A Bass Lake Outlet Control is a Beneficial Public Work

Background

Bass Lake is a spring fed lake with no inflow from other lakes, rivers or creeks. At the north end of the lake there is a major outlet comprising a long wetland and creek that flows to Lower Rideau Lake (part of the Rideau Canal system), entering just south of Rideau Ferry. Approximately 280 meters downstream in this outlet there is a man-made earthen berm that has served as a water control structure since the mid-1990s. It was developed by a private individual(s) on an ad hoc basis without regulatory approval. It lies on private land, with a small portion laying on an unopened original township road allowance.

Bass Lake is considered by Rideau Valley Conservation Authority (RVCA) to be part of the Lower Rideau Lake catchment area and it has a higher elevation (134 m) than the Lower Rideau Lake (125 m). The topography of the outlet wetland in front of the man-made earthen berm is no longer restricting outflow to any significant degree. Without a reliable natural or a man-made berm in the Outlet there will be a very dramatic lowering of the historical seasonal water level.

There is now an issue of lower water levels that may adversely affect the 230 Bass Lake property owners, downstream lakes and rivers, tourism, local business and property taxes. The vast majority of lake property owners have petitioned for the establishment of an effective lake water level management plan for Bass Lake. In order to deal with this problem on a comprehensive and consensus basis a new Bass Lake Property Owners Association (BLPOA) was recently formed in the Fall of 2018. It presently has 185 members and Its primary mandate is to work with the Township of Rideau Lakes in the pursuit of a municipal project to establish an effective lake water level management plan for Bass Lake.

A past report by the RVCA "Rideau_Lakes Subwatershed Report 2014 – Lower Rideau Catchment" is an exhaustive evaluation of the lake's status in 2014 and makes numerous recommendations relating to water quality, water levels, shoreline and wetland protection and partnerships to deal with such issues.

Purpose

This document seeks to support the rationale that resolving this Bass Lake issue would constitute a beneficial public work and as such warrants a collaborative project involving the leadership of the Township, and the participation of the BLPOA, the RVCA and the Ontario Ministry of Natural Resources (OMNR). The financial and technical resources of these government organizations should be used to assist in solving the issue of Bass Lake water levels that have been significantly lowered as a result of the rapid deterioration of the earthen berm at the lake's outlet to the Lower Rideau.

Environmental Issues

Provincially Protected Wetlands

Bass Lake is small (less than 750 acres) and is mainly spring fed. It is not connected to the Rideau system except for the outlet to Lower Rideau Lake which is 10 metres lower in elevation. There are wetlands at both ends of the lake and by themselves are not provincially significant. In recent years, however, the Bass Lake wetlands have been "complexed "into the Big Rideau Wetland Complex thereby making it a Provincially Significant Wetland (PSW) and therefore is part of a regional system. This provincial designation requires that the PSW and buffer zone are to be protected. This should include avoiding reduced water levels or any activity on the Lake that has an adverse impact on the PSW.

Lake Eco-systems

A major and long term drop in lake water level will inflict adverse impacts on the lake's ecosystems and nature's filtration system. The habitat for small mouth bass and other fish species in the lakes five major bays and along the extensive shoreline shoals could be depleted and lost. Such a dramatic change will also eliminate various wildlife habitats and waterfowl nesting sites. This loss of these habitats would have regional impacts.

Blue-Green Algae Blooms

Major outbreaks of Blue-Green Algae blooms on Bass Lake were detected and reported in October/November of 2018. While nutrient concentration levels are the main factor, low water levels and higher water temperatures are a suspected contributing cause of these outbreaks, which thrive in areas where the water is shallow, slow moving and warm. Blooms can be a real threat to lake drinking water for those residents using the lake as a source, even with treated systems. Blooms can be toxic to fish, wildlife and people. The die-off of these blooms can lead to oxygen depletion and contribute to massive fish kills. Not only will this harm the Bass Lake fishery but any release into the Lower Rideau would have a downstream impact.

Downstream Impacts

Outflow from Bass Lake enters the Rideau system at Lower Rideau Lake. There is a clear recognition by the RVCA that there is a relationship, evidenced by the statement in the above noted report "Consider the need for a community – driven lake management plan for Bass Lake and Lower Rideau Lake". Some impacts that may occur include:

- Downstream sedimentation from erosion created by uncontrolled run off from Bass Lake especially in the spring;
- Low water levels will expose more shoreline and subject it to increased erosion from wave action. This in turn will affect the downstream receiving lakes;
- Water level management issues on the Rideau system when no water escapes from Bass Lake because of low levels even during rainfall events;

Economic Impacts

If current water quality, rated "Poor "by the RVCA, is exacerbated by persistent lower water levels the result is likely to be an increase in dangerous algae blooms, further degradation of fish habitat and retreating shorelines. This will lead to numerous adverse regional economic impacts including but not limited to:

Property Taxes

There are fourteen (14) private access roads around Bass Lake that service the 230 properties located on the Bass Lake waterfront. All of these properties are developed with at least 55-60% being full time primary residences. The remainder are seasonal (May-Oct) properties. There are also two significant recreational businesses located in the North end of the Lake. They are the Bass Lake Lodge business with 10 Cottages and the adjacent Bass Lake Campground (65 lots). Property values have increased significantly in the last few years. The Province of Ontario uses a market value assessment methodology to determine property values for taxation purposes. Any decline in property values will have an impact on the municipal tax base.

Waterfront property owners on Bass Lake, both permanent or seasonal, are a significant force in our Township. The most recent assessments by Municipal Properties Assessment Corporation (MPAC) has determined that the total value of all properties on Bass Lake is \$84,000,000 which translates to a very significant tax revenue contribution of over \$800,000 to support local governance, programs and infrastructure for our County and Township.

The adverse impacts created by a drastic long-term lowering of the lake water level and decline in lake water quality on waterfront conditions would force a significant number of property owners around the lake to demand that their properties be reassessed by MPAC to reflect the negative impact on their property value.

Spending by Property Owners

A thriving lakefront community plays a key economic role in our Township. Seasonal residents nearing retirement are spending more time at their second homes with many choosing to relocate there permanently. The related household expenditures of our waterfront property owners amount to millions of dollars every year which is spent in the surrounding municipal districts. Should the issues involving Bass Lake not be resolved the incentive to own and upgrade property will be diminished. This will affect the tax base, local retail stores, restaurants, marinas, building contractors and suppliers.

Many small businesses in the Township provide essential services to Bass Lake owners. Some examples include: A large percentage of larger watercraft (60-75) are supported by local marinas or businesses who provide maintenance, winterization and storage services. In another example, the Road Associations/Groups around Bass Lake are responsible for the maintenance and capital improvements of their respective private access road. These essential activities comprise: periodic road gravel replenishment; seasonal road grading; snow plowing of roads and driveways,

sanding operations and improvement projects. The majority of the Bass Lake private roads each incur annual expenditures in the \$5,000 range, all of which support local businesses/contractors.

Tourism, Recreational & Rental Properties

Tourism which is important to economic growth will be negatively impacted – the newly reopened Bass Lake Lodge attracts visitors from outside the region. In the first year of the reopened operation the Bass Lake Lodge attracted several hundred guests. It is estimated that 80% came from more than 50 km away and 30% from the United States. This results in a significant amount of local spending on food, fuel, boat rentals (both on Bass Lake and the Rideau system), restaurants and at other local attractions. This activity is a strong contributor to the local tax base.

There are a number of rental properties on Bass Lake. If renters stop coming there will be an impact on local businesses such as marinas, local restaurants or other attractions in nearby towns and villages. This is also an area of concern for the Bass Lake Lodge and the adjacent campground.

Waterfront Property Owners & Lake Association

It is worthy to note that the Rideau Lakes Town Council recognize the importance of the lake property owners and their cumulative importance to the townships economic well-being and development. The newly elected Mayor indicated that the Township will be considering potential programs in 2019 related to lake associations. He affirmed that waterfront taxpayers are important to the community and generate significant funding for the Township.

Conclusion

In summary, Bass Lake and its waterfront community are a significant contributor to the local economy and the natural environment. The BLPOA's objectives are in line with those of RVCA and MNR with respect to maintaining better water quality, healthier wetlands and the protection of wildlife species and habitat. The involvement of local and provincial authorities is necessary to achieve a healthy Bass Lake and restore acceptable and manageable water levels that will result in a benefit to current and future landowners, businesses, tourists, and the regional ecosystem. Such a partnership will assist in moving forward to implement the recommendations presented in the 2014 RVCA report.

The BLPOA has requested that the Township provide its leadership and authority to establish a municipal project in 2019_and work with our Lake Association to define a plan of action leading to a resolution of the long-standing issues we have faced at the Outlet to Bass Lake.

Interested parties are urged to consider this document "A Bass Lake Outlet Control is a Beneficial Public Work "when determining justification of the provision of funding and technical expertise.

Prepared By: BLPOA Board of Directors – January 2019