



Deer Lake First Nation – Shoulderblade Falls Water Management Plan Implementation Report 2024

Submitted To:

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REVISION HISTORY

Revision #	Description of Revision	Prepared by	Approved By	Date
0	Submitted to MNRF for Review and Filing	K. Leonard	J. Supinski	December, 2024



EXECUTIVE SUMMARY

Dear Mr. Cassidy,

Please find below the second 5-year Implementation Report for the Shoulderblade Falls Mini-Hydroelectric Generating Station. The first Implementation Report was sent in 2019. This report has been prepared and submitted in accordance with Section 6.0 of the technical bulletin '[Maintaining Water Management Plans](#)' (MNRF, 2016).

If there are any question or concerns regarding the report, or any information contained within, please feel free to contact myself at 807-474-1769 or at keith.leonard@hydroone.com.

Sincerely,

Keith Leonard, P.Eng
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1.0 INTRODUCTION

In adherence with the technical bulletin '[Maintaining Water Management Plans](#)' (MNRF, 2016), this document serves as the second 5-year Implementation Report for the Shoulderblade Falls Water Management Plan (**WMP**).

The Shoulderblade Falls Mini-Hydroelectric Generation Station (**HGS**) is a 490kW mini-hydroelectric generation station, located on the Severn River, Northeast of the remote community of Deer Lake First Nation. The generating station and associated distribution line are owned and operated by Hydro One Remote Communities Inc. (**HORCI**).

The original Shoulderblade Falls WMP was submitted in 2005, and a revised WMP was submitted in 2012. The expiry date for the revised WMP was removed by the MNRF through Amendment 2017-1 in 2017. The first 5-year Implementation Report was submitted in 2019. This second 5-year Implementation Report is submitted prior to December 31, 2024 as per Section 6.0 of the technical bulletin.

This Implementation Report contain a summary of:

- All amendment request received.
- Status update on the Standing Advisory Committee.
- Report on the results of the Effectiveness Monitoring Program (**EMP**).
- Report on any data/information collected as outlined in the WMP.



2.0 Amendment Requests

Section 2.0 contains a summary of each amendment received for the Shoulderblade Falls WMP.

2.1 Amendment 2017-1

Date Received:	July 25, 2017
Date Enacted:	August 15, 2017
Title:	Alignment with Lakes and River Act Technical Bulletin entitled 'Maintaining Water Management Plans'
Amendment Type:	Administrative
Requested By:	MNRF
Description:	This amendment removes the WMP expiry date of December 31, 2017.
Rationale:	With the replacement of 'Water Management Planning Guidelines for Waterpower' (2002) with 'Maintaining Water Management Plans' Technical Bulletin (2016), changes must be made to WMPs planned using the redacted document.
Consultation:	There is no consultation required for administrative amendments.



2.2 Amendment 2017-2

Date Received:	July 25, 2017
Date Enacted:	August 15, 2017
Title:	Alignment with Lakes and River Act Technical Bulletin entitled 'Maintaining Water Management Plans'
Amendment Type:	Administrative
Requested By:	MNRF
Description:	This amendment clarifies the requirements for compliance self-reporting and removes the 10-year review and renewal requirements.
Rationale:	With the replacement of 'Water Management Planning Guidelines for Waterpower' (2002) with 'Maintaining Water Management Plans' Technical Bulletin (2016), changes must be made to WMPs planned using the redacted document.
Consultation:	There is no consultation required for administrative amendments.

3.0 Standing Advisory Committee

As the Shoulderblade Falls WMP is categorized as Simplified, there is no Standing Advisory Committee.

HORCI does however hold an annual meeting with Deer Lake First Nation. These meetings serve as a way for the community to remain informed about station performance, maintenance, fuel savings, the WMP, and other aspects of the site and station operations. These meetings also provide a forum where community members can participate in an open discussion about the facility and raise any questions or concerns.

4.0 Effectiveness Monitoring Program (EMP)

As outlined in the WMP, there is no EMP at the Shoulderblade Falls HGS. This HGS has no control over water levels or flows in the Severn River beyond the immediate station area.



5.0 Compliance Monitoring

As outlined in the WMP, there is no EMP at the Shoulderblade Falls HGS. This HGS has no control over water levels or flows in the Severn River beyond the immediate station area. As such, river flow monitoring is not required to comply with the WMP.

HORCI does collect and record station output as well as headwater and tailwater level in the immediate vicinity of the HGS using our Supervisory Control and Data Acquisition (**SCADA**) system. This data can be available upon request. As an example, the HGS Daily Production for 2023 is shown in **Figure 1** and the Headwater/Tailwater level for the HGS in 2023 is shown in **Figure 2**.

In April 2024, the Deer Lake First Nation community was connected to the overall power grid through the Wataynikaneyap Power transmission line. Since then, the Shoulderblade Falls HGS was dewatered and is offline. HORCI is currently in discussions with the Ontario Energy Board (**OEB**) to determine the next steps to re-energize the Shoulderblade Falls HGS and connect it to the overall power grid. HORCI estimates that the HGS will be re-energized in Q2 2025.

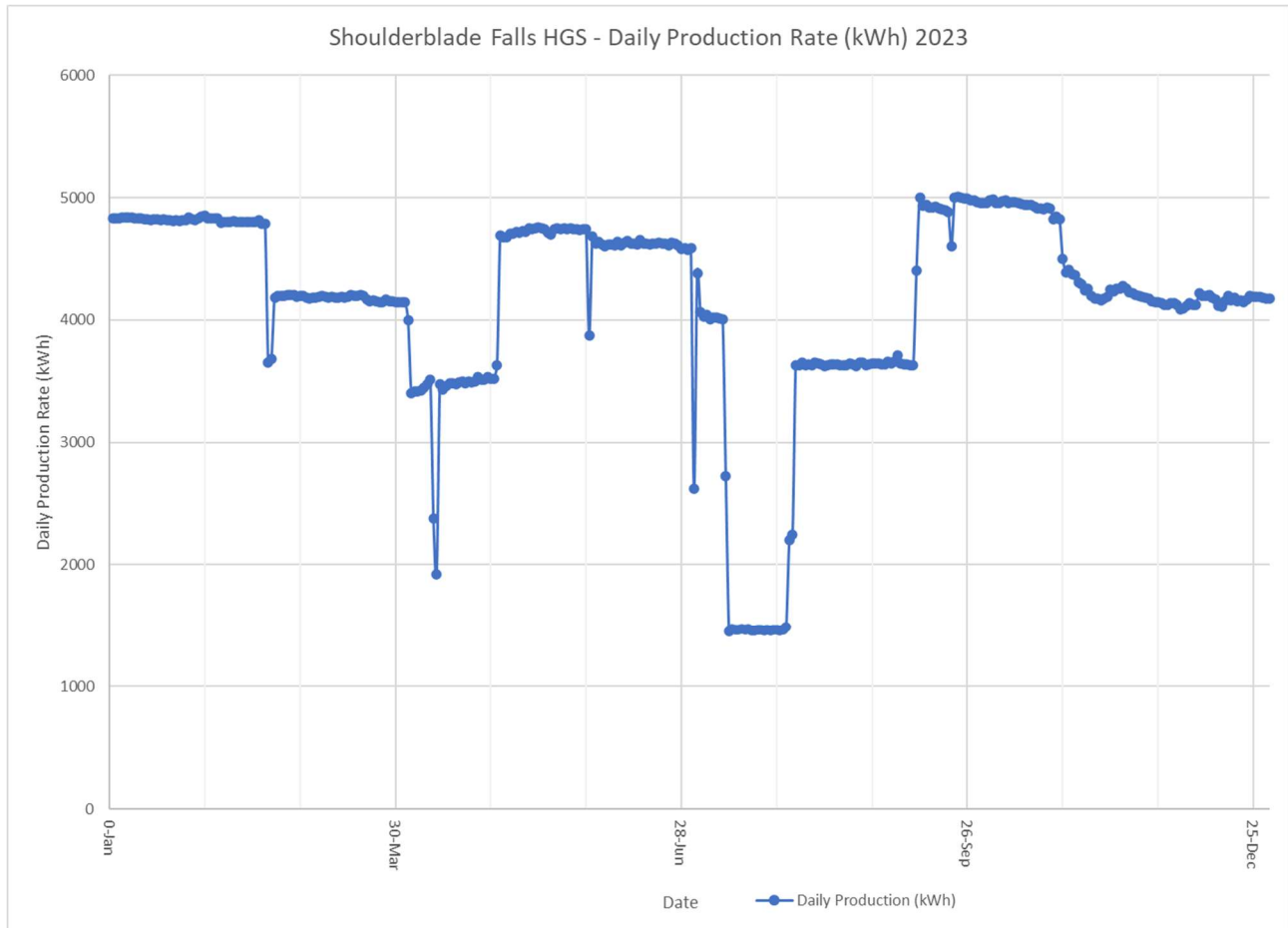


Figure 1 – Shoulderblade Falls Daily Production Rate for 2023

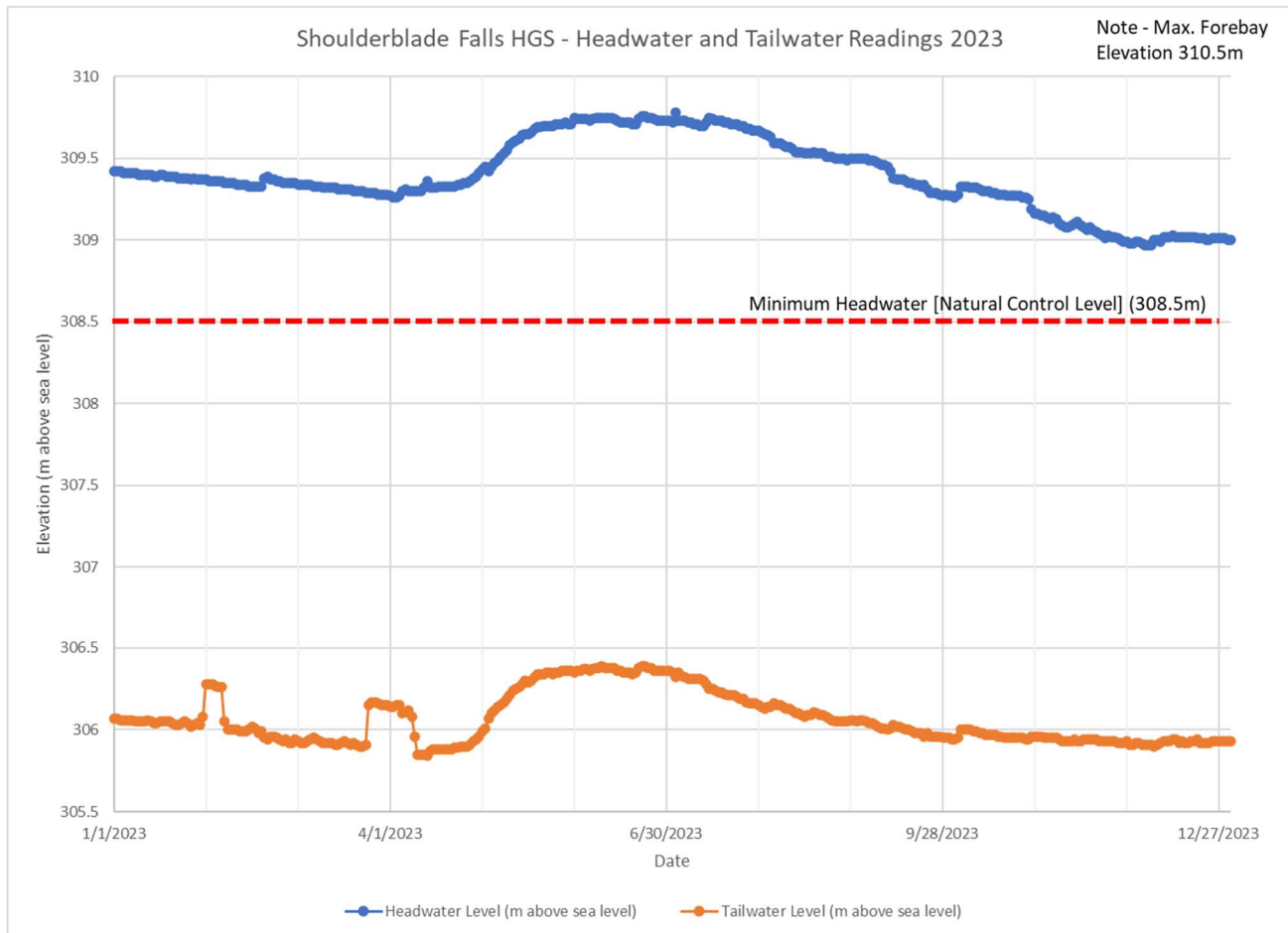


Figure 2 – Shoulderblade Falls Headwater/Tailwater Readings for 2023