

# Excerpt from RFP Admin2018-02

## Project Context, Principles and Goals - Otter and Bass Lake Outlets

### Project #1 – Otter Lake Outlet

#### Project Context

The Township owns the road and culvert which forms the outlet of Otter Lake. The Township has received concerns from property owners on Otter Lake related to water levels. More specifically, concerns have related to spring flooding, private road/access inundation, shoreline erosion, and beaver dam management. Property owners have identified the outlet as being either a primary and/or contributing factor.

An Otter Lake Landowners Association (OLLA) member surveys indicates a concern about spring flood risk and the contribution that the existing culvert makes according to existing hydrology reports. Water levels outside of the spring freshet period is not generally a concern for OLLA members.

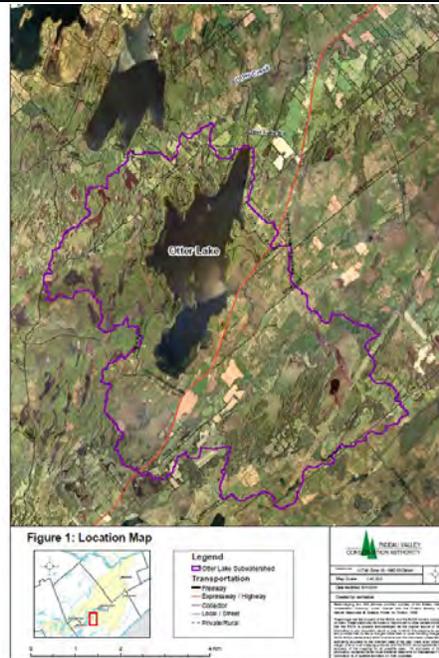
Rideau Valley Conservation Authority assessments have indicated that the outlet does generate head loss during flood return periods.

#### Lake Context

Otter Lake is situated wholly within the Township of Rideau Lakes. It has a surface area of 572 hectares and 22.8km of shoreline. The lake's catchment area is 36.38km<sup>2</sup>.

There are approximately 266 residential units on the lake, being a mix of seasonal and permanently occupied homes. There are also five commercial properties on the lake with approximately 229 recreational trailer sites and/or cabins.

#### Otter Lake – Subwatershed and Context



The lake outlets into Otter Creek via a culvert under a Township road (Otter Lake Road). Otter Creek flows 25km to the Rideau River (part of the Rideau Canal system), entering just south of Smiths Falls.

The lake is served by an active lake association, OLLA. The lake is within the Rideau Valley Conservation Authority watershed. The lake bed is under the authority of the Ministry of Natural Resources. Otter Creek is considered a navigable waterway.

### Project Goals

The Township wishes to engage a consultant to assess the existing outlet and associated water level conditions and lead a project to determine the full scope of resident and other stakeholder concerns (both upstream and downstream). Through community consultation and understanding stakeholder positions, the consultant will be tasked with developing consensus and recommending a preferred solution(s) to address identified concerns. The firm will be engaged to complete necessary plans, permit/approvals packages and inspection/certification work to facilitate implementation.

The Township believes this project should be classified as a Schedule B Project under the Municipal Class EA. Accordingly the project should follow the Municipal Class EA Planning and Design Process. Further, the MNRF has advised “For applications that involve LRIA approval on private land (i.e. both the banks and the bed of the waterbody are private land), there is no disposition of Crown resources and therefore, the Class EA for Resource Stewardship Facility Development does not apply.”

### Project Principles

- The project shall be open, transparent and inclusive;
- The project shall seek to find consensus across the wide array of stakeholders;
- All stakeholders’ interests shall be weighed equitably – including upstream and downstream parties, land owners, permanent residents and seasonal residents, commercial interests etc.
- The project shall incorporate best practices in community consultation, project management and hydrological assessment;
- The Township’s Duty to Consult with Indigenous Communities shall be appropriately addressed;
- The project shall be undertaken with the highest degree of professional independence and ethics;
- The project shall seek to identify a preferred solution(s) that are balanced and evidence based;
- The project shall be cognisant of the regulatory and statutory requirements throughout to ensure a preferred solution(s) is implementable; and
- The project shall seek to identify solutions that are cost-efficient, with limited to no active management, and that have extended renewal and life-cycle periods.

### Project Timeline

The Township is open to proposed timelines. The Township does however wish to undertake the project in 2019, with sufficient leeway to permit potential solution implementation in the fall of 2019.

### Associated Documents

- Rideau Lakes – 2015 and Forward (Township, 2015)
- Otter Lake Shoreline Assessment Summary Report (Watersheds Canada and Canadian Wildlife Federation, July 2016)

- Otter Lake flood determination study (RVCA)  
[https://www.rvca.ca/media/k2/attachments/Otter\\_LakeZMapping\\_Final\\_Report.pdf](https://www.rvca.ca/media/k2/attachments/Otter_LakeZMapping_Final_Report.pdf)
- Otter-Hutton flood mapping study (RVCA)  
<https://www.rvca.ca/media/k2/attachments/OtterHuttonMapping.pdf>
- HEC-RAS model from Otter-Hutton study and Mike11 model of Otter-Hutton system. These models can be provided upon request by consultants, however, a data sharing agreement and a fee are applicable to all models. (RVCA)
- Measured water level at Otter lake (2011 – present). RVCA has been monitoring water levels in Otter Lake since 2011 using a pressure transducer continuous recording data logger attached to a concrete block placed on the lake bottom. The data is corrected for barometric pressure after being recovered from the logger three times a year. The barometric data logger is located at Glen Tay, within the acceptable limits for such pressure correction routines. The data is a good indicator of the pattern of the seasonal fluctuation in the lake. However, users need to recognize when applying the data that there are inherent sources of error including shifting of the concrete block and possible drift over time in all such recording devices (barometric and level recorders). (RVCA)
- Measured water level at Otter lake culvert (2007 – 2017). These observations are made by local landowners and RVCA staff. (RVCA)

## Project #2 – Bass Lake Outlet

### Project Context

Bass Lake outlets into a creek through a berm and culvert structure. The Township does not own or maintain this outlet structure. It is believed the berm was developed by a private individual(s) in the mid-1990s on an ad hoc basis without regulatory approval. It is believed the berm is made of an earthen material and lies on private land, with a small portion potentially laying on an unopened original road allowance. The outlet creek flows to Lower Rideau Lake (part of the Rideau Canal system), entering just south of Rideau Ferry.

The Township has received concerns from property owners on Bass Lake related to water levels and the existing outlet. More specifically, concerns related to a significant drop in water levels in the spring of 2018, apparent tampering with the berm in the spring of 2018, the long-term structural stability of the berm, ownership and access issues related to the berm, and the potential environmental and social impacts should the berm unexpectedly fail. Additionally, isolated concerns have been received in the past related to spring flooding/land inundation.

### Lake Context

Bass Lake is adjacent to Otter Lake (Project #1), but they are not directly hydrologically connected. It is situated wholly within the Township of Rideau Lakes. It is part of the Lower Rideau Lake catchment. There are approximately 230 properties on the lake, being primarily a mix of seasonal and permanently occupied homes.

The Lake is served by an in-development lake association, the Bass Lake Property Owners Association (BLPOA). It is within the Rideau Valley Conservation Authority (RVCA) watershed. The lake bed is under the authority of the Ministry of Natural Resources. The outlet creek is not considered to be a navigable waterway.

Bass Lake - Overview



### Project Goals

Lake residents have sought to begin the process of building lake-wide communication channels via the establishment the BLPOA. The codification of the berm and water levels and long-term stability of the berm have been identified as the key priorities for the association. The association would like to play an active role in addressing the concerns identified.

The Township wishes to support the association and lake property owners through identifying qualified firms, gaining professional proposals and costings for the work necessary to address the concerns raised. Once in hand, a determination will then be able to be made by all the stakeholders as to how to proceed and in what capacity.

It is envisioned the project would take place in two phases. The first phase would assess the existing structure, including a confirmation of the berm's location in relation to underlying land ownership. Based on the assessment and a professional recommendation to abandon, renew or renew and augment, the project would, through community and stakeholder consultation and developing consensus, recommend a preferred solution(s). The second phase, subject to proponent approval, may see the engagement of the firm to complete necessary plans, permit/approvals packages and inspection/certification work to assist implementation.

As this project is not clearly a municipal undertaking, the Class EA implications are unclear. The BLPOA has developed a context document "BLPOA Draft Scope of Work Nov 12, 2018". It is strongly recommended this document be reviewed as a part of the proposal development.

### Project Principles

- The project shall be open, transparent and inclusive;
- The project shall seek to find consensus across the wide array of stakeholders;
- All stakeholders' interests shall be weighed equitably – including upstream and downstream parties, land owners, permanent residents and seasonal residents, commercial interests etc.
- The project shall incorporate best practices in community consultation, project management and hydrological assessment;
- Address any Duty to Consult with Indigenous Communities implications that may apply;
- The project shall be undertaken with the highest degree of professional independence and ethics;
- The project shall seek to identify a preferred solution(s) that are balanced and evidence based;
- The project shall be cognisant of the regulatory and statutory requirements throughout to ensure a preferred solution(s) is implementable; and
- The project shall seek to identify solutions, be they public or private, that are cost-efficient, with limited to no active management and that have extended renewal and life-cycle periods.

### Project Timeline

The community considers a timely review and implementation of any solution to be of the utmost importance. No specific timelines are prescribed, and accordingly subject to the proposal. Consideration should be given to the opportunity to permit potential solution implementation in the fall of 2019.

### Associated Documents

- Rideau Lakes – 2015 and Forward (Township, 2015)
- BLPOA - Scope Of Work (BLOPA, Nov 12, 2018)

