Some of the other greenhouse gases, although of much lower concentrations, are more potent and are rising even more rapidly (5-6% per year for chlorofluorocarbons). Collectively, increases in these gases are likely to result in unprecedented and perhaps irreversible global climate warming within the next few decades to half-century, accompanied by major shifts in precipitation and hence vegetation patterns. For Canada, primary concerns are with respect to the potential for dryer climate conditions in the south, affecting agriculture, forest ecozones and fire risks, water supply and quality, hydro power and navigation, and the risks of coastal inundations due to rising sea levels. More positive implications include longer, warmer growing seasons, reduced ice cover in navigable waters, and reduced requirements for space heating in winter. A recent world conference held in Toronto, in June 1988, concluded that seriousness of the threat of climate change is second only to that of global nuclear war and that the world community must act now. Canada is already investigating the implications of climate change through its Canadian climate program, and is now developing an interdepartmental action plan to respond to the recommendations of the Toronto conference.

Waterfowl protection. A plan to manage North American waterfowl, the North American Waterfowl Management Plan (NAWMP), was signed by Canada's Federal Environment Minister, Thomas McMillan and the US Secretary of the Interior, Donald Hodel in May 1986. The plan proposes a far-reaching $1.5 billion management agreement to be undertaken jointly by private and public interests in Canada and the United States to bring seriously declining waterfowl populations back to the average annual fall migration level in the 1970s of 100 million birds.

The objectives of NAWMP are to be achieved over a 15-year period. It will seek to restore the breeding habitat of mallard and pintail ducks in the mid-continental region by protecting and improving 3 million acres of duck habitat in Canada and the United States. Additional habitat will be protected in the lower Mississippi River and Gulf Coast region, and the Central Valley of California. Other projects will protect black duck habitat in Eastern Canada and the East Coast of the United States. The first waterfowl habitat enhancement and protection project in North America, under NAWMP, was established in the Quill Lakes area of Saskatchewan in 1988.

Sustainable development. The maintenance of a strong economy is directly related to the health of the environment. In Canada, over 40% of the Gross Domestic Product, 32% of the labour force and 52% of exports can be directly related to economic activities which are dependent on the environment. The declining quality of the environment arising from intense resource use and poor waste management, however, is constraining economic activities and posing serious risks to health and well-being.

Following the recommendations of the World Commission on Environment and Development, the federal government is committed to the promotion of activities which support sustainable development, those which enhance economic productivity and, at the same time, ensure the maintenance of a healthy environment for future generations. In support of this, the federal Cabinet approved the Environmental Quality Policy Framework to strengthen and streamline federal environmental quality actions, and emphasize the need to incorporate environmental decisions into economic planning and decision making.

The department's role in promoting sustainable development by Canadians and their governments includes the establishment of conservation strategies as blueprints for sustainable development; building a sound environmental knowledge base; providing information and advice to support environmentally sound development; influencing federal programs so that environmental objectives are achieved along with economic measures; and developing policies, methods and tools to help in the realization of sustainable development.

State of the environment reporting. The Federal Environmental Quality Policy Framework, approved in 1986, gave Environment Canada and Statistics Canada the authority and terms of reference to establish jointly a State of the Environment (SOE) reporting system. In June 1988, the newly proclaimed Canadian Environmental Protection Act gave SOE reporting its legislative mandate.

The role of systematic state of the environment reporting is to improve and provide open access to information on the status and trends, and their significance, of environmental quality and natural resource use; provide measures of progress in dealing with environmental problems; identify emerging issues; and encourage the sustainable use of natural resources. Key functions that have been identified are the preparation of a national report every five years; preparation of reports and fact sheets on high profile environmental issues; provision of guidance and assistance to federal departments in their preparation of sectoral reports and information; and development and maintenance of a publicly accessible SOE data base in co-operation with stakeholders.