

and unequivocal endorsement (of) . . . a specific document (which) . . . says exactly what must be done . . . (in terms of) specific dollars.

“Ce que je veux, c’est l’élimination du problème et je veux que l’on affecte également les fonds nécessaires au projet pour y parvenir. Je prends pour acquis que cet engagement sera respecté intégralement par l’administration et le Congrès américain. J’ai la certitude de l’affirmation du Président des Etats-Unis, l’engagement de toute son administration et le leadership du Congrès.

“I recognize that (the President will) have to approach it . . . in a manner he

deems appropriate but his obligations are undiminished The report recommends a major departure in two areas: (There) is a first-time recognition of the transboundary nature of the overwhelming problem . . . and there is this formal undertaking to seek appropriate funding from Congress

“This is a Canadian and an American problem I looked back five years at what had been accomplished and the answer was nothing. And I looked back another five years and the answer was nothing, that I could see, of substance. So the first thing we did was begin the process of cleaning up our own act in Canada and . . . we began seeking for

the first time . . . the acknowledgment (by the United States) of the transboundary nature of this problem I view the President’s statement as new and very significant I (also) met with . . . the Senate leadership and with the Speaker of the House and (with) committee chairmen . . . you will find support, I believe, in the House and in the Senate, for environmental legislation being brought forward by the Administration. I think the priorities of Congress have shifted here as they have elsewhere, in Canada too. People are saying we cannot leave this kind of legacy to our children and we’re going to do something about it.

BACKGROUND: ACID RAIN

Acid rain falls on the just and the unjust alike.

Rain is naturally acid but this slight acidity does no harm. In recent decades an unnatural, man-made increase has polluted rain, snow and airborne dust and damaged lakes, streams, forests, monuments and buildings.

The problem has become widespread in the last thirty years. Thousands of lakes in both countries have been rendered lifeless because of acidic precipitation.

A report published last October by an ad hoc committee of six scientists formed in Milbrook, N.Y., in September, 1984, drew on six earlier reports issued by the U.S.

The scientists agreed on four basics:

- 1) Man-made emissions of SO₂ and NO_x account for over 90 per cent of the acidic atmospheric pollution. Sulfur compounds from industrial and utility smokestacks account for two-thirds of this total, nitrogen compounds from automobile exhausts for the rest.
- 2) Acidity in rain, snow, fog and dry particles is often transported hundreds of miles by the wind and falls far from the points of origin.
- 3) The falling particles acidify streams, lakes and soils, affect animal life and reduce the number of species of fish and insects.
- 4) Significant reductions of SO₂ emissions will reduce sulfur deposition over the region to an equiva-

lent degree and reduce or eliminate the destruction of life.

A Comprehensive Report

A few days before the Reagan-Mulroney summit the National Academy of Sciences issued “the most comprehensive” report to date on the causes of lake acidification.

The report, three years in the making, reached the careful conclusion that “sulfur emissions and acid rain do appear to have caused acidification of many lakes in the northeastern United States,” and this has caused declines in fish populations.

The report used records compiled over the last century to demonstrate that the burning of gasoline, coal and other fossil fuels has had severely adverse effects on lakes, though they have not been uniform and some lakes have suffered much greater damage than others in the same area.

James H. Gibson, of Colorado State University, who headed the research team, said “The connection between acid rain and environmental damage is real but it is more variable and complex than many people have supposed.”

The Effects on Lakes and Streams

Tens of thousands of lakes and streams in North America have

been damaged by acid precipitation.

Not all lakes are vulnerable. In some regions the limestone helps neutralize the acid and large, deep lakes have a greater “flushing capacity,” but shallower lakes in hard rock regions have no effective defence.

A 1982 survey by the U.S. Congressional Office of Technology Assessment, of 9,400 lakes in twenty-three states in the eastern half of the United States, found that half had been adversely affected or were “seriously at risk.” Of 117,000 miles of streams,

some 23,000 miles were classified as “acid-altered” and 37,000 miles as “seriously at risk.”

The New York Department of Environmental Conservation found 180 lakes in the Adirondack Mountains to have lost all aquatic life and 330 others on the verge of losing theirs. In eastern Canada some 20,000 square miles of surface water are receiving excessive amounts of acid rain, and in Ontario alone some 48,000 lakes could face life extermination in twenty years if SO₂ emissions are not curtailed.

Sensitive Areas

The sections marked in red are low in natural buffers and particularly sensitive to acidic precipitation.

