

# **Fisheries and Oceans Canada**

**1998-99  
Estimates**

**A Report on Plans and Priorities**

Approved

Minister of Fisheries and Oceans

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# I Messages

## A. Minister's Message

I am very pleased to introduce the 1998-99 Report on Plans and Priorities of the Department of Fisheries and Oceans (DFO). The Department is responsible, on behalf of the federal government, for policies and programs in support of Canada's ecological, scientific and economic interests in the oceans and freshwater fish habitat; for the conservation and sustainable utilization of Canada's fisheries resources in marine and inland waters; and for environmentally responsible use of Canada's waters and marine safety services, responsive to the needs of Canadians.

When I was appointed Minister of Fisheries and Oceans, I was asked what my priorities were. I replied that I had three: conservation, conservation and conservation. This is a difficult but essential commitment. We must ensure that our marine and freshwater resources and ecosystems are managed responsibly and developed sustainably. This is the heart of the challenge facing DFO: balancing conservation and protection of our environment with the provision of long-term economic opportunities for Canadians.

Our Plans and Priorities are designed to meet this challenge. They are intended to ensure that our fisheries are managed with a cautious, conservation-based approach, and that fishers themselves are more involved in management plans and take more responsibility for their impact on the resource and the environment. These Plans and Priorities also recognize that sustainability of the resource is impossible without a healthy environment. An affordable and integrated system of marine services will also assist by ensuring marine safety, protecting the environment and facilitating shared use of our waters.

We have taken action and will continue to act on the issue of too many licences in the fishery. We have reduced the number of commercial licences. Despite this, landed values have continued to increase because of species and market conditions. We are working toward a better balance between a fishery that is both environmentally sustainable and economically viable. Therefore, the themes of conservation, a precautionary approach in fisheries management, viability of industry, consultation and partnerships recur frequently in this report.

The *Oceans Act*, which came into force on January 31, 1997, designates DFO as the lead federal department in the development and implementation of a national oceans strategy and provides it with stronger authority to protect our ocean resources, including authority to establish Marine Protected Areas. We are undertaking broad consultations with Canadians from coast to coast to coast on Marine Protected Areas and on our Oceans Strategy.

The United Nations has declared 1998 as the International Year of the Ocean to increase awareness of the importance of oceans, to bring ocean-related issues to the attention of policy and decision makers, and to develop programs aimed at protecting the world's oceans. These objectives are reflected in DFO's own focus for the year. One of DFO's International Year of the Ocean initiatives is a campaign to obtain more than one million signatures on a less formal version of the Ocean Charter. Signatories promise to remember the need to maintain the health of the oceans in their work, in their play and in the decisions they make.

Our Plans and Priorities are also intended to ensure that the services we provide continue to meet the highest of performance standards. We will continue to use and promote the best in technological innovation, to transfer DFO-developed technology to industry, to pursue more partnering arrangements and co-operative ventures with industry, and to update and streamline regulations.

Finally, a word of appreciation is in order for the dedicated and industrious DFO staff who succeeded so well in meeting our Plans and Priorities for the 1997-98 fiscal year and who will, I am confident, do even better in 1998-99.

David Anderson  
Minister of Fisheries and Oceans

## **B. Management Representation, Report on Plans and Priorities 1998-99**

I submit, for tabling in Parliament, the 1998-99 Report on Plans and Priorities (RPP) for Fisheries and Oceans Canada.

To the best of my knowledge, the information:

- accurately portrays the Department's mandate, plans, priorities, strategies and expected results;
- is consistent with Treasury Board policy and instructions and the disclosure principles contained in the *Guidelines for Preparing a Report on Plans and Priorities*;
- is comprehensive and accurate; and
- is based on sound underlying departmental information and management systems.

I am satisfied as to the quality assurance processes and procedures used for the RPP's production.

The Planning and Reporting Accountability Structure on which this document is based has been approved by Treasury Board Ministers and is the basis for accountability for the results achieved with the resources and authorities provided.

Name: \_\_\_\_\_  
Carol Beal

Date: \_\_\_\_\_

## **II Departmental Overview**

### **A. Mandate, Roles and Responsibilities**

#### ***Mandate***

**T**he Department of Fisheries and Oceans (DFO), on behalf of the Government of Canada, is responsible for policies and programs in support of Canada's economic, ecological and scientific interests in the oceans and freshwater fish habitat; for the conservation and sustainable utilization of Canada's fisheries resources in marine and inland waters; and for safe, effective and environmentally sound marine services responsive to the needs of Canadians in a global economy.

As outlined above, the Department's mandate is extremely broad. It covers:

- management and protection of the marine and fisheries resources inside the 200-mile exclusive economic zone;
- management and protection of freshwater fisheries resources;
- marine safety along the world's longest coastline;
- facilitation of marine transportation;
- protection of the marine environment;
- support to other federal government institutions and objectives, as the government's civilian marine service; and
- research to support government priorities such as climate change and biodiversity.

Because of its broad mandate, DFO does not operate alone. Federal and provincial governments share jurisdiction in a number of areas related to the Department's mandate, and this is reflected in this report. Stakeholder participation and involvement are also essential, and are reflected in many of the elements of this document.

The mandate, departmental objectives, long-term priorities and goals, and business lines described in this document refer to those responsibilities that fall under federal jurisdiction.

#### ***Vision and Mission***

The Department's vision is to be a world leader in the management of oceans and fisheries resources. The Department's mission is to:

- manage Canada's oceans and waterways to keep them clean, safe, productive and accessible;
- foster the sustainable use of fisheries resources; and
- facilitate marine trade and commerce.

#### ***Organization and Program Composition***

DFO is a decentralized federal government department that operates across Canada from five regional offices and from national headquarters in Ottawa.



The Department has five assistant deputy ministers (ADMs) responsible for 11 business lines. The relationship between business lines and long-term priorities and goals is summarized in the following table. Fish Product Inspection is no longer reported under DFO as this business line was transferred to the Canadian Food Inspection Agency on April 1, 1997.

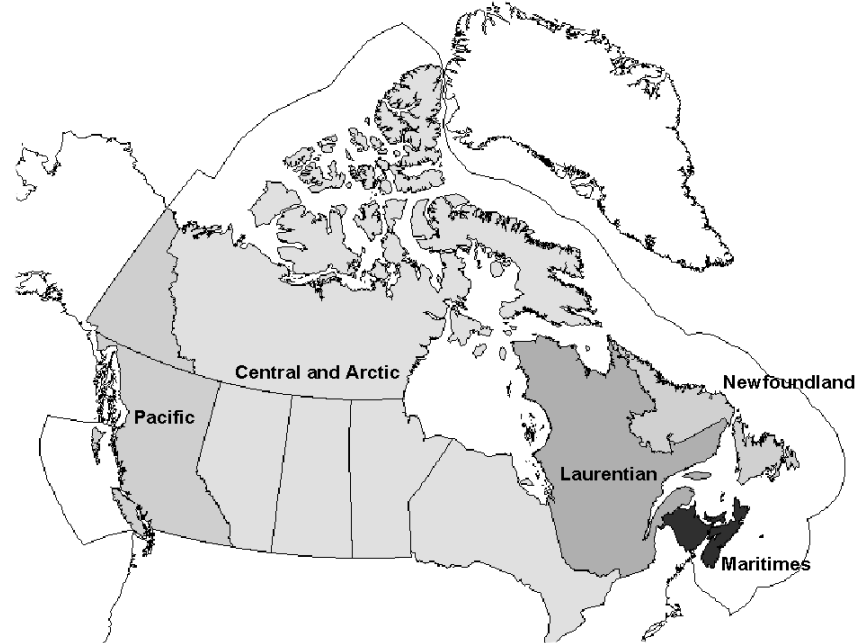
### DFO Business Lines: Contribution to Departmental Priorities

Business Line	Departmental Priorities							Accountable Manager
	Manage and protect fisheries resources	Protect marine and freshwater environment	Understand oceans and aquatic resources	Maintain maritime safety	Facilitate maritime commerce and development	Improve client relations	Improve employees' work environment	
Marine Navigation Services		✓		✓	✓	✓	✓	ADM, Marine/Commissioner, CCG
Marine Communications and Traffic Services		✓		✓	✓	✓	✓	ADM, Marine/Commissioner, CCG
Icebreaking Operations		✓		✓	✓	✓	✓	ADM, Marine/Commissioner, CCG
Rescue, Safety and Environmental Response		✓		✓	✓	✓	✓	ADM, Marine/Commissioner, CCG
Fisheries and Oceans Science	✓	✓	✓	✓	✓	✓	✓	ADM, Science
Habitat Management and Environmental Science	✓	✓	✓		✓	✓	✓	ADM, Science
Hydrography			✓	✓	✓	✓	✓	ADM, Science
Fisheries Management	✓	✓			✓	✓	✓	ADM, Fisheries Management*
Harbours		✓		✓	✓	✓	✓	ADM, Corporate Services
Fleet Management	✓	✓	✓	✓	✓	✓	✓	ADM, Marine/Commissioner, CCG
Policy and Internal Services	✓	✓	✓	✓	✓	✓	✓	ADM, Corporate Services ADM, Policy

\* Within Fisheries Management, accountability for special capacity-reduction programs (e.g., the Atlantic Groundfish Strategy) rests with ADM Policy.

Departmental programming is delivered in the following DFO regions, each headed by a Regional Director General in regional headquarters: Newfoundland Region — St. John's, Newfoundland; Maritimes Region — Halifax, Nova Scotia; Laurentian Region — Québec City, Quebec; Central and Arctic Region — Winnipeg, Manitoba; and Pacific Region — Vancouver, British Columbia.

## Department of Fisheries and Oceans Regions



### **B. Objective**

At the broadest level, the Department's objective is to undertake policies and programs in support of Canada's economic, ecological and scientific interests in the oceans and inland waters; to provide for the conservation, development and sustainable economic utilization of Canada's fisheries resources in marine and inland waters for those who derive their livelihood or benefit from these resources; to provide safe, effective and environmentally sound marine services responsive to the needs of Canadians in a global economy; and to co-ordinate the policies and programs of the Government of Canada respecting oceans.

### ***Long-term Priorities and Goals***

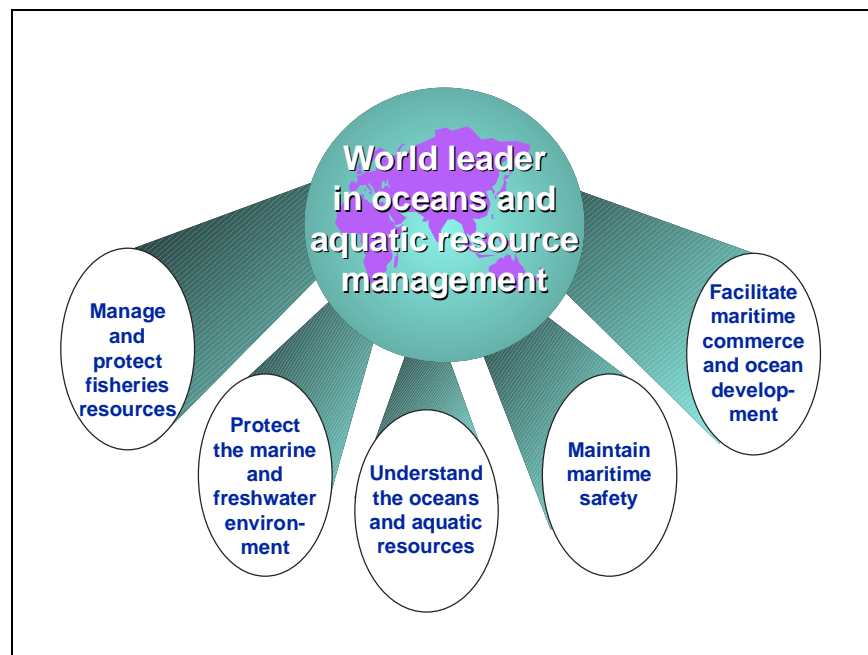
In pursuit of this objective, DFO is committed to the following five long-term priorities and goals.

- 1) **Managing and protecting fisheries resources.** Conservation is DFO's top priority. The goal is to conserve Canada's fisheries resources to ensure that they are used sustainably in a self-reliant fishery. In pursuit of this goal, the important contributions of the provinces and territories must be recognized. DFO must also manage fisheries resources in a manner consistent with Aboriginal and treaty rights. Effective regulatory enforcement and management of harvesting capacity are essential to the long-term objective of sustainable conservation. As well, it is essential that effective international arrangements are in place that will prevent foreign overfishing and safeguard resources under international treaties.
- 2) **Contributing to the protection of the marine and freshwater environment.** Our goal is to protect marine and freshwater environments and, thus, to support sustainable fisheries. To achieve this goal, DFO must take a proactive, coherent, results-oriented approach that includes working with provinces and territories to manage and protect freshwater fish habitat, and to reduce the effect of pollution on marine ecosystems.

- 3) **Understanding the oceans and aquatic resources.** The goal is to improve, apply and communicate to all Canadians knowledge about Canada’s oceans and its marine and freshwater fisheries resources. This knowledge will support the activities of clients, partners and DFO’s operational branches.
- 4) **Maintaining marine safety.** The Department’s goal is to continually improve safety in Canada’s waterways by reducing the number and severity of collisions and groundings, helping people in distress and in danger, and preventing loss of life and damage to property.
- 5) **Facilitating maritime commerce and ocean development.** The Department’s goal is to provide the policy, regulatory framework and operational services that support commercially sustainable maritime industries. DFO also provides the Department of Foreign Affairs and International Trade with scientific and technical support for its efforts to liberalize trade in the fisheries and oceans sectors.

In pursuit of these long-term objectives and goals, DFO is also committed to:

- improving departmental relations with clients and partners, and achieving effective participation by clients in decision making, information-sharing and program delivery;
- promoting mutual respect, teamwork, professionalism and excellence in service delivery; and
- achieving tangible, “real world” results that benefit both our direct clients and society at large.



## C. Context and Directions

The Department is a major federal presence across Canada. DFO’s mandate, programs and services affect the lives and livelihood of thousands of people in a wide range of occupations in

marine transportation, tourism and recreation, fishing and other oceans and freshwater industries throughout Canada. Many Canadians use and depend on our heritage of marine and freshwater resources and marine commerce, so they have a stake in conserving them. Therefore, DFO policy and program decisions affect not only the fisheries and oceans environment, but also, by their very nature, the entire economic, social and cultural fabric of Canada.

### ***Habitat Protection and Management***

Canada's economic well-being is linked to the sustainability of its renewable and non-renewable marine and freshwater resources. Marine and freshwater ecosystems perform essential biological, chemical, and geological functions, such as purifying water, recycling oxygen, fixing toxic compounds, absorbing carbon dioxide, and regulating climate. Conservation is crucial to the growth and prosperity of everyone who lives by, uses or depends on marine and freshwater environments.

Without habitat there would be no fish: without fish there would be no fisheries. Healthy fish habitat is critical to sustainable fisheries and to DFO's conservation mandate. The Policy for the Management of Fish Habitat supports conservation; however, it also recognizes that fish habitat protection — critical as it is — must accommodate other industrial sectors and other water users.

The Policy for the Management of Fish Habitat promotes an integrated approach to habitat management and establishes a framework for reconciling competing uses. This approach involves, as appropriate, working with:

- stakeholders, municipalities, other federal departments and other fisheries interests;
- co-management boards and other bodies established under Aboriginal land claim agreements; and
- international bodies such as the Great Lakes Fishery Commission, to implement international agreements such as the Great Lakes Water Quality Agreement.

DFO intends to continue working with the provinces, through formal agreements, to define objectives and responsibilities for fish habitat conservation and protection.

Industrial sectors, such as forestry and hydro-electricity generation, are also significant as partners in ensuring that their activities have as little effect on fish habitat as possible. DFO is working in various ways with these industrial sectors and with others who share an interest in sustainable development and concern for conservation of this important component of the fishery.

### ***The Fishery of the Future***

Providing for a well-managed, economically viable and environmentally sustainable Fishery of the Future is an important challenge for DFO.

In 1996, the total annual production value of the Canadian commercial fishing and aquaculture sector is estimated at \$4.1 billion, composed of approximately \$2.7 billion from the Atlantic fishing industry, \$1 billion from the Pacific fishing industry, and \$0.4 billion from aquaculture. More than 80% of Canadian fish products are destined for other countries. In 1996, approximately 65,000 fishermen were registered, and approximately 75,000 people were working in fish processing plants. Fishing and aquaculture are the main income sources for hundreds of communities on Canada's coasts.

Despite some economic and management successes, the 1990s have been troubled years for Canadian fisheries.

The Atlantic fishery, long the economic mainstay of coastal communities, has suffered significant downturns, especially in the groundfish sector. These problems are not new. For many years, this fishery has been characterized by over-capitalization, excess participation, low and unstable incomes, economic and ecological unsustainability and cyclical instability. In 1992, the Atlantic groundfish stock collapsed and fisheries were closed, devastating coastal communities and affecting thousands of Atlantic Canadians.

Programs such as the Atlantic Groundfish Strategy (TAGS), implemented by the federal government, have helped to address several problems by providing income support, reducing harvesting capacity, and assisting individuals who want to leave the industry.

Since 1992, a number of other important initiatives have been pursued to reform management practices and foster fisheries renewal. These include:

- establishing the Fisheries Resource Conservation Council (FRCC) to provide a transparent, arm's-length service for setting harvest limits;
- passing legislation to permit curtailment of foreign overfishing;
- promoting the enforcement of international conservation and management measures and resolution of compliance problems through such international organization as the Northwest Atlantic Fisheries Organization;
- introducing licensing policy reform and other measures for self-rationalization of the industry;
- developing integrated fisheries management plans, co-operative fisheries management agreements and conservation harvesting plans;
- professionalizing the fishing industry through training and standards development; and
- pursuing the development of a code of responsible fishing practices at the domestic and international levels.

Harvesting capacity has been reduced. The number of Atlantic groundfish licences has been reduced from 17,193 to 13,125 and, once the attrition of non-core, non-transferable licences is

complete, will decline to 10,925, for an overall reduction of 36%. While important strides have been made, more needs to be done in light of continuing low groundfish stocks, social and economic dependence on the fishery, and the pending end of TAGS in 1998.

On the Pacific coast, the fisheries and oceans sectors are similarly important economic contributors. With commercial fisheries valued at more than \$1 billion annually, and more than 400,000 recreational anglers, fisheries and oceans activities are a key component of the cultural, social and economic fabric of life on the Pacific coast.

Ocean and freshwater resources influence the lives of all British Columbians, especially its coastal residents and Aboriginal peoples, but pressures on Pacific resource management, including pollution, economic growth, urban sprawl, and forestry and mining activities, have stressed the fishery resource and its environment.

DFO rose to these challenges with initiatives such as the three-year Pacific Salmon Fisheries Revitalization Strategy. Responding to the threat to some Pacific salmon stocks, this Strategy focuses on conservation, reducing pressure on the resource through licence retirement and fleet reductions, and other licensing measures. In other areas, reforms have been introduced in the groundfish fishery and increased efforts have been placed on the development of Integrated fisheries management plans and the extension of the Aboriginal Strategy. DFO will continue to work closely with British Columbia to ensure that relevant legislation at both the federal and provincial levels of government will be effective in conserving and protecting fish habitat.

In other regions, particularly the Arctic, where harvesting of fish and marine mammals is an important subsistence activity, especially for Aboriginal people, co-management boards and other structures are being established through land claim agreements.

It is vital to maintain public participation in the discussion of how to achieve a Fishery of the Future. DFO intends to continue pursuing partnering agreements to share decision making and costs with individual harvesting groups, where appropriate. This means moving away from a paternal relationship with industry and toward a relationship based on shared responsibility and stewardship, and a common vision.

A positive example of shared stewardship to promote stable fishery management is the Aboriginal Fisheries Strategy (AFS), launched in 1992. With the AFS, the Department has entered into arrangements with Aboriginal peoples to establish a framework for managing their fishery. The program applies in areas where DFO manages the fishery that are without a fishery management regime established by a land claim settlement.

DFO manages Aboriginal fisheries to be consistent with court decisions regarding Aboriginal and treaty rights to fish, especially the *Sparrow* decision of the Supreme Court of Canada. DFO intends to continue negotiating mutually acceptable, time-limited fisheries arrangements with Aboriginal organizations.

Another factor contributing to the decline in resource sustainability is international overfishing. From the mid-1980s, Canada has had major fish conservation problems caused in part by

foreign vessels fishing straddling stocks outside the 200-mile exclusive economic zone off the east coast of Canada. This area is regulated by the Northwest Atlantic Fisheries Organization (NAFO), a regional fisheries management organization of 17 member countries, including Canada. The Government of Canada has been a world leader in creating the international consensus that led to the adoption of the United Nations *Agreement on Straddling Stocks and Highly Migratory Stocks*. With the co-operation of the European Union and the other NAFO members, significant progress has been made with respect to effective conservation and enforcement measures in the NAFO Regulatory Area.

On the Pacific coast, international efforts are geared toward achieving bilateral agreement with the United States on implementation of the 1985 *Pacific Salmon Treaty*. In accordance with the January 1998 recommendations of the Special Representatives to the Prime Minister of Canada and the President of the United States, the immediate challenge is to negotiate interim fishing arrangements for 1998 and 1999. During this period, DFO, working with DFAIT, the Province of British Columbia and representatives of the Pacific salmon industry, will seek agreement on long-term fishing arrangements consistent with the principles of the *Pacific Salmon Treaty*.

Mindful of the challenges facing the evolution of a Fishery of the Future, the Minister and the Department are committed to developing policies and programs that support fisheries that are ecologically sustainable, economically viable and internationally competitive.

### ***Role of Science***

In DFO, science is used to achieve an important public policy goal — understanding how to conserve and wisely manage Canada's ocean resources for this generation and for the generations to follow. To that end, we are working to fulfil our responsibility as stewards of Canada's oceans and waterways.

Since the northern cod moratorium in 1992, DFO has made the science and fisheries management process more open, transparent and inclusive. Fisheries management is now based on the precautionary approach.

The Fishery of the Future must have a reliable base of scientific, traditional and local knowledge to ensure accurate assessment of fish stocks. This knowledge base must also include a better understanding of how marine ecosystems work.

DFO is increasing the transparency of its scientific decision making by increasing extra-governmental participation. For example, in 1993, DFO established the Fisheries Resource Conservation Council (FRCC) as a source of independent advice for the Minister and the public. Through the FRCC, a continuing dialogue has been created between scientists, fishers, other stakeholders and the government, working together to conserve the resource. To further improve the transparency and accountability of the decision-making system, FRCC reports are published.

Similar changes are also being made to the Pacific stock assessment review process. The Pacific Fisheries Research Conservation Council (PFRCC) will become operational in the spring of 1998. The PFRCC will be a source of independent advice on conservation issues

related to Pacific salmon and their habitat, integrating the knowledge of scientists and others in the fisheries. The PFRCC will also publish its reports.

In 1997, DFO established the Science Advisory Council — an independent council to advise DFO on broad strategic matters in science and technology. The establishment of this council is in keeping with the federal strategy on science and technology.

DFO will continue to strive for a better understanding of the ecological factors, including harvesting and climate change, behind the Atlantic groundfish collapse and declines in certain stocks of coho and chinook salmon on the Pacific coast. Included in these efforts is an attempt to understand the dynamics of more abundant stocks, such as lobster and crab. In British Columbia, DFO is also initiating an enhanced two-year El Niño monitoring program.

### ***Developing an Oceans Strategy***

With the coming into force in 1997 of the *Oceans Act*, the responsibility to lead the development and implementation of Canada's Oceans Strategy rests with the Minister and the Department. This is a formidable challenge.

An oceans strategy is needed to replace the current fragmented approach to ocean governance with a coordinated framework to improve understanding of and protect the integrity of the ocean ecosystem, to optimize the potential of the oceans, and to engage the public in the sustainable use of coastal resources.

The Oceans Strategy will set the stage for many oceans activities involving not only DFO but also other federal institutions involved with the oceans. Oceans activities and their management must be premised on co-operation among stakeholders and governments.

The Oceans Strategy will be based on the principles of:

- sustainable development;
- integrated management of activities in estuarine, coastal and marine waters; and
- the precautionary approach (erring on the side of caution).

The *Oceans Act* provides for a management system based on these principles. It includes the authorities for establishing Marine Protected Areas (MPAs), which the *Oceans Act* defines as areas of the ocean that can be designated for the conservation and protection of fishery resources, threatened marine species and their habitats, and areas of high biodiversity or biological productivity. The 1998 International Year of the Ocean and federal sponsorship of themes surrounding the millennium will provide a forum for advancing MPAs as an effective tool for marine conservation and protection.

### ***Aquaculture***

Since 1984, when the value of the aquaculture industry was estimated at \$7 million, the sector has grown steadily. Preliminary figures show that the industry's production value reached



\$372 million in 1996, and aquaculture now accounts for about 20% of the landed value of the Canadian fisheries. Farmed salmon production almost equals the wild harvest in volume, and exceeds the wild fishery in value.

The Minister and the Department are committed to the orderly development of the industry through the Federal Aquaculture Development Strategy, which is designed to harmonize industry development with maintenance of environmental integrity in areas such as habitat and biodiversity. The process to appoint a Commission of Aquaculture Development has begun, with the position being advertised in the *Canada Gazette* on January 31, 1998.

### ***A Rationalized Harbour System***

Small Craft Harbours (SCH) policies and strategies are geared to address the reality of a large inventory of aged infrastructure rusting out faster than shrinking budgets can address. Unless resolved, the growing public-safety issue and the prospect of wholesale facility closures could have a profound impact on Canada's fishing industry, on the economic fabric of remote coastal communities and on the environment.

Strategies already under way during the last planning period — a sharing of the responsibility and costs with users and, in partnership with them, a gradual rationalization of the harbour system — have since been intensified. Concurrently, SCH is in the process of disposing of recreational sites and derelict or inactive fishing facilities to remove non-essential demand on future budgets. In combination, these strategies will continue to advance the SCH vision for the early part of the next century — a smaller, more supportable, national fishing harbour system rationalized to core fishing industry requirements and comprising harbours that are client-run and partially client-financed.

### ***The Canadian Coast Guard of the Future***

Core responsibilities of improving safety, protecting the marine environment, and enabling shared use of our waterways position the CCG in supporting DFO's understanding and management of oceans, as well as its facilitation of marine trade and commerce.

To minimize risks to the marine environment that arise from marine trade and commerce, the CCG is modernizing its aids to navigation program to create a safer, more efficient, innovative "electronic highway" for key Canadian marine shipping channels. By accessing new satellite and electronic technologies, partnering, and implementing legislative reform, the CCG will work to facilitate the safe flow of marine traffic in Canada and prevent marine incidents.

Environmental protection through prevention is a core component of the CCG mandate. Thus, mitigating the effects of collisions, groundings and spills is an important element of CCG's business. To that end, DFO in general, and the CCG in particular, continue to work by partnering with public- and private-sector bodies to enhance Canada's existing capacity to protect our waterways and shorelines from marine pollution.

Finally, the CCG intends to be an environmental leader, particularly in its internal operations. It will ensure that its operational processes meet or exceed federal environmental standards, institute accountabilities to measure the environmental impact of activities in CCG areas of

responsibility, and help ensure that employees are aware of such standards and commit themselves to the spirit and substance of sustainability.

### ***Legislative Agenda***

Legislative change is required to support many of the policy directions and initiatives outlined above. Major changes to the *Fisheries Act* have been proposed to modernize the legislation and to provide the fisheries management tools necessary to achieve the Fishery of the Future. Amendments to the *Coastal Fisheries Protection Act* (Bill C-27) that will allow for the ratification and implementation of the United Nations Fisheries Agreement are expected to be considered by Parliament and receive Royal Assent in 1998. The *Canada Shipping Act* is currently undergoing a major overhaul and consultations on amendments to the *Navigable Waters Protection Act* are expected to get under way later this year.

### ***DFO's Internal Environment***

Rationalizing program spending while getting government right has been the focus of decision making in government during recent years. Like other departments, DFO has had to re-examine its business lines and re-orient its expenditure priorities.

In April 1995, the CCG and DFO merged, doubling the size and budget of the new department. But, the impact of Program Review has been substantial. By the end of the process (1998-99), net spending for DFO, including the CCG, will have dropped from \$1.4 billion to \$1.1 billion and the work force will have been reduced from 11,694 full-time equivalents (FTEs) to 8,573 FTEs.

For DFO, reductions in program spending have fostered important new relationships, thus affecting how we develop and implement our plans and priorities. The public demands input into the decision-making process and the government needs that input.

In the context of diminishing resources and increasing public demands for government to be more open and accountable, an important theme in the preceding pages and throughout this report, is the importance DFO attaches to developing new partnerships, making consultation and decision making more inclusive, and balancing competing interests.

With an extensive network of federal installations, vessels, staff and research facilities across the country, the Department's ability to work effectively with others is key to its success. In support of these efforts, the Department is placing renewed emphasis on its human resources. It is also focusing on improved communications, information management and strategic planning capabilities. Importantly, given its extensive asset base, the Department will also be taking steps to optimize the use of its fleet as part of the long-term capital planning process.

## D. Financial Spending Plan

(\$ millions)	Forecast Spending 1997-98*	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
Gross Planned Spending	1,194.0	<b>1,129.1</b>	1,098.9	1,083.4
Less Revenue Credited to the Vote	38.1	<b>54.7</b>	54.1	54.1
<b>Net Planned Spending</b>	1,155.9	<b>1,074.4</b>	1,044.8	1,029.3
Less Revenue Credited to the Consolidated Revenue Fund	54.0	<b>56.8</b>	56.7	56.2
Plus Estimated Cost of Services Provided by other Departments	63.1	<b>57.2</b>	57.2	57.2
<b>Net Cost of the Department</b>	1,165.0	<b>1,074.8</b>	1,045.3	1,030.3

\* Reflects best forecast of total planned spending to the end of the fiscal year.

### III Plans, Priorities and Strategies

#### A. Summary of Key Plans, Priorities and Strategies

##### DFO Performance Commitments

Business Line	To provide Canadians with —	To be demonstrated by —
<i>Marine Navigation Services</i>	Aids to navigation that assist mariners in determining their position in relation to land and hidden dangers.	<ul style="list-style-type: none"> <li>• Efficient and effective marine access to Canadian waters.</li> <li>• Reduced vessel transit times.</li> <li>• Trends in safety, marine accidents, marine pollution and threats to the environment, and property and economic losses.</li> <li>• A safe and environmentally sound national marine transportation system.</li> </ul>
<i>Marine Communications and Traffic Services</i>	Communications and traffic services for the marine community and for the benefit of the public at large.	<ul style="list-style-type: none"> <li>• A comprehensive, efficient, timely and responsive marine communications and traffic services network.</li> <li>• Trends in safety, marine accidents, marine pollution and threats to the environment, and property and economic losses.</li> <li>• Efficient shipping.</li> <li>• Economic and operational benefits to industry and government.</li> <li>• A safe and environmentally sound national marine transportation system.</li> </ul>
<i>Icebreaking Operations</i>	Safe and efficient movement of marine traffic through ice-covered waters.	<ul style="list-style-type: none"> <li>• Marine access through ice-covered Canadian waters.</li> <li>• Minimized obstacles to safe navigation through ice-covered waters.</li> <li>• Trends in safety, marine accidents, marine pollution and threats to the environment, and property and economic losses caused by ice.</li> <li>• Reduced risk of flooding as a result of ice build-up.</li> <li>• Assured annual deliveries by ship to northern settlements and military sites.</li> <li>• A safe and environmentally sound national marine transportation system.</li> </ul>
<i>Rescue, Safety and Environmental Response</i>	Life saving and the protection of the marine environment.	<ul style="list-style-type: none"> <li>• Timely, efficient and effective response to marine search-and-rescue incidents.</li> <li>• Timely, efficient and effective response to marine oil and chemical emergencies.</li> <li>• Preparedness for a national emergency.</li> <li>• Safe recreational boating.</li> <li>• Trends in safety, marine accidents, marine pollution and threats to the environment, and property and economic losses.</li> <li>• A safe and environmentally sound national marine transportation system.</li> </ul>

<b>Business Line</b>	<b>To provide Canadians with —</b>	<b>To be demonstrated by —</b>
<i><b>Fisheries and Oceans Science</b></i>	Fisheries and Oceans science.	<ul style="list-style-type: none"> <li>• A reliable scientific basis for fisheries resource conservation and sustainable development of aquaculture.</li> <li>• Scientific understanding of ocean and coastal waters and of aquatic ecosystems.</li> <li>• Technology transfer from aquaculture research projects to industry.</li> </ul>
<i><b>Habitat Management and Environmental Science</b></i>	Marine environmental and fish habitat protection and conservation.	<ul style="list-style-type: none"> <li>• Healthy and productive aquatic ecosystems.</li> <li>• Improved scientific understanding of aquatic habitats.</li> <li>• Effective integrated habitat management.</li> </ul>
<i><b>Hydrography</b></i>	Hydrographic information.	<ul style="list-style-type: none"> <li>• Scientific understanding of water depths, tides, currents, water levels, and geographic relationship between Canadian waters, adjacent waters and the Canadian landmass.</li> <li>• Improved access to hydrographic information.</li> </ul>
<i><b>Fisheries Management</b></i>	Conservation and protection of Canada's fishery resource and, in partnership with stakeholders, assurance of its sustainable utilization.	<ul style="list-style-type: none"> <li>• Conservation and biological sustainability of fish stocks both within and adjacent to Canada's 200-mile zone through an integrated approach to resource management.</li> <li>• Sustainable harvesting practices within the industry.</li> <li>• Professional industry participants who share responsibility and accountability with government for co-managing the resource.</li> <li>• An integrated monitoring and enforcement program that contributes to the conservation and sustainability of the resource.</li> </ul>
<i><b>Harbours</b></i>	Harbours critical to the fishing industry open and in good repair; divestiture of recreational harbours from inventory.	<ul style="list-style-type: none"> <li>• Harbours critical to the fishing industry open and in good repair.</li> <li>• Number of harbours in the inventory.</li> <li>• Industry sharing responsibility with government for administering and maintaining harbours.</li> <li>• Safety of users.</li> </ul>
<i><b>Fleet Management</b></i>	Efficient sea and air support to the DFO programs.	<ul style="list-style-type: none"> <li>• Safe, appropriate, cost-efficient and effective sea and air platforms.</li> <li>• Fees for service to the public and industry.</li> <li>• Number of vessels and crews in use.</li> </ul>
<i><b>Policy and Internal Services</b></i>	Infrastructure and service base support required to achieve DFO's vision and mission.	<ul style="list-style-type: none"> <li>• A department fully supported by policy, communications and other corporate services, such as finance and human resources.</li> <li>• Quality service delivery, appropriate infrastructure and functional expertise.</li> </ul>

## Legislation and Regulations

Business Line	Legislative Acts or Regulations	Expected Results
<p><b>Marine Navigation Services</b></p>	<p><i>Navigable Waters Protection Act</i> — Amendment of act to modernize and clarify scope and responsibilities.</p> <p><i>Canada Shipping Act (Part VI)</i> — DFO, in collaboration with Transport Canada, is actively involved in simplifying the legislative and regulatory framework for marine safety and pollution response, which is being accomplished through a two-track reform of the <i>Canada Shipping Act</i>. All CCG business lines are involved in the revision of the statute except Fleet Management.</p>	<ul style="list-style-type: none"> <li>• Modernized and streamlined legislation.</li> <li>• Continued protection of public right to navigation, allowance for interference to navigation, ability of Minister to remove obstructions to navigation.</li> <li>• Improved certainty for industry.</li> <li>• Clear linkages to environmental assessment.</li> <li>• Modernized, streamlined legislation.</li> <li>• Clear enunciation of the Minister's accountability under the act.</li> </ul>
<p><b>Rescue, Safety and Environmental Response</b></p>	<p><i>Small Vessel Regulations</i> — Revise safety requirements on recreational vessels and improve construction standards certification system.</p> <p><i>Small Vessel Regulations</i> — Small Vessel Operator Proficiency — Develop regulations to improve safe operation of recreational vessels through operator education.</p> <p><i>Small Vessel Regulations</i> — Small Vessel Identification and Licensing — Ensure identification of vessels and owners for Search and Rescue and regulatory enforcement.</p> <p><i>Chemical-spills Response Regulations</i> — Develop appropriate chemical-spill response by ports, chemical handling facilities and, perhaps, vessels.</p>	<ul style="list-style-type: none"> <li>• Improved safety for recreational vessels.</li> <li>• Rationalized certification system.</li> <li>• Enhanced boating safety.</li> <li>• Reduction in loss of life and injury.</li> <li>• Introduction of boating safety program.</li> <li>• Creation of national registry for small vessels.</li> <li>• Improved environmental quality.</li> </ul>

<b>Business Line</b>	<b>Legislative Acts or Regulations</b>	<b>Expected Results</b>
<b><i>Fisheries Management</i></b>	<p><i>Atlantic Fishery Regulations, 1985</i> — Rewrite and streamline regulations to introduce a more flexible resource management system.</p> <p><i>Marine Mammal Regulations</i> — Review regulations respecting seal fishing.</p> <p>Amendment to the <i>Freshwater Fish Marketing Act</i>.</p>	<ul style="list-style-type: none"> <li>• Development of conservation measures by resource managers and stakeholders in partnership.</li> <li>• Streamlined regulations and improved responsiveness of management system.</li> <li>• Elimination of defective or outdated provisions.</li> <li>• Rationalized sealing regulations.</li> <li>• Updating of rules respecting other marine mammals.</li> <li>• To provide for an elected Advisory Committee.</li> </ul>
<b><i>Policy and Internal Services</i></b>	<p><i>Fisheries Act</i> — Rewrite to create new management tools (fisheries management orders and expanded conditions of licence), habitat delegation, co-operative management (fisheries management agreements), and licensing and sanctions boards.</p>	<ul style="list-style-type: none"> <li>• Improved management and conservation of fish stocks and habitats.</li> <li>• Streamlined regulations.</li> <li>• Flexible and co-operative approach to fisheries management.</li> <li>• Modernization of language and rules.</li> </ul>

## B. Details by Business Line

### **External Factors Affecting CCG**

Over the past three years, the CCG has undergone a major reorganization, designed to refocus its role within a newly merged Department of Fisheries and Oceans and to ensure service delivery that is responsive to clients' needs. The newly merged CCG faces fundamental governance and accountability issues as a result of its integration into DFO and because of the partnership arrangements it seeks with clients. This has created the challenge of balancing the corresponding demands these many stakeholders are making on the organization. Although this rapid change has not altered CCG's core mission and values, there has been a heightened emphasis on meeting the government's broad objective of reducing the public debt and ensuring that the Canadian taxpayer is getting maximum value for each dollar spent. Consequently, CCG continues to make difficult decisions and adopt complex strategies that affect employees, programs and the clients it serves. The key strategies and plans articulated for each of the business lines, take into account the following underlying external factors affecting CCG:

- As a result of cost recovery for various CCG services, commercial clients and stakeholders are exerting an unprecedented degree of influence on the determination of the costs for these services. It has become imperative for CCG to demonstrate more clearly its costs and the value it adds, in a format understandable by external users.
- The government's Program Review initiative has resulted in a refocused mandate for CCG that concentrates on the CCG core roles of marine safety and environmental protection, and the withdrawal from non-core services such as dredging.
- Reduced budgets and the search for program savings have shifted the philosophy within government to consider such concepts as alternate service delivery, increased contracting out of services where appropriate and more effective partnerships both nationally and locally.

### **COAST GUARD: CONTEXT**

- **Implementing new technology** in an operating environment affected by marine technology and international standards. CCG is continuing to pursue new technologies as a means to reduce costs and improve services.
- **Renewing the CCG work force** to position it well to meet the demands of the public service of the future, including fulfilling the strategies of *La Relève*.
- **Maintaining a unique "CCG identity"**, flowing from marine tradition based on core values such as safety, service, respect and transparency, within the oceans mandate of the merged department.
- **Improving client relations** to ensure the proper balance between service delivery and public safety, and in response to industry, community and commercial clients needing their say on such issues as cost-recovery initiatives. By better knowing its clients and their needs, CCG will be better positioned to reach cost-reduction targets, reprofile service delivery and apply user fees equitably.



- ❑ The emphasis on improved service effectiveness has resulted in the exploration and implementation of new technologies within CCG, the building of new partnerships, and a renewed reliance on multitasking techniques that allow for service delivery that satisfies clients while using less capital and human resources.
- ❑ The approach of Year 2000 has required CCG to dedicate resources to ensuring that critical CCG systems are technologically capable of incorporating the date change to the next century.
- ❑ The emphasis on decreasing budgets and cost recovery is straining CCG's ability to replace aging capital assets.
- ❑ In an atmosphere of fiscal restraint, CCG is faced with the challenges of maintaining the integrity of marine search and rescue and managing service levels in an operational environment that may vary widely from year to year (for example, the severity of ice seasons can vary significantly from year to year).
- ❑ The increased emphasis on client consultation has introduced a number of challenges in the demand for and establishment of CCG service levels because of the difficulty in reconciling competing demands from commercial clients and Canadian citizens.
- ❑ There is an increasing emphasis on environmental responsibility and CCG intends to move more aggressively to deal with its historical environmental concerns and develop processes to ensure that its future operations are carried out in an environmentally sound manner.

Note: Key plans and strategies, as well as intermediate and ultimate outcomes, are listed under the following business lines: Marine Navigation Services; Marine Communications and Traffic Services; Icebreaking Operations; Rescue, Safety and Environmental Response; and Fleet Management. The intermediate outcomes are listed as bullets under each of the key plans and strategies, and the ultimate outcomes are under the heading "Expected Results."

### ***Marine Navigation Services***

This business line consists of three programs: Aids to Navigation; Navigable Waters Protection; and Waterways Development.

#### ***Objective***

The objective of this business line is to provide and ensure efficient operation of aids to navigation to assist mariners in determining their position in relation to land and hidden dangers, to reduce navigation risk and vessel transit time, in support of a safe and environmentally sound national marine transportation system.

## Planned Spending: Marine Navigation Services

(\$ millions)	Forecast Spending 1997-98	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01
Gross Expenditures	159.6	120.7	121.5	121.5
Revenue Credited to the Vote	27.2	28.2	28.2	28.2
Net Expenditures	132.4	92.5	93.3	93.3

### Key Plans and Strategies

- Continue modernization of aids to navigation.
  - ⇒ Conclude implementation of Differential Global Positioning System (DGPS) by January 1998.
  - ⇒ Improve effectiveness of current aids equipment through the implementation of the five year buoy, solarization of seasonal buoys, evaluation of laser range lights, and performance monitoring of existing equipment.
  - ⇒ Terminate LORAN-C by year 2000 — a long-range navigational system used by mariners to determine position.
  - ⇒ Continue to assist the Canadian Hydrographic Service to implement electronic chart coverage in main Canadian waterways.
  - ⇒ Use alternate approaches to improve the effective and efficient use of lightstations.
  - ⇒ Facilitate domestic and international acceptance for Electronic Chart Systems, Electronic Chart Display and Information Systems (ECDIS) and DGPS.
- Modernize and maintain information systems.
  - ⇒ Maintain the waterways branch database.
  - ⇒ Implement the Système de Position des Aides (SIPA).
  - ⇒ Upgrade and maintain Navigable Waters Database System (NWDS).
- Develop competency profiles to ensure a skilled and capable work force.
  - ⇒ Develop a competency profile for the Marine Navigation Services work force, specifically for workers in the Marine Aids, Navigation Protection Program and Waterways Development branches.
- Amend applicable legislation to simplify the regulatory framework and ensure its responsiveness to regulatees.
  - ⇒ Amend the *Navigable Waters Protection Act* to confirm the applicability of legislation, streamline the application process and provide for cost recovery.
  - ⇒ Amend the *Canada Shipping Act*, specifically Part VI — Receiver of Wreck Provisions, to streamline administrative processes and reduce the administrative burden related to storage and disposal of wrecks.
- Harmonize regional and national levels of service.
  - ⇒ Adjust levels of service to one national standard with a revised mix of visual and electronic aids.
- Develop channel policy, standards and guidelines for the purpose of maintaining vessel safety within the confines of national commercial waterways.

- Continue providing, monitoring and controlling waterways information and services.
  - ⇒ Withdraw from dredging on the Fraser and Athabaska Rivers.
  - ⇒ Scale back dredging on Lake Winnipeg over the next two years.
  - ⇒ Develop long-term agreement for dredging fees on the St. Lawrence River.
  - ⇒ For major waterways, provide water-level forecasting and depth availability information to clients on an ongoing basis.
  - ⇒ Monitor and control water-level fluctuations in Lake Ontario and the St. Lawrence River.
  - ⇒ Manage ice control structures.
  - ⇒ Provide dredge soil disposal facilities for the Detroit and St. Clair River waterways.

### ***Expected Results***

- Reduced number and severity of collisions, groundings and spills.
- Reduced risk of spills.
- Reduced pollution from vessel transits and construction on waterways.
- Reduced vessel transit time.
- Increased efficiency in commercial vessel cargo loading, resulting in clients' improved operational and economic performance.
- Increased efficiency in assessing how works in navigable waters will affect navigation.

### ***Marine Communications and Traffic Services Objective***

The objective of this business line is to provide communications and traffic services for the marine community and for the benefit of the public at large to ensure: safety of life at sea in response to international agreements; protection of the environment through traffic management; efficient movement of shipping; and information for business and national interests.

## Planned Spending: Marine Communications and Traffic Services

(\$ millions)	Forecast Spending 1997-98	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01
Gross Expenditures	60.2	<b>74.0</b>	74.5	74.5
Revenue Credited to the Vote	0.7	<b>0.5</b>	0.3	0.3
Net Expenditures	59.5	<b>73.5</b>	74.2	74.2

### Key Plans and Strategies

- Complete the MCTS integration.
  - ⇒ Complete the integration of Vessel Traffic System and Coast Guard Radio Stations by 1998-99, which will reduce the number of staffed Marine Communications and Traffic Services (MCTS) stations from 43 to 22.
  - ⇒ Develop a strategy to consolidate the MCTS Officers' new and existing skills, training and knowledge for quality service delivery.
- Provide employees with opportunities to achieve their maximum potential so that MCTS and CCG can reach their vision.
  - ⇒ Focus on career development, using international project assignments, acting assignments and cross-functional experiences with a view to gaining a wide range of expertise.
- Continue to foster a closer relationship with clients by emphasizing communication and partnerships.
  - ⇒ Work with partners and stakeholders to understand the technological and operational changes.
- Continue the implementation of a National Information System on Marine Navigation (INNAV). INNAV is a real-time information system that will automate the collection, processing, display and distribution of timely and accurate marine traffic information.
  - ⇒ Complete Phase I of INNAV by September 1998.
  - ⇒ Proceed with Phase II of INNAV, to be completed by 1999.
- Continue the development of a national implementation strategy by the end of 1999 in partnership with industry, for the use of Automated Identification System (AIS) in MCTS operations.
  - ⇒ Prepare a national implementation strategy by the end of 1999 in line with the international technical and operational standard expected by early 1999.
- Continue with the implementation of the Global Maritime Distress and Safety System (GMDSS) in accordance with Canada's international commitment and the support of the marine industry.
  - ⇒ Implement the VHF/Digital Selective Calling (DSC) at selected sites in Canada over the next four years and the HF/DSC in the Canadian Arctic over the next two years.

- ❑ Continue to provide MCTS expertise internationally in support of Canadian industry and for the promotion of the CCG.
  - ⇒ Explore opportunities to market operational and technical expertise internationally in operational analysis, standards development, systems advice and training, and undertake projects if proposals are accepted.
- ❑ Continue the review of MCTS levels of service to seek the most efficient and effective means of delivering MCTS services including consideration of alternate delivery methods.
  - ⇒ Conduct a level-of-service review, to be completed in 1999, including risk ranking and consideration of new technology to reduce expenditures and rationalize MCTS standards.
  - ⇒ Resolve all questions relating to the replacement of aging MCTS assets at a time of decreasing budgets and cost-recovery.

### ***Expected Results***

- ❑ Reduced number and severity of collisions and groundings.
- ❑ Reduced number and severity of incidents that place people in distress or imminent danger, which minimizes loss of life.
- ❑ Reduced risk and impact of spills resulting from collisions and groundings, which leads to an environmentally sound transportation system.
- ❑ Reduced vessel transit time, which improves clients' operational and economic performance.

### ***Icebreaking Operations Objective***

The objective of this business line is to support economic activities by: facilitating safe and efficient movement of marine traffic through ice-covered waters in the Arctic and in southern waters, which include the Great Lakes and East Coast of Canada; decreasing the risk of flooding in areas prone to or threatened by it as a result of ice build-up; and ensuring that northern settlements and military sites are resupplied annually.

### **Planned Spending: Icebreaking Operations**

	Forecast Spending 1997-98	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
(\$ millions)				
Gross Expenditures	53.8	<b>51.7</b>	50.9	50.9
Revenue Credited to the Vote	9.3	<b>23.6</b>	23.3	23.3
Net Expenditures	44.5	<b>28.1</b>	27.6	27.6

### ***Key Plans and Strategies***

- ❑ Establish annual service levels.
  - ⇒ Accurately match ice season and client requirements with service capacity year to year.

- ⇒ Continue with advisory boards on service requirements to lower costs and service levels.
- Develop an Icebreaking Program performance management framework.
  - ⇒ Develop Icebreaking Program performance measurements by March 1999 and continue developing data linkages to support this management tool.
- Implement the Icebreaking component of the Marine Services fee.
  - ⇒ Implement fees for the winter icebreaking season that commences December 1998.
- Transfer Arctic Sealift and resupply sites to Nunavut.
  - ⇒ Initiate discussions with territorial governments and agencies.
- Strengthen the alliance with Transport Canada Marine Safety Branch.
  - ⇒ In consultation with Transport Canada Marine Safety Branch, harmonize Polar Ship Rules and the Ice Regime project.
  - ⇒ Take a proactive role in Transport Canada for dealing with ice operations or ships operating in ice.
- Develop a National Icebreaking Policy by December 1998 including a policy pertaining to requests for icebreaking outside of icebreaking levels of service (e.g., Voisey's Bay and Labrador) and the cost-recovery process to address these situations.

### ***Expected Results***

- Increased confidence that ships can travel in Canadian waters during ice season, which improves clients' operational and economic performance.
- Reduced vessel transit time, which improves clients' operational and economic performance.
- Reduced risk of property damage along the rivers.
- Reduced risk of ice damage to ships crossing ice-covered waters, which leads to a safe national transportation system.
- Demonstration of Canadian sovereignty in the North.
- Contribution to the well-being and economic viability of Inuit communities.

### ***Rescue, Safety and Environmental Response Objective***

The objective of this business line is to save lives and protect the marine environment.

## Planned Spending: Rescue, Safety and Environmental Response

(\$ millions)	Forecast Spending 1997-98	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01
Gross Expenditures	137.2	<b>110.3</b>	110.4	110.3
Revenue Credited to the Vote	0.1	<b>0.1</b>	0.1	0.1
Net Expenditures	137.1	<b>110.2</b>	110.3	110.2

### Key Plans and Strategies

- Promote and develop safety partnerships to ensure effective program delivery.
  - ⇒ Develop specific boating safety partnership projects in each region for the 1998-99 boating season.
  - ⇒ Establish an improved small vessel identification and operator proficiency regime by March 1999.
  - ⇒ Build on the CCG's partnership with the CCG Auxiliary by assisting it in its evolution to address changing demands.
- Build on relationships with Transport Canada and partners to ensure harmonized and complementary safety interventions (regulatory and non-regulatory) responsive to the needs of all small vessels under 15 gross registered tons.
  - ⇒ Amend Small Vessel Regulations by March 1999.
- Enhance search and rescue (SAR) scientific, analytical and operational capability.
  - ⇒ Complete Bay of Fundy SAR risk model by March 1999.
- Use technology to improve SAR system effectiveness.
  - ⇒ Develop a complete Rescue Centre GMDSS satellite communications capability by September 1998.
- Provide international leadership.
  - ⇒ Develop and sign joint plans for oil pollution preparedness, response and co-operation with France, Russia and Denmark by March 1999.
  - ⇒ Sign a revised plan for oil pollution preparedness, response and co-operation with the U.S. by March 1999.
  - ⇒ Sign Canada-U.S.-U.K. Memorandum of Understanding on SAR by September 1998.
- Develop and improve effective pollution preparedness and response measures with partners.
  - ⇒ Make improvements to oil spill preparedness and response regime by March 1999.
  - ⇒ With industry partners, develop a marine chemical spills and HAZMAT (hazardous material) preparedness and response regime for Canada by March 1999.
- Improve DFO emergency preparedness capability.
  - ⇒ Develop a departmental national emergency response framework at corporate and regional centres by December 1998.

## ***Expected Results***

- Reduced number and severity of incidents that place people in distress or imminent danger, which minimizes loss of life.
- Reduced risk and impact of spills resulting from collisions and groundings, which leads to an environmentally sound transportation system.
- A sustainable balance between environmental protection and the long-term viability of marine trade and commerce.

## ***External Factors Affecting Science***

DFO Science's challenge is to provide a reliable scientific basis for conservation and the sustainable use of aquatic resources, protect the marine habitat and produce navigation charts for Canadian waters. This encompasses three business lines: Fisheries and Oceans Science, Habitat Management and Environmental Science, and Hydrography. Science is currently operating in a social-economic environment characterized by uncertainty and ferment in the following areas:

- Sustainable Development of Marine Resources:* High expectations among stakeholders about the sustainable management of coastal and ocean resources being affected by onshore developments, competing uses and excess capacity.
- Commercial Fish Stocks:* Concerns over East Coast groundfish fisheries, the coho and chinook returns on the West Coast and an expected downturn in Atlantic lobster landings. Pressure for reopening of the fisheries on the major Atlantic cod stocks will intensify in fall of 1997 and winter 1998.
- Marine Aquaculture:* High expectations for aquaculture as an economic engine in coastal areas.
- Ocean Climate and Global Change:* Uncertainty as to the validity of current climate models and the effect of climate change on fisheries.
- Habitat:* Public concern about how habitat alterations affect sustainability of fish populations and toxic chemicals affect the marine environment.
- Environmental Assessment:* The process for reviewing of development projects that affect fish habitat and harmonizing agreements with provincial governments on environmental assessment and habitat management to facilitate approval processes is a priority issue for provinces, industry and their stakeholders (e.g., ENGOs).
- Hydrography:* The need for surveys of inadequately charted isolated areas has to be reconciled with the demands for electronic charts in areas of heavier marine traffic, and all charted features related to the more accurate Differential Global Positioning System positions used by mariners.



- ❑ *Shrinking Program Resources:* Science faces the need to find new ways to deliver essential programs and services with a smaller resource base (budget reduced by about 32%). The new approaches will include using innovative technologies in collaboration with clients, stakeholders and non-DFO research organizations.

## ***Fisheries and Oceans Science***

### ***Objective***

The objective of this business line is to provide fisheries management and the industry with a reliable scientific basis for the conservation of marine, anadromous and freshwater fishery resources, and for the sustainable development of marine aquaculture; and scientific information on ocean and coastal waters and marine and freshwater ecosystems in support of environment and fish habitat management, integrated resource management, offshore development, climate prediction, marine services, coastal engineering, defence and shipping.

### **Planned Spending: Fisheries and Oceans Science**

	Forecast Spending 1997-98	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
(\$ millions)	124.9	<b>118.0</b>	111.5	111.6
Gross/Net Expenditures	124.9	<b>118.0</b>	111.5	111.6

### ***External Factors***

Canadians expect their fisheries resources and the aquatic environment to be managed responsibly and conserved for future generations. They also expect safe harbours, reliable navigational charts and a scientific capacity to deal with environmental and resource issues of local, regional, national and international concern.

In the coastal zone, increased land use will continue to be a threat to sensitive and productive coastal habitats. All the while, interest in coastal recreational activities will continue to grow in Canada. In the offshore, there is a growing interest in exploiting hydrocarbon and minerals.

Expectations are high for aquaculture as an economic engine in coastal areas; technical progress is allowing aquaculture to expand although there remain concerns for interactions between wild and cultured fish and for how operations affect the coastal environment. Marine science will provide the most objective basis to resolve sea-related issues when governments make choices to maintain the balance between conservation and exploitation. DFO's role in harmonizing potentially conflicting demands from stakeholders will not change.

What will change, however, is the degree to which the private sector, universities and provincial and territorial governments are partners with DFO in information gathering and dissemination, and as discoverers of new knowledge and researchers of the natural environment.

DFO is committed to conducting a transparent, open and inclusive stock assessment review to promote understanding and acceptance, by the public and industry, of the probabilistic nature of research results and scientific advice and of the implications of scientific uncertainty in conservation measures aimed at sustainable fisheries and based on the precautionary approach.

### **FISHERIES AND OCEANS SCIENCE: CONTEXT**

- *Providing advice to fisheries management and the industry for sustainable use of resources.*
- *Intensifying collaboration with other marine scientists in the private, public and academic sectors, with industry and with management.*
- *Emphasizing transparency, openness and inclusiveness of the stock assessment process to promote understanding and acceptance, by public and industry, of research results and scientific advice.*

### **Key Plans and Strategies**

- Gather fishery and biological data (e.g., research vessel surveys (trawl and acoustic), sentinel surveys, port sampling) to generate new knowledge on fish and fish stocks and to assess fish stocks.
- Gather data and generate new knowledge on ecological processes (e.g., the effect of predation, multispecies interactions) and on oceanic conditions and processes (e.g., ocean temperature, El Niño); evaluate the effect of natural and anthropogenic variability of biological, ecological and environmental factors (e.g., natural mortality and recruitment of fish stocks, climate change) on the productivity of the oceans.
- Promote the involvement of academic and non-governmental scientists of fisheries and environmental sciences and key clients and stakeholders (e.g., fishers, environmental groups, First Nations) in the assessment of resources.
- Progressively develop and incorporate the Precautionary Approach into fisheries assessment and management.
- For aquaculture, transfer knowledge and technology from research projects to make possible the cultivation of new species and success in preventing the spread of fish diseases or genetically modified organisms.

### **Expected Results**

- Scientific assessments of the resource are intended to form the basis of management regimes aimed at developing a self-sustaining fishing industry in balance with the production capacity of the oceans. Assessments of stocks will be completed and provided to Fisheries Management, the Fisheries Research Conservation Council (FRCC), the newly

established Pacific Fisheries Research Conservation Council (PFRCC) and other regular recipients of stock assessment reports from the public, academic and industrial sectors.

- ❑ An ecological approach for the management of the oceans is under progressive development. For the year under planning, new knowledge and information on ecological and environmental factors affecting the productivity of the oceans will continue to be part of the stock assessment. The results of a major study on the factors (e.g., fishing, species interaction, predation, environmental conditions) regulating the productivity (mortality, recruitment, growth) of cod stocks will be published as a special issue of the *Canadian Journal of Fisheries and Aquatic Science*. DFO will continue to be a major partner in the Canadian Global Ecosystems Program, a collaborative project of the Natural Sciences and Engineering Research Council of Canada, universities and DFO, studying how the abundance, distribution and productivity of marine populations respond to variability in their physical environment. DFO will continue to support the Chair in Fisheries Conservation at Memorial University.
- ❑ The involvement of external practitioners of science and key clients will improve the transparency of the resource-assessment process, augment the credibility of the resulting scientific advice and favour compliance with conservation measures aimed at promoting a healthy fishery. Representatives from academia and the industry will participate in peer-review assessment processes with DFO scientists. The PFRCC will be fully implemented and related changes will be made to the Pacific Science Advisory Research Council.
- ❑ The Precautionary Approach states that we must err on the side of the fish in case of scientific uncertainty. Erring on the side of the fish must be based on a formal and transparent inclusion of precautionary principles in the assessment process. This will result in the public and stakeholders understanding the role of scientific advice in management decisions underpinned by the Precautionary Approach. Pilots will be developed on selected assessments in the Pacific and the Atlantic with the aim of developing new methods to express uncertainty in scientific advice related to fish stocks.
- ❑ A profitable aquaculture industry requires, among other things, cost-effective means to control pathogens and objective criteria to select the most favourable operation sites. In the long term, this will result in a more economically sound, self-sustaining and competitive aquaculture industry. In the period under planning, a project aimed at developing diagnostic tests for important salmon pathogens and a project aimed at developing indices of shellfish and finfish production capacity will be pursued.

### ***Habitat Management and Environmental Science Objective***

The objective of this business line is to achieve marine environmental and fish habitat protection and conservation through an integrated approach to managing the habitat.

**Planned Spending: Habitat Management and Environmental Science**

	Forecast Spending 1997-98	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
(\$ millions)	48.8	<b>46.8</b>	39.5	39.5
Gross/Net Expenditures				

**External Factors**

There are increasing pressures on fish habitat as a result of human activities. This is being felt perhaps most acutely in rivers, streams and estuaries near rapidly urbanizing areas of British Columbia. There is also an increasing concern about the use being made of the marine environment, the health of aquatic ecosystems, the productivity and quality of aquatic resources, and the effect of habitat disruption on these resources. The presence of toxic chemicals, their transfer through the food chain to humans, and their effect on the health of ecosystems (including fish and marine mammals) requires that DFO continue to target its efforts to understand ecosystem functions and the impact of pollutants on aquatic resources, and that it develop regulatory and non-regulatory tools for conservation and protection.

Although the *Fisheries Act* provides a strong legislative base for the protection of fish habitat, the provinces have important roles to play through their regulation of important industries such as forestry, mining and hydro-electricity generation, and also through their role in land use and urban planning. The general trend toward reduced provincial resources for environmental protection and provincial withdrawal from some roles related to habitat management are significant challenges for the Department and project proponents.

**Key Plans and Strategies**

- Negotiate with inland provinces new arrangements for habitat management activities.
- Determine and mitigate effects on aquatic ecosystems, their habitats and resources related to physical, chemical and biological disruptions, increased pressures related to exploration and exploitation activities, environmental variability, and climate change.
- Develop and implement, in consultation with key clients and partners, a new strategic plan for environmental science.
- Develop, in collaboration with ocean stakeholders, strategies, policies and programs respecting the designation of Marine Protected Areas (MPAs), the

**HABITAT MANAGEMENT AND ENVIRONMENTAL SCIENCE: CONTEXT**

- *Increasing pressures on fish habitat as the result of human activities.*
- *Increasing concern about the use being made of the marine environment, the health of aquatic ecosystems, the productivity and quality of aquatic resources, and the effect of habitat disruption on these resources.*
- *General trend toward reduced provincial resources for environmental protection, in general, and provincial withdrawal from some roles related to habitat management, are significant challenges for the Department and project proponents.*

establishment of a national framework to guide the development of integrated management plans in the coastal zone (ICZM), and a national marine environmental quality (MEQ) framework including regional guidelines, criteria and standards application.

### **Expected Results**

- More effective and consistent conservation and protection of fish habitat.
- Clarification of the roles of the provinces and DFO with respect to the management of fish habitat.
- Increased certainty for project proponents with respect to requirements for environmental assessments triggered by the *Fisheries Act*.
- Better understanding of the ecological significance of physical, chemical and biological disruptions on aquatic ecosystems, as well as their effects on the sustainable integration of aquatic resources.
- Increased effectiveness of marine conservation and protection measures and better integration of ocean-related activities. Validation of the developing MPA, ICZM and MEQ programs through pilot testing will increase public awareness and involvement in the Department's ocean conservation efforts.
- Increased awareness of DFO's marine conservation and protection responsibilities and the profiling of DFO achievements in this area as part of the federal government's International Year of the Ocean efforts.

### **Hydrography**

#### **Objective**

The objective of this business line is to provide nautical information products for safe and efficient navigation in Canadian and bordering international waters.

#### **Planned Spending: Hydrography**

	Forecast Spending 1997-98	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
(\$ millions)	26.5	<b>26.0</b>	25.3	25.3
Gross/Net Expenditures				

## **External Factors**

Many areas of Canada's navigable waters are inadequately charted to support modern shipping. There has been a significant number of vessel groundings in isolated coastal areas.

Tourism is the world's fastest growing industry. The number of cruise ships operating on the Labrador Coast, in Arctic waters and on the Pacific Coast of Canada has increased.

In addition, there has been an increasing demand for marine navigation routes to mineral discoveries in areas such as Voisey's Bay, Bathurst Inlet and various other Arctic sites. Lack of up-to-date surveys and modern electronic charts is currently slowing the pace of resource development.

### **HYDROGRAPHY: CONTEXT**

*To modernize charts for Canada's navigable waters to respond to increases in:*

- *tourism;*
- *cruise ships on both coasts; and*
- *demand for marine navigation routes to mineral discoveries (e.g., Voisey's Bay, Bathurst Inlet).*

## **Key Plans and Strategies**

- Maintain paper and electronic charts and associated nautical publications for sale to commercial fisheries and recreational mariners, carry out surveys to improve the accuracy and adequacy of these products, and provide information on Maritime Boundaries.
- Form alliances and co-operative ventures with universities and private-sector interests, improve services to clients, and enhance data accessibility.
- Investigate the introduction of new products to meet the changing demands of the shipping community, the commercial fishing community and other clients.

## **Expected Results**

- Existing publications will be kept up to date to the latest Notices to Mariners. These existing publications are necessary for safe maritime commerce and to meet legal requirements. At the same time, Electronic Navigation Charts will be produced for the Great Lakes/St. Lawrence Seaway System, for Vancouver Harbour and approaches, and for the main navigation routes on the lower B.C. Coast.
- Electronic Navigation Charts improve navigation safety by providing better functionality than paper charts. They increase efficiency by improved voyage planning and by allowing vessels to operate under inclement weather conditions and when navigation buoys are displaced. In addition, working closely with private-sector companies, paper and electronic charts will be produced for routes to Voisey's Bay, for routes into Bathurst Inlet and for resupply to the Keewatin district through Hudson Bay. These surveys are a prerequisite for safe resource development in these marine areas.
- Modern surveys will eliminate the risk of vessel foundering and subsequent environmental damage that might have been caused by the lack of information regarding hazards on the sea floor. Updated information on headlands, offshore islands and low tide elevations

(drying rocks) will improve the accuracy of maritime baselines from which the territorial sea, contiguous zone and exclusive economic zone are drawn.

- ❑ Alliances serve as a means of increasing output. It is expected that alliances with the private sector will improve data delivery by employing private-sector marketing expertise, alliances with universities will contribute to improved performance through co-operative research, and alliances with other government departments and agencies will avoid duplication in map and chart production and printing and ensure that delivery mechanisms and pricing policies are similar for similar products.
- ❑ New products such as Electronic Docking Charts will benefit mariners by increasing safety and reducing environmental damage. Digital Sailing Directions will be easier for mariners to use, and three-dimensional sea floor mapping will be beneficial to fishers by increasing efficiency in harvesting the resource and avoiding damage to fishing gear.

## ***Fisheries Management***

### ***Objective***

The objective of this business line is the conservation and protection of Canada's fishery resource and, in partnership with stakeholders, to assure its sustainable utilization.

### **Planned Spending: Fisheries Management**

	Forecast Spending 1997-98	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
(\$ millions)				
Gross/Net Expenditures*	235.8	<b>215.0</b>	205.1	199.2

\* Includes special capacity-reduction programs.

### ***External Factors***

After Program Review, Fisheries Management had significantly fewer resources to fulfil its commitment to the conservation and sustainable utilization of the fishery resource; it must therefore respond to the widely divergent and often conflicting demands from fishers and the public at large with a fundamentally redesigned program.

The core mandate of Fisheries Management is conservation as a means to achieve the vision of a biologically sustainable resource supporting self-reliant fisheries. It is in this context that resource users must comply with conservation standards and harvesting conditions and take a greater decision-making role and responsibility for the management of the resource and the associated costs.

The predominant challenge for Fisheries Management for the immediate future and beyond will be to ensure that the renewal and institutional change within DFO proceeds in step with the restructuring of the fishing industry and the ability of resource users to accept an increased role, particularly in fisheries currently under moratorium or characterized by severely depleted stocks or low economic returns to fishers.

## **Key Plans and Strategies**

□ **Policy/Program Reform** — Continue program and policy reform to enhance service levels by:

- ⇒ continuing the redesign of Fisheries Management programs including the Canadian Code of Conduct on responsible fishing, renewal of the Conservation and Protection program, and long-term fleet sector allocations;
- ⇒ establishing Integrated Fisheries Management Plans for all the major and most sensitive fisheries, and eventually extending the approach to all fisheries;
- ⇒ implementing the action plan flowing from the corporate review of integrated fisheries management planning by March 1999;
- ⇒ developing additional co-operative fisheries management arrangements;
- ⇒ promoting conservation based harvesting practices in the context of growing global concern about the health of the oceans and the sustainability of the world's fisheries stocks;
- ⇒ increasing participation in the development and implementation of the departmental Oceans Agenda (Oceans strategy development, marine protected areas, integrated coastal zone management, International Year of the Ocean);
- ⇒ developing a performance measurement framework and implementing a pilot study by December 1998;
- ⇒ developing and initiating the implementation of an integrated cross-sectoral fisheries information management investment strategy in 1998;
- ⇒ developing and initiating the implementation of a comprehensive human resources strategy for the sector in April 1998; and
- ⇒ supporting the process to amend the *Fisheries Act*.

□ **Pacific Fishery Reform** — Reform of the Pacific fishery to reduce the pressure on the resource and to promote economic and ecological sustainability by:

- ⇒ implementing the Canada-British Columbia Agreement on the Management of Pacific Salmon Fishery Issues;
- ⇒ continuing the implementation of the Pacific Salmon Fisheries Revitalization Strategy and review after the 1998 season;

### **FISHERIES MANAGEMENT: CONTEXT**

- *Achieving a renewed Pacific Salmon Treaty has been difficult. Efforts must continue, starting with interim fishing arrangements for 1998.*
- *Groundfish stock recovery remains years away and alternatives outside the fishery will need to be found for the substantial numbers of groundfish harvesters (10,300) receiving TAGS, which is scheduled to expire in August 1998.*
- *Taking into account Program Review reductions, a priority for Fisheries Management is to continue to reinvent its approach to the management of the fisheries by working in partnership with other DFO sectors, resource users, their organizations and communities to renew the fishing industry and by developing and implementing integrated approaches to support the strengthening of departmental management processes.*



- ⇒ implementing of the Toy and Kelleher recommendations on intersectoral and intrasectoral salmon allocations involving the commercial, recreational and Aboriginal sectors;
  - ⇒ implementing the long-term plan for the management of the Pacific groundfish trawl fleet.
  - ⇒ initiating consultations to develop a plan for the hook-and-line sector;
  - ⇒ developing herring fishery;
  - ⇒ releasing a public discussion document on selective fisheries guidelines;
  - ⇒ improving catch-monitoring;
  - ⇒ increasing cross-sectoral and community consultation and increasing local management;
  - ⇒ maintaining productive capability from salmonid enhancement facilities for sustaining existing fisheries, creating new fisheries, and addressing conservation issues; and
  - ⇒ investigating the potential for terminal harvests with increased fish production in selected areas.
- ❑ **Atlantic Fishery Reform** — Reform the Atlantic fishery to reduce the pressure on the resource and to promote economic and ecological sustainability by:
- ⇒ developing and implementing further strategies to reduce participation in the groundfish harvesting sector;
  - ⇒ developing an integrated Atlantic Fisheries Policy framework;
  - ⇒ developing a discussion paper for industry consultations on options for further advancing the objective of the fishery of the future; and
  - ⇒ continuing the phase-out of sealing industry assistance by 2000.
- ❑ **International Fisheries** — Promote international conservation and sustainable utilization, maximization of Canadian fishing possibilities and globally responsible fishing practices by:
- ⇒ negotiating with the United States to achieve bilateral agreement on the implementation of *Pacific Salmon Treaty* principles, obtain agreement on two-year interim arrangements before the 1998 fishing season and review the Pacific Salmon Commission.
  - ⇒ obtaining legislative authorization for Canada to ratify the *UN Agreement on Straddling and Highly Migratory Stocks*;
  - ⇒ negotiating international treaties and agreements in areas of foreign overfishing and effective enforcement measures in such fora as NAFO and International Commission for the Conservation of Atlantic Tunas;
  - ⇒ promoting and implementing responsible harvesting practices such as the Code of Conduct on Responsible Fishing of the Food and Agriculture Organization; and
  - ⇒ implementing strategies and diplomatic initiatives to extend NAFO enforcement measures.
- ❑ **Aboriginal Fisheries** — Advance the Aboriginal fishery agenda by:
- ⇒ negotiating a final agreement and ratification of the fisheries component of the *Nisga'a Treaty*;

⇒ continuing initiatives to enhance Aboriginal opportunities in commercial fisheries through the Allocation Transfer Program.

- ❑ **Arctic Fisheries** — Promote conservation efforts for sustainable utilization of the Arctic fishery by:

⇒ developing co-operative fishery management plans for Arctic fisheries; and

⇒ assisting in the formation of co-operative management boards with fisheries management responsibilities as part of the negotiation and anticipated settlement of land claims in the Arctic.

### **Expected Results**

- ❑ An integrated monitoring and enforcement program that contributes to the conservation and sustainability of the resource.
- ❑ Conservation and biological sustainability of fish stocks both within and adjacent to Canada's 200-mile zone through an integrated approach to resource management.
- ❑ Sustainable harvesting practices within the industry.
- ❑ Professional industry participants who share responsibility and accountability with government for co-managing the resource.

The attainment of these results must be evaluated in the context of the overall Canadian commercial fishery shown. In the commercial sector, for example, there are 176 commercial fisheries, a number of which encompass international management arrangements, as well as co-management arrangements with Aboriginal peoples. Work is also carried out with 300 First Nations groups in meeting Canada's fiduciary responsibilities and with whom 125 formal agreements exist to facilitate fisheries management and access to commercial fisheries. In the recreational fisheries approximately 5.5 million Canadians and 600,000 visitors participate nationally, spending in the order of \$5.5 billion annually. Many of these recreational users participate in fisheries managed by the Department.

Category	Region (1996 Data)						
	Nfld.	Maritimes	Lauren- tian	Atlantic -Wide*	Central & Arctic	Pacific	Total
Commercial Fishers	17,610	28,203	4,309	50,122	496**	14,164	64,782
Fishing Vessels	11,636	9,870	1,741	23,247	128***	4,450	27,825
Fisheries Managed	18	34	10	10****	72	32	176
Total Landings (Tonnes)	192,300	436,800	47,300	676,400	N/A	242,400	918,800
Landed Value (\$M)	289.5	700.0	131.2	1,120.7	N/A	415.8	1,536.5
Value of Exports (\$M)	326.0	1,440.0	199.0	1,965.0	N/A	859.0	2,824.0
Licence Revenue (\$M) *****	5.5	15.3	3.4	24.2	—	11.7	35.9

\* Involves fisheries with participants from across the Atlantic Region.

\*\* Refers to fishers only in the North-West Territories.

\*\*\* Refers to snowmobiles and fishing vessels on Great Slave Lake.

\*\*\*\* Refers to fisheries managed on an Atlantic-wide basis.

\*\*\*\*\* Reflects revenues collected for the fiscal year ended March 31, 1997.

## Harbours Objective

The objective of this business line is to keep harbours critical to the fishing industry open and in good repair.

### Planned Spending: Harbours

(\$ millions)	Forecast Spending 1997-98	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01
Gross/Net Expenditures	52.1	54.7	54.4	54.4

### External Factors

- ❑ Public safety, disruption of commercial fishing activity and increased government liability have become major concerns as harbour structures rust out beyond DFO's ability to fund their repair and replacement. At fishing harbours alone, over 60% of the structures need safety repairs immediately or within the next three years; 25% are already in unsafe or poor condition and many are barricaded.
- ❑ The decision to reduce and rationalize the harbour system has a direct effect on 90% of Canada's commercial fishers (or 66,000) who rely on DFO facilities to access fishing grounds, to land their fish and to protect millions of dollars invested in boats and gear. Some 2,000 communities hosting DFO harbours and 50,000 Canadian and U.S. boaters and anglers and thousands of small business enterprises are also affected.
- ❑ Industry response to DFO policy decisions requiring them to share in responsibility and cost of their harbours has been generally positive with over half of our fishing clients now operating from Harbour Authority sites. However, unless major maintenance projects can be funded, it will be more challenging for users to form Harbour Authorities, or continue as such, which would seriously jeopardize harbour rationalization efforts.
- ❑ Communities have proven willing to accept their recreational harbours, and 45% of the 844 sites have been divested since 1995-96, at an annual expenditure of \$6.5 million. Of the 460 remaining sites however, most will comprise higher cost actions because of repair and

#### **HARBOURS: CONTEXT**

- *Designing a smaller, less costly harbour system, focused on commercial fishing and more responsive to local priorities.*
- *Sharing costs and responsibility with harbour users — forming partnering arrangements to provide safe operating conditions for Canada's commercial fishing industry.*
- *Working with communities and provinces to ensure an orderly transfer of recreational harbours out of the federal inventory.*
- *Protecting and promoting the responsible use and development of marine and coastal environments.*

environmental remediation costs. At the current expenditure rate, up to 160 divestitures could remain outstanding by 2001, 26 of them being the most costly.

- The dilemma of continued departmental funding of recreational harbour divestiture, at any level, is that funds must be temporarily diverted from fishing harbour maintenance. This further degrades the condition of fishing harbours, compromises rationalization commitments and adds to future costs. Without a source of incremental funds, 100% completion of the recreational divestiture initiative by the 2001 target date is unlikely to occur except at unacceptable cost to fishing harbours and public safety. Options to resolve this funding issue are currently under review.

### ***Key Plans and Strategies***

- Plans to reduce the total number of DFO's harbours by more than half by 2001 (from the 1994-95 base of 2,133 harbours), including continued divestiture of the 844 recreational harbours and rationalization of the fishing harbour inventory to less than 1,000 sites.
- Options to maximize recreational harbour divestiture and minimize the impacts of continued diversion of funds from fishing harbours will be addressed by spring 1998.
- Funding priority for maintenance works will be restricted to fishing harbours that are client-managed and increasingly self-sufficient in operational and routine maintenance costs, with DFO fully funding or cost-sharing major maintenance works.
- Harbours managed by Harbour Authorities will be increased by 50-100 annually to an eventual maximum of 700-800 from over 440 at the end of 1997-98.
- Public consultation will form the basis for decisions on the future of individual harbours.
- DFO will remove from its inventory 250-300 derelict harbours and sites no longer needed by the fishing industry through divestiture or demolition by 2001.
- Actions such as use-restrictions, barricades or structural removals may be necessary in cases where funding is not available to address serious public safety or environmental issues.

### ***Expected Results***

- A smaller, more supportable national fishing harbour system rationalized to core fishing industry requirements and comprising of harbours that are client-run and partially client-financed.
- Protection of public safety and environmental integrity.
- Responsible partnering arrangements with DFO clients.

## ***Fleet Management Objective***

The objective of this business line is to provide efficient sea and air support to the DFO program areas of Marine Navigation Services; Marine Communications and Traffic Services; Icebreaking Operations; Rescue, Safety and Environmental Response; Fisheries and Oceans Science; Hydrography and Fisheries Management.

### **Planned Spending: Fleet Management**

	Forecast Spending 1997-98	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
(\$ millions)	125.6	<b>144.7</b>	146.2	146.3
Gross/Net Expenditures	125.6	<b>144.7</b>	146.2	146.3

### ***Key Plans and Strategies***

- ❑ Continue optimization of the fleet.
  - ⇒ Replace obsolete vessels for more cost-efficient and multitaskable ones and modification of existing vessels to suit new roles as programs require and funding allows.
  - ⇒ Decommission surplus vessels as scheduled in the fleet mix plan for 1998-99 and as dictated in the fleet capital plan.
  - ⇒ Develop Type 1000 replacement project statement of requirements.
  - ⇒ Develop Type 1100 conversion for icebreaking and ocean research roles.
- ❑ Focus on the DFO programs as clients and maximize the use of fleet assets through a client consultation process and a marketing plan.
  - ⇒ Implement technical and operating services marketing strategy by March 1999.
  - ⇒ Establish partnering and co-delivery atmosphere.
  - ⇒ Introduce fleet/program delivery planning process at headquarters and in the regions in 1998-99, to ensure client consultation and efficient delivery of fleet services to DFO programs.
- ❑ Introduce more efficient fleet management and maintenance processes to reduce the cost of fleet support.
  - ⇒ Develop and implement advanced maintenance techniques for vessels.
  - ⇒ Update Fleet Activity Information System — Version II by mid 1998-99 (including data-gathering requirement of all DFO programs and Windows-based interface for users).
  - ⇒ Develop and implement new Maintenance Information Management System.
  - ⇒ Develop and accept fleet capital investment planning process as an essential CCG ongoing process.
  - ⇒ Implement new vessel fleet scheduling and budget allocation process (Fleet Program Delivery Plan) before 1998-99.
  - ⇒ Secure support from headquarters steering committee for regional cost accounting initiatives (activity-based management).

- ⇒ Complete Phase II of the Maritime Fleet Management System by the end of 1998-99 (which provides for crew management, fleet operational planning and resource tracking).
- ⇒ Optimize the ship disposal process to achieve the highest possible proceeds, for reallocation in the CCG fleet.
- Rationalize facilities and shore-based support to the fleet.
  - ⇒ Recommend new level of facilities and shore-based support to recognize allocated Program Review savings.
  - ⇒ Identify and initiate required Program Review reductions by the regions.
  - ⇒ Recommend new level of support in 1998-99, to meet the needs of the new combined fleet and CCG programs.
- Implement the International Safety Management Code in the fleet followed by compliance with ISO 9002.
  - ⇒ Develop and implement a configuration management system.
  - ⇒ Conduct initial Safety Management Certificate Audits for five vessels by March 1999.
  - ⇒ Verify that all vessels above 500 gross registered tons are in compliance with ISM code by July 2002.
- Implement the technical and operational services business planning model, including a comprehensive business plan, business accords with clients and a performance management system.
  - ⇒ Integrate planning through the business planning process by the end of 1998-99.
  - ⇒ Improve client relations through the implementation of business accords by the end of 1998-99.
  - ⇒ Produce one year of baseline performance data from the performance management system by the end of 1998-99.

### ***Expected Results***

- Access to appropriate, cost-efficient and program-effective sea and air assets for the delivery of marine program activities.
- Provision of appropriate, cost-effective ship and aircraft services, which ensures delivery of marine program activities.

### ***Policy and Internal Services***

#### ***Objective***

The objective of this business line is to support the business lines outlined above. The Department will maintain the infrastructure and service base required to provide staff with the information, technology and support needed to achieve the DFO vision and mission, in Canada and abroad, in a timely and cost-effective manner.

## Planned Spending: Policy and Internal Services

(\$ millions)	Forecast Spending 1997-98	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01
Gross Expenditures	169.5	<b>165.8</b>	159.6	149.8
Revenue Credited to the Vote	0.8	<b>2.3</b>	2.2	2.2
Net Expenditures	168.7	<b>163.5</b>	157.4	147.6

### External Factors

DFO's internal operating context remains affected by Program Review as employees and managers complete the adjustment process after the departure of employees and budget reductions. Recruitment of new staff and organizational health and development initiatives for existing staff are continuing under the aegis of the government-wide work force renewal initiative, *La Relève*.

Modernization of comptrollership and the implementation of the government-wide Financial Information Strategy, including accrual accounting will require changes in how the Department manages resources and in the support required from Finance and Administration.

The business line is supporting management of the Year 2000 issue for the Department. This work is placing an additional heavy, but critical, workload on staff department-wide. Plans are in place to manage Year 2000 activities based on priorities, with the objective of having the Department ready for the century changeover by the middle of 1999.

The business line operates in a milieu of minimal resources and high public expectations generated by downturns in coastal fisheries, high unemployment and increased media scrutiny.

### Key Plans and Strategies

- Implement the *Oceans Act* by developing an Oceans Strategy, led by Policy. Prepare recommendations for the Minister after public consultations.
- Develop legislative and regulatory changes, through Policy, to support DFO's new structure, mandate and vision, including proposals to reintroduce amendments to the *Fisheries Act*, amend the *Navigable Waters Protection Act*, put forward new Ministerial Orders for Marine Service Fees and St. Lawrence Dredging Fees, and rewritten Atlantic Fisheries Regulations.
- Pursuing the liberalization of Canadian export markets for fish products by leading the Asia Pacific Economic Cooperation fish products trade liberalization initiative, by promoting a fisheries trade negotiation round at the World Trade Organization (WTO), and by supporting the Canadian WTO challenge against Australia on its ban on imports of uncooked salmon.
- Negotiate new capacity and institutional arrangements for Pacific Salmon, and implement the next steps in discussions with provinces about Federal and Provincial roles and

responsibilities. In particular, resolve irritants between Canada-Ontario (habitat, sea lamprey, Aboriginal compensation) and Canada-British Columbia (fisheries management).

- Develop and implement a human resources performance measurement framework on both qualitative and quantitative bases by measuring adherence to service standards and client satisfaction.
- Implement *La Relève* initiatives including managing the existing executive bridging and mentoring programs, recruiting 61 strategically positioned new staff, implementing human resources plans for key occupational groups and functional communities, implementing the employee recognition program, and delivering the management development continuum and the diversity management and respectful workplace awareness initiatives.
- Participate in other government-wide human resources undertakings including negotiating collective agreements, implementing the Universal Classification System, and developing departmental official languages and employment equity plans.
- Continue to improve the human resources information system (PeopleSoft) by implementing Workflow capability and an interface with Public Works and Government Services Canada's On-Line Pay.
- Update the Department's long-term strategic plan to deal with outstanding funding issues and emerging priorities. This will include a long-term capital plan, which will provide direction for the Department's capital investment for the next three to five years.
- Rationalize the Department's real property holdings.
- Implement the departmental Year 2000 recovery plan, which manages the problem by identifying and prioritizing the main functions of the Department and resourcing the recovery effort based on these priorities.
- Implement system enhancements in the areas of departmental planning, activity costing and real property that support more informed decision making.
- Address the government's Financial Information Strategy and the recently completed report on modernization of comptrollership to identify opportunities to improve departmental decision making and resource management.
- Develop and implement, within approved budgets, a Strategic Informatics Management Framework that will ensure that life-cycle management principles are applied to all DFO's (information, hardware, and software) assets.
- Enhance DFO's presence on the Internet to improve our service to the public and stakeholders.



- Strive toward providing a consistent tool set to all DFO employees irrespective of where they work (Ottawa vs. remote locations) and how they work (in the office, on the road, on a ship).
- Manage human resources in the information technology field in a downsizing environment and in competition with the private sector for acquiring and retaining the best resources.

### ***Expected Results***

- A department fully supported by policy, communications and corporate services including finance, human resources and information management, based on quality service delivery, appropriate infrastructure and functional expertise.
- From the Oceans Strategy, a framework of principles and guidelines for decision making regarding Canada's ocean resources.
- From legislative changes, the management tools necessary to support a sustainable and viable fishery. Also, increased stakeholder involvement in decision making and the means for more effective enforcement. Modernized legislation will better reflect new ways of doing business, and will provide a greater role for provinces and territories.
- From the trade policy work, a fish products free trade agreement for the APEC region and success in forcing Australia to lift its ban on salmon imports.
- From federal-provincial policy activities, a more transparent federal-provincial consultative process, which should foster resolution of the principal irritants.
- Optimal use of available financial and human resources through the quality and timeliness of information and advice to managers for informed decision making on resource allocation, capital investment, and goods and services procurement.
- Client satisfaction relative to established service standards will be assessed through client surveys and other feedback mechanisms.
- Mission-critical date-sensitive assets and systems supporting DFO's main business functions have their coding corrected before 2000 to provide continuous and seamless services to clients beyond 2000.
- From an information management perspective, DFO's information is adequately collected, shared, protected, stored and disposed; that the applications developed to support DFO's business fully take advantage of the available technological opportunities; and a secure, reliable and responsive technology infrastructure is available to DFO staff to deliver the departmental mission.

## IV Supplementary Information

### A. Spending Authorities

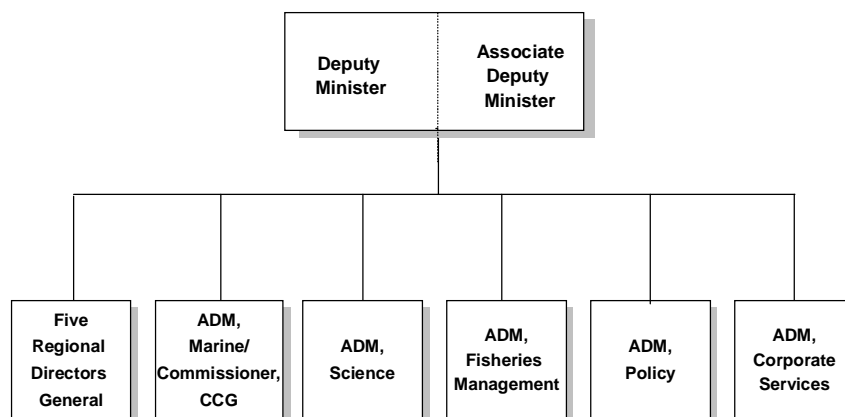
Authorities for 1998-99 — Part II of the Estimates

#### Financial Requirements by Authority

Vote	(\$ millions)	Main Estimates	
		1998-99	1997-98
1	Operating Expenditures	793.7	845.5
5	Capital Expenditures	127.5	113.3
10	Grants and Contributions	41.6	41.1
(S)	Minister of Fisheries and Oceans — Salary and Motor Car Allowance	—	—
(S)	Liabilities under the <i>Fisheries Improvement Loans Act</i>	0.2	0.2
(S)	Contributions to Employee Benefit Plans	88.8	76.6
Total Main Estimates		1,051.8	1,076.7

## B. Personnel Information

### Organization Chart



### Responsibility for Planned Spending by Business Line, 1998-99

(in millions of dollars)

Business Line	Accountability					Total
	ADM, Marine/Commissioner, CCG	ADM, Science	ADM, Fisheries Management	ADM, Policy	Executive and Corporate Services	
Marine Navigation Services	92.5	—	—	—	—	92.5
Marine Communications and Traffic Services	73.5	—	—	—	—	73.5
Icebreaking Operations	28.1	—	—	—	—	28.1
Rescue, Safety and Environmental Response	111.6	—	—	—	—	111.6
Fisheries and Oceans Science	—	118.0	—	—	—	118.0
Habitat Management and Environmental Science	—	46.8	—	—	—	46.8
Hydrography	—	26.0	—	—	—	26.0
Fisheries Management	—	—	203.2	11.8	—	215.0
Harbours	—	—	—	—	54.7	54.7
Fleet Management	144.7	—	—	—	—	144.7
Policy and Internal Services	—	—	—	14.8	148.7	163.5
<b>Total</b>	450.4	190.8	203.2	26.6	203.4	1,074.4

***Planned Full-time Equivalent (FTEs) by Business Line***

Business Line	Forecast 1997-98	Planned <b>1998-99</b>	Planned 1999-00	Planned 2000-01
Marine Navigation Services	1,281	<b>1,055</b>	1,048	1,048
Marine Communications and Traffic Services	630	<b>748</b>	744	744
Icebreaking Operations	444	<b>437</b>	434	434
Rescue, Safety and Environmental Response	1,288	<b>1,141</b>	1,134	1,134
Fisheries and Oceans Science	1,165	<b>1,146</b>	1,136	1,136
Habitat Management and Environmental Science	442	<b>446</b>	435	435
Hydrography	341	<b>324</b>	324	324
Fisheries Management	1,423	<b>1,367</b>	1,382	1,382
Harbours	88	<b>87</b>	86	86
Fleet Management	364	<b>564</b>	564	564
Policy and Internal Services	1,315	<b>1,254</b>	1,272	1,272
<b>Total</b>	8,781	<b>8,569</b>	8,559	8,559

## C. Capital Projects Information

### Capital Spending by Business Line

(\$ millions)	Forecast Spending 1997-98	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
Business Line				
Marine Navigation Services	21.4	<b>22.0</b>	22.3	22.3
Marine Communications and Traffic Services	10.9	<b>11.7</b>	11.8	11.8
Icebreaking Operations	—	—	—	—
Rescue, Safety and Environmental Response	—	—	—	—
Fisheries and Oceans Science	—	—	—	—
Habitat Management and Environmental Science	—	—	—	—
Hydrography	—	—	—	—
Fisheries Management	—	—	—	—
Harbours	11.6	<b>12.7</b>	12.3	12.3
Fleet Management	62.5	<b>66.4</b>	67.2	67.2
Policy and Internal Services	8.3	<b>14.7</b>	15.5	15.5
<b>Total</b>	114.7	<b>127.5</b>	129.1	129.1

The following table shows the details of approved capital projects with an estimated total cost of \$1 million or more, as well as all projects listed in previous Estimates as having future years' requirements. Projects are listed by activity, province and location; in addition, class of estimate and approval status are indicated for each project. The following definitions apply:

- Substantive Estimate (S):** This estimate is of sufficiently high quality and reliability to warrant Treasury Board approval as a cost objective for the project phase under consideration. It is based on detailed system and component design and takes into account all project objectives and deliverables. It replaces the classes of estimates formerly referred to as Class A or B.
- Indicative Estimate (I):** This is a low-quality, order-of-magnitude estimate that is not sufficiently accurate to warrant Treasury Board approval as a cost objective. It replaces the classes of estimates formerly referred to as Class C or D.
- Preliminary Project Approval (PPA):** This is Treasury Board's authority to initiate a project in terms of its intended operational requirement, including approval of the objectives of the project definition phase and any associated expenditures. Sponsoring departments submit for PPA when the project's complete scope has been examined and costed, normally to the indicative level, and when the cost of the project definition phase has been estimated to the substantive level.
- Effective Project Approval (EPA):** This is Treasury Board's approval of the objectives (project baseline), including the cost objective, of the project implementation phase and provides the necessary authority to proceed with implementation. Sponsoring departments submit for EPA when the scope of the overall project has been defined and when the estimates have been refined to the substantive level.

**Departmental Authority (DA):** Effective project authority is delegated to the Department up to and including \$11.3 million.

**Environment (ENV):** These projects are environment-related.

### List of Capital Projects over \$1,000,000 by Business Line

(in millions of dollars)

Business Line/ Province/ Project Description	Currently Estimated Total Cost	Forecast Spending to March 31, 1998	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01	Future Years' Requirements
<b>MARINE NAVIGATION SERVICES</b>						
<i>Nova Scotia</i>						
Restoration of Lock Gates — Canso Canal (S-DA)	5.4	0.4	2.5	2.5	—	—
<i>New Brunswick</i>						
Urgent Repair of Brickwork — Saint John (S-DA)	2.6	0.8	0.9	0.9	—	—
<i>Prince Edward Island</i>						
New Helicopter Hangar — Charlottetown (S-DA)	1.2	1.2	—	—	—	—
<i>Quebec</i>						
Relocation of Air-Cushioned Vehicles — Trois-Rivières (S-DA)	3.8	3.8	—	—	—	—
Resurfacing of Roof — Québec (S-DA)	1.9	1.9	—	—	—	—
Construction of Ice Control Centres — Lac St-Pierre (S-DA) (ENV)	1.9	1.9	—	—	—	—
<i>Ontario</i>						
Southeast Bend Dredging — Lake St. Clair (S-DA) (ENV)	1.9	1.9	—	—	—	—
<i>British Columbia</i>						
Paint and Grit Blast — Victoria Facility (S-DA)	3.1	1.1	2.0	—	—	—
Construction of Hovercraft Hangar and Apron — Sea Island Base (S-DA)	3.3	1.0	2.2	0.1	—	—
<i>Multi-province</i>						
Differential GPS Navigation Service Network (S-DA)	7.0	7.0	—	—	—	—
Solarization of Seasonal Buoys (S-DA)	3.5	2.9	0.6	—	—	—
National Telecommunications Network Optimization (S-DA)	3.1	3.1	—	—	—	—
Aids Inventory and Maintenance Management System (S-DA)	1.9	1.8	0.1	—	—	—
Implementation of Five-year Buoy Initiative (S-DA)	2.9	1.1	0.6	0.6	0.6	—
Lightstation Services Project — Technological Systems Demonstration (S-DA)	2.2	2.2	—	—	—	—
Marine Aids Modernization (Phase I) (S-DA)	9.4	3.3	2.9	1.7	1.5	—
Lightstation Services Project — Phase 2 (S-DA)	3.2	3.2	—	—	—	—

(in millions of dollars)

Business Line/ Province/ Project Description	Currently Estimated Total Cost	Forecast Spending to March 31, 1998	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01	Future Years' Requirements
<b>MARINE COMMUNICATIONS AND TRAFFIC SERVICES</b>						
<b>Quebec</b>						
Vessel Traffic Information System — Québec (S-DA)	7.4	6.7	0.7	—	—	—
<b>British Columbia</b>						
Relocation of the Vancouver Marine Communications and Traffic Services Centre (S-DA)	5.4	2.0	3.4	—	—	—
Microwave Replacement — West Vancouver Island (S-DA)	1.3	0.7	0.6	—	—	—
<b>Multi-province</b>						
Integration of Marine Communications and Traffic Services (S-DA)	10.4	8.9	1.5	—	—	—
Computer-based Training for Marine Communications and Traffic Services (S-DA)	1.3	1.0	0.3	—	—	—
Information System on Marine Navigation (INNAV) — National (S-DA)	3.5	0.5	2.5	0.5	—	—
<b>HARBOURS</b>						
<b>Newfoundland</b>						
Port de Grave — Harbour Redevelopment (S-DA)	5.9	3.4	1.5	1.0	—	—
Garnish — Wharf Reconstruction (S-DA)	1.1	1.1	—	—	—	—
Bay de Verde — Breakwater Extension (I-DA)	2.0	—	0.8	1.2	—	—
<b>Quebec</b>						
Neuville Breakwater Construction (S-DA)	1.1	0.9	0.2	—	—	—
St-Godefroi Wharf Reconstruction (S-DA)	1.4	1.0	0.4	—	—	—
<b>FLEET MANAGEMENT</b>						
<b>Newfoundland</b>						
CCGS <i>Teleost</i> — Refit (S-DA)	1.2	1.2	—	—	—	—
<b>New Brunswick</b>						
CCGS <i>Louis S. St-Laurent</i> — Replacement of Propellers (S-DA)	2.0	0.4	1.6	—	—	—
CCGS <i>Cygnus</i> — Refit (S-DA)	10.2	4.0	6.2	—	—	—
CCGS <i>Sir William Alexander</i> — Crane Replacement (S-DA)	1.5	0.8	0.7	—	—	—
<b>Quebec</b>						
Fleet Data Integration — Québec (S-DA)	2.3	1.8	0.5	—	—	—
<b>British Columbia</b>						
CCGS <i>Bartlett</i> — Capital Refit (S-DA)	3.9	—	3.9	—	—	—

(in millions of dollars)

Business Line/ Province/ Project Description	Currently Estimated Total Cost	Forecast Spending to March 31, 1998	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01	Future Years' Requirements
<b>Headquarters</b>						
Fleet Restructuring — Two Air- Cushioned Vehicles (S-EPA)	28.6	27.4	1.2	—	—	—
CCGS <i>Pierre Radisson</i> — Vessel Upgrade (S-DA)	3.8	3.8	—	—	—	—
LAN Renewal (S-DA)	1.3	1.0	0.3	—	—	—
<b>Multi-province</b>						
Expand Flag/Datahail System (S-DA)	2.5	2.3	0.2	—	—	—
Communications Security Equipment (S-DA)	2.7	0.6	1.2	0.9	—	—
Chart-based Navigation Display System (S-DA)	5.9	4.0	1.3	0.6	—	—
Search-and-Rescue Lifeboat Replacement (S-EPA)	46.3	22.8	6.0	17.5	—	—
Maintenance Management Information (S-DA)	7.9	0.3	6.9	0.7	—	—
Electronic Navigation Charts (S-DA)	2.7	0.7	1.0	1.0	—	—
<b>POLICY AND INTERNAL SERVICES</b>						
<b>Newfoundland</b>						
Northwest Atlantic Fisheries Centre — New High-voltage Distribution System (I-PPA)	1.3	1.3	—	—	—	—
Northwest Atlantic Fisheries Centre — Roof Replacement (S-DA)	1.5	1.1	0.2	0.2	—	—
Southside CCG Base — Wharf Upgrading (I-PPA)	6.7	—	0.2	4.8	1.7	—
<b>Nova Scotia</b>						
Bedford Institute of Oceanography — Fish Lab Renovations (S-DA)	3.2	3.2	—	—	—	—
Bedford Institute of Oceanography — Mould Remediation (I-PPA) (ENV)	2.5	2.5	—	—	—	—
Bedford Institute of Oceanography — Water Supply Upgrade (I-PPA)	3.1	1.0	2.1	—	—	—
Bedford Institute of Oceanography — <i>Labour Code</i> Compliance (I-PPA)	1.8	0.3	0.3	0.3	0.3	0.6
Bedford Institute of Oceanography — Strickland Level II Labs (I-PPA)	2.0	—	0.2	0.4	1.4	—
Bedford Institute of Oceanography — Renovation of Vulcan Building (I-PPA)	4.4	—	0.8	2.0	1.6	—
Bedford Institute of Oceanography — North Wing Level II Labs (I-PPA)	4.7	0.2	1.5	3.0	—	—
Bedford Institute of Oceanography — Fume Hood and Ventilation Repairs (I-PPA)	1.0	—	1.0	—	—	—
Bedford Institute of Oceanography — New Salt Water Supply (I-PPA)	1.1	0.1	0.5	0.5	—	—
Yarmouth Fisheries Building — Revitalization (I-PPA)	1.6	—	0.5	0.5	0.2	0.4
Dartmouth Coast Guard Base — Buoy Building Replacement (I-PPA)	3.9	—	0.1	3.8	—	—
<b>New Brunswick</b>						
Gulf Fisheries Centre — Upgrade (I-PPA)	2.8	0.6	0.7	0.6	0.4	0.5



(in millions of dollars)

Business Line/ Province/ Project Description	Currently Estimated Total Cost	Forecast Spending to March 31, 1998	Planned Spending 1998-99	Planned Spending 1999-00	Planned Spending 2000-01	Future Years' Requirements
<b>Gulf Fisheries Centre — Interior Modifications (I-PPA)</b>	2.5	—	<b>0.3</b>	2.0	0.2	—
St. Andrews Biological Station — Short-term Plan (S-DA)	4.1	2.2	<b>1.9</b>	—	—	—
St. Andrews Biological Station — Long-term Plan (S-DA)	5.5	—	<b>0.5</b>	1.0	2.5	1.5
St. Andrews Biological Station — Salt- and Fresh-Water Supply (S- DA)	1.3	1.3	—	—	—	—
St. Andrews Biological Station — Electrical Upgrade (I-PPA)	1.5	1.0	<b>0.5</b>	—	—	—
St. Andrews Biological Station — Salt- Water Filtration System (I-PPA)	1.0	—	<b>0.2</b>	0.8	—	—
<b>Quebec</b>						
Maurice Lamontagne Institute — Roof and Skylight Repairs (S-DA)	1.6	0.7	<b>0.9</b>	—	—	—
Québec CCG Base — Wharf Repairs (I-PPA)	1.8	—	<b>0.2</b>	1.6	—	—
<b>Ontario</b>						
Experimental Lakes Area — Lab Reconstruction (I-PPA)	1.8	0.2	<b>0.7</b>	0.1	0.8	—
Prescott CCG Base — Wharf Repairs (I-PPA)	4.9	—	<b>0.2</b>	4.7	—	—
<b>Manitoba</b>						
Freshwater Institute — CFC Removal (S-DA) (ENV)	1.3	0.8	<b>0.3</b>	0.2	—	—
<b>British Columbia</b>						
Institute of Ocean Science — Wharf Repairs (I-PPA)	1.9	0.2	<b>0.1</b>	0.8	0.8	—
Institute of Ocean Science — Roofing Mid-Life Replacement (I-PPA)	2.1	0.4	<b>0.4</b>	0.3	0.4	0.6
Pacific Biological Station — Taylor Clemens Building Refit (I-PPA)	2.1	0.6	<b>0.1</b>	0.6	0.6	0.2
Pacific Biological Station — 600-volt Upgrade (I-PPA)	1.0	0.3	<b>0.2</b>	0.5	—	—
<b>Headquarters</b>						
Move CCG to Centennial Towers (I-PPA)	1.2	—	<b>1.2</b>	—	—	—

## D. Additional Financial Information

### *Departmental Summary of Standard Objects of Expenditure*

(\$ millions)	Forecast Spending 1997-98	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
Personnel				
Salaries and Wages	460.7	<b>419.7</b>	420.1	420.1
Contributions to Employee Benefit Plans	76.6	<b>88.8</b>	89.0	89.0
Other Personnel Costs	3.4	<b>3.8</b>	4.2	4.2
<b>Total Personnel</b>	<b>540.7</b>	<b>512.3</b>	<b>513.3</b>	<b>513.3</b>
Goods and Services				
Transportation and Communications	61.2	<b>55.5</b>	53.9	51.9
Information	8.6	<b>8.8</b>	8.6	8.2
Professional and Special Services	147.3	<b>152.9</b>	131.5	126.4
Rentals	31.0	<b>31.3</b>	30.4	29.3
Purchased Repairs and Maintenance	81.2	<b>70.6</b>	68.7	66.2
Utilities, Materials and Supplies	94.1	<b>79.9</b>	77.7	74.8
Other Subsidies and Payments	8.5	<b>7.6</b>	7.5	7.5
Minor Capital	64.8	<b>48.2</b>	47.6	47.6
<b>Total Goods and Services</b>	<b>496.7</b>	<b>454.8</b>	<b>425.9</b>	<b>411.9</b>
<b>Total Operating</b>	<b>1,037.4</b>	<b>967.1</b>	<b>939.2</b>	<b>925.2</b>
Capital	102.2	<b>114.4</b>	115.8	115.8
<b>Total Transfer Payments</b>	<b>54.4</b>	<b>47.6</b>	<b>43.9</b>	<b>42.4</b>
<b>Gross Expenditures</b>	<b>1,194.0</b>	<b>1,129.1</b>	<b>1,098.9</b>	<b>1,083.4</b>
Less: Revenue Credited to the Vote	38.1	<b>54.7</b>	54.1	54.1
<b>Net Budgetary Expenditures</b>	<b>1,155.9</b>	<b>1,074.4</b>	<b>1,044.8</b>	<b>1,029.3</b>

## ***Details of Planned Expenditures by Business Line for 1998-99***

(in millions of dollars)

<b>Business Line</b>	FTEs	Budgetary					Statu- tory Items*	Gross Planned Spending	Less: Revenue Credited to the Vote	Total Planned Spending
		Oper- ating	Capital	Grants and Contri- butions	Gross Voted					
Marine Navigation Services	1,055	98.7	22.0	—	120.7	—	120.7	28.2	92.5	
Marine Communications and Traffic Services	748	62.3	11.7	—	74.0	—	74.0	0.5	73.5	
Icebreaking Operations	437	51.7	—	—	51.7	—	51.7	23.6	28.1	
Rescue, Safety and Environmental Response	1,141	108.5	—	3.2	111.7	—	111.7	0.1	111.6	
Fisheries and Oceans Science	1,146	117.0	—	1.0	118.0	—	118.0	—	118.0	
Habitat Management and Environmental Science	446	46.8	—	—	46.8	—	46.8	—	46.8	
Hydrography	324	26.0	—	—	26.0	—	26.0	—	26.0	
Fisheries Management	1,367	172.0	—	42.8	214.8	0.2	215.0	—	215.0	
Harbours	87	42.0	12.7	—	54.7	—	54.7	—	54.7	
Fleet Management	564	78.3	66.4	—	144.7	—	144.7	—	144.7	
Policy and Internal Services	1,254	150.7	14.7	0.4	165.8	—	165.8	2.3	163.5	
<b>Total</b>	<b>8,569</b>	<b>954.0</b>	<b>127.5</b>	<b>47.4</b>	<b>1,128.9</b>	<b>0.2</b>	<b>1,129.1</b>	<b>54.7</b>	<b>1,074.4</b>	

\* Excludes contributions to employee benefit plans and Minister's allowance, which are allocated to operating expenditures.

## ***Details of Transfer Payments by Business Line***

(in millions of dollars)	Planned Spending 1997-98	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
<b>Grants</b>				
<b>Policy and Internal Services</b>				
Grants to support organizations associated with research, development, management, and promotion of fisheries and oceans-related issues	0.2	<b>0.2</b>	0.2	0.2
<b>Total Grants</b>	<b>0.2</b>	<b>0.2</b>	0.2	0.2
<b>Contributions</b>				
<b>Rescue, Safety and Environmental Response</b>				
Contribution to the Canadian Coast Guard Auxiliary for the provision of voluntary search-and-rescue services and the promotion of boating safety through accident prevention and education	2.5	<b>3.0</b>	3.5	4.0
Contribution to the Canadian Red Cross Society in respect of its boating safety program	0.2	<b>0.2</b>	0.2	0.2
<b>Fisheries and Oceans Science</b>				
Contribution to the Youth Employment Initiative	0.7	<b>1.0</b>	—	—
<b>Habitat Management and Environmental Science</b>				
Contribution to the Youth Employment Initiative	0.3	—	—	—
<b>Fisheries Management</b>				
Contributions for early retirement benefits to older fish processing plant workers, trawlermen and fishermen whose livelihood was adversely affected by the moratorium of the northern cod fishery	9.0	<b>7.8</b>	6.1	4.6
Contribution under the Canada-Newfoundland Cooperation Agreement for Fishing Industry Development	1.0	—	—	—
Contribution to the Pacific Salmon Foundation	1.0	<b>1.0</b>	1.0	1.0
Contributions under the Inuvialuit Final Agreement for the protection of wildlife harvesting, land ownership, resource management and economic and social development	0.4	<b>0.4</b>	—	—
Contributions to older groundfish fishermen who meet model Terms and Conditions for the Early Retirement Program of The Atlantic Groundfish Strategy	2.3	<b>3.8</b>	2.9	2.6

(in millions of dollars)	Planned Spending 1997-98	<b>Planned Spending 1998-99</b>	Planned Spending 1999-00	Planned Spending 2000-01
Contribution to the Salmon Sub-Committee of the Yukon Fish and Wildlife Management Board for implementing responsibilities pursuant to Comprehensive Land Claim Settlements	0.2	<b>0.2</b>	0.2	0.2
Contributions to support increased Native participation commercial fisheries, cooperative fisheries management arrangements and consultations respecting Aboriginal fisheries agreements	24.2	<b>29.2</b>	29.2	29.2
Contribution to the Canadian Sealing Industry	0.7	<b>0.4</b>	0.2	—
Payments to Pacific Salmon Commercial Licence Holders for Gear Rendered Obsolete by Licensing Policy changes	5.9	—	—	—
Payments to the Community Futures Development Corporation of Central Island for a Pacific Salmon Commercial Licence Facilitated Access to Credit Program	5.0	—	—	—
Contributions under the Southern Labrador Commercial Salmon Retirement Program	0.4	—	—	—
(S) Liabilities under the <i>Fisheries Improvement Loans Act</i>	0.2	<b>0.2</b>	0.2	0.2
<b>Policy and Internal Services</b>				
Contributions to support organizations associated with research, development, management, and promotion of fisheries and oceans-related issues	0.2	<b>0.2</b>	0.2	0.2
<b>Total Contributions</b>	<b>54.2</b>	<b>47.4</b>	43.7	42.2
<b>Total</b>	<b>54.4</b>	<b>47.6</b>	43.9	42.4

## Details of Revenue by Business Line

(\$ millions)	Forecast Revenue 1997-98*	Planned Revenue 1998-99	Planned Revenue 1999-00	Planned Revenue 2000-01
<b>Revenue Credited to the Vote</b>				
<i>Marine Navigation Services</i>				
Marine Services Fees	26.6	<b>26.6</b>	26.6	26.6
Federal-Provincial Partnerships	—	<b>1.0</b>	1.0	1.0
Employee Deductions for Employee Housing	0.5	<b>0.5</b>	0.5	0.5
Prescott Shop Operations	0.1	<b>0.1</b>	0.1	0.1
	<u>27.2</u>	<u><b>28.2</b></u>	<u>28.2</u>	<u>28.2</u>
<i>Marine Communications and Traffic Services</i>				
Coast Guard Radio Tolls	0.7	<b>0.5</b>	0.3	0.3
<i>Icebreaking Operations</i>				
Eastern Arctic Sealift	9.0	<b>9.0</b>	9.0	9.0
Resupply at Pelly Bay for Government of the Northwest Territories	0.3	<b>0.3</b>	0.0	0.0
Marine Services Fees	—	<b>14.3</b>	14.3	14.3
	<u>9.3</u>	<u><b>23.6</b></u>	<u>23.3</u>	<u>23.3</u>
<i>Rescue, Safety and Environmental Response</i>				
Small Vessels Regulations for Capacity Plates and Construction Decals	0.1	<b>0.1</b>	0.1	0.1
<i>Policy and Internal Services</i>				
Canadian Coast Guard College	0.8	<b>2.3</b>	2.2	2.2
<b>Total Credited to the Vote</b>	<u>38.1</u>	<u><b>54.7</b></u>	<u>54.1</u>	<u>54.1</u>
<b>Revenue Credited to the Consolidated Revenue Fund (CRF)</b>				
<i>Marine Navigation Services</i>				
Aids to Navigation Services in the Deep Water Channel between Montreal and Lake Erie	0.6	<b>0.6</b>	0.6	0.6
<i>Fisheries and Oceans Science</i>				
Lab Tests and Analyses	—	<b>0.1</b>	0.1	0.1
Sale of Fish and Eggs	—	<b>0.3</b>	—	—
Technology Transfer Licences	0.1	<b>0.1</b>	0.1	0.1
	<u>0.1</u>	<u><b>0.5</b></u>	<u>0.2</u>	<u>0.2</u>
<i>Hydrography</i>				
Sale of Charts and Publications	2.2	<b>2.8</b>	2.8	2.8
<i>Fisheries Management</i>				
Commercial Licences	27.0	<b>28.0</b>	28.6	28.6
Individual Vessel Quotas	11.5	<b>12.5</b>	12.5	12.5
Foreign Licences	0.2	<b>0.2</b>	0.2	0.2
Sportfish Licences	8.0	<b>8.0</b>	8.0	8.0
Conservation Stamps	1.9	<b>1.9</b>	1.9	1.9
Sale of Fish and Eggs	0.4	—	—	—
Rental of Land, Buildings and Equipment	0.1	<b>0.1</b>	0.1	0.1
	<u>49.1</u>	<u><b>50.7</b></u>	<u>51.3</u>	<u>51.3</u>
<i>Harbours</i>				
Small Craft Harbour Revenue	1.8	<b>2.0</b>	1.6	1.1
<i>Policy and Internal Services</i>				
Rental of Land, Buildings and Equipment	0.2	<b>0.2</b>	0.2	0.2
<b>Total Credited to the CRF</b>	<u>54.0</u>	<u><b>56.8</b></u>	<u>56.7</u>	<u>56.2</u>
<b>Total Revenue</b>	<u>92.1</u>	<u><b>111.5</b></u>	<u>110.8</u>	<u>110.3</u>

\* Excludes \$4.8 million in CRF revenues transferred to the Canadian Food Inspection Agency effective April 1, 1997.

## ***Net Cost of Program for 1998-99***

(\$ millions)	<b>Total</b>
Gross Planned Spending	1,129.1
Plus:	
<i>Services Received without Charge</i>	
Accommodation Provided by Public Works and Government Services Canada	26.7
Contribution Covering Employees' Share of Insurance Premiums and Costs Paid by Treasury Board Secretariat	27.9
Workers' Compensation Coverage Provided by Human Resources Development Canada	1.9
Salary and Associated Costs of Legal Services Provided by Justice Canada	0.6
Transport Canada	0.1
	<u>57.2</u>
Total Cost of Program	1,186.3
Less:	
Revenue Credited to the Vote	54.7
Revenue Credited to the Consolidated Revenue Fund	56.8
	<u>111.5</u>
1998-99 Estimated Net Cost of Program	<u>1,074.8</u>
1997-98 Estimated Net Program Cost	1,098.9

## **E. Other Information**

### **Statutes, Regulations and Orders Currently in Force**

#### **Statutes**

<i>Atlantic Fisheries Restructuring Act</i>	<i>R.S. 1985, c. A-14</i>
<i>Canada Shipping Act*</i>	<i>R.S. 1985, c. S-9</i>
<i>Coastal Fisheries Protection Act</i>	<i>R.S. 1985, c. C-33</i>
<i>Department of Fisheries and Oceans Act</i>	<i>R.S. 1985, c. C-15</i>
<i>Fisheries Act</i>	<i>R.S. 1985, c. C-14</i>
<i>Fisheries Development Act</i>	<i>R.S. 1985, c. F-21</i>
<i>Fisheries Improvement Loans Act</i>	<i>R.S. 1985, c. F-22</i>
<i>Fisheries Prices Support Act</i>	<i>R.S. 1985, c. F-23</i>
<i>Fishing and Recreational Harbours Act</i>	<i>R.S. 1985, c. F-24</i>
<i>Freshwater Fish Marketing Act</i>	<i>R.S. 1985, c. F-13</i>
<i>Great Lakes Fisheries Convention Act</i>	<i>R.S. 1985, c. F-17</i>
<i>Navigable Waters Protection Act</i>	<i>R.S. 1985, c. N-22</i>
<i>Oceans Act</i>	<i>S.C. 1996, c. 1</i>

\* The Minister of Fisheries and Oceans shares responsibility to Parliament with the Minister of Transport.

#### **Regulations and Orders**

<i>Aboriginal Communal Fishing Licences Regulations</i>
<i>Alberta Fishery Regulations</i>
<i>Atlantic Fishery Regulations, 1985</i>
<i>Bait Services Fee Order</i>
<i>Boating Restriction Regulations</i>
<i>British Columbia Sport Fishing Regulations, 1996</i>
<i>Coastal Fisheries Protection Regulations</i>
<i>Dredging Fees</i>
<i>Fish Health Protection Regulations</i>
<i>Fish Toxicant Regulations</i>
<i>Fishery (General) Regulations</i>
<i>Fishing and Recreational Harbours Regulations</i>
<i>Fishing Zones of Canada (Zones 1, 2, and 3) Order</i>
<i>Fishing Zones of Canada (Zones 4 and 5) Order</i>



*Fishing Zones of Canada (Zone 6) Order*  
*Foreign Vessel Fishing Regulations*  
*Management of Contaminated Fisheries Regulations*  
*Manitoba Fishery Regulations, 1987*  
*Marine Mammal Regulations*  
*Marine Navigation Services Fees*  
*Maritime Provinces Fishery Regulations*  
*Nautical Charts and Related Publications Fees Order*  
*Newfoundland Fishery Regulations*  
*Northwest Territories Fishery Regulations*  
*Oceans Data and Services Fees Order, 1993*  
*Ontario Fishery Regulations, 1989*  
*Pacific Fishery Management Area Regulations*  
*Pacific Fishery Regulations, 1993*  
*Pleasure Craft Sewage Pollution Prevention Regulations*  
*Private Buoys Regulations*  
*Quebec Fishery Regulations, 1990*  
*Small Vessel Regulations*  
*Yukon Territory Fisheries Regulations*

## Proposed Regulations

Proposed Regulation	Expected Date of Enactment
<i>British Columbia Sport Fishing Regulations</i> — Miscellaneous amendments respecting shrimp, halibut and salmon.	April 1998
<i>British Columbia Sport Fishing Regulations</i> — Amendment to provide tidal waters fishing licence for people with disabilities; define measurement criteria for lingcod; and make possession of illegally caught fish a ticketable offence.	March 1999
<i>Pacific Fishery Regulations, 1993</i> — Amendments to: <ul style="list-style-type: none"> <li>• make greater use of licence conditions for fisheries management;</li> <li>• rationalize rules for live fish importation;</li> <li>• regulate tagging of clams during transportation;</li> <li>• amend close times for certain species;</li> <li>• prohibit certain gear prior to halibut fishery opening;</li> <li>• make miscellaneous amendments to gear in shellfish fishery;</li> <li>• modify Category “C” licence for allowable species and gear;</li> <li>• update licence fees for geoduck, sablefish and halibut;</li> <li>• increase fee for prawn trap and shrimp trawl licences;</li> <li>• establish new licence categories for eulachon and clams; and</li> <li>• establish three-year licence fee review.</li> </ul>	January 1999
<i>Fishery (General) Regulations</i> — Amendments respecting certification of companies and monitors involved in dockside monitoring program.	May 1998
<i>Fishery (General) Regulations</i> — Various administrative amendments, including the delegation of authorities for making variation orders to fisheries management directors.	January 1999
<i>Atlantic Fishery Regulations, 1985*</i> — Rewriting and streamlining regulations to introduce a more flexible resource management system and a three-year licence fee review.	January 1999
<i>Marine Mammal Regulations*</i> — Review of sealing regulations.	Future initiative
Miscellaneous amendments to provincial and territorial fishing regulations, including rewrites of Yukon Territory Fishery Regulations and Newfoundland Fishery Regulations.	April 1998 through April 1999
<i>Pleasure Craft Sewage Pollution Prevention Regulations</i> — Amendment to list of sites for designation under regulations	January 1999
<i>Small Vessel Regulations*</i> — Safety equipment requirements and plate requirements.	April 1998/December 1998
<i>Small Vessel Regulations*</i> — Improvement of licensing system for identification of small vessels and owners.	Future initiative
<i>Small Vessel Regulations*</i> — Improvement of recreational boat operation safety through operator education.	Future initiative
<i>Chemical-spill Response Regulations*</i> — New regulations respecting response to chemical spills by ports, chemical handling facilities and vessels.	Future initiative
<i>Small Vessel Regulations</i> — Rewriting of regulations to reflect new responsibilities of Minister of Fisheries and Oceans and Minister of Transport.	Future initiative

<b>Proposed Regulation</b>	<b>Expected Date of Enactment</b>
<i>Fishing and Recreational Harbours Regulations</i> — Deleting devolved harbours from list in Schedule I and adding acquired harbours to that list.	June 1998
<i>Fishery (General) Regulations</i> — New regulations to control transgenic aquatic organisms.	September 1998
<i>Fish Health Protection Regulations</i> — Application of regulations to all species; mandatory reporting of certain fish diseases; new procedures for quality assurance.	January 1999
<i>Coastal Fisheries Protection Regulations</i> — Amendments to implement United Nations Fishing Agreement in Canada.	June 1998
<i>Freshwater Fish Marketing Corporation Advisory Committee Regulations</i> — Prescribing election procedures for members of advisory committee.	January 1999
<i>Fisheries Act</i> * — Rewriting of act (including consequential rewrites of all fish management regulations).	Future initiative
<i>Navigable Waters Protection Act</i> * — Amendment of act to modernize and clarify scope and responsibilities.	March 1999
<i>Canada Shipping Act (Part VI)</i> * — Revision to enhance program administration and cost efficiency, to permit delegation and to provide flexibility for timing of storage and disposal of wreck.	March 1999
<i>Private Buoys Regulations</i> — Updating.	March 1999
<i>Newfoundland Fishery Regulation</i> — Amendment of definition of artificial fly.	June 1998

\* More detail on these major regulatory initiatives may be found in Section III of this report.

## **References and Departmental Contacts**

### **Statutory Reports**

*Atlantic Fisheries Restructuring*

*Fish Habitat Protection and Pollution Prevention*

*Fisheries Development*

*Fisheries Improvement Loans*

*Freshwater Fish Marketing Corporation Annual Report*

*Marine Oil Spill Preparedness and Response Regime*

*Privacy and Access to Information*

These documents are available from:

#### **Fisheries and Oceans**

Publications Distribution

200 Kent Street

Ottawa, Ontario K1A 0E6

(613) 993-1516

### **Departmental Contacts**

For more information, contact the following Communications personnel:

<b>Region</b>	<b>Name</b>	<b>Telephone</b>
Newfoundland	Lily Abbass	(709) 772-4328
Maritimes	A.-M. Lanteigne	(506) 851-7757
Laurentian	Marcel Thérien	(418) 648-7316
Central and Arctic	Sharon Leonhard	(204) 983-5108
Pacific	Kate Glover	(604) 666-0470
Headquarters	Jo-Anne Brisebois	(613) 990-0219

The Department's Internet address is <http://www.ncr.dfo.ca>.

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