

QUICK FACTS from the Sellers report on Grassy Narrows

EXECUTIVE SUMMARY:

1. Mercury levels are still unsafe.
2. Sediment mercury levels are in the highest risk category.
3. Mercury levels are high enough to trigger remediation.
4. Mercury levels are going up in some areas.
5. People are still sick from mercury, including children.

1. Mercury levels are still unsafe.

“preferred fish, sediment, and crayfish at surveyed sites remain elevated (half a century after the discharge of mercury began) with respect to both background and guideline levels” (p.51)

“In Clay Lake, the sediment mercury has is showing a stabilization trend at a level 8 to 20 times background levels (Sellers, 2005) whereas the latest reports of top predator fish mercury in this lake (Neff et al, 2012) are at a level, possibly a stabilizing one, that is 2 – 15 times above consumption guideline levels.” (p.52)

“[G]iven that mercury levels have not yet returned to normal levels at affected sites, earlier predictions that natural recovery alone would mean sustained levels in fish for decades have been realized.” (p.52)

2. Many areas have mercury at the highest risk level

"the sediment data show that both basins of Clay Lake, one upstream site on the Wabigoon River, and an estimate of the current levels of mercury in the Wabigoon River between Clay Lake and Dryden are above the FEL (frequent adverse effects level) established by Environment Canada and MDDEP.” (p.50)

3. Mercury levels are high enough to trigger remediation

“this places them above the FEL guideline established by the EC and MDDEP. (p.44)

“In the Environmental Risk Assessment used in the St. Lawrence Action Plan 2011-2026, sediments that exceed the FEL level trigger the decision for remediation and whether to do so by sediment containment or removal (as opposed to open water disposal), effectively ending the ERA [Environmental Risk Assessment] process for such sites.” p.50

All quotes are from: Sellers, P. 2014. Human and Ecological Health in Asubpeeschoseewagong Netum Anishinabek (Grassy Narrows First Nation). Report prepared for the ANA-Ontario Mercury Working Group. 61 p + appendices. Released June 15, 2015.

“FEL: Value used [by Environment Canada] to provide guidance for remediation decisions; the level above which adverse effects are anticipated in most benthic species; indication that the site should be remediated; above which open-water disposal prohibited & other management option should be sought.” (p.44)

4. Some mercury levels are going up

“In Separation Lake the 2000-2010 trend show an increase in mercury for walleye and northern pike (3-8%)” (p.31)

“In the south basin of Ball Lake, the mercury concentration in the surface sediment has been steadily increasing. This means that the sediment accumulating at the surface was higher in mercury in 2004 than it was in the 1970s (Sellers, 2008).” (p.34)

“Ball Lake and most likely all other downstream basins have the potential to graduate from the TEL (threshold effects level) and OEL levels (occasional adverse effects level) to a PEL (probable adverse effects) level over the long term.” (p.45)

“PEL: Value above which adverse biological effects is expected; used to provide guidance for remediation decisions; value above which in depth analysis of advantages vs. disadvantages of remediation should be undertaken.” (p.44)

5. People continue to be sick from mercury

“The people of Asubpeeschoseewagong Netum Anishinabek (ANA, also known as Grassy Narrows First Nation) were poisoned by mercury released into the Wabigoon-English River system in the 1960s.” (p. iv)

“people have been adversely affected for a few generations as a result of eating the fish,” (p.51)

“we know that children in ANA and WIN were diagnosed by the MDB with having symptoms consistent with mercury poisoning [between 1990 and 2001].” (p.18)

Takaoka et al, 2014 “showed that older (46 to 76 years) and younger (16 – 45 years) people of ANA show symptoms of mercury poisoning.” (p.25)

“To date, no ongoing surveillance program among children exposed to mercury prenatally has been referenced in the reviewed publications. (p.10)