## QUICK FACTS New report on Remediation of the Wabigoon River

#### SUMMARY

"Recovery of fish mercury concentrations in the Wabigoon-English system from mercury pollution, which began in in the 1960's, has stalled in the most contaminated part of the system, and appears to be spreading to the lower reaches of the system. However **we believe that recovery could be restarted and accelerated, using methods described in this report**." (p.52)

- 1. The Wabigoon River is still highly contaminated.
- 2. There is an ongoing source of mercury in the system.
- 3. The government's plan (Natural Recovery) is not working.
- 4. The river can be cleaned up and the fish made safe to eat.

### THE WABIGOON RIVER IS STILL HIGHLY CONTAMINATED

"Fifty-seven years after mercury releases started, mercury concentrations in surface sediments of Shallow Lake and Clay Lake are still highly elevated (2200 ng/g and 2000 ng/g respectively)." (p.26)

"The most recent measurements for Clay Lake sediments show that mercury concentrations in 2004 were still as much as 20 times regional background levels." (p. 1)

"In terms of current-day fish mercury levels, adult walleye from Clay Lake in the range of 1-3 ppm had concentrations in 2010 that were 2 to 6 times higher than the 0.5 ppm guideline for commercial sale." (p.1)

### THERE IS AN ONGOING SOURCE OF MERCURY IN THE SYSTEM

**"This [persistent high level of mercury] suggests that there is ongoing contamination entering Clay Lake from upstream.** Whether the source of contamination to Clay Lake is residual seepage from the site of the former chlor-alkali facility or mercury loading from contaminated sediments in the Wabigoon River is not clear but needs to be determined;" (p.8)

"In the south basin of Ball Lake, which is influenced by the Wabigoon River, sediment concentrations of inorganic mercury are slowly increasing (Sellers, 2008)." (p.6)

"We recommend that a full assessment be carried out of present-day losses of mercury from the former chlor-alkali facility site in Dryden to the Wabigoon River." (p.26)

"MOECC indicated that these mercury monitoring data [at the Mercury Waste Disposal Site in Dryden] are owned by third parties and cannot be released without permission. Requests have been made to release the data but permission has not yet been secured." (p.5)

### THE GOVERNMENT'S PLAN (NATURAL RECOVERY) IS NOT WORKING

"We do not consider MNR (Monitored Natural Recovery) to be a viable standalone option for the Wabigoon-English System because fish mercury concentrations in Clay Lake are presently not declining or are declining at an imperceptible rate." (p.12)

"This stalling of recovery in Clay Lake is likely also affecting recovery rates in downstream lakes because water and contaminated particles are constantly flowing out of Clay Lake towards the downstream lakes." (p.26)

# THE RIVER **CAN BE CLEANED**, AND THE **FISH MADE SAFE** TO EAT

## "We believe that recovery could be restarted and accelerated, using methods described in this report." (p.52)

"We do believe the present situation could be substantially improved. Achieving a mercury concentration of 0.2 ppm in Clay Lake for example would enable women of child bearing age and children under age 15 to eat 8 meals of fish per month without being at risk to mercury exposure (Government of Ontario, 2015)." (p.27, 28)

"ENR [Enhanced Natural Recovery] is considered the leading candidate for mercury remediation in Clay Lake and is recommended for further evaluation. We recommend this procedure because of its likely effectiveness, because it is least disruptive to ecosystem, and because of its comparatively low cost." (p.30)

"Remediation of Clay Lake may speed the recovery of downstream lakes." (p.30)



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All references are from Harris, Rudd, Sellers. Report on options for the remediation of the English-Wabigoon River system. Completed Feb. 2016, released publicly on Monday May 30, 2016.