2009



Report of the

Commissioner of the Environment and Sustainable Development

to the House of Commons

SPRING

Message from the Commissioner

Chapter 1
Protecting Fish Habitat

Chapter 2 Kyoto Protocol Implementation Act



The 2009 Spring Report of the Commissioner of the Environment and Sustainable Development comprises a Message from the Commissioner, and two chapters. The main table of contents for the Report is found at the end of this publication.

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© Minister of Public Works and Government Services Canada 2009 Cat. No. FA1-2/2009-1E ISBN 978-1-100-12467-4 ISSN 1495-0782 To the Honourable Speaker of the House of Commons:

On behalf of the Auditor General of Canada, I have the honour to transmit herewith my Spring Report to the House of Commons for 2009, which is to be laid before the House in accordance with the provisions of subsections 7(5) of the *Auditor General Act* and 10.1(1) of the *Kyoto Protocol Implementation Act*.

Scott Vaughan Commissioner of the Environment and Sustainable Development

To the reader:

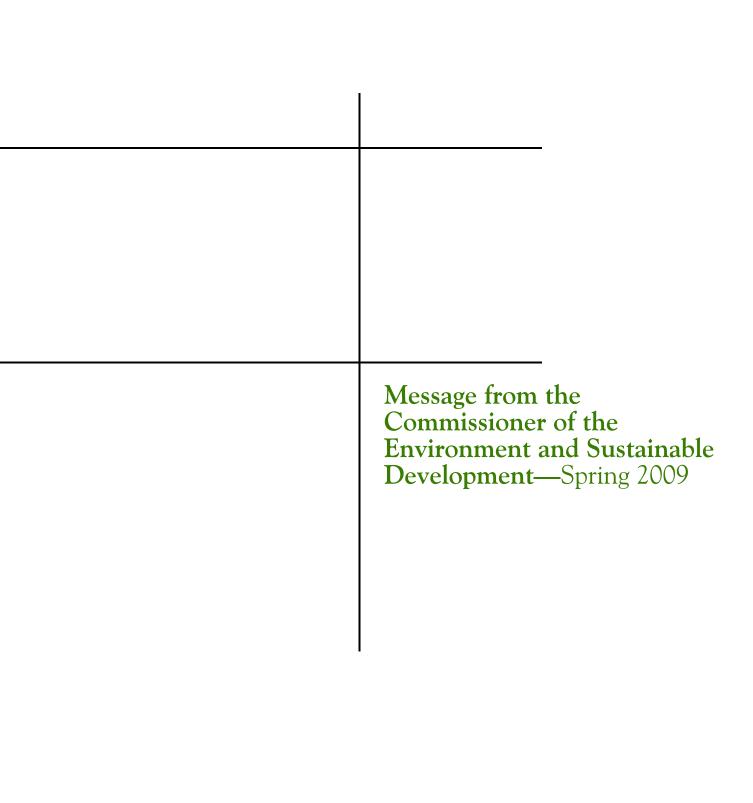
I welcome your comments and suggestions on this Report and other issues related to the environment and sustainable development. I can be reached at the following address:

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Message from the Commissioner of the Environment and Sustainable Development—Spring 2009

This Report examines the management of some key elements of two important federal laws: the *Fisheries Act* and the *Kyoto Protocol Implementation Act*. The *Fisheries Act* represents one of the oldest areas of federal responsibility, as set out in the *Constitution Act*, 1867.

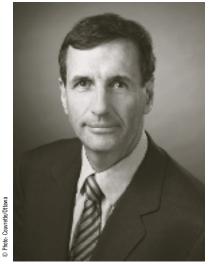
Protecting fish habitat—places where fish can spawn, feed, grow, and live—is essential for sustaining fish, providing food and shelter for other aquatic and terrestrial wildlife, contributing to water quality for human consumption, and other uses. Among the key objectives of this Act are to prohibit the harmful alteration, disruption, or destruction of fish habitat and to prevent pollution by prohibiting the deposit of harmful substances into our waters.

The Kyoto Protocol Implementation Act was passed by Parliament in 2007 to "ensure that Canada takes effective and timely action to meet its obligations under the Kyoto Protocol and help address the problem of global climate change." The Act requires the federal government to present annual plans to Parliament, including measures the government will take to reduce Canada's annual emissions of greenhouse gases. Climate change is a global problem. Although the sources of greenhouse gases vary among countries and sectors, climate impacts are likely to include serious and potentially irreversible damage both in Canada and around the world.

Economic dimensions of environmental protection

In 2005, Canada's commercial fishing sector generated \$2.2 billion and employed more than 80,000 people in fishing and fish processing activities. Recreational fishing plays an even larger role, including contributing to Canada's tourism sector. More than 3.2 million Canadians participate in recreational fishing, which in 2005 contributed \$7.5 billion to Canada's economy. Few would now argue that protecting the quality of Canada's lakes, rivers, and marine coastline is not essential to sustaining these important economic benefits.

The economic dimensions of climate change remain a subject of analysis and debate. Many measures associated with reducing greenhouse gas emissions will be costly, as will the impacts of climate change. Examples of climate change impacts could include loss of life, and the destruction of property in low-lying coastal regions due to rising sea levels or more



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frequent and severe storms. Economic sectors such as forestry are likely to be affected by changes in water availability, increased frequency of forest fires, and more pest infestations. Climate change is also associated with emerging technologies such as carbon capture and storage and alternative and renewable energy technologies, as well as with emerging carbon markets that could scarcely be imagined even a few years ago. According to a 2008 study by the Bank of Canada, the value of global carbon markets from emissions trading schemes as well as project-related offsets in 2006 was around \$30 billion.

In this report, we examine how the government manages some of its activities under the two Acts. Each of the Acts presents unique challenges. However, the following identifies some cross-cutting or common areas in order for Parliament to compare and contrast the government's track record in supporting the objectives of both federal laws.

Government roles and responsibilities

Both the *Fisheries Act* and the *Kyoto Protocol Implementation Act* involve more than one federal department.

While Fisheries and Oceans Canada has primary responsibility for the *Fisheries Act*, Environment Canada is responsible for a provision of the Act that prohibits depositing harmful substances into waters that provide habitat for fish. Among the findings in chapter 1 of this Report is the absence of formal arrangements between the two departments to coordinate their policies that relate to protecting fish habitat. The Habitat Policy of 1986 stipulates that Fisheries and Oceans Canada should work with Environment Canada to establish federal priorities. However, we found little formal interaction to set priorities, develop common criteria for fish protection, establish expectations relating to the pollution prevention provisions of the *Fisheries Act*, or maintain formal contact about these issues.

Under the Kyoto Protocol Implementation Act, Environment Canada is responsible for preparing the annual climate change plans, with input from other departments—such as Natural Resources Canada and Agriculture and Agri-Food Canada—responsible for specific measures included in the plans. Environment Canada has a process in place to collect information from responsible departments and to obtain sign-offs from them on the information provided in the plans.

State of the environment, or leading environmental indicators

Information that is accurate, comprehensive, and timely helps Parliament know the current state of environmental conditions and, over time, the rate of change in relation to some reference point. In the absence of such basic information, it is difficult to understand annual changes within a broader risk assessment framework.

To know if Canada's Fish Habitat policy is achieving its objective of moving toward an overall increase, or net gain, in fish habitat, information on the state of fish habitat is important. Since the current state of Canada's fish habitat is unknown, the government has no means to determine whether its actions are effective in achieving its obligation under the Policy to produce a net gain in fish habitat. We found that the Department has made little progress on this matter since we reported it in 2001.

By contrast, the government maintains a credible national inventory of Canada's annual greenhouse gas emissions. The design of the inventory is consistent with recommendations set out by the United Nations Framework Convention on Climate Change. According to the national inventory, Canada emitted about 731 million tonnes of greenhouse gas in 2005. Estimated global greenhouse gas emissions for 2005 totalled more than 37 billion tonnes.

Monitoring and measuring the impacts of government action

In order to know whether federal policies and programs are protecting Canada's environment, reliable monitoring systems are needed to track impacts and signal the need for corrective action when measures are not working effectively.

Our audit for chapter 1 of this Report found that Fisheries and Oceans Canada rarely monitors whether proponents of projects that could negatively affect fish habitat comply with the conditions the Department has placed on the projects to allow them to proceed. Prior to setting out conditions, the Department is required to assess the risks to the habitat and the proponent's analysis of habitat impacts. The Department is also required to undertake monitoring to ensure that the required conditions—including conditions to compensate for possible negative impacts—are actually satisfied. However, in 30 projects we found that the Department did not follow the required steps consistently. In no case did the analysis of a project we reviewed contain all of the required information. Overall, we found weak monitoring systems to determine whether the conditions set out for project approval actually led to a net increase or a net loss in fish habitat.

The Kyoto Protocol Implementation Act requires the government to measure the actual reductions in greenhouse gas emissions resulting from each of the measures set out in its plans on an annual basis, beginning in 2008 and ending in 2012, when the Kyoto Protocol reporting period concludes. Our audit work for chapter 2 of this Report found that the government is unable to monitor actual reductions resulting from a number of the measures in its plans. The government acknowledges that it lacks such a monitoring system. We also found problems in how the government explained its projected reduction targets.

A key observation in the chapter is that Environment Canada has overstated the reductions it expects in greenhouse gas emissions for the 2008–12 Kyoto Protocol period. Neither the government nor we can be certain of the actual reductions that will take place between 2008 and 2012. There are many variables that affect annual greenhouse gas emissions, not least the price of energy and the general state of Canada's economy. Given that expected emission reductions are based on estimates in the same manner that economic forecasts are based on estimates, a recurring flaw or shortcoming, noted in chapter 2, is the lack of transparency on the part of the government as to how forecast reductions are calculated.

Enhanced transparency would help Parliament and Canadians determine when projected reductions in emissions are overstated or unduly optimistic.

Much has changed during the 140 years that separate the *Fisheries Act* and the *Kyoto Protocol Implementation Act*. It is increasingly recognized that good environmental management is based on management practices that are transparent and that require accountability. It is also recognized that environmental protection does not represent a kind of stand-alone, isolated, or special-interest action but instead affects and is affected by both economic and social considerations. Indeed, the three pillars of sustainable development—linking economic, social, and environmental considerations—are evident in the matters these two Acts address.