Fisheries and Oceans Canada | Pêches et Océans Canada

ERRATUM

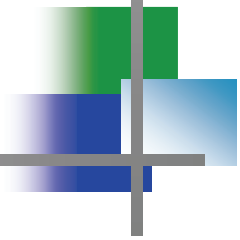
Subsequent to the printing of the 2010-11 Report on Plans and Priorities, an error was noted in the Voted and Statutory Items table. The financial denomination is indicated as "thousands of dollars"; however, the numbers shown are in "millions of dollars". The Voted and Statutory Items table in this electronic version has been corrected.

Fisheries and Oceans Canada

Estimates

2010-11

Report on Plans and Priorities



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Minister's Message

As Minister of Fisheries and Oceans, I am pleased to present my Department's Report on Plans and Priorities for 2010-11.

Fisheries and Oceans (DFO) is a national and international leader in the management of oceans and freshwater resources, as well as marine safety. As a sustainable development department, DFO integrates environmental, economic, and social perspectives to ensure Canada's oceans and freshwater resources benefit this generation and those to come. Our work on Canadian waters helps to ensure the safe passage of people and goods.

As we emerge from the global economic downturn, our Department is taking action to ensure that Canada's fisheries and maritime sectors will provide economic benefits to Canadians now and in the future. We are helping these sectors to become more resilient, flexible, competitive, and prosperous.

Canada's Economic Action Plan is already protecting Canadians, stimulating our economy, and creating jobs throughout Canada. Under the Plan, we are providing additional funding for vital fisheries and marine infrastructure, as well as support for coastal communities affected by the economic downturn. To reach these goals, DFO is sharpening its focus on several priorities for 2010-11.

Improving the Economic Viability of Canada's Fisheries

Sustainable fisheries and aquaculture make a significant contribution to Canada's economy. One of the greatest challenges we face is ensuring that consumers have more accurate information about the seafood they buy.

We are working closely with industry stakeholders to help them obtain the certification needed to expand access to markets at home and abroad. We will continue investing in aquaculture innovation and aquatic animal health and improving the predictability of regulations. These efforts will help protect and expand access to domestic and foreign markets. Around the globe, consumers are demanding fish and seafood that is not only safe and healthy but also fished in a way that does not threaten fish stocks or harm the marine environment. Our government's objective is to ensure that Canada is a world leader in sustainable fish and seafood products. That is why DFO is working to ensure healthy and productive aquatic ecosystems — they form the basis of sustainable fisheries. Using sound science, we are managing environmental impacts, imposing conservation measures, enforcing regulations, and monitoring results to protect and conserve fish stocks.

We must also ensure support for the food, social, and ceremonial needs of First Nations, as well as for recreational fisheries, which are critical to the Canadian economy.

We understand that a successful commercial fishery relies on a well-functioning network of small craft harbours across Canada. Under Canada's Economic Action Plan, DFO will invest the second year's portion of the original $200 million to revitalize small craft harbours across the country. By investing in the maintenance and repair of these core commercial fishing harbours, we are creating jobs for Canadians and investing in coastal and inland communities. One of our priorities is building a commercial fishing harbour in Pangnirtung, Nunavut, to boost the viability of the Northern fishery.

Many Aboriginal and Inuit people, along with residents in remote Atlantic communities, include seal hunting as part of their cultural heritage, as well as a source of food, raw material and income. Our government recognizes the seal hunt is a vital component of their local economies. Our commitment to the long-term sustainability and profitability of the seal harvest is strong. We want it to continue to provide important economic opportunities for our remote coastal and northern communities, and we will maintain our active promotion of seal products in new markets around the world.

Using science as our foundation, we are working with partners around the world to ensure the conservation and protection of the valuable marine resources found in international waters. Canada continues to be a leader in international efforts to combat illegal, unreported, and unregulated fishing through our membership in Regional Fisheries Management Organizations, including the Northwest Atlantic Fisheries Organization.

Enhancing Marine Safety and Security through Fleet Renewal

The dedicated men and women of the Canadian Coast Guard (CCG) continue to uphold the safety of our waters. Safe and accessible waterways facilitate marine commerce, including international trade and the economic benefits of recreational boating.

Under Canada's Economic Action Plan, we are modernizing the CCG fleet. With the second year's portion of the $175 million, Coast Guard will procure 68 new small vessels and 30 environmental barges and undertake repair work on 40 of its aging large vessels. We are also supporting our government's goals for security and sovereignty under the Northern Strategy. In support of this priority, we are replacing the CCG vessel *Louis S. St-Laurent* with a new polar icebreaker, the *John G. Diefenbaker*, which will be delivered in 2017.

Also supporting marine safety, security, and sovereignty is DFO's Canadian Hydrographic Service (CHS). CHS surveys Canadian waters and produces hydrographic products and services for mariners and information to support national security, emergency preparedness, and the resolution of boundary disputes. To affirm our sovereign rights to Canada's continental shelf beyond the existing 200 nautical mile limit, CHS is on target to complete the necessary hydrographic work and assist in the preparation of Canada's submission to the United Nations Commission on the Limits of the Continental Shelf in 2013.

Ensuring Sustainable Development of our Fisheries and Oceans

DFO protects aquatic ecosystems so that Canadians have fisheries resources for Aboriginal, commercial, and recreational use now and in the future. Through strong habitat management, our Department helps the natural resource development sector mitigate and avoid impacts on precious fish habitat. Fulfilling our responsibilities under the *Species at Risk Act* enables us to preserve the biodiversity of our aquatic ecosystems.

Through our comprehensive science program, DFO supports the evolution of sustainable aquaculture — improving nutrition, health, and production while reducing the impacts on aquatic environments.

Our Department is also creating new oceans centres of expertise to broaden our knowledge of Canada's waters. We will continue to expand our network of Marine Protected Areas and develop ecosystem monitoring strategies for boundary waters in our Arctic.

The recent announcement of the Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River illustrates the importance of managing fish stocks. Our Department will be working closely with the Commission to help advance its work, improve our understanding of the state of the Fraser River sockeye, and determine what can be done to effectively restore and conserve the stock.

Improving our Effectiveness through Collaboration

DFO is taking a community-based and co-operative approach to managing our fisheries and oceans.

We will continue to forge strong relationships with industry, non-governmental groups, fishers' unions, Aboriginal communities, and our government partners.

Our Department is modernizing human resource management, developing a new strategy for information management, and strengthening the management of its considerable infrastructure.

By working together with Canadians, we will build strong, sustainable fisheries and maritime sectors for future generations.

The Honourable Gail Shea, P.C., M.P.
Minister of Fisheries and Oceans

Section 1 — Departmental Overview

Raison d'être

Fisheries and Oceans Canada (DFO) plays the lead role in managing Canada's fisheries and safeguarding its waters, ensuring safe, healthy, and productive waters and aquatic ecosystems for the benefit of present and future generations. The Department's work is built around three strategic outcomes:

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;

SUSTAINABLE FISHERIES AND AQUACULTURE

— Delivering an integrated fisheries and aquaculture program that is credible, science-based, affordable, and effective and contributes to sustainable wealth for Canadians while respecting Aboriginal and treaty rights; and

HEALTHY AND PRODUCTIVE AQUATIC ECOSYSTEMS

— Ensuring the sustainable development and integrated management of resources in or around Canada's aquatic environment and carrying out critical science and fisheries management activities.

Mandate

DFO is responsible for developing and implementing policies and programs in support of Canada's scientific, ecological, social, and economic interests in oceans and fresh waters.

The Canadian Coast Guard (CCG), a Special Operating Agency within DFO, is responsible for services and programs that contribute to the safety, security, and accessibility of Canada's waterways. CCG supports other government organizations through the provision of a civilian fleet and a broadly distributed shore-based infrastructure.

The *Oceans Act* entrusts the Minister with leading integrated oceans management and providing coast guard and hydrographic services, while the *Fisheries Act* gives the Minister responsibility for the management of fisheries, habitat, and aquaculture. The *Species at Risk Act* gives the Minister responsibilities associated with the management of aquatic species at risk.

Our Vision

Excellence in service to Canadians to ensure the sustainable development and safe use of Canadian waters.

Organization

Fisheries and Oceans Canada is a highly decentralized department, with more than eight of every ten employees located outside national headquarters. National headquarters, in Ottawa, establish national objectives, policies, procedures, and standards for the Department and CCG.

DFO's Regions

In addition to the National Capital Region (NCR), which serves as the Department's national headquarters, DFO has six regions, each headed by a Regional Director General (RDG).

Situated in regional headquarters, RDGs are responsible for delivering programs and activities in their regions in accordance with national and regional priorities and within national performance parameters. The Department operates 15 major science institutes, laboratories, and experimental centres across the country.

- The **Newfoundland and Labrador Region** encompasses over 29,000 kilometres of coastline and three international boundaries. Work is performed from 30 offices throughout the region, and headquarters are located in St. John's, Newfoundland.
- The **Gulf Region** comprises the waters of the Gulf of St. Lawrence adjacent to the eastern coast of New Brunswick, the Northumberland Strait coast of Nova Scotia and western Cape Breton Island, as well as the whole of Prince Edward Island. It is the only region of DFO, outside the NCR, that is designated bilingual. Regional headquarters are in Moncton, New Brunswick, and there are three area offices. Program delivery is supported by 20 field offices.
- The **Maritimes Region** extends from the northern tip of Cape Breton to the New Brunswick-Maine border, taking in over 8,600 kilometres of coastline and adjacent marine areas, including the Bay of Fundy. Regional headquarters are in Dartmouth, Nova Scotia. There are also three area offices — in Yarmouth, Nova Scotia; Sydney, Nova Scotia; and St. Andrews, New Brunswick — and more than 100 other sites.
- The **Quebec Region**, located within the borders of the province of Quebec, has 6,000 kilometres of coastline. The Quebec Region has a staff of more than 1,000 employees in some 15 cities and villages. Most programs and activities are managed from the regional office, in Québec.
- DFO's largest geographic region, **Central and Arctic**, extends west from the Quebec Region to British Columbia's eastern border — excluding the National Capital Region — and up through Canada's far North. The region includes 71% of Canada's coastline, 67% of its fresh waters, 65% of its marine waters, 64% of its area, and 55% of its population. Central and Arctic is home to five major research facilities: the Freshwater Institute Science Laboratory, the Bayfield Institute, the Sea Lamprey Control Centre, the Experimental Lakes Area, and the Resolute Bay Laboratories.
- **Pacific Region** has over 27,000 kilometres of coastline and hundreds of aquatic species to protect, manage, and enhance. The region is responsible for overseeing West Coast marine resources and the inland fisheries of British Columbia and the Yukon. As the Pacific Region is entrusted with managing and protecting Pacific salmon, it plays a role in the stewardship of 105 river systems in British Columbia and two transboundary northern rivers, the Stikine and Taku.

Canadian Coast Guard — DFO's Special Operating Agency

The Canadian Coast Guard is a Special Operating Agency (SOA) within DFO. The Agency's headquarters are in the National Capital Region, and there are five regional offices. Like the rest of DFO, CCG is highly decentralized, with 92% of its employees located in the regions. Because CCG is an operational organization, many programs and services are provided 24 hours a day, seven days a week.

The Commissioner is the Chief Executive Officer of the Agency, reporting and accountable to the Deputy Minister of Fisheries and Oceans Canada for the performance of the Coast Guard. Each CCG region is led by an Assistant Commissioner, who reports to the Commissioner and is responsible for directing the day-to-day delivery of CCG programs and services in that region. While CCG plans at a national level to ensure consistency in the design and delivery of programs, the regions are responsible for program delivery.

Coast Guard delivers the following core programs in accordance with published levels of service and service standards[1] in each of its five regions: Aids to Navigation, Waterways Management, Marine Communication and Traffic Services, Search and Rescue, Environmental Response, and Icebreaking (except in Pacific Region). The CCG fleet delivers many of these programs and supports DFO's science and conservation and protection activities, as well as the on-water needs of other government departments. The Canadian Coast Guard College, in Sydney, Nova Scotia, trains and develops marine professionals to support CCG-mandated programs.

CCG is committed to ensuring that its programs and services are aligned with the needs and expectations of its clients, stakeholders, and the Canadian public. The Agency has a number of consultative mechanisms in place at both the regional and national level to ensure that these views and needs are incorporated into Coast Guard program planning and decision-making.

While all five regions deliver the core CCG programs, the focus in each region is different, depending on climate, geography, and client needs. For example:

- **Newfoundland and Labrador Region**, with the largest oil-handling port in Canada, a rapidly expanding offshore oil industry, and millions of tons of potentially polluting cargo and vessel fuel transiting its waters each year, must always be ready to protect the marine environment.
- **Maritimes Region** operates the Canso Canal on a 24-hour basis each year from April 16 to December 23, linking Chedabucto Bay to Northumberland Strait. Sailing through the Strait via the Canso Canal benefits the commercial shipping and fishing industries by reducing transit time and fuel costs.
- **Quebec Region** delivers aids to navigation, channel maintenance, and icebreaking services that help to keep the St. Lawrence River up to Montreal open and accessible throughout the year for the benefit of commercial shipping and Canadians in general .
- **Central and Arctic Region**'s partnership with the United States Coast Guard in the delivery of the icebreaking and aids to navigation programs on the Great Lakes provides the marine industry with a fully integrated, bi-national service. The region also provides support to Eastern Arctic sealift activities for the Government of Nunavut .
- **Pacific Region**, with 27,000 kilometres of coastline and 560,000 square kilometres of ocean, attracts approximately 750,000 vessel movements a year. Ensuring the safety of these movements is challenging, as weather can vary dramatically and be very severe along the British Columbia coast.

The implementation of the government's Economic Action Plan is affecting each CCG region, providing $175 million over two years for the procurement of new small vessels and major repair work on large vessels. This investment will help CCG to maintain its service levels on Canada's three coasts, the Great Lakes, and the St. Lawrence Seaway.

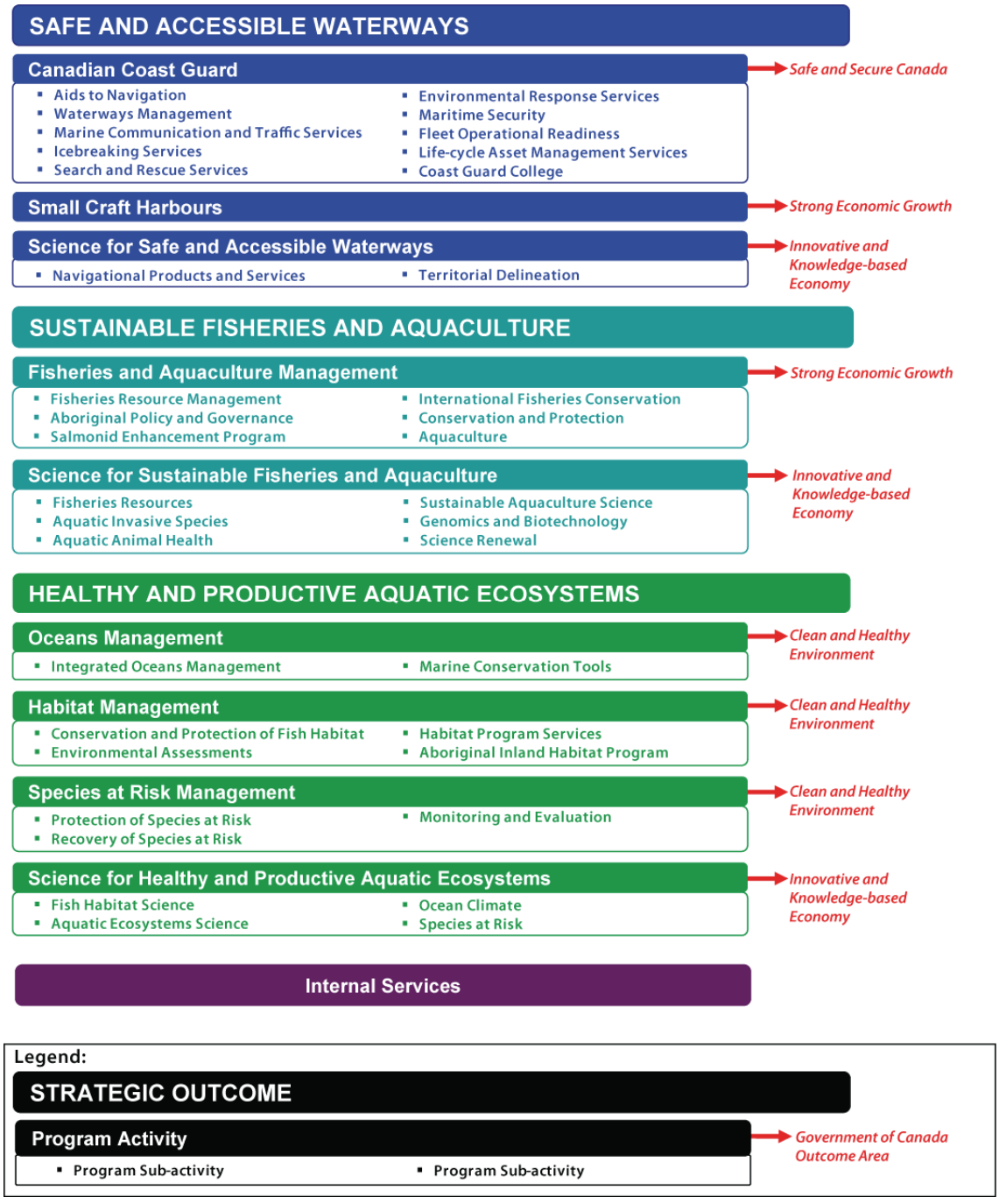
More information on Coast Guard plans and priorities can be found in Section 2 of this report and in the CCG Business Plan, which is available on the CCG website.[2]

[1] http://www.ccg-gcc.gc.ca/eng/Ccg/wm_Los_Home
[2] http://www.ccg-gcc.gc.ca/eng/CCG/Home

Program Activity Architecture

The Government of Canada's Management, Resources and Results Structure (MRRS) is the foundation of a common, government-wide approach to the collection, management, and reporting of financial and non-financial information. DFO's Program Activity Architecture (PAA) is a component of its MRRS. The PAA shows how DFO's programs align with the Department's three strategic outcomes. Each Program Activity is linked to a single Government of Canada Outcome Area, permitting whole-of-government reporting.

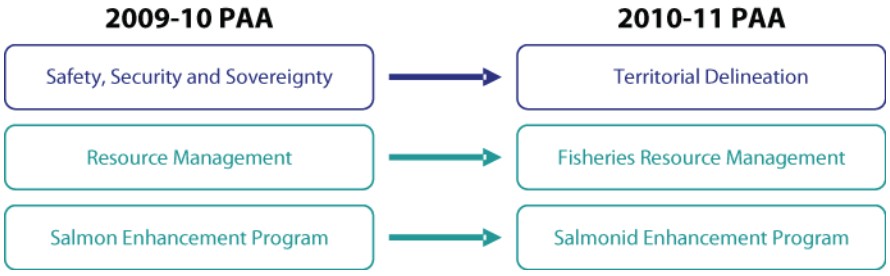
The PAA also captures the functions that enable public programs, as well as internal services, to operate more effectively and efficiently. These functions are called Internal Services. For more information on DFO's Internal Services, see page 49.



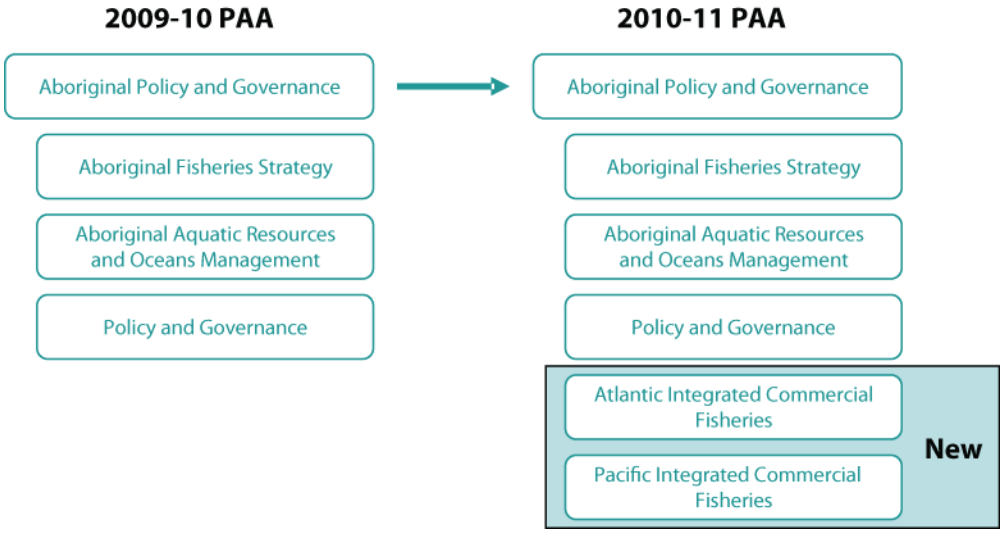
Changes for 2010-11

DFO's PAA for 2010-11 differs only slightly from 2009-10. The Department's strategic outcomes and program activities remain unchanged. Changes have been made at the sub-activity and sub-sub-activity level only.

The names of three sub-activities have changed to better reflect their responsibilities.



Two sub-sub-activities have been added to the Aboriginal Policy and Governance sub-activity. These sub-sub-activities were previously included within the Aboriginal Fisheries Strategy sub-activity.



Looking ahead to 2011-12

DFO is redesigning its Management Resources and Results Structure (MRRS) for 2011-12. The main goals of the redesign are to better reflect the departmental mandate and to ensure all MRRS components are fully compliant with Treasury Board Secretariat's Policy on MRRS.

Strategic Context

To provide Canadians with the benefits of strong economic growth, knowledge and innovation, healthy environments, and safe and secure communities, DFO must evaluate an increasingly complex and demanding policy and program environment that is characterized by interdependent domestic and global issues and risks.

The Economy

Canada's marine economy is growing. Our oceans and waterways are experiencing rapid expansion and economic potential related to shipping, oil and gas exploration, and tourism (e.g., ecotourism, cruise ships, and recreational boating). There are also numerous opportunities for new and emerging sectors (e.g., offshore renewable energy, sea-bed mapping and mining, biotechnology, and marine engineering and construction). Increasing demands for resources offer new scope for oceans and seafloor resources, particularly in Canada's North.

Canada's aquatic environment provides excellent conditions for natural and farmed fish harvesting. This harvesting capacity contributes to economic prosperity for Canadians through the generation of wealth from commercial, recreational, aquaculture, and Aboriginal fishing interests.

Changing climatic conditions in Canada's North provide both opportunities for Northern economic development and challenges to the protection of the ecosystem and its users. Sea-ice depletion offers the prospect of new navigation routes in Canada's North, bringing about a need for new hydrographic data and navigational charts, new harbour facilities, and an increased CCG presence to provide search and rescue and emergency environmental response. Increased use of our northern waters makes the protection of their fragile and unique ecosystems paramount.

Canada's Economic Action Plan has presented DFO and CCG with an opportunity to strengthen critical program infrastructures — small craft harbours, the CCG fleet, and scientific facilities — while stimulating economic growth in Canada.

International Issues

Growth that relies on an increasingly global economy necessitates effective international governance mechanisms that ensure sustainable fisheries, healthy oceans ecosystems, and a stable trading regime. Safe and accessible waterways, modern navigation aids, hydrographic products and services, reliable small craft harbours, and collaborative partnerships with domestic and international stakeholders all contribute to these objectives.

Canada's seafood sector is heavily reliant on international trade. A globally competitive fishery must anticipate and adapt to increasingly restrictive global markets and increasing competition from lower cost international processors. With increasing costs of fishing, increasing competition for scarce wild resources, and a growing focus on sustainability, there is a growing reliance on aquaculture to help meet increasing global demand for seafood products. This presents opportunities for Canadian aquaculture but also raises challenges for managing biodiversity. DFO will work with other federal departments, provincial and territorial governments, industry, the private sector, and non-government organizations to increase consumer confidence in aquaculture products, ensure the protection of natural species, and reduce international barriers to Canadian aquaculture products.

A sound strategy with regard to international engagement will allow Canada to work with other nations to protect shared resources.

The Environment

Rising production and consumption of aquatic resources and the increasing intensity and range of ocean use — off-shore oil and gas deposits, mineral resources, hydro development, and undersea cables and pipelines — are placing increased pressures on the biodiversity of living marine resources in oceans. Continental shelf delineation, marine ecosystem protection, and environmental protection are key to DFO's mandate, particularly in Canada's North, where these demands and the effects of climate change have been most noticeable.

Sustained use of our aquatic resources necessitates a thorough understanding of the resources and the ecosystems within which they exist, robust conservation and protection measures, and effective environmental response to emergencies. Continued work on the identification, protection, and recovery of species at risk is essential to maintaining the integrity and biodiversity of our aquatic ecosystems and the sustainability of our resources.

Environmental impacts of climate change include changes in sea levels, changes in water characteristics (e.g., currents, salinity, and temperature), and diminishing ice cover. While this offers possibilities for emerging fisheries and off-shore natural resource development, it also presents risks to habitats, ecosystems, and infrastructure and increases the threat posed by invasive aquatic species. The development of the Arctic's rich resource base requires both a broader scientific understanding and the protection of these unique ecosystems. These impacts are also expected to place increased demands on the Canadian Coast Guard Program, including Icebreaking, Search and Rescue, Environmental Response, and Waterways Management services.

A safe marine environment and the provision of maritime services to Canadians and other federal departments and organizations helps to provide safe and secure communities and Northern development and to demonstrate our Canadian sovereignty. To provide service to Canadians, the Department, and others, the Canadian Coast Guard must now focus on ensuring that it maintains a versatile fleet and shore-based infrastructure.

Science and Technology

New technologies and their application continue to enable and shape the delivery of the Department's mandate. Newer technologies used to observe the oceans, such as satellites, cabled seafloor observation systems, and ocean profiling floats present new opportunities to increase our understanding of global ocean dynamics and processes. Detailed, high-resolution imagery of seafloor substrate, habitat, topography, and geology has proven extremely useful in the delineation of Marine Protected Areas, the exploration and discovery of oil and gas deposits, the identification of safe corridors in which to lay cables and pipelines, and the sustainable management of the fisheries resource. New technology capable of integrating tide, current, and weather data with seabed shape and depth information is making possible near-real-time dynamic navigation systems that allow mariners to see safe navigation channels open up and widen in near-real- time as tides rise and water depth increases. In addition to fulfilling our regulatory responsibilities, biotechnology and genomics applications in support of the Department's mandate will continue to evolve beyond current applications as the technologies' full capabilities are realized.

Departmental Priorities

DFO is committed to supporting environmentally sustainable and internationally competitive marine, fisheries, and aquaculture sectors; healthy aquatic ecosystems; and maritime safety and security. To respond to the potential risks and opportunities related to meeting this commitment, the Department will focus on the following operational priorities over the three-year planning period starting in 2010-11.

- ❑ Globally Competitive Fisheries
- ❑ Health of the Oceans
- ❑ Fleet Renewal
- ❑ Economic Action Plan
- ❑ International Leadership
- ❑ Northern Strategy
- ❑ Regulatory Improvement (Streamlining)
- ❑ Implementing e-Navigation in Canada

The tables below summarize the Department's operational priorities for 2010-11. Detailed information on key plans can be found in Section 2.

Contribution of Operational Priorities to Strategic Outcomes

Globally Competitive Fisheries — **Ongoing since 2004**

(formerly Fisheries Renewal)

Canada has the largest coastline in the world and an aquatic environment that provides excellent conditions for natural and farmed fish harvesting. This harvesting capacity is distributed across commercial, recreational, aquaculture and aboriginal fishing interests. The goal is to manage these activities in an integrated and sustainable fashion in all three of Canada's oceans such that each separate fishery can grow wealth within a broad and robust fishery sector. The end result is an integrated and globally competitive fishing sector for Canada.

Why is this a priority?

- Creates and maintains a globally competitive fisheries that responds to these challenges:
  - Fishing in Canada is a $12 billion industry and an important activity for sustaining coastal communities;
  - The future of the resource hinges on ensuring its suitable its use;
  - The Department must work with harvesters to exploit changing market dynamics to maximize potential value and maintain and expand markets;
  - Recent legal decisions — such as the BC Supreme Court ruling that aquaculture is a federal responsibility and the *Saulinier* decision upholding that fishing licenses are considered property — provide opportunity to improve and modernize the regulation of fishing activity in Canada.

Contributing to…	Key Plans and Performance Measures
■ Sustainable Fisheries and Aquaculture	**By March 31, 2011** ■ Develop and implement a framework to guide negotiations on Aboriginal fisheries. ■ Implement regulatory changes associated with the aquaculture industry and land claims settlements. **Ongoing work** ■ Facilitate market access for the Canadian fish and seafood industry. ■ Implement elements of the Sustainable Fisheries Framework.[3] ■ Enable fish harvesters to effectively respond to economic forces that affect the fishing industry. ■ Increase stability, transparency, and predictability in fisheries management. ■ Implement the Lobster Sustainability Program.[4]

[3] http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/fish-ren-peche/sff-cpd/overview-cadre-eng.htm
[4] http://www.dfo-mpo.gc.ca/media/npress-communique/2009/hq-ac38-eng.htm

Health of the Oceans — Previously committed to in 2008-09

The Health of the Oceans (HOTO) initiative consists of 22 distinct components spanning five departments and agencies (Fisheries and Oceans, Transport, Indian and Northern Affairs, Environment, and Parks Canada). Advancing a national network of Marine Protected Areas (MPAs), controlling pollution, and collaborative oceans management will all contribute to the health of Canada's oceans.

Why is this a priority?

- Reflects a Budget 2007 commitment of the federal government.
- Contributes to meeting domestic legal obligations under the *Oceans Act* and international obligations under the Convention on Biological Diversity and the World Summit on Sustainable Development.

Contributing to…	Key Plans and Performance Measures
■ Healthy and Productive Aquatic Ecosystems	■ Designate six Areas of Interest as MPAs by March 2012. ■ Provide, by March 2012, national guidance on state of the oceans reporting, traditional ecological knowledge, coastal management, and corals and sponges. ■ Advance an ecosystem-based management approach for Arctic waters. ■ Complete, by November 2010, the distribution of equipment packages designed to improve Coast Guard's capacity to respond to oil spills in the Arctic.

Fleet Renewal — Ongoing since 2004

CCG is building a versatile fleet of vessels and helicopters capable of meeting the current and future on-water needs of the Government of Canada. The CCG fleet will be capable, sustainable, and operationally ready.

Why is this a priority?

- Supports safety, security, and maritime commerce.
- Enables DFO and other government departments to carry out conservation and protection activities, scientific research, and environmental response.
- Ensures that CCG is capable of meeting the evolving on-water needs of the Government of Canada.
- Partially mitigates one of DFO's key corporate risks: Physical Infrastructure.

Contributing to…	Key Plans and Performance Measures
■ Safe and Accessible Waterways ■ Sustainable Fisheries and Aquaculture ■ Healthy and Productive Aquatic Ecosystems ■ Economic Action Plan priority ■ Northern Strategy priority	■ Procure new vessels: – 9 Mid-shore Patrol Vessels and 1 Offshore Oceanographic Science Vessel by 2013; – 3 Offshore Fishery Science Vessels by 2014; and – 1 Polar Icebreaker by 2017. ■ Use Economic Action Plan (EAP) funding to accelerate vessel procurement (98 small boats) conduct vessel life extensions and repair and refit (40 vessels) to 2011. ■ Develop a 30-year Fleet Renewal Plan to renew CCG vessels and helicopters.

Economic Action Plan — New in 2010-11

Through the EAP, announced in Budget 2009, the Government of Canada provided DFO with $392 million in direct funding and $58.7 million in indirect funding, through other departments and agencies, to build and repair departmental assets such as ships, harbours, and laboratories.

Why is this a priority?

- Alleviates the effects of the recession by creating or maintaining jobs within construction and shipbuilding communities.
- Partially mitigates one of DFO's key corporate risks: Physical Infrastructure.

Contributing to…	Key Plans and Performance Measures
■ Safe and Accessible Waterways ■ Sustainable Fisheries and Aquaculture ■ Healthy and Productive Aquatic Ecosystems ■ Northern Strategy priority ■ Fleet Renewal priority	■ Implement all EAP projects within budget by March 31, 2011: – Undertake approximately 260 repair, maintenance and/or associated dredging projects at over 200 core commercial fishing harbours across Canada. – Hasten construction of a small craft harbour at Pangnirtung, Nunavut. – Acquire 98 new small boats. – Conduct vessel life extensions on 5 CCG vessels. – Repair or refit 35 CCG vessels. – Upgrade 65 federal laboratories. – Assess 1,385 properties for contamination, and perform remediation/risk management activities at 72 sites. – Undertake environmental assessments in support of the Mackenzie Valley Gas Pipeline.

International Leadership — Ongoing since 2003

(formerly International Governance)

International leadership promotes and influences sustainable regional fisheries management and healthy global marine ecosystems while contributing to the growth of international trade for Canadian fish and seafood products.

Why is this a priority?

- Addresses challenges confronting international fisheries and ecosystems.
- Contributes to the sustainability of Canada's fisheries, the health and productivity of Canada's aquatic ecosystems, and the Government of Canada's international priorities.
- Seeks to ensure that international standards, norms, and management decisions reflect Canadian objectives and interests.

Contributing to…	Key Plans and Performance Measures
■ Safe and Accessible Waterways ■ Sustainable Fisheries and Aquaculture ■ Healthy and Productive Aquatic Ecosystems	■ Combat illegal, unreported and unregulated fishing. ■ Advance and strengthen international fisheries management. ■ Strengthen oceans and freshwater governance and biodiversity conservation. ■ Preserve and increase access to international markets for Canadian fish and seafood products.

Northern Strategy — Previously committed to in 2008-09

Retreating polar ice, global demand for resources, and the prospect of year-round shipping are creating both risks and opportunities in the North, affecting DFO programs, oceans users, northerners and international partners. DFO/CCG is committed to ensuring that Canada's Northern waters can be used, and off-shore resources exploited, in an environmentally sustainable and safe manner, while also fulfilling its role in the Government's Northern Strategy.

Why is this a priority?

- Supports the government's Northern Strategy, in which DFO plays a key role.
- Responds to demands for a long-term vision in the North for CCG.
- Provides critical support to Northern commerce, safety and security, sustainable resource development, protection of Arctic ecosystems and habitats, and Northerners' quest for greater economic prosperity.
- Reinforces Canadian Arctic sovereignty, especially through the presence of CCG and its support to Northern marine shipping.

Contributing to…	Key Plans and Performance Measures
■ Safe and Accessible Waterways ■ Sustainable Fisheries and Aquaculture ■ Healthy and Productive Aquatic Ecosystems	■ Establish, in 2010-11, an Arctic Vision and short-run and long-run objectives and priorities for DFO and CCG. ■ Commission a new polar icebreaker to replace *CCGS Louis S. St-Laurent* by 2017. ■ Build a small craft harbour in Pangnirtung, with associated hydrographic and aids to navigation products and services, by 2011-12. ■ Submit evidence delimiting Canada's extended continental shelf to the United Nations by December 2013. ■ Designate a new Marine Protected Area in the Arctic, and work toward designating two others by 2011. ■ Establish a Northern office for the Beaufort Sea Large Oceans Management Area and provide new tools for spatial planning/monitoring by 2010-11. ■ Co-lead the Arctic Oceans Review project in Arctic Council to secure agreement on priorities for protecting Arctic ecosystems and resources by December 2012-13.

Regulatory Improvement (Streamlining) — Revised in 2007-08

(formerly Habitat Management Regulatory Improvement Initiatives)

The focus is on improving and streamlining DFO's regulatory review and approval processes, especially that for major resource projects.

Why is this a priority?

- Ensures that the Department continues to support healthy and productive aquatic ecosystems while stimulating the economy through the EAP.
- Supports the review of approximately $300 billion of major resource projects across Canada.
- Ensures that regulatory review and approval processes are more efficient, timely, transparent, and effective in protecting fish habitat.

Contributing to…	Key Plans and Performance Measures
■ Healthy and Productive Aquatic Ecosystems	■ Continue to work closely with the Major Projects Management Office and other federal departments to improve the whole-of-government approach to regulatory review and approval. ■ Review and revise policies and practices regarding regulatory approval.

Implementing e-Navigation in Canada	**New in 2010-11**
E-Navigation will enhance berth-to-berth navigation and related marine services, thus increasing the safety, efficiency, and protection of the marine environment. The International Maritime Organization expects the concept of e-navigation to be implemented world-wide in the next 10 to 15 years. **Why is this a priority?** ■ Enhances safety, has positive economic effects, and brings efficiency benefits to the broader shipping industry while enhancing environmental marine protection. ■ Positions Canada to be at the forefront of e-Navigation, to set international standards, and to benefit the Canadian shipping industry sooner. ■ Partially mitigates two of DFO's key corporate risks: Stakeholder Expectations and Partnering and Collaboration.	
Contributing to… ■ Safe and Accessible Waterways	**Key Plans and Performance Measures** ■ Develop a strategic vision by December 2010, in collaboration with other key government departments, to oversee and guide the implementation of e-Navigation in Canada. ■ Develop a high-level implementation plan by March 2011.

Contribution of Management Priorities to Strategic Outcomes

DFO must steward its people, assets, and information and has established the following management priorities to provide such stewardship.

- ❑ People Management
- ❑ Asset Management
- ❑ Information Management

The tables below summarize the Department's management priorities for 2010-11. Detailed information on key plans can be found in Section 2.

People Management	**Ongoing since 2003**
(formerly Human Resources Modernization) Effective people management ensures that the right people are in the right jobs and are well supported. Continued attention to the core elements of people management will lead to high levels of employee engagement and contribute to building a culture of excellence in the public service. **Why is this a priority?** ■ Responds to recommendations from Public Service Renewal Action Plan. ■ Addresses concerns raised in the most recent Public Service Employee Survey. ■ Responds to Treasury Board Secretariat (TBS) recommendations in the Department's recent Management Accountability Framework (MAF) assessment. ■ Mitigates one of DFO's key corporate risks: Human Capital.	
Contributing to… ■ All Strategic Outcomes	**Key Plans and Performance Measures** ■ Reduce the average time it takes to staff a position. ■ Address future leadership needs by implementing programs for leadership development and talent management. ■ Increase the representation of women, visible minorities, Aboriginals, and persons with disabilities by at least 5% by March 31, 2011. ■ Improve employee engagement.

Asset Management — **Previously committed to in 2008-09**

DFO uses 25,000 capital assets and over 90,000 moveable assets to manage, protect, and monitor Canada's fisheries and oceans. With an initial acquisition value of $5.1 billion, the replacement value could be significantly greater. The Department's asset base includes significant real property holdings, such as research facilities, small craft harbours and lightstations, equipment for cutting-edge scientific research on oceans and aquatic resources, the Coast Guard fleet, and informatics infrastructure.

Why is this a priority?

- Ensures that the Department has the right assets in place to deliver its programs.
- Ensures that the Department complies with government policies and directives concerning asset management.
- Responds to TBS recommendations in the Department's recent MAF assessment.
- Partially mitigates the key corporate risk: Physical infrastructure.

Contributing to…	Key Plans and Performance Measures
■ All Strategic Outcomes	■ Respond to recommendations from the MAF VI assessment regarding the sound management of real property assets. ■ Develop and deliver, in 2010-11 and 2011-12, policies, frameworks, systems, and plans in the areas of real property, safety and security, environmental management, moveable assets and inventory. ■ Obtain approval of the Five-year Investment Plan for the management of real property assets. ■ Implement a new Real Property Information Management System by 2011-12. ■ Assess sites for contamination, and report on and implement any remediation/risk management required.

Information Management — **Previously committed to in 2008-09**

(formerly Information Management and Information for Decision-making)

Effective decision-making depends heavily on the timely availability of accurate information. The retention and availability of corporate knowledge will be a significant challenge during the upcoming period of unprecedented workforce turnover. DFO is implementing a five-year Information Management Strategy to ensure that information is safeguarded as a public trust and managed as a strategic asset. A strengthened evaluation function will provide advice on performance measurement and assess DFO's ability to produce objective information for decision-making. DFO will also ensure that the Department's information holdings comply with the access and privacy legislation.

Why is this a priority?

- Mitigates one of the key corporate risks: Information for decision-making.
- Responds to recommendations from the recent MAF assessment.
- Complies with the new *Policy on Evaluation*, effective April 1, 2009.
- Complies with the *Access to Information Act* and the *Privacy Act*.

Contributing to…	Key Plans and Performance Measures
■ All Strategic Outcomes	■ Start implementing the Information Management Strategy. ■ Start implementing the new *Policy on Evaluation*. ■ Address TBS concerns about the DFO chapter of Info Source.

Regional Contributions to Strategic Outcomes

Various regional initiatives contribute to achieving the Department's three strategic outcomes. The key priorities for each region are summarized below.

Newfoundland and Labrador Region

- Completing Year 2 **Economic Action Plan** projects, including the Small Craft Harbours Infrastructure Program and the Federal Laboratories Initiatives;
- Continuing the **self-rationalization initiative** for the harvesting sector to create an industry that is sustainable, economically viable, and able to withstand fluctuations in the market;
- Working with industry to implement projects approved under the **Atlantic Lobster Sustainability Measures**;
- Working with industry on **market access initiatives** (e.g., certification/traceability) to help create a viable, sustainable, globally competitive, and robust fishing industry;
- Enhancing the **competitiveness of the Newfoundland and Labrador aquaculture industry** by working with the region and the Atlantic Canada Opportunities Agency to provide the appropriate infrastructure for industry;
- Advancing Canadian goals and objectives **in international fora** to improve the conservation and protection of fish stocks, sensitive benthic areas, corals, and sponges, to provide more effective enforcement measures and management of fish stocks; and
- Establishing **Marine Protected Areas** as part of the Department's Health of the Oceans priority.

Gulf Region

- Delivering Small Craft Harbour projects, as approved under **Economic Action Plan** initiatives, by March 31, 2011;
- Delivering **Atlantic Lobster Sustainability Measures** through continued discussions with all Lobster Fishing Areas about the development of sustainability plans**;**
- Conducting effective **ecosystem monitoring programs**, which are required to assess ecosystems and the health of stocks in the Southern Gulf, by:
  - Using numerous opportunities and platforms to improve data collection for a wide range of physical and biological data; and
  - Using sampling opportunities efficiently and taking maximum advantage of investments in ecosystem research.
- Improving access to **fisheries data** to support more efficient and effective decision-making in the management of Gulf Region fisheries.

Maritimes Region

- Working with industry to implement projects approved under the **Atlantic Lobster Sustainability Measures**;
- Implementing **Economic Action Plan** objectives, including investments in small craft harbours and improvements to federally owned DFO laboratories and biodiversity sites;
- Implementing the **Ecosystem Approach to Management (EAM)**, including internal and external engagement, modifying science data collection to support EAM, and adjusting Integrated Fisheries Management Plans to reflect EAM;
- Developing a **Consultation and Engagement Framework** model that includes but is not limited to the following:
  - Fishing Industry Engagement, including an annual schedule for major fisheries and consultation management processes; and
  - Aboriginal Consultation and Engagement, to ensure that processes are effective, efficient, integrated to the extent possible, and responsive to the needs of Aboriginal communities.

- Advancing ecosystem objectives and policies related to biodiversity through a **By-catch Management Project** by monitoring selected fisheries, developing management strategies, and assessing the economic impacts of implementation.

Quebec Region

- Implementing **Economic Action Plan** initiatives including, among others, the accelerated repair, maintenance, and dredging of fishing harbours in Quebec and the modernization of laboratories in the Maurice-Lamontagne Institute;
- Working with industry to implement projects approved under the **Atlantic Lobster Sustainability Measures**;
- Continuing to implement the **sustainable fisheries framework**, for example, supporting eco-certification initiatives, developing a licensing policy for recreational marine fishing, and working with partners to develop a risk-management strategy for the Canadian Shellfish Sanitation Program;
- Continuing to improve and reinforce **sustainable and competitive aquaculture initiatives** through innovation;
- Implementing obligations to comply with **Quebec North treaties**, i.e., the Nunavik Inuit Land Claims Agreement and the James Bay and Northern Quebec Agreement; and
- Continuing the **integrated management** of the St. Lawrence River with federal partners, primarily through the St. Lawrence Plan.

Central and Arctic Region

- Implementing **Economic Action Plan** initiatives, including 19 projects to be delivered under the Small Craft Harbours and Real Property Management Programs;
- Supporting the **Northern Strategy** by building a harbour in Pangnirtung, Nunavut; monitoring and conducting research on emerging fisheries in Nunavut;
- Reviewing **Freshwater Management** in response to provincial and territorial stakeholders' demands to explore options for a more cohesive approach to freshwater management;
- Reviewing our **engagement with federal/provincial/territorial/land claims organizations** to bring a more consistent, disciplined, and structured approach to our involvement with these organizations;
- Establishing a single-window **Liaison and Consultation Unit** to ensure that the region's obligations regarding public, stakeholder, and Aboriginal consultations are delivered as efficiently and effectively as possible; and
- Improving **Human Resources Management** in response to the 2008 Public Service Employee Survey, Arctic staffing challenges, land claims agreements, and employment commitments.

Pacific Region

- Supporting the **judicial inquiry** into the decline of sockeye salmon in the Fraser River, which will require significant resources over the next 18 months;
- Completing Year 2 **Economic Action Plan** projects, including the Small Craft Harbours Infrastructure Program and the Modernizing Federal Laboratories Initiatives;
- Developing a new **Pacific Aquaculture Management Regime** in light of the 2008 British Columbia Supreme Court *Morton* ruling on finfish aquaculture in British Columbia;
- Implementing **Pacific Fisheries Reform** initiatives including:
  - The Pacific Wild Salmon Policy;
  - The Pacific Integrated Commercial Fisheries Initiative;
  - The Chinook Mitigation Strategy under the Pacific Salmon Treaty; and
  - Assessment of species to obtain Marine Stewardship Council certification.
- Supporting **sustainable Aboriginal fisheries** by enhancing relationships with Aboriginals and supporting the treaty process; and

- Implementing **Pacific Science Renewal** initiatives, especially those related to climate change research, to ensure that the best scientific information is available to policy- and decision-makers.

Integrated Risk Management

DFO's Corporate Risk Profile (CRP) is based on an analysis of the organization's internal and external operating environments and identifies and prioritizes material high-level risks that could significantly interfere with the Department's ability to achieve its strategic outcomes. The CRP also outlines mitigation measures for addressing each key corporate risk and assigns senior management accountabilities for overseeing the mitigation.

Key Risk	Risk Mitigation Measures	Link to Departmental Priorities
Human Capital DFO may be unable to attract, develop and retain sufficiently qualified human resources to deliver on its mandate.	DFO will equip managers to fully address human capital risks impacting their delivery of policies and programs in support of DFO's mandate by identifying gaps in the recruitment, development, promotion, and retention of employees and ensuring access to appropriate guidance and tools.	■ People Management ■ Information Management
Information for Decision-making Sufficient and appropriate information may not be available on a timely basis to support decision-making.	DFO will use an Information Management Strategic Plan to implement an enterprise approach to information management and will improve the management of information across the Department.	■ Information Management ■ Asset Management
Organizational Adaptability DFO may be unable to effectively adapt to emerging priorities, directions and environmental conditions.	DFO will monitor and assess strategies developed by sectors to address emerging priorities and directions and continue to bolster its planning activities and regional committee work.	■ All Departmental Priorities
Internal Alignment Activities, accountabilities and resources within DFO may not be optimally aligned to meet objectives.	DFO will continue to use a risk-based process that analyzes departmental funding pressures, activities, and accountabilities to better align resources and priorities.	
Physical Infrastructure DFO may be unable to invest in or maintain the infrastructure necessary to achieve its objectives.	DFO will establish senior management accountabilities for asset management and develop a system to provide comprehensive and integrated asset information to ensure that investment planning will maintain DFO's physical infrastructure.	■ Economic Action Plan ■ Fleet Renewal ■ Asset Management
Stakeholder Expectations DFO may be unable to manage expectations and maintain the confidence of stakeholder groups, the public, media and elected officials.	DFO will assess communications and consultation mechanisms as well as outreach efforts. DFO will assess learning and training strategies to foster more consistent core messages on priorities and strategic directions.	■ Globally Competitive Fisheries ■ Regulatory Streamlining ■ Information Management ■ International Leadership
Partnering and Collaboration DFO may be unable to create and sustain effective partnerships, or there will be failures on the part of third parties on which DFO relies.	DFO has begun to review and assess all types of collaborative arrangements that it has with organizations.	■ Northern Strategy ■ Globally Competitive Fisheries ■ Regulatory Streamlining ■ Information Management
Legal and Compliance DFO may be successfully challenged before the courts, resulting in either significant financial liability or negative effects on DFO's legislative or regulatory authorities, and DFO may not be able to ensure public compliance with its legislation and regulations.	The Department will develop and assess a complete, Department-wide inventory of key mitigation measures for this risk.	

Risk management at DFO continues to evolve. Sectors and the Canadian Coast Guard have developed their own risk profiles, and risk management is used in delivering programs in the regions; for example, a special Risk Management Framework was developed to identify, manage, and mitigate the implementation of Canada's Economic Action Plan at DFO. Continued monitoring of DFO's operating environment allows the Department to identify new risks and opportunities and the related response strategies. DFO is currently formalizing a corporate risk management process that will ensure that annual updates of the risk profile are available to guide management in determining priorities for the coming year.

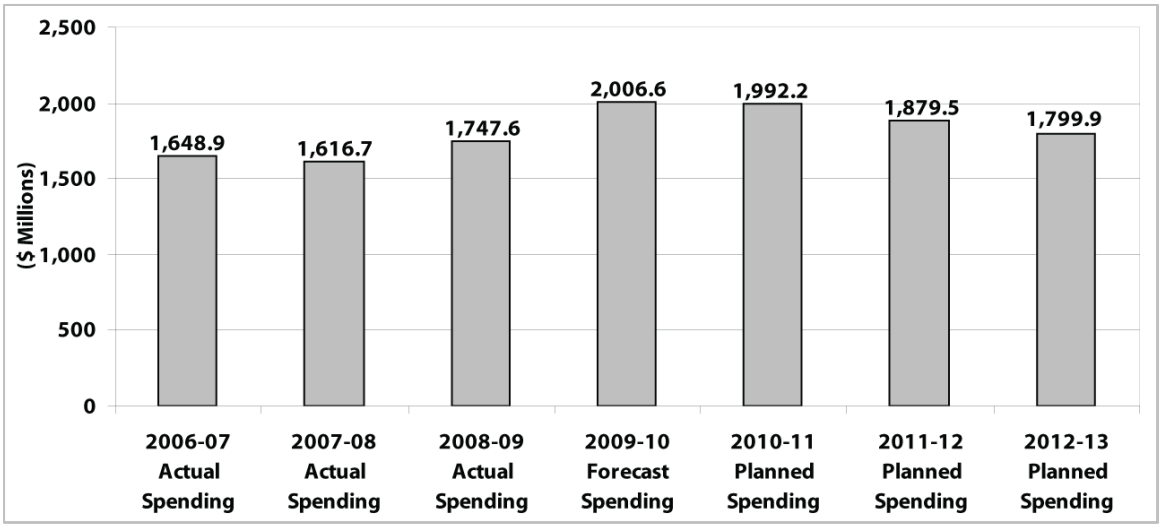
Challenges that emerge from the external operating context include the effects of climate change, access to international markets for Canadian commercial fisheries, the global competitiveness of Canadian fisheries, DFO's capacity to meet the needs of the Government of Canada's Northern Strategy, and a comprehensive understanding of our fisheries and oceans. DFO is working to develop responses to these challenges by fully articulating the associated risks and developing corresponding mitigation measures.

Expenditure Profile

Financial and Human Resources for 2010-13

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	1,992.2	1,879.5	1,799.9
Human Resources (FTEs)	11,025	11,052	11,022

Departmental Spending Trend



Voted and Statutory Items

($ thousands)

Vote/ Statutory Item	Vote/Statutory Wording	Main Estimates 2009-10	Main Estimates 2010-11
1	Operating Expenditures	1,167,689	1,283,084
5	Capital Expenditures	242,667	427,591
10	Grants and Contributions	110,637	129,231
(S)	Minister of Fisheries and Oceans Canada salary and motor car allowance	78	79
(S)	Contributions to Employee Benefit Plans	120,446	127,752
	Total - Fisheries and Oceans Canada	**1,641,516**	**1,967,737**

Human Resources Summary

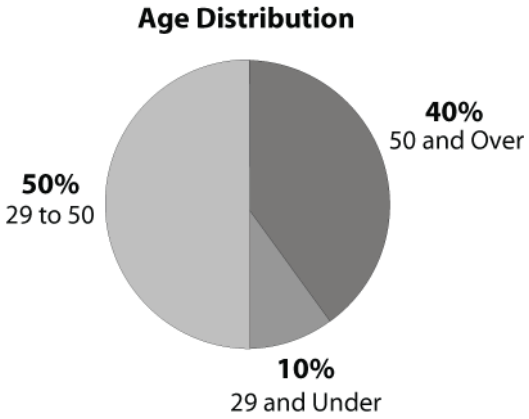
DFO's most important resource is its people — the workforce of just over 11,000 employees delivers most of the Department's programs and services. The size of the workforce has remained relatively stable over the years.

DFO faces many of the same demographic challenges as the rest of the federal public service. The Department has been actively managing the impacts of an aging workforce and renewing at a time of increased technological change and complexity, globalization, challenging economic conditions, and increased diversity of Canada's population.

DFO's workforce plays both operational and scientific roles. The Department offers a wide array of challenging and interesting occupations, ranging from ship's crew at the ready for 24/7 search and rescue, to scientists researching the health of Canada's oceans, to Fishery Officers protecting fish resources and habitat, to analysts shaping policies for international fisheries issues and climate change. The Internal Services functions, which include, among others, human resources, finance, audit, communications, and information technology, enable the Department to deliver its programs and services effectively and efficiently.

DFO is highly decentralized, with 87 per cent of its workforce located outside the National Capital Region. DFO has a strong visible presence in hundreds of communities across Canada. The Coast Guard (included in the figures above) has over 4,800 employees, working in 127 locations and on 116 vessels across Canada.

Of the DFO workforce, 90 per cent is employed on an indeterminate basis, and 10 per cent is temporary (student, casual, term, and seasonal employment). Largely because of the unique work DFO offers, particularly in scientific disciplines and CCG, employees have tended to remain with the Department well past their retirement eligibility; however, many are now deciding to leave, and the attrition rate has increased from 4 per cent in 2007 to 7 per cent in 2009. DFO has taken proactive steps to recruit and develop employees and transfer the critical knowledge necessary to maintain a stable workforce for years to come. The Department has a strong presence at public service career fairs, the Canadian Coast Guard is developing a marketing and recruitment program, and DFO is engaged in community outreach and partnerships with academia and employment equity groups.



Planning Summary by Strategic Outcome

($ millions)

Safe and Accessible Waterways

Performance Indicator	Target
Percentage of Canadian public reporting confidence in the safety of the marine transportation system in Canada	90%

Program Activity/ Expected Result	Alignment to Government of Canada Outcome Areas	Forecast Spending 2009-10	Planned Spending		
			2010-11	2011-12	2012-13
Canadian Coast Guard					
■ Safe, economical, and efficient movement of maritime traffic in Canadian waters ■ Civilian fleet operationally ready to deliver Government of Canada programs and maintain a federal presence	Safe and secure communities	725.3	732.6	788.9	779.6
Small Craft Harbours					
■ A network of harbours critical for Canada's commercial fishing industry that is open, safe, and in good repair	Strong economic growth	208.1	221.7	113.2	93.2
Science for Safe and Accessible Waterways					
■ Stakeholders have the information to safely navigate Canada's waterways	Innovative and knowledge-based economy	38.7	38.9	32.3	32.4
Total		**972.1**	**993.2**	**934.4**	**905.2**

Note: Because of rounding, figures may not add to the totals shown.

Sustainable Fisheries and Aquaculture

Performance Indicator	Target
Year-over-year improvement in management and conservation of major stocks to support sustainable fisheries, as evidenced in growth of the sustainability index	Baseline of 5.4/10 with target of 2% increase for 2010 to 5.5/10 and additional 2% increase to 5.6/10 for 2011

Program Activity/ Expected Result	Alignment to Government of Canada Outcome Areas	Forecast Spending 2009-10	Planned Spending		
			2010-11	2011-12	2012-13
Fisheries and Aquaculture Management					
■ Sustainable fisheries and aquaculture	Strong economic growth	358.0	350.2	345.9	305.2
Science for Sustainable Fisheries and Aquaculture					
■ Comprehensive understanding of aquatic resources for decision-makers to help ensure sustainable fisheries and aquaculture	An innovative and knowledge-based economy	146.6	140.0	146.7	153.4
Total		**504.6**	**490.2**	**492.5**	**458.6**

Note: Because of rounding, figures may not add to the totals shown.

Healthy and Productive Aquatic Ecosystems					
Performance Indicator		**Target**			
Percentage of Canadian aquatic ecosystems where the risk to ecosystem health and productivity has been assessed as medium or low		TBD – baseline value to be measured in 2010			
Program Activity/ Expected Result	**Alignment to Government of Canada Outcome Areas**	**Forecast Spending 2009-10**	**Planned Spending**		
			2010-11	**2011-12**	**2012-13**
Oceans Management					
■ Oceans activities are managed in a manner consistent with sustainable development	A clean and healthy environment	17.2	15.9	15.3	13.1
Habitat Management					
■ Healthy and productive fish habitat available to sustain the production of fish species and populations that Canadians value	A clean and healthy environment	63.9	59.7	55.7	50.0
Species at Risk Management					
■ Endangered or threatened aquatic species in Canada are managed to prevent them from becoming extinct	A clean and healthy environment	17.3	23.0	23.7	14.1
Science for Healthy and Productive Aquatic Ecosystems					
■ Comprehensive understanding of living aquatic ecosystem function for decision-makers to help ensure healthy and productive aquatic ecosystems	An innovative and knowledge-based economy	59.7	56.0	51.5	55.8
Total		**158.1**	**154.7**	**146.2**	**133.0**

Note: Because of rounding, figures may not add to the totals shown.

All Strategic Outcomes	Forecast Spending 2009-10	Planned Spending		
		2010-11	2011-12	2012-13
Safe and Accessible Waterways	972.1	993.2	934.4	905.2
Sustainable Fisheries and Aquaculture	504.6	490.2	492.5	458.6
Healthy and Productive Aquatic Ecosystems	158.1	154.7	146.2	133.0
Internal Services	371.9	354.0	306.3	303.1
Total Departmental Spending	**2,006.6**	**1,992.2**	**1,879.5**	**1,799.9**

Note: Because of rounding, figures may not add to the totals shown.

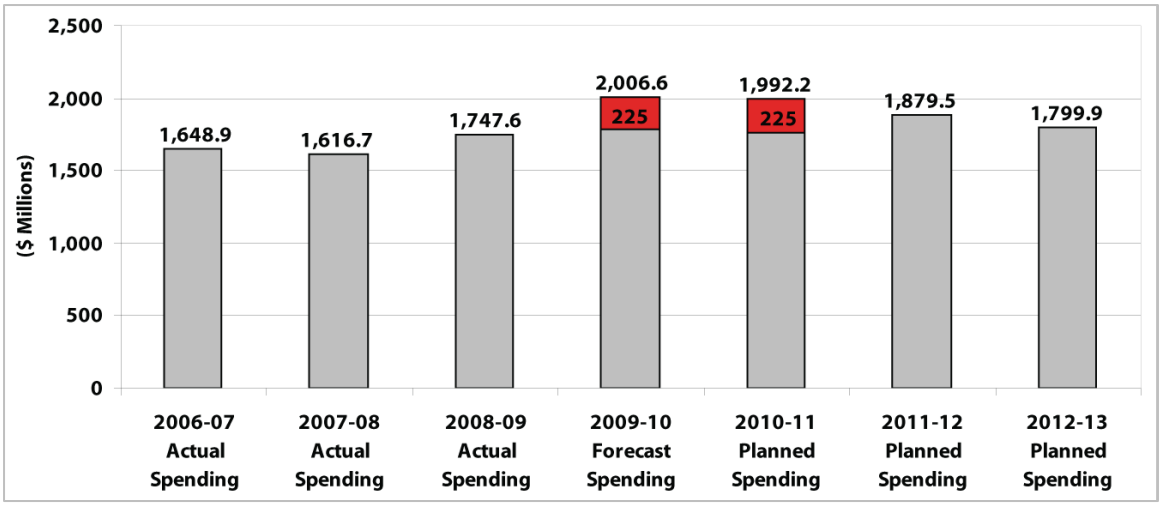
Canada's Economic Action Plan

Canada's Economic Action Plan (EAP) allocates close to $12 billion in new infrastructure funding over two years to create jobs across Canada and to ensure that Canada emerges from the economic downturn with a more modern and greener infrastructure. As part of the government's Economic Action Plan, DFO has received the following funding:

($ millions)

EAP Initiative	Focus	Forecast Spending 2009-10	Planned Spending 2010-11
Canadian Coast Guard – Shipbuilding and Repair	■ Purchase 98 new vessels (including 60 small boats, 30 Environmental Response Barges, 5 47-foot Motor Life Boats, and 3 Off-shore Fishery Science Vessels). Delivery of all new vessels is expected by the end of March 2011. ■ Vessel life extensions (VLEs) are under way on five vessels to give them another 10 years of service life. Work on CCGS *Tanu*, CCGS *Cape Roger*, CCGS *Tracy*, CCGS *Bartlett*, and CCGS *Limnos* is expected to be completed by 2010-11. ■ Repair and refit 35 existing vessels by March 2011.	90.0	85.0
Small Craft Harbours	■ Undertake approximately 260 repair, maintenance, or dredging projects at over 200 core commercial fishing harbours. The fishing industry is the lifeblood of hundreds of coastal communities, and this repair work will help ensure access over the long term to safe and functional harbours in many communities across the country.	102.3	97.7
	■ Accelerate construction of a fishing harbour in Pangnirtung, Nunavut, which was originally announced in Budget 2008. The full project is expected to be completed by 2012.	7.0	10.0
Mackenzie Gas Project	■ Carry out environmental assessment and regulatory activities associated with the Mackenzie Gas Project and induced oil and gas exploration and development activities. DFO is responsible for determining impacts on fish habitat and the means to mitigate the impacts, as well as for issuing authorizations for the harmful alteration, disruption, or destruction of fish habitat under the *Fisheries Act*.	4.2	—
Federal Laboratories	■ Modernize 16 DFO laboratories and 49 Salmonid Enhancement Program (SEP) facilities.	13.6	24.5
Federal Contaminated Sites Action Plan	■ Assess and remediate DFO properties as part of the Federal Contaminated Sites Action Plan.	8.2	8.2
Total		**225.3**	**225.4**

Economic Action Plan Spending



Section 2 — Analysis of Program Activities by Strategic Outcome

In this Section

Safe and Accessible Waterways

- Canadian Coast Guard
- Small Craft Harbours
- Science for Safe and Accessible Waterways

Sustainable Fisheries and Aquaculture

- Fisheries and Aquaculture Management
- Science for Sustainable Fisheries and Aquaculture

Healthy and Productive Aquatic Ecosystems

- Oceans Management
- Habitat Management
- Species at Risk Management
- Science for Healthy and Productive Aquatic Ecosystems

Internal Services

Safe and Accessible Waterways

Strategic Outcome

Safe and Accessible Waterways is about providing access to Canadian waterways and ensuring the overall safety and integrity of Canada's marine infrastructure for the benefit of all Canadians.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	993.2	934.4	905.2
Human Resources (FTEs)	5,327	5,317	5,314

To Results …

Expected Result	Performance Indicator	Target
Safe and Accessible Waterways	Percentage of Canadian public reporting confidence in the safety of the marine transportation system in Canada	90%
	Percentage of core fishing harbours with performance ratings of fair, good, or very good	70%

Benefits to Canadians

Economic growth in Canada depends heavily on trade and maritime commerce, which relies in turn on secure, sustainable harbours, safe waters, aids to navigation, and reliable and modern hydrographic products and services. Canadian Hydrographic Service (CHS) charts and navigational products have guided mariners safely from port to port since 1883. But maritime accidents do occur, necessitating strong capacities for search and rescue and for environmental response from Coast Guard. Demand for increased services and infrastructure, especially in the North, continues to challenge the Coast Guard, Small Craft Harbours, and the Canadian Hydrographic Service.

Coast Guard programs and services provide the maritime presence that supports a safe and secure Canada, delivering direct and indirect services to the country's marine sector. This sector transports, on average, 97% of Canada's exports and 76% of its imports. Coast Guard supports the maritime economy and facilitates maritime commerce by ensuring the safe and efficient navigation of Canadian waterways. With its multi-tasked fleet, Coast Guard provides essential search and rescue services, enables the on-water fisheries enforcement and science activities of the Department and supports various other departments and agencies that have a front-line role in maritime security. Northern prosperity and development, in particular, are fostered by the secure access to our northern waters provided by Coast Guard icebreakers. In addition, Northern communities benefit from supplies delivered by Coast Guard vessels.

DID YOU KNOW?

- Canada has: the longest coastline of any nation in the world — 240,000 kilometres; an exclusive economic zone of almost 8,000,000 square kilometres; and the second largest continental shelf area in the world — 6,500,000 square kilometres.
- Exports account for over 40% of Canada's $977 billion Gross Domestic Product.
- In trade with countries other than the United States, 92% of Canadian exports and 87% of our imports are moved across ocean trade routes.
- Canada's 546 ports handle over 390 million tonnes of cargo each year and serve as Canada's gateway to more than 100 other economies.
- Ships carry 20% of Canada's trade with the United States.
- Oceans industries directly employ nearly 145,000 Canadians and generate $19 billion of economic output.
- Canada has 900,000 ferry or boat visitors every year.

DFO's small craft harbours[5] support the effective operation of the Canadian commercial fishing industry. Many fish harvesters depend on the infrastructure at small craft harbours for access to the fisheries that are their livelihood. Our harbours are often the only visible federal presence in remote communities; they also often provide the only public access to waterways.

The geographic coverage required of navigational products and services for safe navigation on Canadian waters is one of the largest in the world, and this coverage continues to grow as changing climatic conditions expose new navigable waterways and industry demands expand. Keeping existing hydrographic charts up-to-date while creating new ones is an ongoing challenge. The advent of electronic charts and other technological advances in hydrography continue to change how the Canadian Hydrographic Service (CHS) makes hydrographic information available to Canadians. CHS provides the hydrographic information needed for Canada's waters, including hydrographic charts (paper and digital); tide, current, and water-level information; and forecasts for marine natural hazards. With the exception of products for remote frontier regions, including areas of the Arctic, our navigational products and services meet or exceed the international standards set by the International Maritime Organization and the International Hydrographic Organization.

Safe and Accessible Waterways Program Activities

- Canadian Coast Guard
- Small Craft Harbours
- Science for Safe and Accessible Waterways

[5] http://www.dfo-mpo.gc.ca/sch-ppb/home-accueil-eng.htm

Canadian Coast Guard — Program Activity

Description from Main Estimates: The Canadian Coast Guard (CCG) provides civilian marine services (vessels, aircraft, expertise, personnel and infrastructure) to deliver its own programs (Aids to Navigation, Waterways Management, Marine Communications and Traffic Services, Environmental Response, Icebreaking, Search and Rescue), and on behalf of other federal government departments or in support of federal agencies and organizations in the achievement of their own specific Government of Canada maritime priorities. CCG provides support to other parts of Fisheries and Oceans Canada (Science and Conservation and Protection), the Department of National Defence, Environment Canada, the Royal Canadian Mounted Police, Foreign Affairs and International Trade, and Transport Canada among others.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	732.6	788.9	779.6
Human Resources (FTEs)	4,838	4,838	4,838

NOTE: FTE data does not include students and cadets.

To Results …

Expected Result	Performance Indicator	Target
Safe, economical, and efficient movement of maritime traffic in Canadian waters	Number of vessel movements facilitated through the provision of CCG maritime safety services (maintain a 3-year average)	848,734 by March 31, 2011
Civilian fleet operationally ready to deliver Government of Canada programs and maintain a federal presence	Satisfaction rate (percentage) of CCG meeting GOC requirements for an operationally ready fleet	80% by March 31, 2011

Planning Highlights

- Procure new vessels and undertake major vessel repairs to improve Coast Guard's capacity to deliver its programs and services.
- Lead the development of a strategic DFO/CCG Arctic Vision.
- Replace *CCGS Louis S. St. Laurent* with a new, more capable polar icebreaker.
- Play a leadership role in the implementation of e-Navigation in Canada, which is expected to significantly enhance marine safety, have positive economic benefits, and increase environmental protection.
- In support of the Health of the Oceans priority, improve the capacity to respond to oil spills.

DID YOU KNOW?

- On an average day, the Canadian Coast Guard:
  - Saves 8 lives;
  - Assists 55 people in 19 search and rescue cases;
  - Services 60 aids to navigation;
  - Handles 1,547 marine radio contacts;
  - Manages 2,325 commercial ship movements;
  - Escorts 4 commercial vessels through ice;
  - Carries out 12 fisheries patrols and supports 8 scientific surveys and 3 hydrographical missions;
  - Deals with 4 reported pollution events; and
  - Surveys 4.4 kilometres of navigation channel bottom.

The Challenge

To meet the evolving demand for Coast Guard services, the Agency is beginning to address the challenges of its aging fleet, workforce, and shore-based infrastructure. While recent federal budgets have provided funding for 14[6] new large ships and 98 small craft, as well as funding for vessel life extensions and vessel refits, it will take a number of years for many of the new vessels to be delivered. The existing fleet must therefore be kept operationally ready.

Like many other organizations, Coast Guard faces challenges in the recruitment and retention of skilled employees. As over 25% of Coast Guard's employees will be eligible to retire over the next five years and demand for skilled seagoing personnel is increasing, recruitment is an important priority for the Coast Guard.

Rapid technological change in the marine industry requires Coast Guard to modernize its shore-based infrastructure and Canada's aids to navigation system. At the same time, CCG must maintain certain older technologies because of user requirements and obligations.

Lastly, despite the recent economic downturn, marine traffic is expected to increase in the future, thus increasing demand for Coast Guard services. Changes to Coast Guard services will also be based on the evolving needs of the Government of Canada, such as the increased focus on the North.

Key Priorities

In 2010-11, Coast Guard will continue to focus on its people to ensure that it has a skilled, qualified, and representative workforce; to deliver on fleet procurement and repair processes already under way; and to play a leadership role in the implementation of e-Navigation and in the development of a strategic DFO/CCG Arctic Vision. CCG will also develop longer term plans for renewal of the fleet and its shore-based infrastructure. Details on these initiatives can be found in its *2009-2012 Business Plan,* which is available on the CCG website.[7]

Fleet Renewal

Key Deliverables

- Begin construction of the first of nine Mid-shore Patrol Vessels.
- Issue a competitive Request for Proposal, and award a contract to design three Offshore Fishery Science Vessels.
- Issue a competitive Request for Proposal, and award a contract to design an Offshore Oceanographic Science Vessel.
- Put a Fleet Renewal Plan in place to address developing trends and forecast client requirements.

Northern Strategy

Key Deliverables

- Finalize an integrated Arctic Vision for DFO and CCG, including short-, medium-, and long-term commitments.
- Develop the Operational Requirements and the Conceptual Design for the new Polar Icebreaker.

Economic Action Plan

Key Deliverables

- Approve and accept delivery of five 47-foot Search and Rescue Motor Life Boats.
- Award the contract and complete the vessel life extension of CCGS *Cape Roger* and CCGS *Tanu.*
- Approve and accept delivery of two 18m Science Vessels.
- Approve and accept delivery of a 24m Science Vessel.
- Plan and complete $19M of additional vessel refits.
- Approve and accept delivery of 30 replacement Environmental Response Barges.
- Purchase and accept the remaining small craft, for a total of 60.

[6] CCG had originally planned to procure 12 Mid-shore Patrol Vessels (MSPVs). In September 2009, a contract was awarded to Irving Shipbuilding for the procurement of 9 MSPVs. To meet program requirements, Vessel Life Extensions will be undertaken on 3 existing vessels to reach the full complement of 12.

[7] The *2010-13 Business Plan* will be available in July 2010 on the CCG website.

Implementing e-Navigation in Canada

Key Deliverables

- Develop a strategic vision and a high-level implementation plan.

Health of the Oceans

Key Deliverables

- Complete the distribution of equipment packages designed to improve Coast Guard's capacity to respond to oil spills in the Arctic.

Canadian Coast Guard Sub-Activities

- Aids to Navigation
- Waterways Management
- Marine Communication and Traffic Services
- Icebreaking Services
- Search and Rescue Services
- Environmental Response Services
- Maritime Security
- Fleet Operational Readiness
- Life-cycle Asset Management Services
- Coast Guard College

Small Craft Harbours

Program Activity

Description from Main Estimates: The Small Craft Harbours Program directly, or indirectly through Harbour Authorities, operates and maintains a network of harbours, critical to the fishing industry, that is open, safe and in good repair. These harbours are necessary for the effective operation of the commercial fisheries that contribute to the Canadian economy, directly support employment and that indirectly create tens of thousands jobs, many in rural and isolated parts of Canada.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	221.7	113.2	93.2
Human Resources (FTEs)	191	181	178

To Results …

Expected Result	Performance Indicator	Target
A network of harbours critical for Canada's commercial fishing industry that is open, safe, and in good repair	Percentage of core fishing harbours with performance ratings of fair, good, or very good	70% by March 31, 2011
	Percentage of facilities at core fishing harbours in fair, good, or very good condition	80% by March 31, 2011
	Percentage of recreational and non-core harbours divested	5% of remaining divestiture candidates to be divested in 2010-11

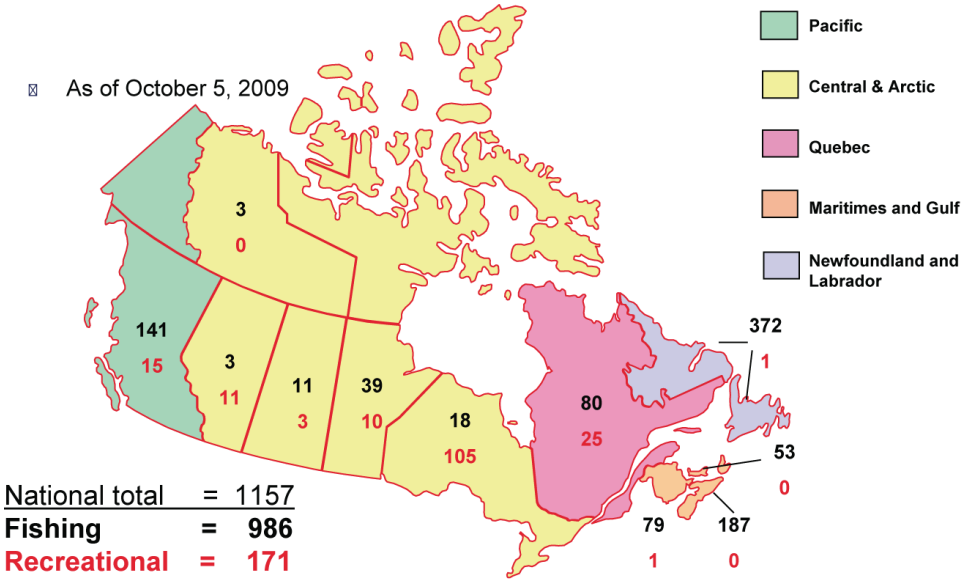
Planning Highlights

- Implement Canada's Economic Action Plan (EAP) initiative for the repair and maintenance of core commercial fishing harbours, including dredging, by March 31, 2011.
- Build a small craft harbour in Pangnirtung, Nunavut. Phase 1 of the project, which includes a west breakwater, small vessel floating docks, partial inner-basin dredging, and a marshalling area, is to be completed in 2010-11. If approved, Phase 2, which includes the remaining harbour components, will be started, with completion planned for 2011-12.
- Implement year three of the four-year Divestiture of Non-core Harbours Program. Provided for by Budget 2008, the Program ends in 2011-12.
- Finalize organizational changes stemming from the Small Craft Harbours Functional Review approved by DFO in 2008.

DID YOU KNOW?

- As of October 2009, fish harvesters and other users had access to a network of over 1,157 harbours throughout Canada, including 986 fishing harbours and 171 recreational harbours.
- Almost 90% of Canada's commercial fish harvest is landed at DFO's small craft harbours.
- Of 754 core commercial fishing harbours, 690 (90%) are managed by 570 Harbour Authorities.
- In 2009-10, approximately 5,000 Harbour Authority volunteers contributed nearly 135,000 hours, equivalent to the work of 70 full-time workers, to manage and operate DFO's small craft harbours.

Small Craft Harbours throughout Canada



The Challenge

The Small Craft Harbours Program[8] must respond to changes on many fronts, including the growing participation of First Nations commercial fish harvesters, expanding aquaculture operations, changing fisheries, and larger fishing vessels. While Budget 2009 provided significant funding to repair core commercial fishing harbours across Canada over two years, the Program needs to develop and implement measures for the long-term sustainability of its network of harbours. In addition, the Program needs to strengthen its support to the volunteer Harbours Authorities, who manage the core commercial fishing harbours in an increasingly complex operating and regulatory environment. Lastly, the Program needs to divest the remaining non-essential fishing and recreational harbours to local communities. These harbours are more difficult and costly to transfer, and many require environmental remediation.

Key Priorities

Northern Strategy

Key Deliverables

- Build a small craft harbour in Pangnirtung, Nunavut. Phase 1 of the project, which includes a west breakwater, small vessel floating docks, partial inner-basin dredging, and a marshalling area, is to be completed in 2010-11. If approved, Phase 2, which includes the remaining harbour components, will be started, with completion planned for 2011-12.

Economic Action Plan

Key Deliverables

- Repair and maintain core commercial fishing harbours, including associated dredging. Investments will involve approximately 260 projects in over 200 different locations across Canada.

[8] http://www.dfo-mpo.gc.ca/sch-ppb/aboutsch-aproposppb-eng.htm

Science for Safe and Accessible Waterways

Program Activity

Description from Main Estimates: This program provides scientific research, monitoring, advice, products and services and data management to ensure departmental and federal policies, programs, decisions, and regulations associated with safe, secure, and accessible waterways are informed by science advice. The science is provided through a network of research facilities, in collaboration with other government departments, private sector, academia and international organizations.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	38.9	32.3	32.4
Human Resources (FTEs)	297	297	297

To Results …

Expected Result	Performance Indicator	Target
Stakeholders have the information to safely navigate Canada's waterways	Number of navigational digital and paper products sold	Maintain current unit sales levels or achieve a net increase in products sold

Planning Highlights

- The Canadian Hydrographic Service (CHS) will undertake hydrographic surveys and produce several new charts in paper and digital format to replace existing products for the Kitimat and Prince Rupert areas of British Columbia. The new charts will make it possible for deep-draught vessels (for instance, those that service the liquid natural gas and oil industries) to safely navigate this area of Canada's Pacific coast.
- In keeping with the objectives, goals, and targets articulated in the CHS Levels of Service initiative,[9] CHS will increase efforts to synchronize the production, availability, and maintenance of its paper and digital charts.
- In response to new responsibilities that require CHS to produce and distribute Canada's official digital nautical products and data, as well as its traditional paper products, CHS will improve its model for digital distribution.

The Challenge

CHS has been collecting hydrographic information and providing Canadians with navigational products and services based on this information for over 100 years. The challenge is to enhance this extensive portfolio of navigational products and service so that it meets international standards, is up-to-date and accurate, and reflects the needs of today's commercial and recreational boaters. Emerging navigation technologies, such as e-Navigation and near-real-time dynamic navigation systems, present particular challenges. The adoption of these new technologies means that CHS information and services must be able to

DID YOU KNOW?

- The Canadian Hydrographic Service distributes a total of nearly 300,000 nautical charts, tide tables, and other nautical publications every year.
- If the United Nations accepts Canada's claim to the continental shelf beyond the current 200 nautical mile limit (370 kilometres), our continental shelf will increase by an estimated 1.75 million square kilometres. This is the size of the Prairie Provinces.
- CHS licenses access to its intellectual property to more than 500 private- and public-sector clients, and is a partner in the development of ocean technology and applications.

[9] http://www.charts.gc.ca/about-apropos/los/los-eng.asp

interface with these technologies and meet the ever-increasing precision required by the marine transportation community. Although hydrographic information is used primarily to support safe navigation, it is also used in such areas as national security, the delineation of the continental shelf, and the management of maritime boundary disputes. In addition, bathymetric data, as well as tide, current, and water-level information, support emergency preparedness for marine natural hazards (storm surges and tsunamis, for example).

Key Priorities

Northern Strategy

Key Deliverables

- CHS is responsible for completing bathymetric survey work in support of Canada's submission to the United Nations Commission on the Limits to the Continental Shelf (UNCLCS). In 2010-11, two surveys will be undertaken in the Arctic. DFO will collect hydrographic and bathymetric data in the Arctic Ocean and Canada Basin in collaboration with Natural Resources Canada, the Department of National Defence, and the United States, in support of Canada's submission. In preparation for the submission deadline of 2013, efforts will increasingly focus on data analysis and management.
- Once the Pangnirtung Harbour has been built, CHS will chart the harbour and gather data on tides, currents, and depths to support safe navigation.

International Leadership

Key Deliverables

- CHS will work with the international marine navigation community to ensure that Canada is well prepared for the pending International Maritime Organization (IMO) decision to implement mandatory Electronic Chart Display and Information Systems in 2012.

Implementing e-Navigation in Canada

Key Deliverables

- CHS will support CCG's work with the national and international marine navigation community on the design and implementation of e-Navigation.

Science for Safe and Accessible Waterways Sub-Activities

- Navigational Products and Services
- Territorial Delineation

Sustainable Fisheries and Aquaculture — Strategic Outcome

Sustainable Fisheries and Aquaculture is about delivering an integrated fisheries and aquaculture program that is credible, science based, affordable and effective, and contributes to the wealth of Canadians, while respecting Aboriginal and treaty rights.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	490.2	492.5	458.6
Human Resources (FTEs)	2,521	2,563	2,555

To Results …

Expected Result	Performance Indicator	Target
Sustainable Fisheries and Aquaculture	Year-over-year improvement in the management and conservation of major stocks to support sustainable fisheries, as evidenced in the growth of the sustainability index[10]	Baseline of 5.4/10 with target of 2% increase for 2010 to 5.5/10 and additional 2% increase to 5.6/10 for 2011
	Year-over-year improvement in the social, economic, and environmental sustainability of the Canadian aquaculture sector, as evidenced by a reduced regulatory burden, increased regulatory effectiveness, increased transparency, increased availability of scientific information, increased industry investment in innovation and certification projects, and the development of sector-specific program and operational policy direction	Development of a national data-collection program and process for sustainability reporting Implementation of regulatory program in British Columbia and possibly nationally

Benefits to Canadians

DFO provides an integrated fisheries and aquaculture program that is credible, science-based, affordable, and effective and contributes to sustainable wealth for Canadians. To provide Canadians with economic benefits from our aquatic natural resources, DFO must understand and act as a steward of the complex ecosystems that sustain these resources, work with other nations to protect and conserve these resources, and ensure that Canadian products have access to world markets. The viability of many of Canada's coastal communities is directly linked to the health of the fisheries and aquaculture industries.

DFO is responsible for developing and implementing policies and programs to ensure the sustainable use of Canada's marine ecosystems and for making possible an economically prosperous sector. DFO has been pursuing a fisheries renewal agenda that recognizes that Canada's fisheries can be sustainable over the short and long term only if the resource is conserved and used sustainably and the fishing industry is viable. This new approach provides a renewed focus for working with harvesters, processors, communities, provinces, and territories in fisheries planning and the management of harvest operations, as well as for creating the necessary conditions for a globally competitive fishing sector that can meet growing market demands.

[10] The sustainability results are taken from the fisheries checklist. They are based on data collected for major fish stocks in Canada through a survey of fishery managers and biologists.

There is a growing desire on the part of the provinces and territories to participate in DFO decision-making and to collaborate in areas of shared interest. Recent Federal Court decisions have also affected science and fisheries management activities, providing the opportunity for fisheries renewal.

Some fish stocks that are important to Canadians are managed internationally, and these fisheries depend on ecosystems and habitats beyond our Exclusive Economic Zone. Canada must demonstrate leadership in international fisheries negotiations and oceans governance mechanisms while engaging in effective enforcement activities on the water.

DID YOU KNOW?

- Canada's fisheries generate around $4 billion of export income annually.
- The commercial fishing, processing, and aquaculture industries employ over 80,000 people and are an important economic driver in 1,500 coastal communities:
  - 53,000 commercial fish harvesters;
  - 4,000 aquaculture employees; and
  - 23,000 workers in seafood production.
- Canada's fish and seafood processing industry generates over $4 billion in revenues.
- Recreational fisheries in Canada's freshwater and tidal waters accounted for $7.5 billion in direct and indirect expenditures in 2005.
- There are 206 fishery-reliant communities in Canada where at least 30% of the community's Gross Domestic Product comes from a fishery-related activity.
- Where DFO manages the fishery, fisheries affect approximately 250 First Nations and other Aboriginal groups.
- Salmonid Enhancement Program (SEP) hatcheries and spawning channels produce 10-15% of the First Nations, recreational, and commercial harvest in British Columbia.
- SEP undertakes more than 70 resource restoration projects every year.

Aquaculture in Canada relies on the cooperation of many — DFO, other federal departments, provincial and territorial governments, industry, the private sector, non-government organizations, and other stakeholders — making transformation and innovation complex and time-consuming. Low consumer confidence in aquaculture products, the need to protect natural species, and international barriers also challenge the growth of aquaculture in Canada.

The management of our fisheries, the creation of conditions that enable a vibrant and innovative aquaculture industry, strong and respected participation in international fora, and effective collaboration with our many partners are all founded on a sound scientific knowledge of the fisheries. The end result is an integrated and globally competitive fishing industry from which Canadians can benefit and prosper.

Sustainable Fisheries and Aquaculture Program Activities

- Fisheries and Aquaculture Management
- Science for Sustainable Fisheries and Aquaculture

Fisheries and Aquaculture Management

Program Activity

Description from Main Estimates: The overall goal of fisheries and aquaculture management is the conservation of Canada's fisheries resources to ensure sustainable resource utilization through close collaboration with resource users and stakeholders based on shared stewardship. Fisheries and Aquaculture Management contributes to international fisheries conservation negotiations and relations, shared management of interception fisheries in international waters, management of the Aboriginal, commercial, recreational fishing in the coastal waters of Canada's three oceans and creating the conditions for a vibrant and innovative aquaculture industry and for an economically prosperous fishing sector as a whole.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	350.2	345.9	305.2
Human Resources (FTEs)	1,594	1,635	1,633

To Results …

Expected Result	Performance Indicator	Target
Sustainable Fisheries and Aquaculture	Year-over-year improvement in the management and conservation of stocks to support sustainable fisheries, as evidenced in the growth of the sustainability index	Baseline of 5.4/10 with target of 2% increase for 2010 and additional 2% increase for 2011

Planning Highlights

- Develop and implement Integrated Fisheries Management Plans (IFMPs), programs, and plans that support conservation, sustainability, and economic prosperity for recreational and commercial fisheries.
- Promote shared stewardship of fisheries by co-ordinating consultations and negotiations with stakeholders.
- Improve and restore fish habitat.
- Use proactive measures, including enforcement, to ensure compliance with legislation, regulations, and management measures.
- Administer the fishing licence regime, manage and collect fisheries data, and undertake major-case and special investigations.
- Develop and implement a management framework for treaty implementation, and implement the integrated aboriginal contribution management framework.
- Introduce self-adjustment mechanisms and other licensing policy changes to enable economic prosperity, and improve market access by promoting sustainable fisheries management.
- Promote and influence sustainable regional fisheries management and healthy global marine ecosystems.
- Contribute to the growth of international trade in Canadian fish and seafood products.

The Challenge

Canada's fisheries have played an important role historically, economically, and culturally in Canada's development and growth as a nation. Today, however, these fisheries face a number of challenges, including the collapse of key stocks, market changes, and environmental challenges such as pollution and climate change.

A viable fishery sector needs the support of a modern fisheries governance regime that is accountable, predictable, and transparent to the people it governs. The Fisheries and Aquaculture Management Program contributes to responsible negotiations regarding the conservation of international fisheries and international relations, shared management of interception fisheries in international waters, and management of Aboriginal, commercial, and recreational fishing in the coastal waters of Canada's three oceans.

Although substantial advances have been made in the Northwest Atlantic Fisheries Organization (NAFO), the high seas fisheries continue to sustain pressure from many sources — legal, institutional, overfishing, Illegal, Unregulated and Unreported (IUU) fishing activities, and from environmental degradation. These activities may also produce cascading risks to the sustainability of fisheries and marine ecosystems within Canada's Exclusive Economic Zone. Many fish stocks continue to decline, threatening the economic viability of the Canadian fishery sector already challenged by world markets, the economic recession and the need in many cases for structured changes.

Developing national and international strategies and measures to conserve and protect our fisheries resources requires sound scientific advice. Scientific knowledge to support conservation, market access, environmental responsibility, and consumer confidence in a strong aquaculture industry is also needed.

Key Priorities

Northern Strategy

Key Deliverables

- Advance the development, sustainability, and prosperity of emerging fisheries through increased support for science and the management of fishery resources.

International Leadership

Key Deliverables

- Combat illegal, unreported, and unregulated fishing by meeting the conditions necessary for Canada's ratification of the Port State Measures by 2011.
- Advance and strengthen international fisheries management:
  - Ensure that Canadian interests and management approaches are reflected in the finalized Convention for fisheries management in the North Pacific Ocean by 2011.
  - Under the Pacific Salmon Treaty, implement a licence retirement program, ensure that the $30 million fishery mitigation program is in place, and ensure that Chapter Four of the Treaty incorporates Canadian objectives when it is renewed in 2010.
  - Ensure that no major non-compliance issues are identified in the 2010 annual review of the NAFO Standing Committee on International Control.
- Influence international regulatory decisions and factors affecting market access, with the overall goal of enhancing the competitiveness of Canada's fish and seafood products:
  - Improve the species permitting process required by the Convention on International Trade in Endangered Species.
  - Support market access by ensuring that sectoral interests are reflected in international trade negotiations.

Globally Competitive Fisheries

Key Deliverables

- Roll out the Sustainable Fisheries Framework, which will enable DFO and resource users to meet conservation objectives.
- Create the domestic conditions necessary to maintain and improve market access for the Canadian fish and seafood industry, including the redesign of the Canadian Shellfish Sanitation Program.
- Enable resource users (Aboriginal, recreational, commercial, or aquaculture fish harvesters) to respond effectively to the economic forces that affect the industry.
- Increase stability, transparency, and predictability in fisheries management.
- Develop and implement a framework to guide negotiations regarding Aboriginal fisheries.
- Pursue regulatory reform, including changes in response to land claims settlements and the removal of impediments to the industry's ability to self-adjust.

Fisheries and Aquaculture Management Sub-Activities

- ❑ Resource Management
- ❑ Aboriginal Policy and Governance
- ❑ Salmonid Enhancement Program
- ❑ International Fisheries Conservation
- ❑ Conservation and Protection
- ❑ Aquaculture

Science for Sustainable Fisheries and Aquaculture

Program Activity

Description from Main Estimates: Provision of advice and recommendations based on scientific research and monitoring, as well as the provision of products and services and the management of data on Canada's oceans and resources. This ensures departmental and federal policies, programs, decisions, and regulations associated with sustainable fisheries and aquaculture are informed by scientific knowledge. The science is provided through a network of research facilities, in collaboration with other government departments, private sector, academia and international organizations.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	140.0	146.7	153.4
Human Resources (FTEs)	927	927	922

To Results …

Expected Result	Performance Indicator	Target
Comprehensive understanding of aquatic resources for decision-makers to help ensure sustainable fisheries and aquaculture	Number of Canadian publications on sustainable fisheries and aquaculture that are authored/co-authored by DFO Science	Maintain 5-year average (2006-2011)
	Number of DFO Science publications on sustainable fisheries and aquaculture that are cited	Maintain 5-year average (2006-2011)
	Number of Canadian Science Advisory Secretariat (CSAS) publications on sustainable fisheries and aquaculture that are posted on the CSAS website	Maintain 5-year average (2006-2011)

Planning Highlights

- Implement the Technical Expertise in Stock Assessment (TESA) initiative to improve the quality and consistency of stock assessment across Canada. The initiative will promote expertise through the establishment of a stock assessment methods committee, an annual conference on national stock assessment methods, and technical training. It will also provide stock assessment practitioners with a problem-solving forum and improve the exchange of information in the scientific community interested in stock assessment.
- Develop, through a federal-provincial-territorial working group, a national Framework for Aquaculture Environmental Risk Management (FAERM) to provide the basis for a coherent national approach to the sustainable development of the aquaculture sector. The Department's Science Program will provide peer-reviewed advice that will both identify environmental risks and inform the development of the overall FAERM.
- Pursue opportunities to engage in collaborative research partnerships with university and private-sector researchers

DID YOU KNOW?

- DFO's Science Program assesses the status of and provides peer-reviewed advice to resource managers on approximately 650 different fish stocks.
- Canada ranks second, second, and fourth, respectively, in the world in scientific production in three areas of aquatic genomics: trait adaptability, aquaculture-environmental interactions, and aquatic animal health.
- Sea lamprey, an invasive species, were a significant factor in the collapse of the Great Lakes lake trout and whitefish fisheries in the 1940s and 1950s. The Sea Lamprey Control Program, implemented in 1955, has resulted in a 90% reduction in sea lamprey populations.

through initiatives such as the Natural Sciences and Engineering Research Council of Canada's supplemental Strategic Network Grants and the Department's Aquaculture Collaborative Research and Development Program and Centre for Integrated Aquaculture Science.

- ❑ Assist in the implementation of the New Substances Program for notifications of aquatic products of biotechnology and the review of the New Substances Notification Regulations (Organisms). In doing so, ensure that any amended regulation provides an appropriate framework for assessing the risks associated with aquatic animal products of biotechnology.
- ❑ Through the Program for Aquaculture Regulatory Research, increase the science knowledge needed to develop sound ecosystem-based environmental management decisions and regulations.

The Challenge

Fisheries and Oceans Canada has one of the most comprehensive Science programs in the federal government. Since the establishment of the Fisheries Research Board of Canada in the 1930s, the scope of the Science Program has expanded beyond the traditional aspects of our work, such as fisheries science, to newer science-based issues, such as the outbreak of serious infectious disease, aquatic invasive species, and the products of fish biotechnology. Science has also played an important role in supporting the evolution of sustainable aquaculture — improving nutrition, health, and production and increasing the understanding of interactions between aquaculture and the environment. The adoption of new technology such as genomics and biotechnology has continued to improve DFO's ability to protect endangered species, manage fisheries, and improve aquaculture practices.

The greatest challenge faced by the Science Program in providing science in support of sustainable fisheries and aquaculture is the increased complexity of the scientific advice needed to inform decision- and policy-making.

Key Priorities

Northern Strategy

Key Deliverables

- Implement the Emerging Fisheries Science Program to support the sustainable development of Nunavut's commercial fisheries.

Globally Competitive Fisheries

Key Deliverables

- Provide advice on the design and implementation of precautionary decision-making frameworks for selected stocks.
- Implement DFO responsibilities associated with the National Aquatic Animal Health Program (NAAHP) and the protection of Canadian aquatic resources (wild and farmed) from serious infectious diseases.

International Leadership

Key Deliverables

- Provide science advice on high seas marine ecosystems for policy- and decision-making by Regional Fisheries Management Organizations.

Regulatory Improvement

Key Deliverables

- Provide knowledge and peer-reviewed advice in support of the development of environmental management and regulation in aquaculture.

Science for Sustainable Fisheries and Aquaculture Sub-Activities

- ❑ Fisheries Resources
- ❑ Aquatic Invasive Species
- ❑ Aquatic Animal Health
- ❑ Sustainable Aquaculture Science
- ❑ Genomics and Biotechnology
- ❑ Science Renewal

Healthy and Productive Aquatic Ecosystems

Strategic Outcome

Healthy and Productive Aquatic Ecosystems ensures the sustainable development and integrated management of resources in or around Canada's aquatic environment through oceans and fish habitat management. It also involves carrying out the critical science and fisheries management activities that support these two programs.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	154.7	146.2	133.0
Human Resources (FTEs)	1,240	1,240	1,221

To Results …

Expected Result	Performance Indicator	Target
Healthy and Productive Aquatic Ecosystems	Percentage of Canadian aquatic ecosystems where the risk to ecosystem health and productivity has been assessed as medium or low	TBD – baseline value to be measured in 2010

Benefits to Canadians

DFO is responsible for ensuring the sustainable development and integrated management of resources in and around Canada's aquatic environment through programs focusing on the management of oceans, fish habitat, and aquatic species at risk.

The Oceans, Habitat and Species at Risk Sector, with support from Science Sector, is primarily responsible for managing the development and protection of the marine and freshwater environments in support of healthy and productive aquatic ecosystems. This involves the protection, conservation, and recovery of freshwater and marine ecosystems and aquatic species to ensure their health, viability, and productivity. Sustainable development is the fundamental principle that guides this strategic outcome — supporting an integrated approach to protect, conserve, and provide for the recovery of Canada's aquatic resources while supporting the development and use of these resources for the benefit of all Canadians.

Oceans and freshwater biodiversity, resources, and habitat are an important part of Canada's environmental, social, cultural, and economic fabric. Effective measures to protect and, in some cases, restore the health and productivity of our aquatic ecosystems, habitats, and species are predicated on sound scientific knowledge. Economic growth associated with inland, onshore, and off-shore development has had, and will continue to have, a significant effect on Canada's marine and freshwater systems. Marine activities must be managed in a sustainable way to support aquatic environments and ecosystems. Oceans health, marine habitat loss, declining biodiversity, growing demands for access to ocean resources, and regulatory and jurisdictional complexities are among the challenges that the Department faces in providing Canadians with healthy and productive aquatic ecosystems.

DID YOU KNOW?

- 50% of Canada's frontier oil reserves are estimated to lie in Canada's offshore, with the Hibernia oilfield alone estimated at over 750 million barrels of recoverable oil and 3.5 trillion feet of natural gas.
- Canada's ocean areas are important to Canada's tourism industries, with over 1,500,000 cruise ship passengers visiting Canadian ports each year.
- In terms of contribution to national Gross Domestic Product, employment, and income of ocean related activities, Canada's seafood sector ranks fourth after offshore oil and gas, marine transportation, and tourism and recreation.

Canada is taking a global leadership role by advancing the agenda to protect high seas ecosystems and biodiversity in a manner that reflects domestic interests and approaches. At the same time, the development of effective international policies can have a positive effect on Canada's management of its oceans sector.

Healthy and Productive Aquatic Ecosystems Program Activities

- Oceans Management
- Habitat Management
- Species at Risk Management
- Science for Healthy and Productive Aquatic Ecosystems

Oceans Management

Program Activity

Description from Main Estimates: Oceans Management involves the conservation and sustainable use of Canada's oceans in collaboration with other levels of government, Aboriginal organizations and other non-government stakeholders through the development and implementation of objectives-based integrated oceans management plans and the application of marine conservation tools. Modern oceans management arrangements deal with a number of challenges including oceans health, marine habitat loss, declining biodiversity, growing demands for access to ocean resources and regulatory and jurisdictional complexities.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	15.9	15.3	13.1
Human Resources (FTEs)	131	131	126

To Results …

Expected Result	Performance Indicator	Target
Oceans activities are managed in a manner consistent with sustainable development	Percentage of priority ocean ecosystems where ecosystem integrity is maintained or improved	100% by March 31, 2017
	Contribution of marine-based industries to GDP	Contribution of marine-based industries to the GDP remains stable or increases by March 31, 2017

Planning Highlights

- Facilitate information access and exchange, informed decision-making, and enhanced oceans planning and management.
- Adopt a spatially-based planning and management approach, based on ecosystem-scale management objectives, to provide guidance to all ocean-related regulators.
- Undertake actions to protect and manage unique and sensitive ecosystems, including identifying Areas of Interest (the first step in establishing an MPA), monitoring, and assessing effectiveness in achieving conservation objectives.
- Develop knowledge of the conservation, social, economic, and governance aspects of a defined marine area, and increase awareness of the effects oceans activities can have on such areas.

The Challenge

Modern oceans management arrangements face a number of challenges, including oceans health, marine habitat loss, declining biodiversity, growing and often competing demands for access to ocean resources, and regulatory and jurisdictional complexities. Ensuring that Canadians' goals are met requires a strong science foundation, governance mechanisms to ensure effective decision-making, and policy/regulatory tools to support sustainable use and conservation objectives.

Key Priorities

International Leadership

Key Deliverables

- Ensure that the decisions made by relevant multilateral fora reflect Canadian expert advice on ocean fertilization, significant marine areas, vulnerable marine ecosystems, and environmental impact assessments by 2011.

Health of the Oceans

Key Deliverables

- Within the context of a system of integrated oceans management:
  - Develop a federal-provincial-territorial network of Marine Protected Areas by 2012.
  - Announce six Areas of Interest for marine protection by 2010-11, and designate these sites as Marine Protected Areas by 2011-12.
  - Provide, by 2011-12, national guidance on state of the oceans reporting, traditional ecological knowledge, coastal management and corals and sponges.
  - Advance an ecosystem-based management approach for Arctic waters, including strategies for monitoring and assessing ecosystems.
  - Support ecosystem science, and provide advice on the health of the oceans.
  - Develop MPA monitoring strategies and protocols, including the identification of indicators, and assess how effectively current MPAs are achieving their conservation objectives.

Oceans Management Sub-Activities

- Integrated Oceans Management
- Marine Conservation Tools

Habitat Management

Program Activity

Description from Main Estimates: In collaboration with others, Habitat Management involves conserving and protecting fish and fish habitat from the impacts of activities occurring in and around fresh and marine fish-bearing waters, and improving (restoring and developing) fish habitat through the administration of the habitat protection provisions of the *Fisheries Act*, providing advice on related provisions of the Act, and the application of non-regulatory activities. It also involves conducting environmental assessments prior to regulatory decisions listed in the Law List Regulations of the *Canadian Environmental Assessment Act* and participating in other environmental assessment regimes. These activities are performed in a manner consistent with the *Species at Risk Act*; the Policy for the Management of Fish Habitat and other operational policies; consultation with Aboriginal groups; the goals and principles of sustainable development; and the policies and priorities of the federal government.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	59.7	55.7	50.0
Human Resources (FTEs)	516	516	505

To Results …

Expected Result	Performance Indicator	Target
Healthy and productive fish habitat available to sustain the production of fish species and populations that Canadians value	Percentage of inspected projects that conform with the terms and conditions of operational statements, formal advice in writing, and *Fisheries Act* authorizations	70% by March 31, 2011

Planning Highlights

- Provide advice on measures and approaches to avoid or control the effects of development projects on fish habitat so that the Program is able to:
  - Maintain or improve the production of fish species and populations that Canadians value; and
  - Undertake monitoring studies to verify the accuracy of projects' effects on fish habitat and assess the effectiveness of mitigation measures, approaches, and compensation plans.
- Monitor conformity with the mitigation measures and approaches required to avoid or control effects on fish habitat, and monitor compliance with the *Fisheries Act*.
- Review and update operational policies and practices to improve the effectiveness and efficiency of program delivery and ensure alignment with strategic priorities.
- Continue to enhance existing partnerships and explore new partnerships to:
  - Inform and consult with key partners and stakeholders about regulatory and policy proposals; and
  - Engage Canadians in protecting and conserving fish habitat.

The Challenge

DFO's Habitat Management Program is directly involved in the regulatory review, approval, and environmental assessments of some of the largest and most complex natural resource and industrial developments across the country — mines, liquefied natural gas terminals, hydroelectric projects, oil sands projects, and infrastructure projects. DFO anticipates roughly $300 billion in large-scale development proposals over the next few years.

Economic development activities across Canada, particularly in the natural resource sector and more recently in Canada's North, have increased the need to protect and conserve fish habitat and to undertake environmental assessments. Partners and stakeholders expect greater involvement in policy and program development and implementation, and legal thresholds for consultations with Aboriginal groups are higher. The Habitat Management Program has to manage the referral of more complex development proposals for regulatory review and environmental assessment, and the Program must also review an increasing number of existing facilities.

A sound scientific understanding of fish species, aquatic ecosystems, the interaction of fish species with their habitat, and the effects of human activities on fish habitat is necessary for the effective management of fish habitat.

Key Priorities

Regulatory Improvement

Key Deliverables

- Continue to participate in government-wide initiatives to make regulatory approval and review more effective, efficient, transparent, timely, risk-based, and results-focused. The timing of the implementation of these initiatives will depend on the overall readiness of the government-wide approach; however, some initiatives — such as providing advice to the Major Projects Management Office on policy, regulatory, and legislative changes that would improve regulatory processes for habitat management— are expected to be carried out in 2010-11.

Economic Action Plan

Key Deliverables

- Undertake environmental assessments in support of the Mackenzie Valley Gas Pipeline.

Habitat Management Sub-Activities

- Conservation and Protection of Fish Habitat
- Environmental Assessments
- Habitat Program Services
- Aboriginal Inland Habitat Program

Species at Risk Management

Program Activity

Description from Main Estimates: Aquatic species at risk are managed to provide for the recovery of extirpated, endangered and threatened species; and the management of special concerned species to prevent them becoming at risk. This program activity involves developing recovery strategies, action plans and management plans for all aquatic species; promoting recovery implementation and monitoring of marine and anadromous (moving between fresh and salt water) species over which the federal government has exclusive jurisdiction; and promoting freshwater species for which certain provinces have specific delegated responsibilities related to fisheries management through regulations under the *Fisheries Act*.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	23.0	23.7	14.1
Human Resources (FTEs)	104	104	104

To Results …

Expected Result	Performance Indicator	Target
Endangered or threatened aquatic species in Canada are managed to prevent them from becoming extinct	Percentage of listed species for which conservation and protection measures and objectives are identified	80% in 2010-11 100% in 2011-12

Planning Highlights

- Manage and deliver species at risk programs to enhance healthy and productive aquatic ecosystems, habitats, and species.
- Ensure issues related to aquatic species at risk are considered in the parliamentary review of the *Species at Risk Act* (SARA) by the Standing Committee on Environment and Sustainable Development and in the development of the government's response to the Committee's report.
- Support, as required, the parliamentary review of SARA by the Standing Committee on Environment and Sustainable Development, as well as the development of the government's response to the Committee's report.

The Challenge

Species at risk protection and conservation is a joint responsibility of the federal, provincial, and territorial governments. As a result, the capacity and level of co-operation and support within each of the provinces and territories can have a significant effect on the implementation of SARA. In addition, land claims agreements in the territories have established wildlife management boards, which share responsibilities with governments on the management of species at risk. Co-operation between and among jurisdictions is critical for the successful implementation of recovery strategies and action plans.

The responsibilities of the Species at Risk Management Program associated with implementation of SARA grow year over year as the number of species assessed as being at-risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) increases. Given the significant information gaps for many species, meeting the SARA-legislated timelines for the production of SARA documents (i.e., species recovery strategies and management plans) has been a challenge.

Implementing SARA for aquatic species poses unique challenges for identifying critical habitat for aquatic species and determining what constitutes destruction of critical habitat. Furthermore, there is the added complexity of operating in multi-species, mixed-use marine and freshwater environments,

not to mention challenges in addressing potentially significant economic development, social, and cultural implications.

DFO and the other federal departments and agencies responsible for implementing SARA (Environment Canada and Parks Canada Agency) are still determining how best to meet the obligations of this relatively new and complex legislation. The challenges associated with the implementation of SARA are being reviewed by the Standing Committee on Environment and Sustainable Development, which started its review of the Act in 2009-10.

Species at Risk Management Sub-Activities

- Protection of Species at Risk
- Recovery of Species at Risk
- Monitoring and Evaluation

Science for Healthy and Productive Aquatic Ecosystems — Program Activity

Description from Main Estimates: This program provides research, monitoring, advice, products and services and data management to ensure departmental and federal policies, programs, decisions, and regulations associated with the integrated management of Canada's oceans and fish habitat resources are informed by science advice. The science is undertaken through a network of research facilities, in collaboration with other government departments, private sector, academia and international organizations.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	56.0	51.5	55.8
Human Resources (FTEs)	489	489	486

To Results …

Expected Result	Performance Indicator	Target
Comprehensive understanding of living aquatic ecosystem function for decision-makers to help ensure healthy and productive aquatic ecosystems	Number of Canadian publications on aquatic ecosystem function that are authored/co-authored by DFO Science	Maintain 5-year average (2006-2011)
	Number of DFO Science publications on aquatic ecosystem function that are cited	Maintain 5-year average (2006-2011)
	Number of Canadian Science Advisory Secretariat (CSAS) publications on aquatic ecosystem function that are posted on the DFO Science website	Maintain 5-year average (2006-2011)

Planning Highlights

- Provide advice in support of decision-making requirements related to the impacts of development on fish habitat and mitigation measures, including:
  - Evidence on the effects of human activities on fish habitat, the effects of offshore wind farms, and the effects of hydroelectric development;
  - Evidence on pathways of effects in the marine environment; and
  - Protocols for monitoring the effectiveness of mitigations measures.
- Develop coupled ocean-ice-atmospheric models to improve ocean forecasting capabilities. Efforts in 2010-11 will focus on implementing the Canadian Operational Network of Coupled Environmental Prediction System, an inter-departmental Memorandum of Understanding among Fisheries and Oceans Canada, the Department of National Defence, and Environment Canada designed to better integrate federal modelling efforts.

DID YOU KNOW?

- Oceanographic data from Line-P, a series of oceanographic stations extending from the mouth of the Juan de Fuca Strait, south of Vancouver Island, to Oceans Station Papa in the Pacific Ocean, dating back to 1956 is available online (http://www.pac.dfo-mpo.gc.ca/SCI/osap/data/linep/linepselectdata_e.htm)
- In 2007, Canada produced approximately 300 scientific publications on Arctic aquatic research. While DFO leads Canada's contribution, the Russian Academy of Sciences is the most productive research institution, followed by DFO and the National Oceanic and Atmospheric Administration (Source: Science-Metrix, Bibliometric Analysis of Aquatic Research in the Arctic).
- Since the 1800s, ocean pH has decreased by 0.1 units. If carbon dioxide emissions increase as projected by the Intergovernmental Panel on Climate Change, the global surface oceans pH will decline more, by 0.3 to 0.5 units, by 2100. The lower pH will affect organisms that form calcium carbonate shells and skeletons as the decline in pH increases the solubility of their shells.

- Conduct research to improve our understanding of the impact of climate change on aquatic ecosystems. The focus in 2010-11 will be on impacts of ocean acidification, hypoxia, and ocean fertilization.

The Challenge

The management of human activity in or around marine and freshwater aquatic environments and the protection of aquatic ecosystems depend on scientific research, understanding, and knowledge. Activities such as oil and gas exploration and development, mining, hydro and tidal power have the potential to affect aquatic biodiversity and ecosystem integrity. The cumulative impacts of these activities as well as the impact of climate change on aquatic ecosystems, add to the complexity of our science work.

As the ocean economy evolves beyond the traditional seafood sector, multiple and sometimes conflicting uses of the oceans will continue to necessitate an integrated ecosystem approach to the management of these uses and the science that informs their management. In response to this challenge, the Science Program will continue to implement an ecosystem-based approach to the integrated management of Canada's oceans and inland waterways. This provides for an interdisciplinary approach that delivers a more complete understanding of biodiversity, population dynamics, habitat, and development implications. This approach also provides more comprehensive information that reflects the needs of decision- and policy-makers.

Key Priorities

Northern Strategy

Key Deliverables

- Participate in International Polar Year (IPY) with a view to understanding the impacts of climate change on the Arctic marine ecosystems, and develop predictions and scenarios of the impact of climate change on oceans by downscaling global models to regional levels. IPY research results will be presented at international IPY conferences in 2010 and 2012.
- Continue to work with Indian and Northern Affairs Canada on the development of the High Arctic Research Station as part of the Government of Canada's Northern Strategy. In 2010-11, the focus will be on the design elements of the science facility.
- Lead Canada's participation on the Arctic Council Marine Expert Monitoring Group, the development of the pan-Arctic Marine Biodiversity Monitoring Plan, and the development of the Canadian Arctic Marine Biodiversity Monitoring Plan.

International Leadership

Key Deliverables

- Provide science advice in support of the development of a Government of Canada position on ocean fertilization that aligns with domestic and international governance obligations.

Health of the Oceans

Key Deliverables

- Contribute to understanding the impacts of ocean acidification and hypoxia on the ecosystems of Canada's three oceans.

Science for Healthy and Productive Aquatic Ecosystems Sub-Activities

- Fish Habitat Science
- Aquatic Ecosystems Science
- Ocean Climate
- Species at Risk

Internal Services

Program Activity

Description from Main Estimates: Internal Services are groups of related activities and resources that are administered to support the needs of programs and other corporate obligations of an organization. These groups are: Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Materiel Services; Acquisition Services; and Travel and Other Administrative Services. Internal Services include only those activities and resources that apply across an organization and not to those provided specifically to a program.

From Resources …

	Planned Spending		
	2010-11	**2011-12**	**2012-13**
Financial Resources ($ millions)	354.0	306.3	303.1
Human Resources (FTEs)	1,937	1,933	1,932

To Results …

The Governance and Management Support sub-activity includes several activities that govern, evaluate, manage, and communicate about the Department's programs and services. The Executive Services group ensures that senior management has the tools and knowledge necessary to lead DFO. The Policy, Communications, and Legal Services groups support the Program Activities in delivering the Department's programs by developing policy, providing economic analysis, communicating with the public, and responding to legal questions. The Evaluation and Audit groups review and monitor the efficiency and effectiveness of programs to ensure that DFO delivers the best program in the best way.

Asset Management Services acquires, operates, maintains, and divests the Department's extensive capital asset portfolio. The assets include real property holdings — ranging from laboratories to lighthouses to fish ladders — and the government's civilian fleet of 114 ships, ranging from small craft to research vessels to icebreakers. The Asset Management Services sub-activity also includes safety and security services for both assets and people, providing the Department with occupational health and safety, security, emergency preparedness, and business continuity capacity.

Resource Management Services ensure that the Department has sound financial management, modern and flexible human resource management, and a comprehensive approach to information technology and management that protects vital information and makes it readily accessible for decision-making.

Planning Highlights

- Address recommendations for improving service identified in recent MAF assessments.
- Implement a number of new government-wide policies aimed at improving the management of the Department, including the *Policy on Evaluation* and the *Policy on Investment Planning – Assets and Acquired Services*.

The Challenge

All Internal Services groups face challenges relating to a changing workforce, increased accountability requirements, new reporting requirements, and an aging asset base. Demands from central agencies such as Treasury Board impose new workloads on this program activity. At the same time, Internal Services groups must remain up-to-date and aware of changes in the programs and services they support so that they can provide the best service possible.

Key Priorities

Over the coming year, groups within the Internal Services program activity will work to address the following departmental management priorities.

People Management

Key Deliverables

- Reduce the average time it takes to staff a position to 120 days by implementing components of the national recruitment strategy.
- Address future leadership needs by implementing DFO programs for leadership development and talent management.
- Increase the representation of women, visible minorities, Aboriginals, and persons with disabilities by at least 5% by March 31, 2011.
- Develop action plans to improve employee engagement and to address results of the 2008 Public Service Employee Survey.

Asset Management

Key Deliverables

- Respond to recommendations from the MAF VI assessment regarding the sound management of real property assets.
- Develop and deliver, in 2010-11 and 2011-12, policies, frameworks, systems, and plans in the areas of real property, safety and security, environmental management, moveable assets, and inventory that support the Department's programs and activities and ensure that DFO meets its legal requirements.
- Comply with the Treasury Board *Policy on Investment Planning – Assets and Acquired Services* by obtaining approval of the Department's new Five-Year Investment Plan.
- Implement, by 2011-12, a new Real Property Information System that provides accurate, relevant, and timely real property data.
- Assess sites for contamination, and report on and implement any remediation/risk management required.

Information Management

Key Deliverables

- Begin implementation of the top priority initiatives identified as part of the Information Management Strategy.
- Increase by 15% the number of documents stored in official repositories.
- Increase the take-up of the Records, Document and Information Management System across the Department by 10%.
- Continue implementation of the Strategy for Enterprise Libraries and achieve a 10% increase in the use of the virtual library.
- Begin implementing the *Policy on Sharing of Information*.
- Develop a departmental Performance Measurement Action Plan by August 2010.
- Start implementing the new *Policy on Evaluation*.
- Establish a departmental Info Source working group to address TBS concerns regarding the DFO chapter of Info Source.
- Establish a more efficient process to help programs document and describe their information holdings.

Economic Action Plan

Key Deliverables

- Upgrade 65 federal laboratories, including science facilities and SEP facilities.
- Assess 1,385 properties for contamination, and perform remediation/risk management activities at 72 sites.

Internal Services Sub-Activities

- Governance and Management Support
- Resource Management Services
- Asset Management Services

Section 3 — Supplementary Information

Financial Highlights

($ thousands)

Statement of Operations (for the year ended March 31)	Forecast 2010-11	Estimated Results 2009-10
Expenses	1,965,384	1,976,510
Revenues	80,635	83,639
Net Cost of Operations	**1,884,749**	**1,892,871**

Statement of Financial Position (for the year ended March 31)	Forecast 2010-11	Estimated Balances 2009-10
Financial Assets	22,393	24,234
Non-Financial Assets	2,604,831	2,461,281
Total Assets	**2,627,224**	**2,485,515**
Liabilities	672,689	657,203
Equity	1,954,535	1,828,312
Total	**2,627,224**	**2,485,515**

For more information, see DFO's Future-oriented Financial Statement at http://www.dfo-mpo.gc.ca/rpp/2010-11/index-eng.htm.

Supplementary Tables

The following tables are available at http://www.tbs-sct.gc.ca/rpp/2010-2011/index-eng.asp:

- Details on Transfer Payment Programs
- Up-front Multi-year Funding
- Green Procurement
- Horizontal Initiatives
- Internal Audits and Evaluations
- Sources of Respendable and Non-Respendable Revenue
- Status Report on Major Crown Projects
- Summary of Capital Spending by Program Activity
- User Fees

Other Items of Interest

Additional information is available at http://www.dfo-mpo.gc.ca/rpp/2010-11/index-eng.htm.

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