

6.0 Key Gaps in Baseline Data and Information / Baseline Data Collection Program

Through the planning process there have been several key gaps in baseline data and information which are required to adequately address issues that have been identified during the public and First Nation consultation process. While the water management planning process will use the best available information at the time of planning to make resource management decisions, one of the main goals of the WMP is to develop the long-term environmental sustainability of the river ecosystem. To achieve this goal, a baseline data collection program will be established to enhance the knowledge of the river system and ensure that site specific issues are addressed. The outcome of these studies will be reviewed by the proponent, MNR and SAC for consideration for further enhancements to the plan.

The following studies have been proposed:

Erosion:

- Erosion Study – Matabitchuan Generating Station

Fisheries

- Walleye Spawning Habitat – Below Rabbit Lake

1. Erosion Study – Matabitchuan GS

Project Objective:

To perform a follow-up erosion study upstream and downstream of Matabitchuan GS to quantify erosion and provide recommendations for further action.

Project Background:

Through the Public Consultation process, concerns were raised regarding locations on the river system where erosion impacts to the shorelines are occurring. As erosion is also a natural process there is a need to verify and assess impacts for these locations to determine if the reported erosion taking place is indeed part of the natural evolution of the river or if the erosion is being accelerated by the operational regime management of the river system.

As part of Ontario Power Generation's (OPGI) commitment to the environment, a shoreline condition monitoring program was initiated in the late 1980's. On October 12th, 1989, OPGI (formerly Ontario Hydro) engaged ERDE Inc. to conduct a shoreline condition survey of the Matabitchuan GS area. The extent of the monitoring was between Four Bass Lake and Lake Timiskaming and coverage was obtained of both riverbanks from Lake Timiskaming to the Matabitchuan GS powerhouse, along the spillway channel from the main dam to the powerhouse, and in the main dam area. A report was prepared for OPGI, dated December 31st, 1990.

Project Description:

The ERDE report listed several recommendations that were to be considered by Ontario Power Generation. These included; conducting a follow-up shoreline monitoring survey of the subject area, a property ownership monitoring program, and consideration to undertaking a debris removal program along the lower reach of the river.

The project proposal is broken down into three sections, as listed:

1. conduct a follow-up C-BANK Phase 2 shoreline condition monitoring survey of the Matabitchuan GS area (similar to the survey conducted in 1989),

2. conduct a property ownership monitoring program to determine if properties have changed ownership over the years, as well as verifying the extent private property owners may be affected by erosion within the study area, and,
3. conduct a “minor” debris clean-up program along sections of the lower reach (downstream of powerhouse) that have a relatively narrow width of river channel. The clean-up would consist of removing beached trees that may be creating restrictions in the river channel and/or removing the accumulated debris that may become dislodged and transported to the small bends in the river, thus creating a possible blockage during high flows (review 1990 report for locations). OPGI will obtain necessary approvals from MNR / DFO for any work conducted in water.

Timing of the Project:

All three components of this project could be completed during the summer of 2004. A review of water conditions/flows during spring freshet may be beneficial as a visual picture, but not necessary to complete the requirements of this project.

Cost of Project:

1. Engage a consultant (such as ERDE Inc.) to conduct a follow-up shoreline condition monitoring survey of the Matabitchuan GS area ----- **\$30k**
2. Conduct a property ownership monitoring program ----- **\$ 4k**
 - Salary (1 staff: 2 days field visits, 1-2 days -report preparation) ----- approx.\$ 3,000
 - Truck, Meals, Miscellaneous ----- approx.\$ 1,000
3. Conduct minor debris clean-up program ----- **\$39.6k**
 - Salary (4 staff: 10-15 days -field work, 1 staff: 2-3 days -report preparation) -----
----- approx.\$27,720
 - Trucks, Meals, ----- approx.\$ 3,380
 - Boat Rental, Gas, Miscellaneous -----approx.\$ 4,500

Total: \$73,600

Potential Partners:

Ministry of Natural Resources

References:

Graham, C.W., 1989 Matabitchuan River Shoreline Evaluation Program, Shoreline Evaluation Survey, October 12th, 1989, Report No. ERDE8905, dated 1990/12/31. ERDE Inc. (Environmental and Resource Development Engineering) for Ontario Hydro.

2. Walleye Spawning Habitat – Upper Matabitchuan River below Rabbit Lake Dam during reservoir fill period – dam closed off

Project Objective:

To assess if the current operating regime causes risk to any valued ecosystem components.

Project Background:

Through the Public Consultation process a concern has been raised regarding potential impacts on fisheries spawning habitat immediately downstream of the Rabbit Lake Dam during spring filling of the Rabbit / Cassels Lakes reservoir system. MNR records do not indicate any recorded walleye spawning sites on this section of the upper Matabitchuan River. Public scoping input has

indicated that there is a need for field investigation regarding this concern. The dam site is in a remote location and there is limited baseline information available to assess this concern.

The current operating procedure by OPGI is: following drawdown to a target of 286.0 m by March 20th, the dam is closed off (stop logs replaced) with the onset of freshet. The stop logs are not cindered, which allows for leakage and provides some minimum flow. There is no minimum flow requirement constraint in place. There is a need to conduct a site inspection to record preliminary observations in regard to this issue. Observations recorded will assist in determining if there are any impacts to the aquatic ecosystem.

Project Description:

Site inspection to record preliminary observations and assess level of minimum flow achieved through dam leakage. Assess potential for fisheries spawning habitat. Determine if there are valued ecosystem components present that are at risk.

Timing of the Project:

The project should be undertaken following stop log operations conducted by OPGI to begin filling of the Rabbit and Cassels Lakes reservoir system. OPGI will inform the MNR when the dam operations to replace the stops logs for the fill period are being conducted. The site can be accessed by snowmobile/all terrain vehicles via forest access road and or possibly by lake, depending on ice safety conditions.

Cost of Project:

Snowmobile/all terrain vehicles/fuel costs -----	\$ 100.00
Truck, meals, miscellaneous -----	\$ 300.00
Salary (1 biologist, 1 technician: 1 day field + 1 day office for data analysis)	
One Biologist (\$1143.83/wk + benefits – 2 days) -----	\$ 549.04
One RT3 Technician (824.40 /wk + benefits – 2 days) -----	\$ 395.71
Total --\$1,344.75	

Potential Partners:

Ministry of Natural Resources
Local Cottagers' Association
Volunteer members of the Public Advisory Committee
Ontario Power Generation Inc.

References:

- Collective Agreements - Ontario Public Service Employees Union and Management Board of Canada



Figure 6.1: MNR Wetland Assessment – Net Lake Johnny Creek
(Courtesy of MNR)