



TOWNSHIP OF NORTH HURON

REPORT

Item No.

REPORT TO: Reeve Vincent and Members of Council
PREPARED BY: Jeff Molenhuis, Director of Public Works
DATE: 05/12/2016
SUBJECT: Howson Dam EA SAR Update and Dam Safety Analysis
ATTACHMENTS: NONE

RECOMMENDATION:

THAT the Council of the Township of North Huron hereby receive the report Howson Dam EA SAR Update and Dam Safety Analysis for information;

AND FURTHER THAT the Council of the Township of North Huron hereby direct staff to proceed with the Phase 1 of the MNRF Species at Risk application, and proceed with the RFP document to conduct a Dam Safety Assessment to determine the feasibility of an application under LRIA following formal response from the Ministry.

EXECUTIVE SUMMARY

At the October 2017 Council meeting, the following resolution was passed:

“AND FURTHER THAT the Council of the Township of North Huron hereby direct staff pending discussion with the Ministry of Natural Resources and Forestry regarding the Species at Risk, to prepare an RFP document to conduct a Dam Safety Assessment to determine the feasibility of an application under LRIA for approvals with the Ministry of Natural Resources and Forestry.”

The purpose of this report is to provide an update on the discussion with the Ministry in relation to the SAR species.

DISCUSSION

GSS Engineering and Township staff held discussions with the Ministry of Natural Resources and Forestry (MNRF) regarding the Species at Risk identified through field investigation. The context of the discussion related to identifying the framework of an application and likelihood of receiving a Species at Risk permit to conduct any construction work. In order to determine if a permit is required, there is a three-staged application review process, as follows:

- Phase 1 – Information Gathering
- Phase 2 – Activity Review and Assessment
- Phase 3 – Permit Application and Assessment: Overall Benefit Permit

The Ministry is recommending completion of Phase 1 – Information Gathering in order for them to assess more in detail the

Construction work on the dam itself, including alterations, improvements and repairs, are regulated under the Lakes and Rivers Improvement Act (LRIA), where certain activities need to be approved by the Ministry before proceeding with the work. The Technical Guidelines for LRIA permitting outline general activities that may be exempt. The Ministry has indicated, in writing to the Township in January 2016, certain thresholds of repair that require permit approvals. BM Ross also indicated the surface repair work previously proposed would exceed the Ministry threshold and it can be concluded that this work would likely require a permit.

Permit applications and approvals are a stepped system of analysis to be completed. Essentially, a Dam Safety Assessment determines the framework for rehabilitation necessary to achieve permit approvals. The following analysis steps are necessary:

- 1) Determine the structure's hazard potential classification – what would the impact be if the dam were to fail?
- 2) Determine the structure's inflow design flood – what return period should the design flood be based on according to the hazard potential?
- 3) Determine the structure's ability to convey the design flood.
- 4) Determine the stability of the structure based on the inflow design flood.

FINANCIAL IMPACT

For Phase 1 of the Species At Risk permitting, the anticipated cost for submission to the Ministry is \$5,500. This stage will help determine if further investigation or permitting is necessary or in a likely position to be approved.

FUTURE CONSIDERATIONS

Staff are recommending that this initial work be undertaken to have the environmental considerations be reviewed by the Ministry in context potential impacts and likelihood of permit approvals.

RELATIONSHIP TO STRATEGIC PLAN

Goal 3 the Township is healthy and safe. Goal 4 the administration is fiscally responsible and strives for operational excellence.



Jeff Molenhuis, Director of Public Works

Sharon Chambers, CAO