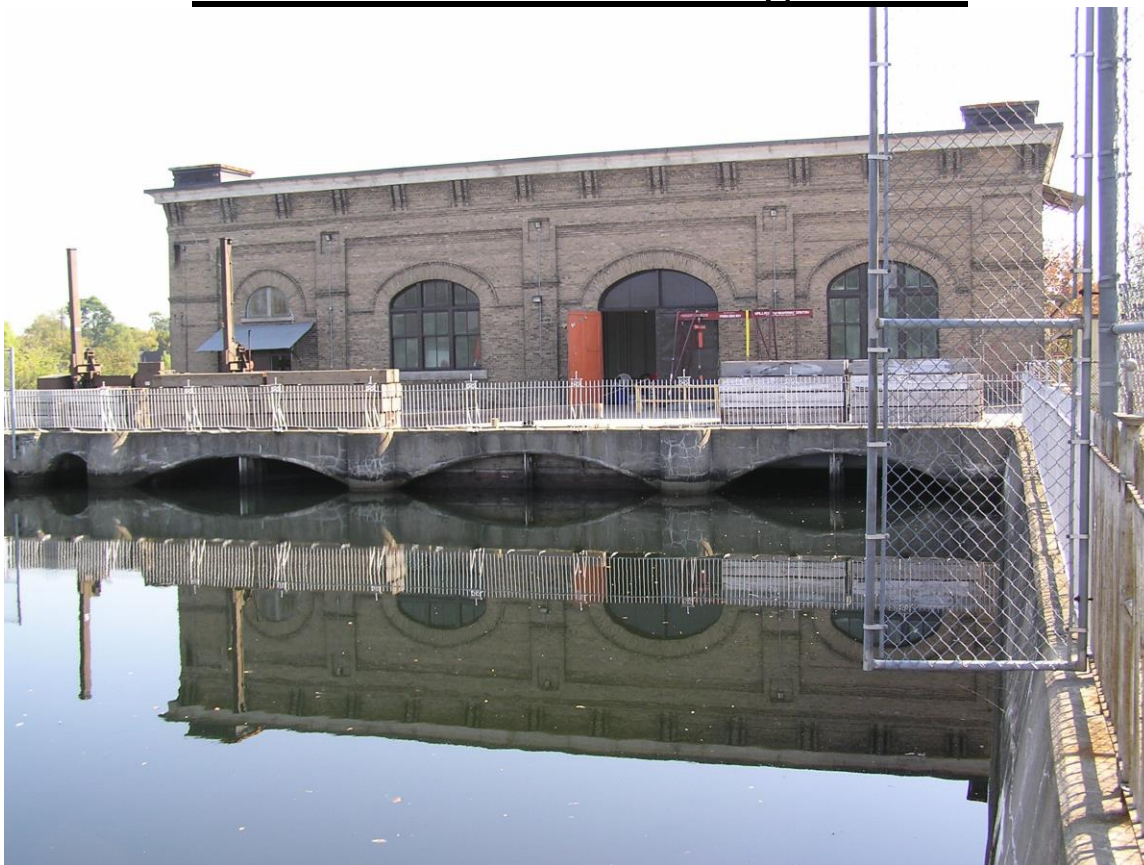


# **Water Management Plan**

## **For Waterpower**

### **London Street Generating Station**



**March 2005**  
**Amended June 2018**

**WATER MANAGEMENT PLAN FOR WATERPOWER**

**for the London Street Generating Station**

**on the Otonabee River**

**OMNR Peterborough District, Southern Region  
Peterborough Utilities Inc.**

**for the 10-year period April 1, 2005 to March 31, 2015**

In submitting this plan, I declare that this water management plan for waterpower has been prepared in accordance with *Water Management Planning Guidelines for Waterpower*, as approved by the Minister of Natural Resources on May 14, 2002.

ORIGINAL SIGNED BY March 30, 2005

Robert G. Lake, President, Peterborough Utilities Inc. date

I have authority to bind the corporation.

I certify that this water management plan has been prepared in accordance with *Water Management Planning Guidelines for Waterpower*, as approved by the Minister of Natural Resources on May 14, 2002, and that direction from other sources, relevant policies and other obligations have been considered. I recommend this plan be approved for implementation.

ORIGINAL SIGNED BY April 21, 2005

Lois Deacon, District Manager, Peterborough District, Ministry of Natural Resources date

**Approved by:**

ORIGINAL SIGNED BY

~~Ron Running~~, Ray Bonenberg A/Regional Director, Southern  
Region,  
Ministry of Natural Resources

In 1994, OMNR finalized its Statement of Environmental Values (SEV) under the Environmental Bill of Rights. The SEV is a document that describes how the purposes of the EBR are to be considered whenever decisions that might significantly affect the environment are made in the ministry. During the development of this Water Management Plan (WMP), the ministry has considered its SEV.

## Water Management Plan ~ *London Street Generating Station*

This water management plan (WMP) sets out legally enforceable provisions for the management of flows and levels on this river within the values and conditions identified in the WMP.

In instances where, due to emergency energy shortages, the Independent Electricity System Operator (IESO) requests that owners of the waterpower facilities and associated water control structures seek relief from certain provisions of this WMP, the Ministry of Natural Resources (MNR) will consider those requests expeditiously and, after consultation with the IESO, may allow short-term relief from certain provisions.

The mandatory provisions of this WMP will be waived, as appropriate, when the dam owners (which may include other dam owners, such as MNR) are requested to do so by a police service or other emergency measures organization.

This plan does not authorize any other activity, work or undertaking in water or for the use of water, or imply that existing dams(s) meet with safe design, operation, maintenance, inspection, monitoring and emergency preparedness to provide for the protection of persons and property under the *Lakes and Rivers Improvement Act*. Approval of this WMP does not relieve the dam owners from their responsibility to comply with any other applicable legislation. For the purposes of this plan, an operational plan means a plan for the management of flows and levels.

Approval of this plan does not grant a dam owner the right to flood Crown land or the land of any other person without first obtaining the Crown's or that person's consent, nor does it authorize any infringement of the rights of the Crown or of any other person.

Water Management Plan ~ *London Street Generating Station*

**Ministry of Natural  
Resources and Forestry**

Office of the Director  
Southern Region  
Regional Operations Division  
300 Water Street  
Peterborough, ON K9J 3C7  
Tel: 705-755-3235  
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**Ministère des Richesses naturelles  
et des Forêts**

Bureau du directeur  
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300, rue Water  
Peterborough (ON) K9J 3C7  
Tél: 705-755-3235  
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March 31, 2015

Mr. Eric R. Prevost  
Peterborough Utilities Inc.  
2245 Keene Road  
PO Box 4125, Station Main  
Peterborough ON K9L 0B8

Dear Mr. Prevost:

**Subject:        Approval of Amendment to Extend the Term of the Water Management Plans for the  
                     London Street Generating Station and the Water Street Pumphouse**

This letter is to advise that the Water Management Plans for the London Street Generating Station and the Water Street Pumphouse have been amended under Section 23.1(6) of the *Lakes and Rivers Improvement Act*. An administrative amendment was undertaken and approved March 31, 2015 to extend the term of the water management plans for an additional three years. As indicated in our earlier correspondence, this will ensure that the water management plans remain in effect while providing time for the results of the provincial review to be known (e.g. proposed changes to the requirements for the preparation, amendment and review of water management plans). The plans will now expire March 31, 2018.

Please note, specific text changes are not being proposed to the plans as a result of this amendment. Instead, this letter should be affixed to the London Street Generating Station and the Water Street Pumphouse Water Management Plans to indicate the term of the plans have been extended to March 31, 2018.

If you have any questions, please contact Amanda McCloskey, Regional Planner, at [amanda.mccloskey@ontario.ca](mailto:amanda.mccloskey@ontario.ca) or at 705-755-1367.

Regards,

A handwritten signature in black ink that reads "Jane Ireland".

Jane Ireland  
Regional Director  
Southern Region

c. Karen Bellamy, Peterborough District Manager, Ministry of Natural Resources and Forestry

## Water Management Plan ~ London Street Generating Station

Ministry of Natural  
Resources and Forestry

Office of the Director  
Southern Region  
Regional Operations Division  
300 Water Street  
Peterborough, ON K9J 3C7  
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Ministère des Richesses naturelles  
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June 29<sup>th</sup>, 2018

Jason Hoskin  
Peterborough Utilities Inc.  
2245 Keene Road  
PO Box 4125, Station Main  
Peterborough, ON K9J 6Z5  
jhoskin@pui.ca

Attention: Jason Hoskin

### **Re: Notice of London Street Generating Station Water Management Plan Amendment Approval**

This letter is to inform you that Ministry of Natural Resources and Forestry (MNRF), under the authority of Section 23.1 (6) of the *Lakes and Rivers Improvement Act*, has amended the London Street Generating Station Water Management Plan (LSWMP). An administrative amendment was undertaken by MNRF, and was approved on June 29<sup>th</sup>, 2018.

The amendment was undertaken in order to align the LSWMP with the 2016 Maintaining Water Management Plans Technical Bulletin. These changes were identified in MNRF's letter notifying of intent to amend, dated March 23<sup>rd</sup>, 2018. As this letter indicated, these changes may include:

- Removal of WMP expiry dates, plan term and mandatory review;
- New amendment classification, processes and proponent roles and responsibilities;
- New compliance monitoring and data reporting processes (where applicable); and
- Details of the new Implementation Report, which will summarize monitoring efforts, assess new or continued direction of Effectiveness Monitoring Plans (EMPs) (where applicable) and support adaptive management.

Changes as a result of this amendment are reflected in the updated (June 2018) version of the London Street Generating Station Water Management Plan, which is attached for your records.

## Water Management Plan ~ *London Street Generating Station*

Ministry of Natural  
Resources and Forestry

Office of the Director  
Southern Region  
Regional Operations Division  
300 Water Street  
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Ministère des Richesses naturelles  
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If you have any further questions about this amendment, please contact Mike Poskin,  
Regional Renewable Energy Coordinator at [mike.poskin@ontario.ca](mailto:mike.poskin@ontario.ca) or (705) 755-1362.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sharon Rew".

Sharon Rew  
Regional Director  
Southern Region  
Ministry of Natural Resources and Forestry

cc:

Trevor Griffin, District Manager, Peterborough District, MNRF  
Renee Bowler, Manager, Regional Resources Section, MNRF  
Erin Cotnam, Land Use Planning Supervisor, MNRF  
Mike Poskin, A/Renewable Energy Coordinator, MNRF

## **HISTORY OF AMENDMENTS**

### **March 2015 Amendment**

On March 31<sup>st</sup>, 2015, the Ministry of Natural Resources and Forestry (MNRF) approved an administrative amendment to the London Street Generating Station Water Management Plan to extend the term of the plan for an additional three years.

### **March 2018 Amendment**

On March 23<sup>rd</sup>, 2018, the Ministry of Natural Resources and Forestry (MNRF) approved an administrative amendment to the London Street Generating Station Water Management Plan to extend the term of the plan for an additional six months.

### **June 2018 Amendment**

On June 29<sup>th</sup>, 2018, the Ministry of Natural Resources and Forestry (MNRF) approved an amendment to the London Street Generating Station Water Management Plan to align the plan with the approved 2016 Maintaining Water Management Plans Technical Bulletin.

The administrative amendment resulted in changes to the following sections of the plan (additional information in Appendix B):

|                          |  |
|--------------------------|--|
| Expiry Date              | The expiry date has been removed.        |
| Monitoring and Reporting | Section 6 and Table 1 have been revised. |
| Compliance               | Section 6 and Table 1 have been revised. |
| Amendments               | Section 7 has been replaced.             |
| Implementation Reporting | Section 8 has been added.                |

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## **1.0 Introduction**

### **1.1 Plan Goal and Principles**

It is the intent of this Water Management Plan (WMP) to follow the goals and principles set out in the Ontario Ministry of Natural Resources (OMNR), Water Management Planning Guidelines for Waterpower, 2002, replaced in October 2016 with the *Maintaining Water Management Plans Technical Bulletin* (MNRF, 2016).

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.

The following principles will guide planning through the preparation, review, approval and implementation of a WMP.

- Maximum net benefit to society
- Riverine ecosystem sustainability
- Planning based on best available information
- Thorough assessment of options
- Adaptive management
- Timely implementation of study findings
- Aboriginal and treaty rights
- Public participation

A more detailed description of these principles is available in the OMNR, Water Management Planning Guidelines, 2002, page 13.

The mandatory and enforceable requirements of the WMP are clearly identified, and are included in Section 5, Section 6 and Section 7 of this document.

### **1.2 Terms of Reference for Water Management Planning**

This WMP has been prepared according to Terms of Reference for the London Street Generating Station included in the Scoping Report for this facility (Appendix A).

### **1.3 Water Management Plan Objectives**

The objectives of the WMP for the London Street Generating Station are to:

- a) Review, document and understand the hydro facility operations relative to environmental, social and economic benefits;
- b) Establish the level of control that the facility exercises over levels and flows;
- c) Determine the zone of influence of the hydropower facility;
- d) Document resource values and environmental, social and economic issues within the zone of influence of the hydropower facility;

- e) Establish whether a change in hydropower operation (water levels and discharge flows) would have a net environmental, social and economic benefit;
- f) Fulfill the legislative requirements of Section 23(1.1) of the *Lakes and Rivers Improvement Act*; and
- g) Be consistent with the goals and principles as outlined in section 4.0 of the *Waterpower – Water Management Planning Guidelines for Waterpower (2002)*.

## **2.0 Physical and Biological Description**

The Otonabee River is located in the Great Lakes St. Lawrence Lowland bedrock unit. This consists of sedimentary rocks, primarily limestone and shale. Limestone bedrock is largely covered by a veneer of glacial deposits with some outcrops. Surficial geology is characterized by drumlinized till, with the dam lying within the Otonabee Glacial Spillway; which has coarse gravels. The Otonabee River is 45 km in length, originating in Lakefield at the outlet of Lake Katchewanooka and flowing south to Rice Lake. The river has 25 tributaries including Jackson Creek, Meade Creek, Bears Creek, and Squirrel Creek and drains an area of approximately 945 square kilometres. Land-use in the area is primarily urban residential. A map of the Otonabee River watershed is included in Figure 1.

The navigable sections of the Otonabee River upstream of the Nassau Mills Bridge and downstream of the Hunter Street Bridge are part of the Trent-Severn Waterway, a National Historic Site of Canada, and are under the mandate of Parks Canada – Trent-Severn Waterway (TSW). This includes the Nassau Dam, located immediately downstream of where the Otonabee River and Trent Canal diverge, which is the upstream control structure on the section of the Otonabee River within which the dam and hydropower facility are located. The waterway is managed in accordance with the Historic Canals Policy and the Management Plan. The regulatory framework for the use, management and protection of the waterway is provided by *The Historic Canals Regulations* under the *Department of Transport Act*. TSW's authority to manage the water along the Trent and Severn Rivers comes from the British North America Act, where the Federal government received responsibility for navigation. It is the practice of the TSW, as the Federal Government's agent, to consider and provide for other legitimate uses such as municipal supply, flood protection, irrigation, recreation, and power production whenever necessary and not in conflict with the navigation mandate. Whenever public safety is threatened by flooding, drinking water shortage, water safety, etc. these are given highest priority regardless of their effects on navigation.

### **2.1 Hydropower Facility Zone of Influence**

The “zone of influence” refers to the portion of the watershed that may experience changes in water levels and flows as a result of the hydro facility



operation. Values and issues identified outside of the zone of influence are not within the scope of the WMP and have been excluded.

The London Street Generating Station is connected with the control dam at that site; both the dam and generating station are owned by Peterborough Utilities Inc. (PUI) and currently operated by Peterborough Utilities Services Inc. (PUSI), both subsidiaries of the City of Peterborough Holdings Inc. PUI is part of the Peterborough Utilities Group that also includes Peterborough Distribution Inc and Peterborough Utilities Services Inc. The dam is operated for the generation of hydropower, and therefore is included in the scope of the WMP.

The zone of influence (Figure 2), associated with the dam and generating station includes the upstream portion of the Otonabee River to the Auburn Generating Station. The segregated tailrace and the adjacent river channel, immediately below the dam to where it meets the toe of the tailrace, are directly influenced by the operations of the generating station. Therefore, the downstream extent of the zone of influence is the Hunter Street Bridge

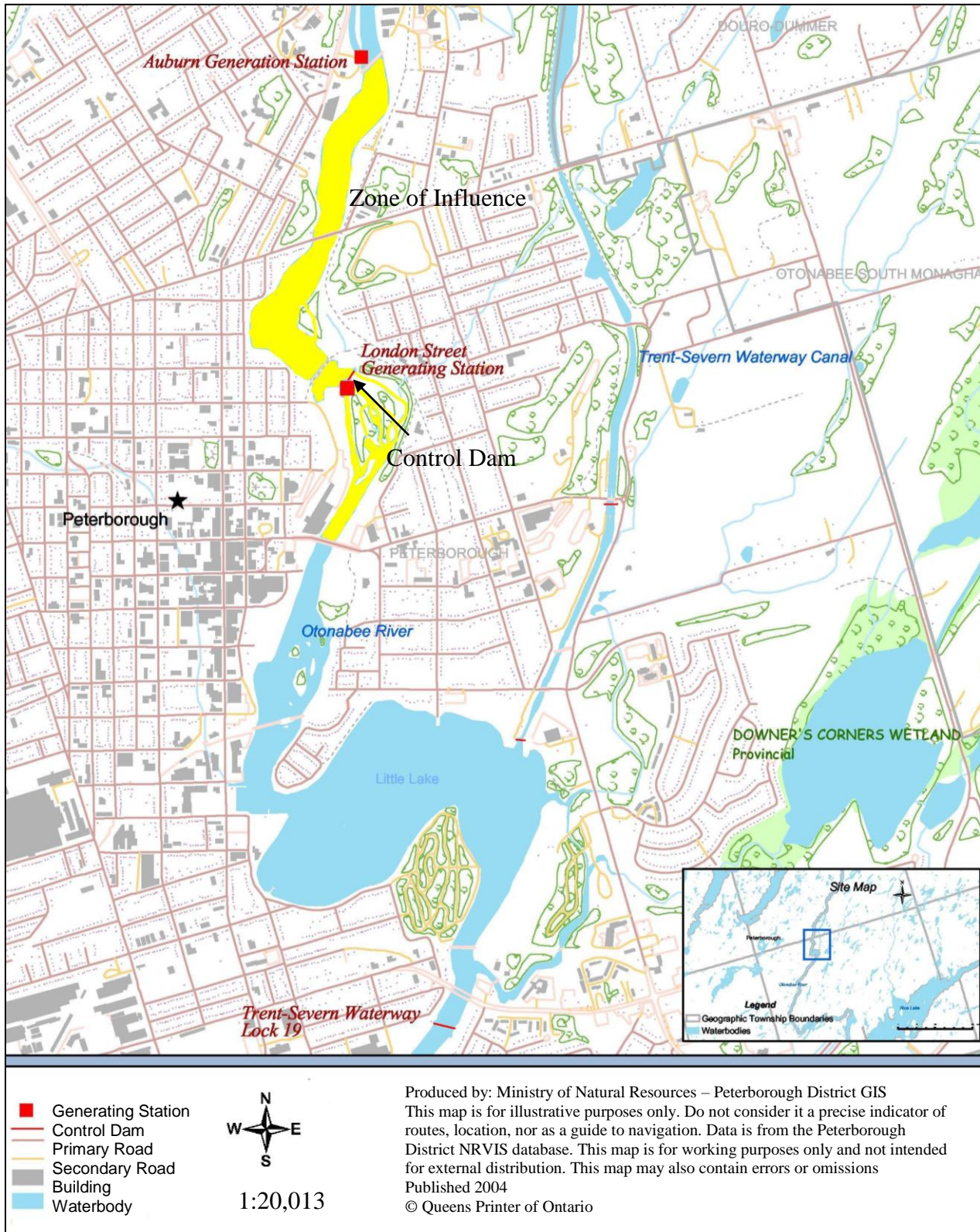
London Street Dam and Generating Station are within a group of four dams and generating stations within close proximity, and within the Peterborough City limits. The operation of each facility concerning flows and levels can influence the operations of the other facilities within this grouping.

## **2.2 Resource Values**

During the scoping phase of the planning process, the steering committee identified the following resource values are within the zone of influence:

- The on-site generation of hydroelectricity.
- The generation of hydroelectricity at the Auburn Generating Station upstream of the London Street Generating Station.
- The control dam and generating station mitigate river flows and levels. Were they not present, fluctuations in flows and levels would be more severe.
- On the east shore of the Otonabee, immediately adjacent to the London Street Generating Station and dam is the popular recreational Rotary Greenway Trail and Park.
- The river both upstream and downstream is used for recreation, including swimming, fishing, canoeing, kayaking and nature appreciation.
- The shores both upstream and downstream have permanent residences.
- Daily water flow requirements are provided by TSW to assist in maintaining navigational requirements and to provide sufficient water for the operation of the Water Treatment Plant upstream of the facility.
- The Otonabee River supports a diverse warm water fishery. White sucker, brown bullhead, common carp, spottail shiner, bluntnose minnow, golden shiner, banded killifish, rock bass, pumpkinseed, bluegill, longear sunfish, smallmouth bass, largemouth bass, walleye, muskellunge, logperch and mottled sculpin are all known to be present in the river between Nassau Dam and Little Lake.





**Figure 2: London Street Generating Station Zone of Influence**

- The minimum low flow discharge for navigational purposes also supports downstream fisheries.

### **2.3 Issue Identification**

The following issues were identified during the scoping phase:

- Dewatering of river channel between toe of dam and end of tailrace during periods of low flow, due to water being diverted to generating station. Dewatering of the stream channel has the potential to strand fish, however the operator indicated that water is passed through the western sluiceway in the tail race structure in order to flush potentially stranded fish back into the main channel.
- Peterborough District files indicate a fish kill, presumed due to receding water, occurred on the Otonabee River downstream of the London Street Dam, May 25<sup>th</sup> 1981. No fish kills have been documented since this time.
- Communication among dam and hydropower operators on this reach of the Otonabee River is very important to maintaining appropriate flows and levels. Communication of adjustments to upstream and downstream operators will maximize social and economic benefits for all operators. Existing communications among operators are strong. The OMNR, Peterborough District has been invited to participate in portions of the annual operators meeting to facilitate communications between OMNR and the operators.

Additional questions exist regarding the potential effects of current operations on the fisheries resource and water level fluctuations. Data to support or refute these questions are currently unavailable, and the collection of these data have been identified as information gaps to be filled cooperatively during the term of the WMP (see Section 4.0).

## **3.0 Waterpower Facility and Other Water Control Structures**

### **3.1 Brief Description of Waterpower Facility and Control Dam**

The London Street Generating Station is owned by the PUSI, a subsidiary of the City of Peterborough Holdings Inc.

The London Street Generating Station consists of three generators, with a combined maximum output of 4.1 MW of electricity. The control dam and generating station are on the same location but the generating station has a separate fore-bay and tailrace. The tailrace is approximately 600 m long to the point where it joins the river channel. Trash racks surround the fore-bay. Photos of the control dam and generating station are included in Figure 3.

The control dam consists of one electrically operated sluice gate, one log chute and ten stoplog sluiceways. The electrically operated sluice gate is remotely operated from the Peterborough Water Treatment Plant located a short distance upstream. A site plan layout is included in Figure 4



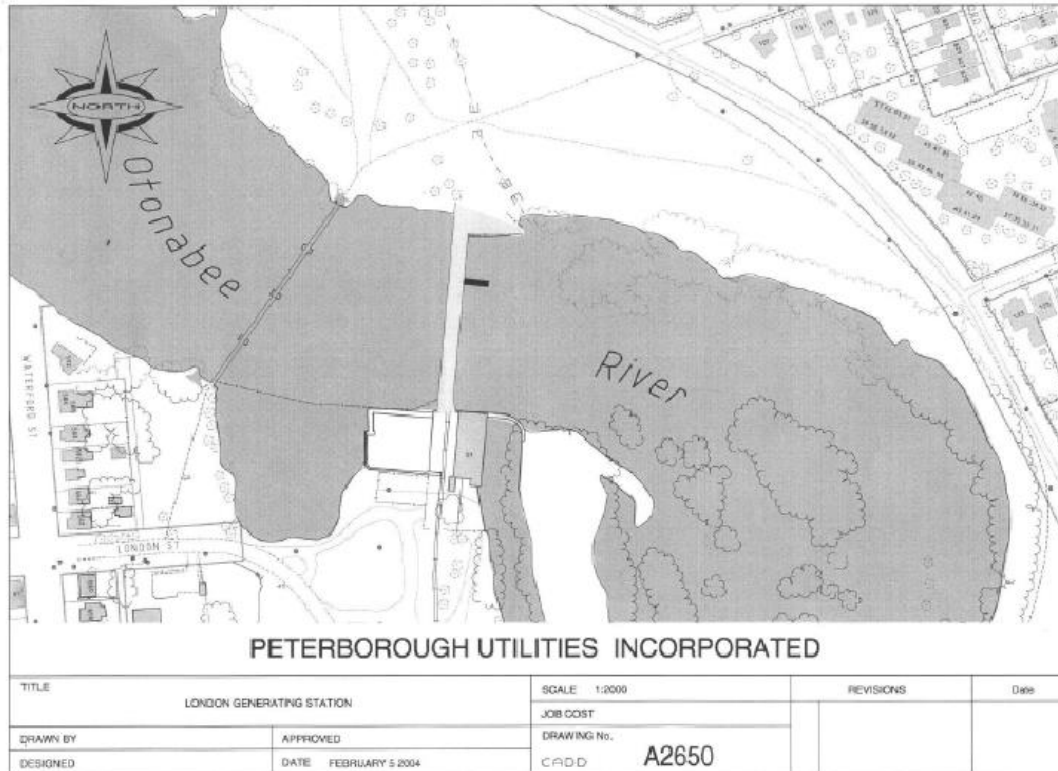


**Figure 3: Photos of the London Street Generating Station and Control Dam. The top photos are of the control dam, with the separate head canal shown in the top right photo. The bottom left photo shows the generating station viewed from upstream. The separate tailrace is shown in the picture on the bottom right.**

## **3.2 Current Operations**

### **3.2.1 Operations of the Hydropower Facility and Control Dam**

The London Street Generating Station does not require a seasonal operation plan with respect to water levels and flows as the facility follows the TSW mandate year-round. However, the London Street Generating Station is operated to maintain an upstream water level between 199.64 m to 200.56 m, a difference of 0.92 m (92 cm). The water levels are related to a top of pier elevation currently determined to be 200.41 m. The water levels within this range can vary daily depending on flow requirements from the TSW, operations upstream and downstream and weather conditions (i.e., frazil ice formation and drought conditions). Operational procedures are outlined in the Operating Manual, select sections of which have been included in the Scoping Report (Appendix A).



**Figure 4: London Street Generating Station Site Plan Layout**

TSW dictates the required minimum flows daily to maintain water levels along navigation routes. Normally this minimum is 17 m<sup>3</sup>/s but can be increased if required to maintain downstream navigation. The London Street Generating Station relies on the TSW's direction to set daily flows and pass the required flow through adjustments in operations of the hydropower facility and/or the control dam.

### 3.2.2 Recording Methods, Control and Maintenance

The river level on the upstream side of the dam is monitored continuously by the facility operator and therefore any flow fluctuations affecting the river level are corrected for immediately by the facility operator. River levels are monitored and recorded on a SCADA (Supervisory Control and Data Acquisition) system located at the Water Treatment Plant every 15 minutes. The data is digitally stored. An operational daily graph is available to the operator for up to two months.

Communications with the upstream operator (Ontario Power Generation) are noted in the operator's logbook, as well as changes made at the dam. TSW provides notice of river flows by telephone on a regular basis (almost daily).



#### **4.0 Information Gaps, Priorities and Programs**

The following information gaps were identified during the Scoping Phase of the Water Management Planning process:

- Absence of Geodetic datum. Currently, elevations at the site are based on local datum – the top of the piers are determined to be 200.41 m.
- Fisheries assessment on the section of the Otonabee River above and below the dam to determine potential impacts of the operation of the facility are currently not available.
- OMNR staff have observed changes in water levels along the Otonabee River, and have received inquiries from the public regarding the implications of these fluctuations on the fisheries resource. The current operating regime suggests that the facility is capable of causing 92 cm fluctuations in upstream water levels, and that the implications of these fluctuations on the fishery is not fully understood. Examination of how current operations affect these fluctuations, and alternatives to minimize them during critical spawning and incubation periods, should be carried out during the term of the WMP.

Information gaps will be filled during the term of the plan using a cooperative approach. OMNR will take a lead role in the collection of fisheries data, however the timing and detail of data collected will be dependent on funding allocations. The operator will take a lead role in filling information gaps as they relate to operations of the facility. In order to fill these information gaps, the following information should be collected:

- Operating range based on Geodetic datum
- Information on the existing fish community on the Otonabee River between Lock 19 and the Nassau Dam, including species presence/absence and relative abundance and biological characteristics of important fish species (e.g. age distribution, growth rates, etc). Data could be collected using one or more provincially standardized techniques: Nearshore Community Index Netting (NSCIN), Early Summer Trap Netting (ESTN), or Fall Walleye Index Netting (FWIN). Electrofishing is also a potential sampling tool.
- Examination of the area immediately downstream of the dam during periods of low flow or following a dramatic reduction in flows to address concerns regarding the potential for fish stranding.
- Characteristics of the dam and hydropower facility operations including inflows, outflows, headpond and tailrace levels, and how these change throughout the spawning and incubation periods. These parameters should be related to the management of water flows and levels throughout the Trent-Severn Waterway.
- A description of the physical attributes of the known and/or suitable spawning sites. Variables measured should include water depth, velocity and substrate size. These can then be compared to the habitat requirements for each species.
- The monitoring requirements in this WMP; and those associated with other facilities on the Otonabee River, will provide increased understanding of the interactions in regards to water level management on this section of the river. The Steering Committee recommends that TSW explore means of reducing the

variation in flow requirements to allow for more consistent water levels and associated energy production.

- The OMNR, Peterborough District has been invited to participate in portions of the annual operators meeting to facilitate communications between OMNR and the operators.

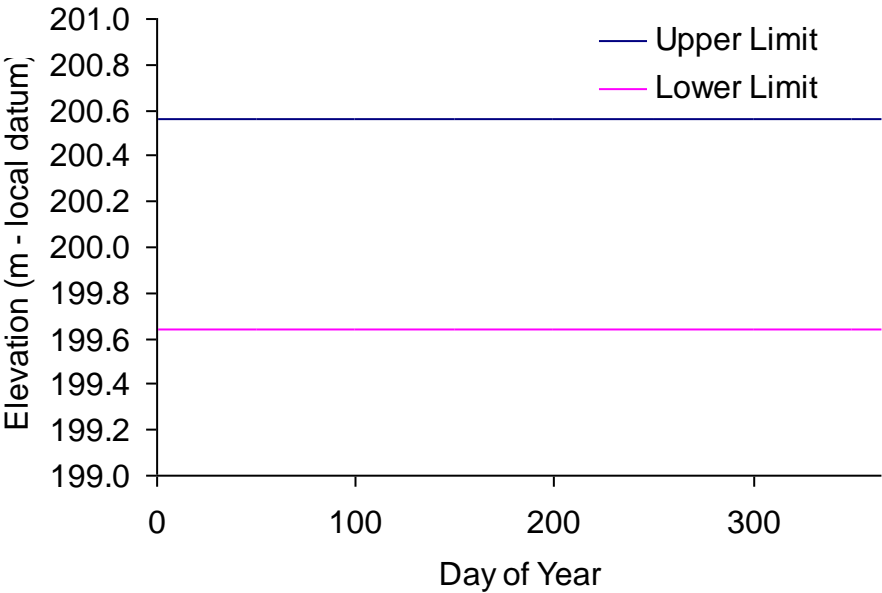
## **5.0 Operating Plan**

The hydropower facility will continue to operate and generate hydropower in response to, or within the operating rule curve of the London Street Generating Station and control dam (see Figure 5). Indicators of low and high water levels are included in Appendix J of the Water Management Planning Guidelines (2002). The measures identified in Figure 5 and Table 1 are deemed to be the mandatory components of this plan.

Flows and levels on the Otonabee River are largely dictated by the mandate of TSW. TSW regulates flows for the operation of the Trent Canal and can substantially increase or reduce flows through this section of the Otonabee River. The regulation of flows by TSW and limited storage capacity at the waterpower facility can result in short periods of time where headpond water levels are above or below the operating limits. These incidents are outside the control of the facility operator and are considered within compliance of the plan (see Table 1).

The operator is required to submit a formal incident report when water levels are outside the approved operating range for two or more consecutive hourly readings. If water levels are outside these limits for less than two consecutive hourly readings then the operator will be considered in compliance with the plan. When such incidents occur, the operator must record the details of the incident in a log book which will be retained by the operator and made available to OMNR when requested. The previous reference to two hours does not apply if water levels deviate from the operating range due to circumstances within the control of the operator. In those situations, the formal non-compliance procedure (i.e., notification of MNR within 24 hours and a completed incident report within 30 days) will apply regardless of the duration.

OMNR is not responsible for any damage to public or private property that results from temporarily going outside of the approved operating range.



**Figure 5 - Operating Rule Curve for the London Street Dam and Generating Station. Both the lower (199.64 m) and upper (200.56 m) limits are mandatory components of the WMP.**

**Table 1: London Street Generating Station Operating Requirements**

| <b>Operating Requirements</b>                |   |                  |
|--|---|------------------|
|  | <p><b>Operating Regime Upper and Lower Limits</b><br/>The operator will manage flows and levels to stay within the upper and lower limits of the operating regime. The upper operating limit is 200.56 m and the lower limit is 199.64 m (Figure 5).</p>  | <b>Mandatory</b> |
|  | <p><b>Minimum Flows</b><br/>The operator will maintain minimum flows as directed by the TSW</p>   | Best Practice    |
| <b>Monitoring and Reporting Requirements</b> |   |                  |
|  | <p>Monitoring and recording of headwater levels at 60 minute intervals using the electronic gauge located on the structure. Operators shall make flow and level data available to the Ministry upon request. Reporting on the results of data collection will occur through the Implementation Report, as outlined in Section 8.</p>  | <b>Mandatory</b> |
|  | <p>Daily monitoring and recording of water flows through the dam and generating station. Operators shall make flow and level data available to the Ministry upon request. Reporting on the results of data collection will occur through the Implementation Report, as outlined in Section 8.</p>   | Best Practice    |
|  | <p>Monitor mandatory water flow and level limits, and report on any incidents where a deviation from the operating requirements of the WMP (mandatory water flow and level), or other mandatory conditions of the WMP (including deviations of two or more consecutive hourly readings). All incidents must be reported to the MNRF. An initial notification to the MNRF is required within 24 hours of the occurrence of the incident or when the proponent(s) first becomes aware of the incident.</p> <p>The report should include:</p> <ul style="list-style-type: none"> <li>• The date, time and nature of the deviation;</li> <li>• The extent of the deviation;</li> <li>• Possible causes of the deviation;</li> <li>• Known or anticipated impacts associated with the deviation; and</li> <li>• Steps taken or to be taken, including the timeframe, to correct the deviation.</li> <li>•</li> </ul> | <b>Mandatory</b> |
|  | <p>A written report to the MNRF within 30 days, outlining the details of the incident, any additional information not provided in the incident notification and subsequent remediation.</p>   | <b>Mandatory</b> |
|  | <p>Complete an annual compliance report and forward to MNR annually by February 28th. The report will contain a summary and description of all incidents and any remedial action(s) proposed or undertaken. In the event there were no recorded incidents of</p>  | <b>Mandatory</b> |

|  |  |                  |
|--|--|------------------|
|  | noncompliance, the report will state as such.  |                  |
|  | Data required for compliance monitoring and reporting shall be recorded and maintained by the proponent for a period of 5 years following it being recorded. | <b>Mandatory</b> |

## 6.0 Plan Compliance and Enforcement

The principals, objectives and guidelines for the compliance and enforcement guidelines are outlined in Appendix J of the OMNR Water Management Planning Guidelines (2002). The following are the compliance and enforcement requirements for the London Street Generating Station WMP.

PUSI must ensure that their facility is operated in accordance with the operating requirements of this WMP. The legal requirement is set out in Section 23.1 (7) of the Lakes and Rivers Improvement Act (LRIA). The water level requirements in this WMP are mandatory. Enforcement action may be taken where these requirements are not met.

PUSI is also responsible for on-going self-monitoring, and are required to report any deviations from the WMP to the OMNR. The **mandatory** self-monitoring requirements of this plan include:

1. The owner/operator must notify OMNR of any deviations of two or more consecutive hourly readings from the operating requirements of the WMP (and those considered by the operator to be within their normal operating control regardless of duration). Incidents related to high or low water conditions are addressed in the Compliance and Enforcement Guidelines, Appendix J of the OMNR Water Management Planning Guidelines (2002).
2. Within 24 hours of the incident (as outlined in #1) being discovered, and to the extent that information is available, the report should include:
  - The date, time and nature of the deviation;
  - The extent of the deviation;
  - Possible causes of the deviation;
  - Known or anticipated impacts associated with the deviation; and
  - Steps taken or to be taken, including the timeframe, to correct the deviation.
3. The facility owner/operator is then required to provide a written report to the MNRF within 30 days, outlining the details of the incident, any additional information not provided in the incident notification and subsequent remediation. Each report is to be dated and signed by the owner/operator.
4. OMNR will maintain a copy of all reports (owner/operator and OMNR created) on file for at least 5 years from the date of the report.
5. All reports produced are subject to the Freedom of Information and Protection of Privacy Act and are considered public documents and subject to mandatory exemptions in that Act (i.e. commercially sensitive restrictions), will be made

available to the public upon an FOI request. Data required for compliance monitoring and reporting shall be recorded and maintained by the proponent for a period of 5 years following it being recorded. OMNR will be responsible for archiving records beyond 5 years if it is deemed necessary.

6. The proponent shall make this existing data available to an OMNR inspector or engineer when requested to do so.
7. When requested by OMNR to supply such information the proponent shall do so in the timeframe indicated in the request given that the request timetable is reasonable.
8. The proponent shall monitor and report on their operations as required in this WMP.
9. The proponent shall complete an annual compliance and forward the report to OMNR annually (by February 28th). The report will contain a summary and description of all incidents and any remedial action(s) proposed or undertaken. In the event there were no recorded incidents of noncompliance, the report will state as such.

Additional criteria of the WMP include:

- OMNR will also from time to time monitor compliance through periodic site inspections (as set out in Section 20 of the LRIA), audits and investigations of public complaints.
- Nothing in this WMP precludes the Minister from making further Orders under the Lakes and Rivers Improvement Act.
- In instances where, due to unscheduled facility imperatives (e.g. emergency maintenance etc.), MNR will consider requests from the owner/operator for temporary relief from the plan expeditiously and considerate of relative priorities.

## **7.0 Provision for Plan Amendments**

### **7.1 Plan Amendments**

In order for the WMP to remain current and to address future issues, the plan may be amended by following the amendment process set out in this section. Any change to the WMP requires an amendment to be submitted to the plan proponents and approved by MNRF. From time to time, new data, information, or issues may arise. MNRF retains the authority to amend a plan at any time, or issue an Order for the plan proponent(s) to amend the WMP.

### **7.2 The Amendment Process**

Any party (Plan Proponent, MNRF, or 3<sup>rd</sup> Party) with an interest in the WMP may request an amendment to the WMP by bringing forward issues to the attention of the plan proponent(s).

An amendment request must be accompanied by sufficient information to allow the proponent(s) to determine whether the proposed amendment should proceed, and whether the amendment should be treated as minor or major. Proponent(s) must apply due diligence when considering proposed amendments.

The plan proponent(s) are responsible for:

- Receiving amendment requests;
- Assessing amendment requests based on criteria outlined in this section;
- Proposing amendments to MNRF; and
- Preparing amendment proposals for MNRF review

MNRF will review proposed amendments to ensure that plan proponents screen and process amendments consistent with the 2016 Maintaining Water Management Plans Technical Bulletin.

### *7.2.1 Types of Amendments*

Changes to the WMP may include simple text corrections to significant modifications to an operating regime. In order to provide flexibility for a range of potential amendment requests, two categories of amendments (minor and major) exist. The categories are mainly differentiated by the expected level of public interest in the proposed change to the WMP.

Amendments may be subject to public and First Nations and Métis community engagement or consultation, dependent on the category of amendment (described below), as detailed in Section 3.5 of the Maintaining Water Management Plan Technical Bulletin, 2016.

#### *7.2.1.1 Minor Amendments*

Minor amendments are changes that do not affect the operating regime, plan objectives, are not expected to generate a high level of public interest, and are not expected to adversely affect Aboriginal and treaty rights. Minor amendments will not be subject to public and First Nations and Métis community engagement or consultation beyond discussions with a SAC (if applicable). Minor amendments may include:

- Changes in the presentation of information, factual or text corrections; and/or
- Changing a WMP to include a new dam and its associated Operating Plan (Section 2.1 of the Maintaining Water Management Plan Technical Bulletin, 2016)

#### *7.2.1.2 Major Amendments*

Major amendments are more significant in scale such as: changes to the operating

regime or plan objectives, changes that could be expected to generate a high level of public interest or changes that might adversely affect Aboriginal and treaty rights. A major amendment will be subject to public, First Nations, and Métis community engagement or consultation. For major amendments where equivalent consultation and engagement has previously occurred through another process (e.g. previous notification that a change will be required, or amendments required after public consultation in other planning processes), the MNRFP may exercise discretion to process the proposed change as a minor amendment on a case by case basis.

### *7.2.2 Amendment Request*

Individuals submitting an amendment request shall clearly articulate concerns and potential solutions. Amendment requestors shall participate in good faith opportunities undertaken to obtain Indigenous Communities, public and stakeholder input on proposed major amendments and should consider their ability to contribute towards those engagement opportunities.

An amendment request should provide sufficient information to allow plan proponent(s) to determine whether an amendment request should be investigated further. It is the responsibility of the individual(s) requesting the amendment to demonstrate that the request is credible, worthy of consideration and within the scope of the WMP and the LRIA.

The amendment request must contain the following information:

- A description of the changes being requested;
- The rationale for the changes being requested;
- Results of any pre-consultation completed with potentially affected parties; and
- Where changes in operations are proposed, a description of how the proposed operation changes may impact other dams subject to the WMP.

Upon receipt of an amendment request from a third party, the plan proponent(s) will acknowledge receipt of the request in writing to the third party and notify the MNRFP that a request has been received. Where the MNRFP receives an amendment request from a third party, the request will be forwarded to the plan proponent(s).

Where plan proponent(s) are considering submitting an amendment request to the MNRFP, prior consultation with the MNRFP, the SAC (if applicable) and other plan proponents may occur.

Plan proponents will maintain records for all amendment requests.

### *7.2.3 Review of Amendment Request and Categorization of Amendment*

The proponent(s) is responsible for screening amendment requests to determine if the request should proceed through the amendment process, and for categorizing the



amendment as minor or major. This determination will ensure the appropriate degree of public consultation for the plan amendment.

The assessment will consider the following criteria:

- a) Is the amendment consistent with this Technical Bulletin?
- b) Is the amendment consistent with the WMP objectives, or does the amendment propose a change to the WMP objectives?
- c) Is there an alternative method to deal with the request rather than amending the WMP?
- d) Is the request within the scope of the WMP?
- e) Is the request related to any ongoing data or effectiveness monitoring commitments?
- f) Is the request supported by other potentially affected parties?
- g) Is the amendment required to comply with other regulatory requirements?
- h) Has the amendment request been considered previously?
- i) Does the amendment have the potential to negatively affect dam safety/public safety?
- j) Does the amendment have potential impacts on socio-economic or environmental considerations?

Where an amendment request does not contain sufficient information to complete an assessment or make a recommendation to MNRF, the plan proponent will return the proposed amendment to the third party with a request for additional information.

When a plan proponent(s) has completed the screening of the amendment request, written notification will be provided to MNRF. The notification will include: a summary of the amendment request and supporting rationale, results of the assessment, a recommendation of whether the request should be further considered, and if so, the appropriate category for the amendment.

#### *7.2.4 Review of Assessment Results*

The MNRF will review the plan proponent's screening results and will:

- Agree with the recommendation;
- Request additional information; or
- Disagree with the recommendation.

Where the plan proponent(s) recommends against proceeding with the amendment request, and the MNRF is in agreement, the plan proponent(s) will notify the requestor of the decision with supporting rationale.

Where the MNRF agrees that the amendment request should proceed, the plan proponent(s) will develop and submit the final amendment proposal for MNRF consideration. The plan proponent(s) will undertake any necessary planning, consultation, information gathering or other investigative activities associated with the amendment. Where the amendment is requested by a third party, the third party

may be expected to support engagement activities.

Where the MNRF disagrees with the recommendation, the MNRF will discuss the proposed amendment with the plan proponent(s). The MNRF may subsequently direct the plan proponent(s) to proceed with consideration of the plan amendment.

### **7.3 Ordering an Amendment**

When a decision is made to proceed through the plan amendment process, the MNRF may formalize the decision through the issuance of an Order to prepare an amendment or approve the amendment under the authority of LRIA Section 23.1(6). Plan proponent(s) may also request that the MNRF issue an Order to amend the plan.

The MNRF retains the authority to require a plan proponent to undertake a WMP amendment where the plan proponent is unwilling to consider reasonable requests or where there are significant concerns regarding a facility's operation.

When MNRF intends to order a plan proponent to amend a plan, the proponent(s) will be provided a notice of intent to issue an Order to amend the plan prior to the issuance of the Order. Upon receipt of a notice of intent to issue an Order to amend a plan, the proponent(s) has 15 days to submit a request for an inquiry to the MNRF. Requests for an inquiry under the LRIA are referred by the MNRF to the Office of the Mining and Lands Commissioner (OMLC). Additional detail regarding appeals to the OMLC is referenced in MNRF's LRIA Administrative Guide and Section 11 of the LRIA.

### **7.4 Amendment Preparation**

Where the MNRF has determined that a proposed amendment request should proceed, the plan proponent(s) shall prepare the final amendment proposal, including completing consultation activities or information gathering in support of the proposed amendment. Where the amendment is requested by a third party, the third party requester should discuss opportunities for collaboration in preparing the amendment.

For minor amendments, the plan proponent(s) must engage the MNRF, other plan proponent(s) and the SAC (if applicable). Public and First Nations and Métis community engagement and consultation requirements for major amendments are described in this plan.

#### *7.4.1 Consultation and Engagement Requirements for Major Amendments*

Plan proponent(s) and in certain circumstances third party amendment requestors, shall undertake public and First Nations and Métis community engagement and consultation when developing a major amendment. Specific requirements shall be

discussed with the MNRF in advance. The scope of consultation and engagement may vary depending on:

- Scope and scale of the proposed major amendment;
- Level of public, stakeholder and First Nation and Métis community interest in dam operations;
- Level of potential impact on Aboriginal and treaty rights;
- Potential impacts on other regulatory approvals; and
- Potential impacts within the scope of the LRIA and the WMP.

Consultation and engagement approaches may include:

- Direct written notice;
- Open houses;
- Information sessions;
- Public notice; and/or
- Community meetings or workshops/focus groups.

Sufficient opportunity for reasonable engagement shall be provided and information regarding the amendment shall be communicated in concise plain language.

#### *7.4.2 Consultation and Engagement Requirements Where EA Applies*

In some instances, proposed changes to existing operations of the WMP will be subject to the Environmental Assessment (EA) Act, such as MNRF's Resource Stewardship and Facility Development Class EA, or the OWA Class EA.

In such cases, the EA Act requirements shall be completed in advance of submitting an amendment request. The plan proponent(s) is not required, but may elect, to incorporate WMP amendment considerations during the EA Act process.

Where proposed changes are subject to an EA, the proponent may not be required to complete any additional public and First Nations and Métis community engagement and consultation in support of the proposed WMP amendment where sufficient engagement activities have been completed as part of the EA process.

MNRF determination of whether consultation and engagement completed during the EA is sufficient for purposes of a WMP amendment shall be made as part of the Ministry's assessment of the WMP amendment screening results. Additional consultation and engagement shall not be required, unless the MNRF concludes that the EA consultation was insufficient. In this case, the MNRF will determine the scope and scale of additional consultation and engagement necessary for the purposes of the WMP amendment.

### **7.5 Amendment Submission**

Following completion of any applicable consultation requirements, the plan proponent(s) will provide the MNRF, other plan proponent(s) where appropriate, and any third party requesters, a copy of the final amendment proposal including:

- a) Amendment request and supporting rationale;
- b) Proposed changes (replacement text) as they would appear within the approved plan;
- c) Map of the area affected by the amendment (if applicable);
- d) Record of consultation identifying the type of form of feedback sought, issues identified and steps taken by the proponent to modify the proposed amendment in response to comments (if applicable); and
- e) Any other supporting information deemed applicable to the proposed amendment.

## **7.6 Amendment Review**

All amendments to the WMP must be approved by the MNRF.

The MNRF will complete a review of the amendment submission. For proposed minor amendments, the MNRF will complete a review within 30 days of receipt of a complete submission. For proposed major amendments, MNRF will complete a review within 60 days of receipt of a complete submission.

During and/or following the review of the proponent's amendment submission, the MNRF may, with supporting rationale, request additional information required to complete the MNRF's review.

### *7.6.1 Requests for Additional Information*

Where additional information is required, the MNRF will identify in writing the additional information requested and the rationale for the request. In such circumstances, the MNRF review timeline will be put on hold until the MNRF receives the requested information.

Upon receiving a request for additional information from the MNRF, the proponent may:

- Agree to provide the additional information by the specified time;
- Request a change to the specified time for submitting the information;
- Request a review by the Regional Director of the required information; or
- Refuse to provide the additional information.

Further details regarding the above scenarios can be found in Section 3.7.1 of the Technical Bulletin (2016).

## **7.7 Issuance of Decision**

In issuing a decision on the proposed amendment, the MNRF shall either:

- Approve the amendment;
- Approve the amendment subject to changes considered advisable to further the purposes of the Act; or
- Refuse the amendment.

MNRF will provide the plan proponent(s) and any third party requester, as appropriate, written confirmation of its decision and supporting rationale.

If the amendment is approved, the WMP will be revised and a record of the amendment will be appended to the approved WMP.

Where the MNRF intends to refuse an amendment, a Letter of Intent to Refuse approval of the amendment will be issued to the proponent identifying the supporting rationale and any additional measures the proponent(s) can take to address any outstanding concerns. The Letter of Intent to Refuse approval of amendment will notify the proponent that unless the MNRF receives a request within 15 days from the proponent for an inquiry, the amendment will be refused.

Requests for an inquiry under the LRIA are referred by the Ministry of the Office of Mining and Lands Commissioner (OMLC). Additional information on appeals to the OMLC is detailed in MNRF's LRIA Administrative Guide.

### **8.0 Implementation Reporting**

Plan proponents for the WMP shall submit an Implementation Report to the MNRF every five years. This report shall be a collective submission from all plan proponents.

The Implementation Report will provide status updates, transparency of dam operations and inform adaptive management considerations. The Implementation Report is not intended to initiate a fundamental review of the WMP.

The Implementation Report will include:

- Summary of all amendment requests received, including the rationale for completed amendments and how proposed amendments that did not proceed were addressed;
- Status of the Standing Advisory Committee, where applicable;
- Report on the results of the effectiveness monitoring program (EMP), if applicable, including a summary of monitoring conducted and findings, a determination of whether operations are having a negative or unintended impact, and an assessment of whether revisions to the facility operations, or the EMP, are required; and
- Status and results of any data or information collection outlined in the WMP's data collection program, if applicable, and a determination of whether revisions to the program are required.

Water Management Plan ~ *London Street Generating Station*

The MNRF will review the report for completeness but will not formally approve the report. If the report is not complete, the MNRF will request that additional information be provided. The MNRF may also audit records used by the proponent(s) to prepare the Implementation Report and may request any additional information to verify the information presented.

Upon confirmation from the MNRF that the Implementation Report is complete, plan proponents will make the report publicly available.

The date for submission of the initial implementation report, through consultation with OWA, has been established as **December 31<sup>st</sup>, 2022**. In Accordance with the Maintaining Water Management Plans Technical Bulletin (2016), Implementation Reports must be submitted every five years thereafter.

**Appendix A – London Street Generating Station  
Scoping Report**

# **Water Management Planning**

## **Scoping Report**

### **London Street Generating Station**

**Prepared by:  
Steering Committee**

**December 2004**



## Approval Sheet

**Subject:**           **Scoping Report**  
**London Street Generating Station Water Management**  
**Plan**

**APPROVED:**    ORIGINAL SIGNED BY \_\_\_\_\_ Date: December 13, 2004  
Dan Taillon  
Biologist  
Ministry of Natural Resources  
Peterborough District

**APPROVED:**    ORIGINAL SIGNED BY \_\_\_\_\_ Date: December 10, 2004  
Robert G. Lake  
President  
Peterborough Utilities Inc.

**ACCEPTED:**    ORIGINAL SIGNED BY \_\_\_\_\_ Date: January 11, 2005  
Lois Deacon  
District Manager  
Ministry of Natural Resources  
Peterborough District

**ACCEPTED:**    ORIGINAL SIGNED BY \_\_\_\_\_ Date: January 19, 2005  
Doug Unsworth  
Regional Waterpower Program Coordinator  
Ministry of Natural Resources  
Southern Region

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## 1.0 Initial Steering Committee

The Steering Committee for the London Street Generating Station Simplified Water Management Plan was established on January 6, 2004. The steering committee consists of:

**Name:**

Jeff Guilbeault  
Dan Taillon

**Affiliation:**

Peterborough Utilities Services  
Ministry of Natural Resources

## 2.0 Water Management Plan Objectives

Recent years have seen a restructuring of Ontario's electricity market. With the passage of the Energy Competition Act in 1998, the Ontario Government began working toward the goal of establishing a competitive electricity market in Ontario.

An open electricity market may provide inducements on waterpower producers to manage water for maximum electricity production, which may impact other commercial, recreational, municipal, and private uses. Many waterpower facilities have operating plans in place that voluntarily recognize and accommodate multiple users of river systems. However, the absence of a formal water management plan for existing waterpower facilities can result in the inconsistent valuing of environmental, social and economic attributes, rather than a balancing of resource values.

The purpose of this Scoping Report is to contribute to the development of the Water Management Plan (WMP) for the London Street Generating Station. The objectives of the Scoping Report are to:

- a) Document current operations of the facility;
- b) Document all resource values, issues, and areas where data are currently not available;
- c) Provide a recommended categorization for the simplified WMP.

The objectives of the WMP for the London Street Generating Station are to:

- h) Review, document and understand the hydro facility operations relative to environmental, social and economic benefits;
- i) Establish the level of control that the facility exercises over levels and flows;
- j) Determine the zone of influence of the hydropower facility;
- k) Document resource values and environmental, social and economic issues within the zone of influence of the hydropower facility;
- l) Establish whether a change in hydropower operation (water levels and discharge flows) would have a net environmental, social and economic benefit;
- m) Fulfill the legislative requirements of Section 23 (1.1) of the *Lakes and Rivers Improvement Act*; and

- n) Be consistent with the goals and principles as outlined in section 4.0 of the *Waterpower –Water Management Planning Guidelines for Waterpower (2002)*.

### **3.0 Terms of Reference**

This scoping document has been prepared according to Terms of Reference (See Appendix A) for the London Street Generating Station Water Management Plan.

### **4.0 Watershed Description and Site Location and Access**

The London Street Generating Station is located on the Otonabee River, which is 45 km in length and has 25 tributaries including Jackson Creek, Meade Creek, Bears Creek, and Squirrel Creek. The Otonabee River drains an area of approximately 945 square kilometres, see Appendix B for a map of the Otonabee River watershed.

The Otonabee River originates in Lakefield, Ontario at the outlet of Lake Katchewanooka and flows south to Rice Lake. The river flows through the municipalities of Smith-Ennismore-Lakefield, the City of Peterborough, Cavan-Millbrook-North Monaghan, and Otonabee-South Monaghan.

The London Street Generating Station is accessible off London Street, within the City of Peterborough, adjacent to the parking access point for the Quaker Oats industrial site, a unit of PepsiCo Beverages and Food industrial site.

Further description of the watershed is included in the Terms of Reference, Appendix A.

### **5.0 Dam and Hydropower Facility**

The London Street Generating Station is owned by the Peterborough Utilities Inc., a subsidiary of the City of Peterborough Holdings Inc.

The site plan of the dam and hydropower facilities is provided in Appendix C.

The London Street Generating Station consists of three generators, with a combined maximum output of 4.1 MW of electricity. The control dam and generating station are on the same location but the generating station has a separate fore-bay and tailrace, the tailrace is approximately 600 m long to the point where it joins the river channel. Trash racks surround the fore-bay.

The control dam consists of one electrically operated sluice gate, one log chute and ten stoplog sluiceways. The electrically operated sluice gate is remotely operated from the Peterborough Water Treatment Plant located a short distance upstream.

## 6.0 Resource Values and Issues

### 6.1 Value Identification

#### *Economic Values:*

- The on-site generation of hydroelectricity.
- The generation of hydroelectricity at a generating station upstream of the facility, Auburn Generating Station.
- Downstream there is a small watercraft (canoe, kayak) rental facility, municipal marina and waterfront park.

#### *Social Values:*

- The popular recreational Rotary Greenway Trail and Park is on the east shore immediately adjacent to the London Street Generating Station.
- Immediately upstream of the dam and generating station is the London Street foot bridge. The footbridge links the downtown area with the recreational trail and provides access across the Otonabee River for pedestrians.
- The river both upstream and downstream is used for recreation, including swimming, fishing, canoeing, kayaking and nature appreciation.
- The shores both upstream and downstream are lined with permanent residences.
- Daily water flows are provided by Trent-Severn Waterway (TSW) to assist in maintaining navigational requirements.

#### *Environmental Values:*

- The Otonabee River is part of a major drainage system. Water quantity and quality are important to all resource users in the large system.
- The Otonabee River supports a diverse warm water fishery. White sucker, brown bullhead, common carp, spottail shiner, bluntnose minnow, golden shiner, banded killifish, rock bass, pumpkinseed, bluegill, longear sunfish, smallmouth bass, largemouth bass, walleye, muskellunge, logperch and mottled sculpin are all known to be present in the river between Nassau Dam and Little Lake.
- The minimum low flow discharge for navigational purposes also supports downstream fisheries.

### 6.2 Issue Identification

Potential environmental, social or economic issues associated with the operation of the London Street Generating Station pertaining to flows and levels:

- Dewatering of the river channel between the toe of the dam and the end of the tailrace during periods of low flow, due to water being diverted to the generating station. Dewatering of the stream channel has the potential to strand fish, however the operator indicated that water is passed through the eastern sluiceway in order to flush potentially stranded fish back into the main channel.

- Peterborough District files indicate a fish kill, presumed due to receding water, occurred on the Otonabee River downstream of the London Street Dam, May 25<sup>th</sup> 1981. No fish kills have been documented since this time.
- Communication among dam and hydropower operators on this reach of the Otonabee River is very important to maintaining appropriate flows and levels. Communication of information about adjustments to upstream and downstream operators will maximize social and economic benefits for all operators.

Additional concerns exist regarding the potential effects of current operations on fisheries resources and water level fluctuations. Data to support or refute these concerns is currently unavailable, and the collection of these data has been identified as information gaps to be filled during the term of the WMP (see Section 10.0).

## **7.0 Current Operations**

### **7.1 Seasonal operations with respect to water levels and dam settings, hydro power and low flow requirements**

The London Street Generating Station does not require a seasonal operation plan with respect to water levels and flows. However, the London Street Generating Station is operated to maintain an upstream water level between 200.10 m to 200.41 m, a difference of 0.31 m or 31 cm. The facility representative indicated that the water levels within this range can vary daily depending on flow requirements from the TSW. Operational procedures are outlined in the Operating Manual, select sections of which have been included in Appendix D.

TSW dictates the required minimum flows daily to maintain water levels along navigation routes. Normally this minimum is 17 m<sup>3</sup>/s, but can be increased if required to maintain downstream navigation. The London Street Generating Station relies on the TSW's direction to set daily flows and pass the required flow through adjustments in operations of the hydropower facility and/or the control dam.

### **7.2 Recording methods**

The river level on the upstream side of the dam is monitored continuously by the facility operator and therefore any flow fluctuations affecting the river level would be corrected for immediately by the facility operator. River levels are monitored and recorded on a SCADA (Supervisory Control and Data Acquisition) system located at the Water Treatment Plant. The data is digitally stored and graphed in hard copy daily.

## **8.0 Dam and Hydropower Facility Zone of Influence**

The London Street Generating Station is connected with the control dam at that site, which is operated with the purpose of supporting the operation of the generating station; both the generating station and dam are owned and operated by Peterborough Utilities Inc.

The zone of influence associated with the dam and generating station (Appendix E), includes the upstream portion of the Otonabee River to the Auburn Generating Station. The influence of an ice build-up or other reason for a significant water level rise, at the London Street facility can cause problems at the Auburn Generating Station by causing the water to rise above the sill level and potentially flood the generating station.

The zone of influence also includes the downstream portion of the Otonabee River to the area upstream of the Hunter Street Bridge. The segregated tailrace and the adjacent river channel, immediately below the dam to where it meets the toe of the tailrace, are directly influenced by the operations of the generating station.

The London Street Generating Station and control dam are within a group of four dams and generating stations within close proximity and within the Peterborough City limits. The operation of each facility concerning flows and levels can influence the operations of the other facilities within this grouping.

## **9.0 Current Operations Versus Plan Objectives**

The London Street Generating Station has incorporated the social, environmental and recreational objectives into its operations and monitors water levels and flows continuously.

## **10.0 Information Gaps, Priorities and Program**

- Fisheries assessments on the section of the Otonabee River above and below the dam to determine potential impacts of the operation of the facility are currently not available.
- OMNR staff have observed changes in water levels along the Otonabee River, and have received inquiries from the public regarding the implications of these fluctuations on fisheries resources. The current operating regime suggests that the facility is capable of causing 31 cm fluctuations in upstream water levels, and that the implications of these fluctuations on fisheries resources is not fully understood. Examination of how current operations affect these fluctuations, and alternatives to minimize them during critical spawning and incubation periods, should be done during the term of the Water Management Plan.
- An effective communication program between all operators on this section of the Otonabee River should be developed in order to allow operators to anticipate

necessary adjustments and maximize power production under the approved operating levels and to minimize adverse environmental impacts.

### **11.0 Recommended Site Classification and Rationale**

The Steering Committee recommends that the London Street Generating Station be classified as a Category “A” Water Management Plan.

Category “A” facilities are those facilities that can control water levels and flows but are without issues that can be mitigated through a change in the hydro facility operations.

Although the London Street Generating Station can exert control of upstream water levels and vary discharge significantly, there are currently no identifiable issues that could be mitigated through a change in the water facility operations. Should additional information arise from future information and assessments to warrant a review of the facility operations, then a plan amendment would be undertaken to assess any effects on identified resource values and any potential changes in operations that would achieve a net environmental, social and economic benefit.



**Appendix A – Terms of Reference, London Street Generating Station**

**Water Management Planning**

**Terms of Reference**

**London Street Generating Station**

**Prepared by:  
Steering Committee**

**September 2004**

## Approval Sheet

**Subject:**     **Terms of Reference**  
                  **London Street Generating Station Water Management Plan**

**APPROVED:**    ORIGINAL SIGNED BY \_\_\_\_\_ Date: January 11, 2005  
                      Lois Deacon  
                      District Manager  
                      Ministry of Natural Resources  
                      Peterborough District

## **1.0 Terms of Reference**

### **1.1 Introduction**

The purpose of the terms of reference document is to provide a description of the London Street Generating Station and the Otonabee River watershed. The terms of reference is also intended to identify the goals and principles of the water management planning process as they are identified in the Ontario Ministry of Natural Resources (OMNR), Water Management Planning Guidelines for Waterpower, 2002. The members of the steering committee, and their respective responsibilities during the water management planning process are also identified.

#### **1.1.1 Brief description of river and geographic setting**

The London Street Generating Station is located on the Otonabee River within the City of Peterborough, at the east end of London Street. The land use in the area is a mixture of urban residential, recreational, and industrial.

The Otonabee River is located in the Great Lakes St. Lawrence Lowland bedrock unit. This consists of sedimentary rocks, primarily limestone and shale. Limestone bedrock is largely covered by a veneer of glacial deposits with some outcrops. Surficial geology is characterized by drumlinized till, this reach of the Otonabee River is within the Otonabee glacially spillway; which has coarse gravels.

The Otonabee River is part of the Trent-Severn Waterway (TSW), a federally managed National Historic Site of Canada. The London Street Generating Station is located on a section of the Otonabee River, from Nassau Dam downstream to the north side of the Hunter Street Bridge in the City of Peterborough, which is under provincial jurisdiction. Upstream, at the Nassau Dam, the Otonabee River splits into two channels. The Trent Canal is the eastern channel and is the established route for boat navigation through Peterborough. The dams and generating stations are on the western channel.

#### **1.1.2 Brief description of waterpower companies and the facilities and dams they operate**

The London Street Generating Station is owned and operated by the Peterborough Utilities Inc (PUI), a subsidiary of the City of Peterborough Holdings Inc. PUI is part of the Peterborough Utilities Group which also includes Peterborough Utilities Services Inc., and Peterborough Distribution Inc.

#### **1.1.3 Brief description of adjacent dam owners and facilities**

The control dam, owned by PUI, is located at the same site as the London Street Generating Station and is operated by the Peterborough Utilities Services Inc. The

control dam is operated for the purpose of supporting the generating station and managing water levels and flows for the TSW.

The Auburn Generating Station and dam, owned and operated by Evergreen Energy Ontario Power Generation is located 1.1 km upstream of the London Street Generating Station. Downstream of the London Street Generating Station is Little Lake and Lock #19 of the TSW.

#### 1.1.4 Brief description of the management of water levels and flows

Flow information has been recorded on the Otonabee River since the 1920's, where flow has ranged from a minimum of 9.2 cubic metres per second ( $\text{m}^3/\text{s}$ ) to a maximum of 445  $\text{m}^3/\text{s}$ . Stream gauges are located adjacent to the dam in Lakefield, immediately below the origin of the Trent Canal above the Nassau Dam, and downstream at Lock 19. Normally 16  $\text{m}^3/\text{s}$  is the annual minimum flow, while 300  $\text{m}^3/\text{s}$  is the average maximum annual flow. August is typically the lowest flow month and April is typically the highest flow month.

Parks Canada, who manages the TSW, provides facilities along this section of the Otonabee River, including the Water Street Pumphouse, with a target minimum flow of 17  $\text{m}^3/\text{s}$ . This flow or greater is determined based on water level conditions throughout the TSW, and is communicated regularly to the dam and hydropower facilities. Flows entering each facility are dictated by the TSW, and thus flows into the facility are not determined by the operator. TSW is managed for the purposes of navigation and although this area is not part of the navigational route it assists in maintaining the flows and levels in the Canal part of the system. Due to the numerous contributing factors and unpredictable nature of the system it is difficult to have a consistent operating plan for the water levels and flows. There are no legal requirements from TSW as to how the target minimum flows are maintained by the operator; flow can be through the control dam, generating station, or both.

The control dam at the London Street Generating Station is operated for the purpose of supporting the generation of hydroelectricity. Water in excess of what is able to run through the generating station is routed through the dam; in contrast the dam is completely closed if there is only sufficient water for the generating station. The facility has very little ability to hold back water.

#### 1.2 Plan goal and principles

It is the intent of this Water Management Plan (WMP) to follow the goals and principles set out in the Ontario Ministry of Natural Resources (OMNR), Water Management Planning Guidelines for Waterpower, 2002.

##### 1.2.1 Goals

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.

### 1.2.2 Principles

The following principles will guide planning through the preparation, review, approval and implementation of a water management plan.

- Maximum net benefit to society
- Riverine ecosystem sustainability
- Planning based on best available information
- Thorough assessment of options
- Adaptive management
- Timely implementation of study findings
- Aboriginal and treaty rights
- Public participation

A more detailed description of these principles is available in the OMNR, Water Management Planning Guidelines, 2002 page 13.

### 1.3 Steering Committee

#### Committee Member #1

Name: Jeff Guilbeault, Vice-President Electric Utility Services

Representing: Peterborough Utilities Inc. (Owner)

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#### Committee Member #2

Name: Dan Taillon, Biologist

Representing: Ontario Ministry of Natural Resources (MNR)

Contact Information:

Peterborough District

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Peterborough, ON K9J 8M5

Tel: (705) 755-3112

Fax: (705) 755-3125

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#### 1.4 Roles and Responsibilities

The steering committee will have the overall responsibility for ensuring the Water Management Plan is prepared in accordance with the Waterpower Water management Planning Guidelines for Waterpower, 2002. Using consensus, the steering committee will investigate the need to expand the steering committee following the scoping report. This is primarily based on the need to consult with additional resource users directly connected with any issues to be explored in the Options Development stage. The steering committee will agree on the extent of the public consultation process upon completion of the draft Water Management Plan. As a minimum to the public consultation process, the draft Water Management Plan will be posted on the Environmental Bill of Rights Registry

The proponent, PUI, is responsible for documenting the dam and hydropower facility operations and preparing the Water Management Plan. The steering committee provides direction and support, where needed.

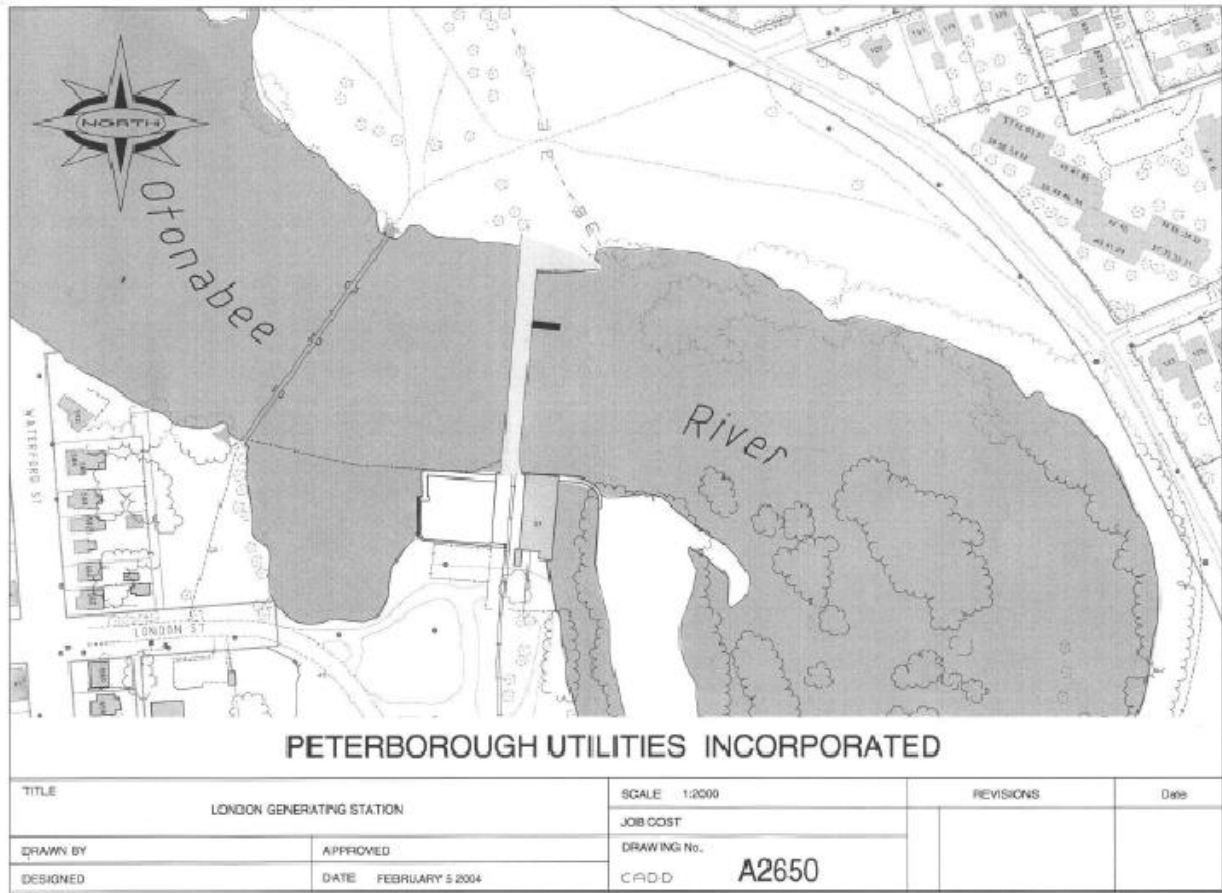
The OMNR is responsible for:

- Preparing the Scoping Report;
- Posting the Water Management Plan on the Environmental Bill of Rights Registry, as part of the public consultation process;
- Producing the Notice of Intention to Make an Order and the Order in the matter of the Lakes and Rivers Improvement Act and in the matter of preparation of a management plan for a hydroelectric facility on a small river;
- Reviewing and approving the Scoping Report, and Water Management Plan.

Appendix B– Otonabee River Watershed (scale 1:170,000)



**Appendix C – London Street Generating Station Site Plan**





**Appendix D - Excerpt from Operating & Maintenance Manual for Water Treatment Plant, September 2004**

**river levels at water street pumphouse and london street generating station**

The head pond level at the Water Street Pumphouse is measured between 677 and 682 feet above sea level. There is a **high** alarm at 680 feet and a **low** alarm at 679 feet.

The level and alarms are monitored at the Water Treatment Plant, by the Operator using the SCADA system, 24 hours a day, 365 days a year. The Operator has a daily river water level graph he can refer to. A bar graph appears on SCADA for the headwater, tail water, inside the racks and the East Pumphouse levels for the Water Street Pumphouse. The head pond level also appears on every screen as a level that will be the colour **RED** if it is in alarm state.

The Operator is trying to maintain the head pond level between 679 feet (40%) and 680 feet (60%) by starting and stopping generators when all the logs are in the dam or by requesting that log changes be made as needed.

The logs can be removed/replaced in gains 1, 2, 5, 6 and 7. The top log at the Water Street Pumphouse is equal to 1.5 m<sup>3</sup>/s, the second log equals 4 m<sup>3</sup>/s, the third and fourth log are equal to 7 m<sup>3</sup>/s each and the rest of the logs are equal to 10 m<sup>3</sup>/s each.

Any changes that are made at the Water Street Pumphouse are communicated to Ontario Power Generation and the London Street Generating Station.

The tail water gauge at the Water Street Pumphouse has a range of 666 feet to 671 feet above sea level. There is a **high** alarm at 671 feet and a **low** alarm at 667 feet. This level is controlled by Ontario Power Generation from Barrie by making changes at the Auburn Generating Station. The Water Treatment Plant Operator will try to maintain the level at about 668 feet (40%) by requesting changes be made at Auburn. Ontario Power Generation will be contacted when the levels are in alarm to request action be taken to remove the alarm condition and/or to find out why the condition exists.

There are two additional water level gauges at the Water Street Pumphouse that can be used as backup for the river water gauges. One gauge is inside the racks in the East Pumphouse and the other is inside the racks in the West Pumphouse in the area of #3 generator. They are used primarily for trash rack differential at times when ice or leaves are collecting on the racks. They can also be used as head pond level gauges if the others fail. They have been set up and calibrated to act as a backup.

The levels at the London Street Generating Station are monitored by the Water Treatment Plant Operator using a SCADA system 24 hours a day, 365 days a year. The level gauge works between 653 feet and 659 feet above sea level. The head pond level is graphed on a continuous basis and there is a **low** and **high** alarm.

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In the summer, while work is being done in the turbine pits (July, August, September), the head pond is maintained at 656.6 feet and the rest of the year the level is at 657.0 feet. There is a **high** alarm at 658 feet and there are two **low** alarms with the first low alarm being at 656 feet and the second low alarm being at 655.5 feet.

The Operator can maintain the head pond level by raising or lowering the generators, opening or closing the gate and by requesting log changes. There is a chart available in the London Street Generating Station office showing the m<sup>3</sup>/s equivalent for each log in the dam by location in the gains. Any flow change is passed on to the lockmaster at Trent Severn Lock #19 as they happen.

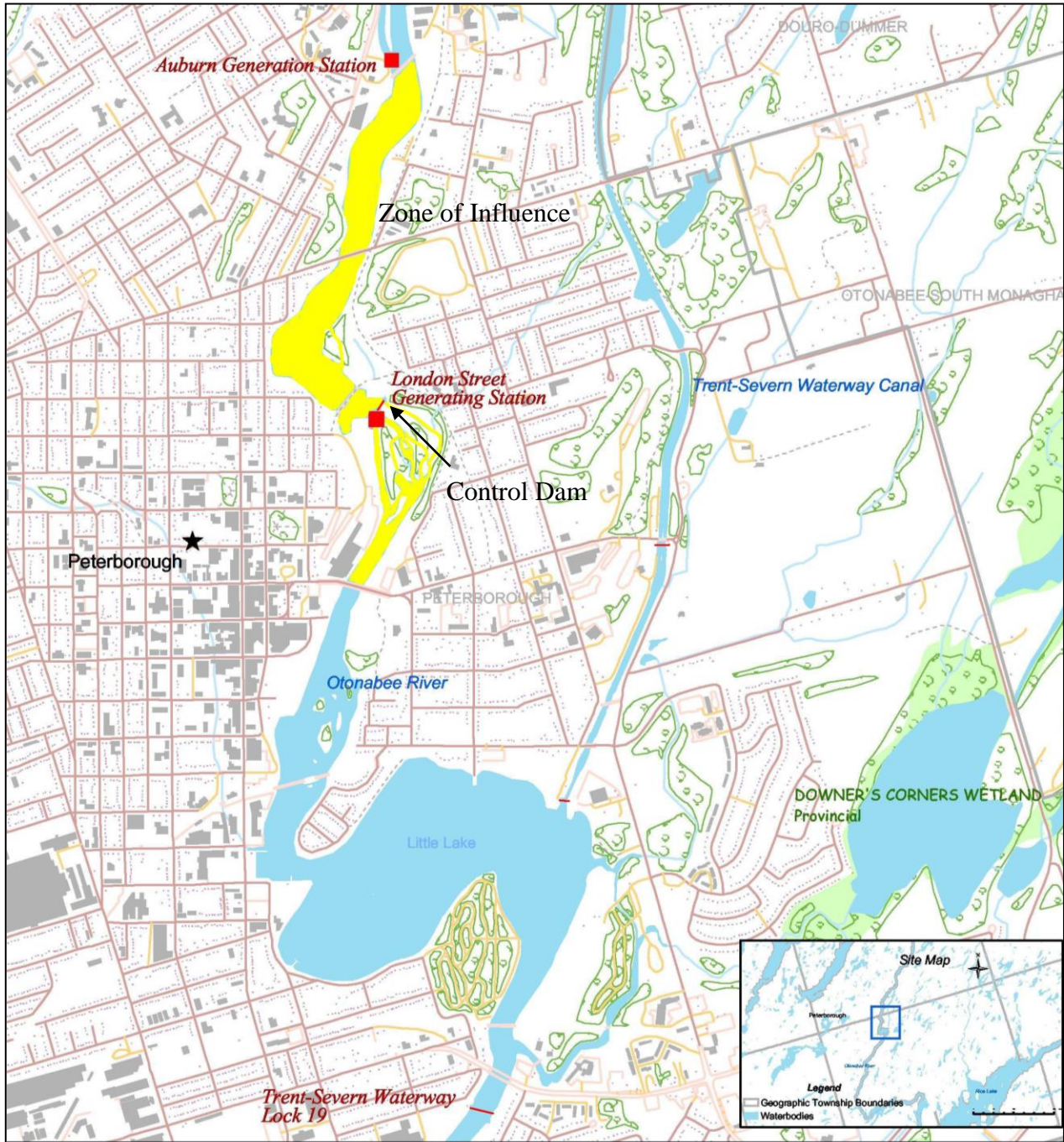
When ice builds up on the racks at the Water Street Pumphouse or London Street Generating Station, the generators and pumps can be shut down remotely and staff is sent to either or both locations to try and remove the ice or pull logs to maintain the river water flow.

The intake level at the Water Treatment Plant is also monitored across a range of 0-3.6 meters. The **high** alarm is set at 3.6 meters and the **low** alarm is at 1.5 meters. This is used as a backup to the pumphouse river water gauge with 2.87 meters being equivalent to 677 feet above sea level and 3.6 meters being the equivalent to 681.2 feet above sea level.

### **Contingency Plan**

At both locations, the river levels and flows can be maintained by adjusting the output from generators or by making log changes. The Water Treatment Plant Operator can also call out staff as needed to make the necessary change or to handle emergency situations.

**Appendix E– London Street Generating Station Zone of Influence**



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|--|--|-----------------|--|
| <ul style="list-style-type: none"> <li><span style="color: red;">■</span> Generating Station</li> <li><span style="border-bottom: 1px solid red; width: 20px; display: inline-block;"></span> Control Dam</li> <li><span style="border-bottom: 1px solid orange; width: 20px; display: inline-block;"></span> Primary Road</li> <li><span style="border-bottom: 1px solid grey; width: 20px; display: inline-block;"></span> Secondary Road</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: grey; margin-right: 5px;"></span> Building</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: lightblue; margin-right: 5px;"></span> Waterbody</li> </ul> |  | <p>1:20,013</p> | <p>Produced by: Ministry of Natural Resources – Peterborough District GIS<br/>                 This map is for illustrative purposes only. Do not consider it a precise indicator of routes, location, nor as a guide to navigation. Data is from the Peterborough District NRVIS database. This map is for working purposes only and not intended for external distribution. This map may also contain errors or omissions<br/>                 Published 2004<br/>                 © Queens Printer of Ontario</p> |
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## **Appendix B**

### **2018 Administrative Amendment Background**

| What is changing?  | Where does this apply?                                      | What does this mean?   |
|--|---|--|
| <p><i>The plan expiry date will be <b>removed</b>.</i></p>   | <p><b>ALL</b> simple water management plans in Ontario.</p> | <ul style="list-style-type: none"> <li>• A ten-year review will no longer occur.</li> <li>• Plans no longer expire.</li> <li>• Plans will now be maintained through the amendment and reporting processes outlined below.</li> </ul>   |
| <p><i>Existing text about amendment processes in water management plans to be <b>removed and replaced with:</b></i></p> <p><b>“Provision for Plan Amendments</b></p> <p><b>Plan Amendments</b></p> <p>In order for the WMP to remain current and to address future issues, the plan may be amended by following the amendment process set out in this section. Any change to the WMP requires an amendment to be submitted to the plan proponents and approved by MNRF. From time to time, new data, information, or issues may arise. MNRF retains the authority to amend a plan at any time, or issue an Order for the plan proponent(s) to amend the WMP.</p> <p><b>The Amendment Process</b></p> <p>Any party (Plan Proponent, MNRF, or 3<sup>rd</sup> Party) with an interest in the WMP may request an amendment to the WMP by bringing forward issues to the attention of the plan proponent(s).</p> <p>An amendment request must be accompanied by sufficient information to allow the proponent(s) to determine whether the proposed amendment should proceed, and whether the amendment should be treated as minor or major. Proponent(s) must apply due diligence when considering proposed amendments.</p> <p>The plan proponent(s) are responsible for:</p> <ul style="list-style-type: none"> <li>• Receiving amendment requests;</li> </ul> | <p><b>ALL</b> simple water management plans in Ontario.</p> | <ul style="list-style-type: none"> <li>• Any change to a WMP requires an amendment.</li> <li>• Plan proponents are now responsible for receiving amendment requests from a third party, and may also propose amendments.</li> <li>• Once the proponent receives an amendment request, they must notify MNRF, assess and process the request based on the listed criteria, and then make a recommendation regarding the amendment to MNRF. Proponents are then responsible for preparing amendment proposals for Ministry review.</li> <li>• All amendments require approval from MNRF.</li> <li>• The Minister retains the authority to amend or order to amend the plan at any time.</li> </ul> |

| What is changing?  | Where does this apply? | What does this mean? |
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| <ul style="list-style-type: none"> <li>• Assessing amendment requests based on criteria outlined in this section;</li> <li>• Proposing amendments to MNRF; and</li> <li>• Preparing amendment proposals for MNRF review</li> </ul> <p>MNRF will review proposed amendments to ensure that plan proponents screen and process amendments consistent with the 2016 Maintaining Water Management Plans Technical Bulletin.</p> <p><i>Types of Amendments</i></p> <p>Changes to the WMP may include simple text corrections to significant modifications to an operating regime. In order to provide flexibility for a range of potential amendment requests, two categories of amendments (minor and major) exist. The categories are mainly differentiated by the expected level of public interest in the proposed change to the WMP.</p> <p>Amendments may be subject to public and First Nations and Métis community engagement or consultation, dependent on the category of amendment (described below), as detailed in Section 3.5 of the Maintaining Water Management Plan Technical Bulletin, 2016.</p> <p><i>Minor Amendments</i></p> <p>Minor amendments are changes that do not affect the operating regime, plan objectives, are not expected to generate a high level of public interest, and are not expected to adversely affect Aboriginal and treaty rights. Minor amendments will not be subject to public and First Nations and Métis community engagement or consultation beyond discussions with a SAC (if applicable). Minor amendments may include:</p> <ul style="list-style-type: none"> <li>• Changes in the presentation of information, factual or text corrections; and/or</li> <li>• Changing a WMP to include a new dam and its associated Operating Plan (Section 2.1 of the Maintaining Water Management Plan Technical Bulletin, 2016)</li> </ul> <p><i>Major Amendments</i></p> |                        |                      |

| What is changing?  | Where does this apply? | What does this mean? |
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| <p>Major amendments are more significant in scale such as: changes to the operating regime or plan objectives, changes that could be expected to generate a high level of public interest or changes that might adversely affect Aboriginal and treaty rights. A major amendment will be subject to public, First Nations, and Métis community engagement or consultation. For major amendments where equivalent consultation and engagement has previously occurred through another process (e.g. previous notification that a change will be required, or amendments required after public consultation in other planning processes), the MNRF may exercise discretion to process the proposed change as a minor amendment on a case by case basis.</p> <p><i>Amendment Request</i></p> <p>Individuals submitting an amendment request shall clearly articulate concerns and potential solutions. Amendment requestors shall participate in good faith opportunities undertaken to obtain Indigenous Communities, public and stakeholder input on proposed major amendments and should consider their ability to contribute towards those engagement opportunities.</p> <p>An amendment request should provide sufficient information to allow plan proponent(s) to determine whether an amendment request should be investigated further. It is the responsibility of the individual(s) requesting the amendment to demonstrate that the request is credible, worthy of consideration and within the scope of the WMP and the LRIA.</p> <p>The amendment request must contain the following information:</p> <ul style="list-style-type: none"> <li>• A description of the changes being requested;</li> <li>• The rationale for the changes being requested;</li> <li>• Results of any pre-consultation completed with potentially affected parties; and</li> <li>• Where changes in operations are proposed, a description of how the proposed operation changes may impact other dams subject to the WMP.</li> </ul> <p>Upon receipt of an amendment request from a third party, the plan proponent(s) will acknowledge receipt of the request in writing to the third party and notify the MNRF</p> |                        |                      |

| What is changing?   | Where does this apply? | What does this mean? |
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| <p>that a request has been received. Where the MNRF receives an amendment request from a third party, the request will be forwarded to the plan proponent(s).</p> <p>Where plan proponent(s) are considering submitting an amendment request to the MNRF, prior consultation with the MNRF, the SAC (if applicable) and other plan proponents may occur.</p> <p>Plan proponents will maintain records for all amendment requests.</p> <p><i>Review of Amendment Request and Categorization of Amendment</i></p> <p>The proponent(s) is responsible for screening amendment requests to determine if the request should proceed through the amendment process, and for categorizing the amendment as minor or major. This determination will ensure the appropriate degree of public consultation for the plan amendment.</p> <p>The assessment will consider the following criteria:</p> <ul style="list-style-type: none"> <li>a) Is the amendment consistent with this Technical Bulletin?</li> <li>b) Is the amendment consistent with the WMP objectives, or does the amendment propose a change to the WMP objectives?</li> <li>c) Is there an alternative method to deal with the request rather than amending the WMP?</li> <li>d) Is the request within the scope of the WMP?</li> <li>e) Is the request related to any ongoing data or effectiveness monitoring commitments?</li> <li>f) Is the request supported by other potentially affected parties?</li> <li>g) Is the amendment required to comply with other regulatory requirements?</li> <li>h) Has the amendment request been considered previously?</li> <li>i) Does the amendment have the potential to negatively affect dam safety/public safety?</li> <li>j) Does the amendment have potential impacts on socio-economic or environmental considerations?</li> </ul> <p>Where an amendment request does not contain sufficient information to complete an</p> |                        |                      |



| What is changing?   | Where does this apply? | What does this mean? |
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| <p>assessment or make a recommendation to MNRF, the plan proponent will return the proposed amendment to the third party with a request for additional information.</p> <p>When a plan proponent(s) has completed the screening of the amendment request, written notification will be provided to MNRF. The notification will include: a summary of the amendment request and supporting rationale, results of the assessment, a recommendation of whether the request should be further considered, and if so, the appropriate category for the amendment.</p> <p><i>Review of Assessment Results</i></p> <p>The MNRF will review the plan proponent’s screening results and will:</p> <ul style="list-style-type: none"> <li>• Agree with the recommendation;</li> <li>• Request additional information; or</li> <li>• Disagree with the recommendation.</li> </ul> <p>Where the plan proponent(s) recommends against proceeding with the amendment request, and the MNRF is in agreement, the plan proponent(s) will notify the requestor of the decision with supporting rationale.</p> <p>Where the MNRF agrees that the amendment request should proceed, the plan proponent(s) will develop and submit the final amendment proposal for MNRF consideration. The plan proponent(s) will undertake any necessary planning, consultation, information gathering or other investigative activities associated with the amendment. Where the amendment is requested by a third party, the third party may be expected to support engagement activities.</p> <p>Where the MNRF disagrees with the recommendation, the MNRF will discuss the proposed amendment with the plan proponent(s). The MNRF may subsequently direct the plan proponent(s) to proceed with consideration of the plan amendment.</p> <p><b>Ordering an Amendment</b></p> <p>When a decision is made to proceed through the plan amendment process, the MNRF</p> |                        |                      |

| What is changing?   | Where does this apply? | What does this mean? |
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| <p>may formalize the decision through the issuance of an Order to prepare an amendment or approve the amendment under the authority of LRIA Section 23.1(6). Plan proponent(s) may also request that the MNRF issue an Order to amend the plan.</p> <p>The MNRF retains the authority to require a plan proponent to undertake a WMP amendment where the plan proponent is unwilling to consider reasonable requests or where there are significant concerns regarding a facility's operation.</p> <p>When MNRF intends to order a plan proponent to amend a plan, the proponent(s) will be provided a notice of intent to issue an Order to amend the plan prior to the issuance of the Order. Upon receipt of a notice of intent to issue an Order to amend a plan, the proponent(s) has 15 days to submit a request for an inquiry to the MNRF. Requests for an inquiry under the LRIA are referred by the MNRF to the Office of the Mining and Lands Commissioner (OMLC). Additional detail regarding appeals to the OMLC is referenced in MNRF's LRIA Administrative Guide and Section 11 of the LRIA.</p> <p><b>Amendment Preparation</b></p> <p>Where the MNRF has determined that a proposed amendment request should proceed, the plan proponent(s) shall prepare the final amendment proposal, including completing consultation activities or information gathering in support of the proposed amendment. Where the amendment is requested by a third party, the third party requester should discuss opportunities for collaboration in preparing the amendment.</p> <p>For minor amendments, the plan proponent(s) must engage the MNRF, other plan proponent(s) and the SAC (if applicable). Public and First Nations and Métis community engagement and consultation requirements for major amendments are described in this plan.</p> <p><i>Consultation and Engagement Requirements for Major Amendments</i></p> <p>Plan proponent(s) and in certain circumstances third party amendment requestors, shall undertake public and First Nations and Métis community engagement and</p> |                        |                      |

| What is changing?   | Where does this apply? | What does this mean? |
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| <p>consultation when developing a major amendment. Specific requirements shall be discussed with the MNRF in advance. The scope of consultation and engagement may vary depending on:</p> <ul style="list-style-type: none"> <li>• Scope and scale of the proposed major amendment;</li> <li>• Level of public, stakeholder and First Nation and Métis community interest in dam operations;</li> <li>• Level of potential impact on Aboriginal and treaty rights;</li> <li>• Potential impacts on other regulatory approvals; and</li> <li>• Potential impacts within the scope of the LRIA and the WMP.</li> </ul> <p>Consultation and engagement approaches may include:</p> <ul style="list-style-type: none"> <li>• Direct written notice;</li> <li>• Open houses;</li> <li>• Information sessions;</li> <li>• Public notice; and/or</li> <li>• Community meetings or workshops/focus groups.</li> </ul> <p>Sufficient opportunity for reasonable engagement shall be provided and information regarding the amendment shall be communicated in concise plain language.</p> <p><i>Consultation and Engagement Requirements Where EA Applies</i></p> <p>In some instances, proposed changes to existing operations of the WMP will be subject to the Environmental Assessment (EA) Act, such as MNRF’s Resource Stewardship and Facility Development Class EA, or the OWA Class EA.</p> <p>In such cases, the EA Act requirements shall be completed in advance of submitting an amendment request. The plan proponent(s) is not required, but may elect, to incorporate WMP amendment considerations during the EA Act process.</p> <p>Where proposed changes are subject to an EA, the proponent may not be required to complete any additional public and First Nations and Métis community engagement and consultation in support of the proposed WMP amendment where sufficient engagement activities have been completed as part of the EA process.</p> |                        |                      |

| What is changing?  | Where does this apply? | What does this mean? |
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| <p>MNRF determination of whether consultation and engagement completed during the EA is sufficient for purposes of a WMP amendment shall be made as part of the Ministry’s assessment of the WMP amendment screening results. Additional consultation and engagement shall not be required, unless the MNRF concludes that the EA consultation was insufficient. In this case, the MNRF will determine the scope and scale of additional consultation and engagement necessary for the purposes of the WMP amendment.</p> <p><b>Amendment Submission</b></p> <p>Following completion of any applicable consultation requirements, the plan proponent(s) will provide the MNRF, other plan proponent(s) where appropriate, and any third party requesters, a copy of the final amendment proposal including:</p> <ul style="list-style-type: none"> <li>a) Amendment request and supporting rationale;</li> <li>b) Proposed changes (replacement text) as they would appear within the approved plan;</li> <li>c) Map of the area affected by the amendment (if applicable);</li> <li>d) Record of consultation identifying the type of form of feedback sought, issues identified and steps taken by the proponent to modify the proposed amendment in response to comments (if applicable); and</li> <li>e) Any other supporting information deemed applicable to the proposed amendment.</li> </ul> <p><b>Amendment Review</b></p> <p>All amendments to the WMP must be approved by the MNRF.</p> <p>The MNRF will complete a review of the amendment submission. For proposed minor amendments, the MNRF will complete a review within 30 days of receipt of a complete submission. For proposed major amendments, MNRF will complete a review within 60 days of receipt of a complete submission.</p> <p>During and/or following the review of the proponent’s amendment submission, the</p> |                        |                      |

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| <p>MNRF may, with supporting rationale, request additional information required to complete the MNRF’s review.</p> <p><i>Requests for Additional Information</i></p> <p>Where additional information is required, the MNRF will identify in writing the additional information requested and the rationale for the request. In such circumstances, the MNRF review timeline will be put on hold until the MNRF receives the requested information.</p> <p>Upon receiving a request for additional information from the MNRF, the proponent may:</p> <ul style="list-style-type: none"> <li>• Agree to provide the additional information by the specified time;</li> <li>• Request a change to the specified time for submitting the information;</li> <li>• Request a review by the Regional Director of the required information; or</li> <li>• Refuse to provide the additional information.</li> </ul> <p>Further details regarding the above scenarios can be found in Section 3.7.1 of the Technical Bulletin (2016).</p> <p><b>Issuance of Decision</b></p> <p>In issuing a decision on the proposed amendment, the MNRF shall either:</p> <ul style="list-style-type: none"> <li>• Approve the amendment;</li> <li>• Approve the amendment subject to changes considered advisable to further the purposes of the Act; or</li> <li>• Refuse the amendment.</li> </ul> <p>MNRF will provide the plan proponent(s) and any third party requester, as appropriate, written confirmation of its decision and supporting rationale.</p> <p>If the amendment is approved, the WMP will be revised and a record of the amendment will be appended to the approved WMP.</p> |                        |                      |

| What is changing?  | Where does this apply?   | What does this mean?  |
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| <p>Where the MNRF intends to refuse an amendment, a Letter of Intent to Refuse approval of the amendment will be issued to the proponent identifying the supporting rationale and any additional measures the proponent(s) can take to address any outstanding concerns. The Letter of Intent to Refuse approval of amendment will notify the proponent that unless the MNRF receives a request within 15 days from the proponent for an inquiry, the amendment will be refused.</p> <p>Requests for an inquiry under the LRIA are referred by the Ministry of the Office of Mining and Lands Commissioner (OMLC). Additional information on appeals to the OMLC is detailed in MNRF’s LRIA Administrative Guide.”</p> |  |   |
| <p><i>Existing text outlining specific requirements for reporting of water flows and levels data to MNRF will be <b>removed and replaced</b> with:</i></p> <p>“Proponents shall make water flow and level data available to the Ministry upon request.”</p>  | <p>Simple water management plan proponents in Ontario <b>that have an existing operating regime only</b> (dams that have an effect on flows/levels).</p> | <ul style="list-style-type: none"> <li>• Existing requirements for data collection and the retention of this data remain in effect.</li> <li>• Proponents no longer have to submit routine flow and level monitoring data on existing schedules, rather they will be submitted upon request by MNRF.</li> <li>• The data that is collected under existing requirements will be communicated through the Implementation Report, as explained further below.</li> </ul>                         |
| <p><i>Incident notification text will be <b>revised</b> to ensure it aligns with the requirements outlined below:</i></p> <p><b>“Self-Monitoring, Data Reporting and Incident Notification</b></p> <p>All facilities are required to self-monitor mandatory water flow and level limits, and report on any incidents where a deviation from the operating requirements of the WMP (mandatory water flow and level), or other mandatory conditions of the WMP. All incidents must be reported to the MNRF.</p>  | <p>Simple water management plan proponents in Ontario <b>that have an existing operating regime only</b> (dams that have an effect on flows/levels).</p> | <ul style="list-style-type: none"> <li>• Proponents must notify MNRF of deviations from the operating regime (flows and levels) within 24 hours of an incident occurring.</li> <li>• Proponents must make MNRF aware of the expected cause and duration of the incident, any remedy the proponent has taken to correct the deviation, and if/when a return to band is expected.</li> <li>• In addition to this initial notification, the proponent must send a follow-up report to</li> </ul> |

| What is changing?  | Where does this apply?   | What does this mean?  |
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| <p>An initial notification to the MNRF is required within 24 hours of the occurrence of the incident or when the proponent(s) first becomes aware of the incident.</p> <p>The report should include:</p> <ul style="list-style-type: none"> <li>• The date, time and nature of the deviation;</li> <li>• The extent of the deviation;</li> <li>• Possible causes of the deviation;</li> <li>• Known or anticipated impacts associated with the deviation; and</li> <li>• Steps taken or to be taken, including the timeframe, to correct the deviation.</li> </ul> <p>The dam owner will maintain and retain records of all level and flow information, and will create and maintain a permanent archive of those records for future reference.</p> <p>The facility owner/operator is then required to provide a written report to the MNRF within 30 days, outlining the details of the incident, any additional information not provided in the incident notification and subsequent remediation.”</p> |  | <p>MNRF that details the incident within 30 days.</p> <ul style="list-style-type: none"> <li>• Many plans already outline similar requirements for incident notification.</li> </ul>  |
| <p><i>Annual compliance text will be revised to ensure it aligns with the requirements outlined below:</i></p> <p><b>“Annual Compliance Reports</b></p> <p>The plan proponent will prepare and submit an Annual Compliance Report. The report will contain a summary and description of all incidents and any remedial action(s) proposed or undertaken. In the event there were no recorded incidents of noncompliance, the report will state as such.”</p>   | <p>Simple water management plan proponents in Ontario <b>that have an existing operating regime only</b> (dams that have an effect on flows/levels).</p> | <ul style="list-style-type: none"> <li>• Proponents will submit an annual signed compliance report to MNRF that outlines any incidents (deviances from the operating regime flows/levels) in the past year, if any.</li> <li>• Many plans already outline similar requirements for compliance reporting.</li> </ul> |
| <p><i>The following statement will be added to existing data collection and/or effectiveness monitoring sections:</i></p> <p>“Reporting on the results of data collection and/or effectiveness monitoring programs will occur through submission of the Implementation Report, as outlined in Section XX.”</p>   | <p>Simple water management plan proponents in Ontario <b>that have an existing operating regime only</b> (dams that have an effect on flows/levels).</p> | <ul style="list-style-type: none"> <li>• Where they exist, data collection and effectiveness monitoring requirements continue to apply.</li> <li>• Proponents will report on collected data and the status of the effectiveness monitoring program through the Implementation Report,</li> </ul>                    |

| What is changing?   | Where does this apply?  | What does this mean?   |
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| <p><i>A section will be <b>added</b> to introduce the new requirement for the implementation report as below. Note that MNRF is working to confirm a schedule for submission of these reports; final dates will be amended into the plan.</i></p> <p><b>“Implementation Reporting</b></p> <p>Plan proponents for the WMP shall submit an Implementation Report to the MNRF every five years. This report shall be a collective submission from all plan proponents.</p> <p>The Implementation Report will provide status updates, transparency of dam operations and inform adaptive management considerations. The Implementation Report is not intended to initiate a fundamental review of the WMP.</p> <p>The Implementation Report will include:</p> <ul style="list-style-type: none"> <li>• Summary of all amendment requests received, including the rationale for completed amendments and how proposed amendments that did not proceed were addressed;</li> <li>• Status of the Standing Advisory Committee, where applicable;</li> <li>• Report on the results of the effectiveness monitoring program (EMP), if applicable, including a summary of monitoring conducted and findings, a determination of whether operations are having a negative or unintended impact, and an assessment of whether revisions to the facility operations, or the EMP, are required; and</li> <li>• Status and results of any data or information collection outlined in the WMP’s data collection program, if applicable, and a determination of whether revisions to the program are required.</li> </ul> <p>The MNRF will review the report for completeness but will not formally approve the report. If the report is not complete, the MNRF will request that additional information be provided. The MNRF may also audit records used by the proponent(s) to prepare</p> | <p><b>ALL</b> simple water management plan proponents in Ontario.</p> | <p>as outlined below.</p> <ul style="list-style-type: none"> <li>• Proponents are responsible for submitting an Implementation Report every five (5) years.</li> <li>• The initial Implementation Report will be due between 1 to 3 years from the March 31<sup>st</sup>, 2018 expiry date of the WMP. MNRF continues to work with the Ontario Waterpower Association to finalize these dates. The initial Implementation Report submission date for your WMP will be included in the final amendment to your plan.</li> <li>• <b>Please contact Mike Poskin, Regional Renewable Energy Coordinator, with any questions regarding this date at <a href="mailto:mike.poskin@ontario.ca">mike.poskin@ontario.ca</a> or (705) 755-1362.</b></li> <li>• The implementation report may include a summary of any amendment requests received, a status update on the Standing Advisory Committee (if one exists), the status of the Effectiveness Monitoring Program, and a report on any flow and level data collected by proponents (if applicable).</li> <li>• MNRF will review the reports, may audit the records and/or request other information used to make the report.</li> <li>• Once completed and reviewed by MNRF, proponents should make the implementation</li> </ul> |



| <b>What is changing?</b>  | <b>Where does this apply?</b> | <b>What does this mean?</b>            |
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| <p>the Implementation Report and may request any additional information to verify the information presented.</p> <p>Upon confirmation from the MNRF that the Implementation Report is complete, plan proponents will make the report publicly available.”</p> |                               | <p>report available to the public.</p> |