Guest Editorial: The James Bay Hydroelectric Project — Issue of the Century

When Robert Bourassa unveiled the first phase of the James Bay hydroelectric project in the early 1970s, he called it "the project of the century." This seemed an appropriate term for a scheme that would alter 19 waterways, create 27 reservoirs and cost tens of billions of dollars. Apart from the Cree inhabitants and a handful of environmental activists, the project had few opponents. As described in a Hydro-Quebec brochure, "the territory, now being molded to man's needs" seemed too remote and too vast to warrant much concern.

Twenty years later, circumstances have changed dramatically. The "project of the century" is becoming the issue of the century as a broad base of opposition forms against it. Biologists, economists, energy experts, anthropologists, plus a growing number of well-informed individuals and groups in Canada and the United States have joined with the Cree and certain Inuit to oppose further hydroelectric development in the region. No longer remote, the James Bay territory, its environment and its people have become subjects of national and international importance.

The reason for this shift is not that the second phase of the James Bay project is to be any larger or have a greater environmental impact than the first. In fact, the project already completed in the basin of La Grande River is larger than that which Hydro-Quebec is now preparing to develop on the Great Whale River. The Great Whale project will generate 3168 megawatts of electricity, compared with almost 15 000 for La Grande, and will flood 4400 km² of land, compared with 9675.

The James Bay project has become a major issue because it involves a number of factors that represent a critical change in our outlook over the past twenty years. The first of these is the growth in popularity and scientific credibility of the environmental movement. Environmental awareness has flowered since the first phase of the James Bay project was begun. The environmental impact of the project was not a matter of great public debate in the early '70s and no formal environmental assessment was ever done prior to construction of the first phase. It has only been since the mid-1970s that environmental impact assessments of major government projects have been performed on a regular basis in Canada.

A surge in public concern about the state of the environment in the late 1980s came at the time Hydro-Quebec began preparations for the Great Whale phase of the project. As a result, the environmental impacts of the first phase have come under close scrutiny, and many of the concerns expressed by opponents in the 1970s have been substantiated.

It has been shown that environmental impacts of the first phase include: methyl mercury contamination of water in reservoirs and downstream rivers and mercury accumulation in fish; reversal of the natural seasonal flow pattern of rivers; conversion of La Grande estuary from a saltwater environment to a freshwater one because of regulated peak flow in winter; changes in water temperatures in affected rivers; loss of wetland productivity; production of greenhouse gasses by the decomposition of vegetation in inundated areas; destruction of shoreline and shoreline habitat (creation of dead zones) around reservoirs due to fluctuating water levels; riverbank erosion downstream from dams; and interference with animal migration routes.* This presents a far different picture from the one advanced in the past of hydroelectricity as a clean, environmentally safe energy source.

A second factor has been the internationalization of environmental issues. Pollution has never respected national borders, but it has only been in recent years that large numbers of people have begun to think of environmental issues in an international sense. In the case of the debate over the Great Whale project, people living in the northeastern United States have been among its most vocal opponents. While there was little American opposition to the first phase of the project, many now perceive a link between the consumption of imported electricity and the damage this causes to the environment and the people living hundreds of kilometres to the north. The irrelevance of distance and of national borders to people concerned with the environmental and social effects of their activities has made the James Bay project an international issue.

A third factor is our growing understanding of, and respect for, native peoples. When the James Bay project was first announced, the Bourassa government did not notify the Crees and Inuit who lived in the affected region. Such a lack of courtesy is unthinkable today.

We are aware of the injustices done to indigenous people in the past through denying the legitimacy of their languages, religions, economies and traditions and forcing them to adopt a foreign culture. However, our misgivings about the way these people have been mistreated historically are belied by the present destruction of their land and way of life in the North. The James Bay hydroelectric project symbolizes this destruction at a time when sensitivity toward the concerns and rights of native people has never been higher.

The Cree of northern Quebec have made it abundantly clear that in spite of receiving millions of dollars in compensation, the James Bay project has severely damaged their community. As they are dependent on fish for their diet and for employment, mercury poisoning of the water has caused a particularly harmful disruption to the Cree way of life. The new roads associated with the project have been equally pernicious; they have facilitated importation of alcohol and other products harmful to the community. Certain hunting grounds belonging to the Cree have been destroyed by the flooding of land for reservoirs. Moreover, the permanent jobs that were to have materialized as a result of the project simply have not been available to the Cree.

The town of Chisasibi, on La Grande River, is struggling to survive in the face of these extraordinary difficulties. Fifty percent of the people who live there are unemployed; alcoholism, teenage pregnancy, wife beating and suicide are rampant; and diabetes affects a disproportionately high percentage of the population — a result of being forced from a traditional fish- and meat-based diet to refined foods. According to Chief Violet Pachanos, the elected leader of Chisasibi, "The price we paid for being modern is high, a lot higher than anyone ever imagined."

The people living farther north, along the Great Whale River, are girding themselves against the kind of development that has devastated their neighbours to the south. They argue that development of the Great Whale project would destroy the traditional way of life they are struggling to maintain. Whereas twenty years ago, this might have been regarded by a majority of Canadians as a step in the march of progress, today it is more likely to be considered abhorrent.

The fourth critical change in the way we think today compared with twenty years ago is in regard to economic development. In the 1960s and 1970s, when economic growth suggested relentless increases in energy demand and when the cost of capital was relatively low, the advantages of building mega-projects seemed irresistible. Oil sands projects, pipelines, nuclear installations and hydroelectric complexes were the order of the day, and the bigger, the better.

Cost overruns, environmental impacts, short-lived employment and economic benefits and a growing aversion to incurring public debt have combined to tarnish the image of large capital-intensive energy projects. Further, energy conservation — the ability to find the energy we need by being more efficient instead of by increasing supplies — has outstripped most predictions, providing a valid alternative that has been shown to be economically and environmentally preferable to energy mega-projects.**

Today, Hydro-Quebec and the Bourassa government seem enthralled by the same thinking that underlay the first phase of the James Bay project: that energy requirements dictate the need for unlimited increases in supply; that modernization of the northern economy requires vast outlays of capital and southern technologies; that the alteration of ecosystems so far "away" is not a matter of great concern; that the environmental impact of hydro-projects is small; and that economic development in the form of mega-projects is good for native people. Their resolve to go forward with the Great Whale project is founded on the belief that these ideas continue to represent progress.

However, the James Bay hydroelectric project embodies a way of thinking and acting that defined progress in an earlier era — before concern for the environment, the rights of native people and the economics of megaprojects began to change the way people think. Today, the idea of progress is undergoing a massive shift away from material and economic growth for growth's sake and toward what has come to be known as "sustainable development." The James Bay project might have been considered "the project of the century" in an earlier era. However, in the era of sustainable development, it must be regarded as something quite different.

> J.I. Linton Editor, Canadian Water Watch The Rawson Academy of Aquatic Science Ottawa, Ontario Canada

*For further information on environmental impacts of the James Bay project see: Jan Beyea and Joyce Rosenthal, July 1989, "Long Term Threats to Canada's James Bay from Human Development," National Audubon Society; Fikret Berkes, 1990, "The James Bay Hydroelectric Project," in *Alternatives* 17(3).

**Ian Goodman, 1991, "Energy conservation vs. the James Bay Hydroelectric Project," in Canadian Water Watch 4(5).