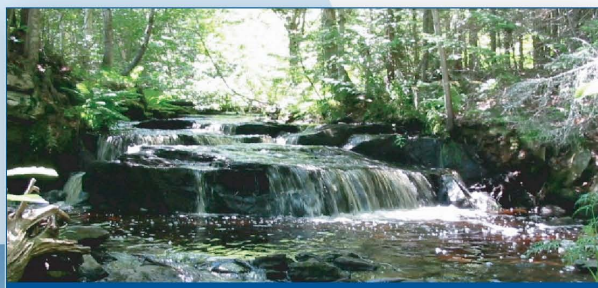




Fisheries and Oceans
Canada

Pêches et Océans
Canada



**ANNUAL REPORT TO
PARLIAMENT**
on the Administration and
Enforcement
of the Fish Habitat Protection
and Pollution Prevention
Provisions
of the *Fisheries Act*

**April 1, 2009
To March 31, 2010**

Published by:

Communications Branch
Fisheries and Oceans Canada
Ottawa, Ontario
K1A 0E6

DFO/2010-1686

© Her Majesty the Queen in Right of Canada 2010

This printed version: Cat. No. Fs1-57/2010
PDF version: Cat. No. Fs1-57/2010E-PDF

ISBN 978-1-100-52541-9
ISBN 978-1-100-17143-2

Correct citation for this publication:

Fisheries and Oceans Canada. 2010. Annual Report to Parliament on the Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the *Fisheries Act*. April 1, 2009 to March 31, 2010: iv + 40 p.

Internet site: < http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/measuring-mesures/reports-rapports/index_e.asp >



Printed on recycled paper

Minister of
Fisheries and Oceans



Ministre des
Pêches et des Océans

Ottawa, Canada K1A 0E6

Ms. Audrey O'Brien
Clerk of the House of Commons
Room 228-N, Centre Block
House of Commons
Ottawa, Ontario
K1A 0A6

Dear Ms. O'Brien:

In accordance with the provisions of section 42.1 of the *Fisheries Act*, I have the honour to present, in both official languages, two copies of the Annual Report on the Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the *Fisheries Act* for the fiscal year 2009-2010.

In conformity with the requirements of the Act, these copies are for tabling in the House of Commons.

Sincerely,

Gail Shea, P.C., M.P.

Attachments

Minister of
Fisheries and Oceans



Ministre des
Pêches et des Océans

Ottawa, Canada K1A 0E6

Mr. Gary O'Brien
Clerk of the Senate & Clerk of the Parliaments
Room 183-S, Centre Block
The Senate
Ottawa, Ontario
K1A 0A4

Dear Mr. O'Brien:

In accordance with the provisions of section 42.1 of the *Fisheries Act*, I have the honour to present, in both official languages, two copies of the Annual Report on the Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the *Fisheries Act* for the fiscal year 2009-2010.

In conformity with the requirements of the Act, these copies are for tabling in the Senate.

Sincerely,

Gail Shea, P.C., M.P.

Attachments

Table of Contents

Abstract.....	iii
List of Acronyms.....	iv
1.0 Executive Summary.....	1
1.1 Administration and Enforcement of the Fish Habitat Protection Provisions of the Fisheries Act.....	1
1.1.1 Review of Development Proposals (Referrals).....	1
1.1.2 Compliance and Enforcement.....	2
1.2 Administration and Enforcement of the Pollution Prevention Provisions of the Fisheries Act.....	2
2.0 The Policy and Legislative Setting.....	4
2.1 Purpose of Annual Report.....	4
2.2 Legislative Basis for the Conservation and Protection of Fish Habitat.....	4
2.3 Policy for the Management of Fish Habitat.....	7
2.4 National Habitat Management Program.....	8
3.0 Administration and Enforcement of the Fish Habitat Protection Provisions of the Fisheries Act.....	10
3.1 Benefit for Canadians: Healthy and Productive Aquatic Ecosystems.....	10
3.2 Administration of the Fish Habitat Protection Provisions of the Fisheries Act.....	11
3.2.1 Overview.....	11
3.2.2 Categorizing Referrals.....	12
3.2.3 Review of Development Proposals (Referrals).....	13
3.2.4 Advice Provided and Authorizations Issued.....	17
3.2.5 Notifications and Use of Regulatory Streamlining Tools.....	18
3.3 Compliance and Enforcement of the Fish Habitat Protection Provisions of the Fisheries Act.....	19
3.4 Oceans and Scientific Support.....	25
4.0 Administration and Enforcement of the Pollution Prevention Provisions of the Fisheries Act.....	27
4.1 General Reviews and Improvements.....	27
4.2 Compliance Promotion for General Prohibition of Releases of Deleterious Substances to Waters Frequented by Fish.....	28
4.3 Regulations.....	29
4.3.1 Pulp and Paper.....	29
4.3.2 Metal Mines.....	30
4.3.3 Wastewater.....	31
4.3.4 Other Regulations and Guidelines.....	31
4.4 Water Quality Monitoring – Canadian Shellfish Sanitation Program.....	31
4.5 Enforcement Activities and Measures.....	32
4.5.1 Summary of Enforcement Activities.....	32
4.5.2 Enforcement Highlights.....	35
4.6 Environmental Emergencies Program.....	36
4.7 Agreements.....	37

List of Tables

Table 1:	
Habitat Protection and Pollution Prevention Provisions of the Fisheries Act.....	6
Table 2:	
Work Categories.....	13
Table 3:	
Summary of Habitat Referrals by Work Category.....	15
Table 4:	
Advice Provided and Authorizations Issued.....	17
Table 5:	
Notifications of use of Class Authorizations and Operational Statements.....	19
Table 6:	
Summary of DFO Habitat Enforcement Activities.....	21
Table 7:	
Convictions Reported under the Habitat Protection Provisions of the Fisheries Act.....	22
Table 8:	
Summary of Convictions and Alternative Measures to Prosecution	23
Table 9:	
EC Enforcement Activities and Measures Carried Out under the Fisheries Act.....	33
Table 10:	
Investigation Breakdown.....	34

List of Figures

Figure 1: Referrals Received by Region, 2005-2006 to 2009-2010.....	16
Figure 2: Percent of Referrals by Region, 2009-2010.....	16
Figure 3: Advice Provided by Region, 2005-2006 to 2009-2010.....	18
Figure 4: Authorizations Issued by Region, 2005-2006 to 2009-2010....	18
Figure 5: Allocation of compliance effort by habitat-related activity....	20

Abstract

Fisheries and Oceans Canada. 2010. Annual Report to Parliament on the Administration and Enforcement of the Fish Habitat Protection and Pollution Prevention Provisions of the *Fisheries Act*. April 1, 2009 to March 31, 2010: iv + 40 p.

This is a report on the administration of Fisheries and Oceans Canada's National Habitat Management Program and Environment Canada's Pollution Prevention Program during the 2009-2010 fiscal year. It highlights the two departments' activities.

Résumé

Pêches et Océans Canada. 2010. Rapport annuel au Parlement sur l'administration et l'application de dispositions de la *Loi sur les pêches* relatives à la protection de l'habitat du poisson et à la prévention de la pollution du 1^{er} avril 2009 au 31 mars 2010 : iv + 43 p.

Ce rapport porte sur l'administration du Programme national de gestion de l'habitat de Pêches et Océans Canada et du Programme de prévention de la pollution d'Environnement Canada au cours de l'exercice financier 2009-2010. Il présente les activités entreprises par les deux ministères.

List of Acronyms

C&P	Conservation & Protection Program
CEAA	<i>Canadian Environmental Assessment Act</i>
DFO	Fisheries and Oceans Canada
EA	Environmental Assessment
EC	Environment Canada
EDF	Environmental Damages Fund
EEM	Environmental effects monitoring
EPAM	Environmental Protection Alternative Measures
EPMP	Environmental Process Modernization Plan
FCSAP	Federal Contaminated Sites Action Plan
HADD	Harmful alteration, disruption or destruction
HaPAE	Healthy and Productive Aquatic Ecosystems
HMP	Habitat Management Program
MMER	<i>Metal Mining Effluent Regulations</i>
NPA	National Programme of Action for the Protection of the Marine Environment from Land-based Activities
OGLA	Ontario-Great Lakes Area
PATH	Program Activity Tracking system for Habitat Management
PPER	<i>Pulp and Paper Effluent Regulations</i>
RISS	Regulatory Information Submission System
RMF	Risk Management Framework
SARA	<i>Species at Risk Act</i>

1.0 Executive Summary

This Annual Report to Parliament summarizes the administration and enforcement of the fish habitat protection and pollution prevention provisions of the *Fisheries Act*¹, from April 1, 2009 to March 31, 2010. The annual report highlights the activities of Fisheries and Oceans Canada's (DFO) National Habitat Management Program (HMP), as well as Environment Canada's (EC) Environmental Enforcement Program, Environmental Emergencies Program and Compliance Promotion and Analysis Program.

Canada's freshwater and marine fish species and fish habitat play a critical role in Canada's economic prosperity and biological diversity. The *Fisheries Act* contains two key provisions that are applied for the conservation and protection of fish habitat that is essential to sustaining freshwater and marine fish species:

- DFO administers section 35, the key habitat protection provision, prohibiting any work or undertaking that would cause the harmful alteration, disruption or destruction (HADD) of fish habitat, unless authorized by the Minister of Fisheries and Oceans or through regulations under the *Fisheries Act*; and
- EC administers section 36, the key pollution prevention provision, prohibiting the deposit of deleterious substances into waters frequented by fish, unless authorized by regulations under the *Fisheries Act* or other federal legislation.

1.1 Administration and Enforcement of the Fish Habitat Protection Provisions of the *Fisheries Act*

1.1.1 Review of Development Proposals (Referrals)

By ensuring that *healthy and productive fish habitat is available to sustain the production of fish species and populations that Canadians value*, DFO's HMP contributes to the department's strategic outcome of healthy and productive aquatic ecosystems. As well, DFO's Environmental Science, and Conservation and Protection (C&P) programs are key partners in realizing this strategic outcome.

The referral process enables HMP staff to review proposals to assess if harmful alteration, disruption or destruction (HADD) of fish habitat is likely to result from the proposed works or undertakings. HMP staff sends advice to the proponent on how to proceed with their works or undertakings in a manner that will comply with the *Fisheries Act*, mainly with respect to avoiding the HADD of fish habitat (section 35). These requirements are commonly

¹ The full text of the *Fisheries Act* can be found at: < <http://laws.justice.gc.ca/en/F-14/text.html> >

in the form of a “Letter of Advice”, an “Operational Statement”² for low risk activities, or an “Authorization” pursuant to subsection 35(2) of the Act.

During fiscal year 2009-2010 the HMP:

- reviewed 7,455 development proposals (referrals) to ensure compliance with the *Fisheries Act*, mainly with respect to avoiding the HADD of fish habitat;
- provided written advice to proponents or others on 4,819 occasions; and
- issued 296 authorizations.

1.1.2 Compliance and Enforcement

DFO’s C&P Program is responsible for monitoring compliance with legislation and regulations regarding the conservation of fisheries resources and fish habitat. The Minister of Fisheries and Oceans appoints Fishery Officers to enforce fisheries regulations and management plans as well as the habitat provisions of the *Fisheries Act*.

DFO’s measures to promote compliance include communication and public education; consultation with parties affected by the habitat protection provisions of the *Fisheries Act*; and technical assistance as required.

Enforcement of habitat protection provisions are carried out through inspections to monitor or verify compliance; investigations of alleged violations; the issuance of warnings, Inspector's Directions, Ministerial Orders; and court actions such as injunctions, prosecutions, court orders upon conviction and suits for recovery of costs.

In 2009-2010, DFO:

- issued 80 warnings under the habitat protection provisions of the *Fisheries Act*;
- laid 14 charges under the habitat protection provisions of the *Fisheries Act*; and
- concluded 8 successful prosecutions.

1.2 Administration and Enforcement of the Pollution Prevention Provisions of the *Fisheries Act*

EC has responsibility for various components of the administration and enforcement of the pollution prevention provisions of the *Fisheries Act*, involving the Environmental Enforcement Program; the Compliance Promotion and Analysis Program; and the Environmental Emergencies Program.

² A list of DFO operational statements can be found at : < http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/modernizing-moderniser/epmp-pmpe/index_e.asp >

EC develops sector-based strategies and undertakes activities to promote and secure compliance with the pollution prevention provisions of the *Fisheries Act*. It works to:

- advance pollution prevention technologies;
- promote the development of preventative solutions; and
- work with the provinces, territories, industry, other government departments and the public on issues relating to the pollution provisions of the *Fisheries Act*.

In 2009-2010, EC carried out enforcement activities and measures under the *Fisheries Act*, including:

- 3,890 compliance verification inspections;
- 45 investigations, involving gathering and analyzing evidence and information relevant to suspected violations; and
- 22 charges, 17 convictions and 214 written warnings.

2.0 The Policy and Legislative Setting

2.1 Purpose of Annual Report

Section 42.1 of the *Fisheries Act* requires the Minister of Fisheries and Oceans to table an annual report to Parliament on the administration and enforcement of the fish habitat protection and pollution prevention provisions. This Report satisfies that requirement for fiscal year 2009-2010.

The Annual Report is organized under the following four parts:

- Part 1.0 presents the executive summary.
- Part 2.0 provides the legislative and policy context for the conservation and protection of fish habitat, as well as an overview of DFO's HMP.
- Part 3.0 reports on the results achieved by DFO in 2009-2010 through the administration and enforcement of the fish habitat protection provisions of the *Fisheries Act*. This part covers both the review of development proposals (referrals) by HMP, and the support provided by DFO's Environmental Science, and C&P programs.
- Part 4.0 reports on the work of EC in developing regulations, policies and guidelines related to the pollution prevention provisions of the *Fisheries Act*.

2.2 Legislative Basis for the Conservation and Protection of Fish Habitat

The Government of Canada fulfills its constitutional responsibilities for sea coast and inland fisheries through the administration and enforcement of the *Fisheries Act*. This Act provides DFO with powers and authorities to conserve and protect fish habitat³, which is essential to sustaining freshwater and marine fish species and populations that Canadians value.

The *Fisheries Act* contains two types of provisions that are applied for the conservation and protection of fish habitat.

Section 35 is the key habitat protection provision of the *Fisheries Act*. This section prohibits any work or undertaking that would cause the harmful alteration, disruption or destruction (HADD) of fish habitat, unless authorized by the Minister of Fisheries and Oceans or through regulations under the *Fisheries Act*.

³ Fish habitat is defined under subsection 34(1) of the *Fisheries Act* as “spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes”.

DFO administers and enforces section 35 and other related habitat protection provisions of the *Fisheries Act*, including sections 20, 21, 22, 26, 28, 30, and 32 (see Table 1 below).

Section 36 is the key pollution prevention provision. It prohibits the deposit of deleterious substances into waters frequented by fish, unless authorized by regulation under the *Fisheries Act* or other federal legislation. Regulations to authorize deposits of certain deleterious substances have been established for key industry sectors pursuant to section 36 (e.g., pulp and paper, and metal mining). As noted above, EC is responsible for the administration and enforcement of the pollution prevention provisions of the *Fisheries Act*.

The *Fisheries Act* also contains provisions that support the administration and enforcement of the habitat protection and pollution prevention provisions. These include:

- powers for the Minister to request plans and specification for works and undertakings that might affect fish or fish habitat (section 37);
- authority for the Minister to appoint inspectors and analysts (subsection 38(1));
- a description of inspectors' powers (including entry, search, and direction of preventive, corrective or cleanup measures) (subsection 38(3));
- a description of offences and punishment (section 40); and
- a determination of liability when a deleterious substance has been deposited (section 42).

Table 1: Habitat Protection and Pollution Prevention Provisions of the <i>Fisheries Act</i>	
Section	Intent
20	The Minister may require fish-ways to be constructed.
21	The Minister may authorize payment, order construction or removal or require fish stops or diverters for fish-ways.
22	The Minister may require sufficient flow of water for the safety of fish and flooding of spawning grounds as well as free passage of fish during construction.
26	Prohibits obstruction of fish passage through channels, rivers and streams. In addition, the Minister may authorize devices to prevent the escape of fish.
27	Prohibits the damage or obstruction of fish-ways, the impediment of fish to fish-ways and nearby fishing.
28	Prohibits the use of explosives to hunt or kill fish.
30	The Minister may require fish guards or screens to prevent the entrainment of fish at any water diversion or intake.
32	Prohibits the destruction of fish by any means other than fishing.
34	Definitions used throughout sections 35 to 42.
35	Prohibits works or undertakings that may result in harmful alteration, disruption or destruction of fish habitat, unless authorized by the Minister or under regulations.
36	Prohibits the deposit of deleterious substances into waters frequented by fish, unless authorized under regulations.
37	The Minister may request plans and specifications for works or undertakings that might affect fish or fish habitat. The Minister may, by regulations or with Governor-in-Council approval, make orders to restrict or close works or undertakings that may harmfully alter fish habitat or lead to the deposit of deleterious substances.
38	Gives the Minister the authority to appoint inspectors and analysts and describes inspectors' powers, including entry, search and the power to direct preventive, corrective or cleanup measures. Provides for regulations that require reporting of abnormal deposits of a deleterious substance or substances that occur in contravention of the general prohibition, regulations or site-specific authorizations.
40	Sets out penalties in case of a contravention of: sections 35 or 36; failing to provide information or to undertake a project in compliance with section 37; or failing to make a report or to otherwise comply with section 38.
42	Those causing the deposit of deleterious substances in waters frequented by fish are liable for costs incurred by Her Majesty. Also, the Minister shall prepare an annual report on administration and enforcement of the fish habitat protection and pollution prevention provisions of the <i>Fisheries Act</i> as well as a statistical summary of convictions under section 42.1.
43	The Governor in Council may make regulations for carrying out the purposes and provisions of the <i>Fisheries Act</i> , including habitat protection and pollution prevention.

2.3 Policy for the Management of Fish Habitat

The *Policy for the Management of Fish Habitat*⁴ (the Policy), which was tabled in Parliament in 1986, and its supporting operational policies provide a comprehensive framework for the administration and enforcement of the habitat protection and pollution prevention provisions of the *Fisheries Act* consistent with the goal of sustainable development.

The Policy has an overall objective to “increase the natural productive capacity of habitat for the nation’s fisheries resources”. This is to be achieved through the Policy’s three goals of conservation, restoration, and development of fish habitat.

The Policy recognizes that habitat objectives must be linked and integrated with fish production objectives and with other sectors of the economy that make legitimate demands on water resources. As a result, the Policy identifies the need for integrated planning for habitat management as an approach to ensuring the conservation and protection of fish habitat that sustain fish production while providing for other uses.

The objective and goals of the Policy are to be achieved through eight implementation strategies: Protection and Compliance; Integrated Resource Planning; Scientific Research; Public Consultation; Public Information and Education; Cooperative Action; and Habitat Improvement and Habitat Monitoring.

A key element of the Policy is the guiding principle of “no net loss of the productive capacity of fish habitat”. This principle, which supports the conservation goal, is applied when proposed works and undertakings may result in a HADD of fish habitat. Prior to issuing an authorization under subsection 35(2) of the *Fisheries Act*, DFO applies the “no net loss” guiding principle, so that unavoidable habitat losses as a result of development projects are balanced by newly created and/or restored fish habitat.

If unacceptable losses of fish habitat cannot be prevented, the Policy calls for an authorization not to be issued. Furthermore, where deleterious substances result in harm to fish or damage to fish habitat, compensation⁵ is not an option.

⁴ The full text of the *Policy for the Management of Fish Habitat* can be found at:
< http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/policies-politique/management-gestion_e.asp >.

⁵ See Glossary in the *Policy for the Management of Fish Habitat* for the definition of compensation at:
< http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/policies-politique/operating-operation/fhm-policy/index_e.asp >.

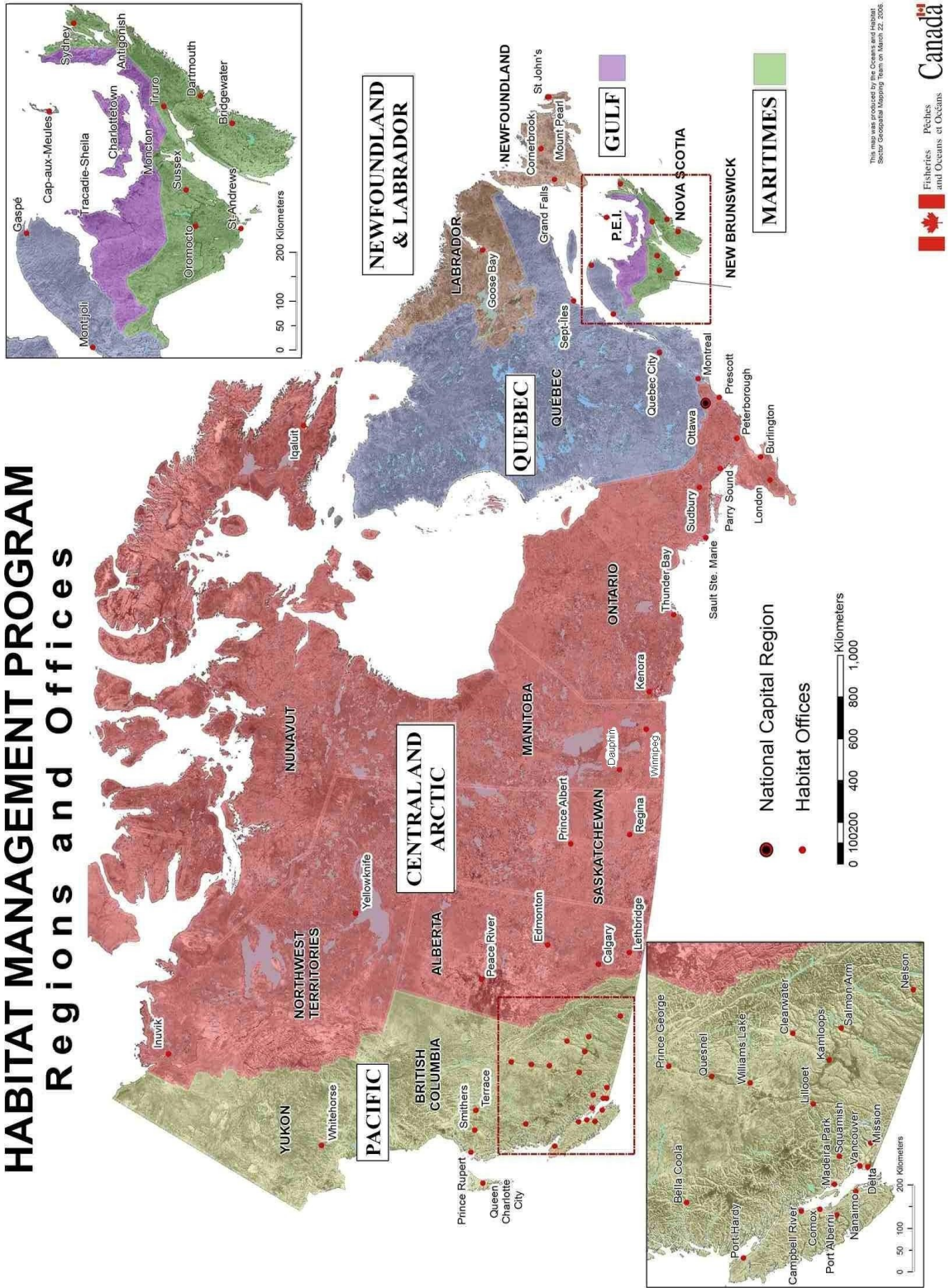
2.4 National Habitat Management Program

DFO's HMP is a key federal regulatory program with a mandate to conserve and protect fish habitat, pursuant to the *Fisheries Act*, the *Canadian Environmental Assessment Act* (CEAA) and the *Species at Risk Act* (SARA). HMP regulatory activities can have significant implications on a wide range of industries, businesses, communities and individual Canadians proposing or carrying out development projects in or around fish bearing waters. The growth of economic development activities across Canada, particularly in the natural resource based sectors, has resulted in a greater complexity and number of development proposals requiring DFO regulatory reviews.

Staff at the HMP's National Headquarters are responsible for the overall coordination of the delivery of the HMP, providing national policy direction, strategic advice and liaison with other Departmental sectors, federal departments and national industry and non-governmental organizations (NGOs). Day-to-day delivery of the program is carried out by habitat staff located in over 65 DFO offices across the country (see map on following page):

The HMP is supported by DFO's C&P Program, and Environmental Science Program.

HABITAT MANAGEMENT PROGRAM Regions and Offices



3.0 Administration and Enforcement of the Fish Habitat Protection Provisions of the *Fisheries Act*

3.1 Benefit for Canadians: Healthy and Productive Aquatic Ecosystems

DFO aims to achieve the sustainable development and integrated management of resources in or around Canada's aquatic environment. This DFO strategic outcome, identified as *healthy and productive aquatic ecosystems* (HaPAE), is expected to take many years to come to fruition, and is beyond the control of any individual government department.

Canada's fisheries resources and fish habitat play a critical role in the economic prosperity and the biological diversity of Canada. In the context of sustainable development, provinces and territories, industry, Aboriginal peoples and others play important roles in delivering HaPAE.

The HMP contributes to the strategic outcome HaPAE through its activities for ensuring that healthy and productive fish habitat is available to sustain the production of fish species and populations that Canadians value.

Science support activities included assessing the impacts of development on aquatic ecosystems, and the provision of scientific advice and information related to the impacts of industrial activities on the aquatic environment. The department's scientists also provided case-specific advice to HMP on several large-scale projects such as the Mackenzie Valley Pipeline, and diamond mines in the north. In addition, scientific advice was provided to specify mitigation measures for managing the impact of water withdrawals from the Athabasca River associated with oil sands projects.

DFO's C&P program provided enforcement and compliance monitoring activities in support of the HaPAE strategic outcome. These activities are linked to enhanced compliance with legislation, regulations and management measures (e.g., conditions of authorizations and orders). Information on C&P activities and related program outputs is provided below in Part 3.3.

Further information in terms of results achieved in 2009-2010 related to DFO's strategic outcomes is available in the 2009-2010 Departmental Performance Report.⁶

⁶ The report is available at: < <http://www.dfo-mpo.gc.ca/reports-rapports-eng.htm> >

3.2 Administration of the Fish Habitat Protection Provisions of the *Fisheries Act*

3.2.1 Overview

The administration of the Fish Habitat Protection Provisions of the *Fisheries Act* is the responsibility of DFO's HMP. The program accomplishes this in part by reviewing development proposals (known as "referrals"). The referral process enables HMP staff to review submitted proposals to assess if a HADD of fish habitat is likely to result from the proposed works or undertakings. As part of its practice, the HMP applies a Risk Management Framework (RMF) consisting of three components: Aquatic Effects Assessment; Risk Assessment, and; Risk Management.⁷

As part of the referral process, HMP staff sends advice to the proponent indicating the requirements for the conservation and protection of fish habitat. This advice informs proponents on how to proceed with their works or undertaking in a manner that will comply with the *Fisheries Act*, mainly with respect to avoiding the HADD of fish habitat (section 35). These requirements are commonly in the form of a "Letter of Advice", an "Operational Statement" for low risk activities, or an "Authorization" pursuant to subsection 35(2) of the Act.

It is important to note that proponents voluntarily submit information about their proposed works or undertakings to determine if they comply with the habitat protection provisions of the *Fisheries Act*. In fact, the habitat protection provisions, including section 35 of the *Fisheries Act*, do not create a mandatory obligation for proponents of development proposals to seek a Letter of Advice, an Operational Statement, or an Authorization from DFO. However, failure to do so may expose a proponent to being charged and prosecuted under the *Fisheries Act*.

Prior to issuing certain Authorizations pursuant to the *Fisheries Act*, HMP staff must verify whether the project under review has potential to adversely affect wildlife species listed under SARA, or their critical habitat, and ensure that an environmental assessment (EA) under CEAA (or other EA regimes) is completed. In the context of development proposals, when DFO may exercise decision-making authority that triggers the CEAA (specifically, when DFO is the proponent; provides financial assistance; sells, leases, or otherwise transfers control or administration of federal land; or, makes certain regulatory decisions to enable a project to be carried out), DFO becomes a responsible authority under the CEAA and must ensure that an EA is prepared prior to making a decision. In such cases, HMP staff must ensure that the EA considers broad environmental issues linked to the project, as well as including those directly associated with fish and fish habitat. The *Fisheries Act* regulatory decisions requiring environmental assessments (*Law List Regulations* under CEAA) involve: subsection 35(2) authorizing a HADD, flow needs for fish downstream of an obstruction; authorizing the destruction of fish by means other than fishing, and; orders to restrict or close

⁷ Information on DFO's application of the RMF is available at:
< http://www.dfo-mpo.gc.ca/oceans-habitat/habitat/modernizing-moderniser/risk-risques_e.asp >

works or undertaking that may cause a HADD or pollution of waters frequented by fish. For more specific information regarding EAs pursuant to the CEEA, please see the Canadian Environmental Assessment Registry.⁸

3.2.2 Categorizing Referrals

Habitat assessors and field staff have categorized referrals according to various work categories (see Table 2). The selected work category references a specific undertaking or work that has the potential to impact on fish and fish habitat.

⁸ Canadian Environmental Assessment Agency < http://www.ceaa-acee.gc.ca/050/index_e.cfm >

**Table 2:
Work Categories**

Work Category	Description
Aquaculture	Includes all forms of aquaculture in marine, estuarine and fresh water, including: shellfish culture, marine plant culture, polyculture, finfish cage culture, freshwater ponds and hatcheries.
Contaminated Site Remediation	The cleanup of contaminated sites, including: excavation and removal of contaminated sediments and soils; treatment of contaminated groundwater, etc.
Control of Nuisance Species	Works to capture, control and poison nuisance species.
Dredging	Dredging, including: clamshell, backhoe, suction, cutter suction, suction hopper, and any other type of dredging in freshwater, estuarine and marine conditions. Does not include dredging for the purposes of ocean mining of minerals or aggregate.
Fish Offal Disposal	Includes sites for disposal into the aquatic environment of fish offal from vessels, barges, etc. Does not include disposal of fish waste from a fish plant through an effluent pipe.
Habitat Improvement	Modifications to or structures placed into any aquatic habitat to improve the capacity of the habitat to produce fish.
Instream Works	Work and activities in a stream, brook, river, lake, estuary or any marine area, including: excavation, pool excavation, beaver dam removal, ditch cleaning, and aquatic vegetation removal.
Log Handling	Establishment and operation of aquatic and terrestrial areas used for storing and sorting logs. Includes log sorts at pulp mills and sawmills. Includes underwater log salvage.
Mineral, Aggregate and Oil & Gas Exploration, Extraction, Production	Includes all forms of mining and mineral exploration, including offshore and onshore oil and gas exploration and production, as well as ocean mining. This category also includes the use of explosives or other methods to explore sub-surface geological structures underwater or on land.
Shoreline Works (Foreshore and Streambank Work)	Includes physical works along a shoreline, both in the riparian zone and in the zone between Low-Low Water (LLW) (Low Water) and High-High Water (HHW) (High water) in a stream, brook, river, lake, estuary or any marine area.
Structures in Water	Includes structures built in all habitat types (riverine, lacustrine, palustrine (wetlands), estuarine, marine) including: docks and boathouses for personal or commercial purposes, wharves, breakwaters, commercial marine terminals, personal and commercial moorings, boat launches, water intake physical structures including screens, effluent outfall pipes and outfalls, fishing weirs, artificial reefs, and gear placed in water.
Water Management	Includes physical structures and activities involved in water management, such as: dams, dykes, diversions, reservoirs and reservoir operations, irrigation canals, stormwater management plans, water withdrawal from natural waterbodies and reservoirs, irrigation canals, hydroelectricity generation, etc.
Watercourse Crossings	Crossings of all kinds that traverse wetlands, streams, brooks, rivers, ponds, lakes, estuaries and any area in the marine environment. Includes small undertakings up to large pipeline and cable crossings across oceans.
Other	To be used for those proposed projects that do not fit any of the above Main Categories.

3.2.3 Review of Development Proposals (Referrals)

Data recorded in the Program Activity Tracking System for Habitat (PATH) on review of referrals are presented in this section.

Table 3 presents summary data on the number of habitat referrals in 2009-2010 by work category for each DFO region.

Figure 1 illustrates the pattern in total habitat referrals, by region, from fiscal years 2005-2006 to 2009-2010.

Figure 2 illustrates the regional distribution of total habitat referrals for 2009-2010.

**Table 3:
Summary of Habitat Referrals by Work Category
Fiscal Year 2009-2010⁹**

DFO Region	Work Categories														
	Aqua.	Remediation Contaminated Site	Control Nuisance Species	Dredging	Fish Offal Disposal	Habitat Improvement	Instream Works	Log Handling	Mineral, Aggregate & O&G Extraction	Shore Works	Structures in Water	Water Mgmt	Water-course Crossing	Other ¹⁰	Total
Newfoundland and Labrador	17	8	0	16	0	2	31	1	73	138	154	54	245	80	819
Maritimes	19	7	0	26	1	13	25	0	8	136	130	66	264	52	747
Gulf	51	0	2	52	0	34	31	0	2	56	76	57	194	34	589
Quebec	6	9	0	29	1	6	47	1	3	43	78	21	91	0	335
Central and Arctic	7	25	4	97	0	31	262	1	140	556	435	412	930	251	3151
Pacific	6	10	3	49	0	40	210	55	181	419	254	187	289	111	1814
Total	106	59	9	269	2	126	606	58	407	1348	1127	797	2013	528	7455

⁹ Note: For reporting purposes, the receipt of a referral by DFO is accounted for in the statistics of the same year that event actually occurred; while any DFO decisions linked to the referral could occur in a subsequent year and be accounted for separately in the statistics for that year.

¹⁰ "Other" includes referrals identified with the Work categories of "to be determined," "Undetermined" and "Other".

Figure 1: Referrals Received by Region, 2005-2006 to 2009-2010

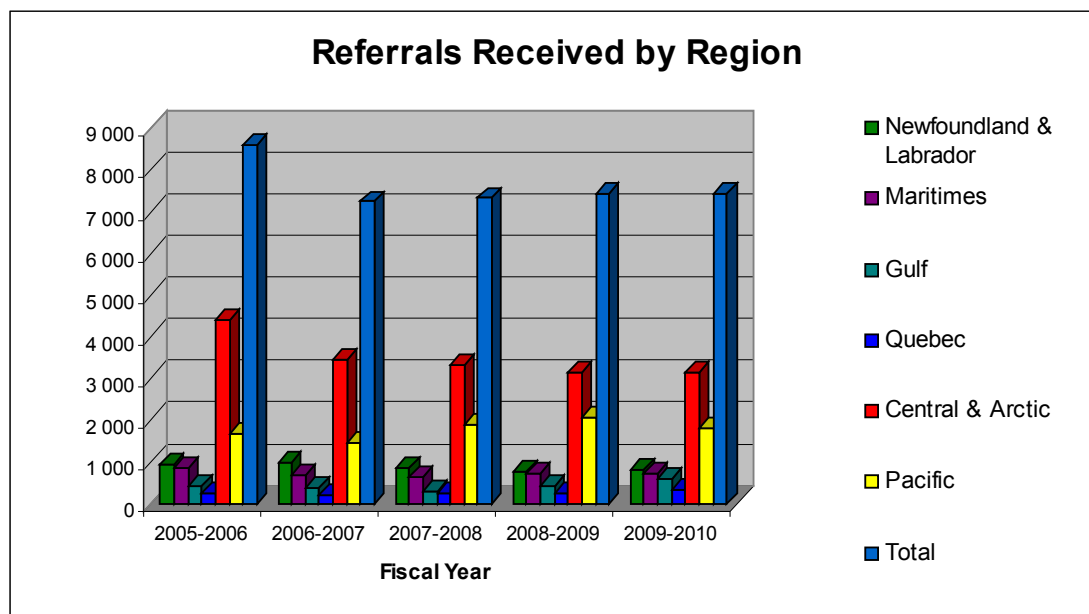
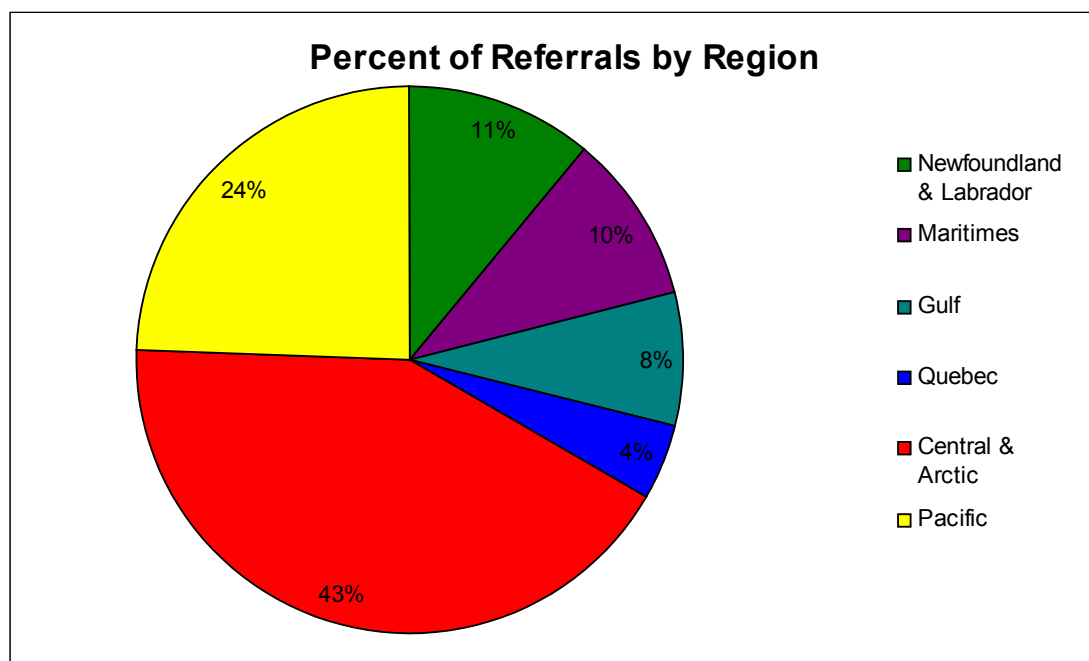


Figure 2: Percent of Referrals by Region, 2009-2010



3.2.4 Advice Provided and Authorizations Issued

Data recorded in PATH on advice provided by DFO and authorizations issued are presented in this section.

Table 4 lists for each region in 2009-2010:

- the letters of advice provided to proponents or others;
- the operational statements provided as advice; and
- the Authorizations issued.

Table 4: Advice Provided and Authorizations Issued Fiscal Year 2009-2010				
REGION	Advice Provided to Proponent or Others¹¹	Operational Statements Provided as Advice	Authorizations Issued	TOTAL
Newfoundland and Labrador	692	19	5	716
Maritimes	519	0	57	576
Gulf¹²	420	0	19	439
Quebec	399	17	42	458
Central and Arctic	2088	169	112	2369
Pacific	465	31	61	557
TOTAL	4583	236	296	5115

Figure 3 and **Figure 4** illustrate the regional distribution of advice and authorizations, respectively in 2009-2010.

¹¹ Advice provided to others includes: written advice to federal agencies, provincial/territorial/other agencies, letters of advice to proponents, letters of approval to proponents, mitigation measures provided to permitting agencies.

¹² In the Gulf Region, as a result of an agreement with the Province of New Brunswick, DFO does not need to provide Operational Statements for streamlining certain activities.

Figure 3: Advice Provided by Region, 2005-2006 to 2009-2010

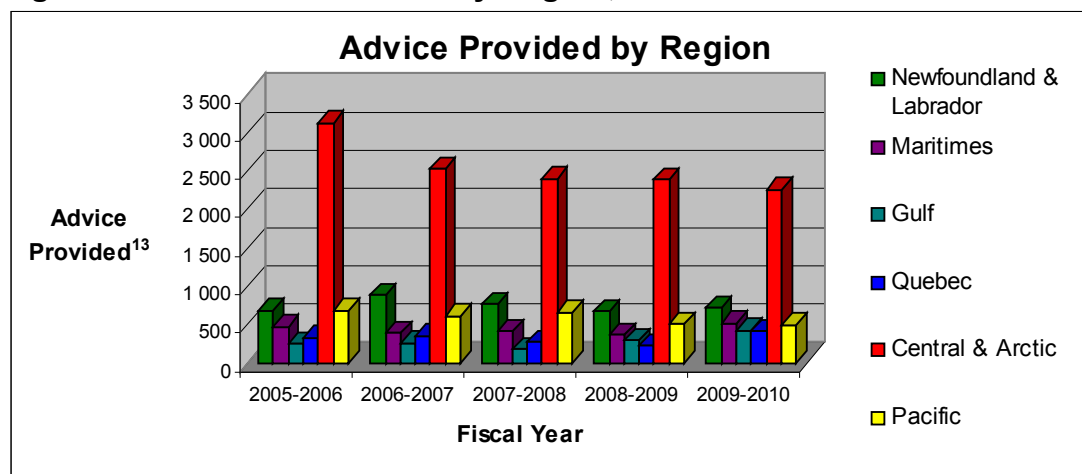
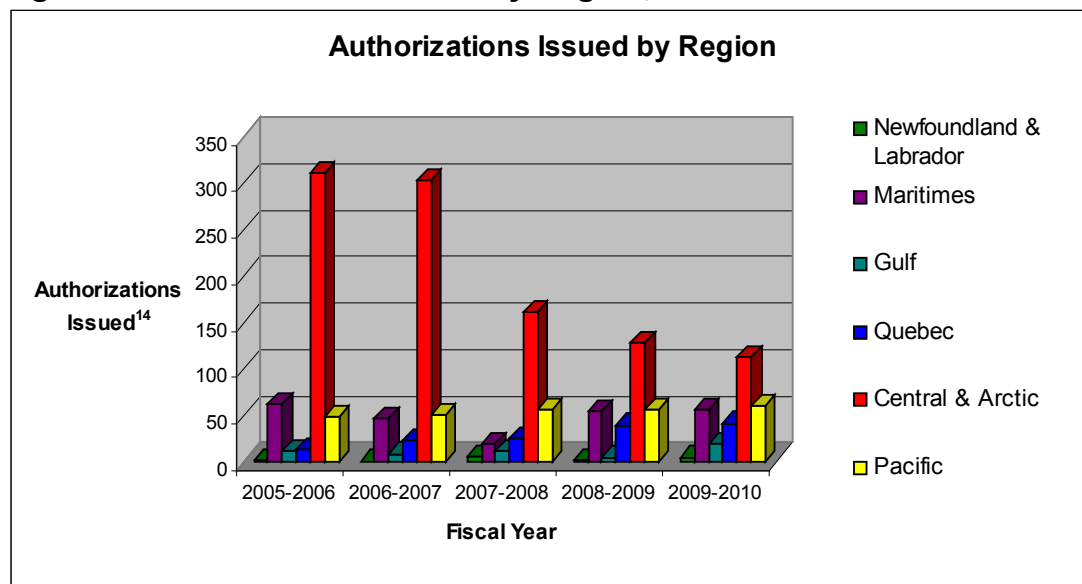


Figure 4: Authorizations Issued by Region, 2005-2006 to 2009-2010



3.2.5 Notifications and Use of Regulatory Streamlining Tools

DFO develops and implements operational statements as a management tool to improve efficiency and effectiveness of its regulatory reviews for low-risk activities. The operational

¹³ As of 2005-2006, the advice provided includes Operational Statements provided as Advice (following receipt of referral).

¹⁴ ¹⁴ Notifications of use of Class Authorizations are not included in this chart.

statements specify mitigation measures needed to avoid harm to fish habitat, providing proponents with greater certainty on what they must do to comply with the habitat protection provisions of the *Fisheries Act*. It is voluntary for proponents to submit notification forms to DFO when any operational statement is used.

To streamline the regulatory process for specific activities, DFO has established “class” authorizations for agricultural municipal drains in Southern Ontario (Ontario-Great Lakes Area), and for placer mining in the Yukon Territory. The process in Ontario was initiated in 1999-2000. It provides a mechanism for proponents to use class authorizations for pre-defined drain maintenance activities thereby eliminating the requirement for a proponent to undergo a site-specific review process. Similarly, the Yukon Territory, DFO, the Government of Yukon, and the Council of Yukon First Nations implemented a new integrated regulatory regime for placer mining. This regime includes a streamlined process for environmental review of placer mining proposals pursuant to the *Yukon Environmental and Socio-economic Assessment Act*.¹⁵

Table 5: Notifications of use of Class Authorizations and Operational Statements Fiscal Year 2009-2010			
REGION	Class Authorizations Notifications	Operational Statements Notifications	TOTAL
Newfoundland and Labrador	0	61	61
Maritimes	0	0	0
Gulf	0	3	3
Quebec	0	14	14
Central and Arctic	304	3120	3424
Pacific	43	242	285
TOTAL	347	3440	3787

3.3 Compliance and Enforcement of the Fish Habitat Protection Provisions of the *Fisheries Act*

DFO’s C&P Program is responsible for monitoring compliance with legislation and regulations regarding the conservation of fisheries resources and fish habitat. The Minister of Fisheries and Oceans appoints Fishery Officers to enforce fisheries regulations and management plans as well as the habitat provisions of the *Fisheries Act*.

In addition to protecting fish habitat, Fishery Officers conduct at-sea patrols in coastal and inshore areas, monitor catches, conduct forensic investigations and audits, conduct inland patrols and provide information to fishers regarding government policies and regulations. The

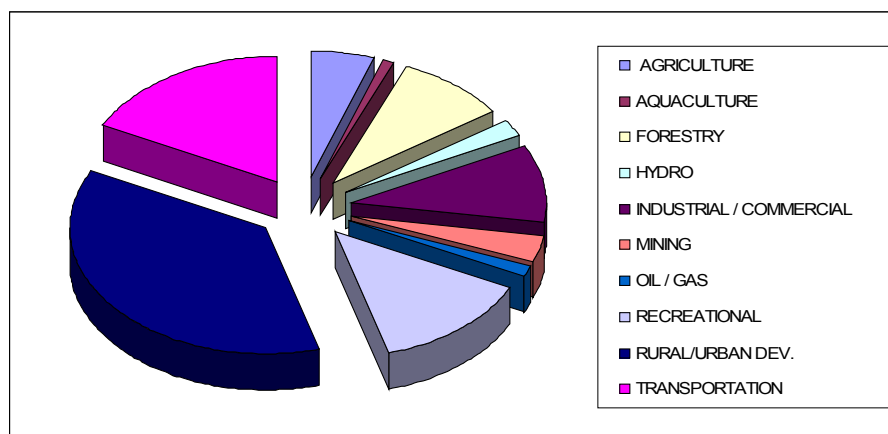
¹⁵ For more information on placer authorizations refer to: < <http://www.yukonplacersecretariat.ca/infocentre.html> >.

enforcement and compliance monitoring activities of Fishery Officers are key to protecting Canada's fish and fish habitat.

The C&P Directorate has adopted a three-pillar approach to the delivery of its enforcement program to address existing challenges and to integrate intradepartmental compliance issues in a comprehensive compliance program. This approach, as described under the DFO National Compliance Framework, guides the application of compliance tools organized into three pillars of compliance management. Pillar One activities include under the heading “*Education and shared stewardship*”: informal and formal education programs and co-management / partnership agreements. Pillar Two, titled “*Monitoring, control and surveillance*”, include activities such as land, sea and air patrols; inspections and compliance monitoring of third-party service providers; and enforcement response to non-compliance. Pillar Three, titled “*Major case / special investigations*” include formal intelligence gathering and analysis, forensic audits and prosecutions.

For fiscal year 2009-2010, Fishery Officers dedicated a total of 34,790 hours to habitat compliance and enforcement activities. The percentage of time Fishery Officer’s allocated to habitat compliance management, as reported under the three-pillars of activities was 16%, 29% and 55%, respectively. Further analysis indicates there are five major habitat activities which accounted for this time. These habitat activities are in descending order: rural and urban development, transportation, recreational, industrial and commercial development, and forestry. The effort and time spent on habitat compliance management, identified as a single work element, represents 6% of the total amount of time Fishery Officers dedicated to other work elements.

Figure 5: Allocation of compliance effort by habitat-related activity



For more information, see the *Compliance and Enforcement Policy for the Habitat Protection and Pollution Prevention Provisions of the Fisheries Act*¹⁶.

Table 6, Table 7 and Table 8 summarize C&P's compliance and enforcement activities by region in 2009-2010.

Table 6: Summary of DFO Habitat Enforcement Activities Fiscal Year 2009-2010			
REGION	Warnings Issued	Charges Laid	Alternatives to Prosecution
Newfoundland and Labrador	2	0	0
Maritimes	13	1	0
Gulf	10	0	0
Quebec	7	0	0
Central and Arctic	5	7	0
Pacific	43	6	1
TOTAL	80	14	1

¹⁶ The full text of the Compliance and Enforcement Policy for the Habitat Protection and Pollution Prevention Provisions of the Fisheries Act may be found at:

< <http://www.ec.gc.ca/ele-ale/default.asp?lang=En&xml=D6765D33-DB9B-4FA9-9E92-815A013842F4> >

Table 7: Convictions Reported under the Habitat Protection Provisions of the <i>Fisheries Act</i> Fiscal Year 2009-2010				
REGION	Section 35(1)	Section 36(3)	Section 40(3)	TOTAL
Newfoundland and Labrador	0	0	0	0
Maritimes	0	0	0	0
Gulf	0	0	0	0
Quebec	0	0	0	0
Central and Arctic	6	1	0	7
Pacific	1	0	0	1
TOTAL	7	1	0	8

**Table 8:
Summary of Convictions and Alternative Measures to Prosecution
Fiscal Year 2009-2010**

REGION	PROVINCE	AREA	WATERBODY	FISHERIES ACT SECTION	PROJECT DESCRIPTION	CONVICTION / RESOLUTION DATE	FINE	SENTENCE DETAILS
Central & Arctic	Alberta	Allen Bill Day Use Area	Elbow River	35(1)	Use of heavy machinery in a bank stabilization project resulted in infilling and destruction of fish habitat along the Elbow River.	August 25, 2009	\$ 95,000	The Court ordered the defendant to pay \$75,000 to Trout Unlimited Canada to fund a fish habitat enhancement and restoration project. The remaining \$20,000 penalty was directed to the Elbow River Watershed Partnership to promote public awareness and education of fish habitat programs.
Central & Arctic	Alberta and British Columbia	Wabamun Lake, AB and near Squamish, BC	Wabamun Lake, AB and Cheakamus River, BC	35(1)	Train derailment in Alberta on August 3, 2005, which resulted in release of oil into the lake. Two days later, a second train derailment occurred in BC, which resulted in release of sodium hydroxide in the river.	May 25, 2009	\$1,000,000 (in Alberta) \$400,000 (in British Columbia)	In Alberta, the defendant received a \$600,000 penalty to be paid to a wildlife shelter, the Wildlife Rehabilitation Society of Edmonton. The defendant received an additional \$400,000 penalty and ordered that it contribute to habitat restoration projects and an education program in Alberta. In BC, the Court ordered the defendant to pay \$350,000 for projects in the Squamish River watershed and a \$50,000 fine to the company.
Central & Arctic	Ontario	Municipality of Dysart et al, Haliburton, ON	Kennis Lake	35(1)	Construction of an aerodrome in a manner that resulted in an infill of fish habitat.	October 30, 2010	\$45,000	Out of the total fine, the judge ordered the defendant to pay a \$40,500 penalty to the Kennis Lake Cottage Owner's Association for projects to improve fish habitat.

The following are examples of results achieved through settlements in habitat protection enforcement actions.

Allen Bill Day Use Area - An investigation by Conservation and Protection launched in October 2006 revealed that work conducted on a bank stabilization project using heavy machinery along the Elbow River, in Alberta, resulted in the infill of fish habitat for several fish species. The work also consisted of removal of trees and other shoreline vegetation along the bank of the river, which helps to protect fish and fish habitat.

On August 25, 2009, the province of Alberta as represented by Alberta Tourism, Parks and Recreation and Wilco Landscape Contractors Ltd., received a penalty of \$95,000 after pleading guilty in provincial court for violating subsection 35(1) of the *Fisheries Act* for the harmful alteration, disruption or destruction of fish habitat along the shoreline of Elbow River, Allen Bill Day Use Area. The judge ordered that \$75,000 of the total penalty be distributed to Trout Unlimited Canada to fund a fish habitat enhancement and restoration project in Alberta. The remaining \$20,000 of the penalty was to be distributed to Elbow River Watershed Partnership, to promote public awareness and education of fish habitat programs.

In addition to the monetary penalties, the defendants were ordered to restore and remediate the site where the offence occurred and the Government of Alberta was ordered to compensate for the loss of fish habitat by remediating two other harmfully altered locations on the Elbow River. The Government of Alberta was also ordered to create a public education display, as well as develop and present a training session for its staff working in and around fish and waterways.

Canadian National Railway Company (CN) On May 25, 2009 CN Rail (CN) pleaded guilty to charges pursuant to the *Fisheries Act* and the *Migratory Birds Convention Act, 1994*, as a result of a train derailment in August 2005, at Wabamun Lake, Alberta, where there was a release of heavy fuel oil (HFO 7102) and pole treating oil into the lake. Two days later, a second train derailment occurred near Squamish, British Columbia, which resulted in a spill of sodium hydroxide (caustic soda) into the Cheakamus River.

In Provincial Court in Stony Plain, Alberta, CN pleaded guilty to one count of depositing a substance harmful to migratory birds in water frequented by migratory birds pursuant to subsection 5.1(1) of the *Migratory Birds Convention Act, 1994*, as well as one count of harmful alteration, disruption, or destruction of fish habitat in violation of subsection 35(1) of the *Fisheries Act*. In Provincial Court in North Vancouver, British Columbia, CN pleaded guilty to one count of depositing a deleterious substance into waters frequented by fish pursuant to subsection 36(3) of the *Fisheries Act*.

In Alberta, CN received a \$600,000 penalty, to be paid to the Wildlife Rehabilitation Society of Edmonton, a shelter that provides care for injured and orphaned wildlife with the ultimate goal of returning animals to their natural habitat. CN also received a \$400,000 penalty to be paid to support a number of fisheries and fish habitat related projects in Northern Alberta.

In British Columbia, CN received a penalty of \$400,000, which included a fine of \$50,000 and an order to pay \$350,000 for projects in the Squamish River watershed. In addition, CN was ordered to contribute environmental sensitivity mapping information along its right-of-way in both provinces to Environment Canada. This information is to be used to enhance emergency response in the event of a railway spill.

The charges in Alberta were a result of a joint investigation by Environment Canada and the Department of Fisheries and Oceans Canada. The charges in British Columbia were a result of a joint investigation by Environment Canada and the BC Conservation Officer Service, Ministry of Environment.

Shoreline Works Result in \$45,000 Fine for Cottagers Convicted of Destroying Fish Habitat on Kennisis Lake

On October 30, 2009, William Michael Montgomery and Frances Marion McQuestion were fined a combined total of \$45,000 after being convicted for a violation of subsection 35(1) of the *Fisheries Act*. The offence occurred on Kennisis Lake, Township of Dysart et al, County of Haliburton. In addition to the fines, the defendant was also ordered to remove a shoreline structure and associated construction materials as part of the process of restoring affected fish habitat.

In 2002, DFO launched an investigation after learning that an aerodrome was built on Kennisis Lake in a manner that destroyed fish habitat. Having previously entered into discussion with DFO about fish friendly designs, it was discovered that the defendants then built the aerodrome in a manner that resulted in an infill of fish habitat. At the request of the department, the judge ordered that \$40,500 of the fine be directed to the Kennisis Lake Cottage Owner's Association for the purpose of carrying out fish habitat improvement projects within Kennisis Lake.

3.4 Oceans and Scientific Support

DFO's Science Sector conducts research and provides advice to assist habitat management practitioners. In collaboration with managers in the Habitat Management Directorate, environmental scientists identify knowledge gaps related to habitat conservation, restoration and improvement, and devise research projects to address those gaps. Research pursued in 2009-2010 included:

- developing empirical models for evaluating the productive capacity of fish habitat, linking fish biomass at specific habitats to total population production;
- assessing the impacts of hydroelectric dam operations (ramping rate) on downstream aquatic ecosystems;
- refining methodologies for the remediation of oil-contaminated sites;
- assessing the impacts of fishing gear on fish habitat;
- developing techniques to assess productive capacity and the value of specific habitats to fish, and to delineate 'critical habitat';
- assessing the effects of aquaculture on the environment;

- conducting joint research, with Habitat Management staff, into the efficacy of habitat compensation projects in meeting compensation objectives in a ‘habitat productive capacity’ framework; and
- developing the knowledge necessary to make decisions regarding stream flows and water allocations in order to ensure that water levels are sufficient for fish.

Research results are transferred to HMP staff in the form of peer-reviewed advice, workshops, published reports, fact sheets, briefings, and personal consultations. Information provided can range from informal, one-on-one discussions, to regional advice sessions and large-scale National Advisory Process workshops that follow a formal process to produce peer-reviewed, published advisory documents. The Canadian Science Advisory Secretariat within the Oceans and Science Sectors oversee the production of science advice, and maintains a website where reports are made available¹⁷.

¹⁷ < http://www.dfo-mpo.gc.ca/csas/Csas/Home-Accueil_e.htm >

4.0 Administration and Enforcement of the Pollution Prevention Provisions of the *Fisheries Act*

Since 1978, Environment Canada (EC) has been responsible for the administration of the pollution prevention provisions of the *Fisheries Act* - namely section 34 and sections 36 to 42. These sections of the Act deal with the deposit of deleterious substances into waters frequented by fish or places where the substances may enter such waters.

EC administers the pollution prevention provisions through a suite of activities including compliance promotion, regulations, environmental effects monitoring (EEM), water quality monitoring, enforcement, emergencies management and administrative agreements. The department's 2009-10 activities may be summarized as follows:

- general ongoing reviews and improvements to the administration and enforcement of the pollution prevention provisions
- compliance promotion activities to support subsection 36(3) which prohibits the deposit of deleterious substances to waters frequented by fish unless authorized by regulation;
- development, administration and compliance promotion of regulations, including EEM for the pulp and paper, and metal mining sectors, under subsection 36(4) for sectors where risks are best managed by authorization and control of the deposit of deleterious substances;
- water quality monitoring under the Canadian Shellfish Sanitation Program;
- enforcement of all regulations and the general prohibition under subsection 36(3);
- response to and notification when emergencies occur as per subsection 38(4) to 38(6) regarding the deposit of deleterious substances out of the normal course of events;
- agreements with provinces for the cooperative administration of *Fisheries Act* activities related to section 36.

4.1 General Reviews and Improvements

In May 2009, the Commissioner for Environment and Sustainable Development (CESD) tabled in Parliament a review of the federal government's activities under the *Fisheries Act* to protect fish habitat, including Environment Canada's administration and enforcement of the pollution prevention provisions. The CESD report included a number of important recommendations for ways in which Environment Canada could make improvements. These included the need to set out clearer objectives, results expectations and accountabilities, to improve the department's risk-based approach to assess and address the risks of non-compliance with the *Fisheries Act*, to review outdated regulations and guidelines, to improve enforcement quality assurance and to work with the Department of Fisheries and Oceans to more clearly establish expectations with respect to administration of the pollution prevention provisions.

Environment Canada undertook a number of activities in 2009-10 in response to these CESD recommendations. The department began development of a Results-Based Management and Accountability Framework for the pollution prevention provisions. EC commenced a review of outdated regulations and guidelines and has established dedicated resources for enforcement quality assurance. Environment Canada and the Department of Fisheries and Oceans have committed to review and renew their Memorandum of Understanding for the administration and enforcement of the pollution prevention provisions in order to better define expectations and responsibilities.

4.2 Compliance Promotion for General Prohibition of Releases of Deleterious Substances to Waters Frequented by Fish

Compliance promotion relates to the planned activities that are undertaken to increase the awareness and the understanding of the Act and related risk management instruments. Through these activities, information is provided on what is required to comply, the benefits of complying with the law as well as the consequences of non-compliance.

The approach to compliance promotion is collaborative and coordinated across the department's programs and regions and with Enforcement. It is achieved using various tools and approaches such as website postings, letters and emails, brochures, site visits, responses to inquiries and information sessions.

In 2009-2010, EC undertook compliance promotion activities relating to the general prohibition provisions across the country for a number of sectors and sources. Activities included:

- Presentations on *Fisheries Act* sections 36(3) and 38(4) as part of four regional EC compliance promotion workshops designed to provide an overview of requirements and regulations under the *Canadian Environmental Protection Act, 1999* (CEPA) and the *Fisheries Act*. Participants included federal departments, industry and other levels of government.
- Provision of scientific and technical advice related to contaminated sites (federal and non-federal sites) and potential *Fisheries Act* implications completed through various avenues including the Federal Contaminated Sites Action Plan (FCSAP), compliance promotion activities and environmental assessments.
- Guidance through the environmental assessment process and through direct interaction with other government departments, industry and the general public for a broad range of sectors and sources including: aquaculture, non-metal mineral developments, offshore oil and gas developments, acid mine drainage from former underground coal mining areas, contaminated effluents at closed/abandoned industrial sites (which included the forestry, chlor-alkali and mineral resource sectors), dredging of port facilities, fish and food processing plant discharges, for infrastructure and marine maintenance projects,

underwater pipeline installation, marsh restoration and protection, and discharges from facilities and vessels owned by all levels of government and small to medium sized enterprises.

- Responses to a wide variety of water pollution control and management issues related to the *Fisheries Act* for a variety of private and public sector audiences, including the general public. This included:
 - Provision of engineering expertise, particularly in industrial wastewater treatment, in the administration of *Fisheries Act* programs in specific natural resource sectors (e.g., food and seafood processing).
 - Technical advice and guidance to regulatees and stakeholders (federal and provincial partners, First Nations, etc.) on subsection 36(3) of the *Fisheries Act*; and
 - Promotion of subsections 36(3) and 38(4) of the *Fisheries Act* during response to questions received from calls to the emergency lines.

4.3 Regulations

4.3.1 Pulp and Paper

EC's analysis of the effluent data generated during 2008¹⁸ by Canadian pulp and paper mills and off-site treatment facilities concluded that these facilities continued to have high rates of compliance with the effluent quality limits prescribed in the *Pulp and Paper Effluent Regulations* (PPER). It was determined that the Regulations applied to 103 pulp and paper mills and 1 off-site treatment facility across the country in 2008, and that the compliance rate with limits for total suspended solids and biochemical oxygen demand were over 99%. The Regulations also require that effluent be non-acutely lethal to rainbow trout, and in 2008 the compliance rate for this requirement was 97%.

EC has provided guidance and advice to the pulp and paper sector on the environmental effects monitoring (EEM) program required under the PPER. EC is currently updating its technical guidance documents on EEM to ensure that they are adequate, up to date, clear and reflect the recommendations from the Smart Regulations Initiative¹⁹.

¹⁸ Reporting data for the PPER are submitted through one of four electronic and/or paper based systems across Canada, depending upon which province a given mill is located. 2008 is the most recent year for which data have been pooled, tabulated and analysed at an aggregate level.

¹⁹ Improving the Effectiveness and Efficiency of Pulp and Paper Environmental Effects Monitoring: A Smart Regulation Opportunity. (Environment Canada, December 2005).

EC continued to provide compliance promotion advice to the pulp and paper sector on the requirements of the PPER especially at sites with temporary or proposed closures and with respect to the 2008 amendments modifying EEM requirements.

EC highlighted requirements for continued compliance with the PPER, and with the general provisions of subsection 36(3) of the *Fisheries Act* when the facility ceases to be a mill, but may continue to have an effluent discharged to waters frequented by fish. Additional guidance to pulp mills, including EEM guidance, was provided via e-mails, phone calls, and mail out of compliance promotion materials.

Compliance promotion activities included continued support for the electronic reporting of data by regulated facilities and training on the utilization of the Regulatory Information Submission System (RISS) for pulp and paper mills. The information system is a web based reporting tool used by industry to report mandatory data as required under the PPER.

4.3.2 Metal Mines

EC's analysis of the effluent data generated during 2008 by Canadian metal mines concluded that these companies continued to have high rates of compliance with the effluent quality limits prescribed in the *Metal Mining Effluent Regulations* (MMER). It was determined that the Regulations applied to 98 mining facilities across the country in 2008, and that the compliance rate with limit for lead was 100%, over 99% for arsenic, copper, cyanide, nickel, zinc, radium 226 and pH, and 94% for total suspended solids. The Regulations also require that effluent be non-acutely lethal to rainbow trout, and in 2008 the compliance rate for this requirement was 95.5%.

EC has provided guidance and advice to the metal mining sector on the EEM program required under the MMER. National assessment of the EEM data from the second phase of monitoring was undertaken. EC met with stakeholders to improve guidance for the investigation of cause of the impacts of metal mining effluents in the receiving environments, and is currently reviewing its technical guidance documents on EEM to ensure that they are adequate, up to date, clear and relevant.

The MMER were amended on one occasion during the year to expand the scope of the MMER to include certain hydrometallurgical facilities and to add a water body to Schedule 2 of the Regulations. This water body is associated with a new hydrometallurgical facility being constructed in Newfoundland and Labrador.

Compliance promotion activities in this sector included the provision of information and advice to the regulated community on the requirements of the MMER and the *Fisheries Act*, as well as in response to the Environmental Assessment (EA) project review process. Several compliance promotion site visits were made to mines and prospective mines, as well as to several operating facilities subject to the MMER and facilities undergoing environmental assessments.

4.3.3 Wastewater

The proposed *Wastewater System Effluent Regulations* (WSER) were published in the *Canada Gazette*, Part I on March 20, 2010. These proposed Regulations are Environment Canada's main tool to implement the Canadian Council of Ministers of the Environment (CCME) *Canada-wide Strategy for the Management of Municipal Wastewater Effluent* which was endorsed by the CCME on February 2009. The proposed WSER includes risk-based implementation timelines and baseline effluent quality standards for secondary wastewater treatment. The proposed Regulations would be applicable to many municipal, federal and community wastewater systems in the country.

The proposed WSER would be applied in a harmonized regulatory framework with the provinces and territories, including environmental effects monitoring. The desired outcome is to ensure that the release of wastewater effluent does not pose unacceptable risks to human and ecosystem health or fisheries resources through the application of one set of standards in a fair, consistent, and predictable manner. Environment Canada is currently considering comments received during the public comment period following the publication in the *Canada Gazette*, Part I. Environment Canada will publish the final WSER in *Canada Gazette*, Part II once feedback is considered on the proposed Regulations.

Compliance promotion activities took place in the form of presentations to stakeholders on the CCME Canada Wide Strategy and EC intentions in moving forward in developing Regulations in support of implementing the CCME strategy.

4.3.4 Other Regulations and Guidelines

Environment Canada is currently reviewing a number of older *Fisheries Act* Regulations and Guidelines to ensure that they are up to date, relevant and enforceable. These include the *Petroleum Refinery Liquid Effluent Regulations and Guidelines*, *Chlor-Alkali Mercury Liquid Effluent Regulations*, *Meat and Poultry Products Plant Liquid Effluent Regulations*, *Potato Processing Plant Liquid Effluent Regulations*, *Fish Processing Operations Liquid Effluent Guidelines* and *Metal Finishing Liquid Effluent Guidelines*.

4.4 Water Quality Monitoring – Canadian Shellfish Sanitation Program

Under the Canadian Shellfish Sanitation Program (CSSP), EC surveys bivalve molluscan shellfish growing areas for the purposes of harvesting area classification. EC makes classification recommendations to Fisheries and Oceans Canada (DFO) and the Canadian Food Inspection Agency (CFIA) pursuant to its responsibilities under the CSSP MOU. DFO considers this information and will implement closures for those areas as appropriate under the

Management of Contaminated Fisheries Regulations, which DFO administers. In 2009-2010, over 30,000 marine water quality samples were collected to support the classification of approximately 19,416 square kilometres of shellfish harvest area along the coastlines of the Atlantic, Quebec (St. Lawrence Estuary) and Pacific regions of Canada.

In 2009, there were 3,678 recorded spills to shellfish areas from wastewater treatment plants (WWTPs). This was a decrease from 4,035 spills recorded in 2008 (note previous Report to Parliament for 2008-09 reported on priority WWTPs only with a lesser total of 638 spills). CSSP partners (Canadian Food Inspection Agency, DFO, EC) worked together to raise awareness of WWTP operators about the importance of timely reporting pursuant to s. 38(4) of the *Fisheries Act*. EC assessed the adverse effects of such spills on harvest areas and made appropriate closure recommendations to DFO. The CSSP is in the process of redefining the classification of harvest areas near WWTPs, including EC's assessment of over 300 WWTPs that could potentially impact these areas.

4.5 Enforcement Activities and Measures

4.5.1 Summary of Enforcement Activities

Table 9 summarizes the number of occurrences, inspections and investigations carried out under the *Fisheries Act* by EC in 2009-2010. The following explanations should be noted with respect to the table:

- An **occurrence** is any event where there is a possible violation of the environmental and wildlife legislation administered, in whole or in part, by EC. An occurrence can generate an inspection or an investigation. Occurrences are tabulated based on Reported Date, for all categories except Spill/Release. An occurrence file may include one or more regulations, therefore it is possible that the data at the regulation level, may not add to the total at the legislation level.
- An **inspection** is an activity that involves verification of compliance with the environmental or wildlife legislation administered, in whole or in part, by EC. Only closed files using the end date are tabulated. The number of inspections relates to the number of regulatees inspected for compliance under each of the applicable regulations.
- An **investigation** is the gathering and analyzing, from a variety of sources, of evidence and information relevant to a suspected violation where there are reasonable grounds to believe that an offence has been, is being or is about to be committed with regards to the environmental or wildlife legislation administered, in whole or in part, by EC. Investigations are tabulated by number of investigations files, based on Start Date of the investigation. An investigation file may include activities relating also to another piece of legislation and may include one or more regulations. Therefore, the total number of investigations shown by regulation may not add to the total at the legislation level.

Table 9:
EC Enforcement Activities and Measures Carried Out under the *Fisheries Act*
Fiscal Year 2009-2010

NATIONAL	Inspections ²⁰			Investigations ²¹	Enforcement Measures				
	Off-site	On-site	Total		Prosecutions	Charges	Convictions	Written Directives	Written Warnings
General Prohibition	890	839	1,729	43	5	5	17	57	46
<i>Chlor-Alkali Mercury Liquid Effluent Regulations and Guidelines</i>	4	1	5	0	0	0	0	6	23
<i>Meat and Poultry Products Plant Liquid Effluent Regulations and Guidelines</i>	34	5	39	0	0	0	0	0	0
<i>Petroleum Refinery Liquid Effluent Regulations and Guidelines</i>	167	6	173	0	0	0	0	0	4
<i>Potato Processing Plant Liquid Effluent Regulations and Guidelines</i>	26	3	29	0	0	0	0	0	0
<i>Pulp and Paper Effluent Regulations</i>	1,235	66	1,301	4	0	0	0	3	96
<i>Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments</i>	0	0	0	0	0	0	0	0	0
<i>Metal Mining Effluent Regulations</i>	535	64	599	4	2	17	0	0	45
<i>Fish Processing Operations Liquid Effluent Guidelines</i>	0	15	15	0	0	0	0	0	0
TOTAL	2,891	999	3,890	45	7	22	17	66	214

²⁰ **Number of Inspections - new way of counting:** Only closed files using the end date are tabulated. The number of inspections relates to the number of regulatees inspected for compliance under each of the applicable regulations.

²¹ **Number of Investigations:** Investigations are tabulated by number of investigations files, based on the Start Date of the investigation. An investigation file may include activities relating to other legislation and may concern one or more regulations. Therefore, the total number of investigations shown by regulation may not add to the total at the legislation level.

ADDITIONAL STATISTICS

There were 44 referrals to other federal or provincial government departments or municipal bodies. Table 10 presents the breakdown of investigation in 2009-2010.

Table 10: Investigation Breakdown Fiscal Year 2009-2010	
INVESTIGATION BREAKDOWN	# of Investigations
Investigations started and ended in fiscal year 2009-2010	7
Investigations started in fiscal year 2009-2010 and still ongoing at end of fiscal year 2009-2010	38
Investigations started before 2009-2010 and ended in fiscal year 2009-2010	48
Investigations started before fiscal year 2009-2010 and still ongoing at the end of fiscal year 2009-2010	35

EXPLANATORY NOTES: THE STATISTICS ARE TABULATED AS FOLLOWS

The measures are tabulated at the section level of a regulation. For example, if the outcome of an inspection is the issuance of a written warning which related to 3 sections of a given regulation, the number of written warnings is 3.

Prosecutions: The number of prosecutions is represented by the number of regulatees that were prosecuted by charged date regardless of the number of regulations involved (including Tickets).

Charges: The number of charges (excluding tickets) is tabulated at the section level of the regulation by charge date, by regulatee. For example, a regulatee violating sections 36(1) and 36(3) of the *Fisheries Act* may be charged with one count under section 36(1) and two counts under section 36(3). This is considered as two charges – one for each section. Charges are counted in relation to the date the charge was laid, not the date when the case began or ended. The number of charges excludes tickets.

Counts: The number of counts (excluding tickets) is tabulated at the section level of the regulation, by offence date relating to the regulatee's charge.

Convictions: The number of convictions (excluding tickets) is represented by the number of counts where the regulatee was found guilty or pleaded guilty. For example, in a case where a regulatee is found guilty of one count under section 36(1) and two counts under section 36(3), this is considered three convictions.

4.5.2 Enforcement Highlights

Irving Pulp & Paper Ltd.

On April 9, 2009, charges were laid against Irving Pulp & Paper Ltd. for violating subsection 36(3) of the *Fisheries Act*. An investigation initiated by Environment Canada confirmed a report from Irving Pulp & Paper Ltd. that over 600,000 litres of green liquor, a bi-product of the pulp and paper process which is harmful to fish, was released into the Saint John River on October 31, 2007. The company was ordered to pay a penalty of \$75,000 of which the court assessed a payment of \$71,250 from the penalty to the Atlantic Coastal Action Program (ACAP).

West Fraser Mills Ltd.

In April 2009, West Fraser Mills Ltd. (West Fraser) received a penalty totaling \$130,000 after pleading guilty to one count of depositing a deleterious substance into water frequented by fish, contrary to subsection 36(3) of the federal *Fisheries Act*. The \$130,000 penalty to West Fraser includes fines of \$5,000, a payment of \$65,000 to the University of Northern British Columbia for the purposes of conservation and protection of fish and fish habitat in north-western British Columbia, and a payment of \$60,000 for deposit into the Habitat Conservation Trust Fund of British Columbia.

Canadian National Railway

On May 25, 2009, Canadian National Railway Company (CN) pleaded guilty to charges pursuant to subsection 35(1) of the federal *Fisheries Act* and to the *Migratory Birds Convention Act, 1994*.

The first charges stem from train derailments at Wabamun Lake, Alberta on August 3, 2005, where there was a release of heavy fuel oil (HFO 7102) and pole treating oil into the lake. CN received a \$600,000 penalty, to be paid to the Wildlife Rehabilitation Society of Edmonton, a shelter that provides care for injured and orphaned wildlife with the ultimate goal of returning animals to their natural habitat. CN also received a \$400,000 penalty to be paid to support a number of fisheries and fish habitat related projects in Northern Alberta.

The second incident occurred in Squamish, British Columbia on August 5, 2005, and resulted in a spill of sodium hydroxide (caustic soda) into the Cheakamus River. CN received a penalty of \$400,000, which includes a fine of \$50,000 and an order to pay \$350,000 for projects in the Squamish River watershed. In addition, CN has been ordered to contribute environmental sensitivity mapping information along its right-of-way to be used to enhance emergency response in the event of a railway spill.

Antigonish, Nova Scotia

On June 2, 2009, the owner of Atlantic Country Composting pled guilty to releasing a substance which was deleterious to fish into a stream that enters the Tracadie Harbour, altering fish habitat. The owner was ordered to pay a penalty of \$8,000. The penalty includes a court ordered payment of \$5,000 to the Environmental Damages Fund. The remaining \$3,000 constitutes a fine.

Northern Transportation Company Limited (NTCL)

On July 22, 2009, after pleading guilty to violating subsection 36(3) of the *Fisheries Act*, the Northern Transportation Company Limited (NTCL) in Hay River was ordered to pay a \$1,000 fine and make a \$3,000 contribution to the Environmental Damages Fund. The incident leading to these fines occurred on April 25, 2008, when a fuel tank rupture resulted in 550 litres of diesel fuel spilling onto the ice of the Hay River.

Hatchet Lake Denesuline First Nation

On January 22, 2010, the Hatchet Lake Denesuline First Nation pleaded guilty to two charges under the federal *Fisheries Act*, one charge under the *Migratory Birds Convention Act, 1994* and two charges under the Saskatchewan *Environmental Management and Protection Act* resulting in \$31,000 in federal fines and penalties and \$19,600 in provincial fines and penalties. The charges in this case stem from a June 2006 spill of an estimated 6,000 litres of diesel fuel along the shoreline of Wollaston Lake. \$10,000 of the federal penalties imposed by the court were allocated to the Environmental Damages Fund.

Grand Bank, Newfoundland

On February 8, 2010, a Newfoundland man pleaded guilty to releasing an estimated 400 litres of diesel fuel into the English Harbour East, Newfoundland and Labrador and was ordered to pay a penalty of \$15,000 for violating the federal *Fisheries Act*. He also pleaded guilty to failing to report the diesel oil spill.

4.6 Environmental Emergencies Program

EC's Environmental Emergencies Program plays an important role concerning the response to the deposit of deleterious substances in water frequented by fish. Subsection 38(5) of the *Fisheries Act* states that persons who own or are responsible for a deleterious substance, or persons who cause or contribute to a deposit of the deleterious substance in water frequented by fish, must "take all reasonable measures consistent with safety and with the conservation of fish and fish habitat" to prevent the deposit or, where that deposit actually does occur, "to counteract, mitigate or remedy any adverse effects that result".

If a spill or other deposit out of the normal course of events occurs, Environmental Emergencies Program personnel provide environmental and technical advice to the responsible parties, environmental response organizations and to other levels of government. In addition, Environmental Emergencies personnel:

- receive notifications and reports of spills, leaks and deposits of deleterious substances;
- access the site of the deposits in order to observe or to carry out spill response activities;
- collect and analyze relevant information;
- issue inspector's directions requiring the responsible parties to take remedial or preventive measures; and
- support enforcement actions.

In 2009-2010, EC recorded a total of approximately 1,633 occurrences involving the deposit of a deleterious substance out of the normal course of events under the *Fisheries Act*. EC's Environmental Emergency Officers, who are designated as inspectors under the *Fisheries Act*, conducted 76 on site inspections to verify that the responsible parties complied with subsection 38(5) of the *Fisheries Act*.

The scope and nature of on-site inspections conducted by Environmental Emergency Officers varies across EC's five regions depending on the location of the incident, the responsible parties and arrangements that exist with other jurisdictions. Efforts are made to ensure that the environment is protected against deposits of deleterious substances in water frequented by fish while minimizing duplication of administrative effort between the federal, provincial and territorial governments.

The Environmental Emergencies Program also coordinates the activities of the Regional Environmental Emergencies Teams in EC's five administrative regions. These interdisciplinary, interdepartmental, multi-stakeholder teams provide agencies involved in an environmental emergency response with consolidated advice and scientific information on environmental protection, environmental damage assessment, clean-up measures and the disposal of waste resulting from cleanup activities.

4.7 Agreements

The Government of Canada has administrative agreements with three provinces – Alberta, Saskatchewan and Quebec - for the cooperative administration of *Fisheries Act* activities related to section 36.

The *Canada-Alberta Administrative Agreement for the Control of Deposits of Deleterious Substances under the Fisheries Act* entered into force on September 1, 1994. The agreement, establishes the terms and conditions for the cooperative administration of subsection 36(3) and the related provisions of the *Fisheries Act*, as well as regulations under the *Fisheries Act* and the *Alberta Environmental Protection and Enhancement Act*. The Agreement streamlines and coordinates the regulatory activities of EC and Alberta Environment (AENV) in relation to the protection of fisheries, and reduces duplication of regulatory requirements for regulatees. During 2009-2010, AENV reported 1993 incidents to EC, of which 298 were related to the *Fisheries Act*. This collaboration led to 115 (on-site and off-site) inspections and 4 ongoing investigations. EC conducted an additional 225 off-site inspections under the *Pulp and Paper Effluent Regulations* and the *Petroleum Refinery Liquid Effluent Regulations* for monthly and annual reports forwarded from AENV in accordance with the Agreement.

To facilitate the cooperative administration of subsection 36(3) of the *Fisheries Act* and its accompanying regulations, EC maintains bilateral agreements with Saskatchewan. The *Canada-Saskatchewan Administrative Agreement for the Control of Deposits of Deleterious Substances under the Fisheries Act* sets out the principles for cooperation and identifies a preliminary list of

activities where detailed collaborative arrangements could be developed. Existing collaborative arrangements are described in the five annexes to the agreement. In 2009-2010, the Saskatchewan Ministry of Environment reported 514 spills to the EC's Enforcement Branch, of which 53 were possible *Fisheries Act* violations. 44 of these led to inspections, 34 of which are now closed and 10 currently ongoing.

Administrative agreements concerning the pulp and paper sector have been in place between the province of Quebec and the Government of Canada since 1994. The fourth agreement expired on March 31, 2007. On June 13, 2009, the proposed *Canada–Quebec Pulp and Paper and Metal Mining Sectors Administrative Agreement* was published in Part I of the *Canada Gazette*. The parties have continued to cooperate in keeping with the spirit of the draft Agreement.

The proposed agreement recognizes Quebec as the principal interlocutor for receiving, from the pulp and paper and metal mining sectors in that province, most of the data and information required pursuant to the following four federal regulations:

- *Pulp and Paper Mill Effluent Chlorinated Dioxins and Furans Regulations* made pursuant to the Canadian Environmental Protection Act (CEPA) 1999;
- *Pulp and Paper Mill Defoamer and Wood Chip Regulations* made pursuant to CEPA 1999;
- *Pulp and Paper Effluent Regulations* made pursuant to the *Fisheries Act*; and,
- *Metal Mining Effluent Regulations* made pursuant to the *Fisheries Act*.

Under the agreement, the province acts as a “single window” for the gathering of information from Quebec pulp and paper mills and forwards such information to Environment Canada for the purpose of enabling the latter to implement CEPA 1999 and the *Fisheries Act*, and their regulations. Both levels of government retain full responsibility for carrying out inspections and investigations and for taking appropriate enforcement measures in order to ensure compliance with their respective requirements on the part of the industry.

During this reporting period more than 80 reports produced by pulp and paper facilities in Quebec were examined against the two regulations pursuant to CEPA 1999. These administrative inspections verified that the facilities were in compliance with the applicable regulations. As well, Environment Canada presented compliance verification reports to Quebec. These presentations are made during meetings of the Management Committee established by the Agreement. In 2009–2010, the Management Committee met once, on December 14, 2009.