## Full Authority 21 April 2022

**Agenda Item: Staff Presentation - Chandos Lake** 

## **Executive Summary**

In accordance with Ontario Regulation 159/06, the CVCA regulates development in flood hazard areas with the primary objective of reducing risks to life and property.

For many of the larger lakes within the CVCA's watershed, 1:100-year flood elevations have been established. On these lakes, CVCA staff review development proposals in relation to the 1:100-year flood elevation, and ensure that development is only approved if it meets the criteria outlined in Ontario Regulation 159/06, CVCA Board-approved policies and provincial standards for responsible flood hazard management.

On lakes where 1:100-year flood elevation information is unavailable, CVCA Regulations staff apply a default setback approach. The CVCA's Regulated Area extends 30m from the high water mark. The floodplain is assumed to be 15m from the high water mark. Another 6m is applied to meet provincial standards for safe access around natural hazards. In practice, this means new development on vacant land would need to be setback a minimum of 21m from the lake. For lots with existing development, any structure located within 15m of the shoreline is considered to be within the flood hazard. As such, CVCA's policies pertaining to development located within a flood hazard apply, which, to be expected, are of a more restrictive nature. The advantage to this approach is that it is simple and relatively easy to implement. The downside is that it does not allow reason and common sense into the process. In the experience of CVCA Regulations staff, far too many scenarios occur where this approach is too restrictive or not nearly restrictive enough. This has been increasingly played out on Chandos Lake (Township of North Kawartha). Chandos Lake has a high volume of development activity and does not have an established 1:100-year flood elevation. The CVCA's approach up until recently has been to apply the default 15m-21m setback.

Chandos Lake presents a unique situation for flood hazard management efforts. Chandos Lake is one of the largest lakes in the Crowe Valley watershed without an engineered 1:100-year flood elevation. Lands surrounding the lake are very active in terms of development. Chandos Lake residents accounted for roughly 20% of development permit applications in 2021. 2022 so far is indicating a similar trajectory. This has allowed staff to observe a large sample of conditions and scenarios where a default setback approach proves ineffective or unreasonable. Together the size of the lake, the relatively high residential density, and the high volume of development activity stress the need to develop a sound and reasonable approach for flood hazard management on Chandos Lake.

CVCA Regulations and Planning staff have been implementing an alternative approach that employs better information and decision-making tools that have become available as a product of technological advancements.

At the meeting, CVCA staff will present the methodology of this approach, along with several examples which illustrate implications for development and flood hazard management. A recommendation from CVCA staff will be forthcoming at the meeting following the presentation.