

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Rural Municipality of Lakeshore

PROPOSAL NAME: Spence Lake Surface Water Management Project

CLASS OF DEVELOPMENT: Two
TYPE OF DEVELOPMENT: Water Development and Control –
Modification of lake with surface area > 2 km²

CLIENT FILE NO.: 5957.00

OVERVIEW

The Proposal was received on February 6, 2018. It was dated February 2, 2018. The advertisement of the Proposal was as follows:

“A proposal has been filed by the Rural Municipality of Lakeshore for the construction and operation of an outlet for Spence Lake. The outlet is proposed to be located in E 1-30-16W, and would consist of a rockfill and sheetpile overflow control structure and a channel to Woods Creek, which flows to Lake Manitoba. The channel capacity of Woods Creek would be increased by removing sediment and obstructions as part of the project. The control structure would have a crest elevation of 251.60 metres, which is 0.4 metres below the lake level observed in the summer of 2015. At the crest elevation, the lake would retain a maximum depth of 1.72 metres.”

The Proposal was advertised in the Dauphin Herald on Tuesday, May 15, 2018. It was placed in the following public registries:

- Legislative Library (Winnipeg)
- Online: <http://www.gov.mb.ca/sd/eal/registries/5957spencelake/index.html>

The Proposal was distributed to Technical Advisory Committee (TAC) members on May 4, 2018.

The closing date for comments from members of the public and TAC members was June 15, 2018.

COMMENTS FROM THE PUBLIC

No public comments were received on the Proposal.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE

Technical Advisory Committee (TAC) responses are summarized in Table 1 below. Substantive comments and their dispositions follow the table. TAC comments are provided in full in the public registries.

Table 1 Rural Municipality of Lakeshore – Spence Lake Surface Water Management Project – Technical Advisory Committee Comments

No	Technical Advisory Committee Member	Response Provided
1	Canadian Environmental Assessment Agency	May 22, 2018
2	Manitoba Agriculture – Land Use Branch	No response
3	Manitoba Sustainable Development – Environmental Compliance and Enforcement Branch	No comments or concerns
	Climate Change and Air Quality Branch	No response
	Wildlife and Fisheries Branch	June 18 and 22, 2018
	Parks and Protected Spaces Branch	No response
	Forestry and Peatlands Branch	No concerns
	Indigenous Relations Branch	No response
	Lands Branch	No comments
	Water Science and Watershed Management Branch:	
	Water Quality Management Section	No response
	Groundwater Management Section	No response
	Office of Drinking Water	No concerns
	Water Use Licensing Section	No response
	Water Control Works and Drainage Licensing Section	No response
	Western Region Integrated Resource Management Team	No response
4	Manitoba Sport, Culture, and Heritage – Historic Resources Branch	June 19, 2018
5	Manitoba Growth, Enterprise and Trade – Mines Branch	No response
6	Manitoba Infrastructure – Highway Planning and Design Branch	June 14, 2018
7	Manitoba Municipal Government – Community and Regional Planning Branch, Dauphin	No response
8	Manitoba Health, Seniors and Active Living – Medical Officer of Health	No response

Canadian Environmental Assessment Agency

Thank you for sharing the Environment Act proposal below for the Spence Lake Surface Water Management Project (the Project). In order to determine whether the proposed Project meets the definition of a designated project as defined in the *Regulations Designating Physical Activities* pursuant to the *Canadian Environmental Assessment Act, 2012*, the following additional information is required:

- What amount of water will be diverted annually from Spence Lake into Lake Manitoba (in m³, if possible)?
- What are the coordinates (i.e. location) of the proposed Project?

Would you be able to request this information from the proponent or provide me with the contact information of the proponent to request the information directly?

Disposition:

Contact information for the proponent was provided to facilitate direct contact. On June 3, 2019, the Canadian Environmental Assessment Agency determined that the project was not a designated physical activity, and therefore would not require a federal environmental assessment.

Manitoba Sustainable Development – Wildlife and Fisheries Branch

Wildlife – June 18

The Wildlife component of the Wildlife and Fisheries Branch has reviewed the Spence Lake Surface Water Management Project proposal (File:5957). Given that the proposed development will interrupt the natural processes of the Spence Lake waterbody and associated wetland habitats, we are concerned that the Environment Act Proposal does not adequately address potential effects on wildlife, specifically water birds and their habitat. Therefore, we would like to request further information on the following aspects:

- There is no description of wildlife within the project area, specifically use of the area by waterbirds for nesting and staging, and potential species at risk. An existing wildlife section must be incorporated into the proposal.
- A description of the probable and potential effects (positive and negative) on specific wildlife species or groups must also be incorporated. Waterbirds within the Spence Lake complex should be the focus, along species at risk potentially using the area. This effects assessment should include loss and/or or conversion of specific habitat types used by wildlife within complex, specifically the potential 626.6 acres of land to be exposed between the 252.18 m and 251.00 levels, as described in the EAP.

- Specific to potential impacts of the project, as a shallow water basin, we are concerned that water management on Spence Lake may cause accelerated occurrences and/or prolonged periods of drought within the complex. The proposal references historical averages, but no information on historic water levels or fluctuations is provided, and no mention of the historic drought cycle. If drought and ‘dry conditions’ is an occurrence within this basin, and system change is a possibility, what impact will it have on waterbirds and other wildlife?

We look forward to seeing a more detailed wildlife assessment for this project.

Disposition:

Additional information was requested to address these comments.

Fisheries – June 22

Fisheries section (head office and regional staff) of Wildlife and Fisheries Branch has discussed the proposed water management project for Spence Lake. Fisheries Branch does not support the project based on the concerns presented below.

Background: This project works involves the installation of a control structure set at a crest elevation of 251.6m, and widening of existing Woods Creek to facilitate the lowering and maintenance of water levels in Spence Lake. At the elevation of 251.6 m the lake would retain a maximum depth of 1.72 meters. Spence Lake provides year round habitat for large bodied fish species, although it has been susceptible to winterkills. Experimental commercial fishing licenses have been issued sporadically in the past, and it is likely that recreational angling occurs on this water body.

High water levels in this lake have been an issue for farmers, and had implications to infrastructure, for decades. Dauphin office has on file an assessment that was done back in 1988. At that time Ducks Unlimited and Wildlife expressed concerns with the proposal to construct a drain through the marsh on the east side of the lake, at the lakes natural outlet, as 1) the area is a semi-permanent wetland with vegetation which benefits from flooding on a regular basis, and 2) to support maximum waterfowl benefit the lake should stay in its natural state. Further to this there were concerns that construction of the proposed drain may have detrimental effects on Spence Lake water levels. It was suggested that further hydrological investigations occur, including the “significance of possible seepage through the beach ridge”. It was also recommended to investigate the feasibility of exchanging crown lands. For this request, a consultant was hired to map the lake with the intent to determine the potential impact of the proposed water level regime on fishes/plants within Spence Lake.

Concerns:

1. Impact created by a barrier, alteration of flow and habitat within Woods Creek, and alteration of flow to the semi-permanent wetland:
 - a. Spence Lake is connected to Lake Manitoba through Woods Creek, and currently fish can move between these lakes. The construction of an outlet

structure at the proposed location will stop fish from accessing Spence Lake. In the absence of knowing we will take the precautionary approach that fish from Lake Manitoba utilize Spence Lake, at least seasonally, for spawning, rearing and feeding purposes.

- b. Further to this, controlling the water levels at the outlet will alter the flows in the marsh and within Woods Creek. There has been nothing done to determine the impact to the semi-permanent wetland, and to fish from Lake Manitoba that may utilize the marsh and creek for spawning, rearing and feeding purposes. Proposed alterations to the creek to enhance capacity may destroy habitat features utilized by fish.
 - c. The proposed route is not what was recommended by the consultant. AAE indicated that modifying the existing drainage would “likely have more negative impacts on the aquatic ecosystem.”
 - d. There were no investigations directed at addressing 1a and b.
2. Impact of regulated water levels:
- a. Increased winter fish kills: The consultant’s report indicates that while the maintenance of water levels at 251.60 m elevation would still provide “valuable spawning and nursery habitat within the lake” because the lake in general is shallow it would likely **naturally** experience fish winter kill in winters with extended ice and snow cover.” Regulated water levels is not natural and there is no current or historical information to make an informed decision with respect to whether regulating at this level would increase the frequency of winter kills over “natural”.
 - b. Less than ideal dissolved oxygen: The consultants report states “the maximum water depth of 1.70 m would not provide suitable conditions for walleye and other sensitive species....there would likely be enough water volume with adequate dissolved oxygen levels to sustain those species inhabiting the lake that can tolerate low dissolved oxygen.....” No dissolved oxygen samples were taken. The consultant recommends taking oxygen readings as part of any proposed post project monitoring. We would suggest this work is done prior.
 - c. Degradation of the shoreline: Regulated flows can exacerbate shoreline erosion, and with Common carp present, can further exacerbate their impacts to the shoreline through their “rooting” of vegetation.

Disposition:

Additional information was requested to address these comments.

Manitoba Sport, Culture and Recreation – Historic Resources Branch

In response to your e-mail regarding the above-noted EAP, the Historic Resources Branch has reviewed the document and found that the provisions addressing heritage resources is insufficient for this draft. While the potential to impact significant heritage resources is deemed low in this area, the Historic Resources Branch should be immediately contacted if an archaeological site is encountered during development.

In addition to the provision concerning the possibility of accidentally encountering heritage resources/archaeological sites, the plan should contain an outline of the appropriate measures to mitigate those impacts upon such an encounter. Specifically, if significant heritage resources or human remains are encountered during any phase of development by the Rural Municipality of Lakeshore, their employees or contractors, work is to stop and the Manitoba Historic Resources Branch is to be contacted immediately. In the case of human remains, notification must also be made to the RCMP.

If at any time heritage resources are encountered in association with these lands during development, the Historic Resources Branch may require that an acceptable heritage resource management strategy be implemented by the developer to mitigate the effects of development on the heritage resources.

Disposition:

These comments were provided to the proponent for information, and can be addressed in a licence condition.

Manitoba Infrastructure – Highway Planning and Design Branch, Environmental Services Section

MI has reviewed the proposal under the Environment Act noted above and we offer the following comments:

West Central Regional Operations:

- The Region has concerns with the potential rush of water coming downstream when the new outlet is complete and opened. The Region requests staging be implemented into the drawdown of Spence Lake. This will allow more time for the PR 276 culverts to better handle the temporary increase of flow.
- The Region does not support excavation within the PR 276 highway right-of-way. The Region requests that excavation of the proposed channel stops before entering the highway's right-of-way. This will ensure the 0.5m embedment is maintained at the existing culverts and the existing upstream culvert habitat pool remain undisturbed.
- The document does not mention any erosion and sedimentation control measures for the new channel. The Region is concerned there may be potential for erosion within the new channel and may result with sedimentation within PR 276 ditch and culverts.
- The Region recommends that the Sustainable Development Water Stewardship Branch are contacted, to determine if a drainage license is required. If a drainage license is required, the Region requests a copy of the approval.

For questions/clarification regarding these comments, please contact Cheri Percival, Regional Planning Technologist, at (204) 622-2377 or Cheri.Percival@gov.mb.ca.

Disposition:

This information was provided to the proponent for information. Several of the comments can be addressed through licence conditions.

ADDITIONAL INFORMATION

Additional information to address Technical Advisory Committee comments was requested on August 3, 2018. A response was received on September 18, 2018. This information was reviewed by Wildlife and Fisheries Branch staff. On March 13, 2019, the applicant indicated that the proposed outlet width was reduced from a crest width of 3 m to a width of 1.2 m. This alteration was made to reduce the maximum possible annual outflow to under 10,000,000 m³, the threshold for federal environmental assessment.

With the reduction in the size of the outlet, and knowledge that the lake level in the fall of 2018 was close to the chosen target level, bird concerns were re-examined by the Wildlife and Fisheries Branch. Some additional information on waterfowl use of the lake was also available. It was decided that with the altered configuration of the project, it is anticipated to have little effect on bird habitat.

With respect to concerns about fish habitat and mobility, the additional information notes that water level changes and associated fish habitat changes in the lake are anticipated to be minimal. Fish habitat changes in Woods Creek can be addressed through licence conditions. With respect to fish mobility, the additional information notes that the existing natural outlet will remain in place, so fish mobility between Woods Creek and Spence Lake would not be affected. This can also be addressed through a licence condition.

PUBLIC HEARING

As no requests were received for a public hearing, a public hearing is not recommended.

CROWN-INDIGENOUS CONSULTATION

The Government of Manitoba recognizes it has a duty to consult in a meaningful way with Indigenous communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of the Indigenous rights of that community.

The proposal involves the construction and operation of water level control works on a waterbody mainly on Crown land. As discussed above, no significant effects are anticipated on wildlife or fisheries resources.

Since resource use is not anticipated to be affected by the project, it is concluded that Crown-Indigenous consultation is not required for the project.

RECOMMENDATION

No public concerns were identified and Technical Advisory Committee comments have been addressed through additional information, the provision of the comments to the proponent or through licence conditions. It is recommended that the Development be licensed under The Environment Act subject to the limits, terms and conditions as described on the attached Draft Environment Act Licence.

It is further recommended that administration of the Licence be assigned to the Western Region of the Environmental Compliance and Enforcement Branch.

PREPARED BY:

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