

MADAWASKA RIVER WATER MANAGEMENT REVIEW
STANDING ADVISORY COMMITTEE
Meeting #2, January 16, 2001 at Renfrew

Attendees:

Standing Advisory Committee (SAC) members: Barry Martin (Chair), Mary Anne McRae, Ernie Coulas, Bob Braden, Kevin Barkley (Secretary), Brian Wright (Vice-Chair)

MNR: Ron Spurr, Paul Moreau, Joanna Gaweda, Ray Bonenberg

OPG: Donald Ferko, Bruce Robertson, Jim Whyte, Linda Halliday

Regrets:

Steve Roy, SAC

The meeting was called to order at 6:25 pm by Chair Barry Martin.

1. Review of Minutes of December 13, 2000

No errors or omissions

Business arising from the Minutes:

- MNR helicopter flight date will be February 16th., with flights from Arnprior airport at 9:30 am and 10:30 am
- Algonquin Park involvement – submission will be shared by Ron Spurr later. Ron Spurr will share information on this with the SAC and OPG before the March meeting.
- Question by Mary Anne McRae re: the boom at the Bark Lake dam not being installed in the summer of 2000. Jim Whyte responded that the boom was in place in the summer of 2000 but not 1999, and it is OPG's intention to install it in future years.
- Venue for the March and April meetings will change due to non-availability of OSP Board Room.

2. Overview of water management planning on the Madawaska River
by Don Ferko: (notes will be circulated).

- OPG system overview
 - Total generating stations
 - % of generation from nuclear (60), fossil (18) and water power (22)
 - How system is planned – by month, day, hour
 - How OPG accounts for energy supply – surplus or deficit, maintenance, outages, what's available when, how we meet primary energy demand, fuel supply, why we buy and sell based on daily demand – hourly and daily planning for daily peaks vs. long-term strategic planning for seasonal demand

- Megawatt profile by station by hour throughout a typical day – using available water integrated with existing fossil and nuclear stations to keep the power on across the province and provide for balancing needs
- Use of the Madawaska River in this overall scheme

- Water management
- MNR is provincial regulatory authority
- OPG governed by provincial and federal legislation, granted License of Occupation and Water Power Leases
- With legal frameworks we work out operating ranges and discharge capacities for each structure, accounting for environmental and citizenship requirements
- Operating limits – absolute range; voluntary constraints; environmental conditions
- OPG and Fisheries constraints must not be violated
- Citizenship constraints are voluntary, are adhered to on a reasonable effort basis and can be exceeded during certain conditions

- Basic hydrology
- Study of the occurrence, circulation and distribution of water over the earth
- OPG's focus is on the magnitude and time variation of the runoff for maximum profit
- Need to store water during low demand times and withdraw from storage during high demand
- Dependent upon supply
- Hydrologic cycle – powered by solar energy, and runoff influenced by climate, geology, land use, basin physiography, vegetation and soil
- Precipitation in Madawaska River watershed is about 800 mm/yr about 34% of which would be available for water power generation

- Madawaska River
- flow measured by cubic metres per second/cms
- take velocity & depth measurements at different points to estimate flow
- flows, elevation and volume have interdependent relationship in basic hydrology – mass balance ratio
- OPG has seven sites on the river, 5 of which produce about 610 megawatts on average (1% of Ontario's energy) with an average annual flow of 100 cms. Change in elevation from Bark Lake to Arnprior is about 235 metres.
- The Madawaska River is a peaking system used for energy demand at certain times of day only and generates for a limited period each day.
- Watershed map in Review document – 5 generating stations and 2 control dams
- Bark Lake and Centennial Lake are used as storage reservoirs and are drawn down each year. These lakes both have restricted ranges.
- Significant points of review:

- Sustainable development/ecosystem approach
- Covers the entire river basin
- Reviewed all operating constraints
- Public information and participation involved
- Developed management approaches that are cost-effective
- Improved communication and cooperation between OPG and MNR
- Madawaska Review plan objectives:
 - Review existing water management by OPG and MNR from an ecosystem, watershed and resource perspective
 - Provide long-term opportunities for public involvement in the review process
 - Monitor the implementation of the review plan and provide feedback and recommendations to public and organizations
- overview of typical annual operations on Bark Lake based on prevailing conditions
- overview of drawdown decisions based on available water, depth of snowpack and weather forecast. Flooding risk is evaluated constantly in spring, also considering freshet and spawning conditions
- overview of annual operations at each generating station and control structure down the river system based on the same constraints as above (all this information is in the Final Review document).
- Water management forecasting is not an exact science and is based on variables that can be expected to change at relatively short notice eg. weather forecasts, which are not always accurate.

MNR Pembroke District Manager Ray Bonenberg was introduced to the SAC members and he thanked them for their participation and volunteerism for this project.

Next meeting on March 28th., features MNR Madawaska Area biologist John Boos who will discuss the different fish species found in the Madawaska River and their habitat requirements, the impacts of fluctuating water levels on fish and wildlife, Information Needs projects completed in 2000, projects planned for 2001 and prioritizing of future projects included in the Information Needs section of the Madawaska River Water Management Review.

The location of the March 28th., and April 25th., meetings will be:

Renfrew Corporate Centre
 210 Lochiel Street South, 2nd. floor
 Renfrew

These meetings will commence at 6:00 p.m.

The meeting was adjourned at 8:50 p.m., there being no further business.