Appendix B

Terms of Reference for Muskoka River Water Management Plan

Terms of Reference

Background Information Collection

for the Muskoka River Water Management Planning Project

1. Purpose

The Ministry of Natural Resources is interested in preparing a Water Management Plan (WMP) for the Muskoka River system. This Request for Proposal is for the preparation of a Background Document, which will consolidate the information and issues requiring consideration in the planning of the WMP. The compilation of information will be undertaken using an ecosystem approach, where "ecosystem" refers principally to the aquatic environments that are most directly affected by changes in water levels and flows.

2. Background

The Muskoka River basin, as shown in Figure 1, covers an area of 4 660 square kilometres and extends from Algonquin Park to Georgian Bay at the western extremity of the watershed. The entire watershed is situated on the Canadian Shield. There are approximately 2000 lakes in the watershed with a combined surface area of 780 square kilometres.

The north and south branches of the Muskoka River rise in the south-western corner of Algonquin Park as shown and flows south-westerly through a series of lakes before joining below the Town of Bracebridge's town centre. The river subsequently discharges into Lake Muskoka, the largest lake in the system. Lakes Rosseau and Joseph also drain into Lake Muskoka entering from the north via the Indian River at Port CarlingDownstream from Lake Muskoka, the river branches into the Musquash River flowing westerly and carrying average flows into Georgian Bay, and into the Moon River flowing in a north-westerly direction and carrying high flows into Georgian Bay during high flow periods.

There are 40 control structures and 10 hydroelectric generating stations in the Muskoka River system. The Ministry of Natural Resources operates 39 of the structures while Ontario Power Generation (OPG) operates one structure. OPG also owns five of the hydrogenerating plants. Of the five remaining generating plants, three are owned and operated by Lakeland Power, one by Algonquin Power and one by Orillia Light Water and Power Commission. Table 1 lists these stations' locations and ownership.

Table 1

River Name	Name of Station	Company Ownership	Organized Township Name
Muskoka	Burgess (Bala)	Algonquin Power	Muskoka Lakes, Twp
Muskoka (north)	High Falls	Lakeland Power	Bracebridge, Town
Muskoka (north)	Bracebridge Falls	Lakeland Power	Bracebridge, Town
Muskoka	Wilson Falls	Lakeland Power	Bracebridge, Town
Musquash(Muskoka)	Big Eddy	OPG	Muskoka Lakes, Twp
Muskoka	Ragged Rapids	OPG	Muskoka Lakes, Twp
Muskoka (south)	South Falls	OPG	Bracebridge, Town
Muskoka (south)	Trethewey Falls	OPG	Bracebridge, Town
Muskoka (south)	Hanna Chute	OPG	Bracebridge, Town
Muskoka (south)	Mathias Falls	Orilllia Light Water and Power Commission	Bracebridge, Town

3. Legislation, Roles and Responsibilities

Legislation

Section 23 (1.1) of the *Lakes and Rivers Improvement Act* was amended on December 6, 2000 such that the Minister of Natural Resources "may order" the owner of a dam to prepare a plan. The background document will enable the preparation of the Muskoka River Water Management Plan, which will fulfil this legislative requirement.

Roles

On the Muskoka River system, control over flows and levels is exercised principally by MNR, the owners of non-waterpower facilities, and local waterpower companies (Companies) essentially operate their facilities on the flows that are made available to them. During background information collection, it is expected that the Companies will provide information on the facilities that they own; assist with the preliminary identification of issues; and, assist with public consultation.

The role of the Consultant will be to coordinate and undertake the collection of information and data relevant to the Muskoka River watershed from all sources (see Section 6).

MNR's principle role will be to provide direction and advice during the background collection project.

Responsibilities

MNR will provide access to all background information, reports, and historical information relevant to the Muskoka River system. MNR will also provide access to a photocopier for

the reproduction of information. MNR Engineering and Area Team staff will also form part of the planning team for this project and will be available to discuss data collection results in order to understand and fulfil any information gaps identified. MNR will also assist with public consultation, according to a consultation schedule developed between MNR, the Consultant and local waterpower companies.

The Consultant will be required to:

- organize a planning team for this project comprised of Consultant/MNR/Company engineers, hydrologists, biologists and/or ecologists, planners, resource technicians, and information management specialists, with additional expertise being brought in on an as-needed basis;

- consult with MNR at key stages in the project and submit information to MNR for approval prior to making the information available to the public;

- form a public advisory committee (PAC), including the preparation of a terms of reference, and facilitate regular PAC meetings and an initial workshop, if deemed necessary, intended to raise the committee's awareness and knowledge of river dynamics;

- prepare a list of stakeholders, residents, government agencies and interest groups and prepare mailouts as required;

- collect environmental, engineering and social information and data held by the Companies and the MNR, as well as, First Nations and stakeholders, residents and the general public, which will be used to weigh costs and benefits of identified water management options during the preparation of the water management plan;

- carry out a data gap analysis, prioritize data collection requirements and prepare a work plan for data collection;

- prepare and execute a public consultation schedule that will involve holding open houses and preparing public consultation material (i.e. brochure) and internet site;

- maintain a public consultation record and append it to the Background Document;

- use historical water flow information (dam operation, water levels, dam outflows, flood levels, rule curves, historical weather patterns, gauging stations) and current status of structures to model the baseline condition for the Muskoka River system such that the same model can be used when evaluating options during the preparation of the future water management plan. The model should have flood forecasting capabilities;

- prepare a draft Background Document that can be understood by the general public and submit this to the planning team and PAC for review; and,

- prepare a final Background Document and Executive Summary for public review.

4. General Principles

The following principles shall guide the preparation of a background document for the Muskoka River Water Management Plan project:

- on-going degradation of the riverine ecosystem resulting from the manipulation of water flows and levels through the operation of waterpower facilities and associated water control structures should be identified;
- the best information available should be collected describing technical, financial, environmental, social and economic conditions, issues and concerns;
- background collection should be undertaken without prejudice to the rights of Aboriginal people and treaty rights; and,
- information should be collected using open and transparent processes.

5. Project Context and Description

The preparation of the Background Document for the Muskoka River Water Management Plan is a multi-year project that is divided as follows:

Tasks	Completion Date
▪ Initiate Information and Data Collection ▪ Public Advisory Committee Formation	March 31, 2002 (2 months)
▪ Complete Information and Data Collection ▪ Data Gap Analysis and Work Plan Preparation ▪ Operational And Flood Forecasting Modelling For The River System ▪ Public Consultation ▪ Preparation of a Background Document and Executive Summary	March 31, 2003 (1 year)

The Consultant will issue a public notice, with MNR approval, announcing the intent to collect background information that will used to facilitate the preparation of a Water Management Plan for the Muskoka River. Direct written notice will be provided to key stakeholders located within the watershed via a mailing list prepared by the Consultant. As part of this announcement, the intent to form a Public Advisory Committee (PAC) will also be made known and interested persons will be invited to submit their names within a specified period of time. The PAC will assist in identifying issues and concerns within the watershed and will assist with public consultation.

A large component of this project involves the collection of background information that is currently available and the information and data that is required to be collected in order to undertake the preparation of the water management plan. Background information should involve detailed information of the Muskoka River system, including:

- physical and biological descriptions of the river system;

- mapping the physical system and resource values*;
- a socio-economic profile;
- a description of waterpower facilities and water control structures; and,
- an operational model for the existing system using current operating plans for waterpower facilities and water control structures, and their known benefits and effects.

***Note:** MNR will provide a watershed map showing available values information at the commencement of this project.

Public consultation is also a significant component of this project and will involve the following:

- co-ordinating and facilitating planning team meetings;
- developing a key stakeholder mailing list;
- preparing a public questionnaire;
- preparing newspaper notices;
- forming a Public Advisory Committee, developing a Terms of Reference for this committee and facilitating committee meetings;
- preparing public consultation material such as brochure(s) and/or newsletter(s), displays for open houses and internet material;
- planning and participating in 2 open house events held at 3 locations in the watershed; and,
- reviewing and responding to public comments, concerns and questions as they arise during this project.

The product of this proposal will be a Background Document for the Muskoka River Water Management Planning Project and Executive Summary and it will include a public consultation record. The draft Background Document will be submitted for review to the Public Advisory Committee, Companies and MNR prior to being made available to the general public. The Consultant will prepare a final version of the Background Document and submit it to MNR at the completion of the project.

6. Information Sources/Contacts (see Appendix A for a list of available information at Bracebridge Area Office, OMNR)

The type of information to be collected should include, but not necessarily be limited to, the following:

- fisheries habitat (location, type of species, year/class/strength from index surveys);

- wildlife habitat (location);
- historical water flow information (dam operation, water levels, dam outflows, flood levels, rule curves, historical weather patterns, gauging stations);
- engineering components (infrastructure inventory, current status of structures, dam safety);
- stakeholders and potential partners;
- opportunities for better management;
- preliminary lists of interests, issues and concerns;
- economic opportunities (recreational, tourism, waterpower potential, divestment opportunities, cranberry production);
- contents of existing water management plans; and,
- Ontario's Living Legacy Land Use Strategy information.

Appendix A contains a list of reports technical information presently available at the Bracebridge Area Office. This information is available for viewing, Monday to Friday, with two days advance notice.

A potential list of contacts should include, but should not be limited to, the following agencies and persons:

PROVINCIAL SOURCES:

Ministry of Natural Resources

Southcentral Region Engineering Group – Mike Phillips
Water Levels – Oliver Pastinak
Fish and Wildlife – Christy MacDonald , Brett Thomas
Planning – Kim Benner
First Nations – Chip Duncan

Ministry of Environment
Ministry of Culture and Communications
Ministry of Northern Development and Mines
Ministry of Tourism

WAHTA FIRST NATIONS

FEDERAL SOURCES:

Department of Fisheries and Oceans
Canadian Coast Guard
Department of Indian and Northern Affairs
Environment Canada

WATERPOWER COMPANIES

Ontario Power Generation
Lakeland Power
Algonquin Power
Orillia Light Water and Power Commission

OTHER INTEREST GROUPS

Local and Regional Municipalities
Ontario Federation of Anglers and Hunters
Federation of Ontario Cottagers' Association
Federation of Ontario Naturalists
Northern Ontario Tourist Operators (NOTO)
Ducks Unlimited
Canoe Ontario
Trout Unlimited
Muskoka Lakes Association
Local Cottage Associations

7. Product Requirements

Consultants should recommend a method of reporting project progress.

At the completion of this project, the Consultant will be required to submit:

- 16 hard copies of the final Background Document and Executive Summary;
- 1 electronic copy (MSWord) of the above material; and,
- copies of all information collected.

8. Proposal Submission Proposal

The proposal shall provide details on the approach and methodology and include:

- contact person and phone number and people involved in the preparation of the proposal;
- bar chart schedule showing activities, meetings, report submission, etc.;
- a list of key staff, their related experience and role on this project;
- corporate experience on similar projects;
- a fixed price cost estimate broken down by task with a breakdown of time and per diem fee for key staff, support staff, and expenses and disbursements; and,
- project cost by fiscal year and the total project ceiling (upset) limit.

9. Section Criteria

Proposals will be evaluated according to the following criteria:

- Understanding of the assignment, including the Field Environmental Planning Procedures (10%).
- Clear and detailed work plan for the modelling of the baseline condition (10%).
- Clear, logical and detailed work plan to fulfil the requirements of this project (20%).
- Demonstrated ability in the co-ordination, facilitation and accomplishment of similar report (20%).
- Qualification of the Consultant/staff to be assigned to the project and reference checks. (15%)
- Expected total costs and expenses (25%)

The Ministry of Natural Resources reserves the right, in its sole discretion, to discontinue or limit the requirements for this project. The ministry may take whatever action necessary to perform the work associated with this project, without incurring any liability whatsoever for any and all costs, to the Consultant that is selected.

10. Ministry Contacts

For more information, please contact:

Kim Benner (Resource Planner)

Bracebridge Area Office
R.R. 2
1350 High Falls Road
Bracebridge, Ontario
(705) 646-5520 (phone)
(705) 645-8372 (fax)

OR

Mike Phillips (Regional Engineering Services)

Bracebridge Area Office
R.R. 2
1350 High Falls Road
Bracebridge, Ontario
(705) 646-5550 (phone)
(705) 646-8372 (fax)

Responses to this Request for Proposal MUST be received at the Shared Services Bureau, Strategic Procurement Unit in Peterborough by 2:00 P.M. December 13th, 2001.