Trout Lake Study Implementation

Trout Lake Conservation Association Presentation To East Ferris Mayor and Council February 13, 2024

TLCA Key Points

- TLCA agrees that more up-to-date, robust land use planning measures need to be incorporated into East Ferris and North Bay Official Plans, to ensure effective long-term protection of Trout Lake
- TLCA is not necessarily opposed to some new lot creation, but any new lots must be guaranteed to have minimal impact – "Best Management Practices" recommended by consultants may be inadequate, as well as difficult to effectively implement or enforce by municipalities
- An independent, third-party scientific peer review of consultants' assumptions for Lakeshore Capacity Modelling and phosphorus loadings would ensure scientific validity of reports' findings and predictions
- Consultants' recommendations depend on an ambitious, costly long-term water sampling and monitoring program, without identifying who would conduct or pay for this work

Scientific Assumptions

 Questionable assumption that measured phosphorus discharges from a few Eastview Estates subdivision lots are typical of all septic systems on Trout Lake
Those Eastview septic systems were specifically designed and installed for "tertiary level" phosphorus removal, as required by 2003 OMB ruling

- Few, if any other Trout Lake septic systems are close to comparable
- Using Eastview data to predict phosphorus loadings from all existing and future lots may not be accurate

- However, the consultants used this data and other assumptions as the basis to re-run the Lakeshore Capacity Model (LCM) and predict that Trout Lake will not be affected by significant increases in development of existing lots and new lot creation

- Ministry scientists ran the LCM a few years ago, with very different results

Failure to Consider Impacts of Climate Change

- Expected impacts from climate change are not adequately addressed, despite good scientific consensus of inevitable significant impacts on coldwater lakes and Lake Trout populations; using terms like 'potential' and 'uncertainty' is misleading

-Impacts will include warmer water temperatures, loss of dissolved oxygen (DO), loss of Lake Trout habitat decreased ice cover, increased nutrient loadings from storm run-off, increased internal phosphorus loadings from lake sediments

- Blooms of toxic blue-green algae will be more common and widespread due to climate change

- Minimizing impacts of development on Trout Lake is under municipal control; climate change is not

Application of Best Management Practices, Other Measures

- BMPs can be nothing more than recommended voluntary actions that property owners may choose to take; e.g. maintaining vegetated shoreline buffer zones, reducing use of lawn or garden fertilizers, preserving tree cover, minimizing paved areas and storm runoff

- Voluntary BMPs are only effective if property owners are well-informed, highly motivated, and understand why measures are necessary for lake protection

- Even legal measures like Site Plan Control Agreements can be difficult to enforce – legal enforcement requires political will, and is very costly for municipalities, consuming resources and staff time

- Public consultation during this study flagged inconsistent and ineffective enforcement as a longstanding problem all around Trout Lake

Responsibility and Funding: Future Water Quality Monitoring and Modelling

- The consultants' October 2023 report made 6 recommendations for ongoing future sampling of Trout Lake and inflowing streams, modelling and sampling of downstream lakes
- Recommendations include:
 - adding additional types of laboratory tests (parameters),
 - more intensive, complex sampling programs of Trout Lake and inflowing streams
 - designing and implementing an entirely new comprehensive Dissolved Oxygen monitoring program,
 - include Turtle and Talon lakes in future monitoring and modelling
- In past decades, Provincial ministries have done most sampling and laboratory submissions at no cost to municipalities; NBMCA also sampled and monitored
- These agencies were not consulted about the report; with funding cuts to CAs and ministries, municipalities may have to undertake all the necessary laboratory work, sampling, monitoring and modelling have they obtained a cost estimate to do so?