



Chloride Pollutant Minimization Plan

Madison Metropolitan Sewerage District





Abundant Freshwater Resources

We recycle freshwater



Madison Metropolitan Sewerage District



Pollution Prevention Focus Areas



Mercury

Chloride

Phosphorus

Medicines,
personal care
products

Non-
flushables,
FOG

Have a current permit limit

Have a permit variance and
Pollutant Minimization Plan
(PMP)



Traditional approaches may not be best for all parameters





Plan

Design

Construct

Operate/
Maintain

Replace

Costs of removing chloride would raise sewer bills by a minimum of 55%.

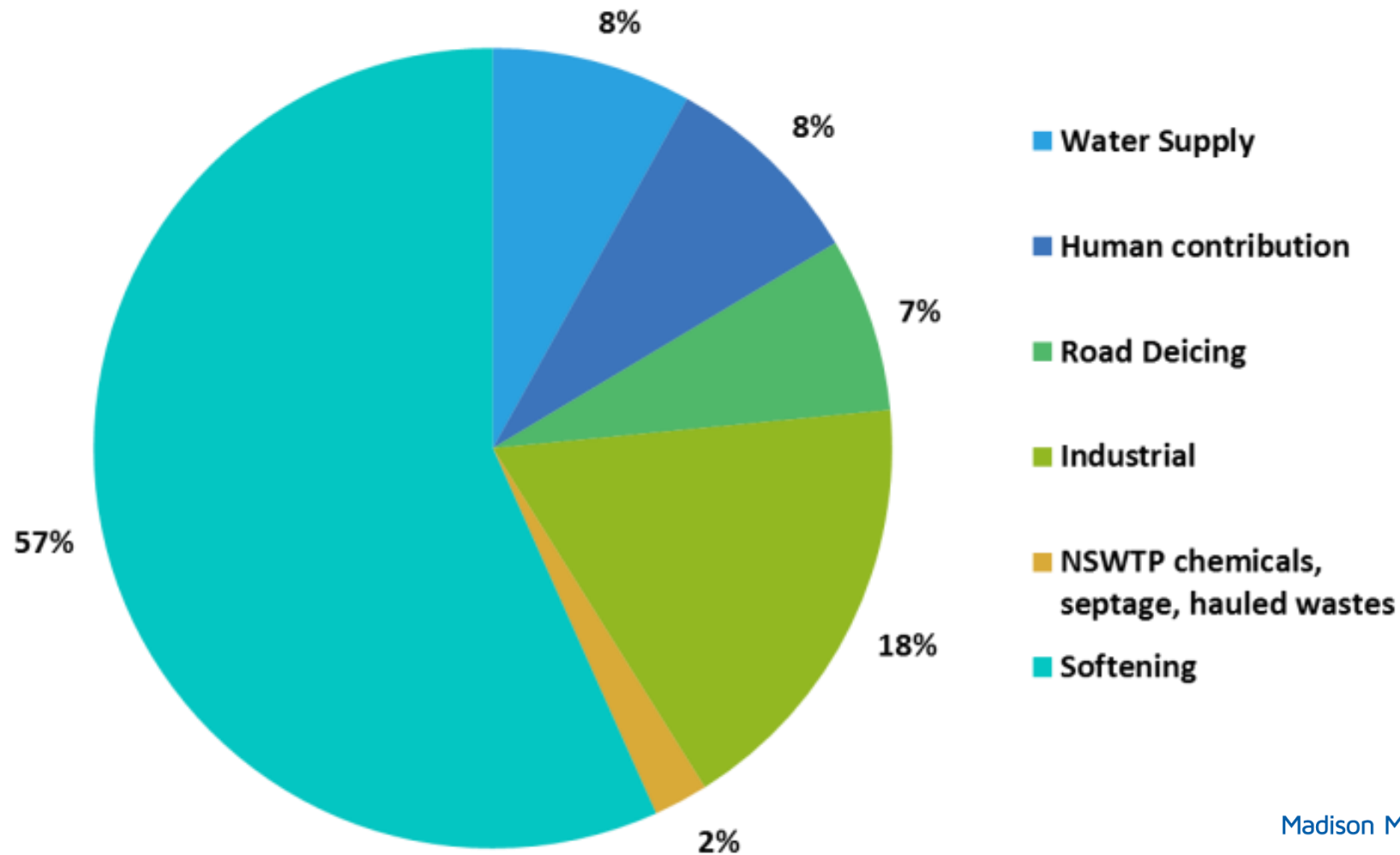


Removal - not possible for water bodies

Madison Metropolitan Sewerage District





Identifying Sources Shows One Water Challenge





[283.15\(4\)\(a\)1.](#)

1. The secretary shall approve all or part of a requested variance, or modify and approve a requested variance if the permittee demonstrates, by the greater weight of the credible evidence, that attaining the water quality standard is not feasible because:

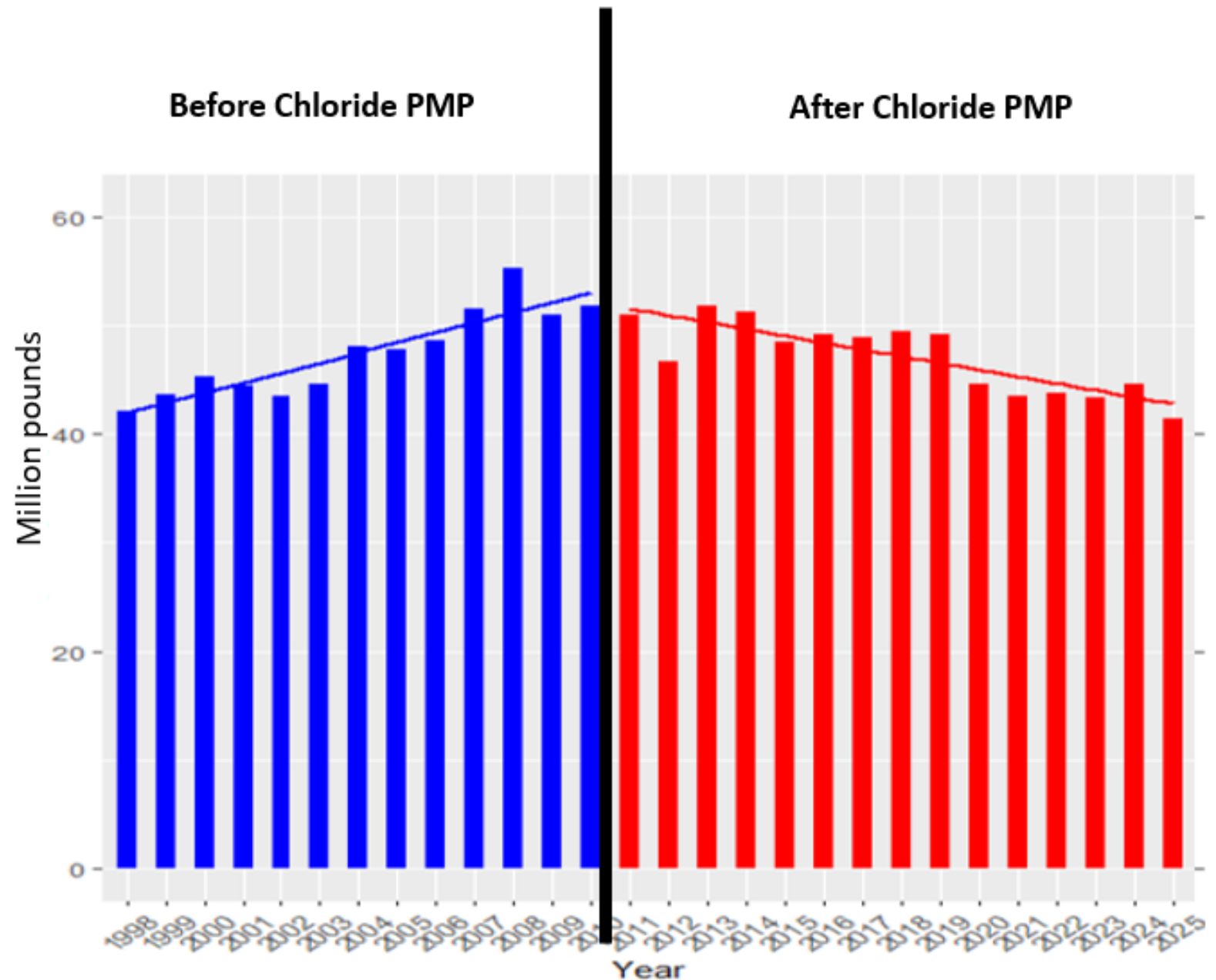
- a. Naturally occurring pollutant concentrations prevent the attainment of the standard;
- b. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the standard, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating water conservation requirements;
-  c. Human caused conditions or sources of pollution prevent the attainment of the standard and cannot be remedied or would cause more environmental damage to correct than to leave in place;
- d. Dams, diversions or other types of hydrologic modifications preclude the attainment of the standard, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the standard;
- e. Physical conditions related to the natural features of the water body, such as the lack of proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or
-  f. The standard, as applied to the permittee, will cause substantial and widespread adverse social and economic impacts in the area where the permittee is located.

2. The secretary shall deny a requested variance if the permittee fails to make the demonstration required under subd. 1.

Groundbreaking Variance Justification

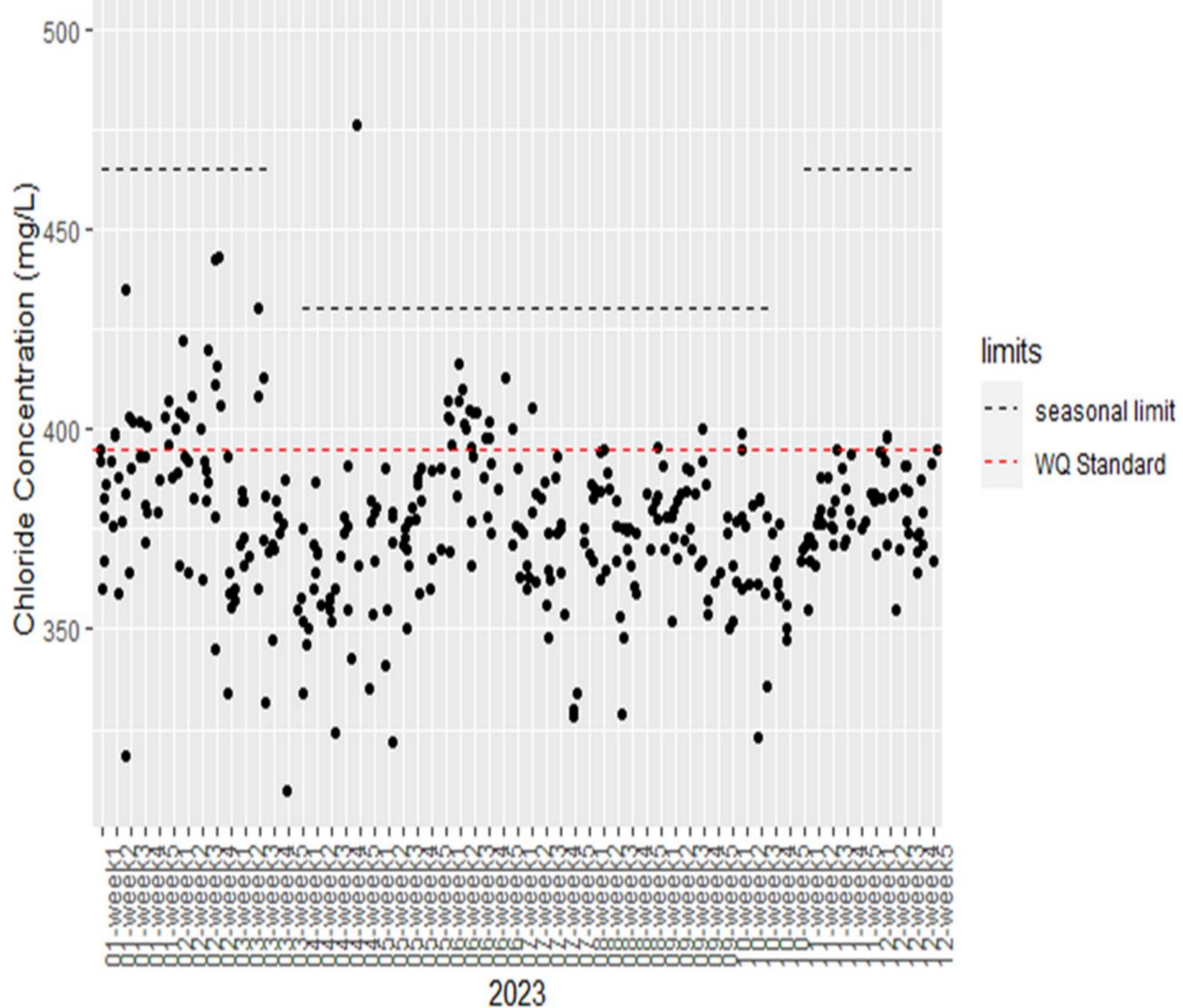
It's working:

- Mass is declining
- Work is still needed:
 - Growth in service area
 - Groundwater, surface waters saltier



Still work to do

- Variance requires meeting interim standards
- Final compliance requires meeting water quality standard.



Pollution Prevention is one way to achieve permit compliance



NACWA - Operations and Environmental Performance Award

- Cost Saving
- Effective
- Requires a variety of expertise, innovation, non-traditional investments, collaboration, education as well as changing norms and behaviors.

Pollution prevention requires collaboration



Starting the Conversation

- General district outreach, tours, special events
- Meeting people where they're at
- Raising awareness
- Start with uncovering barriers



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Chloride Reduction Practices

Your water softener has been factory programmed in accordance with Madison Metropolitan Sewerage District "MMSD" Water Softening Best Practices Guidelines. This will reduce the amount of chlorides going into the wastewater treatment plant or your septic system and ultimately the environment. For more information on this go to: www.madsewer.org and click on the Salt Page. Depending on your water quality parameters and especially private well water applications may require the installer to modify these factory settings to provide adequately conditioned water.



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Working with Businesses

- Water Quality Professionals dev. BMPs
- Largest Water Users Optimize
- Pretreatment Program Industrial Permittees evaluate
- Large Institutions/Campuses inventory and improve

Working with Customer Communities

- Sewer Use Ordinance Reporting
- Meeting to ID needs and connect to resources
- Supporting Public Works



Extending reach through partnerships

- [City of Madison BESP Partnership](#)
- [Project Home Partnership Press Release](#)
- [Efficiency Navigator/Sustain Dane Partnership](#)



Efficiency Navigator

Making multi-family housing
affordable and resilient

A partnership with Sustain Dane and Elevate

Founded

Wisconsin Salt Wise



- Brought coalition together
- Secured funding for coordinator
- State-wide expansion
- Robust training program that has shifted industry norms
- State Policy Advocacy

WI Salt Wise is a coalition of organizations from across Wisconsin working together to reduce salt pollution in our lakes, streams and drinking water. Our primary goals are to: educate residents, leaders and winter maintenance professionals on salt pollution and solutions, provide training and promote best practices to reduce salt pollution and recognize those committed to minimizing their salt footprint.



Madison Metropolitan Sewerage District



Northcentral Wisconsin
Stormwater Coalition



<https://www.wisaltwise.com>

Training

Hundreds of plumbers trained

- Developed water softener efficiency training program
- Partnership with Plumber's Union, Local 75 & Building WI TV
- Building inspectors, utility workers



Fostering Innovation



Madison Metropolitan Sewerage District added 3 new photos.

November 1 at 5:16pm · 🌐

TRAINING UNDERWAY: WINTER SALT REDUCTION
Did you know that many parking lots and sidewalks receive 10 to 20 times the amount of salt needed to fully melt the ice? This excess salt washes away, affecting area... [More](#)





Developing Champions & Sharing their Stories

- [Grant success stories](#)
- [Innovation Case study](#)

Research & Piloting

- [Paired Sewershed Study](#)
- [Salt Savers Pilot](#)
- [Blending valve pilot](#)



Finding Sustainable Solutions

- Evaluating softening needs
- Blending valves
- Finding water reuse opportunities



Changing Norms

- Working with softener manufacturers to change default settings
- Local builders install blending valves by default
- Creating resources tools to help plumbers look up water hardness



Looking Ahead

- Permit and variance renewal
- Sewer Use Ordinance
- Amplify in your networks.





Thank you!

Madison Metropolitan Sewerage District

