

Canada's James Bay fresh-water project gains political support

by Nicholas Benton

The fresh water shortage crisis confronting the entire globe has become a matter of growing awareness and concern in the last year. Droughts of unprecedented magnitude are not only sweeping Africa—combining with International Monetary Fund conditionalities to create mass genocide—but are also ravaging economically-strapped agricultural and urban regions of the North American continent. Not only the 11 million irrigated acres dependent on the shrinking Ogallala aquifer on the great plains, but New York City, Southern California, the Central Canadian Plains, and northern Mexico all face acute water shortages right now.

Enzo Fano, chief of the water resources branch of the United Nations, predicts that many nations' need for water will soon make the oil crises of the 1970s pale by comparison. Jimmy Carter's genocidal recipe for world depopulation, the infamous "Global 2000" report, intoned that—assuming his faction is successful in choking off any substantial new water development projects—by the end of the century "the notion of water as a free good available in essential limitless quantities will have disappeared throughout much of the world." For such genocidalist social engineers, the notion of manipulating demographics and population through water control is an art devised over centuries.

Africa's crisis, for example, is one of deliberately-imposed underdevelopment. There are no less than eight major river systems on that resource-rich continent, combined with more unused arable land than any other continent on Earth. With sufficient investment in water diversion projects, the continent could quickly become a leading breadbasket of the world.

As this is true for Africa, it is even truer for the North American continent. In the case of water development, despite the monumental achievements to date, such as the Hoover Dam, the continent has barely touched its potential. A staggering 27% of the entire globe's fresh water flows untouched to our north in Canada! By tapping this resource, the developing shortage crises throughout the continent could be readily overcome.

It has been proposed that large-scale weather modification methods—derived from the spectacular plasma technologies development that the Strategic Defense Initiative will provide—is the best and ultimate solution to drought and water shortages in the world. The ability to "bend" the pre-

vailing weather flow pathways on the globe with high-powered laser or particle beams, something originally envisioned by the late Dr. Krafft Ehrlicke, could shift the pathway of monsoon storms from India directly over the Sahara, for example. It has been proposed that the same species of technology could be used to provide dirt-cheap salt water desalination.

These approaches may indeed render the whole notion of conventional forms of water diversion obsolete. Yet, still, the accelerating growth in magnitude of the water crisis is forcing some serious reappraisal of "great projects" for tapping the fabulous water resources of Canada using ideas developed by water engineers that have been sitting on the shelf for over 30 years.

EIR has reported on the "North American Water and Power Alliance" (NAWAPA) proposal, developed in the 1950s by the Ralph M. Parsons Company of California, to divert the flow of northern-flowing rivers in western Canada and Alaska through the Rocky Mountains, providing 150 million acre feet and 70,000 megawatts of hydroelectric surplus for development of Canada, the lower 48 states, and Mexico. Because of its comprehensiveness and net yield, this remains the "grandest" proposal of all—made most rational by the fact that the system flows almost entirely downhill.

But although the biggest, NAWAPA is only one of eight proposals for tapping Canadian waters. One that is gaining popularity now is a plan devised over 30 years ago by 72-year-old water engineer Tom Kierens to turn the James Bay into a fresh water lake, and "recycle" that water into the Great Lakes for use throughout the Canadian and U.S. plains. This plan won the editorial approval of Canada's equivalent of *Time* magazine, *Macleans*, in its August 26, 1985 issue, and is also promoted by former Quebec premier Robert Bourassa in his new book, *Power From the North* (Scarborough, Ontario: Prentice-Hall, 1985, 181 pages).

This proposal is euphemistically known as the "GRAND (Great Recycling and Northern Development) Canal," and begins with building a dyke across the northern mouth of the James Bay to turn it into a fresh-water lake.

The James Bay is chosen because of the enormous flow of fresh water into the body (three million gallons per second)—twice the water flow into the entire Great Lakes. This comes primarily from the LaGrande, Nottaway, Broadback,

and Rupert Rivers. As a result of this massive inflow of fresh water, the salinity level of water in the James Bay is already one-third the salinity of ocean water. Further, the bay is shallow, and the dyke would be built through a string of islands near the mouth of the bay, at a distance of not more than 100 miles to close it off from the Hudson Bay.

One of the reasons for the renewed interest in the James Bay project over the other seven designs is the fact that this region has already undergone enormous hydroelectric development since 1965. This effort has already tapped a yield seven times greater than that of the Hoover Dam, and when finally completed, will provide 20 times that yield. This project was launched when Bourassa, a member of the Liberal Party who is still looking to win back his former job, was premier.

Once captured in James Bay, the GRAND Canal concept envisions the water being channeled roughly 500 miles to the Great Lakes, which Kierans says should be considered as the greatest natural "reservoir" on the continent, being huge (100,000 square miles), elevated (580-feet above sea level), and central to everything. As much as 500,000 gallons per second—one-third the flow of Niagara Falls—could be pumped into the Great Lakes from James Bay.

From the Great Lakes, water could be pumped to augment all the water systems linked to it, as well as the major river systems—the Mississippi, Ohio, Hudson and Delaware (to meet East Coast urban water needs)—and directly to the agricultural plains regions both in Canada and the United States. Over 90% of the water use from this plan would be in the United States, Kierans said.

Concept came from Dutch

The concept for dyking and transforming James Bay into a fresh-water lake comes directly from the Dutch, Kierans said. It is based on the dyking project carried out there in the 1930s that converted the Zuider Zee into the fresh-water IJsselmeer.

The pricetag on this plan? Kierans envisions about \$100 billion—with costs about equal on each side of the border. It would take 10 years to build, he said. Kierans sees negotiations at the U.S.-Canada International Joint Commission key, as well as the up-hill battle of winning support from his own provincial and national governments and, of course, the relevant jurisdictions in the United States. He proposed that financing be done in a manner parallel to a "large communications service company," where the various jurisdictions serviced by the company pay in proportionately.

This is not just another "pipe dream," apparently, although Kierans has been a lonely crusader for the idea for a quarter-century: this year, Bechtel Canada Ltd., a subsidiary of Bechtel, and four other companies have formed a joint venture to promote the project.

The principle drawback of the plan is that it requires a significant lift of the water—from sea level in the James Bay

to 950 feet above sea level in the Harricana River Valley to an area near Amos, Quebec. From there it would be transferred across a short canal to the Upper Ottawa River near Val D'Or. It would then flow southward and be transferred to Lake Nipissing and then, via the French River, into Lake Huron.

Lifting the water the 950 feet could consume 10,000 megawatts of electrical power during peak periods—only a portion of which could be recuperated during the subsequent downhill trip toward Lake Huron.

Together with magnitude, this is the main difference between the GRAND Canal project and NAWAPA. The NAWAPA plan is almost entirely a "downhill run" from high-elevation, northward-directed rivers, giving it an enormous net yield of hydroelectric surplus, in addition to the mammoth volumes of water.

It is not to be overlooked that the GRAND Canal plan was devised as a competing, alternative concept to NAWAPA when NAWAPA was being seriously considered by the U.S. Senate in the 1960s under the leadership of Sen. Frank Moss (D-Utah). Kierans, himself, was involved in debates against NAWAPA proponents in the United States at that time. His main arguments against NAWAPA were unsubstantial.

He opposed NAWAPA because, he said, it involved creating a huge reservoir out of the "Rocky Mountain trench" on the British Columbia-Alberta border where, he argued, "people wanted to live." He also claimed that NAWAPA violated "riparian law" by diverting water from its natural river flow, thus denying it to potential downstream users (although in the NAWAPA case, downstream is to the desolate north). On this point, he was contrasting British "riparian law" with U.S. law—which has always favored those who want to make use of water through development over those who might happen to live along the banks of its "natural" flow.

Therefore, Kierans favors his GRAND Canal plan over NAWAPA because it does not disrupt the natural flow of any existing rivers—but allows their flow to go into the sea before being "acted upon" by man. That is why he prefers to call his plan "recycling" rather than "diverting" of water.

But these arguments are all invalid. The GRAND Canal project should be examined on its merits as an engineering proposal—not because it appeases a British notion of "riparian law."

By this criterion, GRAND is inferior to NAWAPA both in scale and efficiency. Its only relative virtue is its lower construction cost and apparently growing institutional support. Neither of these factors, however, should be allowed to determine anything by themselves. Action is needed to tap the northern waters of the continent, and quickly, to avert any number of impending water shortage disasters that face us. All the environmentalist lobbies, including World Watch Institute with its recent anti-development water study, are prepared to block any and all such plans.