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McGhee-Krizsan Engineering Limited

# **PETERBOROUGH UTILITIES COMMISSION**

# WATER STREET PUMPHOUSE

WATER MANAGEMENT PLAN IMPLEMENTATION REPORT FOR PERIOD APRIL 2019 THROUGH APRIL 2024

# FOR SUBMISSION TO: MINISTRY OF NATURAL RESOURCES AND FORESTRY

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#### McGhee-Krizsan Engineering Limited

April 30, 2024

Ministry of Natural Resources and Forestry Peterborough District Office, Southern Region 300 Water Street, Peterborough, ON K9J 8M5 (Submitted by email to Jeffrey.Simkins2@ontario.ca)

Attention: Mr. Jeffrey Simpkins, A/IRM Technical Specialist – Peterborough Bancroft District

Dear Mr. Simpkins:

#### RE: WATER STREET PUMPHOUSE, WATER MANAGEMENT PLAN IMPLEMENTATION REPORT FOR THE PERIOD APRIL 2019 THROUGH APRIL 2024

Please find attached a copy of the Implementation Report for the *Water Management Plan for Waterpower for the Water Street Pumphouse on the Otonabee River* (WMP) for the period April 2019 through April 2024. MKE is submitting this report to MNRF on behalf of the Owner, Peterborough Utilities Commission to fulfill the requirements of Section 8.0 of the Amended WMP.

Please do not hesitate to contact the undersigned at <u>kmcghee@m-k-e.ca</u> or 905-331-9692 if you have any questions regarding this report or require any additional information.

Yours truly,

MKE Limited

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Karen McGhee, P.Eng. President

c.c. Patricia Skopelianos, PUG Service Corp. (via email)

C:\Karen\Peterborough Utilities\Water Street Pumphouse\WMP\2024-04-30 WSPH WMP Implementation Report.docx

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#### PETERBOROUGH UTILITIES COMMISSION

## WATER STREET PUMPHOUSE WATER MANAGEMENT PLAN IMPLEMENTATION REPORT FOR PERIOD APRIL 2019 THROUGH APRIL 2024

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# 1.0 INTRODUCTION

The Water Management Plan for Waterpower, Water Street Pumphouse on the Otonabee River (WMP) was prepared and issued in March 2005 to follow the goals and principles set out in the Ministry of Natural Resources and Forestry's (MNRF) Water Management Planning Guidelines for Waterpower (MNRF, 2002). The WMP was subsequently amended in 2018 to align with MNRF's Maintaining Water Management Plan Technical Bulletin (MNRF, 2016) that replaced the earlier 2002 guidelines. The amendment included a requirement for the owner to prepare Implementation Reports every five years.

The following Implementation Report was prepared to provide plan proponents, MNRF, and interested parties with a status update on the WMP, greater transparency of dam operations, and to help inform adaptive management considerations. The period covered is April 2019 through April 2024. It is not intended to initiate a fundamental review of the WMP.

The WMP is categorized as a "Simplified WMP", as such, there was no Standing Advisory Committee appointed to the WMP. A Simplified WMP is defined by MNRF as follows:

"Plans prepared for a river section based on limited control over water flows and levels by waterpower facilities and water control structures, with few issues to resolve."



# 2.0 SUMMARY OF AMENDMENT REQUESTS RECEIVED

#### 2.1 Amendments Completed

No amendments to the WMP were completed during the period April 2019 through April 2024.

#### 2.2 Other Amendment Requests Received

No amendment requests were received or presented by Peterborough Utilities Commission (PUC) or MNRF during this period.

### 3.0 STATUS OF THE STANDING ADVISORY COMMITTEE

There has been no Standing Advisory Committee assigned to this WMP.

## 4.0 EFFECTIVE MONITORING PROGRAM (EMP)

No effective monitoring program (EMP) was established for the Water Street Pumphouse in the WMP. The daily water flow requirements continue to be provided by Parks Canada's Trent Severn Waterway to assist with maintaining navigational requirements and to provide sufficient water for the operation of the Water Treatment Plant and support downstream fisheries. The only identified resource values associated with the waterpower facility are the economic benefits associated with the generation of the hydropower and the mitigation of river flows and levels.

During the reporting period for this Implementation Report, the facility consistently:

- generated power based on the availability of the water provided to it for generation, with the exception of periods for required maintenance;
- sold that electricity for use on the provincial grid;
- consistently communicated adjustments of flows and levels to upstream and downstream operators; and
- mitigated river flows and levels, thereby reducing the severity of fluctuations.

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# 5.0 STATUS OF ANY DATA OR INFORMATION COLLECTION

The WMP lists a number of information gaps to be filled using a cooperative approach with the MNRF. The following sections provide a status of the WMP recommendations for data collection listed in *italics*.

### 5.1 Data and Information Commitments Completed During This Period

1. 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.):

MNRF has shifted from specific area monitoring to fisheries management at the landscape level since development of the WMP. The Ministry undertakes routine monitoring within Fisheries Management Zone 17 (FMZ 17), which contains the Kawartha Lakes, to assess species presence/absence, relative abundance, and biological characteristics. Due to connectivity of these lakes by way of the Trent-Severn Waterway (TSW), information collected in the lakes supports the sections of waterway between them.

2. 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:

Walleye are the highest priority for fisheries management planning within FMZ 17. MNRF regularly communicates with the dam owner pre-spawn, during the spawn, and post-spawn through to the anticipated hatch for dams that are considered priority walleye spawning areas. There has also been a Walleye Watch monitoring program implemented to verify important spawning habitat, estimate the number of walleye using the site, and identify the quality of the habitat present at these priority areas. The Water Street Pumphouse is not considered a priority walleye spawning area, and therefore no specific monitoring or communication related to walleye spawning has been required.

### 5.2 Pending Data or Information Collection Commitments

1. Characteristics of the dam and hydropower facility operations including inflows, outflows, headpond and tailrace levels, and how these change through the spawning and incubation periods:

Inflows, outflows, and water levels have been recorded through the period of this report. However, since the Water Street Pumphouse is not considered to be a priority walleye spawning area (as outlined in Section 5.1), no study has been completed to investigate changes through spawning and incubation.



2. A description of the physical attributes of the known and/or suitable spawning sites:

Since the dam at the Water Street Pumphouse is not considered a priority walleye spawning area, no specific monitoring related to physical attributes of the site has been conducted.

An amendment to the WMP may be considered by the Ministry in the future to update it to align with the province's modernized landscape-level approach to fisheries management.