

Moira Lake Monitoring Update
Member FAQ – MECP Deloro Monitoring
(2023–2025)

Moira Lake Property Owners Association
February 13, 2026

Moira Lake Monitoring Update

Member FAQ – MECP Deloro Monitoring (2023–2025)

1. What is this monitoring program?

These results come from the Ministry of the Environment, Conservation and Parks (MECP) under the Deloro Site Cleanup Project.

Sampling is conducted at:

- Moira River Inlet (west basin)
- Stoney Point Island (east basin)

The Ministry confirms that 2023–2025 results are consistent with historical trends

This program is focused on monitoring related to the Deloro cleanup and does not represent a full lake-wide assessment.

2. What parameters were measured?

The program analyzed metals including:

- Aluminum
- Arsenic
- Cobalt
- Copper
- Molybdenum
- Nickel
- Lead
- Zinc

These are compared to Provincial Water Quality Objectives (PWQOs), which are protective ecological guidelines for aquatic life.

3. What were the overall findings?

✓ Most metals remain at or below Provincial Water Quality Objectives

✓ Arsenic continues to exceed the interim PWQO (0.005 mg/L)

However:

- Arsenic concentrations remain within the historical range observed at these locations
- An overall general decreasing trend has been observed over time

The Ministry notes that 2025 drought (Level 3 low water) conditions likely contributed to somewhat higher concentrations last summer due to reduced dilution

4. What does “exceeding the PWQO” mean?

The interim PWQO for arsenic (0.005 mg/L) is a conservative ecological guideline. It is not a swimming limit.

For comparison:

- The Ontario Drinking Water Standard is 0.01 mg/L (for treated drinking systems).
- The Ministry’s recreational screening reference concentration for swimming exposure is 0.25 mg/L.

The highest 2025 arsenic results:

- 0.051 mg/L (Moirra River Inlet)
- 0.039 mg/L (Stoney Point)

These exceed the ecological PWQO but remain well below the recreational screening level.

5. Is it safe to swim?

Based on the data provided:

- Arsenic levels are significantly below the Ministry’s recreational screening reference concentration.
- No swimming advisories have been issued.

As always:

- Avoid swallowing lake water.
 - Follow standard public health guidance.
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6. Is it safe to boat and fish?

No boating restrictions have been issued.

PWQOs are designed to protect aquatic ecosystems over long-term exposure. The Ministry indicates results are consistent with historical trends

Fish consumption guidance, if applicable, is provided separately through Ontario's Fish Consumption Advisory Program: [Moir Lake Advisory](#).

7. Why were 2025 levels somewhat higher?

The Ministry notes that a Level 3 low water condition was in effect during much of summer/fall 2025

From a freshwater chemistry perspective:

- Lower water levels reduce dilution.
- Reduced flow increases residence time.
- Concentrations of naturally occurring and legacy metals can increase during drought.

This is a hydrologic concentration effect, not evidence of a new contamination source.

8. Is arsenic getting worse over time?

The Ministry states:

- Arsenic concentrations remain within the historical range
- An overall general decreasing trend has been observed

The 2025 increase appears consistent with drought-related concentration, not a sustained upward trend.

9. Does this reflect the entire lake?

No.

The Ministry clearly states results are location and time specific and may not represent conditions elsewhere in the lake

These results are part of the Deloro monitoring program only.

10. Is MLPOA doing additional monitoring?

Yes.

In addition to supporting Deloro monitoring, MLPOA operates a citizen-science water quality program that includes:

- Field parameter testing
- Nutrient monitoring
- Long-term trend tracking
- Partnership coordination with Lake Partners and the Ontario Clean Water Agency (OCWA)

Monitoring is one of the strongest tools we have for evidence-based lake management.

11. What is the overall takeaway?

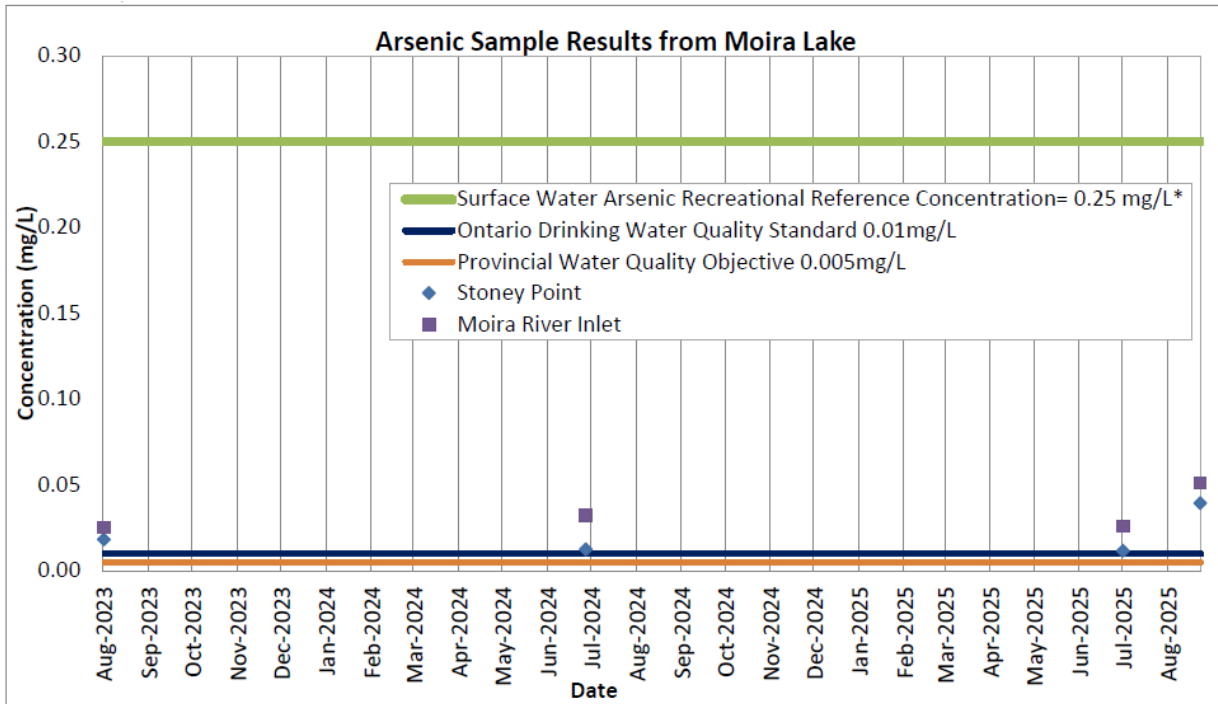
- No new contamination trend has been identified.
 - Results are consistent with long-term patterns.
 - Arsenic remains a known legacy parameter in the Moira watershed.
 - Recreational exposure levels remain well below screening thresholds.
 - Continued monitoring remains appropriate and prudent.
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Moira Lake Raw Testing Data (2023 – 2025)

Moira Lake Sampling

Location	Units	Parameter	PWQO	August 5, 2023	July 1, 2024	July 5, 2025	August 27, 2025
Moira River Inlet	mg/L	Al	0.075	0.0018	0.0056	0.0041	0.0067
		As	0.005*	0.0253	0.0324	0.0259	0.0510
		Co	0.0009	0.0003	0.0008	0.0006	0.0009
		Cu	0.005	0.0005	0.0007	0.0007	0.0011
		Mo	0.04	0.0002	0.0002	0.0003	0.0002
		Ni	0.025	0.0020	0.0023	0.0023	0.0029
		Pb	0.005	0.0001	0.0001	0.0001	0.0016
Zn	0.03	0.0010	0.0039	0.0011	0.0124		
Stoney Point	mg/L	Al	0.075	0.0018	0.0027	0.0029	0.0060
		As	0.005*	0.0182	0.0124	0.0116	0.0393
		Co	0.0009	0.0004	0.0008	0.0004	0.0009
		Cu	0.005	0.0005	0.0008	0.0010	0.0015
		Mo	0.04	0.0002	0.0002	0.0003	0.0002
		Ni	0.025	0.0021	0.0028	0.0024	0.0030
		Pb	0.005	0.0001	0.0001	0.0001	0.0001
Zn	0.03	0.0010	0.0018	0.0040	0.0036		

*interim PWQO



*Surface Water Recreational Reference concentration of **0.25 mg/L** for arsenic is derived from an internal MECP Standards Development Branch (SDB) review in July 2015. *This concentration reflects a conservative exposure scenario (child swimming 90 minutes per day and incidentally ingesting water over 120 days per year), developed for recreational-risk screening purposes.* Please note this value is specific only to this situation and location and is not to be considered to be applicable elsewhere.