

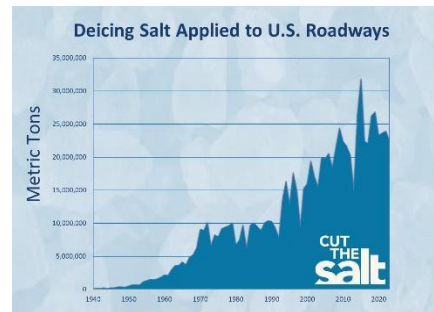
Protecting All of Pennsylvania's Waterways from Winter Salt Pollution

The **Pennsylvania Road Salt Action (PARSA)** coalition is preparing to submit a petition to the Pennsylvania Environmental Quality Board (EQB) requesting that the Department of Environmental Protection (DEP) develop a **Water Quality Standard for chloride** that protects aquatic life in all Pennsylvania surface waters.

Why is PARSA submitting this petition?

Winter salt use has skyrocketed.

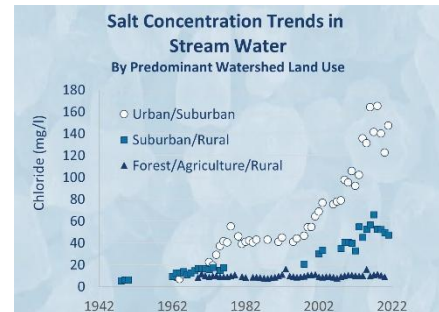
Winter salt use has grown significantly in Pennsylvania and across the U.S. The amount of rock salt applied annually for deicing has more than doubled since 1975, with 20–30 million metric tons applied each year nationwide and as much as 2 million tons used in Pennsylvania annually.



Salt runoff is polluting streams and groundwater.

Runoff from roadways and parking lots is a major source of chloride pollution in streams:

- Winter storms cause harmful spikes in chloride levels as salt washes into nearby streams. This runoff also damages soil, trees and other vegetation.
- Chloride from salt also infiltrates groundwater, keeping levels in streams and rivers elevated year-round.
- Data from DEP, USGS, Stroud Center, and watershed groups show increasing chloride in many PA waterways; significantly above historic chloride concentrations.



Charts from www.stroudcenter.org/salt

Elevated chloride levels harm aquatic life.

Elevated chloride has serious impacts on freshwater ecosystems:

- Fish, mussels, and aquatic insects that are critical to stream health and biodiversity are sensitive to chloride pollution. As DEP itself noted in 2009: “Freshwater fish and aquatic communities cannot survive in elevated concentrations of chlorides.”
- There’s no known way to remove chloride from streams once it’s in the water. And small amounts of salt can harm a stream—it only takes 1 teaspoon of salt to pollute 5 gallons of water to a level that is toxic for freshwater ecosystems.
- Chloride is also bad for drinking water supplies and very expensive to remove from tap water. It also corrodes drinking water pipes along with bridges, roads, culverts and other infrastructure. Chloride corrodes vehicles, bridges and roads at an estimated cost of approximately \$5 billion per year.

Proven alternatives exist which can reduce salt use by 30–50% without compromising safety.

Effective best management practices can reduce salt use while maintaining safety:

- Calibrated spreaders improve application precision. Brining and pre-wetting of salt improve efficiency. Improved plowing and weather-based decisions reduce over-salting.

Current Pennsylvania water quality standards do not fully protect aquatic life. Existing PA protections are limited:

- Special Protection Waters are protected against degradation, but less than one-third of PA's stream miles have that protection.
- The Potable Water Supply standard for chloride applies only at drinking water intakes, not elsewhere on the waterbody.
- DEP relies on Osmotic Pressure (OP) as a surrogate for chloride, but OP is difficult to apply broadly and does not capture cumulative impacts across a watershed.
- DEP started to work on a chloride standard between 2010 and 2019, but no statewide aquatic life standard currently exists.

A chloride standard would help ensure consistent use of sustainable practices across all sectors, including by private applicators.

How does the petition process work?

Under Pennsylvania law, organizations and individuals can petition the EQB to adopt or revise standards. Once a petition is submitted, DEP reviews the petition and responds. The EQB votes whether to accept the petition; if it is accepted, DEP begins a multi-year process including research and public input.

PARSA is suggesting Pennsylvania could consider benchmarks in adjacent states such as Ohio (52 mg/L) or Maryland (50 mg/L), but DEP would ultimately determine the standard.

How can your organization help?

PARSA is asking organizations across Pennsylvania to **endorse this petition**. Broad support will demonstrate this is a statewide concern, show support for practical, science-based solutions, and help advance protection of PA waterways. Endorsing organizations will receive updates and opportunities to stay engaged.

- To endorse the petition, go to paroadsaltaction.org/endorse (insert link)

Learn More and Take Action

www.paroadsaltaction.org

www.paroadsaltaction.org/chapter-23-petition