Environment Canada
Atlantic Region

Environnement Canada
Région de l'Atlantique

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DOE ATLANTIC

# LRTAP OPERATIONAL PLAN

# ENVIRONMENT CANADA

# ATLANTIC REGION

# COMPREHENSIVE LRTAP

# OPERATIONAL PLAN

1983 - 1987

## INTRODUCTION

This document provides a regional perspective on the priorities that should be addressed and the activities that will be undertaken to support the national and regional objectives of this program.

The Operational Plan is set out in three sections:

Section A. - provides the reader with the departmental objectives and priorities for the Atlantic Region.

Section B. - deals in general terms with the LRTAP issue in three categories:

1. Issue Management
2. Scientific Effects and Environmental Monitoring
3. Control Strategies

A Summary of Resources for the LRTAP Issue for 1982/83 to 1986/87 has been included in this section.

Section C.-contains a synopsis of the Operational Plans of of the Services.

Section A

OBJECTIVE

The overall objective of the departmental program is to protect the environment and humans from damaging pollutants which cross interprovincial and international boundaries.

Several more specific objectives that are being pursued in the Atlantic Region are listed as follows:

1. To convince both governments of Nova Scotia and New Brunswick to protect their provinces and their neighbours from their emissions and to support federal actions in the International sphere by making a commitment to develop apportionment goals on the reduction of sulphur emissions. Particular emphasis will be placed on Nova Scotia.

2. To reach an agreement with the Cape Breton Development Corporation on a development program that will result in the availability and sale to the Nova Scotia Power Corporation of coal with a sulpur content of 2% or less by 1990.

3. To obtain definitive statements on cause-effect relationship linking emissions, depositions and impact by focusing scientific studies on control strategies.

4. To ensure that long term scientific programs such as the Kejimkujik Watershed Study continue in a coordinated fashion with realistic goals and clear milestones of achievement.

PRIORITIES

In terms of pollutants, the priority compounds that will be addressed by study and control strategy work are as follows:

1. sulfur dioxide and sulfate
2. nitrous oxides
3. organic chemicals
4. metals

Ecosystem components of priority for continuing study are:

1. Forests: germination and growth and seedlings
2. Role of organic acids in freshwater
3. Effects of acid rain on aquatic habitat
4. Acidification and contamination of drinking water (surface and groundwater)

From a control strategies perspective, the priorities are:

1. Continuing effort to get Nova Scotia to develop or adopt a provincial strategy.
2. Cooperation with Cape Breton Development Corporation in developing low sulfur coal deposits and making washed coal available to the utilities.
3. Development of cost figures reflecting benefits of using low sulfur coal in utilities.
4. Support to R&D programs aimed at reducing sulfur content in coals.

Section B

The operational plan has been divided into three categories of activity:

1. - ISSUE MANAGEMENT

2. - SCIENTIFIC EFFECTS AND ENVIRONMENTAL MONITORING

3. - CONTROL STRATEGIES

Section B

## 1. ISSUE MANAGEMENT

Managing the regional LRTAP issue will entail the following activities: identification and recommendation of research, monitoring priorities by analysis of national and regional information gaps and needs:

- development of a scientific effects monitoring plan which ensures a coordinated approach among service, other federal departments, provinces and universities for effective use of resources;
- recognition that scientific effects activities entail both long term and short term research, of which feedback on a regular basis of current thinking/conclusions is important in supporting control strategy efforts;
- definition and implementation of control strategies which include technical, information and socio-economic components;
- promotion of the understanding of the problem and dissemination of public information;
- information exchange and communication between national committees, LRTAP officer and regional participants;
- evaluation of regional output in terms of the objectives.

These activities will primarily be undertaken by the Regional Director General's office and EPS on behalf of the Department. A small advisory committee will probably be formed to review direction of program in the region and make recommendations.

Resources

| | Current Year 82 - 83 | Budget Year 83 - 84 | Upcoming Year 84 - 85 | Planning Year 1 85 - 86 | Planning Year 2 86 - 87 |
|---|---|---|---|---|---|
| RDG's Office | 0.2PY, 12.0K | 0.1PY, 7.5K | 0.1PY, 7.5K | 0.1PY, 7.5K | 0.1PY, 7.5K |
| EPS | 0.5PY, 27K | 0.5PY, 27K | 0.5PY, 27K | 0.5PY, 27K | 0.5PY, 27K |

Section B

## 2. SCIENTIFIC EFFECTS AND ENVIRONMENTAL MONITORING

Identification of both the scope and intensity of the acid rain problem is a national environmental priority. This is of special significance for the Atlantic Region because of this area being a major recipient of toxic fallout originating in all parts of North America.

In order for effective control measures to be developed, accepted and implemented, an understanding, and in some cases a scientific prediction of what the impact of these long range transported air pollutants is necessary. Knowledge of its impact on aquatic ecosystems, wildlife populations and land (forested and agricultural) is called for.

Resources

| | Current Year 82 - 83 | Budget Year 83 - 84 | Upcoming Year 84 - 85 | Planning Year 1 85 - 86 | Planning Year 2 86 - 87 |
|---|---|---|---|---|---|
| Lands | 0.1PY, 4.2K | 0.7PY, 41.9K | 0.3PY, 13.6K | 0.3PY, 13.6K | 0.3PY, 13.6K |
| IWD | 4.5PY, 245K | 4PY, 230K | 4PY, 230K | 4PY, 230K | 4PY, 230K |
| CWS | 2.0PY, 92.3K | 1.5PY, 58K | 1.5PY, 58K | 1.5PY, 58K | 1.5PY, 58K |
| CFS(E) | 5.8PY, 272.5K | 5.8PY, 278.5K | 5.8PY, 278.5K | 5.8PY, 278K | 5.8PY, 278K |
| AES* | 0.2PY, 7.3K | 0.2PY, 7.3K | 0.2PY, 7.3K | 0.2PY, 7.3K | 0.2PY, 7.3K |
| Parks | 0.3PY, 10.1K | 0.6PY, 21.6K | 0.3PY, 9.6K | 0.3PY, 9.5K | 0.3PY, 9.6K |

*Does not include funding for CANSAP, APN and WMO monitoring networks.

Section B

## 3. CONTROL STRATEGIES

The primary objective in control strategies will be to try to convince the provinces of NS and NB to implement sulfur dioxide reductions that will result from the current $SO_2$ reduction apportionment exercises. Increased attention will be focused on the impact of nitrogen compounds and the long range transport of toxics and assessment of the oxidant situation.

Resources (EPS)

| Current Year 82 - 83 | Budget Year 83 - 84 | Upcoming Year 84 - 85 | Planning Year 1 85 - 86 | Planning Year 2 86 - 87 |
|---|---|---|---|---|
| 3.2PY, 108.4K | 2.1PY, 93K | 2.2PY, 94.8K | 2.3PY, 86.5K | 2.2PY, 80.1K |

Other activities will be directed at DEVCO, DREE and the Atlantic Committee on Coal. Attempts will be made to convince DEVCO and NSPC to sign agreements for the sale of coal for thermal generating purposes which would involve both the use of lower sulfur coal and coal washing/beneficiation on a broad scale.

SUMMARY OF RESOURCES

FOR

FOR LRTAP ISSUE - FROM

1982/83 TO 1986/87

| | Current Year 83-84 | Budget Year 83-84 | Upcoming Year 84-85 | Planning Year 1 85-86 | Planning Year 2 86-87 |
|---|---|---|---|---|---|
| 1. Priority Environment Issue Management | 0.7PY, 39K | 0.6PY, 34.5K | 0.6PY, 34.5K | 0.6PY, 34.5K | 0.6PY, 34.5K |
| 2. Knowledge Base Development for Scientific Effects | 12.9PY, 631.4K | 12.8, 637.3K | 12.1PY, 597K | 12.1PY, 596.4K | 12.1PY, 596. |
| 3. Knowledge Base Development for Control Strategies | 3.2PY, 108.4K | 2.1PY, 93K | 2.2PY, 94.8K | 2.3PY, 86.5K | 2.2PY, 80.1 |
| TOTALS | 16.8PY, 778.8K | 15.5PY, 764.8K | 14.9PY, 726.3K | 15.0PY, 717.4K | 14.9PY, 711. |

Canada Canada

OPERATIONAL PLAN
PLAN OPÉRATIONNEL

PROGRAM
PROGRAMME

PLANNING ELEMENT/COMPONENT
ÉLÉMENT/COMPOSANTE DE PLANIFICATION

SUBJECT
OBJET

LONG RANGE TRANSPORT OF AIR POLLUTANTS (Parks Component)

1. Issues & Priorities

Identification of both the scope and intensity of the acid rain problem is a national environmental priority. This problem is especially acute in the Atlantic Region, which is a major recipient of toxic fallout originating in parts of eastern North America. The opportunity exists to develop an understanding of the direct acid rain problem as well as how the fallout reacts once it has entered the aquatic and terrestrial environments. These problems will be addressed primarily through special-purpose sampling surveys, laboratory studies and data interpretation.

2. Synopsis of the Operational Plan

Although limited involvement in the program, Parks will continue to provide assistance to other services and OGDs in the Kejimkujik Calibrated Watershed Basin.

A monitoring program to detect environmental changes caused by acid rain in biotic and abiotic systems for the Kouchibouguac National Park in cooperation with CWS.

Environment Canada | Environnement Canada

# OPERATIONAL PLAN (AES)
# PLAN OPÉRATIONNEL

PROGRAM
PROGRAMME

PROGRAM COMPONENT
COMPOSANTE DE PROGRAMME

SUBJECT: OBJECTIVES AND GOALS
OBJET: OBJECTIFS ET BUTS

| OBJECTIVES<br>OBJECTIFS | 1982/83<br>Current year<br>Année courante | 1983/84<br>Budget year<br>Année financière | 1984/85<br>Upcoming year<br>Année financière suivante | 1985/86<br>Planning year<br>Année de planification | 1986/87<br>Planning ye<br>Année de planificatio |
|---|---|---|---|---|---|
| Objective<br><br>To predict impacts of airborne pollutants on aquatic ecosystems, wildlife populations and lands and monitor the effects of such impacts in the Atlantic Region. | *0.2PY, 7.3K | 0.2PY, 7.3K | 0.2PY, 7.3K | 0.2PY, 7.3K | 0.2PY, 7. |
| Goals<br><br>Continue to provide assistance in the operation of the CANSAP, APN & WMO Regional Networks with upgrading of CANSAP station to begin in 1983/84. Provide trajectory analysis in support of other services, OGD's and provincial agencies on a need basis. Provide program coordination for scientific studies in the Region by chairmanship of the Atlantic Regional LRTAP Monitoring & Effects Working Group. | | | | | |
| *Note<br><br>Resources are minimal estimates since AES Regional funding is not based on a project basis. In addition, funding for National programs such as CANSAP, APN and WMO stations is coordinated from AES-HQ, Downsview. | | | | | |

01-1114D (10/82)

LONG RANGE TRANSPORT OF AIR POLLUTANTS (AES Component)

1. Issues & Priorities

Identification of both the scope and intensity of the acid rain problem is a national environmental priority. This problem is especially acute in the Atlantic Region, which is a major recipient of toxic fallout originating in parts of eastern North America. The opportunity exists to develop an understanding of the direct acid rain problem as well as how the fallout reacts once it has entered the aquatic and terrestrial environments. These problems will be addressed primarily through special-purpose sampling surveys, laboratory studies and data interpretation.

2. Synopsis of the Operational Plan

In the upcoming years, greater emphasis will be placed on data interpretation to determine trends in the acidity of precipitation in the Region.

The continued operation of the CANSAP, APN and WMO Regional Networks and the Kejimkujik Calibrated Watershed. Upgrading of CANSAP to begin in 1983/84.

Provide trajectory analysis in support of other DOE services, OGDs and provincial agencies.

Through the Atlantic Regional LRTAP Monitoring and Effects Working Group, provide program coordination for scientific studies in the Region.

Beginning in 1984/85, greater emphasis on the deposition of toxic materials.

Environment Canada / Environnement Canada

OPERATIONAL PLAN (CFS)
PLAN OPÉRATIONNEL

PROGRAM
PROGRAMME

PROGRAM COMPONENT
COMPOSANTE DE PROGRAMME

SUBJECT: OBJECTIVES AND GOALS
OBJET: OBJECTIFS ET BUTS

| OBJECTIVES<br>OBJECTIFS | 1982/83<br>Current year<br>Année courante | 1983/84<br>Budget year<br>Année financière | 1984/85<br>Upcoming year<br>Année financière suivante | 1985/86<br>Planning year<br>Année de planification[1] | 1986/87<br>Planning year<br>Année de planification[2] |
|---|---|---|---|---|---|
| Objective<br><br>To predict impacts of airborne pollutants on terrestrial ecosystems, forest vegetation and soils, and monitor the effects of such impacts in the Atlantic Region. | | | | | |
| Goals (Estimated Resources) | 5.8PY, 272.5K | 5.8PY, 278.5K | 5.8PY, 278.5K | 5.8PY, 278K | 5.8PY, 278K |
| The growth and morphological responses of commercially important forest tree species to simulated acid rain will continue in the Maritimes and will be initiated in Nfld. in 1983/84 and continue beyond 1986/87. Work on the long term trends in rainfall chemistry and the effects of acid rain on nitrogen transformation processes will continue until 86/87. The terrestrial effects studies in two catchments of Kejimkujik National Park will continue until 1986/87, with the preparation of a five-year summary report in 1986/87. Studies on the interacation between Acid Rain and forest soil organic transformations will receive greater attention beginning in 1983/84. | | | | | |

# LONG RANGE TRANSPORT OF AIR POLLUTANTS

## 1. Issues & Priorities

Identification of both the scope and intensity of the acid rain problem is a national environmental priority. This problem is especially acute in the Atlantic Region, which is a major recipient of toxic fallout originating in parts of eastern North America. The opportunity exists to develop an understanding of the direct acid rain problem as well as how the fallout reacts once it has entered the aquatic and terrestrial environments. These problems will be addressed primarily through special-purpose sampling surveys, laboratory studies and data interpretation.

## 2. Synopsis of the Operational Plan

In the upcoming years, greater emphasis will be placed on data interpretation to enable the scientific community to identify the present impacts of acid rain in the Region.

Studies on the growth and morphological responses of commercially important forest tree species will continue in the Maritimes and be initiated in Newfoundland in 1983/84. These studies will continue beyong 1986/87 with emphasis on field evaluations.

The long term trends in rain chemistry will be evaluated in 82/83 and will continue in 83/84. The effect of acid rain on nitrogen transportation processes will continue until 86/87.

The terrestrial effects work in two catchments of Kejimkujik National Park will continue until 1986/87.

Studies on the interaction between acid rain and forest soil organic transformations will receive greater attention beginning in 1983/84.

Environment Canada / Environnement Canada

OPERATIONAL PLAN (RDG's Office)
PLAN OPÉRATIONNEL

PROGRAM
PROGRAMME

PROGRAM COMPONENT
COMPOSANTE DE PROGRAMME

SUBJECT: OBJECTIVES AND GOALS
OBJET: OBJECTIFS ET BUTS

| OBJECTIVES<br>OBJECTIFS | Current year<br>Année courante | Budget year<br>Année financière | Upcoming year<br>Année financière suivante | Planning year<br>Année de planification[1] | Planning year<br>Année de planification[2] |
|---|---|---|---|---|---|
| Objective<br><br>To ensure that important environmental issues are addressed and resolved in an effective and efficient manner.<br><br>Goal<br><br>Existing Program - LRTAP<br><br>- Ensure information exchange and communication between national committees, LRTAP offices and regional actors. (83/84-).<br>- Ensure the identification and recommend research and study priorities by analysis of national and regional needs. (83/84-).<br>- Ensure a coordinated approach to regional activities by linking scientific sheets, monitoring and control strategies. (83/84-)<br><br>- Ensure control strategies are implemented and revised. (83/84-) | 0.2PY, 12K | 0.1PY, 7.5K | 0.1PY, 7.5K | 0.1PY, 7.5K | 0.1PY, 7.5K |

01-1114D (10/02)

OPERATIONAL PLAN
PLAN OPÉRATIONNEL

PROGRAM / PROGRAMME: Administration Program

PLANNING ELEMENT/COMPONENT / ÉLÉMENT/COMPOSANTE DE PLANIFICATION: Regional Management - RDG, Atlantic Region

SUBJECT / OBJET: Decision Document

1. Issues and Priorities

The RDG is responsible for the general conduct of relations with the provinces and other departments. Key external issues in relation to this responsibility include the environmental implications of industrial growth and diversific especially energy related development and opportunities; forest renewal and its implications for wood supply and spr the effects of LRTAP; the protection of ecosystems supporting fishery resources; federal responsibilities regarding marine environmental quality; and federal/provincial coastal zone planning dealing with environmental implications o economic developments (mostly energy related).

The RDG plays a major role in the planning and evaluation of regional environmental priorities. Included in this responsibility are the resolution of concerns relating to major developments such as coal, Hibernia and Sable Island toxic chemicals management, including hazardous and nuclear waste disposal as well as pesticide uses; LRTAP and a realignment of baseline studies.

The implementation of the Public Consultation Policy in terms of the effective use of feedback from the public and t increased participation by the provinces in the implementation of integrated programs remain key issues. Inadequate resourcing in the pay and benefits area continues to be a major priority in the Personnel function. Other issues in the emigration of trained staff in relation to the availability in the region and the scarcity of qualified francoph candidates for positions in the region.

2. Synopsis of the Operational Plan

In ensuring that the important environmental issues are addressed and resolved in an effective and efficient manner there will be continuing coordination in such areas as Marine Environment, EARP, Energy/Environment, LRTAP, Baseline Studies and Toxic Chemicals. Effort will be spent to ensure that cyclical and non-cyclical corporate planning requ ments are met and that information for corporate planning decisions is provided to executive levels.

Regional information activities will concentrate on four major areas. These are forestry agreements, offshore expl tions and the marine environment, toxics and major departmental policies. Specific attention will be placed on pub consultation and information exchange between internal and external clients.

Section C

# SYNOPSIS

# OF THE

# OPERATIONAL PLAN

Environment Canada | Environnement Canada

OPERATIONAL PLAN (IWD)
PLAN OPÉRATIONNEL

PROGRAM
PROGRAMME

PROGRAM COMPONENT
COMPOSANTE DE PROGRAMME

SUBJECT: OBJECTIVES AND GOALS
OBJET: OBJECTIFS ET BUTS

| OBJECTIVES<br>OBJECTIFS | 1982/83<br>Current year<br>Année courante | 1983/84<br>Budget year<br>Année financière | 1984/85<br>Upcoming year<br>Année financière suivante | 1985/86<br>Planning year<br>Année de planification[1] | 1986/87<br>Planning year<br>Année de planification[2] |
|---|---|---|---|---|---|
| Objective<br><br>To predict impacts of airborne pollutants on aquatic ecosystems, wildlife populations and lands, and monitor the effects of such impacts in the Atlantic Region. | 4.5 PY, $245K | 4 PY, $230K | 4 PY, $230K | 4 PY, $230K | 4 PY, $230K |
| Goals<br><br>To provide regional technical input to the activities of ECS & DOE LRTAP committees as requested; to continue work on the Kejimkujik Calibrated Basin study to determine the effects of acid precipitation on water quality (to be completed in 1986/87); by 1984 to have in place a National CANSOC measurement system utilizing on site preservation techniques, by 1986 to have completed the analyses & interpretation of all data collected under ECS Aquatic effect projects. | | | | | |

LONG RANGE TRANSPORT OF AIR POLLUTANTS (IWD Component)

1. Issues & Priorities

Identification of both the scope and intensity of the acid rain problem is a national environmental priority. This problem is especially acute in the Atlantic Region, which is a major recipient of toxic fallout originating in parts of eastern North America. The opportunity exists to develop an understanding of the direct acid rain problem as well as how the fallout reacts once it has entered the aquatic and terrestrial environments. These problems will be addressed primarily through special-purpose sampling surveys, laboratory studies and data interpretation.

2. Synopsis of the Operational Plan

In the upcoming years, greater emphasis will be placed on data interpretation to enable the scientific community to identify the present impacts of acid rain in the Region.

It is anticipated that by 1986/87, the Kejimkujik Calibrated Basin study will be completed and final report preparation initiated.

By 1985/86, an inland water maintenance monitoring network will be established to identify acidity trends in the data. The network will be operated beyond 1986/87.

A National CANSOC measurement system to estimate the deposition of toxic chemicals will be in place by 1984.

Environment Canada / Environnement Canada

# OPERATIONAL PLAN (Lands)
# PLAN OPÉRATIONNEL

PROGRAM
PROGRAMME

PROGRAM COMPONENT
COMPOSANTE DE PROGRAMME

SUBJECT: OBJECTIVES AND GOALS
OBJET: OBJECTIFS ET BUTS

| OBJECTIVES<br>OBJECTIFS | 1982/83<br>Current year<br>Année courante | 1983/84<br>Budget year<br>Année financière | 1984/85<br>Upcoming year<br>Année financière suivante | 1985/86<br>Planning year<br>Année de planification | 1986/87<br>Planning year<br>Année de planificatio |
|---|---|---|---|---|---|
| Objective<br><br>To predict impacts of airborne pollutants on aquatic ecosystems, wildlife populations and lands, and monitor the effects of such impacts in the Atlantic Region. | 0.1 PY, $4.2K | 0.7PY, 41.9K | 0.3 PY, $13.6K | 0.3 PY, $13.6K | 0.3 PY, $ |
| Goals<br><br>To produce a 1:500,000 scale map, depicting sensitivity of terrain to acid loading in N.S. in 1983/84; implement further research relating terrestrial and aquatic ecosystem sensitivity evaluation and mapping, particularly at refined scales, or in more limited geographic areas in 1984/85; to evaluate impacts of acid precipitation on land capability in limited geographic areas of high sensitivity by 1986; complete research relating processes and impact of acid rain to the terrain of Atlantic Canada by 1986/87 and initiate studies in 1986/87 of interrelationships of acid rain loading levels to land capability and land use. | | | | | |

LONG RANGE TRANSPORT OF AIR POLLUTANTS (Lands Component)

1. Issues & Priorities

Identification of both the scope and intensity of the acid rain problem is a national environmental priority. This problem is especially acute in the Atlantic Region, which is a major recipient of toxic fallout originating in parts of eastern North America. The opportunity exists to develop an understanding of the direct acid rain problem as well as how the fallout reacts once it has entered the aquatic and terrestrial environments. These problems will be addressed primarily through special-purpose sampling surveys, laboratory studies and data interpretation.

2. Synopsis of the Operational Plan

In the upcoming years, greater emphasis will be placed on data interpretation to enable the scientific community to determine the impacts of acid rain in the Region.

By 1985 to develop a comprehensive ecological data base to support the interpretation of LRTAP land sensitivity and the deliniation of geographic areas with highest sensitivity to these pollutants.

By 1985 to have initiated ecological surveys within Atlantic Canada to provide new terrestrial sensitivity evaluation data which will vastly improve the sensitivity mapping technique.

To meet commitments to the Canada/United States LRTAP Working Group, treaty negotiations and to federal/provincial inter-departmental and departmental LRTAP committees.

By 1986 to have initiated research programs on the linkages between terrain characteristics and processes and the acidity of waters within watersheds of Atlantic Canada.

OPERATIONAL PLAN (CWS)
PLAN OPÉRATIONNEL

PROGRAM
PROGRAMME

PROGRAM COMPONENT
COMPOSANTE DE PROGRAMME

SUBJECT: OBJECTIVES AND GOALS
OBJET: OBJECTIFS ET BUTS

| OBJECTIVES<br>OBJECTIFS | 1982/83<br>Current year<br>Année courante | 1983/84<br>Budget year<br>Année financière | 1984/85<br>Upcoming year<br>Année financière suivante | 1985/86<br>Planning year<br>Année de planification[1] | 1986/8<br>Planning<br>Année planifiée |
|---|---|---|---|---|---|
| Objective<br><br>To predict impacts of airborne pollutants on aquatic ecosystems, wildlife populations and lands, and monitor the effects of such impacts in the Atlantic Region. | 2 PY, $92.3K | 1.5 PY, $58K | 1.5 PY, $58K | 1.5 PY, $58K | 1.5 PY, |
| GOALS<br><br>In 1983/84, complete the studies of zooplankton and macrophytes in Kejimkujik Calibrated Basin; continue studies relatin wetland classification and wildlife productivity to acid rain in Nova Scotia and extend study to New Brunswick in 1984/8 complete the studies of amphibians - pH relationships and produce final reports on the biological studies in Kejimkujik Calibrated Basin and relationship to water chemistry; report on baseline information on water chemistry and limnological conditions in Kejimkujik Study in cooperation with IWD in 1985/86; in 1986/87, complete final report on the effects of and precipitation on the availability for selected wildlife species and access impact on wildlife populations. | | | | | |

Canada Canada

OPERATIONAL PLAN
PLAN OPÉRATIONNEL

PROGRAM
PROGRAMME

PLANNING ELEMENT/COMPONENT
ÉLÉMENT/COMPOSANTE DE PLANIFICATION

SUBJECT
OBJET

LONG RANGE TRANSPORT OF AIR POLLUTANTS (CWS Component)

1. Issues & Priorities

Identification of both the scope and intensity of the acid rain problem is a national environmental priority. This problem is especially acute in the Atlantic Region, which is a major recipient of toxic fallout originating in parts of eastern North America. The opportunity exists to develop an understanding of the direct acid rain problem as well as how the fallout reacts once it has entered the aquatic and terrestrial environments. These problems will be addressed primarily through special-purpose sampling surveys, laboratory studies and data interpretation.

2. Synopsis of the Operational Plan

In the upcoming years, greater emphasis will be placed on data interpretation to enable the scientific community to determine the present impacts of acid rain in the Region.

By 1986, determine the effects of acid precipitation on the availability of habitat for selected wildlife species and assess the impact on wildlife populations.

By December 1984, to estimate the annual exchange of major ions and nutrients and quantify the modifying effects of acid loading in the three Kejimkujik calibrated study basins.

By December 1984, to detect possible effects of acid rain on the biota of the three study basins.

By 1986, in cooperation with IWD-AR, to report on baseline information on water chemistry and limnological conditions in the Kejimkujik Calibrated Water Basins in Nova Scotia.

Canada Canada

OPERATIONAL PLAN (EPS)
PLAN OPÉRATIONNEL

PROGRAM
PROGRAMME

PROGRAM COMPONENT
COMPOSANTE DE PROGRAMME

SUBJECT: OBJECTIVES AND GOALS
OBJET: OBJECTIFS ET BUTS

| OBJECTIVES<br>OBJECTIFS | Current year<br>Année courante | Budget year<br>Année financière | Upcoming year<br>Année financière suivante | Planning year<br>Année de planification[1] | Plann<br>Ann<br>plani |
|---|---|---|---|---|---|
| Objective<br><br>To protect the environment and humans from damaging pollutants which cross international and interprovincial boundaries. | 3.7PY, $135.4K | 2.6PY, $120K | 2.7PY, $121.8K | 2.8PY, $113.5K | 2.7PY, |
| GOALS<br><br>To develop and implement control strategies for acid gas emission sources in the Atlantic Region, with main efforts directed to Nova Scotia and New Brunswick (1983/84 + 1985/86);<br><br>To provide advice and direction to Headquarters on apportionment on $SO_2$ emission reductions in N.S. and N.B. (1983/84);<br><br>To evaluate the relative impacts of local versus long range sources on acidic deposition in the Atlantic Region, to be completed by 1985/86;<br><br>To evaluate the contribution of nitrogen compounds on acidic deposition in the Atlantic Region (19<br><br>To provide direction to the scientific community for new areas of investigation in the support of apportionment exercise;<br><br>To provide assistance on information and public education on acidic deposition and oxidants (1983 85/86);<br><br>To determine the levels of oxidants and its precursors and toxics and the need for the development of control strategies for these compounds (1986/87). | | | | | |

01-1114D (10/02)

Canada Canada

OPERATIONAL PLAN (EPS)
PLAN OPÉRATIONNEL

1983 to 1984

PROGRAM
PROGRAMME

PLANNING ELEMENT/COMPONENT
ÉLÉMENT/COMPOSANTE DE PLANIFICATION

SUBJECT
OBJET

LRTAP

1. Issues and Priorities

Acid deposition continues to be a serious environmental problem in the Atlantic Provinces. While the region also receives these emissions of sulfur dioxide and nitrogen oxide from central Canada and the United States, the main difficulty will probably continue to be the reluctance of the provinces to initiate sulfur dioxide reduction. It is also becoming evident that the impact and control of nitrogen compounds will recieve increasing attention in th coming years. In addition, the region may also be impacted by oxidants and toxics.

2. Synopsis of the Operational Plan

It is anticipated that the monitoring aspects of this acid rain program will decline after 1984/85 with increased emphasis placed on control strategies refinement and implementation in the region. The contribution of nitrogen compounds will be investigated beginning in 1983/84.

The NS/NB Oxidant study will continue to collect background information on ozone and $NO_2$ levels in the budget yea and further work will be required to qualify hydrocarbon levels and emissions and their contribution to oxidant le Control strategy development work, if required, will not begin until 1986/87 fiscal year.

Overall management and coordination of the Regional LRTAP issue will be provided for the RDGO.

Canada Canada

OPERATIONAL PLAN (Parks)
PLAN OPÉRATIONNEL

PROGRAM
PROGRAMME

PROGRAM COMPONENT
COMPOSANTE DE PROGRAMME

SUBJECT: OBJECTIVES AND GOALS
OBJET: OBJECTIFS ET BUTS

| OBJECTIVES<br>OBJECTIFS | 1982/83<br>Current year<br>Année courante | 1983/83<br>Budget year<br>Année financière | 1984/85<br>Upcoming year<br>Année financière suivante | 1985/86<br>Planning year<br>Année de planification[1] | 1986/87<br>Planning yea<br>Année de planificatio |
|---|---|---|---|---|---|
| Objective<br><br>To predict impacts of airborne pollutants on aquatic ecosystems, wildlife populations and lands, and monitor the effects of such impacts in the Atlantic Region.<br><br>Goals<br><br>These resources represent the combined LRTAP monitoring and information programs carried out at the Atlantic Regional Office, Kouchibouguac, Fundy, Terra Nova, Cape Breton Highlands, Gros Morne and Kejimkujik National Parks. | 0.3PY, $10.1K | 0.6PY, $21.6K | 0.3PY, $9.6K | 0.3PY, $9.5K | 0.3PY, $9. |

01-1114D (10/82)