

1.8 Environment

Environment Canada has a mandate to foster harmony between society and the environment for the economic, social and cultural benefits of present and future generations of Canadians.

1.8.1 Environmental quality

In its strategic planning, the department has identified the following priorities.

Toxic substances released into the environment, especially if persistent, can have a cumulative effect on all living things, including humans. The department is undertaking to identify threats as early as feasible. It has proposed that responsibility should be shared among governments and actual or potential polluters, that action should be taken to prevent or mitigate adverse consequences, and that public consultations should be held on the environmental and socio-economic trade-offs in using polluting substances. A new Environmental Protection Act will be introduced to Parliament in 1987 that will consolidate the Environmental Contaminants Act, the Canada Water Act, Part III, the Clean Air Act and Section 6(2) of the Department of the Environment Act (1979). The new act will upgrade the penalties for a breach of the toxic chemicals provisions. The Minister will be endowed with powers to recall chemicals, products, etc. which he deems to be unsafe. These and other provisions will make the act one of the most advanced of its kind in the world.

Acid rain is caused by emissions of sulphur dioxide and nitrogen oxide in Canada and the United States. To solve Canada's acid rain problem, deposition of wet sulphate in all vulnerable areas in Eastern Canada must be reduced to less than 20 kilograms per hectare a year. Achieving this environmental objective requires that total sulphur dioxide emissions east of the Saskatchewan/Manitoba border be reduced to 2.3 million tonnes (50% of the 1980 level) and that the transboundary flow of sulphur dioxide from the US into Canada be reduced to about 2 million tonnes a year (50% of the 1980 level). The federal government and the seven eastern provinces have agreed to cut emissions by 50% by 1994 at the latest. At the March 1986 summit meeting of President Reagan and Prime Minister Mulroney, the President endorsed the findings and conclusions of the Special Envoys on Acid Rain. These included implementation of a five-year \$5 billion program in the US to develop control technology and the establishment of a bilateral, advisory and consultative group on transboundary air pollution.

Water resources management may become as significant an issue by 1990 as energy has been in recent years. Elements of concern include: growing

imbalances between water supply and demand especially on the Prairies; inadequate water quality in various parts of the country; pressures for water export to the United States; proposals for major diversions in Canada; and conflicts in water use plans among provinces and territories. The final report of the Inquiry on Federal Water Policy — the first comprehensive assessment of the government's role in managing water resources — was published in 1985. Following extensive consultations on the report's recommendations, the federal government is developing a comprehensive water policy.

Land resources. Increased demands for renewable resources including forestry and agricultural products make it necessary to maintain land productivity and the related resource base. Issues are multiple land use, possible degradation of soil quality and loss of wildlife habitat, increasing soil erosion and water supply considerations, and land-use demands from urbanization.

Climate change. Carbon dioxide levels in the atmosphere are increasing by 3% per decade from burning fossil fuels, deforestation and other altered land use. This may cause significant warming of the earth surface, altering climates and economies. A warmer climate in Canada would expand growing and ocean transportation seasons in the North. It would increase aridity in Southern Canada threatening drought, water shortages, and reduced river and lake levels. Changes elsewhere in the world could alter Canada's international trade position. A Canadian climate program plans to monitor changes in carbon dioxide and climate, predict the effects, prepare related socio-economic impact scenarios, develop adaptive strategies and provide monthly and seasonal climate predictions.

Waterfowl protection. A plan to manage North American waterfowl 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 the plan 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.