

SAVE OUR STREAMS FROM ROAD SALT



Salt is a problem in the Pennypack Creek watershed

- Most Pennypack streams are contaminated with salt
- Salt levels in local streams are 10-30 times higher than natural levels, even in the summer. During winter storms, levels rise to 50-100 times higher than natural (PERT and USGS)



The amount of salt in Pennypack streams is shocking

25,000+ TONS
of salt applied by humans
flow through the watershed every year
=
65+ TONS PER DAY

A problem across the world

- An invisible freshwater pollutant - salt - has increased at least 2-4 times in the last 50 years in many places
- Road salt use has more than doubled since the 1970s, and is the main cause of the salt increase in our region
- Road salt dissolves in water and enters streams quickly via runoff from roads and parking lots, and slowly enters into the soil and groundwater
- Even though the problem is getting worse, solutions need to be balanced with safety and economic concerns

Salt (as chloride) in Pennypack

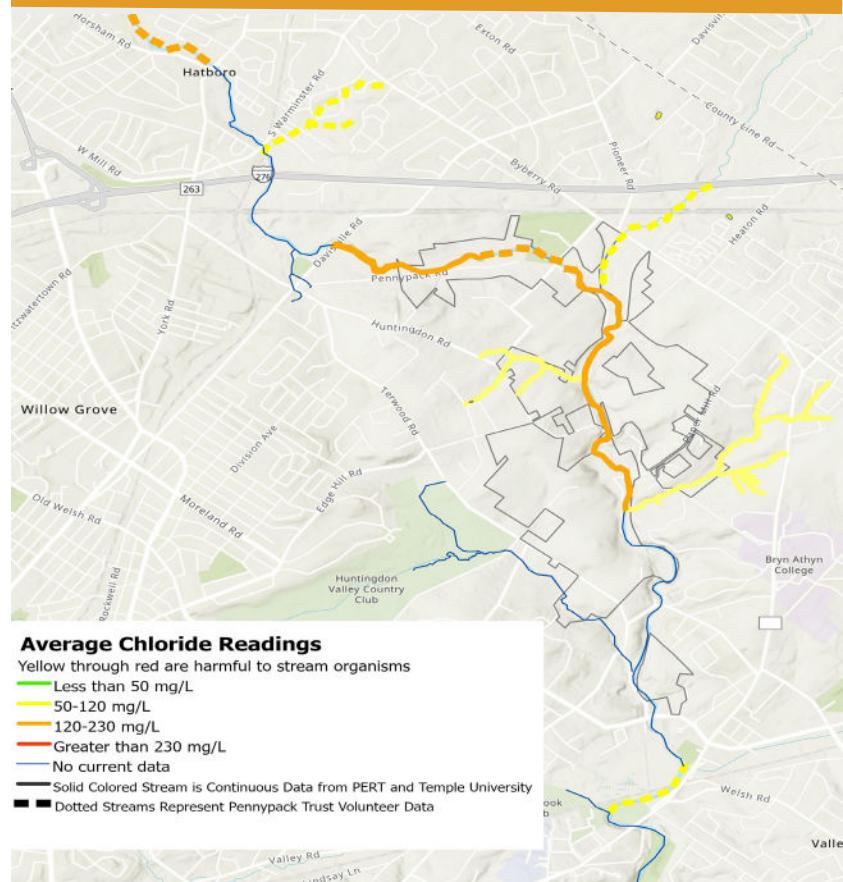
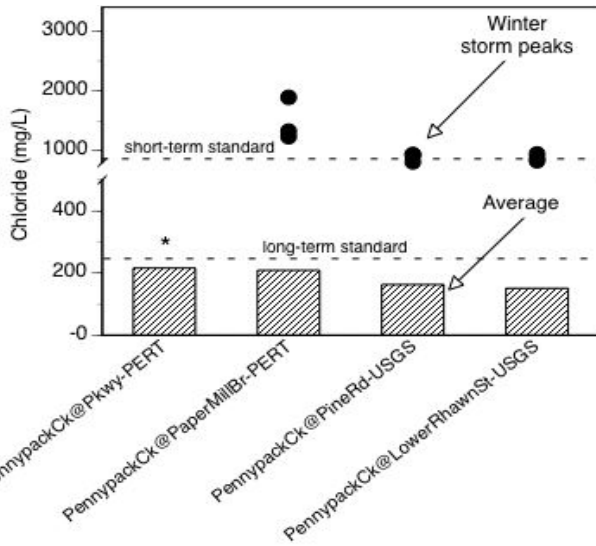


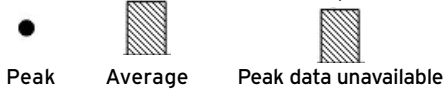
Photo by Kevin Roth
Excessive use of road salt in Lower Moreland parking lot

Map includes all available data from 2018-2021, collected by PERT volunteers with chloride test strips in partnership with the Izaak Walton League, and by continuous sensors maintained by PERT volunteers.

Salt (as chloride) in Pennypack streams



KEY



Natural Chloride Concentrations in this area should be less than 5 to 20 mg/l



PERT staff Kevin Roth measuring chloride in the Pennypack Creek. Photo by Ali Roth

What can we do to help?

Homeowners and residents

- **Shovel First:** Shovel before you salt and right after it snows to reduce the need for salt
- **Reduce and Reuse:** Use just enough salt to melt ice (One 12oz cup of salt per 20ft of driveway or 10 sidewalk squares). After snow melts, sweep up and reuse the salt that remains
- **Consider:** sand or crushed limestone instead of salt or a 1:1 sand/crushed limestone to road salt mixture
- **Read the Label:** Don't use products containing urea, kitty litter, or ashes
- **Speak Up:** Educate your neighbors! If you see an unprotected salt pile or excessive salt use, contact your township

Why is salt a problem?

- Salt can be harmful to aquatic animals and plants. Some of these streams exceed the federal standard for long-term exposure designed to protect aquatic life most days of the year
- High levels of road salt during winter storms have exceeded the federal standard for short-term exposure designed to protect aquatic life (~1 tsp of salt/gallon)
- Road salt speeds up rusting of metal and corrosion of concrete, causing millions of dollars in damage to infrastructure and personal property



Photo by Carol Armstrong
Salt accelerates rusting of metal and corrodes concrete

Considerations for municipal and private property owners

- Adopt more efficient mechanical snow/ice removal methods such as live edge plows
- Apply pre-storm salt brine to reduce rock salt use
- Improve efficiency of salt application and storage to reduce waste. Sweep up salt after use
- Adjust brine and salt applications to match snow/ice expectations and traffic volume



QUESTIONS?

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Scan me to learn more about Winter Salt Watch:

