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northern
flood
agreement

Development of the

# LAKE WINNIPEG REGULATION CHURCHILL/NELSON RIVER DIVERSION PROJECT

and the

# NORTHERN FLOOD AGREEMENT



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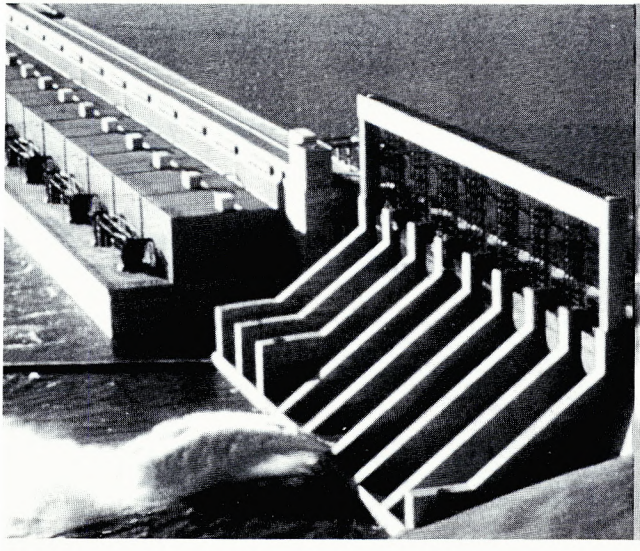

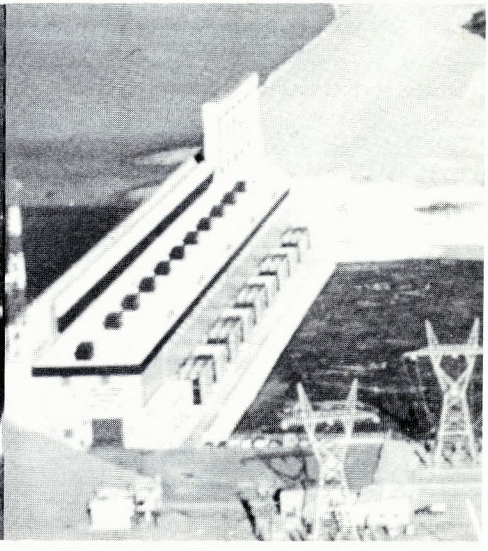

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# Introduction

## Positive Results

During the 1960's and 70's planning and construction was in progress on a major hydro generating project in Northern Manitoba. This project, known as the Lake Winnipeg Regulation and Churchill/Nelson Rivers Diversion Project (LWCNR), was undertaken to meet increasing requirements by Manitoba residents for electric power and to allow the Province to generate revenue by exporting hydro-electric power.

While this Project has proven beneficial to the majority of Manitobans, providing a reliable source of electrical power for years to come, it has had major consequences for the environment and the residents of a large part of northern Manitoba.

## Negative Results

Among those residents affected by the Project are the Status Indians who live on the Cross Lake, Nelson House, Norway House, Split Lake, and York Landing Reserves. These Reserves have an aggregate population (1982) of 6,535 in addition to 1,025 living on nearby Crown lands.

As a result of the flooding caused by the Project, 19 percent (11,861 acres) of Reserve lands were lost and residents experienced major changes in many aspects of their traditional way of life.

## Compensation

To compensate these five Indian Bands for the impact of the Hydro Project, two agreements were negotiated by the Province of Manitoba; Manitoba Hydro; the Department of Indian Affairs and Northern Development (on behalf of the federal government); and the Indian Bands' representative, the Northern Flood Committee. These agreements are the Economic Development Agreement (September 1977) and the Northern Flood Agreement (December 1977).

The history of the development of these agreements and the hydro-electric Project which gave rise to them are the subject of this publication.

# History of the Hydro Project

## Exploring the Potential

The potential for generating electrical power from the Churchill and Nelson Rivers was under consideration for many years before development actually occurred. As early as the 1920's a study done by the federal Department of the Interior identified the possibility of future development of the river systems. Surveys of the region were carried out by the Manitoba Government Water Resources Branch in the late 1940's. Over the years, Manitoba's need for electrical power supplies continued to grow and these surveys set the stage for close examination, during the 1950's and early 1960's, of ways to develop the hydro-electric capabilities of the two rivers.

In 1964, the federal and provincial governments created the Nelson River Programming Board to consider recommendations on how best to develop the Churchill and Nelson Rivers.

## Recommendations for Development

In 1965, after examining several proposals, the Board recommended that:

- the potential of the Nelson River be developed by means of a major hydro-electric project including diversion of the Churchill River into the lower Nelson River via the Rat and Burntwood Rivers (the Churchill/Nelson River Diversion)
- the outflow of Lake Winnipeg into the Nelson River system be regulated to ensure an adequate supply of water for the optimal generation of electric power by the hydro stations on the upper and lower Nelson River and to provide the means to control flooding on the land surrounding Lake Winnipeg (Lake Winnipeg Regulation).

## Churchill/Nelson River Diversion

Addressing themselves to these recommendations, the Province of Manitoba and Manitoba Hydro undertook detailed engineering studies; later, they agreed in principle to the Churchill/Nelson River Diversion Project. The first phase of the Project planned for a diversion of the Churchill River into the Rat/Burntwood system and a rise in South Indian Lake water levels by approximately 35 feet.

However, in 1968, when Hydro applied for a license to develop the Churchill River Diversion component of the Project, it was met with strong opposition. Community concern and opposition arose over two related issues: the need to relocate the community of South Indian Lake because of anticipated flooding from this "high level" diversion; and the scope, relevance, and impact of extensive environmental changes expected to result from the Project. Hydro's initial license application for the Churchill River Diversion and "high level" flooding at South Indian Lake, therefore, was not approved.

A thorough re-evaluation of the Diversion Project followed and modified plans were developed which would reduce the impact at South Indian Lake. The Project incorporated plans for construction of the Kettle Rapids plant (which began generating energy in 1970) as well as the Long Spruce site and as many as eight additional stations on the lower Nelson and Burntwood Rivers. Though scheduled to be completed by 1975, major modifications in the design of the Diversion Project delayed development.

## Lake Winnipeg Regulation

At the same time that the Churchill River Diversion component of the Project was being re-examined, the possibility of regulating Lake Winnipeg was also under consideration. In July 1970, the provincial government and the Hydro Board reviewed a Hydro Task Force report on several proposals for Project development. The Board accepted a recommendation that the Lake Winnipeg Regulation Project be developed for completion in 1974 and the Churchill River Diversion be completed in 1975/76.

Construction of the Lake Winnipeg Regulation Project began with the dredging of channels to increase the amount of water flowing out of Lake Winnipeg during the winter months.

One component of this Project was the construction of the Jenpeg dam at Cross Lake. While the Lake Winnipeg Regulation Project had been planned for 1974 completion, the first generating unit was not in operation until July 1977; the sixth and final unit became operational in November 1979.

## The Present

At present, approximately one quarter of the Project is complete; it consists of two dams on the lower Nelson River (Kettle and Long Spruce) and two on the upper Nelson River (Jenpeg and Kelsey) including diversion and control structures at Notigi and at Missi Falls.

Project development has increased Manitoba Hydro's installed generating capacity about threefold, from approximately 1.2 billion KW in 1969 to 4.1 billion in 1982 (1983 Annual Report, Manitoba Hydro).

## The Future

Completion of the project and construction of additional hydro-generating stations was planned initially for the mid 1980's and 1990's. Because of the slowdown in economic growth in Manitoba during the late 1970's however, electrical energy demand did not increase as quickly as was originally expected and the additional construction planned was delayed.

Additional Project development on the lower Nelson River and the completion of the Limestone Station is now expected, and is linked to the negotiation and approval of export contracts. Potential Project development on the Burntwood River is expected to begin as future provincial electrical energy needs increase. The extent and timing of further Project development, therefore, remain uncertain at present.

Manitoba Hydro has announced an agreement with Northern States Power Co. to electrical power to the U.S. beginning in 1992. The company has applied to the National Energy Board for an export licence. Manitoba Hydro also announced that domestic and export needs would require advancement of the construction of Limestone to 1985. This is a $3 billion program including some 6,000 person years of employment. If other potential Hydro sales are realized in Canada and the U.S., the next phase of the Project could see the start of a third series of Churchill and Nelson Rivers hydro development construction. This would involve Wuskwatim Station and Conawapa Station, for a $4 billion program including some 15,620 person years of employment. Northern hydro construction could roll right into the 21st century, the single most significant employment and economic development activity in Manitoba (and possibly Canada).

# The NFC and The NFA

## Growing Concern

In 1968, when Manitoba Hydro first announced its intentions to proceed with the Churchill River Diversion, it was met with opposition — the strongest of which came from the community of South Indian Lake because the Project called for a substantial alteration in the level of South Indian Lake. This community opposition was instrumental in delaying components of the Project for several years and marked the beginning of greater local involvement in northern development.

By 1970, the original Churchill River Diversion proposal was modified. Combined with a Lake Winnipeg Regulation component, Manitoba Hydro announced its intention to proceed with construction of the balance of the Project. Although there was an awareness of the Project in the northern communities, a lack of information about the effects of the Project hindered formal discussions with the affected communities. As information was gathered between 1971 and 1974, it became increasingly obvious that significant adverse effects could result from the Project.

## Formation of the Northern Flood Committee

Once the information had been gathered, the leaders of the communities most affected by the Project met to discuss its impact. As a result, in 1974, an executive body was elected and the Northern Flood Committee (NFC) was formed. The NFC consists of the five Chiefs of the Bands of Cross Lake, Nelson House, Norway House, Split Lake, and York Factory. They were to be the negotiators in developing a compensatory agreement for the residents of the five Indian Reserves.

During 1974 the Northern Flood Committee held organizational meetings to establish working guidelines. Legal counsel was retained and the Committee began to seek recognition from the two levels of government in order to get negotiations started. The federal government, after recognizing the Committee represented those Bands affected, made loans available to enable advisors to research and evaluate matters pertaining to the Project and advise the Committee on potential impacts and remedies.

## Discussion and Mediation

Prepared to participate in discussion on compensation programs, the Northern Flood Committee, in late 1974 and early 1975, began to meet formally with the federal and provincial governments. However, disagreements over the kind of compensation to be granted hindered progress. The Parties, therefore, appointed a mediator to overcome these disagreements.

The mediator visited the five Reserves affected by the Project to gain a better understanding of the issues. He initiated local workshops and encouraged Band input to develop plans which would deal with the adverse effects of the Project. In September 1976, a workshop was held in Nelson House and an "agreement of principle" was drafted and distributed to all Parties.

It was expected that this "agreement of principle" would facilitate development between the four Parties and the mediator of the specific terms of compensation. The mediator undertook to work on an item by item basis; his priority was to deal first with the items where all-Party consent was likely to be reached quickly.

Although mediation was a slow process, by February 1977, the outline of a compensation program was accepted by the Northern Flood Committee and the federal government. In Spring 1977, Manitoba Hydro informed the other Parties an agreement needed to be reached; the worst drought conditions in Manitoba's recent history dictated that water from the Churchill River and South Indian Lake was needed to produce electricity and that this would create an extra flow of water through the Burntwood River system.

## Agreement

After a period of intense negotiations, the four Parties announced that the new Agreement had been concluded and would be proposed to the membership of the five Bands and the two levels of government for their ratification. In September 1977, an Economic Development Agreement was signed and in December 1977, the Northern Flood Agreement was signed.

The Northern Flood Committee took the Agreement to the Reserve communities for discussion and ratification. On March 15, 1978, a referendum was held and all five Bands ratified the Agreement.

# Effects of the Project

## Overview

The Churchill/Nelson River Diversion Project and the resulting regulation of Lake Winnipeg has had a number of positive effects. The Project has expanded Manitoba's hydro-electric resources, created economic and employment opportunities, and provided some of the Bands with access to all-weather roads and to hydro energy. On the negative side, however, it has substantively altered the surrounding environment and led to adverse effects on the communities living along the waterways.

Any major project that involves altering the course of nature inevitably creates problems, both for the environment and for the people who live and work there. The Lake Winnipeg Regulation and Churchill/Nelson River Diversion Project is no exception. This Project has caused a radical change to water levels, including flooding in various areas, and created problems for all five Indian Bands represented in the Northern Flood Agreement.

## Fishing

One noticeable effect of the flooding is its impact on fisheries. In some affected lakes, there has been a drop in the quality and number of fish caught; in others, fishing has completely ceased. Where fishing continues, fishermen have to travel farther and work longer days in order to maintain income and harvest yields. Another problem for fishermen has been an increase in the amount of debris floating in the water, resulting in damage to boat equipment and nets and adding to the cost of harvesting fish.

## Transportation

Boating is a common means of travel in the north, but fluctuating water levels have also hampered this form of transportation. Where water levels rise, debris and logs from flooded shorelines get caught up in propellors and damage hulls. Where levels drop, shoals and mud flats create a navigation hazard.

In dry years, extremely low lake levels convert shorelines in some areas into reedy swamps, hampering almost every aspect of community life. Boats must be hauled several hundred feet through mud before reaching water and carefully maneuvered over hidden reefs and rocks exposed by shallow water levels. As a result, traditional water-based transportation has become difficult.

Problems are not limited to the summer months. The abnormal water levels have compounded a different set of winter problems such as slush ice, making travel hazardous. In other areas, water levels drop in the winter, leaving ice suspended above the water and creating hazardous conditons for travel over the ice.

## Water Supply

Most of the Reserves have experienced a drop in water quality and availability. The Hydro Project has also affected water supply equipment and resulted in higher costs for repairs and additional water treatment equipment.

## Hunting and Trapping

Hunting and trapping activities have also been adversely affected because of the Project. The habitat and location of game has been altered, and in some areas traplines have become inaccessible due to fluctuating water levels.

## Compensation

It was in response to these problems — the awareness that some means of addressing both known and unanticipated adverse effects of the Project and the necessity of developing suitable remedies — that the Northern Flood Agreement was signed. Although not all effects of the Project can be reversed, the Agreement is intended to mitigate damages and/or provide compensation for the damages caused.

# Conclusion

## The Agreement

The Northern Flood Agreement is a complex document, containing 25 different sections (Articles) and 8 appendices (Schedules). Each Article describes a number of commitments or actions to be undertaken, either by one of the Parties, or in some cases by all four Parties in conjunction with each other.

Information concerning the contents of the Northern Flood Agreement and the companion Economic Development Agreement may be found in the "Issues and Obligations" brochure available from the Department of Indian Affairs and Northern Development.