



Environment UPDATE

May 1981 Volume 2 Number 1

Canadians Impatient over Acid Rain

We Canadians are now impatient about the acid rain issue. We know how dangerous acid rain is. We know that technology exists to stop the emissions that cause acid rain. Still, the United States is exporting thousands of tons of acid-causing chemicals to Canada every day -- through the atmosphere. The impatience of Canadians showed through when President Reagan visited Ottawa in March. Thousands of demonstrators protested on Parliament Hill.

During the President's visit to Ottawa, the Prime Minister and I discussed the acid rain problem. Since then I have met with Interior Secretary James Watt and with members of the U.S. Senate Environment Committee.

President Reagan publicly assured the Canadian Parliament that his government's plans to decrease the number of regulations on private industry "won't be done in a way that will affect the health and safety of Canadians." The President also indicated that the United States wishes to negotiate an acid rain treaty, and he expects final negotiations will begin this summer.

Interior Secretary Watt repeated these assurances. Several times in our discussions he assured me that the United States would

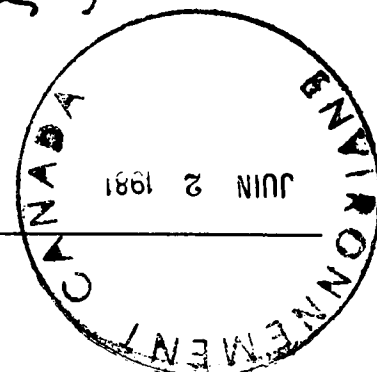
fulfill its responsibilities. He appeared to take Canadian concerns about acid rain very seriously.

As a government we are concerned over the impending review of the U.S. Clean Air Act. Canada and the United States have a long history of respecting each other's environmental interests.

This principle is embodied in our international commitments to each other. We have shown repeatedly that our mechanisms for cooperation can deal with very difficult transboundary environmental issues -- that we can rise above narrow vested interests to meet our obligations as good neighbors.

The specific approach to the acid rain problem chosen by Americans is their own business, not mine -- as long as the results meet the need to protect our environment. But I can say that Canada is prepared to meet its obligation toward our neighbors. We look for the same attitude from the United States.

John Roberts
Minister



Work Group Report On Airborne Wastes

First reports by the U.S.-Canada work groups have been published in accord with the bilateral Memorandum of Intent on Transboundary Air Pollution of August 5, 1980.

Work groups were set up to provide scientific and technical information to negotiate an agreement. They deal with impact assessment (group 1), atmospheric modelling (group 2), strategies development and implementation (group 3A), and emissions, costs and engineering assessments (group 3B).

The impact assessment concentrates on key physical and biological impacts resulting from pollution. It emphasizes acid precipitation, but identifies other problems such as oxidants. Others will be dealt with in subsequent revisions.

Group 2 describes studies of the transport of airborne pollutants from source to final deposition, based on models developed in Canada and the U.S., as well as measured deposits obtained from monitoring networks.

Group 3A provides an overview of the acid rain phenomenon, summaries of the other work groups, reports and initial preparations of strategy packages. It recommends additional studies by each work group and elaborates on uncertainties and data gaps identified in reports.

Group 3B reviews process and control technologies, costs of controlling SO₂ and NO_x emissions and those of the thermal power industry, non-ferrous smelters, non-utility fuel use and mobile sources. It recommends research and development activities, offers conclusions and recommendations concerning

control of SO₂ and NO_x emissions.

Reports will be revised and submitted this summer, to support the initial negotiations of the agreement. Following submission they will be refined and expanded to include more detailed information on transboundary air pollution issues, in addition to acid rain.

Further information and copies:

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Mailing list

We have received numerous requests to have names added to our mailing list, along with several requests for corrections to the list. These are now being processed. Changes will be easier, however, when the list is computerized early this summer.

Information

Requests for further information should be sent to the authors of the articles at :

Information Directorate
Environment Canada
Ottawa, Ontario
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unless otherwise indicated.

For the address of regional information directors see page 12.

Comments and suggestions should be sent to Henri Mauviel, Environment Update, at the above address, (819) 994-1410.

The Energy Challenge

by Jacques Gérin

Adapted from a speech given by Jacques Gérin, senior assistant deputy minister, Environment Canada, at the McGill University Conference on Energy, February 13, 1981.

Jacques Gérin, 43, is a native of Montréal. He received a bachelor of arts degree from the Collège Jean de Brébeuf (Université de Montréal) in 1956, a bachelor's degree in applied science and a diploma in civil engineering from the Ecole Polytechnique (Université de Montréal) in 1962, and a master's degree in regional planning from the University of North Carolina at Chapel Hill in 1968.

Mr. Gérin joined the Public Service of Canada in 1971 as vice-president, bilateral programs, Canadian International Development Agency. From 1975 to 1977, Mr. Gérin served as assistant secretary to the Cabinet (priorities and planning) in the Privy Council Office, and since June 1977 has been senior assistant deputy minister, Department of the Environment.

The following aphorism recently appeared in a Pogo cartoon: "We are confronted by insurmountable opportunities."

The restrictions and pressures that have characterized the energy crisis of the past decade have put us into just this position. We are staring at "insurmountable opportunities".

Every component of our society has finally turned its attention to this energy problem.

Cutbacks, shortages and rising prices are forcing us to innovate, opening new horizons.

Now we are faced with choices: not just either-or choices, not just options between renewable or non-renewable, between solar or nuclear energy.

One obvious truth is that there is no single solution -- only a diversity of solutions that must be encouraged and developed.

Fortunately, technology has opened a number of avenues to us. Using technology, we can arrive at a sensible mix -- a balance of many methods, rather than a single panacea.

But this does not mean that technology can dictate our choices. The choices are up to all of us; technology will follow.

Furthermore, there are ways of approaching the energy problem that require technology, but that go beyond it.

For example, improved urban planning offers significant sources of conserved energy for heating, transportation, solar radiation and protection from wind. Other alternatives include the energy self-sufficiency of the British Columbia wood industry; the potential of low-head power sites (small waterfalls); and the combustion of municipal and industrial wastes as an energy source.

These approaches may appear useful only on the local level. In fact, they have the potential for national impact. They can play as important a role as the much more widely publicized potential of Hibernia, the tar

Energy Challenge (continued)

sands, arctic gas and oil, and nuclear power. It would be to our benefit to develop such regional projects as low-head hydro in Nova Scotia, wood, solar and wind power in Prince Edward Island, forest biomass in New Brunswick, and so forth across Canada.

The multiple impact of these approaches should be noted:

- . use of local renewable resources
- . spin-offs to research and development, to industries, and to exports
- . job creation throughout the country.

Obviously, the sum of all these "small" solutions adds up to a significant contribution as a whole.

Living in harmony with his environment leads man to live in harmony with himself. This is not a rejection of technology, but rather a valuation that puts technology at the service of man.

It is up to us to decide which directions we wish technology to take, and to let our decision be known: it is a decision not for experts, but for people.

Calendar

June 1-4 - Provincial and Federal Environmental Advisory Councils - 6th annual meeting, Banff, Alberta. Topics: incremental environmental disturbance, agricultural land base, public participation in decision-making.

Further information:

W.A. Flook
 Director of Liaison
 Environmental Council of
 Alberta
 2100 College Plaza Tower
 Three
 8215 - 112 Street
 Edmonton, Alberta
 T6G 2M4
 Tel.: (403) 427-5792

June 10-12 - Canadian Water Resources Association 34th National Conference, Banff, Alberta. Theme: Canadian water resources, constraints on the future:

Further information:

D. Mortin
 Underwood McLellan Ltd.
 2540 Kensington Road N.W.
 Calgary, Alberta
 T2N 3S3

June 23-26 - Forty-fifth Federal-Provincial Wildlife Conference. Charlottetown, P.E.I. Theme: A National Policy on Wildlife - Phase II.

Further information:

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 Program Committee Secretary
 Canadian Wildlife Service
 Environment Canada
 Ottawa, Ontario
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Environment Week '81

Canada Environment Week 1981 is scheduled for October 11 to 17.

Last year's efforts established cooperative support for Environment Week activities among environmental groups, with participation from business, labor and universities.

This year we will build up from that base to increase and broaden that level of involvement.

A theme has yet to be chosen. We are considering a national theme that would lend itself to development of regional sub-themes and activities.

If you have any ideas for a theme or for supporting activities, or if you would like suggestions for your own participation, please write to "Environment Week 81" in care of the editor of this publication. Or contact any of Environment Canada's regional information directors (listed on page 12).

Public support and participation is essential to the success of Environment Week 1981. We want your help.

Further information:
Larry Gordon
Tel.: (819) 994-1410

Public Interest High

Environment Canada has received a wealth of public reaction to the Draft Policy for Public Consultation and Information Availability. A significant number of improvements will be included in the final version of the policy, scheduled for implementation in May.

Many respondents said the financial assistance available to the public was inadequate, so the department has initiated a major study as the basis for a comprehensive program of assistance to non-government environmental organizations. They will be fully consulted during the program development which is planned for implementation early next year. Meanwhile the department will help with travel expenses in accord with the policy.

In the coming weeks a number of steps will follow the policy's adoption. Each service and region will be developing its own implementation programs, as the department prepares a response to all comments received. A brochure should help the public understand and use the consultation process. A citizen's guide to Environment Canada, now being prepared, will be a more general aid to the public in doing business with the department. Finally, Environment Update will report the department's regulatory activities, enabling members of the public to take advantage of the department's new regulation-making policy.

Further information:
Tim Bezanson
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Climate Changes May Require New Policies

Climate changes may force governments to review many of their policies and priorities, Environment Minister John Roberts told a Regina seminar last March. The impact of climate change and variability on environmental and resource management in Canada was the theme of the seminar, sponsored by the Canadian Council of Resource and Environment Ministers (CCREM).

The seminar was organized by the Canadian Climate Centre of Environment Canada's Atmospheric Environment Service (AES). It brought together the federal environment minister, seven provincial ministers, 10 deputy ministers and some 80 federal and provincial policy advisers and scientists.

"Canadians have come to expect a relatively stable climate," said Mr. Roberts. "We have built our economy and infrastructure on the assumption of continued stability." Mr. Roberts is president of the CCREM for 1980-81.

Dr. F.K. Hare, provost of Trinity College, Toronto, and chairman of the Canadian Climate Planning Board, pinpointed the buildup of carbon dioxide in the atmosphere as one of many factors contributing to permanent shifts in climate.

Dr. W.W. Kellogg, of the U.S. National Center for Atmospheric Research, said areas in the centre of continents will probably get hotter while coastal areas may become wetter as the world's average temperature rises. Mathematical models suggest that the southern portions of the prairie

provinces could become much drier than they are now.

Dr. John Maybank, of the Saskatchewan Research Council, said this could mean that prime land will no longer be suitable for some crops. Some fish species would die out while power use could go up for air conditioning.

M.K. Thomas, director general of the Canadian Climate Centre called on the provinces to join in the Canadian Climate Program. This is cooperative federal-provincial initiative to monitor, predict, and assist Canadians in adapting their activities to our climate.

Mr. Blair Seaborn, deputy minister of Environment Canada and currently chairman of the CCREM coordinating committee, said the seminar marked a further important step in the development of a truly national Canadian Climate Program.

Conclusions and recommendations from the seminar will be presented to the September meeting of the Canadian Council of Resource and Environment Ministers.

Further information:

Brett Maxwell
Atmospheric Environment Service
4th floor, 4905 Dufferin Street
Downsview, Ontario
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World Effort Needed on Toxic Chemicals

Solution to the toxic chemicals problem in our society must involve international cooperation on a major scale.

Speaking to a joint meeting of the Canadian and American Bar Associations in Banff, Environment Minister Roberts stressed the importance of developing internationally accepted test guidelines to control toxic chemicals before they are marketed. Some 1 000 new chemicals are introduced into world commerce every year.

The minister hoped to see these guidelines adopted shortly by the Organization for Economic Cooperation and Development (OECD), of which Canada is a member. He saw a need for new Canadian legislation to parallel this emerging international

regime, developed in consultation with the provinces, industry and public interest groups.

The confidentiality of data and what can be released to the public is another issue to be resolved, to assure Canadians there are no cover-ups, he said.

Toxic chemicals can be effectively dealt with only if good information about their properties is available.

Further information:

Marcel Thérien
(819) 997-6555

Keeping Tabs on Chemicals

A new computer system will help Environmental Protection Service (EPS) monitor use of industrial chemicals. EPS Ontario Region is developing the system, to pinpoint all locations where such chemicals are used, and their quantities. It will analyze data geographically, provide an inventory of all chemicals used in any region and rates of discharge into the environment.

Environmental Protection Service Chemical Information System (EPSCIS) will use EPS data along with chemical use and production information provided by industries as required by the Environmental Contaminants Act. It gives all chemical and trade names, chemical and physical properties, uses, and hazards associated with use. It lists

all companies using the substance, company locations and quantities discharged as solid, liquid or gas.

EPSCIS helps EPS determine patterns of chemical use in Canada as a first step toward control of toxic substances. PCBs, mirex and chlorofluorocarbons are banned or restricted in use.

The Great Lakes Water Quality Agreement requires Canada and U.S.A. to inventory all toxic substances in the Great Lakes basin.

Further information:
Jeanne Jabanoski
Ontario Region
Tel.: (416) 966-6406

Air and Sea Scientists Forge Closer Links

A new era of cooperation between the long-associated sciences of meteorology and oceanography was ushered in last January.

Federal meteorologists and oceanographers will cooperate more closely thanks to a memorandum of understanding between Environment Canada's Atmospheric Environment Service (AES) and the Ocean Sciences and Surveys Branch (OSS) of the Department of Fisheries and Oceans.

Signed by assistant deputy ministers Jim Bruce for AES and Gerry Ewing for OSS, it recognizes that many processes involving the atmosphere, oceans or ice are of common interest. Both agencies are interested in providing similar services, conducting similar research and engaging in joint data processing, information and

training programs; and both are concerned with such global problems as sea surface temperature, sea ice, waves, atmosphere-ocean models, icebergs and storm surges.

Mr. Bruce said close cooperation was needed because of increasing interest in Canada's offshore renewable and non-renewable resources, the need to establish environmental design criteria for ships, offshore production facilities and other systems, and the need for atmospheric and oceanic services support.

Further information:

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Guidelines for Steam Plants

Emission control guidelines have been issued for the electrical power industry to reduce air pollution from new steam generating plants fired by fossil fuel.

They will reduce emissions of sulfur dioxide by up to 90 percent, nitrogen dioxide from 10 to 50 percent and particulate matter by 99 percent or more.

Existing generating units will not be subject to these restrictions. Existing stations will be evaluated on a case-by-case basis, with controls imposed as necessary under provincial legislation. The federal-provincial acid rain control program will recommend controls for existing stations in eastern and central Canada.

An effective level of emission control will be imposed on all gas or oil-fired plants which convert to coal under the National Energy Program. The level of possible control will be determined for each plant.

Provincial governments may adopt these guidelines for new plants as minimum standards. Local conditions could require more stringent controls.

The cost impact of the guidelines on national and provincial economies should be very small.

Further information:

Paul Hempel
(819) 997-6555

An Enjoyable Learning Experience

Secrets of Canada's varied landscape are revealed to visitors at the five wildlife interpretation centres operated by the Canadian Wildlife Service. Open each year from spring through fall, the centres offer a rare and enjoyable learning experience -- free of charge.

The centres are at Creston, British Columbia; Webb, Saskatchewan, west of Swift Current; the Wye Marsh at Midland, Ontario; Percé and Cap Tourmente, Quebec.

Like the other four centres, the Creston Valley Wildlife Interpretation Centre includes an exhibit hall where the natural history of the area is explained with the help of pictures, films and other displays. Outside the visitor can follow any of the well-marked nature trails, alone or accompanied by a trained naturalist. In the evenings

there are campfire talks.

Framed by the Selkirks and the Purcell Mountains, the Creston valley bears the mark of pioneers who wrested farms from the wilderness, or trekked along the Dewdney Trail in search of gold. But marshes still draw thousands of migrating ducks, geese and whistling swans.

The visitor can go canoeing with a naturalist, or watch kingfishers, herons or terns catching fish in the marshes. And Creston has one of the densest osprey populations in Canada.

The centre includes a bookstore, campground, and picnic tables.

The exhibit hall and washrooms have facilities for the handicapped.

For more information on this and other centres, contact the Canadian Wildlife Service, Distribution Section, Ottawa K1A 0E7.

Snow Goose Hunters Face May 27 Deadline

The Canadian Wildlife Service invites Canadian hunters to enter their names in a draw to determine the 240 participants in next fall's greater snow goose hunt in the Cap Tourmente National Wildlife Area.

Official entry forms must be received by May 27, 1981. An entry fee of \$3, not refundable, should accompany the form. Money orders or cheques are payable to the Receiver General of Canada.

Participants in the draw have increased from 3 000 in 1972 to 11 135 in 1980. The \$3 entry fee is being introduced because of rapidly increasing costs. The hunting fee for those selected is \$150, but each hunter may bring a companion at no extra cost for two half-days of hunting. Fee covers cost of blinds, guides and transportation inside the hunting area.

Cap Tourmente, 50 km east of Quebec City, is stopover on the migration route of about 200 000 greater snow geese. The controlled hunt disperses the birds, promoting a more uniform use of food supplies.

This year's hunt will be held September 23 to October 22.

Only Canadian residents may enter the draw, with one entry form per person. Sending more than one form means disqualification. Forms can be obtained by writing: Cap Tourmente National Wildlife Area, P.O. Box 130, Beaupré, Québec, G0A 1E0, or by calling (418) 827-3776.

The draw will be held in early June, the winners being selected by computer.

Further information:
Jacques Babin
Quebec region
Tel.: (418) 694-7204

Don't Waste That Paper!

Some 8 000 civil servants in the Toronto area have been recycling paper since spring 1980 in a high-grade paper separation program.

The office waste paper recovery program began in Ottawa in 1976, involving 17 federal government buildings. Initially it recycled some 400 tonnes of high-grade paper monthly. It expanded last fall to include 20 additional buildings.

A similar program was initiated in the Toronto area about the same time, with a pilot project in Environment Canada's Atmospheric Environment Service (AES) at Downsview. By spring 1980 it was recycling 36 tonnes of paper a year.

Extended in early 1980 to four more federal buildings, it recovered more than 200 tonnes last year, yielding a cash return of some \$9 000 to the federal government.

Expanded again this spring, it includes 10 more Toronto buildings. The program will eventually include all federal buildings in the Toronto-Hamilton area.

Waste paper from office buildings contains large amounts of higher-grade paper, much sought after by paper mills. The key to successful recovery is separating it from unacceptable waste material.

Recycling produces a significant energy saving compared to producing paper from our forests, or even from using it as fuel. Recycling one tonne saves 17 full-grown trees, and it takes less energy to convert waste paper to pulp.

Office workers deposit waste paper in special holders that are emptied into a central containers. Then the paper is picked up by a private contractor.

Sales are arranged by the Crown Assets Disposal Corporation.

Environment Canada has a 12-step basic program for waste paper recovery available to private industry.

Further information:
Jean Jabanoski
Ontario Region
Tel.: (416) 966-6406

China Signs Forestry Agreement

Canada and the People's Republic of China have agreed to scientific and technical exchanges in the field of forestry. A memorandum of understanding was signed in Peking last month by Environment Minister John Roberts and Yong Wen Tao, forestry minister of the People's Republic.

A Canadian group representing government, the forestry industry and the forestry academic community arrived in Peking in the latter part of April. It included Environment

Minister Roberts, Deputy Minister J.B. Seaborn, Assistant Deputy Minister F.L.C. Reed, who heads Canadian Forestry Service, (CFS); W.M. Fullerton, director general, Forestry Relations and Renewal, CFS; Dr. Marcel Lortie, professor of forest policy, Laval University; Gordon Baskerville, assistant deputy minister, Forest Resources, Department of Natural Resources, New Brunswick; and Bruce Devitt, chief forester, Pacific Logging Co. Ltd., Victoria.

After the signing, the Canadian

Forestry Agreement (continued)

party went on a tour which included visits to the forest area of Heilongjiang in northeast China, the forestry university of Nanking, Hunan province and Canton.

They studied forestry operations in China, with special emphasis

on regeneration. They also looked at forestry educational facilities and discussed research programs with a view to scientific exchanges.

Further information:
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Policy Promote Sound Land Use

Canada is formally committed to sound management and wise use of the land, through the Federal Policy on Land Use. An Interdepartmental Committee on Land has been established under direction of the Minister of the Environment.

Land is the basis of national sovereignty, and largely determines the quality of life. It provides food, fibre, minerals, fuels, shelter, water and oxygen, helps control pollution and maintain productive ecosystems. Land use determines how society functions, and is fundamental to achieving political, social and economic goals.

Provinces have jurisdiction over land use within their boundaries, the federal government over land in the Territories and some, mainly federally owned, in the provinces.

The policy deals with the preservation of prime farmland; the increased need for industrial and residential land, and its high cost; appropriate use and designation of potential risk areas, subject to floods, erosion, slumping, avalanches

and seismic activity; location of transport, communication and energy facilities; maintenance of land with high forestry capability; access for mineral exploration and development; settling land claims; preserving unique wildlife habitats and land of recreational, historical, cultural or aesthetic importance.

The federal government owns, acquires or leases lands for airports, canals, ports and harbors, parks and wildlife areas, community pastures, defence and public works. The policy urges sound planning of such lands.

The government will provide a coordinated program of surveys and socio-economic, scientific and technical research, to include geological surveys, topographical and ecological mapping, soil studies, social, economic and environmental studies of land use, identification of critical lands, land use monitoring, forest inventories and water surveys.

Further informaton:
Judith Hilliker
Tel.: (819) 997-6555

A new publication

"The hazardous waste problem: Let's find some common ground" is a new brochure produced by Environment Canada. It identifies the most hazardous wastes, explains why they are so hazardous, how best to dispose of them, and what is being done

about them in Canada and elsewhere.

To obtain a copy, contact:
Enquiry Centre
Environment Canada
Place Vincent Massey Bldg.
Ottawa, Ontario K1A 0H3
Tel: (819) 997-2800

Your local contact...

Here are the names and addresses of Environment Canada's regional directors general and of their information directors.

The regional director general serves as the principal representative of Environment Canada locally.

	<u>Regional Director General</u>	<u>Information Director</u>
ATLANTIC	Dr. C.J. Edmonds 5th floor, Queen's Square 45 Alderney Drive Dartmouth, Nova Scotia B2Y 2N6	J. Rod MacDonald Tel.: (902) 426-8374
QUEBEC	Patrice Dionne, eng. Case postale 10,100 2700 boul. Laurier Ste-Foy (Québec) G1V 4H5	J. Babin Tel.: (418) 694-7204
ONTARIO	Dr. R.W. Slater Arthur Meighen Building 7th floor 55 St. Clair Avenue East Toronto, Ontario M4T 1M2	Jeanne Jabanowski Tel.: (416) 966-5842
WESTERN AND NORTHERN	• Dr. A.H. Macpherson 9942, 108th Street 9th floor Edmonton, Alberta T5K 2J5	Jean Compagnon Tel.: (403) 420-2545
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