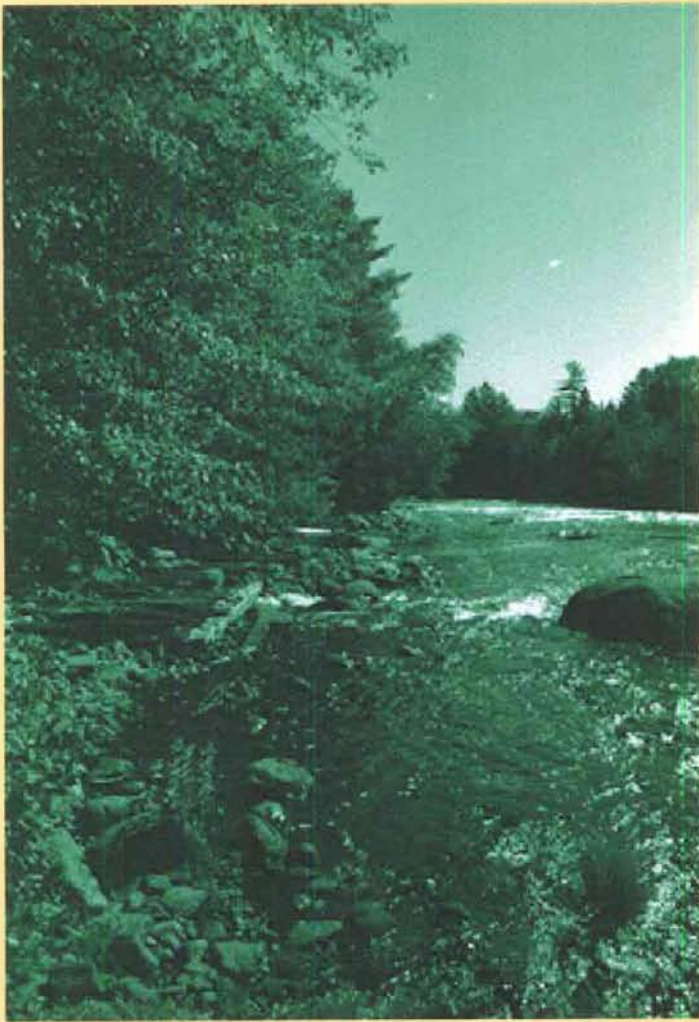


Madawaska River

WATER MANAGEMENT REVIEW



Five Year Report

2000 - 2004

May 2006

Madawaska River Water Management Review

Five Year Report

2000-2004

Prepared by the Ministry of Natural Resources Pembroke District and Ontario Power Generation with the assistance of the Madawaska River Water Management Review Standing Advisory Committee.



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1.0 Introduction

The Madawaska River Water Management Review (2000) was prepared as a result of an agreement between the Ministry of Natural Resources (MNR) and Ontario Power Generation (OPG) in June 1995, to form a partnership to conduct a review of water management of the Madawaska River.

The review was a significant step for several reasons:

1. It aimed to apply several developing concepts of interest to both organizations: sustainable development, water management planning, and an ecosystem approach to management;
2. It involved water planning on the entire Madawaska River system;
3. It involved public information and participation as a key element of water management planning;
4. It strived to develop management approaches that are cost-effective, building on experiences elsewhere in the province.
5. It would improve communication and cooperation between water management operations of MNR and OPG.

The goal of the Madawaska River Water Management Review was to develop a water management plan to guide levels and flows for the Madawaska River and ensure public awareness of the plan. The plan identifies operation criteria for MNR and OPG-controlled structures and was designed to be a work in progress that captured only the current limitations.

Public participation and consultation was instrumental to the *Madawaska River Water Management Review*. A Public Advisory Committee (PAC) was selected that provided advice and direction to the inter-organization review team. Three phases of Public Consultation, including focus groups and open houses were undertaken.

In August 2000, a Standing Advisory Committee (SAC) was formed to monitor the implementation of the water management plan. The SAC is made up of citizens representing a diversity of interests, whose mandate is to provide a mechanism for the public to contribute to the implementation of the plan, follow the implementation progress, and be aware of issues and proposed changes to the plan. It has been the role of the SAC to bring any new problems and issues to MNR and OPG throughout the implementation of the plan.

The review document called for a five year report on the status of the plan implementation. The report will summarize the items that the Standing Advisory Committee monitored over the last 5 years, based on their annual reports, and re-assess information needs from an ecosystem and resource use perspective.

Once finalized, the 5 year report will be a public document and will be referenced in the updated Madawaska River Water Management Plan.

In May 2000, the government endorsed a “new business relationship” with Ontario’s waterpower industry including, among other things, a requirement that formal plans for the management of flows and levels be prepared for the province’s waterpower facilities. In December 2000, the *Lakes and Rivers Improvement Act* (LRIA) was amended to provide the Minister of Natural Resources with the authority to require dam owners to prepare water management plans in accordance with the guidelines approved by the Minister. This authority was expanded and new penalty provisions were added to the LRIA in June 2002. The Water Management Planning Guidelines for Waterpower (WMPG) were approved by the Minister in May 2002.

The opening of the Ontario Electrical Market in 2002 changed the mechanism of operation for power production facilities in the province. Four of the five power facilities on the Madawaska River were required to participate in an open market and follow dispatch instructions from the Independent Market Operator. The mechanism of operating in the new market changed the OPG’s ability to manage flows and levels by introducing greater uncertainty.

The goal of water management planning 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.

2.0 Summary of Standing Advisory Committee Activities

The Madawaska River Water Management Review – Final Report (2000) stated that the implementation of the water management plan be monitored by a Standing Advisory Committee (SAC). The mandate of the SAC, as outlined in the Terms of Reference, is to provide a mechanism for the public to contribute to the implementation of the water management plan, follow the implementation progress, and be aware of any issues or proposed changes to the plan. The SAC provides a communication link with the public that helps MNR and OPG foster and maintain credible relationships.

The SAC was formed in August of 2000 with seven members. The Terms of Reference, as outlined in the Madawaska River Water Management Review Final Report (2000), stated that membership on the Committee would be limited to a maximum of three consecutive two-year terms. In November 2004, three members retired from the committee and four new members were appointed.

Between August 2000 and December 2004 the Standing Advisory Committee met on 22 occasions with the first meetings being devoted to orientation,

information and education for members new to the Madawaska River Water Management Review process. The orientation process included a helicopter flight of the river. Subsequent meetings focused on a broad range of issues relating to water levels and flows on the Madawaska River, including the summary of public issues received by MNR, OPG, and SAC members. Early in 2005, two meetings were dedicated to orienting and informing the four new committee members. The Minutes of each SAC meeting were recorded and are available for viewing on the OPG website (<http://www.opg.com/envComm/madawaska/meetingminutes.asp>).

The Standing Advisory Committee members felt that they needed to be more accessible to the public and, as a result, have held open SAC meetings in Griffith in August 2003 and 2004. In addition, the SAC has participated annually in both OPG's Upper and Lower Madawaska River Stakeholder meetings. Since the formation of the SAC in August 2000, it has proved to be a successful vehicle for bringing forward public concerns, serving as a link between MNR and OPG and the broader constituents. Section 4.0 highlights a progress report of action items, identified both in the 2000 Report and by the Standing Advisory Committee, and their current status. Section 5.0 identifies new issues brought forward by the SAC, MNR or OPG throughout the implementation period.

The Standing Advisory Committee has produced three annual reports outlining the committee's activities since its inception.

- 1) Annual Report 2001 – May 2002
- 2) Annual Report 2002 – June 2003
- 3) Annual Report 2003 – November 2004

3.0 Successes and Accomplishments

Under the guidance of the Standing Advisory Committee, Ontario Power Generation and the Ministry of Natural Resources, the Madawaska River Water Management Review has seen many accomplishments in its first 5 years of implementation.

Primary among these is the success of the Madawaska River Water Management Review resulting in the Premier of Ontario announcing that the format used on the Madawaska would be used as a model for studying 41 other river systems in Ontario. OPG received an award from the National Hydropower Association for its "Outstanding Stewardship of America's Rivers" for four years (2001-2004). In addition, in 2000, Pembroke District MNR staff was presented with the prestigious Amethyst Award, the highest accolade for Ministry employees.

In August 2002, OPG and MNR received a "World Summit Business Award for Sustainable Development" for the Madawaska Review, in recognition of its

contribution to sustainable development. This was awarded at the World Summit on Sustainable Development, Johannesburg, SA.

Since its approval in 2000, several public sessions, including workshops and stakeholder meetings have been held to further the communication of the plan to the public. For instance;

- OPG Paddlers' Workshop at Palmer Rapids in April 2001
- MNR/OPG Erosion Workshop at Eganville, May 11, 2002.
- Stakeholders meeting for Centennial/Black Donald Lake residents held July 17, 2003.
- OPG Lower Madawaska Stakeholder meetings have taken place since 1997 and have been held in Renfrew each April from 2001-2005.
- OPG Upper Madawaska River Stakeholder meetings have taken place since 2002:
 - May 2002 in Combermere
 - May 2003 in Palmer Rapids
 - May 2004 in Barry's Bay
 - July 2005 in Combermere
- Open SAC meetings have been held in late August at Griffith in 2003 and 2004.

4.0 Progress Summary: Information Needs/Actions Items

Throughout the first five years of implementation of the water management plan, a number of action items and information needs were identified in relation to the 2000 Report. This section groups the major items identified by the Standing Advisory Committee, OPG and MNR throughout the implementation and provides an update on their current status.

4.1 Erosion Workshop

The January 2000 Report committed MNR and OPG to conduct an erosion workshop to assist shoreline dwellers with potential solutions, by providing the public with a forum to discuss erosion problems.

The erosion workshop took place in Eganville on May 13, 2002. Advertisements were placed in local newspapers and interested individuals were invited to attend. A presentation by an MNR engineer was delivered. Public turnout was quite small, however future workshops are possible provided there is enough public interest.

4.2 Algonquin Park/Bancroft District MNR integration

The 2000 Report identified that a protocol for inter-organizational communication and decision-making between OPG and MNR for water release during low water and dry weather periods. Algonquin Park staff committed to operating in lower water situations. OPG installed temporary gauges at Opeongo lake, downstream of Booth Lake, at Galeairy Lake and downstream of Galeairy Lake to monitor the response of the river to MNR log operations.

MNR committed to work out a process for involving Algonquin Park and MNR Bancroft district in the Review Process. MNR Pembroke district represented Algonquin Park and MNR Bancroft district. MNR Pembroke district obtained MNR Bancroft district and Algonquin Park input or participation in SAC activities as required.

4.3 Information Needs

The 2000 Report identified that “there is a need for additional biological and ecological information in order to effectively address the issues of water level fluctuations on fish populations and aquatic ecosystems on the Madawaska River”.

The Information Needs is one of the primary results of the water management plan. Over the 2000-2004 period, these were updated, studies completed and priorities set annually. Both the MNR and OPG completed a number of studies. A list of published reports is contained in Appendix A.

4.4 Public Contact/Issue Identification

Another issue identified was a mechanism for logging long-term public involvement in water management on the river.

OPG and MNR have provided a summary of public issues/concerns as it relates to levels and flows, for review at each SAC meeting.

4.5 Bark Lake Draw Down Strategy

The Bark Lake draw down strategy also ties into developing a protocol for inter-organizational communication and decision-making between OPG and MNR for water release during low water and dry weather periods. The refill of Bark Lake in 2001 did not reach the summer minimum until early July. Both OPG and MNR were committed to monitor a number of environmental variables and review the draw down strategy.

OPG has modelled varying drawdown patterns to determine impacts. However, it is not possible to have a significant increase in the probability of refilling Bark Lake to the summer minimum without also increasing the risk of downstream flooding.

4.6 Cherry Beach Spawning Grounds

An issue identified was the limiting factors to the production of walleye. The plan has committed that spring surveys will be conducted of fish spawning at Cherry Beach Rapids.

In April 1999, walleye were observed to spawn in the upper part of the Cherry Beach rapids (Rosien 1999). During low flow springs such as 1999 and 2001, the shoal associated with the rock crib may become exposed during either spawning and/or incubation. Some observations by Rosien (1999) and MNR (J. Boos personal communication) suggest that walleye spawn between the shoal and the north bank where eggs are unlikely to be exposed. However, the Standing Advisory Committee requested confirmation that there was no egg exposure problem at this location, and an investigation into the level of protection by the backwater from Stewartville GS if higher elevations are maintained during the spawning/incubation period. Three new action items were identified in April 2002 to resolve this issue:

- 1) Annual Observations: Continue to make annual observations of the distribution of spawning walleye at Cherry Beach when flows permit (Walleye Watch, MNR, OPG). Make observations of shoal exposure at various flows through direct observation and flow tests (first flow test, 68 cms, conducted Jan 30, 2002 OPG). During egg incubation during low spring flows, inspect shoal for exposed eggs (OPG, MNR).

Status: This is an ongoing activity. Note that in 2002 the flows were too high to observe spawn conditions.

- 2) Investigate backwater effect from Stewartville: At low flows, determine how far upriver the backwater from the Stewartville GS extends relative to the Cherry Beach Rapids at elevations 144.48 to 144.78 (OPG).

Status: Temporary gauges installed at Cherry Beach in 2000 provide information on the backwater effect from Stewartville. However, the decision to lower the upstream shoal has eliminated the need for further investigation.

- 3) Investigate potential to lower shoal upstream of Cherry Beach: At low summer flows, inspect the shoal to determine if the elevation of the shoal can be easily lowered to prevent dewatering (OPG).

Status: Low flow conditions were observed and it was decided that OPG would lower the elevation of the shoal upstream of Cherry Beach to prevent the possibility of dewatering the potential spawning ground. This work was completed in the fall of 2003.

During this work it was also recommended that the shoal located downstream of Cherry Beach be lowered. Remediation of this shoal is still required.

4.7 Process – Plan Amendments

It was identified that a procedure was needed to amend the water management plan if warranted, as there was no mechanism in place. The SAC recommended that the process be handled by a sub-committee to make recommendations.

The *Lakes and Rivers Improvement Act* was amended in December 2000, providing the Minister of Natural Resources with the authority to require dam owners on rivers with waterpower facilities to prepare water management plans in accordance with the Water Management Planning Guidelines for Waterpower (2002). As a result, the Madawaska River Water Management Review, Final Report (2000), is being updated to conform to these guidelines. A formal process for amending the water management plan will be outlined in the updated plan.

4.8 Portage Routes

An issue was identified in the plan that at some, if not all, generating stations/dams there are safety booms, shoreline signs and fencing both upstream and downstream from these sites that prevent boat travel between river reaches. OPG agreed to establish portage routes around the seven facilities on the Madawaska River. Public safety features were enhanced and some portage routes were re-established on adjacent properties. The three upstream portages around Bark Lake Dam, Kamanisseg Lake Dam and Mountain Chute GS were completed in August 2003. The portage route around Arnprior makes use of public roads to connect to the Ottawa River. All 7 portage routes were officially opened on May 24, 2004. The routes are publicized by means of a Madawaska Paddler Portage brochure available at tourist information booths, municipal offices, outfitters, other locations, and on the Ontario Power Generation website at <http://www.opg.com/envComm/madawaska/canoebrochure.pdf>.

4.9 Web Updates

A need was identified to create greater public understanding of “why’ and ‘how” the river is operated in the manner that it is. In addition, water level elevations are collected daily at midnight, which does not correspond to the peak period of usage of the river by other users.

In 1999 OPG started the weekly or twice weekly updates of the flow and level webpage. Requests from the SAC to report more frequently on the levels and flows have been received over the past 5 years. OPG is working on a web update process that will allow level and flow updates at least once per day at sites where continuous readings are currently obtained. The Ontario Power Generation web address for the Madawaska River updates is (<http://www.opg.com/envComm/wateruse/Madawaska/MadawaskaRiverMap.asp>)

4.10 Arnprior Erosion Work

OPG carried out shoreline stabilization work on the Arnprior forebay during 2001 and 2002. This shoreline work covered over 2200 m of the shoreline and included placing rock fill along the toe of the banks, regrading portions of the banks, and planting trees. Fish habitat features included the installation of large woody debris structures, gravel fans and gravel pads. The shoreline work was monitored for success during both 2003 and 2004 and subsequent shoreline tree planting continued in 2005 to further stabilize a few observed problem areas. The Department of Fisheries and Oceans was pleased to see that the fish habitat compensation and remedial works were successfully installed.

4.11 Mountain Chute Winter Operations

OPG committed to lowering the elevation of Mountain Chute during the freeze-up period to try to reduce shoreline erosion problems in the section of the river between Mountain Chute and Griffith. The request from the public to start the draw down of Bark Lake prior to the formation of an ice cap resulted in a discussion of the operations at Mountain Chute. The reason for the draw down at Mountain Chute is similar; however the level at mountain Chute was held until the cap was formed and then could be raised to the normal operating maximum. OPG agreed to a trial period of a winter maximum to be consistent with Bark Lake starting in the winter of 2002.

4.12 OPG Stakeholder Meetings

In addition to the website updates, OPG stakeholder meetings help to address the need to create greater public understanding of river operations. OPG started

annual Stakeholder meetings on the Madawaska River in 1997. Annual stakeholder meetings were established to provide a formal setting for exchanging information about the operation of the river with members of the public. The stakeholder meetings were not advertised in any formal way. Between 2000 and 2004 the SAC members made a number of requests to advertise the Stakeholder meetings in local newspapers. Starting in 2005 the OPG Stakeholder meetings on the Madawaska were advertised in local newspapers to increase public awareness of the events. Annual Stakeholder meetings, hosted by OPG, will continue to be a part of the action plan to keep the public informed.

4.13 Mountain Chute Summer Range

The issue identified was the effect of daily and weekly water level fluctuations during the recreation season, as low water levels during the summer leave boat-lifts and ramps inoperable.

The summer operating minimum was changed from 247.80 m to 248.00 m for the peak summer period as part of the Madawaska Review process (1995-2000). In September 2002 the elevation of Mountain Chute was reduced from 248.00 to 247.80 m shortly after the end of the peak summer period, and remained close to the summer minimum for the remainder of the summer period. In October 2002 the elevation of Mountain Chute was also reduced below 247.80 m shortly after the end of the summer period and remained below 248.00 m until the end of November. In 2003 a public meeting was held with Centennial Lake residents to discuss operations at Mountain Chute. Many of the residents were not happy with the sudden reductions in elevation in 2002 and requested a summer minimum level of 248.00 m for the entire summer period. The SAC agreed to test out a new summer operating minimum of 247.80 or 248.00 m depending on the inflow into Mountain Chute in 2005.

4.14 Levels & Flows Background

As a component of the action plan to help increase a greater public understanding of river operations, the SAC requested that the 2003 annual report be modified to include background information about the operational flow and level graphs at OPG facilities.

4.15 Stewartville Summer Range

Mid-day water levels from June to September was identified as an issue in the plan in terms of shallow areas becoming unswimmable when the water level is below 144.5 metre level. The longer the water is left at that elevation, the more

significant the problem in terms of lost recreational opportunities. The problem occurs in the downstream end of the reach.

The interpretation of conditions to use the full 78 cm summer operating limit at Stewartville under high flows was the subject of much discussion. Many residents along the downstream end of the reach are not satisfied with the use of the full 78 cm range for more than a 2 hour period. More discussion and a better understanding of the hydraulics of the reach are required to resolve the conflicting interpretations.

4.16 Paddlers Workshop

MNR and OPG agreed to meet with the paddler community to inform them about river operations on the upper Madawaska River, and to find out the issues and concerns from that perspective. This workshop was an OPG and MNR commitment made in the January 2000 Report. It was held on April 21, 2001 at Palmer Rapids.

Weekend and special event white water releases from Kamaniskeg Lake (Palmer Rapids) were requested of OPG. An Upper Madawaska River stakeholder meeting is held annually.

A request for releases from OPG for defined weekends each season was received. OPG has not made any weekend release for white water activities due to the cost to provide them, the impacts of these releases on the recreational users of Kamaniskeg/Negeek Lake and potential impact of such regular releases on the downstream ecosystem.

4.17 Kamaniskeg Summer Range

Narrow operating limits (+/- 6cm) existed on Kamaniskeg Lake in the summer. OPG committed to increase the summer operating range to 282.88 – 283.06 m.

The summer operating range was changed to 282.88 to 283.06 m from 282.94 to 283.06 m as part of the water Madawaska Review process (1995-2000). Numerous low water complaints were received in 2001 and 2002 from the Negeek Lake area when the elevation was near the lower end of the summer operating range. The summer operating range was adjusted to 282.94 to 283.12 on a trail basis in 2003. Numerous high water complaints were received in 2003 when the elevation was near the summer operating maximum. The summer operating range was adjusted to 282.91 to 283.09 on a trail basis in 2004 and 2005.

4.18 Erosion at Bells Rapids

A concern was expressed about erosion occurring at Bell's Rapids where the river has been diverted. Erosion protection work was carried out in 2003.

5.0 New Issues

5.1 Bark Lake Pre-freeze up draw down

A request from the public was made to start the draw down of Bark Lake prior to the formation of an ice cap. The reason for the draw down is to reduce shoreline erosion and damage to docks. The original request suggested a 3.0 m draw prior to the formation of an ice cap on Bark Lake. Requiring a draw down in December of 3.0 m would be a significant deviation from the typical operating pattern and have an impact on flows and levels all the way to the Ottawa River. OPG agreed to test a winter maximum of 313.40-313.30 m starting in the winter of 2002.

6.0 Operational Figures

OPG and MNR operate a number of dams on the Madawaska River. Operating figures for all OPG sites as well as four MNR sites are included in Appendix B. The operational summary for each site covers the 2000 to 2004 period. The format of the figures for OPG and MNR sites are similar however, MNR graphs are limited to elevations.

6.1 MNR Sites

The 4 MNR site figures show the variation of the elevation over the 2000 to 2004 period. Recorded elevations are spot readings that are obtained periodically. Spot readings represent an elevation obtained at an instant in time and are not a daily average. The discharge spot readings at each MNR site are also recorded however, they are not shown in the figures. Each MNR site figure includes the operating limits and 2000-2004 period average, minimum and maximum. The average, minimum and maximum values are calculated over a period of a week. The average is the average of all spot readings recorded in the week period of each year. The maximum and minimum represent a spot reading recorded during the week in the specified week in any of the years.

6.2 OPG Sites

Each figure follows the same format and consists of two graphs. The top graph is a plot of the annual discharge data for the site while the bottom graph is a plot of the annual elevation data.

Each graph of the annual flow shows the following information:

- Site discharge. At the three upstream OPG sites where there is significant storage room (Bark Lake, Kamanisgeg Lake and Mountain Chute) the discharge is the measured discharge into the site or inflow. At all other sites the discharge is the outflow from the site.
- Historical Average\Maximum\Minimum inflow or outflow. This is the historical Average\Maximum\Minimum for the site calculated on a daily average. For example the average value for January 1 is the sum of all outflow or inflow values recorded on January 1 divided by the number of years of data. Historical average\maximum\minimum\ values are calculated for each site based on the period of record, which is different at each site. The Bark Lake, Kamanisgeg Lake & Centennial Lake reservoirs' period average series are based on total inflows, while at the other facilities they are based on total outflow.
- Water Management Plan (WMP) Average\Maximum\Minimum discharge for each site. This is the average\maximum\minimum for the site calculated on a daily average for the 2000 to 2004 data.

Each graph of the annual elevations shows the following information:

- operating range
- other level constraints such as summer minimums/ranges, spawn ranges or winter ranges.
- reservoir elevation – either Head Water elevation or Lake elevation
- Historical average\Maximum\Minimum elevation for each site. This is the historical Average\maximum\minimum for the site calculated on a daily average. For example the average value for January 1 is the sum of all elevations recorded on January 1 divided by the number of years of data. Historical values are calculated for each site based on the available records, which is different at each site.
- Water Management Plan (WMP) Average\Maximum\Minimum elevation for each site. This is the average\maximum\minimum for the site calculated on a daily average for the 2000 to 2004 data.

7.0 Conclusion

The Madawaska River Water Management Review was instrumental in leading the way for the approval of the Water Management Planning Guidelines for Waterpower (WMPG) in 2002. However, in order to meet the requirements of existing and new legislation and regulations, there are components of the guidelines that need to be incorporated into the Madawaska River Water Management Review document. As a result, the Madawaska River Water Management Review (2000) will be updated to conform wherever possible to the WMPG. The updated plan, the Madawaska River Water Management Plan, is projected to be finalized in 2006. New components will include an Effectiveness Monitoring Plan and a Compliance Monitoring Plan. In addition, a new reach will

be incorporated in order to include the MNR dam and the three private water power facilities on Waba Creek, and a Simplified Water Management Plan for Bancroft Light and Power will be appended to the updated plan. There will be opportunity for public input into the new components of the updated plan. Focus groups and open houses sessions at draft plan stage may occur.

The five year report will be referenced in the updated Madawaska River Water Management Plan. Where appropriate, components of plan implementation in the first 5 years, such as updated “information needs” may appear in the updated water management plan.

Implementing the Madawaska plan for the past five years has been at times challenging, yet highly successful. Many studies have been produced, alternative operating regimes tested, and OPG and MNR commitments made. The Standing Advisory Committee has been instrumental in the implementation process as it has brought forward public issues and concerns, recommended operating regime alternatives, and kept MNR and OPG on track in terms of commitments made in the 2000 Report. The perseverance and commitment of its members to the SAC process and the Madawaska River is exemplary.

Appendices

Appendix A: Reports Published to Date

Bland, David. June 2002. Waterbirds and other Wildlife in the Madawaska River: A Literature Review, Site Reconnaissance and Preliminary Habitat Assessment. A Report for OMNR and OPG Madawaska River Water Management Review Working Group, Pembroke & Toronto.

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Appendix B: Operational Figures 2000-2004

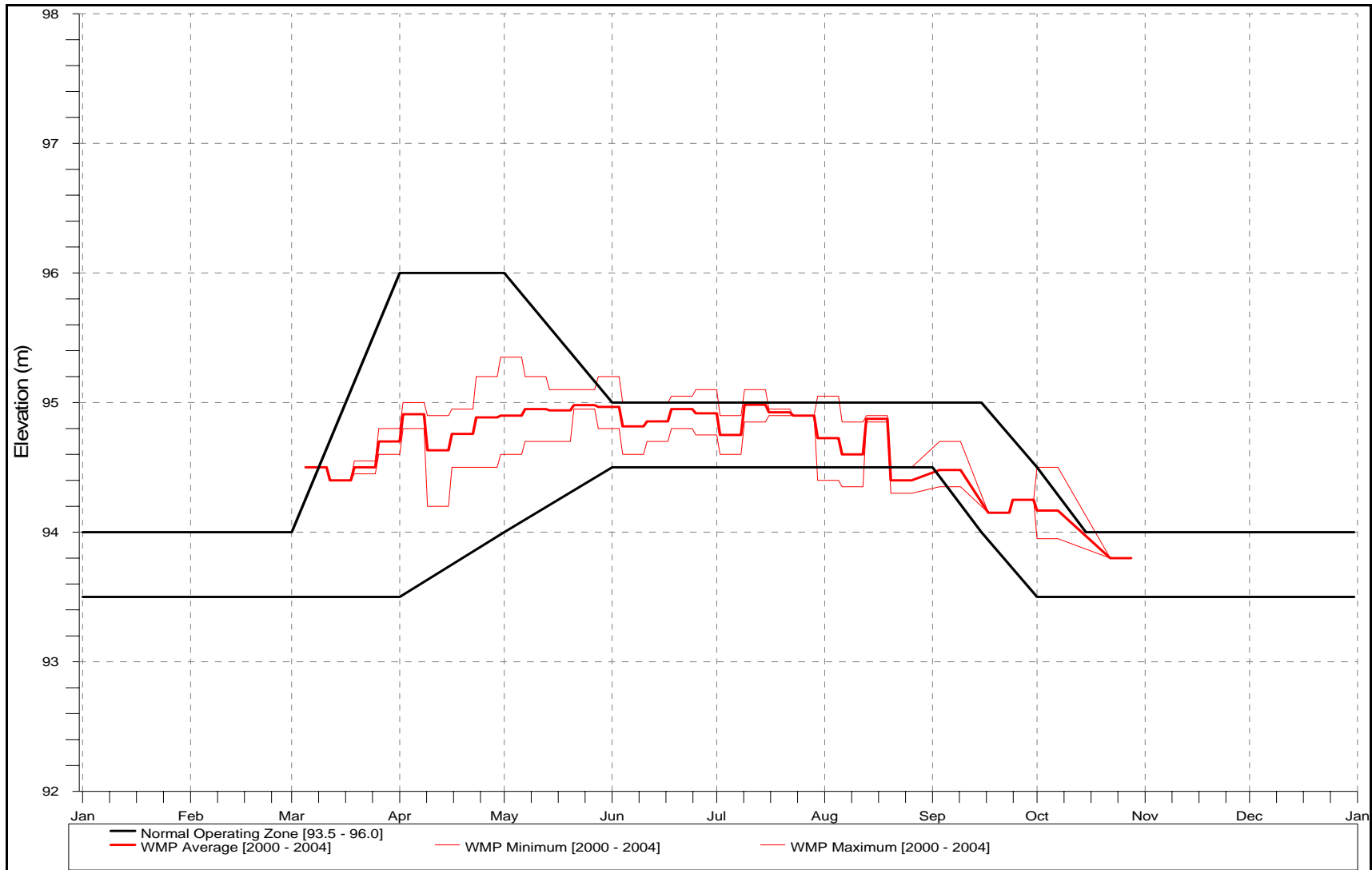


Figure 01: Opeongo Lake (MNR) Elevation

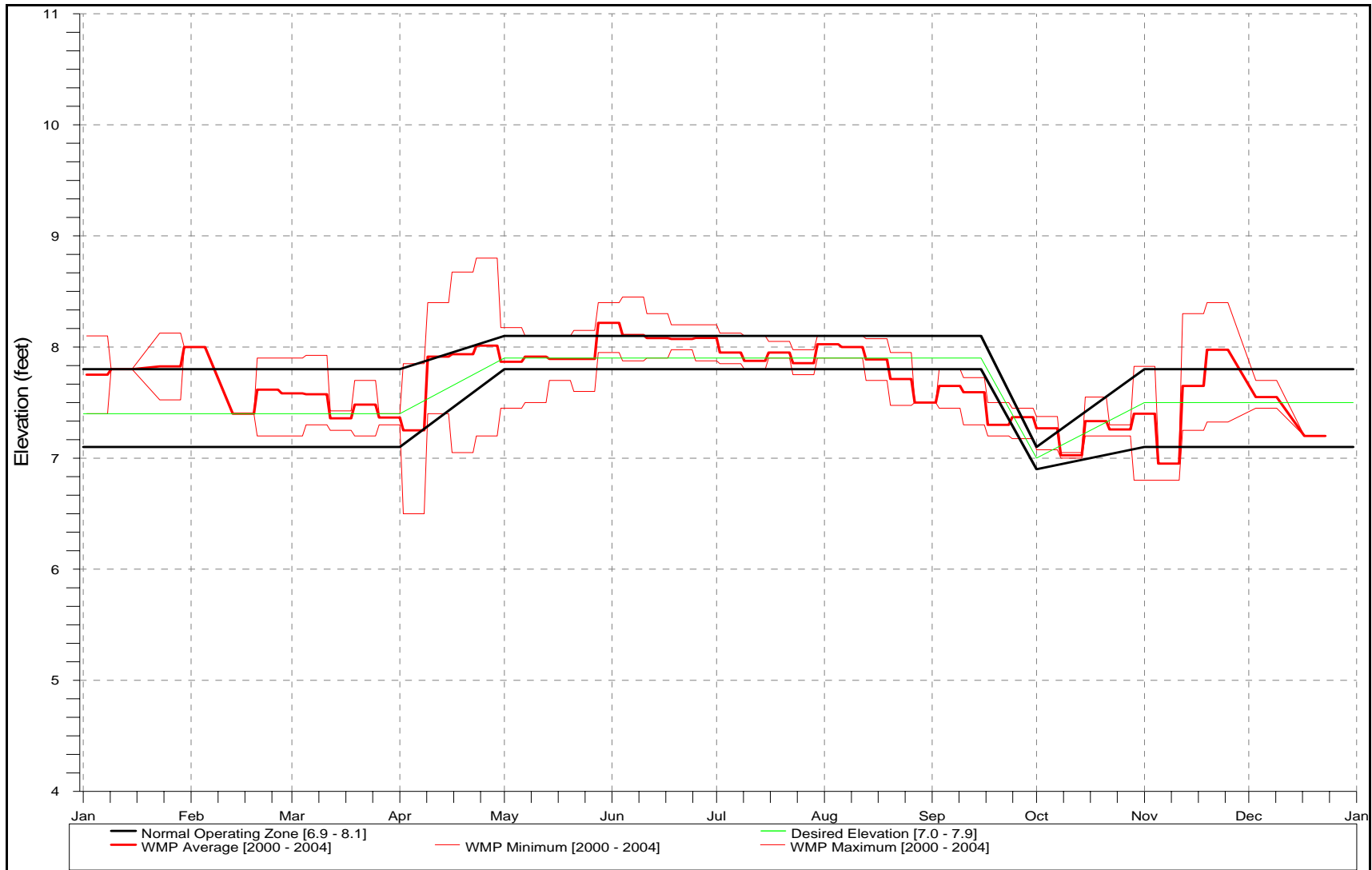


Figure 02: Ayles Lake (MNR) Elevation

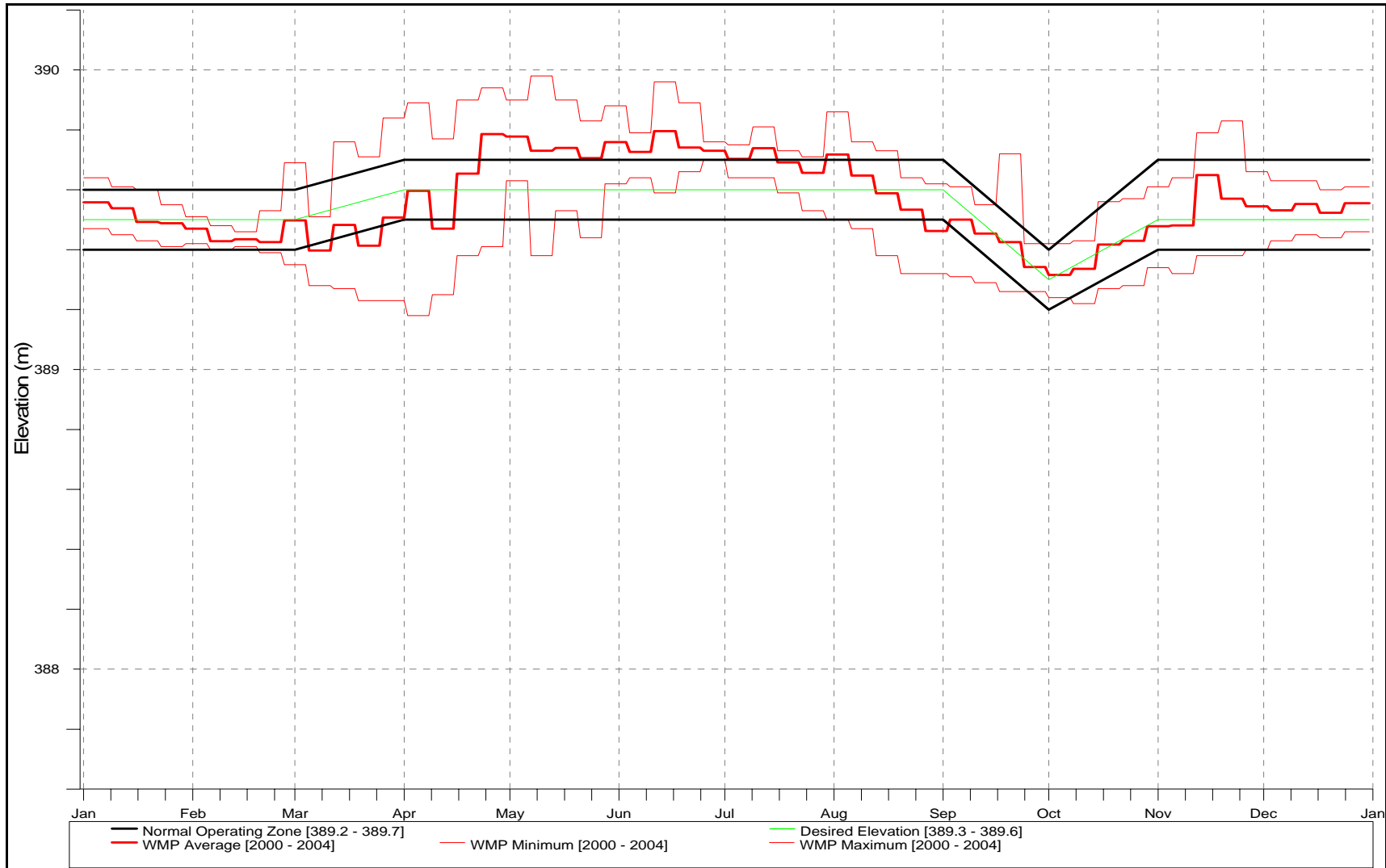


Figure 03: Galeairy Lake (MNR) Elevation

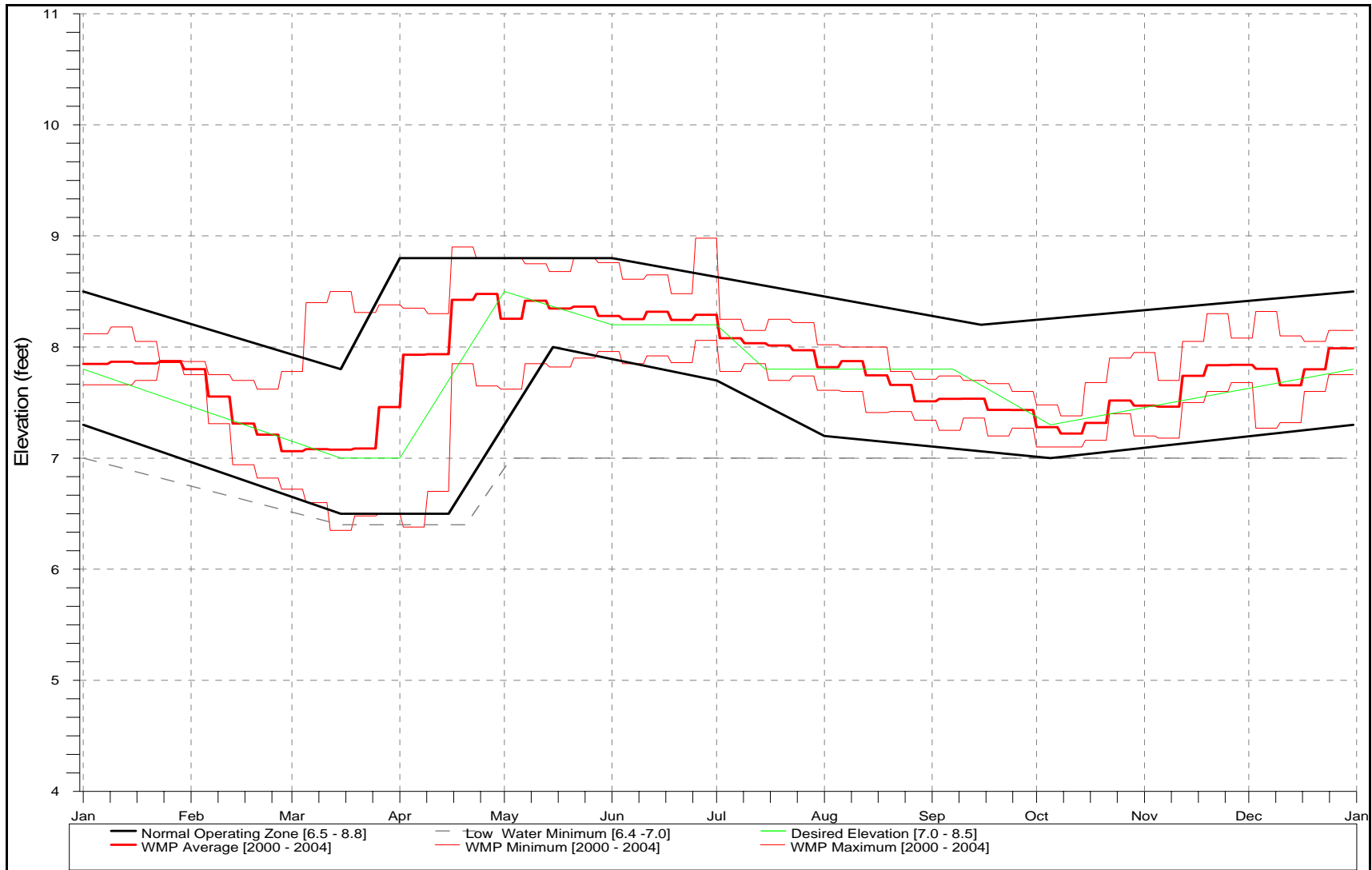


Figure 04: Baptiste Lake (MNR) Elevation

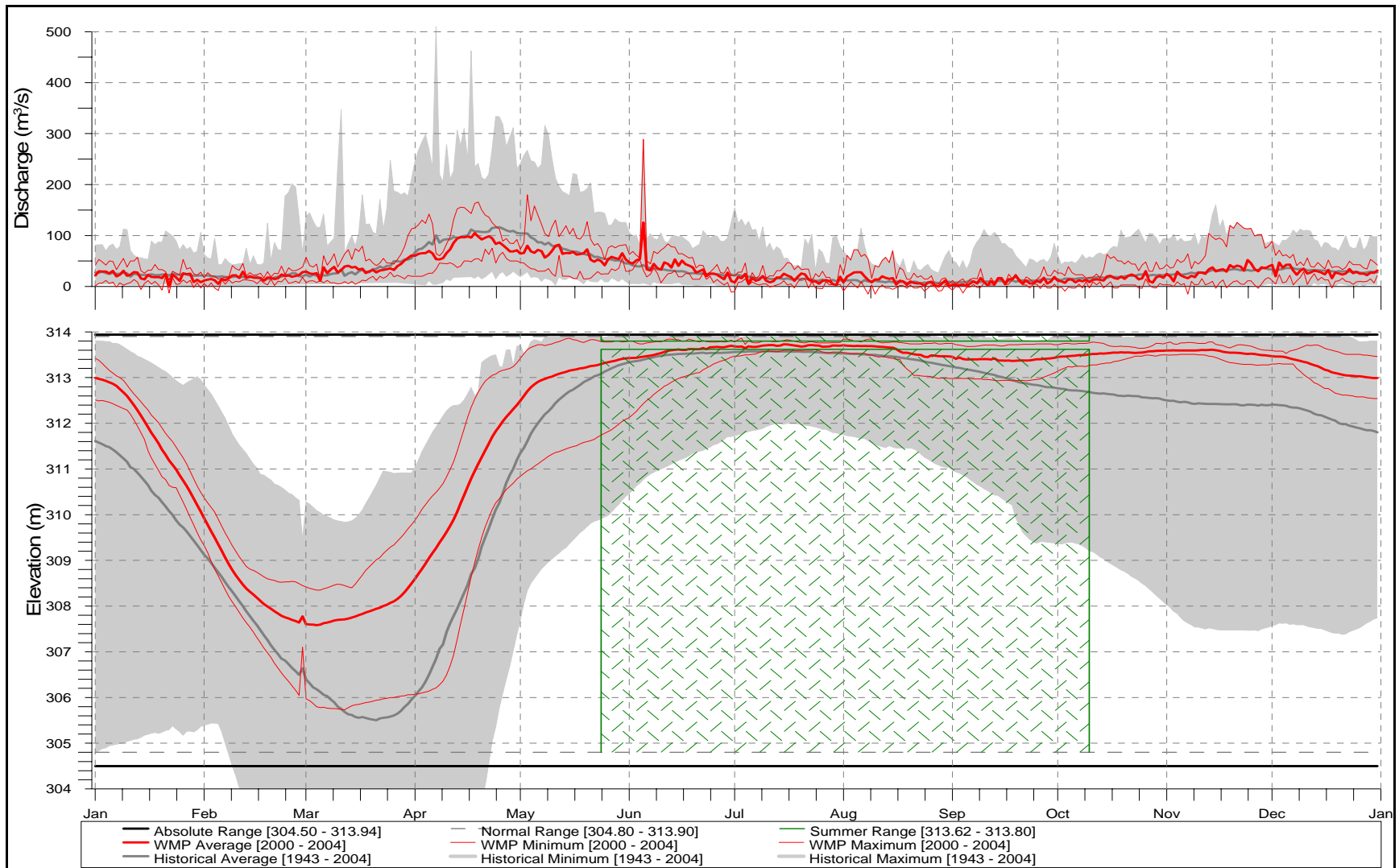


Figure 05: Bark Lake (OPG) Discharge & Elevation

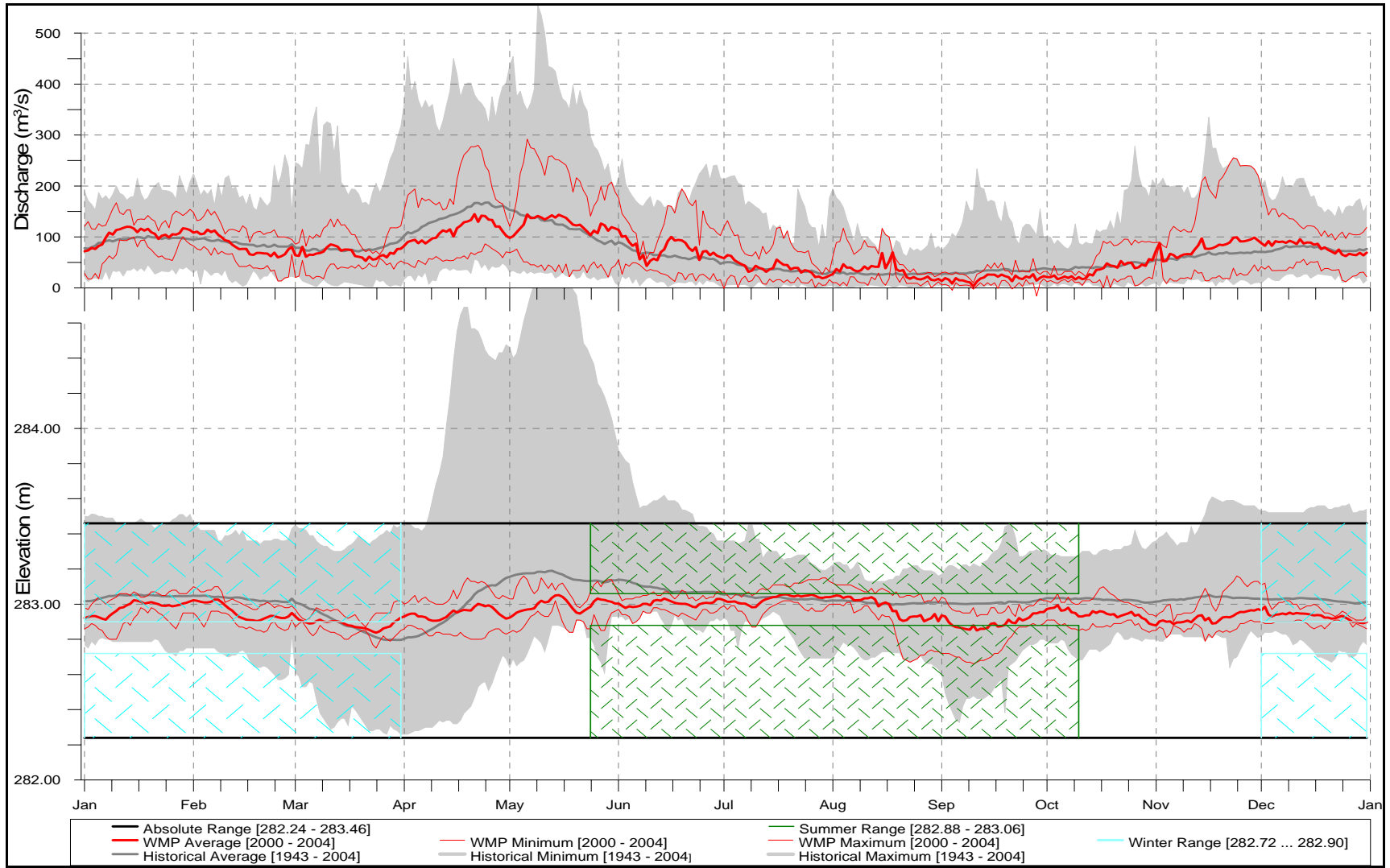


Figure 06: Kamanisgek Lake (OPG) Discharge & Elevation

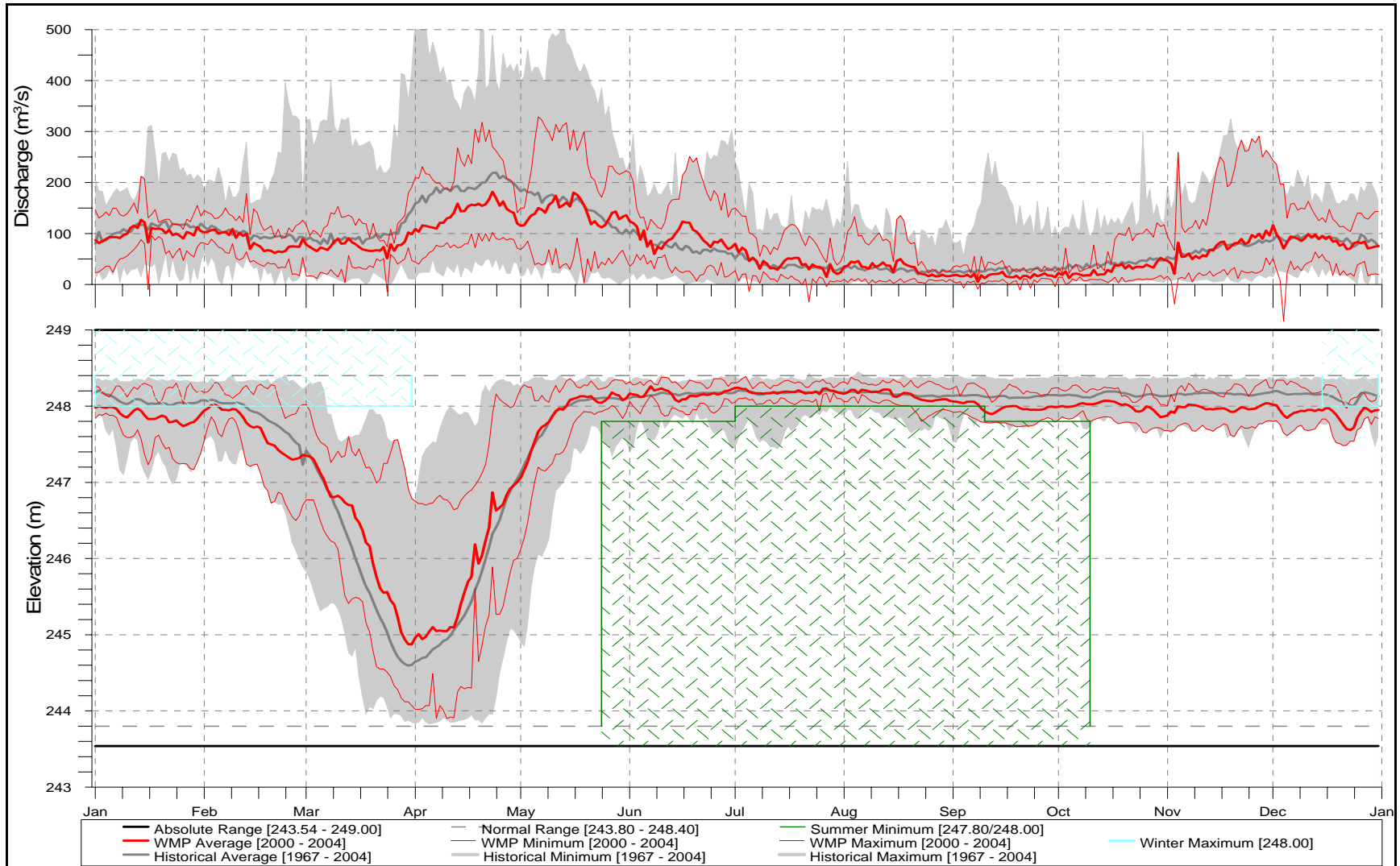


Figure 07: Mountain Chute (OPG) Discharge & Elevation

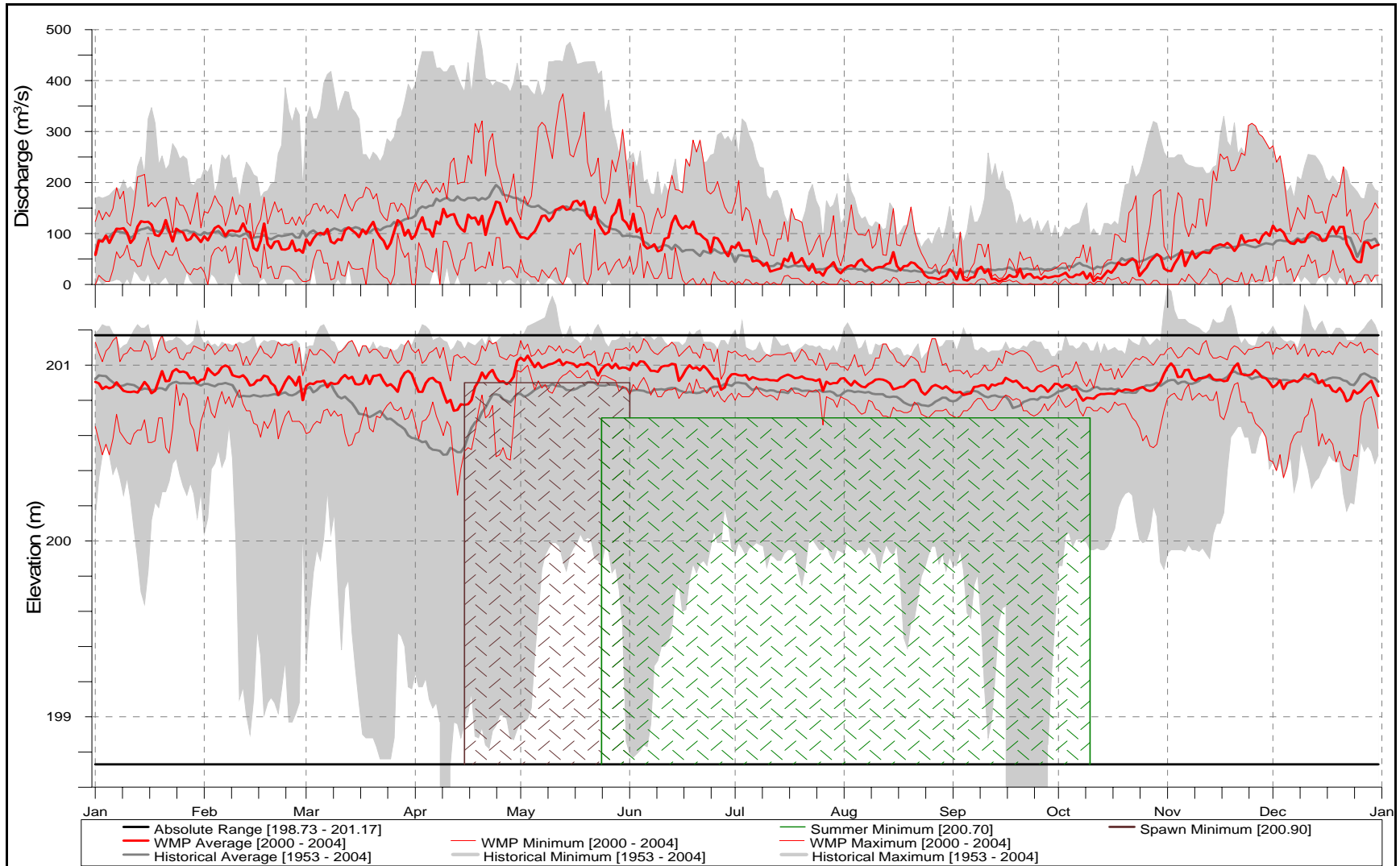


Figure 08: Barrett Chute (OPG) Discharge & Elevation

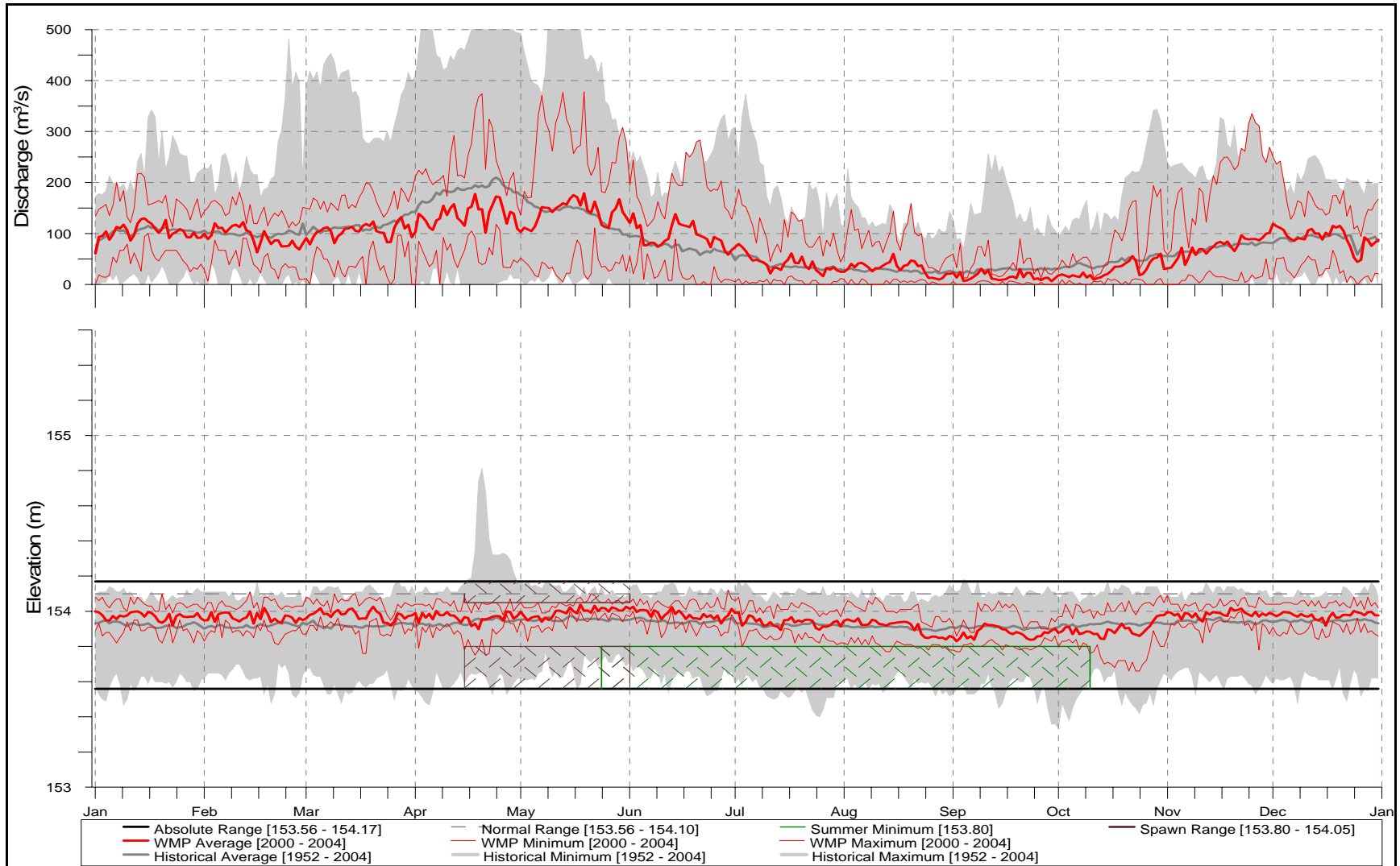


Figure 09: Calabogie GS (OPG) Discharge & Elevation

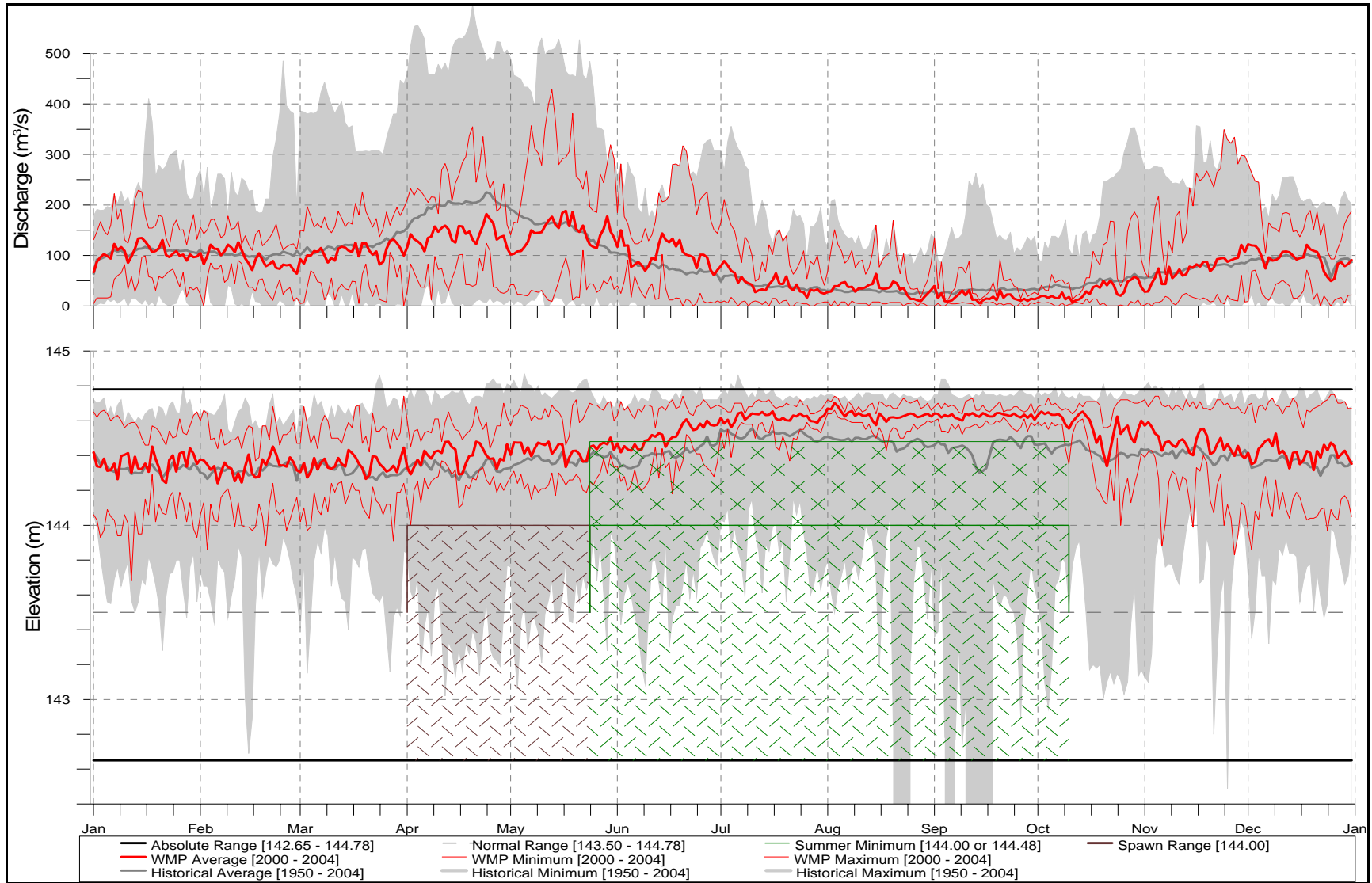


Figure 10: Stewartville (OPG) Discharge & Elevation

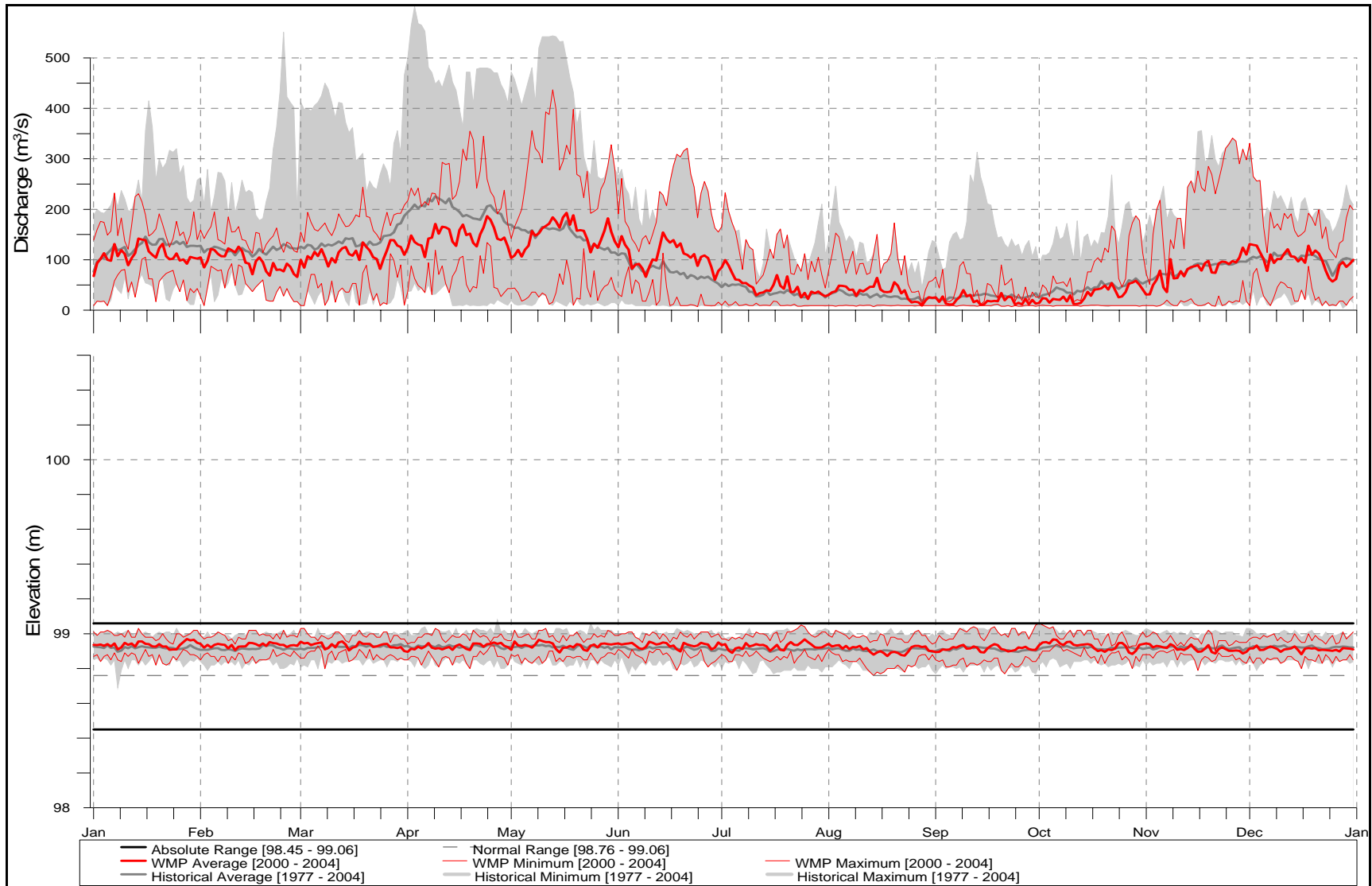


Figure 11: Arnprior (OPG) Discharge & Elevation

Appendix C: Madawaska River Water Management Review Standing Advisory
Committee - Terms of Reference (2000)

**MADAWASKA RIVER WATER MANAGEMENT REVIEW
STANDING ADVISORY COMMITTEE
TERMS OF REFERENCE**

Introduction:

Ontario Power Generation (OPG) and the Ministry of Natural Resources (MNR) have cooperated to optimize and balance the water levels and flows of the Madawaska River and its headwaters for the benefit of fish and wildlife resources, power production, recreation and flood control. Since 1997, by means of public consultation and the advice and guidance of a Public Advisory Committee, a new operating plan for the Madawaska River and a document detailing the Problems, Issues and Solutions brought forward by the public have been produced. The Public Advisory Committee (PAC) has recommended that a Standing Advisory Committee (SAC) be established to advise, monitor and assist in the implementation of the Madawaska River Water Management Review plan. The SAC would be composed of a number of citizens representing a diversity of interests along the course of the river, some of whom might be members of the existing PAC. OPG and the MNR have committed to this course of action.

Mandate:

The Standing Advisory Committee will provide a mechanism for the public to contribute to the implementation of the water management plan, follow the progress of the plan's implementation and be aware of any issues or proposed changes to the plan. The formation of such a committee will not only enhance OPG's and the MNR's ability to deliver the management responsibilities outlined in the plan, but also provide a communications link with the public to foster and maintain credible relationships. The members of the SAC will be broadly representative of the many and various interests and uses of the river throughout the entire watershed area. The SAC will report to the Madawaska Review Steering Committee, made up of senior management staff from OPG and the MNR. Final decisions on advice received from the SAC shall rest with the Steering Committee members whose organizations are legally responsible, for the management of the water resource.

Roles:

The Standing Advisory Committee will perform the following activities:

- Review and advise on matters relating to the implementation of the Madawaska River Water Management Review plan including:
 - a) reviewing and recording all issues raised relating to the implementation of the Madawaska River Water Management Plan;
 - b) advising OPG and the MNR on appropriate solutions to specific water related issues in the watershed;
 - c) reviewing all data collected during the monitoring of the plan;
 - d) advising on all proposed minor amendments to the plan;
 - e) advising on all proposed major amendments received by OPG and the MNR, and as to whether they should be incorporated in the plan and under what terms of public consultation, or if the application should be considered at the next public review of the plan.
- Facilitate the partnership of groups, agencies, organizations, clubs or individuals with OPG and the MNR to assist in implementing the water management plan;
- The Standing Advisory Committee will monitor the implementation of the plan and produce an annual status report in January of each year to be distributed to OPG and MNR;

- OPG and MNR will each develop a process to log communications from the public regarding water levels and flow issues which will be available for the Standing Advisory Committee to review as part of their roles and responsibilities;
- Assist OPG and the MNR in implementing communications and consultation by:
 - a) seeking to ensure the participation of all interested parties (the general public, and interest groups) in any consultation process;
 - b) jointly hosting formal public consultation sessions with OPG and the MNR;
 - c) reviewing written requests from the public for changes to the plan and advising whether any such requests warrant a public review of the water management plan.

Composition:

The Standing Advisory Committee shall be composed of no more than 9 persons and no fewer than 6. Members of the advisory committee shall be selected by OPG and MNR. They will be assisted by 1 member of the PAC who will be selected by the other PAC members. Members selection will be based on:

- a) the knowledge and perspectives they can provide, rather than representing a
- b) specific constituency;
- c) ensuring a diversity of perspectives or interests are represented, including fishing, recreation, cottagers, boating, tourism, conservation, protection, business, and municipal government, among others;
- d) ensuring that citizen representation covers the entire watershed and have a knowledge of the entire Madawaska River basin;
- e) the majority of the members live/work in the Madawaska River basin geographic area;
- f) demonstrated ability to work with other groups or organizations to form effective partnerships;
- g) demonstrated ability to work with others in resolving issues.

Members shall be appointed to the committee for a term of three to five years, rotating three at a time.

Administration:

The following administrative rules shall apply to the functions of the committee:

- The members shall select a Chair, a Vice-Chair and Secretary, who will serve on an annual basis. Their terms may be extended by the members.
- The members may establish an alternate person to represent them in their absence, but each member cannot miss more than one meeting per year.
- The members will be reimbursed for reasonable expenses, such as travel and meals.
- Meetings will be held at the direction of the Chair, to a minimum of two meetings and a maximum of four per year. Additional meetings may be scheduled with the agreement of all members or as requested by OPG and/or MNR.
- The Chair shall be responsible for ensuring adequate notice to members of upcoming meetings, meeting agendas, and the overall conduct of meetings.
- In the absence of the Chair, the Vice-Chair shall assume the responsibilities of the Chair.
- Co-chairs from OPG and the MNR will be assigned to the committee and will act in an advisory, facilitating and liaison capacity to the committee.
- The committee Secretary shall be responsible for preparing meeting agendas and placing items on the agenda at the request of committee members.
- OPG and the MNR shall provide secretarial support to the SAC. The secretary shall record the minutes of each meeting, including key discussion points and action items, if any.

- The minutes shall be reviewed and approved by the SAC and available for public review.
- Recommendations of the SAC shall be arrived at by consensus decision-making. Where consensus is not achieved, majority and minority viewpoints will be noted.
- Recommendations of the SAC will be submitted to the OPG and MNR representatives and a decision on the recommendations will be made by the OPG Ottawa-St. Lawrence Plant Group Manager and the MNR Pembroke District Manager. A decision summary will be provided by these to the committee, including written descriptions of where and why they agree or disagree with the recommendations of the SAC.
- Meetings shall generally be open to the public, although the committee shall have the right to meet in-camera where matters to be considered need to protect the privacy rights of individual(s).
- Meetings are working sessions; members of the public may observe the sessions and may make scheduled presentations if submitted to the Chair at least 10 days prior to the agenda being set for the next meeting, and SAC members notified.
- Other OPG and MNR staff may attend portions of committee meetings in the capacity of advisory or resource persons, and may provide the committee with data and information on matters related to the review through presentations and upon members' request.
- OPG and MNR will provide orientation training for the members of the Standing Advisory Committee.

Selection Process:

SAC members will be selected by OPG and the MNR, with assistance from 1 member of the former Public Advisory Committee. Through advertisements and letters of invitation, the public will be invited to submit an expression of interest to participate on the SAC. Applicants will be selected based on the criteria outlined in her terms of reference and after completing an interview.

Location of Meetings:

SAC meetings will be held in different locations within the Madawaska River valley to allow greater public access to them.

Appendix D: Madawaska River Water Management Review Terms of Reference:
5 Year Report & Updated Water Management Plan (2005)

Madawaska River Water Management Review

Terms of Reference for:

- I. The Five Year Report**
- II. Updated Madawaska River Water Management Plan**

January 2005

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1.0 Background/Introduction

The Madawaska River is located in south-eastern Ontario and flows 225 kilometres from its headwaters in Algonquin Provincial Park to the Ottawa River at Arnprior. Its drainage area covers over 8500 square kilometres. The river supports a range of uses, from generating electricity and flood control, to a significant amount of recreational and tourism activities.

The Ministry of Natural Resources (MNR) has operational responsibilities for several dams, primarily in the upper reaches of the watershed and manages them to maintain and protect recreational and natural features. Ontario Power Generation (OPG) operates several dams and hydroelectric facilities on the river, is a major user of the water resource on the river, and has a significant economic stake in its operations (see figure 1). OPG's activities are governed by Licences of Occupation and Water Power Lease Agreements administered by the Ministry of Natural Resources. The public at large and stakeholder groups are also important users and have roles to play in reviewing and managing the river's operations.

In June 1995, as a result of concerns expressed both locally to the Chairman of Ontario Hydro and the Minister of Natural Resources, an agreement was reached between MNR and OPG, to form a partnership to conduct a review of water management of the Madawaska River. One of the basic premises of this partnership was to identify the problems and issues associated with levels and flows and to develop solutions to them.

The review was a significant step for several reasons:

1. It aimed to apply several developing concepts of interest to both organizations: sustainable development, water management planning, and an ecosystem approach to management;
2. It involved water planning on the Madawaska River system;
3. It involved public information and participation as a key element of water management planning;
4. It strived to develop management approaches that are cost-effective, building on experiences elsewhere in the province.
5. It would improve communication and cooperation between water management operations of MNR and OPG.

The *Madawaska River Water Management Review* was finalized in January 2000. The goal of this review was to develop a water management plan to guide levels and flows for the Madawaska River and ensure public awareness of the plan. The plan identifies operation criteria for MNR and OPG-controlled structures and was designed to be a work in progress that captured only the current limitations.

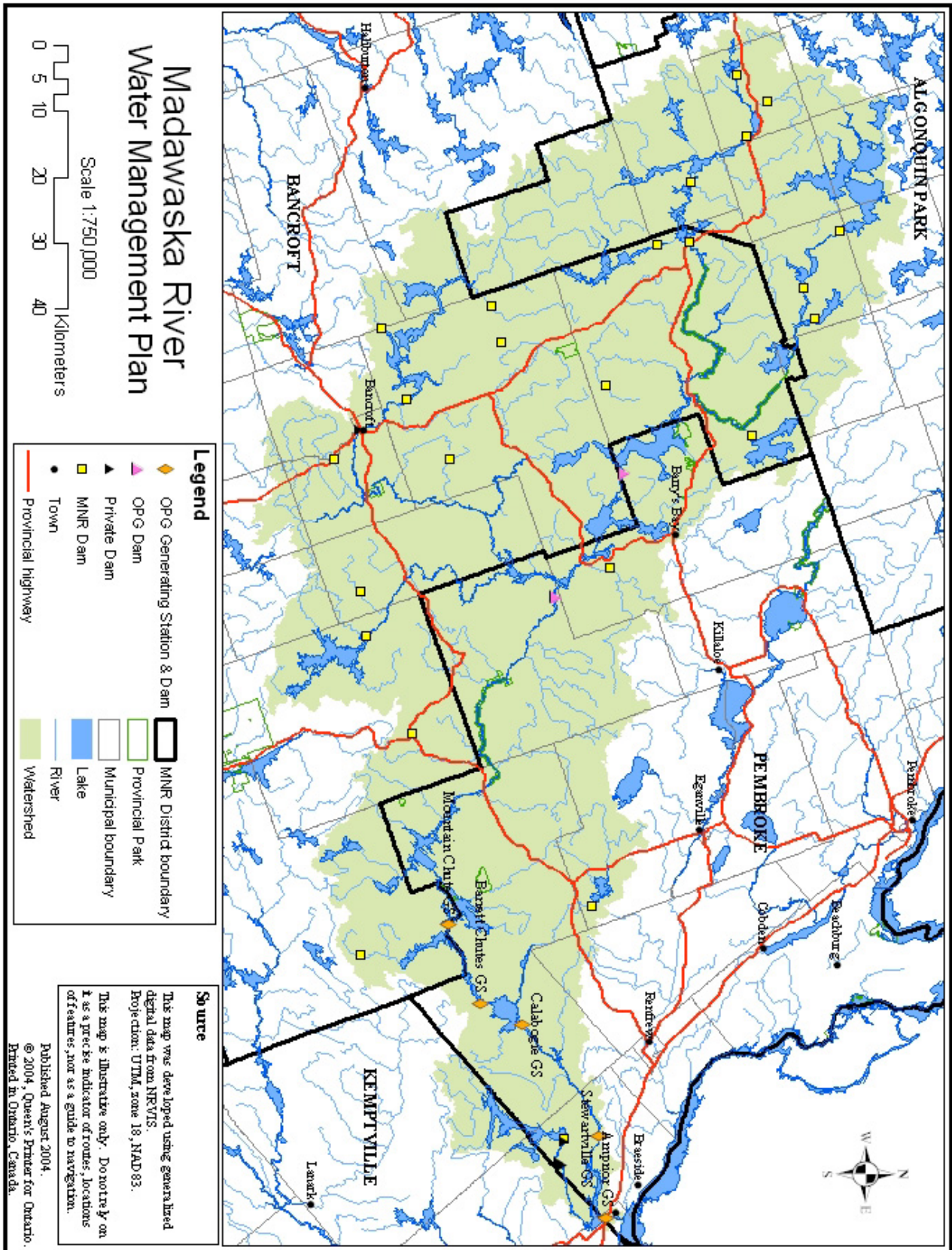


Figure 1 – Madawaska River Dams and Generating Stations

Public participation and consultation was instrumental to the *Madawaska River Water Management Review*. A Public Advisory Committee (PAC) was selected that provided advice and direction to the inter-organization review team. Three phases of Public Consultation, including focus groups and open houses were undertaken. Major concerns regarding the fishery and other ecosystem components were expressed by the public and an “information needs” document was developed to identify specific projects. The “information needs” document continues to be dynamic in nature and will continue to be updated as projects are completed and new ones are identified. Many accomplishments occurred during the planning process as well as into the implementation process.

In August of 2000, a Standing Advisory Committee (SAC) was formed to monitor the implementation of the water management plan. The mandate of the SAC is to provide a mechanism for the public to contribute to the implementation of the plan, follow the implementation progress, and be aware of issues and proposed changes to the plan. OPG and MNR staff members have continued to be involved with the information needs program and possible amendments to the water management plan. It has been the role of the SAC to bring any new problems and issues to MNR and OPG throughout the implementation of the plan. In May 2002 the SAC produced the First Annual Report for 2001 and similarly, in June 2003, the Second Annual Report (2002) was produced and in November 2004, the third annual report (2003) was issued.

The original review document called for a five year report of the plans implementation.

The Water Management Planning Guidelines for Waterpower were approved in May 2002. In order to meet the requirements of existing and new legislation and regulations, there are components to the guidelines that need to be incorporated into the *Madawaska River Water Management Review* document. As a result, the *Madawaska River Water Management Review* (2000) will be updated to conform wherever possible to the Water Management Planning Guideline for Waterpower (2002).

As a result, two separate reports will be generated. The Five Year Report will be appended to the updated *Madawaska River Water Management Plan*, which is projected to be finalized in December 2005.

2.0 Water Management Planning Goals and Objectives

The goal of water management planning is to ensure the sustainable development of waterpower resources to meet economic, environmental and social objectives for the benefit of present and future operations. This will be achieved through the management of water levels and flows as they are affected by the operations of waterpower generating facilities and associated dams.

A set of general water management planning principles was developed based on the Water Management Planning Guideline for Waterpower (2002). These include:

- Maximum net benefit to society
- Riverine ecosystem sustainability
- Planning based on the best available information
- Thorough assessment of options
- Adaptive management approach
- Timely implementation of study findings
- Respect for Aboriginal and Treaty Rights
- Public Participation

The Ministry of Natural Resources and Ontario Power Generation share a commitment to sustainable development. In the existing Madawaska River Water Management Review, sustainable development is defined as a water management regime that results in a balance among a range of natural heritage, social and economic values and uses for the benefit of present and future generations. It is anticipated that this balance will continue to be achieved through a commitment on the part of the organizations to maintain the following goals:

1. sustaining and enhancing the river's aquatic ecosystem and biological diversity
2. generating electricity safely, efficiently, reliably and economically (at competitive prices) while making a reasonable effort to ensure that the economic well-being of other stakeholders is considered
3. supporting a range of recreational and tourism uses
4. fostering greater public awareness and understanding of the river as an interconnected system
5. being cooperative and maintaining improved levels of communications
6. working in partnership with individuals and groups

2.1 Five Year Report

The **goal** of the Five Year Report is to report on the status of the plans implementation by summarizing the items that the Standing Advisory Committee monitored over the last five years and provide recommendations.

The **objectives** for the Five Year Report are as follows:

1. review the status of the first five years of implementation of the water management plan
2. assess information needs from an ecosystem and resource use perspective
3. communicate final report to the public

2.2 Updated Madawaska River Water Management Plan

The **goal** for updating the *Madawaska River Water Management Review* is to update and conform, where possible, the existing inter-agency water management plan to the Water Management Planning Guidelines for Waterpower, 2002, and to communicate it to the public.

The **objectives** for the update of the *Madawaska River Water Management Review* are as follows:

1. review of issues over past five years of implementation that may require incorporation in the 2000 plan
2. where possible, the conformity of the plan to the Water Management Planning Guideline for Waterpower (2002), including the incorporation of an Effectiveness Monitoring Plan and a Compliance Monitoring Plan for OPG, MNR and other waterpower producers
3. communicate with the public and provide long-term opportunities for public involvement in the river's management

3.0 Guiding Principles for the Review Process

The following principles will guide preparation of the Five Year Report and updates/conformity of the water management plan.

3.1 Five Year Report

1. Summarize the items that the Standing Advisory Committee (SAC) monitored over the first five year's of plan implementation, based on annual reports issued by the SAC
2. Summarize recommendations from the SAC
3. Review of reports and studies undertaken during the implementation
4. Review of outstanding "Information needs"

3.2 Updated Madawaska River Water Management Plan

1. Current and future operations, as outlined in the existing plan, must adhere to the present licensing and regulatory requirements and build on existing operational practices (under extreme natural conditions it may not be possible to operate within normal limits).
2. For all plan proponents, the identification of issues that need re-assessing, information/studies that need to be incorporated, and identification of gaps in the "information needs" document, must be comprehensive.
3. Both an effectiveness monitoring plan and a compliance monitoring plan to be developed and incorporated
4. The addition of a new reach will be incorporated in the plan in order to include the MNR dam and the three private waterpower facilities on Waba Creek.
5. A simplified plan for Bancroft Light and Power will be appended to the final water management plan

6. Internal and external communications are integral parts of plan review and will be coordinated between the organizations.
7. MNR and OPG will commit to sharing the costs and applying the necessary resources to the review process and the subsequent implementation and outcome of the updated Madawaska River Water Management Plan.

4.0 Organization for Planning

4.1 Committees

There will be three committees involved in the preparation of the Five Year Report and in the update of the *Madawaska River Water Management Review*; a Steering Committee, a Working Group, and a Standing Advisory Committee (SAC). The SAC was formed upon the completion of the initial document and have agreed to act in this role in place of forming of a new Public Advisory Committee for the update to the plan. The length of the process may make it necessary for reappointment or replacement of individuals from each participating committee as the process continues. If key individuals leave or are no longer able to assume their role, attempts will be made to replace or reappoint them as soon as possible.

4.1.1 Steering Committee Members

Joan Frain	Ontario Power Generation
John Tammadge	Ontario Power Generation
Chris Tonkin	Ontario Power Generation
Ray Bonenberg	Ministry of Natural Resources
Mike Bohm	Ministry of Natural Resources
Ian Crawford	MNR Manager – Water Power Program
Spencer Martin	Department of Fisheries and Oceans Canada
<i>To be determined</i>	Ministry of Environment

4.1.2 Working Group Members

Chris Tonkin	Ontario Power Generation
Linda Halliday	Ontario Power Generation
Don Ferko	Ontario Power Generation
Mike Bohm	MNR Pembroke District
Joanna Samson	MNR Pembroke District
Nick Paroschy	MNR Engineer
Jim Niefer	Department of Fisheries and Oceans
Victor Castro	Ministry of Environment
<i>Will draw on other resources as required</i>	

4.1.3 Standing Advisory Committee Members

Brian Wright
 Steve Roy
 Ernie Coulas

Damian Hanel
William Morton
J.P. de Grandmont
Marijean Scott

4.2 Roles and Responsibilities

4.2.1 Steering Committee

The Steering Committee will continue to work in an advisory capacity and will meet when necessary to review phases of the plan review. The committee will be responsible for reviewing phases of the work to be completed and ensuring the work is meeting the established goals. The Steering Committee will offer guidance and recommendations throughout the process. In addition, the Steering Committee will continue:

- To consult with the SAC and the Working Group;
- To ensure the accessibility, transparency and adequacy of public consultation;
- To provide mediation and facilitation of conflict resolution for the Working Group;
- To approve plan components and Working Group products prior to submission for approval;
- Set deadlines and ensure activities are being carried out; and
- Provide liaison with political entities

4.2.2 Working Group

The Working Group is responsible for seeing that all tasks are completed to meet the objectives of the Five Year Report and the updates to the plan. The Working Group will deal with action items that will contribute to solutions, and will advise the SAC and support its activities during public consultation.

The Working Group will meet as necessary to complete the two documents and meet the deadlines set by the Steering Committee. MNR and OPG staff will alternate as Chairs for the Working Group. Minutes of all meetings will be taken and a draft version will be circulated to Working Group members and the Steering Committee for review at the next meeting. If the Working Group cannot reach consensus on a particular item, the Steering Committee will be asked to resolve the issue.

Items discussed by the Working Group that have effects outside the Madawaska River, or set precedents for other watersheds, will be directed to the Steering Committee.

4.2.3 Standing Advisory Committee

The SAC will review and provide input into the Five Year Report.

For the update to the water management plan, the SAC, acting in the role of a Public Advisory Committee, will advise the Working Group of any issues and possible solutions that have been raised during the five years of implementation. In addition, the SAC will continually help in planning and implementation of communications and public consultation. As a result, the SAC may be required to meet more frequently during this process than they have during the last five years of plan implementation.

5.0 Planning Process

The following is proposed schedules for the Five Year Report and the Update to the water management plan for the Madawaska River.

5.1 Five Year Report

This schedule targets the completion of the Five Year Report by December 2005.

1. Prepare a Terms of Reference
2. Prepare draft report based on the monitoring of the plan by the Standing Advisory Committee over the first five years of implementation
3. Submitted to SAC for review and comment
4. Final report will be appended to the updated Madawaska River Water Management Plan

5.2 Updated Madawaska River Water Management Plan

This schedule targets completion of the renewed Madawaska River Water Management Plan in 2006.

1. Prepare a Terms of Reference, and a planning schedule
2. Based on the five years of implementation, identify and verify problems, issues, perspectives, possible solutions that may need incorporation into the plan
3. Include components that are required for conformity with the *Water Management Planning Guidelines for Waterpower (2002)*
4. Completion of draft plan
5. Review draft plan with SAC and public
6. Completion of final plan
7. Provincial and Regional Review of final plan
8. Final public open house
9. Approval of Madawaska River Water Management Plan (2006)