



# SALT FACTS & MUNICIPAL CAMPAIGN

Claire Malcolmson for the  
ONTARIO SALT POLLUTION  
COALITION, 2024 – 2025

PPG webinar June 24, 2025

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# OSPG Goals

- That the province of Ontario works urgently with key stakeholders to develop limited liability legislation, including enforceable contractor training and a single set of provincially-endorsed standard BMPs for snow and ice management; and
- That the province of Ontario creates and funds an expert stakeholder advisory committee to advise the province and municipalities on the best courses of action to protect freshwater ecosystems and drinking water from the impacts of salt pollution; and
- Encourage municipalities and businesses to commit to the reduction of the use of road salt as much as possible while maintaining safety on roads, parking lots and sidewalks; and
- That the municipal resolution is shared with provincial officials and AMO.

# Muskoka first in Ontario to call for provincial action on road salt pollution

Ontario is Canada's No. 1 user of winter salt, applying approximately two million to three million tonnes of salt each winter, according to provincial salt pollution group

MidlandToday Staff  
2 days ago



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## 12 MUNICIPAL RESOLUTIONS

The District of Muskoka

Town of Georgina

City of Waterloo

Township of Malahide

North Perth

City of Sudbury

Town of Whitchurch Stouffville

City of Cambridge

Municipality of Killarney

Bradford West Gwillimbury

Town of Bracebridge

Township of Addington Highlands.

Toronto Enviro and Infrastructure Cmte

# ONTARIO LEADS CANADA IN SALT POLLUTION

- Ontario is responsible for 2.2 of the 5 million tonnes of salt applied in Canada.
- “Overall, Chloride concentrations in the streams monitored increased by approximately 2-fold from the 1960s to [2022]”
- “... lakes with the highest Chloride concentrations were commonly situated near urban centres, adjacent to highways, and tended to be in more populated regions of the province.”



Government  
of Canada

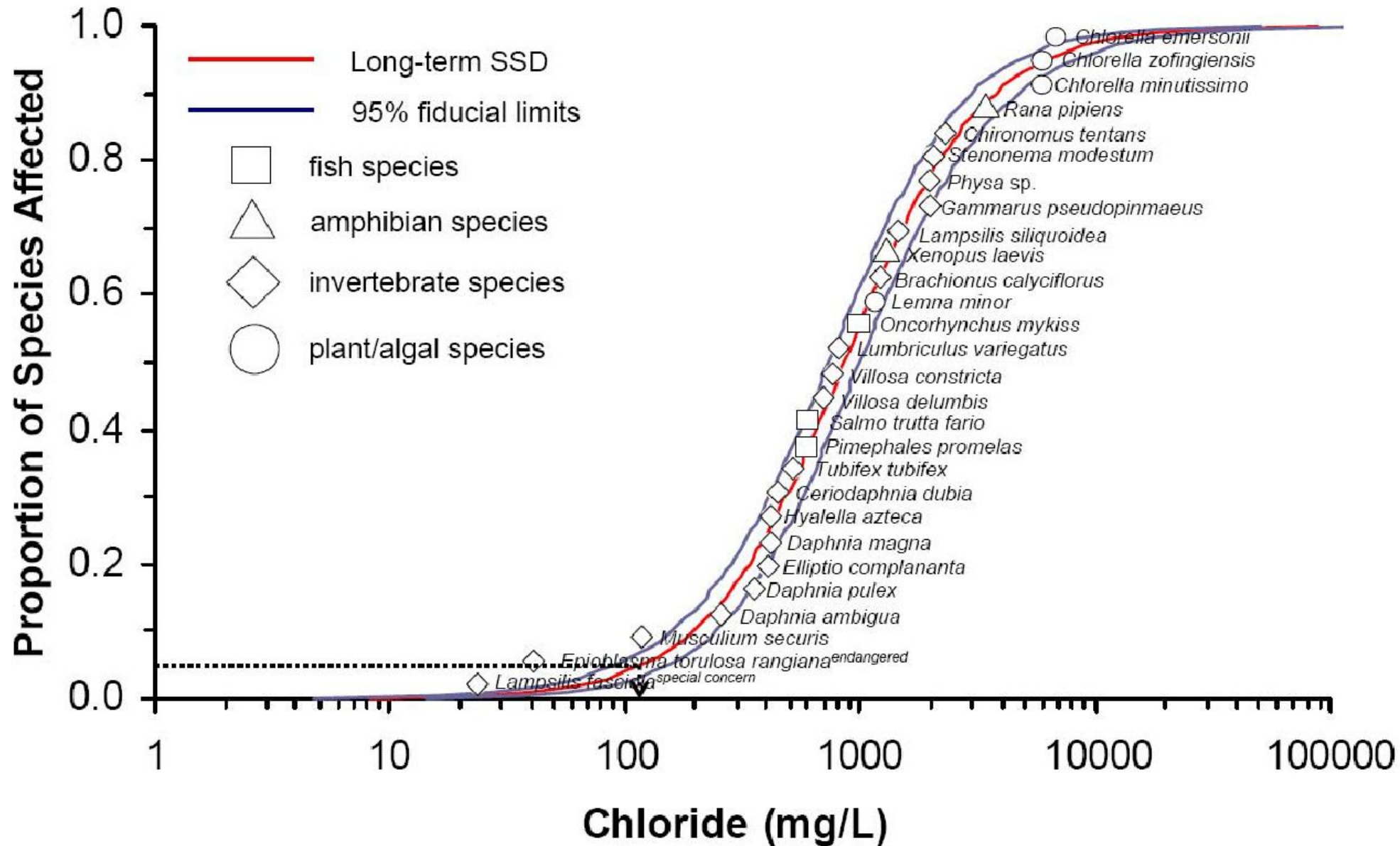
# Environment and Natural Resources

## 2001 Assessment Report of Road Salts

“....it is clear from available information that there is a reasonable probability that road salts may be having an immediate or long-term harmful effect on some Canadian surface water organisms, terrestrial vegetation and wildlife and may also constitute a danger to the environment on which life depends through its impacts on aquatic systems and soils and terrestrial habitats.”

“Thus, road salts that contain inorganic chloride salts should be considered "toxic" under CEPA\* 1999 because of tangible threats of serious or irreversible environmental damage.”

\* Canadian Environmental Protection Act



The Canadian Water Quality Guideline says most aquatic life is protected below 120 mg/L of Chloride

## BUT 5 LOCAL SPECIES OF *DAPHNIA* PROVED THE GUIDELINE WAS SUSPECT FOR THE SOFT WATER OF MUSKOKA LAKES

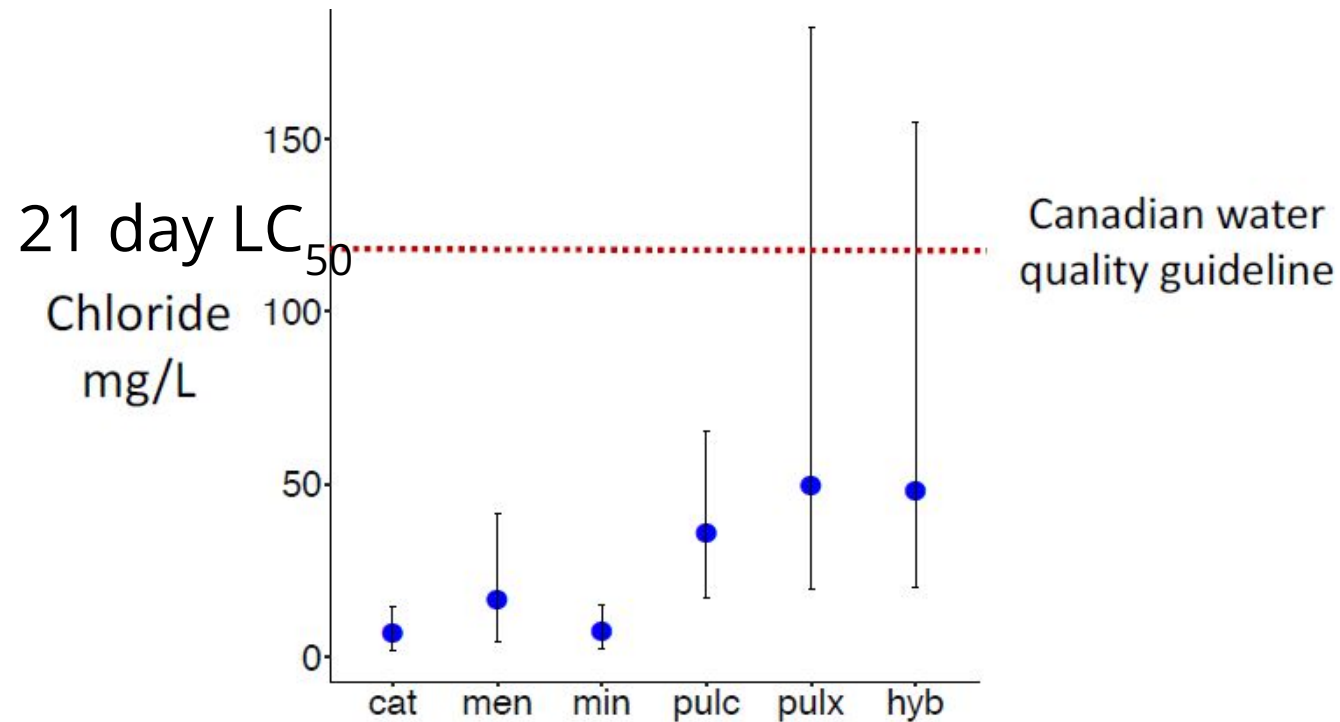
Research conducted by:



Dr.  
Arnott



Dr. Delis-Salgado



● = *Daphnia* species that die at Chloride levels below the Canadian Water Quality Guideline in the soft water of Muskoka lakes.

# ROAD SALT & DRINKING WATER SOURCE PROTECTION

- Application, handling & storage of salt is a prescribed threat under Clean Water Act
  - Policies must be developed to manage “issues” and “significant threats” to municipal drinking water wells
- Orangeville and Georgetown well systems have thousands of significant salt threats over an area of 50 sq km (Credit Valley Source Protection Area)
- Policies are a mixture of:
  - Prohibitions on new parking lots/salt storage;
  - Mandatory Risk Management Plans - negotiated between property owner and municipality;
  - Non-mandatory actions by Province (BMPs, contractor licensing).

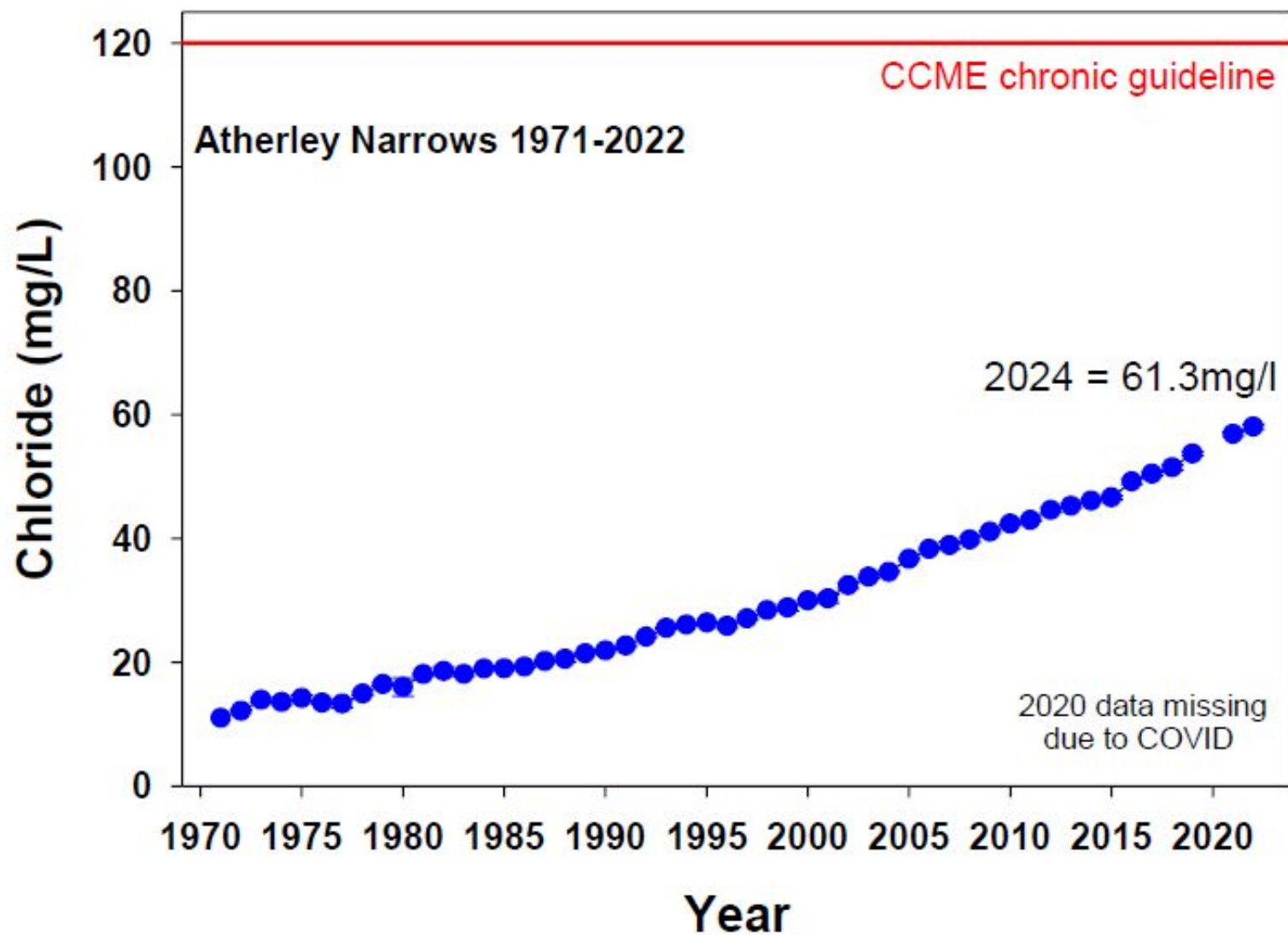


# ROAD SALT & DRINKING WATER SOURCE PROTECTION

- CTC (Credit Valley-Toronto and Region - Central Lake Ontario) Source Protection Region Discussion Paper, March, 2024:
  - “It is not expected that current salting policies will have a significant impact in reduction of salt trends.”
  - “Risk Management Plans to manage the salt issue **do not appear to be having the desired effect** & take a great deal of municipal resources.”
  - “Until incentive programs that reduce liability.....to ensure safety but consider the environment are enacted, no significant change will occur and sodium & chloride in surface and groundwater will continue to rise”.
- *Conclusion: the limited liability regime being requested by L.O. & OSPC should significantly benefit Source Water Protection*



# Winter Salt Concentration in Lake Simcoe



Most recent sample result:  
64.2mg/l March 20<sup>th</sup> 2025

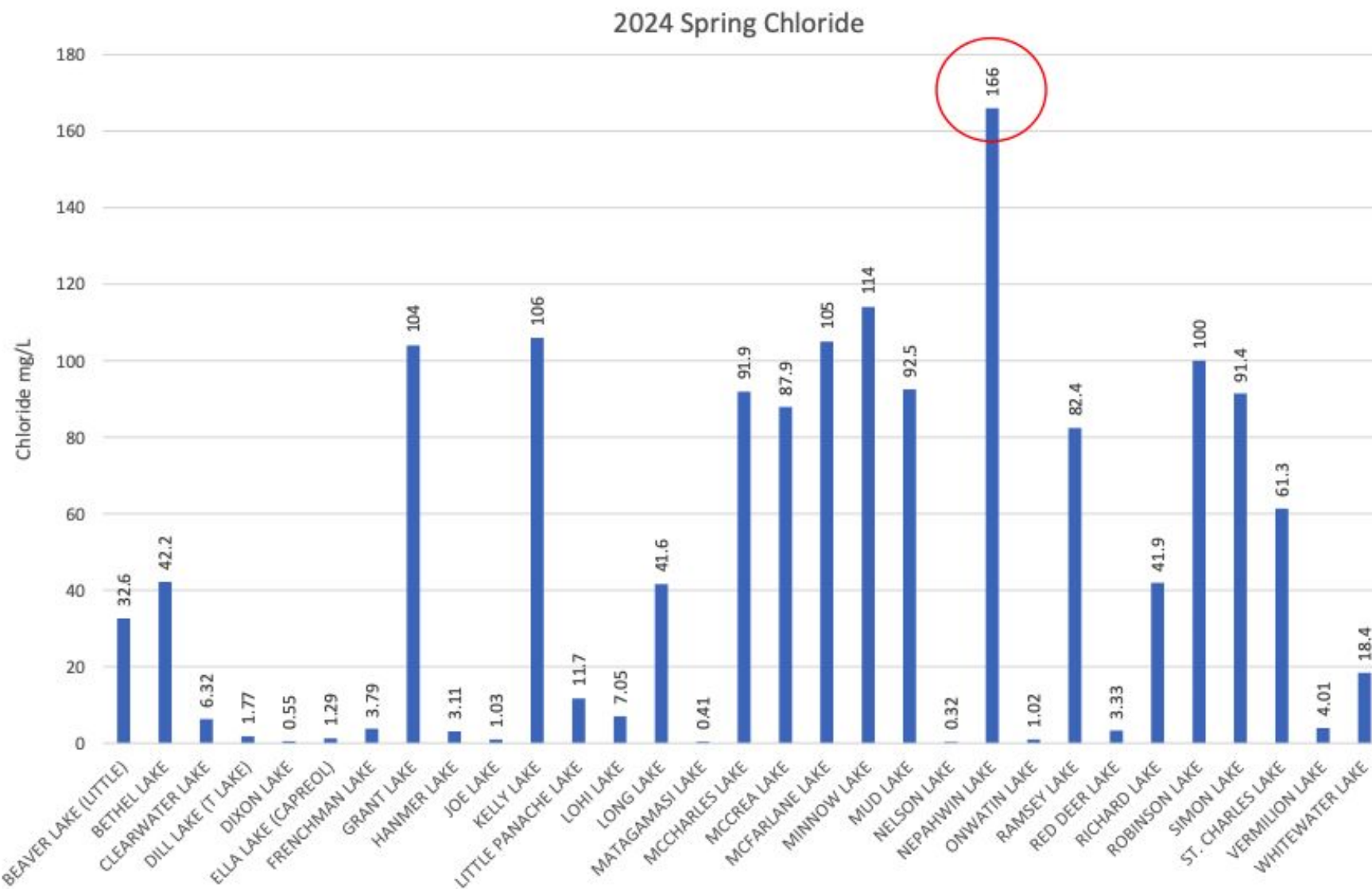


## Humans

- The aesthetic objective for chloride in drinking water is  $\leq 250$  mg/L.
- \*Nepahwin is not used as a drinking water source

## Aquatic organisms

- CCME acute surface water guideline is 640mg/L
- CCME chronic surface water guideline is 120mg/L



# TRCA DATA

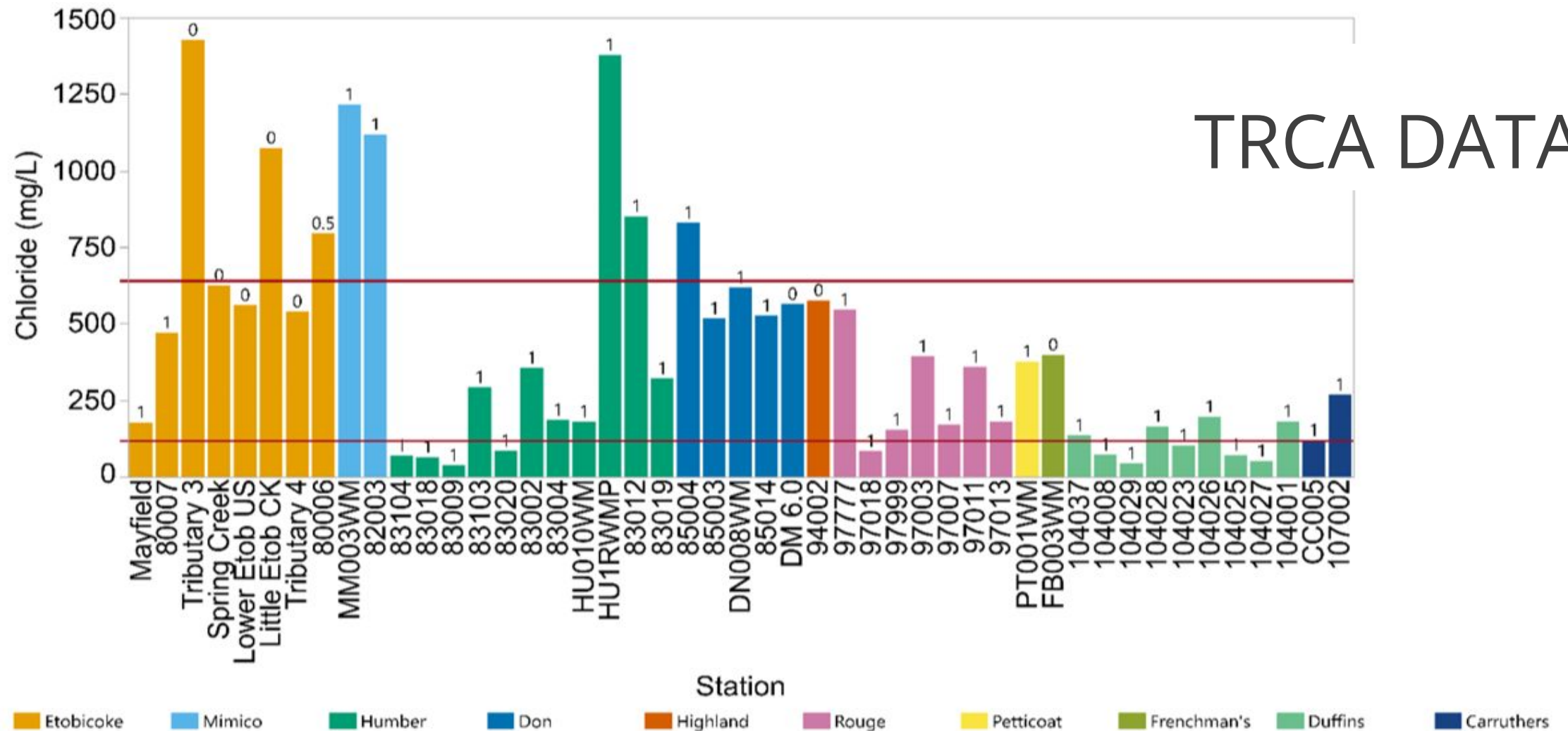


Figure 4. Average chloride concentration (mg/L) for TRCA's jurisdiction 2018-2022 by station and watershed. Bar labels indicate temporal trends between ~2000 and 2022 where 1 = significant increasing trend ( $p < 0.05$ ), 0.5 = approaching significant increasing trend ( $0.05 < p < 0.10$ ), 0 = no trend, -0.5 = approaching significant decreasing trend ( $0.05 < p < 0.10$ ), -1 = significant decreasing trend ( $p < 0.05$ ). Horizontal red lines represent the water quality objective (120 mg/L chronic; 640 mg/L acute).

# HIDDEN COSTS OF SALT

- Public infrastructure
- Fresh water for recreation, swimming, commercial uses
- Freshwater for drinking
- Aquatic life & food chain effects
- Boots and paws
- Cars



One of the cities libraries entrances. Salt plays a role in this

# OUR ASKS OF PARTNERS IN PROJECT GREEN

1. **All:** commit to the reduction of the use of road salt as much as possible while maintaining safety on roads, parking lots and sidewalks.
2. **Councillors:** Contact OSPC for support in championing the municipal resolution in your municipality.
3. **Businesses:** Support better salt management regulations—sign/send the support letter to key officials.





# THANK YOU

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[HTTPS://SALTCOALITION.CA/](https://saltcoalition.ca/)