Great Lakes Water Treaty Signed

President Nixon and Canadian Prime Minister Pierre Trudeau on 15 April signed the Great Lakes Water Quality Agreement, the first pact between two nations designed to protect and resuscitate a shared environmental resource. The agreement follows 6 years of study by the International Joint Commission (IJC), a body set up in 1909 to define the two countries' rights and responsibilities over the Great Lakes, and 2 years of detailed negotiations over mutual water quality goals.

The signing of the agreement coincides with the beginning of the International Field Year for the Great Lakes, which features a detailed analysis of Lake Ontario being conducted by the National Oceanic and Atmospheric Administration.

The Great Lakes comprise the world's most extensive bodies of fresh water and account for 20 percent of the fresh water in the lakes and rivers of the earth. Some 37 million people inhabit their shores, and this number is expected to double by the end of the century.

The agreement calls for dramatic reductions in the pollution of Lake Erie, Lake Ontario, and the international portion of the St. Lawrence Seaway, as well as for preventive maintenance to forestall the decline of Lakes Huron and Superior. Lake Michigan, which is encompassed by U.S. land, is omitted from the agreement.

Ecological Freedoms Defined

The pact holds that the lakes have a right to five freedoms: from toxic substances, nutrient overloading, oil, sludge, and noxious colors and odors. It spells out in tortuous detail the exact levels of filth and poison that will ultimately be deemed acceptable and calls for a Joint Contingency Plan to deal with oil spills. All the programs must be either implemented or en route to implementation by the end of 1975.

The agreement calls for no new money or legislation from the United States, although its facilitation will rely heavily on the new water quality bill, which is now wallowing in House-Senate conference with no compromise version in sight. The United States is expected to put about $3 billion into Great Lakes water quality over the next 5 years. Some $2 billion will come from federal, state, and local sources for municipal waste treatment; $700 million to $1 billion is what industry is expected to put into waste treatment and recycling facilities. The Canadian expenditure over the same period will be around $400 million.

The only controversial part of the agreement seems to be the matter of detergent phosphates, which contribute heavily to eutrophication, the chief pollution problem in the two lower lakes. Canada has ordered the proportion of phosphates in detergents down from 20 percent to 5 percent by the end of the year, and ultimately to 2.2 percent. The United States, in view of the fact that no viable alternative to phosphates has been found, is leaving the matter to local discretion and is concentrating on the construction of treatment plants. The agreement envisages that phosphorous loadings into Lake Erie should go down from 32,000 tons this year to 16,000 in 1976, but conservationists say that eliminating phosphates could bring the 1976 input down to 11,000 tons.

The IJC has been instructed to form a Great Lakes Water Quality Board which will have representatives from all the eight states and two provinces affected by the agreement. The commission will be given money to set up a new office somewhere in the Great Lakes Basin, and has been assigned the tasks of monitoring the cleanup, issuing annual reports on progress, and recommending adjustments in the agreement. It will have no enforcement powers, but the high-level nature of the pact is expected to supply motivation. Besides, Environmental Protection Agency Director William Ruckelshaus says the United States now has a "solemn commitment" to keeping the lakes alive and pure.—C.H.

16,000 women will die of that tumor this year, all needlessly—and that greater efforts should be instituted to get information about the benefits of aggressive chemotherapy in certain cancers, such as leukemia, out of the major centers and into the practice of medicine at large.

How the National Cancer Act, which became effective only last February, will ultimately be implemented, how that $1.6 billion plus will eventually be deployed, is something that, in theory at least, will be decided in detail soon. Whether the program can be conducted efficiently, whether it can be effectively coordinated to get results, remains to be seen.

An exercise in rational planning was initiated last winter by Baker, who contracted with a local management firm to assemble the National Cancer Plan. The NCI appointed some 250 investigators to 41 panels, sent them at various times to Airlie House, a conference center outside Washington, to review their fields and draw up plans for future research, and thereby got for itself massive quantities of data and a $900,000 bill. Baker, many close to the project say, first saw the undertaking as a ploy to satisfy the scientific community's desire to be heard. The results of their labors, however, were, in the words of one NCI staffer, "far more valuable than any of us anticipated." Said another, "It showed that the investigators broadly agree on what is needed, and, by laying the problem out, we've been able to see gaps in our knowledge that have to be filled in before we can proceed."

Copies of the rough draft of the National Cancer Plan have been circulated among the nation's scientists. The plan is now being honed into shape by the NCI staff and by the chairmen of the 41 panels. An executive report of the plan should be available by late May.

The challenge facing Rauscher, the panel, and the board is one of taking what, even in final form, will be a mass of data reflecting thousands of individual pieces of research and making some coherent sense of it. They will have to look at all the bits and pieces of knowledge we have about the malignant cell and, as Albert Sabin said not long ago, "coordinate them and attempt either to derive meaningful patterns or to delineate the gaps in our knowledge which prevents the synthesis of meaningful patterns." That is no mean task.

—BARBARA J. CULLITON