Grand River Conservation Authority

Report number: GM-11-24-103

Date: November 22, 2024

To: Members of the Grand River Conservation Authority **Subject:** Dam/ River Safety in the Grand River Watershed

Recommendation:

THAT Report Number GM-11-24-103 – Dam/River Safety in the Grand River watershed be received as information.

Summary:

Not applicable.

Report:

In Ontario, dam owners are responsible for the safe operation and maintenance of their dams, including public safety measures. The Lakes and Rivers Improvement Act provides the Ministry of Natural Resources with the legislative authority to govern the design, construction, operation, maintenance, and safety of dams in Ontario. The Navigable Waters Act provides Transport Canada with the legislative authority to govern any work that may interfere with navigation on any navigable water, including dams, weirs, booms, and buoys.

The Grand_River Conservation Authority (GRCA) owns and operates 28 dams in the Grand River watershed and takes a variety of actions and approaches to help ensure people are safe and have awareness of the dangers around water, and in particular around GRCA dams. At GRCA dams, safety devices that are provided include a danger sign upstream of the dam and a sign that indicates there's a portage ahead (for sites that are deemed navigable). There are also signs located at the upstream and downstream portage locations, and typically more danger signs closer to the dam. At dams with a tailwater fishery, there are also warning signs downstream of the dam warning of changing river flows. These are placed at angler access points and coordinated with groups such as Friends of the Grand River. The Canadian Dam Association provides guidelines for best industry practices concerning Public Safety around Dams, including recommendations for risk assessments and safety devices including signage, booms, and buoys which the GRCA has implemented at all GRCA dams. In addition, the GRCA has secured approvals from Transport Canada under the Canadian Navigable Waters Act for all dams and their associated safety buoys and booms.

Dam and water safety information is shared with the public in a variety of ways. As part of its flood warning system, the GRCA issues flood messages to alert municipal flood coordinators about the potential for flooding. These messages are also shared with the media and on the GRCA website, and always include information about water safety. GRCA staff attend community events throughout the watershed to educate the public on the hazards associated with dam structures and water safety. In addition, through the Outdoor Environmental Education Program and Children's Water Festivals, education is provided to children about the hazards associated with dam structures and water safety. General dam safety and water safety messages are shared on GRCA social media channels regularly.

The GRCA is committed to doing its part to raise awareness about water safety and safety around its dams. Nonetheless, everyone has a role to play with respect to safety, and along with the GRCA, there are other public and private agencies in the watershed that also help to raise awareness about water safety.

The GRCA does not own the rivers and there are more than 100 dams in the watershed that are not owned by the GRCA. These dams may not have the same safety devices in place that are encountered at GRCA-owned dams. The GRCA will continue to provide information in alignment with the role and responsibilities of a conservation authority and will continue to focus on public safety as a dam owner as part of the GRCA's overall dam safety program.

The river data that is published on the GRCA website is collected through the GRCA's flood forecasting and warning system; this is its purpose as part of the GRCA's core mandate of natural hazard management as a conservation authority. While this data may also be useful to people who engage in recreational activities in the rivers the GRCA does not have the authority or appropriate expertise to be able to provide the public with advice on what river levels would be considered safe or unsafe for these activities. Suitability of river flows for recreation depends on many different factors including the experience of the individual, the equipment used, and the conditions at the time.

Financial Implications:

Not applicable.

Other Department Considerations:

Not applicable.

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