1.0 INTRODUCTION

1.1 Background

Waterpower has been used to produce electricity along the Matabitchuan River system for more than 90 years. Hydroelectric electricity production has contributed to the economic development of the province. In addition, hydroelectric and control structures have also provided other social benefits such as mitigation of flooding and creation of recreational opportunities. There is one generating station and three control dams on the Matabitchuan River system. Net Creek Dam and North Milne Dam are owned by Ontario Ministry of Natural Resources (MNR); Rabbit Lake Dam is owned by Ontario Power Generation Incorporated (OPGI). The generating station on the river is owned by OPGI. The Matabitchuan Generating Station has an installed capacity of 10,140 kW, which represents approximately 0.1% of the hydroelectric capacity in the province. Hydroelectric capacity accounts for approximately 26% of the total electricity generating capacity in the province.

In the past, power producers have often worked with members of the public, First Nations, interest groups, MNR and other regulatory agencies to address the effects that the operation of waterpower facilities can have on other resource values and users. As a result, many waterpower facilities have existing operating plans with constraints on water levels and flows that voluntarily recognize the multiple uses of the river in addition to legal constraints. In 1998, the Ontario Government passed the *Energy Competition Act* in order to establish a competitive electricity market in Ontario. In 2000, the *Lakes and Rivers Improvement Act* (LRIA) was amended to establish the statutory authority of the MNR to order the preparation of a Water Management Plan (WMP) for operation of waterpower facilities and associated control structures and ensure compliance with that plan. The end result of this WMP is the revised description of operating plans for each facility that is legally enforceable under the *Lakes and Rivers Improvement Act.* The intent of the WMP is to provide certainty and clarity as to how waterpower facilities and control structures are operated with respect to levels and flows, so as to balance environmental, social and economic objectives.

The planning area consists of the regulated river and its areas of influence inside the watershed. Area of influence has been defined as 200 m on both sides of the river as well as tributaries and wetlands that are affected by the regulated flow. All structures that affect levels and flows on the river system are included in the WMP.

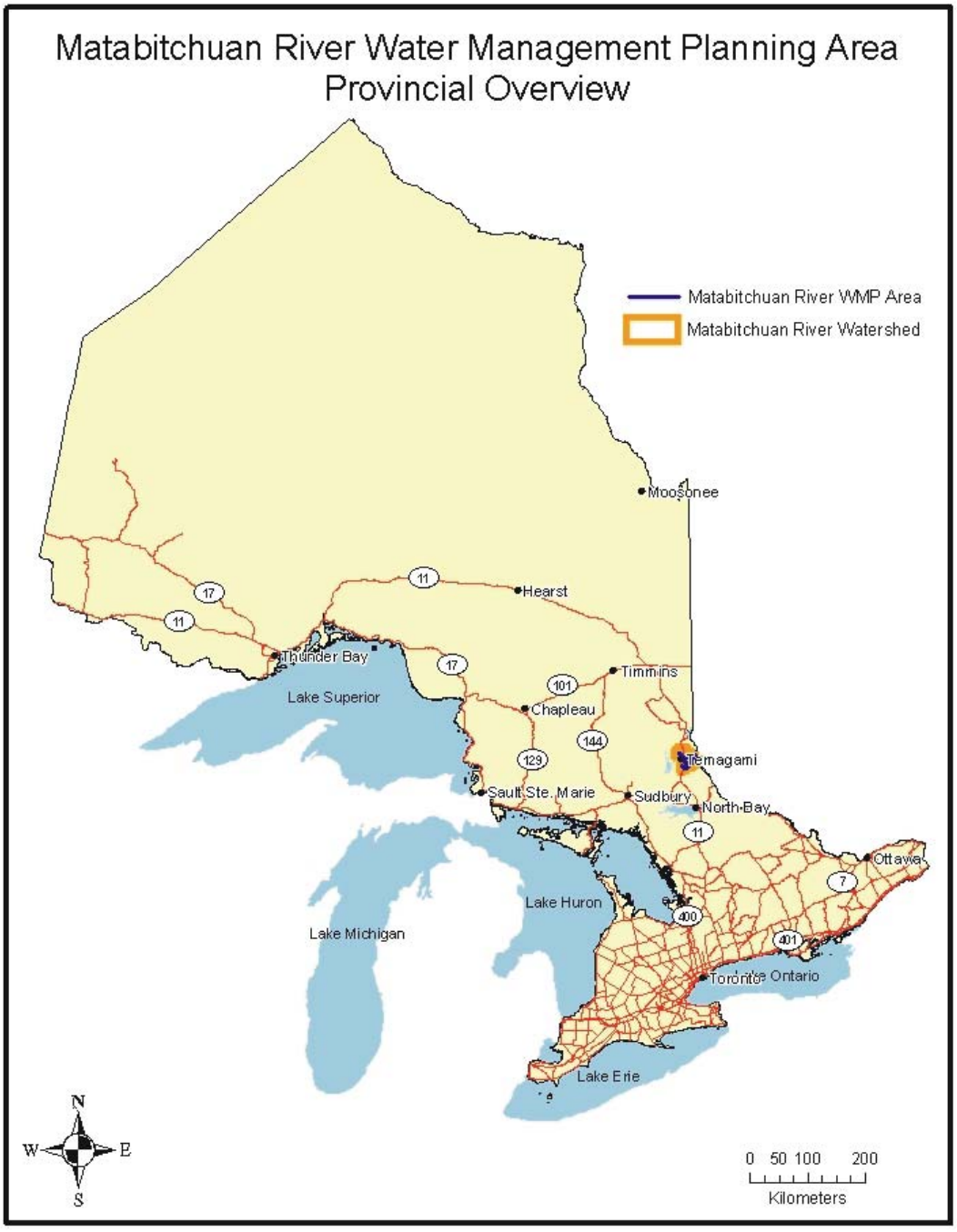

Figure 1.1: Matabitchuan River Water Management Planning Area Provincial Overview (Courtesy of MNR)

1.2 Goal of the Water Management Plan

The goal of the Water Management Plan is to contribute to the environmental, social and economic well-being of the people of Ontario through the sustainable development of waterpower resources and to manage these resources in an ecologically sustainable way for the benefit of present and future generations.

1.3 Water Management Planning Objectives

1. To review the existing operational plans and to develop an overall Water Management Plan for the Matabitchuan River system with specific operational plans for each generating station and water control structure.
2. To identify issues and concerns regarding management of dam and hydroelectric facilities associated with the Matabitchuan River and develop strategies to address these.
3. To establish a process for on-going monitoring of WMP compliance and amendments to the plan if necessary.

1.4 Matabitchuan River Water Management Planning Objectives

The following are the water management planning objectives that the Matabitchuan River Planning Team has developed to assist in the planning process (listed in no particular order):

Fisheries: Maintain or improve fisheries health throughout the river system.

Navigation: Maintain or improve navigability throughout the river system.

Recreation: Maintain or improve recreational opportunities throughout the river system.

Flooding: Minimize the risks of damage due to flooding throughout the river system.

First Nations: Maintain or improve protection of known First Nation values and traditional relationship throughout the river system.

Cultural Heritage: Maintain or improve protection of known cultural heritage values throughout the river system.

Erosion: Minimize the impacts of erosion caused by facility operation throughout the river system.

Wildlife: Maintain or improve wildlife habitat throughout the river system.

Economics: Maintain or improve sustainable economic opportunities throughout the river system.

Public Safety: Maximize public safety throughout the river system.

Power Generation: Maintain or improve power production throughout the river system.

Natural Flow Regime: Maintain or improve operations to more closely match the natural flow regime of the river. The natural flow regime is used as a guide to determine water levels and flows that best protect and enhance the aquatic ecosystem.

1.5 Guiding Principles of the Matabitchuan River Water Management Plan

1. The Water Management Plan should attempt to maximize the net environmental, social and economic benefits derived from how waterpower facilities and their associated water control structures are operated through the manipulation of flows and levels.
2. Current and future operations must adhere to licensing and regulatory requirements and build on existing operational practices (under extreme natural conditions, it may not be possible to operate within normal limits).
3. Several stakeholder interests have been considered in developing the present operating plans for the river. These plans represent the base condition for which incremental improvements will be sought.
4. Options for the management of flows and levels shall be developed in an open and participatory manner with technical, financial, social and economic considerations taken into account.
5. Internal and external communications are integral parts of this review and will be coordinated between the organizations.
6. The facility operators and MNR will commit to applying the necessary resources to implement the outcome of the plan.
7. Water management planning will be undertaken without prejudice to the rights of Aboriginal people and treaty rights. MNR will undertake meaningful consultation with affected First Nation communities.
8. Public input and consultation will be an integral part of the development of the plan.
9. The Water Management Plan will promote the ecologically sustainable management of waterpower resources.
10. An adaptive management approach will be the basis for the preparation of the Water Management Plan.
11. The best information that is available at the time of decision-making is to be used in the preparation of the Water Management Plan.
12. Decisions shall be made by consensus. Where consensus cannot be reached they will go through an MNR issue resolution process, or be referred by MNR to the appropriate authority.
13. Both the Steering Committee and the Planning Team will follow the philosophy of consensus decision-making.

1.6 Terms of Reference for the Water Management Plan

The complete Terms of Reference for the Matabitchuan River Water Management Plan (Appendix A) outlines the plan goal, objectives, guiding principles, term, schedule as well as committee roles and responsibilities, and committee membership.

1.7 Background Information

This report provides the background information on the Matabitchuan River system including a physical and biological description of the watershed, a socio-economic description and profile of the communities in the watershed, and a description of the waterpower facilities and structures with current operating regimes.

1.8 Issues, Resource Values and Interests Identified through Scoping

Issues, resource values and interests were identified by the public through questionnaires, public information sessions and First Nation information sessions. MNR and the power producers also identified issues to be addressed in this plan. Chapter 5 is divided into two parts: Public Issues

Document and First Nations Issues Document. Issues are presented by facility, organized into the following categories: fisheries, navigation, recreation, erosion, wildlife, economic, flooding, other issues. Issues that are not indicated for specific sites are presented in a section entitled "Non Specific Site" and organized into the same categories. At the end is a summary of other issues that do not relate to water levels and flows and for that reason are beyond the scope of this plan. Issues that pertain to past, present or future First Nations grievances will be addressed outside of the Water Management Planning Process without prejudice.

Temagami First Nation presented a report on the Montreal & Matabitchuan Rivers Water Management Planning that outlines issues and concerns of the First Nation. The report is included in Appendix M. The issues and concerns that are within the scope of the Water Management Plan will be referred to the Standing Advisory Committee for follow-up.

1.9 Key Gaps in Baseline Data and Information

Chapter 6 identifies key gaps in baseline data and information required to address issues raised and the associated proposed studies to fill in these information gaps.

1.10 Option Development

The issues, resource values and interests identified through scoping formed the basis for the options that were developed for each facility. The existing operations were used as the baseline conditions to which options were compared to make improvements. Concurrent to the gathering of public issues and option development pertaining to these issues, issues were gathered from the participating First Nation and aboriginal communities. The issues were grouped under the various water management planning objectives listed in section 1.4 and options were developed, by objective, to address the issues. The range of options for each facility with the Planning Team's preliminary preferred option highlighted is presented in chapter 7. The third stage of public consultation involved presenting, to the public and First Nations, the range of options developed and gathering feedback. The Planning Team then selected the preferred overall operating option for each facility. The evaluation methods and criteria are discussed in chapter 8, with public comments on the options presented in section 8.2 and public comments on the Draft Plan presented in section 8.3. The selected options for each facility can be found in chapter 9, with the new operating plans for each facility detailed in chapter 10.

1.11 Monitoring and Reporting

In some cases the selected options have resulted in changes to the operating plans for facilities. These changes are expected to make improvements and increase the net benefit of the planning objectives. To ensure that these changes are effective in meeting the plans' objectives, the monitoring program outlined in chapter 11 will be carried out. Chapter 12 outlines the compliance monitoring program that involves self monitoring with periodic audit by MNR to ensure that facilities are being operated in accordance with the Water Management Plan. The Standing Advisory Committee, as described in chapter 13, will be responsible to monitor, assist and report on the implementation of the Water Management Plan, Effectiveness Monitoring Program and the Compliance Monitoring Program.

Figure 1.2: Rabbit Chute, Matabitchuan River
(Courtesy of MNR)