

Riparian Rights and Legal Implications of the Otter Lake Outlet

Presentation to the Township of Rideau Lakes
August 10, 2020

Kristi M. Ross, Barrister & Solicitor

Overview

- Key facts related to the Otter Lake Outlet
- Stakeholder concerns
- Overview of the doctrine of Riparian Rights
- Overview of municipal liability for interference with Riparian Rights and Causes of Action relating to flooding and interference with natural systems
- Key Conclusions
- Key Recommendations
- Questions and Answers

Key facts related to the Otter Lake Outlet

- In the late 1950s or early 1960s a bridge on Otter Lake Road was replaced with a culvert, flooding has been a more recent phenomena
- The Jp2g 2019 Report and the RVCA data show that there is capacity in the culvert during a 1:100 year flood event:
 - The culvert creates head loss of ~ 24 / 25 cm, there is ~ 21.6 cm of air space remaining and the Otter Lake Road would not be overtopped with water
 - The culvert has adequate capacity from a municipal infrastructure perspective
- Approximately 250 m downstream of the culvert is a rocky-ridge. Jp2g Consultants Inc. is of the opinion that the water level observed at the Otter Lake Outlet is primarily controlled by the hydraulic conveyance of the rocky ridge profile rather than the culvert.

Key Facts Continued

The RVCA regulatory standard permits up to **30 cm** of water on top of municipal & private roads to ensure safe ingress and egress, during a 1:100 year flood event:

Private Road	Lowest Recorded Point	Flood level 1:100 year flood	2014 Flood year
Road 09	125.092 m	40.8 cm of water	~ 37.9 cm of water
Road 010	125.196 m	30.4 cm of water	~ 27.5 cm of water
Road 011B	125.128 m	37.2 cm of water	~34.3 cm of water

- The above chart shows that all Private Roads should, at a minimum, be build to the RVCA regulatory standard for a 1:100 year flood, and currently none of them meet this standard

Stakeholder Concerns

- Recent flooding of private access roads;
- Inundation of land and shoreline erosion during the spring freshet and raised water levels in Otter Lake;
- Average water levels of Otter Lake are getting lower each year, potential impact to recreational use of Otter Lake, such as swimming and boating;
- Protection of the natural ecosystem and Provincially Significant Wetlands, any changes to the Otter Lake outlet could adversely impact its ecological function
- The survey conducted by Jp2g (2019) found that 72% of respondents preferred “maintaining the existing condition” and 84% felt that no construction should take place to manage Otter Lake Levels.

Overview of the doctrine of Riparian Rights

- When a person owns land bordering a stream, river, or lake, their interest in the land gives them a riparian right to the “continued flow of the water in its natural quantity and quality, undiminished and unpolluted”;
- However, upper riparian owners may use the water flowing past their lands for “ordinary use” and “to such further use ...in connection with their property as may be reasonable under the circumstances”;
- If a person upstream changes the quantity or quality of water heading downstream, beyond an “ordinary or reasonable use” they may be liable under common law
- Municipalities can be found liable under the doctrine of riparian rights even if they are not a riparian land-owner
- Liability for dams, bridges and structures that “hold back water” (i.e. culverts):
 - “The onus of proving that the damage has resulted from the defendant’s structure, whether a dam, bridge, or otherwise, and not from other causes, such as a freshet, is on the person who alleges it. If the damage would have occurred in any event, the owner of the dam or other structure is not liable ...”

Application of Riparian Rights to Otter Lake

- Option 1 - No Intervention
 - No change to historic flows, Township would only be liable if a direct causal link can be established between the culvert and flooding. If the damage would have occurred as a result of the natural system, there will be no liability.
- Option 2 - Increase Downstream Conveyance (eliminate / reduce rocky ridge)
 - Reduced liability risk associated with: spring flooding of access roads (flooding could continue), shoreline erosion and potential claims for trespass from water;
 - Increased liability risk for: downstream flooding or damage due to increased flows / velocity of flows; reduced water levels in Otter Lake (loss of recreational use of property) unanticipated changes to water flow / damages, and potential significant ecological damage.
- Option 3 - Increase Outlet Conveyance (add a second culvert or increase culvert size)
 - Same liability risks as Option 2, moderately more control possible through culvert design

Application of Riparian Rights to Otter Lake

- Option 4 - Restrict Low level Outflow (weir to increase Otter Lake water levels)
 - i. Potential riparian rights claim for reducing water flows downstream: Water flows downstream can be reduced if the restriction is “reasonable”; however, the Township could face a lawsuit for a diminution in water flows that cause damages to a downstream property owner in negligence or nuisance; and
 - ii. Potential for a catastrophic environmental incident such as ice jams and extreme flooding if the weir fails. The consensus of the case law is if anyone interferes with a natural water course, they have a duty to see that the works they substitute are adequate. If such a system fails, they will be held liable for damages.
- Option 5 - Combination
 - This option would have the risks of options 2, 3 and 4. The risks associated with a significant storm or weather event would increase with this option, should this weather event result in failure of the system, and courts often find municipalities liable in these situations

Overview of Municipal Liability, focus on Option 1 - No Intervention

- In addition to riparian rights, liability can be found under negligence, nuisance, the rule in *Rylands and v. Fletcher* (strict liability) and trespass (for shoreline erosion due to flooding)
- Otter Lake and its outlet falls within the definition of a “natural water course” and is NOT Surface Water, it is also NOT a Sewage Works or a Water Works
- **General Rules on Municipal Liability established by the Case Law:**
 - If a municipality interferes with a natural watercourse, they will be liable for damage caused if there is a factual and causal link between the modification and the damage (strict liability, negligence or nuisance)
 - Clear causation must be established (b/w damage and municipal action)
 - If the flooding is caused by a naturally occurring event, there will be no municipal liability
 - Damages should only be awarded for the proportion of the flooding caused by municipal action, but not flooding that would have occurred naturally or in any event. Therefore, if the culvert is linked to a portion of the flooding, it is only this amount that would be recoverable, and there would be no liability for flooding resulting from the Rocky Ridge

Overview of Municipal Liability

- **Strict liability**

- Under the rule in *Rylands v. Fletcher*, strict liability will attach to a defendant if the land is put to a non-natural use and if there is an escape; there is no defence UNLESS it can be proven that the damage would have occurred regardless of the obstruction
- Courts have found liability when:
 - changes to topography creating a large pond on the property and replacing the natural watercourse of the stream with piping “[were] a non-natural use causing floodwaters, heretofore absent, which escaped onto the plaintiffs' lands and damages thereby ensued” (*Ivall (Balkwill) et al. v. Aquiar*)
 - “It is the duty of any one who interferes with the course of a stream to see that the works which he substitutes for the channel provided by nature are adequate to carry off the water brought down even by extraordinary rainfall, and if damage results from the deficiency of the substitute which he has provided for the natural channel he will be liable” (*Greenock Corp. v. Caledonian R. Co.*, *Smith v. Ontario and Minnesota Power Co. Ltd.*, and *Kelley v. Canadian Northern Railway Co.*, *Southern Canada Power Co. Ltd. v. The King*, [1936] SCR)

Overview of Municipal Liability

Negligence:

- Constitutes the omission to do something which a reasonable person, would do, or, conversely, what a similarly prudent person would not do. Flooding, as a result of the operation of municipal works which alter a natural watercourse, has been found to be a lawful basis for a cause of action in negligence (five part test)
- Defences are available (statutory authority, statutory immunity and making a policy decision)
 - *Policy decisions are those dictated by financial, economic, social, or political constraints and are usually made by a municipal council. A decision made to do, or not to do, something in order to balance competing interests or protect the environment or a watershed would be a policy decision*

Overview of Municipal Liability

Negligence Case Law - No Liability Found

- ***Krohnert v. Regional Municipality of Halton (1989) (On SC)***
 - The court dismissed claims in negligence, nuisance and riparian rights after flooding caused by an obstruction to an inlet at a nearby storm sewer created a significant back-up. The court found that the defendant municipality designed the sewer for a 100-year storm, which conformed to the engineering norms at that time, and that a better inspection system (that may have detected the obstruction) would have been “expensive and impractical”. A regular spring and fall inspection routine was enough and a more regular inspection (short of a 24 surveillance) would not have prevented the flood.
- ***Sprecken v Griffin (Rural Municipality No. 66), 2011 SKQB 236***
 - The Plaintiff’s sought to require that the Municipality install culverts to alleviate the historic flooding problem. The court declined to do so, on the reasoning that the municipality has the duty to balance the interests of all landowners, including the downstream land-owners and that the potential liability of the municipality to downstream residents would likely far exceed any potential liability to the applicants for “increased damages” resulting from its alleged failure to install an extra culvert
- Policy decision made in both cases

Overview of Municipal Liability

Negligence Case Law - No Liability Found

- Damage to the Plaintiff's dock due to increased velocity of water travelling downstream when Park's Canada, in fulfilling their duty to manage the Trent-Severn waterway released water downstream to protect upstream properties from flooding. Judge didn't find negligence as the Crown was required to balance the needs of upstream and downstream landowners; however, a private nuisance was found in this case (*R. v. Henderson*) 2008 (ONSCDC))
- Blocking of a municipal culvert during a storm & spring flood, flooding home; municipality sued for failure to inspect / maintain culvert. Municipality was held not to be liable as the Plaintiff did not establish a causal link between the blockage and the flooding (*Zippilli v. Hamilton (Corporation of the City)*, 2010 ONSC 3949 (CanLII); (*City*), 2011 ONCA 659)

Overview of Municipal Liability

Negligence Case Law - Municipal Liability Found

Inadequate culvert design:

- Flooding of land resulted from the replacement of a 24 inch culvert with an 18 inch culvert , Court found that the Municipality failed in their duty to see that the flow of water in a watercourse is not interfered with, and “this duty applies with respect to any flow of water which may occur and to any damage resulting from the deficiency in an outlet provided by the municipality”. (*Lee v. Arthur (Rural Municipality)*, 1964 CanLII 526 (MB QB))
- Flooding resulting from the construction of a highway across two watercourses, and the installation of culverts, without providing adequate means for the water in the watercourses to pass under the highway in times of spring run-off or heavy rainfall. The construction occurred in 1958, a flood event occurred in 1969 and in 1976. The Court placed weight on the fact that the municipality did not address the flooding, and its link to the culvert design, when it became aware of it in 1969 (*Moore v. Manitoba*, 1981 CanLII 2766 (MB QB))

Overview of Municipal Liability

Negligence Case Law - Municipal Liability Found

- Changes made to a natural watercourse through “channelization projects” resulting in increased runoff and flooding (*Stachniak v. Thorhild (County No. 7)*, 2001 ABPC 65, *Scarborough Golf & Country Club v. Scarborough (City)* (1986), 1986 CanLII 2492 (ON SC))
- The more significant the project changes the natural watercourse, the more likely courts are to find the municipality liable for damages if the project is negligently designed (this is particularly relevant to options 2 - 5 in the Jp2g Report)

Overview of Municipal Liability

Trespass Case Law

- *Plaunt v. Renfrew Power Generation Inc.*, 2011 ONSC 4087 is one of the few cases that exist which considers the liability of a municipality for causing shoreline erosion because of their act of permitting higher water levels in a lake due to the operation of a dam
- Class proceeding on behalf of 450 property owners on Round Lake
- Action was certified as a class proceeding, but this decision was overturned because the damages were not truly common for all class members, individual actions could be brought
- Important case:
 - a. Township could face claims based on trespass due to high water levels / shoreline erosion
 - b. Class Actions are a significant threat to municipal finances and have resulted in settlements related to flooding (City of Stratford), growing trend

Overview of Municipal Liability

Nuisance Case Law

- A nuisance consists of “an interference with the claimant's use or enjoyment of land that is both substantial and unreasonable”
 - Substantial in nature: A substantial interference is an injury to the plaintiff's property interest that is more than a slight annoyance or trifling interference. To constitute a nuisance, the defendant's conduct must “substantially alter the nature of the claimant's property itself or interfere to an extent with the actual use being made of the property
 - Unreasonable: In assessing reasonableness, the court must balance various factors, including the severity and duration of the interference, the character of the area, the utility of the defendant's conduct, and the sensitivity of the plaintiff
- Flooding, changing the direction and velocity of water flow, and the damages to a dock due to increased waterflows (*R. v Henderson*) have been established as actionable private nuisances

Key Conclusions

- The case law reveals that if the Township of Rideau Lakes follows “Option 1 - No Intervention”, they could face the following potential claims:
 - a claim (riparian rights, negligence, nuisance) from the owners of property affected by spring access road flooding that the modification to the natural watercourse and installation of the culvert has resulted in the flooding experienced;
 - a claim from Otter Lake riparian owners that the high water levels associated with the culvert have resulted in a trespass of water causing shore-line erosion.
- HOWEVER, liability will only be found if, a direct causal link between the flooding and the head loss of the culvert can be established:
 - If the road flooding / higher water levels are a result of a natural feature, such as the rocky ridge, municipal liability will not be able to be proven
 - Alternatively, if it can be shown that the culvert contributed to a portion of the flooding, but that some of the flooding resulted from the rocky ridge, the Township may be liable only for the damages caused only by the culvert
- Additional information / investigation is required to determine the causation of the flooding

Recommendation - Obtain additional information / data

- Determine how the water levels resulting from the rocky ridge impacts the level of water on the private access roads and whether there is compliance with the RVCA standard for safe access;
- Determine whether the rocky ridge contributes to the head-loss of the culvert; and
- Determine the extent, and proportion, of flooding that should be attributed to the rocky ridge and what (if any) proportion can be attributed to the culvert, for a variety of flooding scenarios.

Recommendation - Climate Change

- There has been a significant recent rise in litigation relating to flooding and this trend is expected to increase over the next 20 years as a result of climate change according to legal experts
- The Township should implement a climate change mitigation study with respect to Otter Lake, under various climate change scenarios:
 - To assess whether the culvert has adequate capacity from a municipal infrastructure perspective;
 - To determine how the water-hold back of the rocky-ridge reacts;
 - To consider the options analysed by Jp2g from a climate change perspective; and
 - To determine if climate change modelling scenarios require that the Township act to mitigate climate change risks, including excess spring flooding as well as managing higher summer temperatures, which could reduce lake levels.

Recommendation - Pass By-law

- Stating that at this time, the Township has decided not to make any modifications to the existing culvert based on the expert engineering evidence that the culvert can adequately carry water during an 100 year flood event and is adequate from a municipal infrastructure perspective, that the rocky ridge controls the water levels in Otter Lake, and the need for the Township to balance the competing needs and rights of upper and lower riparian owners and Otter Lake users, protect the sensitive ecological function and the existing Provincially Significant Wetlands;
- This by-law could implement an enhanced inspection and maintenance regime to ensure that the Otter Lake Road Culvert can operate at full capacity and note the additional studies being conducted;
- According to the Supreme Court of Canada, in order for a decision to qualify as “policy”, the decision maker must have specifically considered the issue at hand and made a conscious decision to act or not to act based on social, political and economic factors.
- Section 450 of the *Municipal Act*, does not permit proceedings “based on negligence,... if the action or inaction results from a policy decision of a municipality or local board made in a good faith exercise of the discretion”.
- However, any by-law that is passed, must be followed and enforced.
 - For example, in the case of *Oosthoek v. Corporation of the City of Thunder Bay*, 200 basements were flooded as a result of a backup of the city’s sanitary and storm sewers, which were constructed between 1907 and 1925 to then-current industry standards. The defendant city was subsequently made aware of problems and risks of flooding (in the 1960s and 1970s) and made a policy decision to enact by-laws to address the problem, at least in part. The defendant was found negligent, however, for not enforcing these by-laws

Alternative Recommendation - *Drainage Act*

- The *Drainage Act* provides a mechanism for persons benefiting from drainage to pay for the drainage, rather than the Township. The *Drainage Act* also provides some liability protection for the Township and a process for balancing interests.
- When a “majority” of landowners (as defined in the *Drainage Act*) in an area requiring drainage submit a petition to the council of a municipality for the construction of a drain, the council may appoint an engineer for the design and construction of a municipal drain. According to the *Drainage Act*, a “majority” of landowners is either a majority in the number of property owners in the area requiring drainage; or, owners, representing at least 60 percent of the hectarage in the area requiring drainage.
- For the purposes of addressing the issue of Otter Lake flooding, the area requiring drainage, could be narrowly defined as “the areas / properties / access roads that a experiencing spring flooding” or it could also be defined more broadly. The Act requires that an engineer be retained to provide a “description of the area requiring drainage” and determine the boundaries of this area.

Questions & Answers

Kristi M. Ross, Barrister & Solicitor

kristi.ross@gmail.com

613-769-9384