aquatic Resource and Oceans Management Program (AAROM), and the Aboriginal Inland Habitat Program (AIHP).

Aboriginal groups on all three coasts are seeking greater access to commercial fishery opportunities as an anchor for sustainable coastal communities and for achieving broader

socio-economic transformation in First Nation communities in coastal areas. DFO has several programs designed to provide Aboriginal groups with greater access to commercial fisheries opportunities and to support the development of the capacity to operate a successful fisheries enterprise.

These include: the Allocation Transfer Program (ATP); the Marshall Response Initiative (MRI); the Fisheries Operations Management Initiative; and, the At-Sea Mentoring Initiative.



9. Pacific Salmon Fisheries Reform

A Pacific Region case study

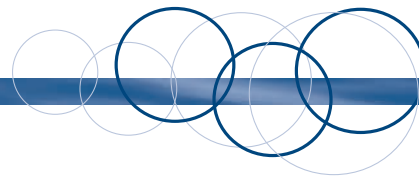
DFO Pacific Region is working on several linked initiatives to facilitate sustainable resource management using ecosystem principles. The implementation of the Wild Salmon Policy will establish a clear policy framework for conservation and sustainable use. It makes conservation the top priority and recognizes the importance of biological, social and economic factors in a transparent decision-making process. Program changes will be introduced in a phased manner, and will be consistent with the Wild Salmon Policy and its principles. These reforms will contribute to improved management of salmon fisheries and salmon habitat and promote sustainable resource management and use.

Environmentally, the Salmonid Enhancement Program will concentrate on conserving and rebuilding salmon populations.

Economically, the management of salmon fisheries will be affected through the implementation of various reforms such as the enhancement of First Nations' fishery economic benefits by moving to defined allocations for all harvesting sectors. Similarly, commercial fishery reforms will be introduced to better define specific allocations and facilitate greater self-reliance.

Socially, sustainability will further be promoted through the ongoing collaboration with the recreational sector to develop and work towards a common vision. Additional reforms will be introduced to foster enhanced co-management arrangements, increase harvester accountability and provide opportunities for more operational decision-making.

Activities	Performance indicators	Target Date
Monitor and evaluate progress of at-sea mentoring deployment in the context of the Aboriginal At-Sea-Mentoring Initiative to ensure Marshall-recipient First Nations are able to further develop skills to fish safely and effectively.	Evaluation of trainee performance by the service provider.	2008
Pursue development and implementation of a fisheries information management system with supporting business mentoring as part of the Fisheries Operations Management Initiative (FOMI); provide assistance to Marshall-impacted First Nations in implementing comprehensive fisheries management frameworks and in learning more advanced skills to manage their communal fisheries assets (with the objective of maximizing benefits for fishers and communities).	Development and implementation of software, regional partnership funds, and contribution agreements with participating First Nations.	2008
Establish co-operative management arrangements to support the management of fisheries as part of the Aboriginal Fisheries Strategy (AFS).	Number of AFS contribution agreements. Number of groups with signed contribution agreement.	Ongoing
Negotiate and implement short-term Aboriginal Aquatic Resource and Oceans Management Program (AAROM) capacity-building agreements. Negotiate and implement multi-year AAROM contribution agreements.	Number of short-term AAROM capacity-building contribution agreements. Number of multi-year AAROM collaborative management agreements. Number of groups who have made the transition from capacity-building to collaborative management.	Ongoing
Negotiate and implement Aboriginal Inland Habitat Program (AIHP) Contribution Agreements.	Number of groups with signed AIHP contribution agreements.	2007
Regional activities supporting Aboriginal group's involvement in Species at Risk Act (SARA) programming.	Regional funding distribution. (DFO and joint DFO & Environment Canada)	2007



10. Northwest River salmon shared stewardship

A Newfoundland and Labrador Region case study

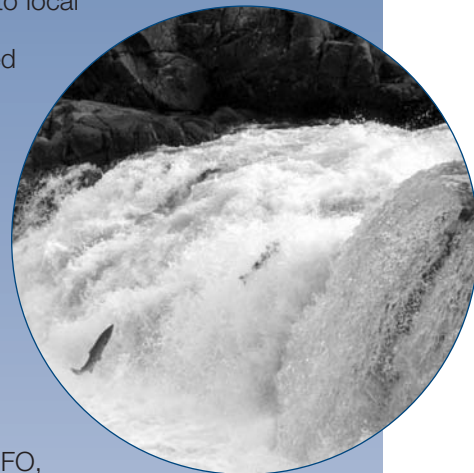
Years of declining salmon returns in the Northwest (Port Blandford) River culminated in an all-time low of only 153 salmon returning to the river in 2001. In 2002, DFO engaged local community stakeholders in managing salmon stocks of this river, with the aim of reducing poaching and rebuilding the spawning stock. Efforts included raising awareness of harmful effects of poaching and the value of salmon stocks, and developing river fishing management plans that allowed some angling in previously closed areas while preventing over-fishing.

Environmentally, salmon returns have increased to 1,501 in 2005 (including 20% large salmon). The Southwest and Salmon tributaries, previously closed to angling, have been re-opened. Pollution in the area has been further reduced through Audobon certification for the local golf course.

Economically, increased returns have resulted in more anglers accessing the salmon fishery

from outside the area, providing economic benefits to local communities. The number of registered fishers increased from only 40 in 2003 to 98 in 2005, many of whom were first-time anglers.

Socially, this project has shown that, through shared stewardship between local communities and DFO, natural resources can be protected and rebuilt, and community pride and a sense of local accomplishment can be fostered.



Outcome C.4:
Illegal, Unreported, and Unregulated (IUU) fishing and over-fishing are reduced through greater international cooperation on management, enforcement, and trade measures.

Issue Scan

The *Food and Agriculture Organization (FAO): The State of World Fisheries and Aquaculture (2004)* report states that 24% of global fish stocks are either overexploited or depleted (16% and 7%, respectively). This means that nearly one-quarter of the world's fish stocks

are being harvested in an unsustainable manner. Illegal, Unreported, and Unregulated (IUU) fishing, global overfishing and a deteriorating marine environment all combine to threaten the world's oceans biodiversity.

There is growing international recognition that for fisheries management to be successful, it must be dovetailed into, and supported by, the broader oceans agenda. As the health of fish stocks rely on the health of ocean ecosystems, an integrated approach is necessary to protect ocean biodiversity on the high seas.

Mindful of this alarming situation and the long-term efforts required to address it, DFO launched the International Fisheries and Oceans Governance Strategy (IFOGS) in 2005 to provide Canadian leadership to achieve the protection and recovery of straddling and other

international fish stocks of importance to Canadians, and to take actions to halt and reverse both long-term trends of global overfishing and failures in governance that threaten the world's ocean biodiversity. The ultimate goal of IFOGS is more effective governance of the high seas that manages for sustainable fisheries and healthier oceans as a contribution to sustainable development. Canada has made strides in achieving this goal but only through sustained international activities and cooperation will this issue be sufficiently addressed to ensure healthy oceans and global fish stocks into the future.

Canada's strategy involves working through diplomatic channels to push countries to hold their vessels accountable, advocating

internationally for trade and market measures designed to achieve sustainable global fisheries, and building our understanding of fisheries and oceans to inform decision making through increased scientific research on high seas ecosystems.

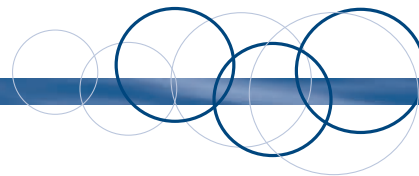
The strategy is built upon four pillars:

1) building understanding of fisheries and oceans; 2) managing for sustainable fisheries; 3) managing for marine environmental and ecosystem sustainability; and, 4) enabling and supporting program delivery. Although the activities presented here are combined under this single outcome, they reflect all four pillars of IFOGS and support both Goal A (Healthy and Productive Aquatic Ecosystems) and Goal C (Sustainable Fisheries and Aquaculture).

11. Implementing the High Seas Task Force Proposals

In March 2006, the High Seas Task Force (HSTF) released its final report, outlining practical measures to expose illegal, unreported and unregulated (IUU) fishing activities, deter them and improve enforcement against violators. The HSTF is now dissolved, but like other former members of the HSTF, Canada now continues to work with a broader group of partners to implement the HSTF measures. In particular, Canada is leading the development of performance standards for regional fisheries management organizations, like NAFO. Canada will also host the next meeting of the International Monitoring, Control and Surveillance Network in January 2007, where further work will be undertaken with our partners to enhance this vital global enforcement tool.

For more information, please visit: www.high-seas.org



Activities	Performance indicators	Target Date
Scientific research, analysis and advisory activities on marine ecosystem and provision of advice to decision makers.	Extent to which scientific contributions (workshops, publications) have contributed to addressing strategic issues under IFOGS.	2009 and ongoing
Reduce IUU fishing and overfishing through enforcement, compliance, and diplomacy consistent with international law as evidenced by effectively reformed Regional Fisheries Management Organizations and reduced global IUU fishing.	Reduction in overfishing and IUU from current levels on high seas and reduced pressure on stocks.	2009 and ongoing
Activities focused on increasing understanding and acceptance of ecosystem-based management of high seas by international organizations and relevant stakeholders (ie, position papers on IFOGS elements, presentations at multilateral fora, etc).	Degree to which Regional Fisheries Management Organizations are moving from stocks to ecosystem-based management issues on the international scene.	2009 and ongoing
Outreach and advocacy activities to mobilize political support for a Canadian vision of the governance agenda, including increased public and industry awareness of the need for ecosystem-based decisions in fisheries management and the need for capacity-building measures for developing nations to participate in and adopt ecosystem-based management.	Frequency and tone (positive-neutral-negative) of international media reports through media analysis. Improved international cooperation on governance issues.	2009 and ongoing

12. Effective Reforms for the Northwest Atlantic Fisheries Organization (NAFO)

In September 2006, NAFO Parties agreed to several significant reforms to the way the Organization deals with overfishing, including amendments to the NAFO Convention. Proposed changes to the Convention include provisions to implement such modern management principles as the ecosystem and precautionary approaches to fisheries management, as well as new decision-making and dispute settlement procedures. NAFO also adopted new enforcement measures that will

oblige flag states to immediately follow-up on serious infringements and to apply interim penalties against a vessel caught misreporting, directing for moratoria species, or repeating serious infringements. NAFO parties also agreed to protect four seamount areas in the NAFO Regulatory Area. These are welcome first steps and Canada looks forward to continuing collaboration to improve fisheries management in the Northwest Atlantic.

GOAL D - Environmentally sustainable operations and management

This goal highlights outcomes related to implementing and maintaining sustainable operations, as well as corporate awareness of the importance of sustainable development considerations in decision making. The ability to minimize departmental environmental footprint constitutes a key objective and an opportunity for the Department to demonstrate leadership in environmental management.

In the outcome statements and activities that follow, you will see links to federal goals of:

- [Governance for SD](#)
- [Climate Change](#)

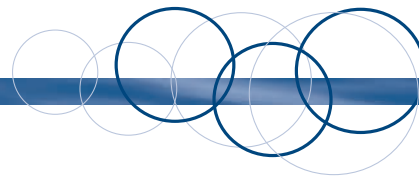
Outcome D.1:
Environmental impacts are taken into consideration in DFO's policies, plans and programs through the integration of a strategic environmental assessment (SEA) approach.

Issue Scan

One of the challenges of sustainable development is improving the ability to integrate its concepts into decision making. Strategic Environmental Assessment (SEA) is an effective planning tool that supports the achievement of sustainable development. The SEA process provides for evaluation of environmental effects of policy, plan, or program proposals, and socio-economic effects, derived from environmental effects, as DFO develops the proposals before it makes decisions.

The 2004 Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals states that the SEA must accompany such proposals brought before Ministers for approval where it may result in important environmental effects, either positive or negative. One of the challenges facing DFO is ensuring employees are well-versed in the SEA process, and that they apply this useful planning tool to the benefit of Canadians. DFO recently introduced a formalized management system that includes tools, training and monitoring activities to implement the 2004 Cabinet Directive. This system guides employees to ensure appropriate consideration of the environmental effects of a relevant decision. Training and awareness sessions, consistent templates and tools, quality tracking, and monitoring are all part of DFO's commitments to SEA in this SDS.

Activities	Performance indicators	Target Date
Raise awareness and support of the Strategic Environmental Assessment (SEA) process.	10% increase in number of participants who have completed SEA training and awareness sessions.	2008
	Annual review of DFO SEA process as part of the regular business planning cycle.	2009



13. Rain gardens

A Pacific Region case study

Rain that falls on driveways, sidewalks, and roads will quickly collect dirt, debris, and chemicals left on the ground by urban activity. It then flows into ditches or pipes and makes its way, untreated, to urban streams. Storm water run-off in urban streams is a typical cause of harm to fish and fish habitat.

Pacific Region's Habitat Management Program works with developers and the communities to provide advice on how to deal with storm water runoff. They have a variety of low-impact development practices in their arsenal. One such practice is the use of rain gardens, which clean runoff water before letting it flow into urban streams. Rain gardens are built to act as a series of natural filters which trap pollutants before they enter the stream systems.

Over the last few years there have been several examples of how DFO Pacific, developers and communities have worked together to successfully use rain gardens and other low impact development practices. They include the Silver Valley subdivision in Maple Ridge, the East Clayton neighbourhood in Surrey and the UniverCity community at Simon Fraser University in Burnaby. While adopting rain gardens may

require a shift in mentality for developers, they also provide communities with more sustainable options. These options are often desirable features to potential home buyers.

Environmentally, the rain gardens provide a natural approach to reducing pollutants in aquatic habitats.

Economically, the enhanced esthetic value of the gardens is the very thing that gives these gardens a direct economic value to home buyers.

Socially, there is a clear benefit from having eco-friendly communities, which makes rain gardens a practical example of how the implementation of sustainable development principles can create positive change in people's everyday lives.



Outcome D.2:
DFO staff members understand and are able to respond to environmental concerns as part of their daily work, including environmental compliance requirements, when relevant.

Issue Scan

Through the Environmental Compliance Awareness Program, DFO will initiate activities to ensure that staff members are trained in

environmental compliance and are able to incorporate this awareness into daily work. DFO has drafted and pilot tested the course module dealing with general environmental awareness focus. Future efforts will therefore focus on the challenges DFO faces in delivering a course to thousands of employees in dispersed geographic locations across Canada. The training content will include legislation, compliance and liability, as well as due diligence. The work and decisions of individuals who comprise a more environmentally conscious and knowledgeable public service culture will, over time, have beneficial and cumulative impacts towards sustainable development.



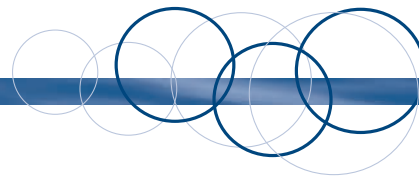
Activities	Performance indicators	Target Date
Implement the Environmental Compliance Awareness Program.	Two additional course modules are developed.	Module 2: 2008 Module 3: 2010
	Number of DFO personnel trained via a national delivery of the program (both various media and in-person training sessions).	Module 1: 2007 Module 2: 2009 Module 3: 2011

14. Effective Reforms for the Northwest Atlantic Fisheries Organization (NAFO)

Summer 2006 marked the creation of DFO's Green Team. This small group of volunteers representing a variety of sectors at National Headquarters in Ottawa is working to create a more energy-efficient and environmentally friendly workplace. The first project was to complete an after-hours "energy audit" at the National Headquarters building to evaluate how much energy is wasted by leaving computers, boardroom lights, printers and other office equipment turned on during the night. After this data was gathered, the Green Team organized an awareness campaign to encourage employees to

make some changes and lower their energy use. A second tour of the building followed, with comparative data showing significant improvement in employee behaviour in terms of saving energy.

The success of this project was largely due to the dedication and enthusiasm of employees who volunteered to participate in this activity. The DFO Green Team is now gaining popularity and momentum as the Green Team develops more projects to help reduce its environmental footprint.



Outcome D.3:
The impact of climate change issues on departmental business is better understood.

Issue Scan

An international scientific consensus has emerged that climate change is occurring and the world is getting warmer. Increasing temperatures may lead to changes in aquatic ecosystems, such as species abundance, diversity and distribution, as well as changes in weather, including wind patterns, the amount and type of precipitation, and the types and frequency of severe weather events. These factors could have far-reaching environmental, social, and economic consequences, all of which could affect DFO.

Recognizing these challenges, DFO commissioned a Risk Assessment which identified six key climate change risks, which have the potential to jeopardize DFO's ability to fulfill its mandate in terms of obligations and commitments. To address these risks, climate change considerations need to be incorporated into all levels of DFO's business planning, especially in areas such as policy and program development and decision making processes in support of the management of the fishery and integrated oceans management.

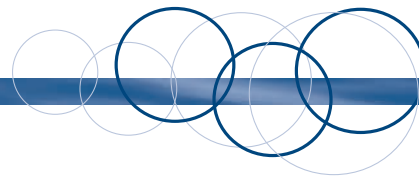
Changes in water levels and in physical, biological and chemical characteristics of the water and the occurrence of severe weather events are increasing the complexity of managing the use of Canada's oceans, including the wild fishery, aquaculture, infrastructure and waterways, and Coast Guard operational response to maritime emergencies and natural disasters, particularly in the North and Coastal zones.

Hurricane Katrina, which hit the Gulf Coast of the United States in September 2005, has highlighted the potential negative consequences of severe weather events and extreme climate variability. Canada must ensure its national operational readiness to manage and to effectively respond to such emergencies. The Coast Guard spends a large portion of its daily activities engaged in incident command, control and communications which address Search and Rescue and environmental response incidents, the management of vessel movements on Canadian waters and the direction and co-ordination of the operations of 114 Fleet vessels and 22 helicopters. The Agency has set in motion specific required adjustments, such as the creation of a National Communications Centre to better integrate and manage operational information. Going forward, Coast Guard will be attentive to and supportive of the development of ways and means to strengthen intra-agency and interagency networks, plans and procedures that make a contribution to Canada's operational readiness for emergency response.



Activities	Performance indicators	Target Date
<p>Improve understanding of the role of oceans in climate change including participation in the International Polar Year.</p>	<p>State of the Ocean reports for Pacific and Atlantic coasts with relevant scientific publications, and enhanced body of knowledge for the Arctic Ocean and ecosystem.</p>	<p>2009</p>
<p>Undertake a Department-wide campaign of education and promotion to enhance awareness and understanding of the risks of climate change. To fulfill this commitment, DFO will: hold information sessions on climate change, improve the DFO climate change Web site; create promotional material and coordinate with various sectors to include climate change components in other campaigns; and, provide employees with information through the internal mail system.</p>	<p>Progress will be measured through attendance at events and sessions; number of users to visit the improved website; the creation and distribution of promotional material within the Department; and the amount of information distributed to employees via email/mail.</p>	<p>2009</p>
<p>Integrate climate change considerations in program design and departmental business planning.</p>	<p>Climate change considerations are integrated in the Report on Plans and Priorities and engage all Sectors.</p>	<p>2007</p>
<p>Further integrate climate change, severe weather event and natural disaster considerations into the planning, risk management, and operational readiness of Coast Guard response capabilities.</p>	<p>The establishment of a CCG National Communications Centre as the central facility to improve the integration of management and up-to-date operational information on all CCG activities, including information exchange and call-out support to CCG HQ, Regions, DFO Corporate/ PSEPC and Transport Canada.</p>	<p>2007</p>





15. BIO Conversion to natural gas

A Maritimes Region case study

The Bedford Institute of Oceanography (BIO) is Canada's largest centre for oceanographic research—its facility occupies about 37,440 m². On March 31, 2006, BIO became the first government facility in the Maritimes Region to fully convert to natural gas. In improving the sustainability of its operations, DFO reflected the Government of Canada's goals and the three pillars of sustainable development.

Environmentally, this conversion helps the Government meet its clean air and climate change mitigation goals by reducing greenhouse gas emissions by about 750,000 kg per year. By removing an associated on-site, underground oil storage tank, DFO also eliminated the potential

risk of soil and water contamination that could result from hydrocarbon leakage.

Economically, annual operating costs will improve through more favourable fuel costs. The conversion will also reduce maintenance expenses in the complex's heating plant.

Socially, this project supports the Government's goal of sustainable communities. Natural gas is new to the Maritimes, so BIO's involvement was critical to ensuring the installation of economical pipelines in the surrounding neighbourhood. Through this initiative, BIO is supporting a new industry, a local company, and spin-off employment in the region.

Outcome D.4:
A Canadian Coast Guard that better understands the environmental impact of its business and directs the operation and development of all assets in accordance with a set of industry leading standards and regulations.

Issue Scan

Through its planned baseline survey of physical assets, the CCG will better understand the environmental sustainability and eco-efficiency of its physical assets and operations. The survey will help CCG establish goals to increase the efficiency and economy of its use of assets, while reducing the overall ecological impact of its operations. This baseline,

along with the development of a comprehensive Health, Safety and Environmental Management System (HSEMS) will enable the CCG to monitor its health, safety and environmental performance, and gauge the changes in environmental impacts. Furthermore, promulgating specific environmental standards and including environmental considerations in more general technical and operational standards will advance CCG leadership in green procurement and operations. This presents an opportunity to integrate sustainable development principles into the life-cycle management of its physical asset base.



Activities	Performance indicators	Target Date
Leverage the experience and knowledge of CCG and other organizations to conduct a baseline survey of the physical assets and operations of CCG to establish a benchmark of their environmental sustainability and eco-efficiency.	Participation rates during the survey. Receipt and consideration by Management Board of the information and recommendations in a completed baseline survey.	2008
Develop a comprehensive Health, Safety, and Environmental Management System (HSEMS) for managing health, safety, and environmental issues pertaining to all shore-side equipment, facilities, and operations.	Implementation of the system to measure health, safety, and environmental performance and a basis to track improvements.	2008
Develop a set of industry-leading, environmental and sustainability standards and specifications that incorporate modern environmental practices and technology, as well as national and international best practices, into the procurement of new CCG assets. The Coast Guard to take the lead in 'green' acquisitions and operations of both marine and shore-side infrastructure through the use of standards and specifications.	Environmental and sustainability standards and specifications in place for use for all CCG asset development and procurement. Specifically, environmental standards in place for design and acquisition of the next phase of Fleet Renewal. Number of standards that contain environmental/sustainability considerations. Number of specific standards that are published.	2009

Outcome D.5:
Frameworks for action are developed to direct DFO's environmental management, including storage tank systems, hazardous materials, and contaminated sites.

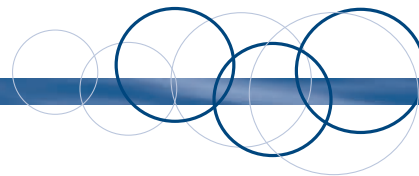
Issue Scan

Environmental management programs that deal with environmental aspects such as storage tank systems, hazardous materials and contaminated sites have been developed and will play a major role in the greening of DFO's operations and ensuring environmental protection. These plans and programs will shape how DFO conducts its business through roles and responsibilities, standard operating procedures, and training.

New regulations proposed under the *Canadian Environmental Protection Act* on managing storage tank systems that store fuel and other petroleum products will come into effect in 2007. With an inventory of more than 1,300 petroleum products storage tanks, DFO is committed to comply with proposed regulations to avoid potential environmental hazards.

Since 2005, DFO has undertaken many projects related to that aspect, including: compliance audits and inspections; a "hands-on" storage tank training workshop; inventories of storage tanks; precision leak tests; and tank system upgrading, removals, replacements, and labeling.

DFO has also been an active player in the Federal Contaminated Sites Action Plan (FCSAP). This program focuses on federal contaminated sites having the highest degree of federal liability. FCSAP assists a large



custodial department such as DFO to accelerate the assessment, risk management, and remediation of its sites beyond internal program resources. Much work has been accomplished over the past year in terms of assessing and managing contaminated sites, including the development of an environmental management planning for DFO FCSAP sites. DFO Expert Support under FCSAP provides specialized advice geared towards the management of DFO contaminated sites as well as contributing to the clean-up of other federal sites.

Procedures were also developed to manage and dispose of hazardous materials. Many inventories were completed, hazardous waste

recycling and disposal facilities were established and other actions were taken on halocarbons, wastewater and air emissions.

In the coming years, DFO will continue to implement management tools and focus its efforts on developing a national strategy for implementing the Environmental Management Plan. DFO will also focus on developing departmental procedures on storage tanks. Among its more specific planned activities to progress toward environmental compliance, DFO will continue to assess its properties, accelerate the clean-up of the Small Craft Harbour in Belleville, Ontario, and risk manage the staffed light stations in British Columbia.

Activities	Performance indicators	Target Date
Ensure plans include a management model component, standard operating procedures, and training components.	Number of Environmental Management Plan (EMP) objectives and targets assigned. Development and distribution of standard operating procedures to applicable DFO staff. Development of training programs related to each EMP.	2008
Delivery of training in-person and via Intranet training modules.	Number of DFO personnel trained.	2009
Participate in the Federal Contaminated Sites Action Plan (FCSAP) to ensure timely remediation/risk management of contaminated sites. Identification of those contaminated sites that pose a threat to human health and the environment. Development of remediation and risk management plans for implementation at identified sites.	Number of assessments undertaken each year. Number of contaminated sites funded under this program for remediation or risk management.	Ongoing

16. The Office of Environmental Coordination

The Office of Environmental Coordination (OEC) at DFO works to improve environmental performance, promote monitoring and reporting on operational environmental compliance, and support federal government environmental initiatives. As the custodian of more than 8,000 properties, DFO occupies office and special-purpose buildings, including Canadian Coast Guard bases, light stations, small craft harbours, hatcheries, laboratories, vehicles, aircraft and a large fleet of ships.

The operational use of these assets, directly affects the environment. The OEC ensures DFO's operations, facilities, programs and activities comply with environmental protection regulations, standards and policies. It also works closely with regional environmental coordinators throughout the country to coordinate and facilitate the Department's efforts to address operational environmental compliance priorities.

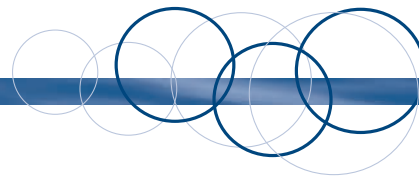
Outcome D.6:
Vehicle gas emissions and maintenance costs are reduced by proper vehicle utilization.

Issue Scan

During the 2005–2006 fiscal year, a draft report concerning motor vehicle lifecycle management was developed by a DFO working group on fleet management renewal. This report will guide activities such as the installation of a fleet monitoring system in vehicles, a device designed to help measure gas emissions.

Activities	Performance indicators	Target Date
Install a fleet monitoring system to monitor driver behaviours (excessive speeding and idling) by installing monitoring devices in vehicles.	Comparing gas emissions output for vehicles.	2008





17. Innovators and early adaptors

Employees in Central and Arctic Region are building a case for going green

Employees in DFO's Central and Arctic Regional office use vehicles to conduct field studies, gather samples, attend meetings, investigate work being done on or near waterways, and enforce the *Fisheries Act*. Through a combination of available subsidies and prudent guidance on the part of Assets Management and Procurement, they are demonstrating the environmental, economical, and social benefits of sustainable development.

The "greening of the fleet" began in 2001 when a Director in Central and Arctic Region decided to be an innovator by replacing two of his aging vehicles with gas/electric hybrids. Since that time, other early adaptors within the region have embraced the greening principle, and the number of hybrid and alternative fuel vehicles (gas/ethanol) within the fleet has expanded to 21.

Hybrid vehicles are proving to be about 30% more efficient, averaging 5.6 litres/100 km compared to 8.0 litres/100 km for similar-sized conventional vehicles.

Environmentally, transportation is the single largest source of greenhouse gas emissions in Canada. The air quality is not as negatively affected by hybrid cars, since they emit fewer greenhouse gases.

Economically, DFO's vehicles are travelling farther on less fuel thus reducing energy consumption. The Department is saving money through vehicle rebates, and when it comes time to replace these vehicles, DFO should experience a better resale value.

Socially, DFO is setting an example by changing behaviours. By taking a lead in using hybrid and alternative fuel vehicles, other government departments and Canadians may follow suit, thereby creating sufficient demand for commercial producers to step forward and supply this emerging industry.



3. Progress Report Table

Being accountable to Canadians

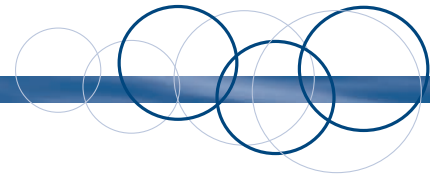
In addition to annual reporting through Departmental Performance Reports, Departments assess and report on the progress they achieve as part of their Sustainable Development Strategy process. The following table presents a report on results for each of DFO's 2005–2006 commitments, and shows significant progress overall. The structure of this table reflects the methodology used to capture the

various outputs, outcomes, and targeted activities. Some of the targets were identified as ongoing, such as the Designation of Oceans Act Marine Protected Areas, work under way in support of the Species at Risk Act, the Aboriginal At-Sea Mentoring deployment, and parts of the Fisheries Operations Management Initiative. Results on planned actions are explained accordingly. In addition, initiatives like the Canadian Council on Fisheries and Aquaculture Ministers Initiatives and the Integrated Oceans Management Plans have to be carried forward and finalized beyond 2005-2006.

Completed ●	In progress ◐	Outstanding ○
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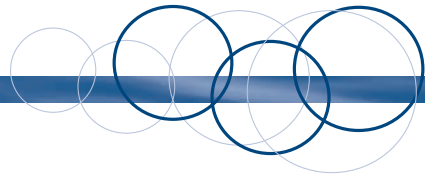
GOAL A - SUSTAINABLE PROGRAMS



OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Targeted activity 1: Developing policies, frameworks, regulations and responses to ensure the integration and sustainability of fisheries and aquaculture.			
Output 1.1 <i>Pacific Wild Salmon Policy</i>	Canada's Policy for Conservation of Wild Pacific Salmon was released.	2005	●
Output 1.2 Announcement of Fishing Plans and management measures in Atlantic Fisheries	Sharing arrangements in most Atlantic fisheries were stabilized for 2005 and 2006.	March 2005 and March 2006	●
Output 1.3 Environmental Process Modernization Plan	<ul style="list-style-type: none"> Risk Management Framework implemented in 2005-2006. Pathways of Effects (PoE) developed that represent linkages between human activities and habitat impacts. <i>Practitioner's Guide to Risk Management</i> approved. Scientific paper developed to inform DFO's risk management approach to the management of fish habitat. Paper to be published in 2006-07. 	2006	●
	<ul style="list-style-type: none"> The Habitat Management Program has developed and approved a total of 18 national Operational Statements (OPS). In 2005-06, proponents used the national OPSs for approximately 800 activities. Before the implementation of OPSs, DFO would have likely issued Letters of Advice in such cases, requiring more resources. 	2005 and ongoing	●



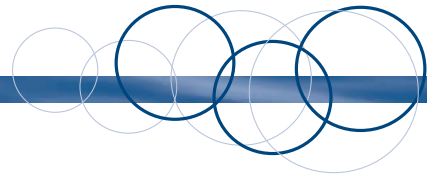
OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
<p>Output 1.3 Environmental Process Modernization Plan</p>	<ul style="list-style-type: none"> Progress was achieved to establish a “one window” approach that involves a provincial/territorial delivery system of OPSs. The agreement with the Province of New Brunswick was implemented in 2005-06. Discussions are ongoing to develop agreements with Provinces and Territories on applying OPS to their guidelines & codes of practice. Implemented the Habitat Management Mandatory Training Program. 38% of staff successfully completed HM101 as of March 31, 2006. Over 50% completed a course on the Risk Management Framework. Five courses developed, six more under development. Modifications have been made to the curriculum and individual training plans, so that by the end of the Fiscal Year 2006-07, specific targets of required program staff can be attained in all regions (e.g., 100% of staff will have completed HM101). 	<p>2005</p>	<p>●</p>

OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Output 1.3 Environmental Process Modernization Plan	<ul style="list-style-type: none"> Established a new National Headquarters-Regional organizational structure for managing the environmental assessments (EA) of Major Projects. Reviewed and updated CEAA Decision Protocols for Major Projects. Completed an Operating Policy for EA Scoping. 	2005	●
Output 1.4 Species at Risk Act	<p>In support of Committee on the Status of Endangered Wildlife in Canada (COSEWIC) requirements, the Science Program participated in 14 peer-review activities involving over 70 species in 2005. Over 40 species status reports and information holdings on seven priority species were reviewed by the Department's scientists in 2005.</p> <p>The Department's Science Program refined a framework for assessing allowable harm to species at risk threatened by impacts to their habitat. The framework enables the provision of advice on the issuance of Authorizations under the <i>Species at Risk Act</i> and the <i>Fisheries Act</i>. The Science Program also provided advice on determining the characteristics of a recovered population; this allows for the development of recovery targets and objectives for species listed under the <i>Species at Risk Act</i>.</p>	2005 for the SDS specific outputs/outcomes, however, support to COSEWIC is ongoing.	●
		Ongoing	●



OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Output 1.5 Aquaculture Regulatory Process Improvements	<p>The Introductions & Transfers (I&T) Code rests on the decisions of a variety of federal and provincial/territorial regulatory authorities across the country, many of which are not applicable. As a result, I&T codes will continue to carefully document the process whereby advice is developed to support Statutory Decision Makers in responding to any challenges that arise.</p> <p>A workshop will be held in Fall 2006 to address, among other issues, the appropriate process for integrating socio-economic considerations into I&T recommendations. These issues will be resolved under the umbrella of the new aquaculture governance regime.</p>	March 2007	
Targeted activity 2: Promoting ecosystem-based approach for Canada's three oceans.			
Output 2.1 Ecosystem Overview Reports (EORs)	<p>Draft Ecosystem Overview Assessment Reports (EOAR) have been completed for five Large Ocean Management Areas (LOMA).</p>	2006	

OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Output 2.2 Designation of Oceans Act Marine Protected Areas	The Strategy was published in 2005 and five areas have been designated. The five areas are: Endeavour Hydrothermal Vents; Gilbert Bay; Basin Head; The Gully; and, Eastport.	2006	●
Targeted activity 3: Examining issues pertaining to climate change.			
Output 3.1 Strategy to Address Climate Change	<p>DFO, with support from Natural Resources Canada's Climate Change Adaptation Policy Capacity program, conducted a comprehensive risk assessment to identify climate change risks to the Department's operations.</p> <p>The Risk Assessment identified six major climate change risks to DFO: 1. Ecosystem and fisheries degradation and damage; 2. Changes in biological resources; 3. Species reorganization and displacement; 4. Increased demand to provide emergency response; 5. Infrastructure damage; and 6. Changes in access and navigability of waterways.</p> <p>It also confirmed that climate change has the potential to jeopardize DFO's mandated obligations and commitments.</p>	2005	●



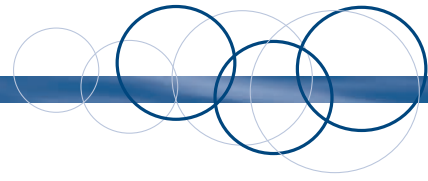
GOAL B – GOOD GOVERNANCE AND ENHANCED PARTNERSHIPS

OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Targeted activity 1: Strengthening ocean governance by implementing integrated management.			
Output 1.1 Integrated Oceans Management Plans	<p>Considerable progress has been made on planning processes and governance structures for priority Large Ocean Management Areas. Progress on governance is on track for the establishment of all five governance bodies in 2007. The science foundations for the plans are largely in place. Overall plan completion is progressing well. In some areas capacity building on the part of partners is taking longer than projected and may delay certain plans from being completed.</p>	2007	
Targeted activity 2: Strengthening Canada's role in international governance of oceans.			
Output 2.1 Strategy on International Fisheries and Governance	<p>Canada has invested in ecosystem science and enforcement which has contributed to improved fishing behaviour. Canada has also played a key role in multilateral fora to garner international support to reduce over-fishing and illegal, Unreported, and Unregulated (IUU) fishing, including:</p> <ul style="list-style-type: none"> • participation in High Seas Task Force (HSTF) that resulted in nine recommendations to combat IUU fishing; 	Ongoing	



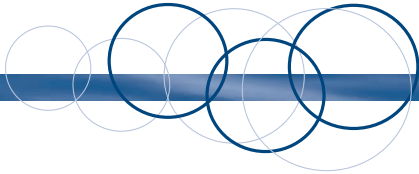
OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Output 2.1 Strategy on International Fisheries and Governance	<ul style="list-style-type: none"> co-chairing of Asia-Pacific Economic Cooperation (APEC) Oceans Ministerial Meeting which resulted in the Bali Plan of Action; participation in the United Nations Fish Stocks Agreement (UNFA) Review Conference; and hosting the St. John's Conference resulting in Ministerial Declaration as basis for reform initiatives in the Northwest Atlantic Fisheries Organization (NAFO) and other Regional Fisheries Management Organizations (RFMO). 	<p>Summer 2005</p> <p>March 2005</p>	<p>●</p> <p>●</p>
Targeted activity 3: Engaging Aboriginal groups.			
Output 3.1 Aboriginal At Sea Mentoring Initiative	Multi-year training plans have been finalized in 18 communities, while five are still in draft form.	April 2007	●

OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Output 3.1 Aboriginal At Sea Mentoring Initiative	15 contribution agreements have been signed with respective First Nations.	April 2006	●
	Interim reports indicate progress is being made on at-sea mentoring deployment, but more training still required.	March 2008	◐
Output 3.2 Fisheries Operations Management Initiative (FOMI)	Consultations for FOMI program design have been conducted and the program design was well received by First Nations.	February 2005	●
	Report from landmark workshop conducted in partnership with the Atlantic Policy Congress, Human Resources and Skills Development Canada, Indian and Northern Affairs Canada, and the Atlantic Canada Opportunities Agency who contributed to inter-departmental support for go-forward strategies.	March 2005	●
	Information sessions were well received by Chiefs and fisheries coordinators in First Nation communities.	May 2005	●
	Initial work has been undertaken through cooperation with the Atlantic Policy Congress of First Nation's Chiefs Secretariat Inc (APC) to select (through use of a request for proposal process) of professional facilitators/co-coordinators to assist First Nations.	March 2007	◐
	Four contribution agreements have been signed by First Nations in order to fund community-based workshops.	March 2008	◐



OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Output 3.3 Aboriginal Fisheries Strategy	87.5% (211 of 240) of eligible Aboriginal groups were signatory to the Aboriginal Fisheries Strategy in 2005-2006.	Ongoing	●
Output 3.4 Aboriginal Aquatic Resource and Oceans Management (AAROM) Program and Aboriginal Inland Habitat Program (AIH)	Approximately 83% (225 of 271) of eligible groups participated in establishing AAROM and AIH program resource management bodies as signatories, affiliates or observers in 2005-2006.	2007	●
Targeted activity 4: Strengthening federal/provincial/territorial collaboration.			
Output 4.1 Canadian Council on Fisheries and Aquaculture Ministers Initiatives (CCFAM)	CCFAM Ministers discussed and endorsed the need to develop a renewed national aquaculture management framework in Fall 2005. DFO's Minister has identified aquaculture renewal as one of the department's main priorities. As a result, the department's Aquaculture Management Directorate (AMD) is dedicating a significant portion of its resources to move forward with this initiative. Numerous provinces have indicated they are in position to proceed with formal negotiations in this regard, pending receipt of federal authorization. It is anticipated that the objectives of the aquaculture renewal initiative will be met within the proposed time frame.	2007	●

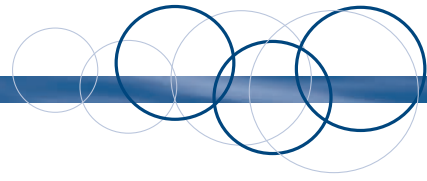
OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Output 4.2 Enhanced Partnering on Environmental Process Modernization	<p>DFO has signed four memoranda of understanding (MOU) with provincial and territorial governments: British Columbia; Prince Edward Island; Nova Scotia; and, Manitoba.</p> <p>Discussions are ongoing with a number of other provincial and territorial governments in completing and signing MOUs on Habitat Management (e.g., Saskatchewan, Yukon).</p>	2005	●
	<p>Implementation of the MOU with Canadian Electricity Association (CEA) included orientation workshops with CEA member utilities, and convened National Workshop on the CEA-MOU.</p>	2005	●
	<p>Organized National Habitat Management Workshop with industry associations.</p> <p>Further to the agreement with the National Resource Industries Association (NRIA), DFO reviewed and approved the revised Best Management Practices (BMPs) for stream crossings.</p>	2005	●



OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
<p>Output 4.2 Enhanced Partnering on Environmental Process Modernization</p>	<p>Formal discussions held on habitat protection with non-governmental organizations (NGOs), Aboriginal groups and with municipalities of the Federation of Canadian Municipalities (FCM) specifically:</p> <ul style="list-style-type: none"> • consulted on Cooperative Arrangements on Habitat Management with NGOs; • consulted with Aboriginal groups on Aboriginal Inland Habitat Program (AIH); • implemented a new Regional/NHQ management model for AIH, and redesigned program; • in December 2005, a funding agreement was approved with the Aboriginal Human Resources Development Council of Canada (AHRDCCO); and, • discussed cooperative arrangement with Federation of Canadian Municipalities (FCM). 	<p>2005</p>	<p>●</p>

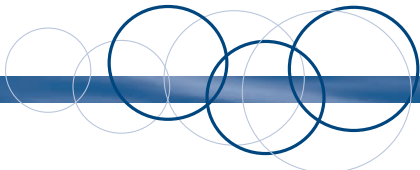
GOAL C – SUSTAINABLE OPERATIONS

OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
<p>Targeted activity 1: Ensuring operations are consistent with recognized Canadian and international environmental management standards.</p>			
Output 1.1 Marine Aids Modernization Project	<p>Updated the Canadian aids to navigation design methodology.</p> <p>Up until now:</p> <ul style="list-style-type: none"> 75% lighted buoys converted to light-emitting diode (LED) lanterns; 11.8% lighted fixed aids converted to LED lanterns; 71% floating buoys replaced with plastic buoys; and, 13.2% synthetic moorings implemented on all floating buoys. <p>Most conversions and implementations done as of January 2006.</p>	<p>2007</p> <ul style="list-style-type: none"> 100% by 2007 25% by 2007 80% by 2007 40% by 2007 	
Output 1.2 Agreement on Environment Management Systems	<p>The planned environmental collaboration with the United States Coast Guard has been delayed. Collaboration has begun with the Canadian maritime industry and other federal departments and agencies through the Technology and Innovation Working Group of the National Marine Industrial Council led by Transport Canada.</p>	<p>June 2006</p>	



OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
	<p>CCG is now implementing a new comprehensive, Health, Safety and Environmental Management System across its shore side facilities to be fully operational by Fall 2008. Currently, consideration is being given to an agency-wide baseline survey to establish a benchmark with which to gauge future CCG environmental performance.</p>		
Output 1.3 Environment Compliance Awareness Program	<p>Target audience and specific needs evaluated through the completion of a business case for the development and delivery of the training course. Business case to be presented to DMC to obtain approval of delivery mechanism.</p>	March 2006	●
	<p>Content of Module 1 developed and piloted in Maritimes Region with good feedback.</p>	March 2006	●
Output 1.4 Environment Management Programs (EMPs)	<p>EMPs for Hazardous Materials, Storage Tank Systems and Contaminated Sites completed at the national level in conjunction with Regions.</p>	March 2005	●
Output 1.5 Participation in the Federal Contaminated Sites Action Plan (FCSAP)	<p>In 2005-2006 36 sites were funded for remediation and risk management activities under FCSAP. Sites will continue to be identified and addressed for threats to human health and the environment on an ongoing basis through DFO's contaminated sites management program.</p>	March 2005	●

OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Output 1.6 Small Craft Harbours compliance with Environmental Regulations and Standards	During the 2003-06 period, Small Craft Harbours undertook 2,832 maintenance, repair, or divestiture projects nationally. All projects requiring compliance with applicable environmental regulations and standards, including, environmental assessments and the provision of environmental compensation measures were compliant.	2006	●
Output 1.7 Environmental Management Plans at Essential Harbours	Of the 620 harbours managed by Harbour Authorities, 553 harbours or 89% had submitted the required Environmental Management Plans.	March 2006	◐
Output 1.8 Strategic Environmental Assessments (SEAs)	Accountability structure is in place for Strategic Environmental Assessments at DFO, in accordance to the Guide to Strategic Environmental Assessments of January 2005.	2005	●



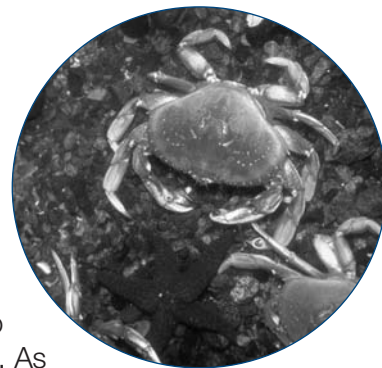
OUTPUTS/OUTCOMES	RESULTS ON PLANNED ACTION	TARGET COMPLETION DATE	PROGRESS
Targeted activity 2: Renewing the Government's civilian fleet.			
Output 2.1 Fleet Management Renewal Initiative	Regional management organizational review completed. Implementation plan in place for approved standard organization.	June 2006	●
* These two processes are under continuous review and improvement.	Fleet delivery planning process review completed*.	March 2005	●
	Fleet Standard Costing Model implemented*.	March 2005	●
Output 2.2 Right number and Mix of Vessels to Meet Clients' Needs	Remaining eight CCG 47 foot lifeboats to complete this class of vessels have been received.	July 2005	●

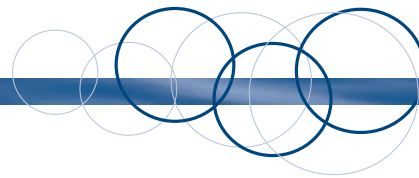
4. Conclusion

The 2007-2009 SDS demonstrates DFO's practical commitment to the Government of Canada's sustainable development objectives. The Department's vision entrenches sustainable development into long-term planning, and efforts continue to integrate it more systematically into the business, human resource, and financial planning processes as part of the departmental planning cycle. DFO is striving to go beyond recognizing current projects as sustainable development activities, to ensure that sustainable development is

increasingly used to guide decision making.

DFO will continue to make every effort to be progressive and forward-looking in its approach to sustainable development. As SDSs are developed over the years, they will continue to reflect the evolution of sustainable development as a concept, and will serve as a cornerstone for departmental innovation and leadership.





ANNEX 1

Background information on the development of the 2007–2009 SDS

A. Historical considerations

Sustainable development as an evolving concept

The concept of sustainable development emerged about 30 years ago, in response to a rising awareness of the need to balance economic and social development with concern for the stewardship of our natural resources. A milestone event was the 1987 *World Commission on Environment and Development*, during which the report *Our Common Future* was released. This publication, also known as the Brundtland Report, included a working definition of sustainable development that is still in use by the Government of Canada: *development that meets the needs of the present without compromising the ability of future generations to meet their own needs.* (For more information, see document number A/42/427 at <http://documents.un.org/>)

A few years later, the Earth Summit in Rio de Janeiro (1992), was an unprecedented conference on environment and development, both in terms of its size and the scope of concerns it addressed, placing sustainable development on the forefront of the global agenda. The vision expanded to include elements such as social justice, solidarity, cooperation and the fight against poverty as key principles of sustainability of development. During the conference, a plan for sustainable development in the 21st century was released, entitled *Agenda 21*, which has formed the foundation of government initiatives for sustainable development for many United Nations member nations, including Canada.

More recently, the 2005 World Summit emphasized the importance of considering the three interconnected and mutually reinforcing pillars of sustainable development: economic; social; and, environmental. In Canada, the adherence to the idea of the three pillars is also built on the earlier *Auditor General Act* amendments. They consider sustainable development as a continually evolving concept based on the integration of social, economic and environmental concerns. This may be achieved through the integration of the environment and the economy, the protection of ecosystems and health of Canadians, the promotion of equity, the prevention of pollution or through an integrated approach to planning and making decisions for example. It is with these pillars in mind that the 2007–2009 DFO SDS was created.

In December 1995, the *Auditor General Act* was amended to help strengthen the federal government's performance in protecting the environment and promoting sustainable development. The position of Commissioner of the Environment and Sustainable Development (CESD) was created to monitor the extent to which departments and agencies have met the objectives and implemented the action plans set out in their strategies. Results are presented in the Commissioner's Annual Reports to the House of Commons.

The SDS provides the CESD and all Canadians with a sustainable development framework to ensure accountability. In other words, the nature of the SDS can be summarized by four general steps: 1) planning of sustainable development activities in relation to DFO's mandate and Coast Guard's operational service duties; 2) implementing the planned activities; 3) monitoring of outcomes and results; and, 4) reporting back to Canadians on progress and achievements.

In recent recommendations, the CESD is encouraging departments to go beyond business as usual in the planned commitments of their SDS. The present document is an attempt at balancing this objective while ensuring that DFO's planned activities represent a needed shift towards a more tangible approach with realistic commitments that are achievable and measurable (see Section 2 *Action plan*).

B. Surveying opinions

Departmental consultations and public opinion surveys

One of the best ways to define sustainable development is through the values that support sustainable development. Recent departmental consultations and public opinion surveys helped DFO gain a better understanding of the potential issues, impact, and expectations related to sustainable development. The Department proceeded to gather opinions from

a variety of sources, to ensure alignment between its sustainable development vision and the interests of Canadians. Results guided the development of the 2007–2009 priorities and conceptualization.

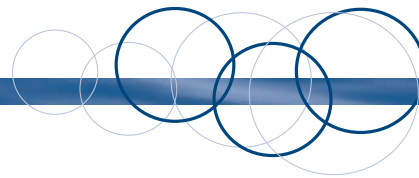
The SDS was developed based on the outcomes of a variety of internal and external consultations conducted over the past year, including: a DFO SDS working group; internal focus group discussions; a stakeholder e-survey; and, results from public opinion surveys.

In addition to internal departmental focus groups, opinions from a broader external audience were required to improve the document's resonance with stakeholders and Canadians in general. The *2006 DFO Baseline Public Opinion Survey of Coastal, Northern, Freshwater and Inland Residents in Canada* - also known as the *Baseline Survey* - provided DFO with quantitative data about the factors shaping public opinions and perceptions on certain issues and included a strong sustainable development component.

18. Focus Group Discussion Outcome

Key messages from departmental focus group discussions include the following:

- focus group participants were eager to have a better understanding of what sustainable development means for DFO;
- respondents called for more overt and explicit references to sustainable development in DFO's departmental decision making;
- participants wished for fewer, more realistic SDS commitments;
- they said the SDS offered DFO an opportunity to show engagement and leadership; and
- they suggested the departmental approach to integrated departmental planning processes and documents could be enhanced by the SDS.



19. Baseline Survey results

- **A**lmost 60% of respondents already knew that the main role of DFO is to ensure the sustainable development of Canada's oceans and waterways.
- Most respondents (70%) had a favourable impression of DFO's ability to balance the needs of the environment with the economic and social needs of Canadians.
- Respondents largely expressed their confidence in the ability of the Canadian Coast Guard to provide good services in terms of emergency response, including oil spills (score of 8 out of 10 or higher for half of the respondents).
- Many respondents believed that decisions being made by DFO in relation to sustainable development are *very good* (11%) or *somewhat good* (59%).

In the survey, sustainable development was defined as *"the careful and responsible use of Canada's oceans and freshwater resources, so that future generations will be able to continue using them"*. Most respondents (70%) had a favourable impression of DFO's ability to balance the needs of the environment with the economic and social needs of Canadians. In the balance of these needs, more weight was generally placed on the environmental side (45% of all respondents, including 22% who opted completely for environmental considerations), at the expense of economic or social considerations. However, although 70% of respondents indicated that a compromise usually needs to be made between the three pillars of sustainable development, a perfect balance was the preferred scenario for 38% of all respondents. Residents of the west coast were the most likely to give the environment the highest priority when making trade-offs (53%), followed closely by those living close to bodies of freshwater (49%), followed by the North (42%), the East (41%) and Inland (37%).

Another striking result of this survey is that 32% of respondents identified the DFO goal of becoming a world leader in sustainable fish and shellfish farming industries among their top three priorities. They also strongly affirmed their belief that DFO is actually succeeding in being a world leader in sustainable development of fisheries, fish farming and other ocean resources (66%

are in agreement, while 18% stressed their "strong agreement").

Overall positive impressions and performance rating of what DFO does included *very good* (11%) and *somewhat good* (59%) decisions being made by DFO in relation to sustainable development. Of note as well is that generally Canadians' views tended to be more critical in the West which also consistently demonstrated higher levels of concern about the environment.

E-Survey with stakeholders

A targeted e-survey was conducted as a means to obtain more specific information on the expectation of key stakeholders, on what sustainable development means to them and how they perceive DFO's role in achieving sustainable development objectives. Targeted key national stakeholders answered a questionnaire online and expressed their opinions on the work the Department is doing in terms of sustainable development. The results complemented the previously mentioned initiatives in providing guidance in the development of the current SDS.

Respondent organizations were from different regions across Canada and mostly represented recreational or commercial fishing or boating associations, conservation or environmental organizations, government, maritime industries, and academic or scientific organizations.

Most respondents were aware that the mandate of DFO included sustainable development. However, respondents believed that DFO could improve the balance of environmental needs with economic and social needs of Canadians, including fishing communities, when making decisions. However, results of the survey also show a strong emphasis on the value of DFO as champion of fish habitat protection, fisheries research and fisheries management. The Department was commended for its sustainable management of fisheries, but many surveyed stakeholders believe further improvements would be helpful.

Respondents generally agreed that DFO's SDS should contain clear commitments that all Canadians - not only public servants and stakeholders - can understand and relate to. However, most felt that the content of SDSs was already adequately communicated to DFO's stakeholders and it should act as a tool for collaborative sustainable development work between DFO and its stakeholders.

Finally, one of the strong messages stemming from this survey is that sustainable development is meaningful to DFO's stakeholders. They expressed a strong interest in participating actively in future discussions on DFO's sustainable development priorities and activities and want to be asked for their input more often.

C. Linking to federal priorities

Evolving context

Supported by the Government of Canada approach and the spirit of a new *Accountability Act*, DFO is committed to an increased focus on clear accountability and integration of its processes. Obtaining results for Canadians is a federal priority and the *raison-d'être* of the SDS process.

In 2005-2006, Environment Canada led the development of guidelines on common federal objectives available to departments to increase policy coherence and accountability in departmental SDSs. This fourth round of SDSs provides an opportunity to implement this approach by developing common standards. While departments are expected to contribute to the federal sustainable development goals where appropriate to the nature of their operations, they are also encouraged to advance their own departmental SDS commitments.

DFO's Track Record

The history of DFO's SDS starts in 1997, with the publication of the very first SDS *Sustainable Development – A Framework for Action*. Building on this first framework, a second strategy was released in 2001: *Building*

20. Government of Canada Goals

The federal guidelines developed by Environment Canada in collaboration with other federal departments and agencies articulate the sustainable development goals around two main categories:

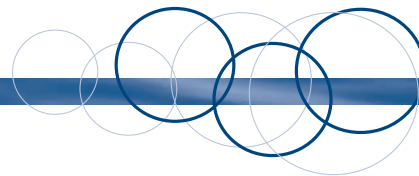
1) Environmental Quality Goals

- Clean Water
- Clean Air
- Climate Change

2) Sustainable Development Management Goals

- Sustainable Communities
- Sustainable Development and Use of Natural Resources
- Governance for Sustainable Development

For more information please visit:
<http://www.ec.gc.ca>



Awareness and Capacity: An Action Plan for Continued Sustainable Development.

Due to timelines associated with the release of a new Strategic Plan and the Departmental Assessment and Alignment Project (DAAP) for DFO, it was decided that only a Progress Report on the 2001-2003 Strategy would be produced in 2004, rather than a full scale strategy. The Commissioner of the Environment and Sustainable Development (CESD) audited the departmental strategies that were tabled, but because DFO's strategy was off cycle, it was not part of the audit.

Our Waters, Our Future – Striking a Better Balance, DFO's SDS for 2005-2006 was released in March 2004. The SDS highlighted that a core part of the Department's new departmental vision is about sustainable development and that sustainable development has an important part in DFO's activities (previous publications are available at http://www.dfo-mpo.gc.ca/publication_e.htm).

Indeed, with the release of the 2005-2010 Departmental Strategic Plan, a new departmental vision was outlined: *excellence in service to Canadians to ensure the sustainable development and safe use of Canadian waters*. With such a vision, DFO plays an important stewardship role and leads Canada in setting an example in terms of sustainable development and operations on the global scene.

The 2007–2009 SDS now aligns DFO with the regular Government of Canada reporting cycle, in time for the fourth round of departmental SDSs released in December 2006. The departmental approach is to be consistent with federal guidelines, while providing for the Department's own vision and other existing

planning documents such as the Departmental Strategic Plan, previous SDSs and annual business plans.

D. DFO's approach

Lessons learned

For the fourth round of SDSs, DFO has taken into consideration the overall CESD recommendations and completed an internal evaluation of its 2001-2003 SDS to improve future SDSs. The evaluation determined: the extent to which DFO was in compliance with the federal policy requirements for sustainable development; whether the goals, objectives and planned results of the SDS 2001-2003 had been achieved; and, whether the SDS objectives were relevant to the departmental mandate.

In response to this internal evaluation, a Management Action Plan acknowledged areas for improvement and highlighted future plans designed to fill the gaps. For example, the 2007–2009 SDS carries on the work done on the performance measurement strategy which was already integrated into the 2005-2006 SDS process and document, including a logic model and performance indicators. Track records from the previous strategies have shown that DFO is committed to achieving its planned targets. However, reaching DFO's ultimate sustainable development goal is a process that will also require time. Since the beginning of SDS publications, continuous improvements ensure that strategies build on previous commitments and results, reflect contextual issues, present stronger accountability structures, and are increasingly meaningful and accessible to all.

Logic model methodology

A logic model is used to succinctly illustrate the activities that make up a policy, program or initiative and the sequence of anticipated outcomes flowing from these activities. It establishes an overall strategy for future direction and sets the parameters for action. It also presents qualitative or quantitative means of measuring an outcome that will gauge the performance of the planned activities. The logic model for 2007–2009, based on DFO’s vision, guides the work of the Department in terms of what it wants to achieve, what it will do, and how it will measure its results.

The following table illustrates the structure of this approach, and shows the methodology used to develop DFO’s more detailed Action plan. The arrow demonstrates the logic chain of results expected, from planned activities to expected outcomes and precise performance indicators. DFO’s ultimate goal consists of including sustainable development in decision making to help achieve DFO’s three departmental outcomes. This logic model is complementary to the tables that can be found in the Action plan, which illustrate the same logic, but provides greater details on the actual activities, outcomes, performance measures and targets.

21. Logic model terminology made simple

Ultimate Goal: sets the overall direction;

Goal: sets the parameters for action;

Outcome: describes the result that should occur after activities are completed;

Activity: identifies a specific commitment;

Performance indicator: indicates a means of measuring success;

Target date: sets the time at which the activity is expected to be completed.

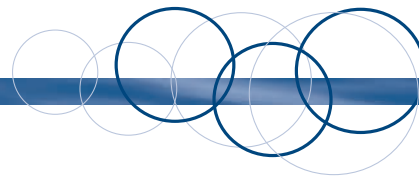
What will be achieved			How it will be achieved	How to measure results	
Ultimate goal	Goals	Outcomes	Activities	Performance indicators	Target dates

Assessment and Measurement

As part of the modernization of management practices, and taking into account the views of the CESD to better integrate sustainable development into business and operational planning, DFO has instituted changes to the departmental planning process to more closely link human resources, financial, strategic and business planning. Changes ensure that priorities are updated based on environmental

scanning, demographic analysis and aligned with financial resources. As well, consistency of data collection and analysis, will aid in monitoring and evaluating goals. The goals are then reported to Parliament in the Report on Plans and Priorities (RPP) and the Departmental Performance Reports (DPR).

The Audit and Evaluation Division of DFO continues to monitor progress on commitments of DFO’s SDS.



ANNEX 2: Glossary

AAROM – Aboriginal Aquatic Resource and Oceans Management Program

AFS – Aboriginal Fisheries Strategy

AHRDCC – Aboriginal Human Resources Development Council of Canada

AIHP – Aboriginal Inland Habitat Program

AIS – Aquatic Invasive Species

AMD – Aquaculture Management Directorate

APC – Atlantic Policy Congress of First Nation's Chiefs Secretariat Inc

APEC – Asia-Pacific Economic Cooperation

ATP – Allocation Transfer Program

BMP – Best Management Practices

CCFAM – Canadian Council on Fisheries and Aquaculture Management

CCG – Canadian Coast Guard

CEA – Canadian Electricity Association

CEAA – Canadian Environmental Assessment Agency

CESD – Commissioner of the Environment and Sustainable Development

COSEWIC – Committee on the Status of Endangered Wildlife in Canada

DFO – Fisheries and Oceans Canada

DPR – Departmental Performance Report

EA – Environmental Assessment

EMP – Environmental Management Program

EOAR – Ecosystem Overview Assessment Reports

EPMP – Environmental Process Modernization Plan

ER – Environmental Response

FAO – Food and Agriculture Organization

FCM – Federation of Canadian Municipalities

FCSAP - Federal Contaminated Sites Action Plan

FMR – Fisheries Management Renewal

FOMI – Fisheries Operations Management Initiative

FPT – Federal-Provincial/Territorial

GHG - Greenhouse gas

HA – Harbour Authority

HAPAE - Healthy and Productive Aquatic Ecosystems

HCM – Habitat Monitoring and Compliance Modernization

HMP – Habitat Management Program

HSEMS – Health, Safety and Environmental Management System

HSTF – High Seas Task Force

IFOGS – International Fisheries and Governance Strategy

I&T – Introductions and Transfers

IUU - Illegal, Unreported, and Unregulated Fishing

LOA – Letters of advice

LOMA – Large Oceans Management Areas

MPA – Marine Protected Area

MRI – Marshall Response Initiative

NAFO – Northwest Atlantic Fisheries Organization

NRIA – National Resource Industry Associations

OAP – Oceans Action Plan

OEC – Office of Environmental Coordination

OPS – Operational Statements

OSC – On Scene Commander

PA – Precautionary Approach

POE – Pathways of Effects

RFMO – Regional Fisheries Management Organizations

RMAF – Results-based Management and Accountability Framework

SARA – Species at Risk Act

SAW – Safe and Accessible Waterways

SCH – Small Craft Harbours

SDS – Sustainable Development Strategy

SEA – Strategic Environmental Assessment

SFA – Sustainable Fisheries and Aquaculture

UNFA – United Nations Fish Stocks Agreement

WSSD – World Summit on Sustainable Development

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