SALT WATCH™
IZAAK WALTON LEAGUE OF AMERICA

FINAL REPORT

2023-2024

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www.saltwatch.org

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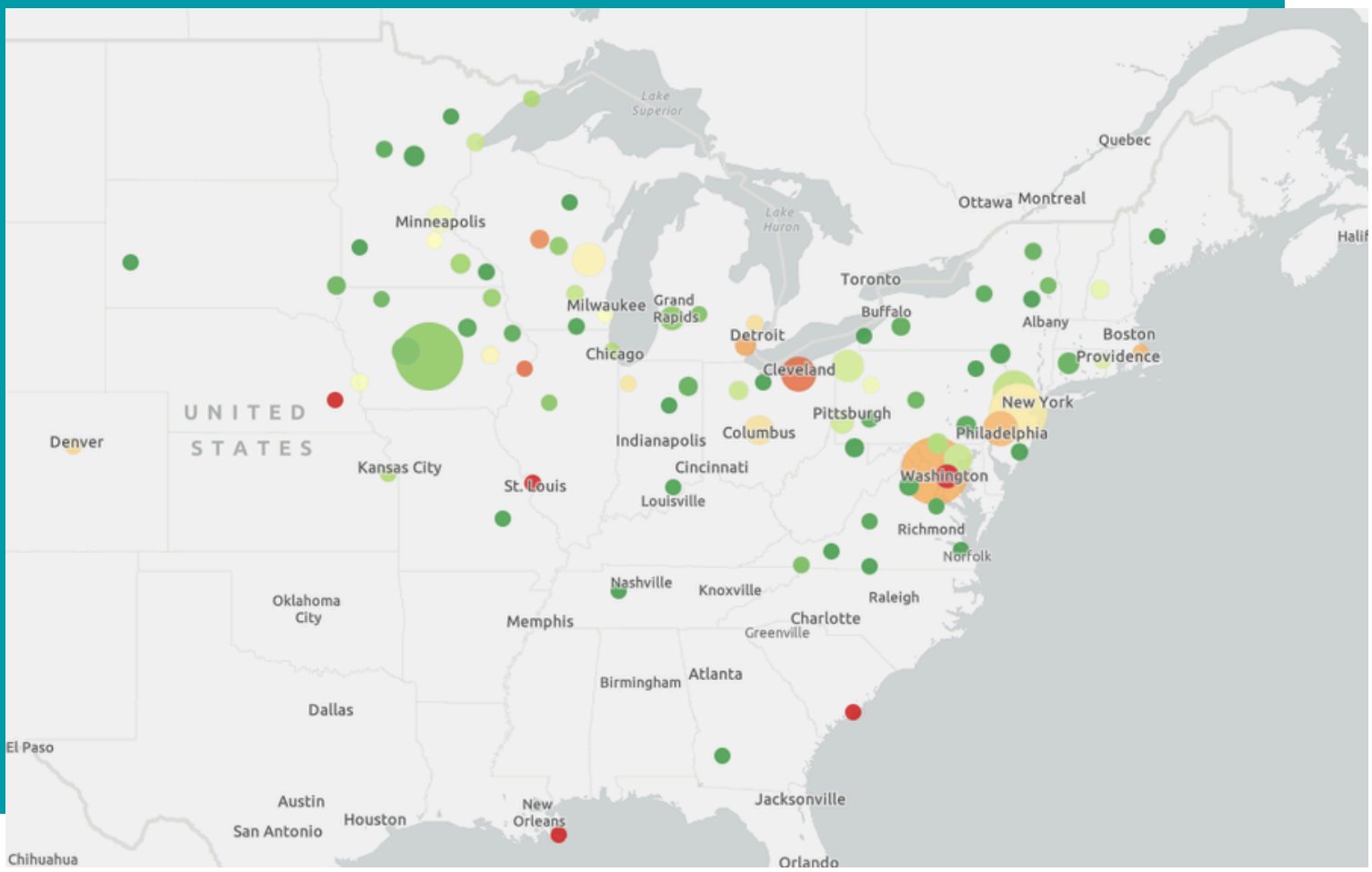
SALT WATCH 2023-2024 SEASON

Between July 1, 2023 and June 30, 2024, we distributed 4,809 Salt Watch Kits to 36 states and received over 6,600 Salt Watch readings from 29 states, with results still coming in! Most of the data reported was from the northern mid-Atlantic states through northern midwestern states, but there were also some data (not shown on the map below) from Washington, California, and Colorado.

To view the new season's Salt Watch Map (updated weekly), visit **iwla.org/saltwatchresults**.



NEW RESOURCES

This year we created additional resources to support the efforts of monitors and volunteers doing outreach.

Flyers

- Flyer to educate neighbors (Spanish version)
- Flyer to inform local businesses (Spanish version)
- Flyer for visual of how much salt to use (Spanish version)
- Brochure to educate your community about road salt pollution and what to do (Spanish version)

Fact Sheets

Use these fact sheets to educate your community about road salt pollution.

- Chloride and Infrastructure Fact Sheet (Spanish version)
- Chloride in Drinking Water Fact Sheet (Spanish version)

Guides

- Salt Watch Advocacy Guide
- How to Run a Successful Paint the Plow Event
- Salt Watch Chapter Toolkit

NATIONWIDE

Another record-breaking season of data submissions! This season, the country did see more winter storms than previous winters, but some areas (like the DC Metro Region) saw only a few days of snow accumulation. Even with limited snow in some regions, more partners than ever before reported incidents of uncovered snow piles that they worked to have covered and cleaned up. It takes many hands to keep us and the environment safe in the winter, and we thank each and every one of you for being a part of our Smart Salting efforts and Salt Watch community.

This year, Salt Watch fully transitioned to reporting data on the **Clean Water Hub.** Data entered on the Hub is easier to upload, access, visualize and download.

As chloride persists, our monitoring and cleanup efforts do too.

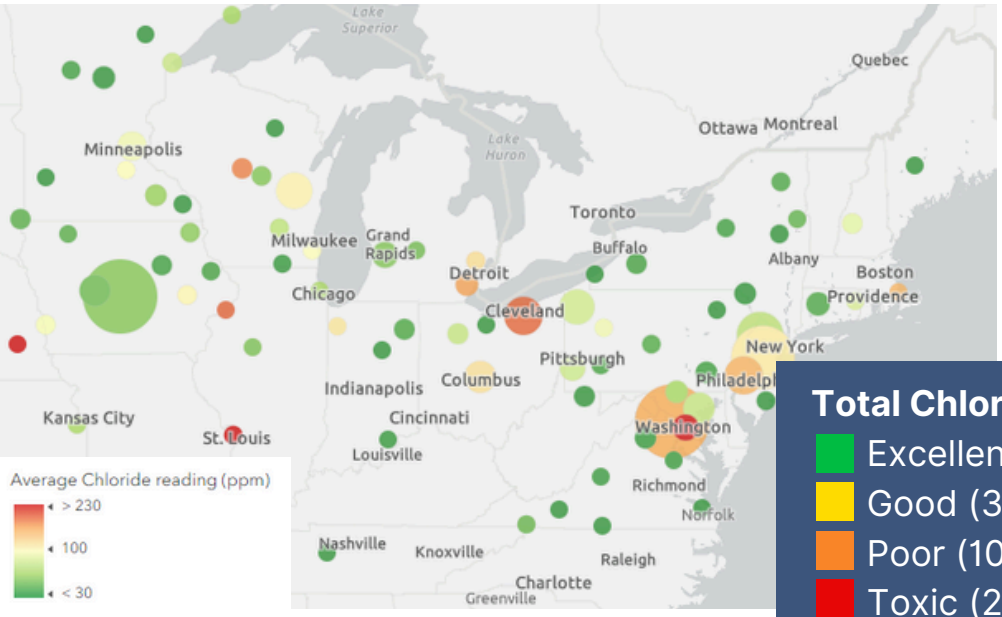
Thank you for being part of the solution.

57
Official partners

566
Participating organizations

913
Volunteers

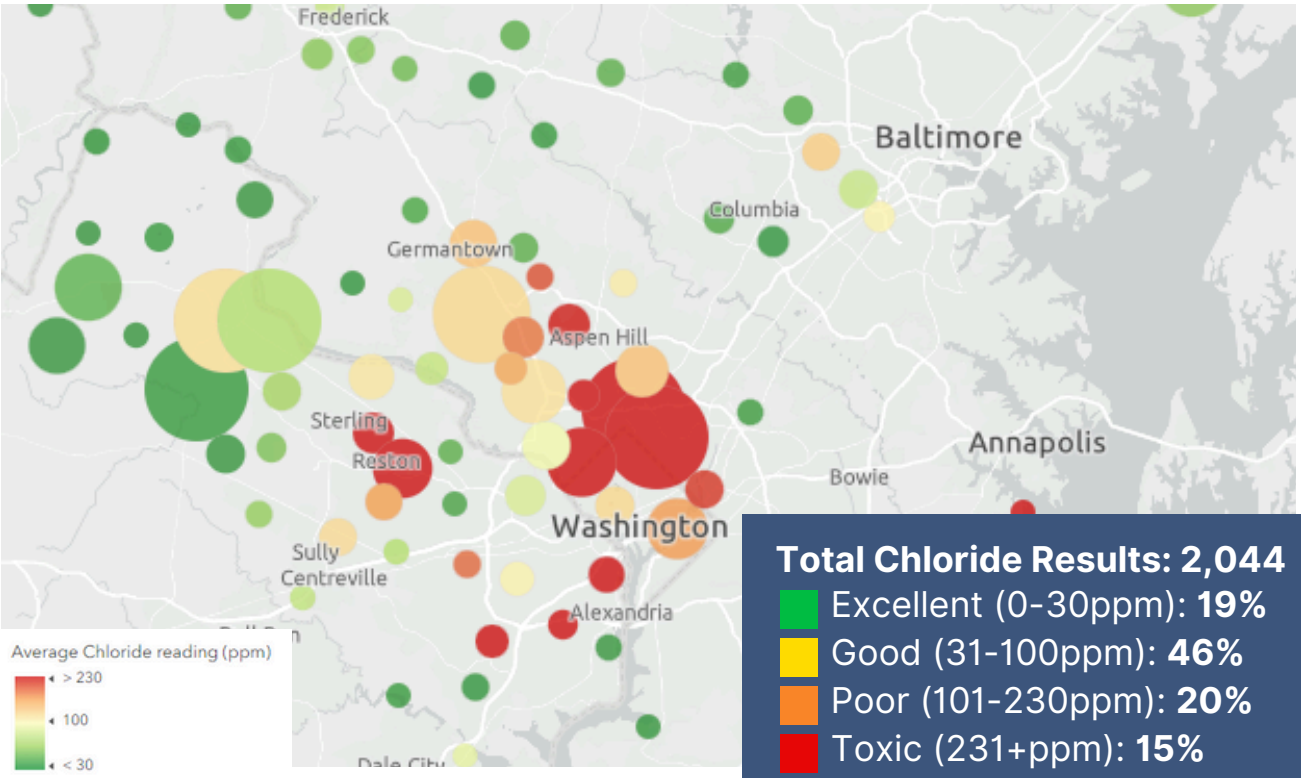
1,842
Sample locations



Total Chloride Results: 6,648

- Excellent (0-30ppm): **23%**
- Good (31-100ppm): **50%**
- Poor (101-230ppm): **17%**
- Toxic (231+ppm): **10%**

DC METRO REGION



Total Chloride Results: 2,044

- Excellent (0-30ppm): **19%**
- Good (31-100ppm): **46%**
- Poor (101-230ppm): **20%**
- Toxic (231+ppm): **15%**

APPLICATOR TRAINING

In the fall/winter Maryland Department of the Environment (MDE) launched a pilot training and certification program for road salt applicators. Salt Watch staff attended and provided feedback on the training. In fall 2024 MDE plans to launch the training for the public.

Regional Partners:

Friends of Cabin John Creek
PA TAPS CO Heritage Greenway
Gaithersburg
Reston Association
Rock Creek Conservancy
Chesapeake Bay Trust
Anacostia Riverkeeper
Little Falls Watershed Alliance
Loudoun Wildlife Conservancy
Muddy Branch Alliance
Friends of Sligo Creek
Neighbors of the Northwest Branch
Department of Environmental Protection, Montgomery County • Maryland

GAITHERSBURG SALT WATCH

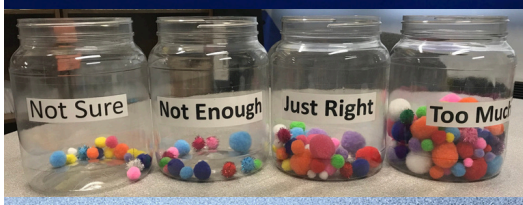
This year was our third being funded for a focused Salt Watch program in one community with Gaithersburg Salt Watch. It has been a great opportunity for us to apply what we've learned to better help partners across the country make meaningful change in their own communities.

Staff have participated in community events like farmers markets, Gaithersburg Oktoberfest, and a Salt Watch hike, giving out Salt Watch kits and information about chloride runoff to community members. Over 560 Salt Watch kits have gone out to school groups and residents in Gaithersburg this season. We also held our second applicator training for commercial salt applicators to learn how to properly apply road salt on sidewalks and parking lots and become "Smart Salt Certified."

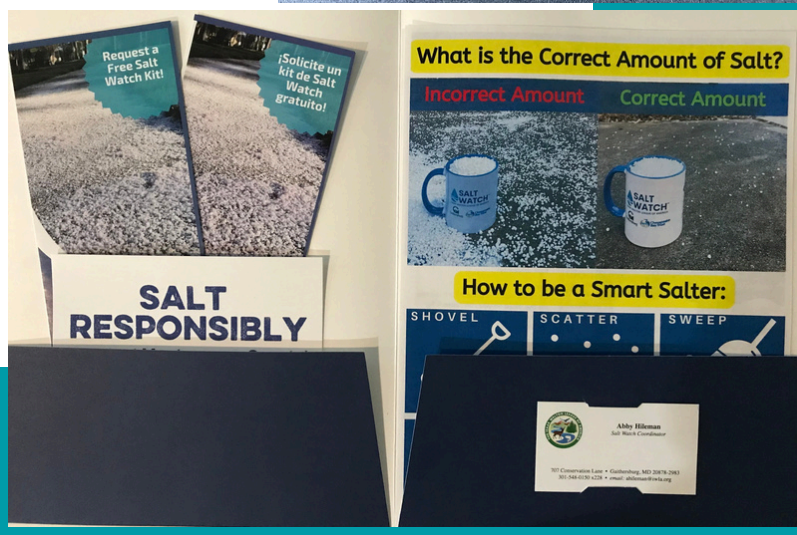
Learn more about Gaithersburg Salt Watch at **saltwatchgaithersburg.org.** Special thanks to the Chesapeake Bay Trust in partnership with the City of Gaithersburg for funding this project.

MOCO SALT WATCH

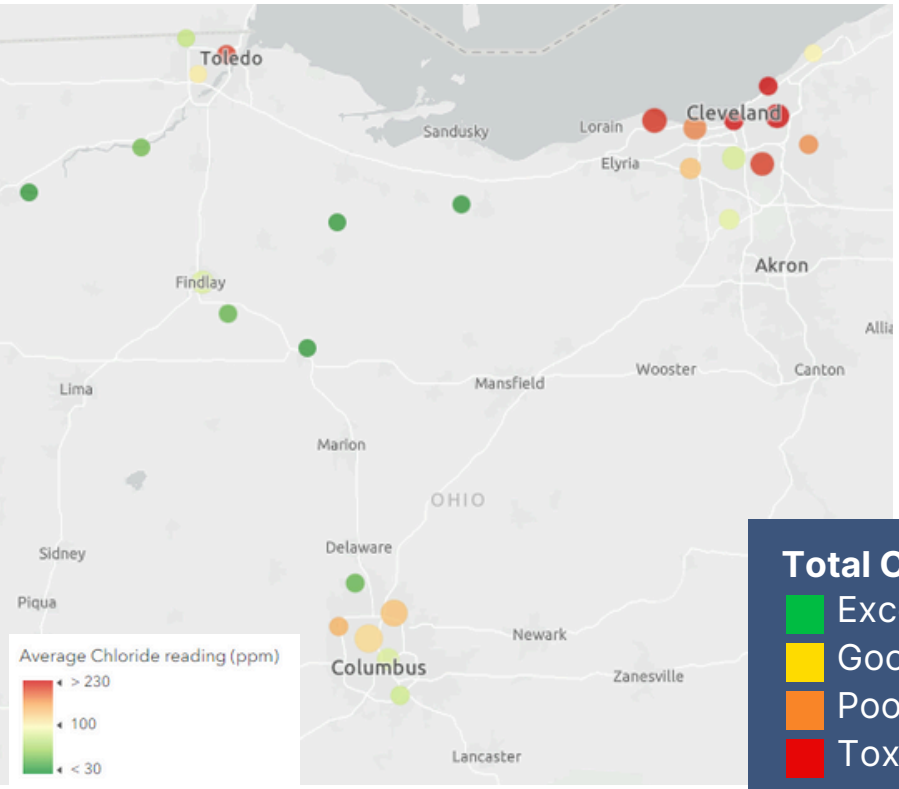
This year we were funded for two focused Salt Watch programs across Montgomery County (MoCo), Maryland. One campaign allowed us to reach out to businesses across the county and give them information on how to reduce road salt pollution while maintaining safety, coupled with an applicator training. We were also able to team up with our County Department of Transportation to host a Salt Watch Paint the Plow event this year. During the program in fall 2023, 11 snowplow blades from Montgomery County Department of Transportation were distributed to Salt Watch Partners, high schools, Scout troops, and Izaak Walton League chapters.



Staff have participated in community events like farmers markets and festivals, giving out Salt Watch kits and information about chloride runoff to community members. We have translated more of our informational materials to Spanish to reach additional audiences and we have been distributing cups for residents to measure the correct amount of salt for their walkways and driveways. Over 800 Salt Watch kits this season have gone out to school groups and residents in MoCo. Learn more about MoCo Salt Watch at **saltwatchmoco.org**. Special thanks to the Chesapeake Bay Trust in partnership with the Montgomery County DEP for funding this project.



OHIO

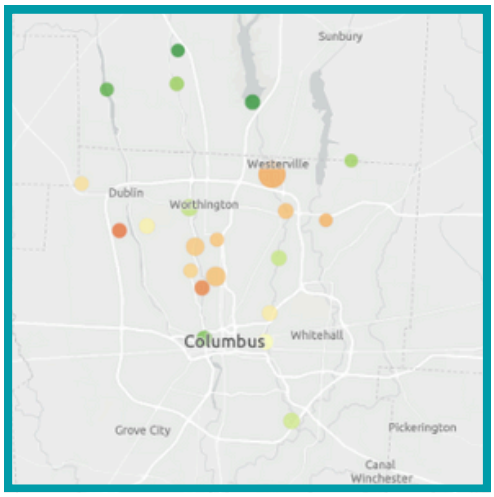


Regional Partners:

Franklin Soil and Water Conservation District
Cleveland Metroparks
FLOW Friends of the Lower Olentangy Watershed
Tinker's Creek Watershed Partners
Rediscover • Respect • Revitalize
Groundwater Consortium
Belmont Soil & Water Conservation District

Total Chloride Results: 429

- Excellent (0-30ppm): **10%**
- Good (31-100ppm): **36%**
- Poor (101-230ppm): **34%**
- Toxic (231+ppm): **20%**



Columbus

151 Total Results

Excellent: **7%**

Good: **48%**

Poor: **34%**

Toxic: **11%**

Cleveland

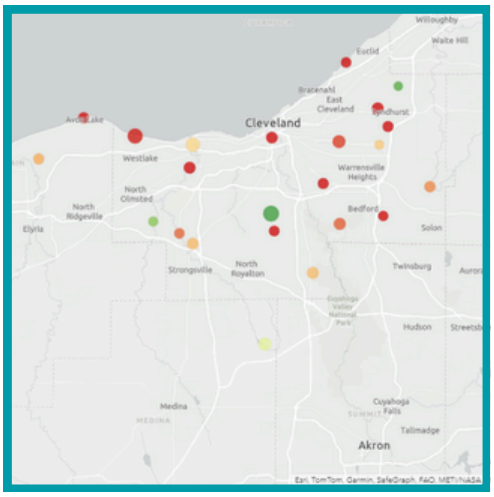
219 Total Results

Excellent: **8%**

Good: **23%**

Poor: **39%**

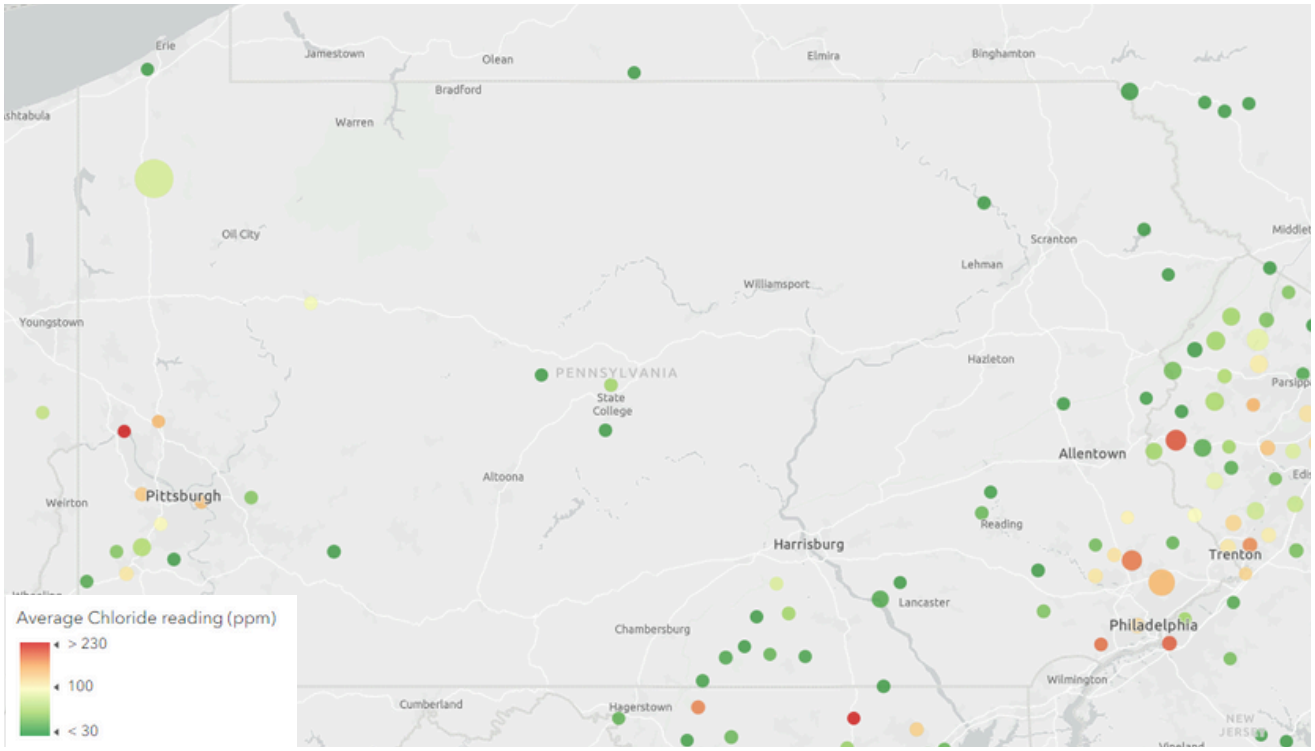
Toxic: **30%**



HIGH CHLORIDE LEVELS IN MAY 2024

In May 2024 we noticed chloride levels in Cleveland which were unusually high for the spring. There are several possibilities for why this occurred, but many of those answers require more monitoring to clue us into what is happening at the local level. Read more about some of the potential causes **here**.

PENNSYLVANIA



Regional Partners:

Total Chloride Results: 570

- Excellent (0-30ppm): **18%**
- Good (31-100ppm): **47%**
- Poor (101-230ppm): **27%**
- Toxic (231+ppm): **8%**

Meadville

184 Total Results

Excellent: **17%**

Good: **61%**

Poor: **16%**

Toxic: **6%**

Philadelphia

201 Total Results

Excellent: **5%**

Good: **35%**

Poor: **45%**

Toxic: **15%**

STATE POLICY

HB1055

Delegate Qi introduced a bill to the Maryland legislature that would require all state agencies, counties, and municipalities to keep records of and report their road salt use annually to Maryland Department of the Environment. Since there are currently few entities required to report road salt application in Maryland, this bill would have been a vital first step to understanding the scope of road salt applied throughout the state. Read the bill text and history **here**.

While the bill did not pass, it did start the conversation around transparency of road salt application. We are working to get more legislation in Maryland to reduce road salt pollution!

HF 3565

Rep. Hollins introduced a bill at the state level in Minnesota to establish a voluntary certification program that would give limited liability protection for road salt applicators who are certified in and maintain best road salting practices. You can find the bill text and history of the bill **here**.

The bill did not pass, but it has helped to start the conversation, and one of our Izaak Walton League chapters in Minnesota is working hard to get more support for similar legislation in the coming years.

STATE POLICY

SB 52

This Wisconsin bill aimed to establish a voluntary certification program that would give limited liability protection for road salt applicators who become certified in best road salting practices, maintain best practices, and keep records of their snow removal and road salt applications. Read about the bill **here.**

This bill passed both the Wisconsin State Senate and the Assembly, but it was vetoed by Governor Evers. Wisconsin Salt Wise is working hard to get similar legislation passed to reduce road salt pollution across the state.

New Jersey 2023 Municipal Separate Storm Sewer System (MS4)

The updated 2023 Municipal Separate Storm Sewer System (MS4) permit in New Jersey now requires municipalities to remove "piles of excess salt and de-icing materials that have been deposited during spreading operations" within 72 hours after the end of a storm event. This includes all streets and parking lots owned or operated by the municipality. If you're in New Jersey and notice excessive road salt on a publicly owned or operated space, please fill out **this form** to assist municipalities with permit implementation.

If you're curious about New Jersey's 2023 MS4 Permit, you can **read it here**.

SUCCESS STORIES

Salt Watch Pledge

Salt Watchers are asked to "pledge" to be part of Salt Watch when they request their kit. This has led to some great engagement, volunteer connections, and advocacy actions taken by Salt Watch volunteers!

Washington, CT

The Town of Washington Sustainability Committee and Washington Environmental Council in Washington, CT, started testing five tributaries to the Shepaug River and provided an opportunity for private well owners to get their well water tested during Earth Day at a reduced group rate.

Salt Watch Paint the Plow

Several Salt Watch partners participated in our most recent Paint the Plow event. In the fall of 2023, 11 snowplow blades from Montgomery County Department of Transportation were distributed to partner organizations, high schools, Scout troops, and Izaak Walton League chapters. See the next page for plows painted by two of our partners.

SUCCESS STORIES

Paint the Plow (MD)

Little Falls Watershed Alliance

Friends of Cabin John Creek

SUCCESS STORIES

Maryland

Patapsco Heritage Greenway

Thanks to the great work of PHG and PHG volunteers, this winter a local shopping center moved their salt pile to the other end of their parking lot so that the salt didn't continue to wash directly into Herbert Run.

During PHG's winter stream cleanup, a volunteer was interested in the Stream Watch program and then became a Stream Watcher for that area of Herbert Run. The volunteer not only cleaned up the stream but also performed Salt Watch tests on the stream. The test kit results were shown to the shopping center manager, and after about two months they agreed to move their salt pile and make it smaller.

Anacostia Riverkeeper

In their first year of participating in Salt Watch, Anacostia Riverkeeper had 16 monitors who collected Salt Watch data throughout the winter. Many of these volunteers will continue to monitor throughout the summer to learn more about how chloride is impacting their local waterways year-round!

Read about more of Anacostia Riverkeeper's **findings here**.

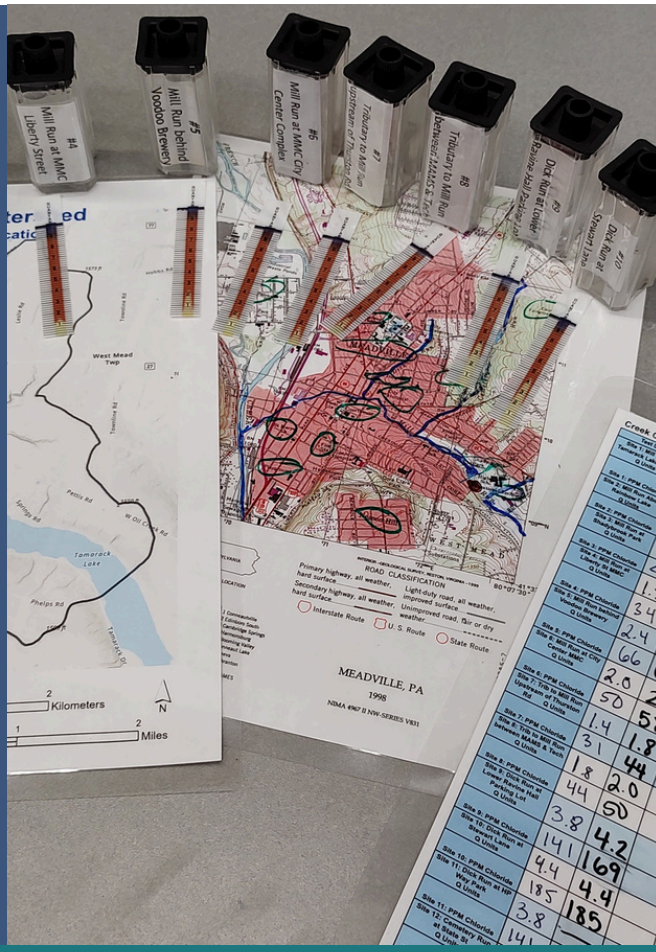
SUCCESS STORIES

Pennsylvania

Creek Connections

Creek Connections loves incorporating Salt Watch into their school programming! They've found Salt Watch is a wonderful way to get students further investigating local waterways while being part of the much larger Salt Watch network.

Creek Connections has included Salt Watch monitoring of the Mill Run watershed in Meadville Middle School's afterschool program as well as Project Enhance, a program that brings gifted students from across the county to Allegheny College for enrichment programming. In both cases, the students became fully invested in the data collection and findings. Many want to get involved at the individual level and monitor the streams near their homes.



TTF Watershed Partnership

Tookany/Tacony-Frankford Watershed Partnership hosted chloride blitzes in the spring and fall, with six volunteers gathering a total of 56 samples at 38 different sites.

This work has led TTF to work with Temple University to further investigate one particular area through continuous monitoring and grab samples.

SUCCESS STORIES

Pennsylvania

Wissahickon Trails

A Wissahickon Trails volunteer has been reporting improper storage of salt at facilities that primarily have outdoor salt piles. There has been mixed success in hearing back from various regulatory entities, but at least two facilities have improved their salt storage just because of the increased attention and pressure put on them.

Salt Watchers of the Month

February 2024
Dr. Brienne May's fifth-grade class (PA)

Fifty fifth-grade students at Franklin Regional School District monitored a local creek (monthly), graphed results, and created a video PSA to share with the local community! They presented their findings at the annual Creek Connections symposium in April 2024.

SUCCESS STORIES

Virginia

Reston Association

In December 2023, the Izaak Walton League's Conservation Director, Jared Mott, alerted Salt Watch to a significant amount of road salt left exposed next to a salt pile in Virginia. Salt Watch staff reached out to a local Salt Watch Partner, the Reston Association. Staff at the Reston Association immediately took chloride samples in the nearby stream (above and below the parking lot's water discharge point) and went to work contacting their county's stormwater division to have the snow removal company get the salt cleaned up! The salt was removed a few days later and the nearby stream and drainage channel are being monitored to see if there are changes in the chloride levels.

Salt Watcher of the Month:

December 2023
Calvin Dickens (VA)

Calvin is the Watershed Specialist at the Reston Association. He quickly reported the uncovered salt and made an action plan for monitoring the nearby stream! (See story above)

SUCCESS STORIES

Virginia

Loudoun Wildlife Conservancy

Loudoun Wildlife Conservancy hosted its First Annual Salt Watch Team Meeting to celebrate the team's accomplishments, review data collected, and discuss potential program expansions, educational outreach, and advocacy opportunities.

This year, Loudoun had a team of 65 volunteers who collected nearly 650 data points and contributed 800 hours to testing and related advocacy efforts. Volunteers also identified salt pollution hotspots at several sites across five streams in Loudoun County. Salt Watch data was then provided to the Town of Leesburg for a stream restoration project on a segment of Town Branch, one of the hotspot streams. Loudoun Wildlife also initiated the Loudoun Watershed Roundtable, which includes government, nonprofit, and public utility stakeholders focused on watershed health. This group is creating a social media campaign to address major stream pollutants (including salt) and actionable steps residents can take to reduce these pollutants.

Loudoun Wildlife also mentored a participant in the Youth Conservation Leadership Institute on a Salt Watch project in the participant's neighborhood. The final project was presented to the Loudoun Soil and Water Conservation District Board, the Youth Conservation Leadership Institute cohort, and at the Loudoun Student Environmental Action Showcase. A live macroinvertebrate table was in the same room as the presentation, allowing participants to make instant connections between the issues of road salt pollution and the organisims living in streams. One attendee exclaimed: "Oh hey! These are those macros that get killed off by road salt! These guys are so cool, they shouldn't be dying!"

SUCCESS STORIES

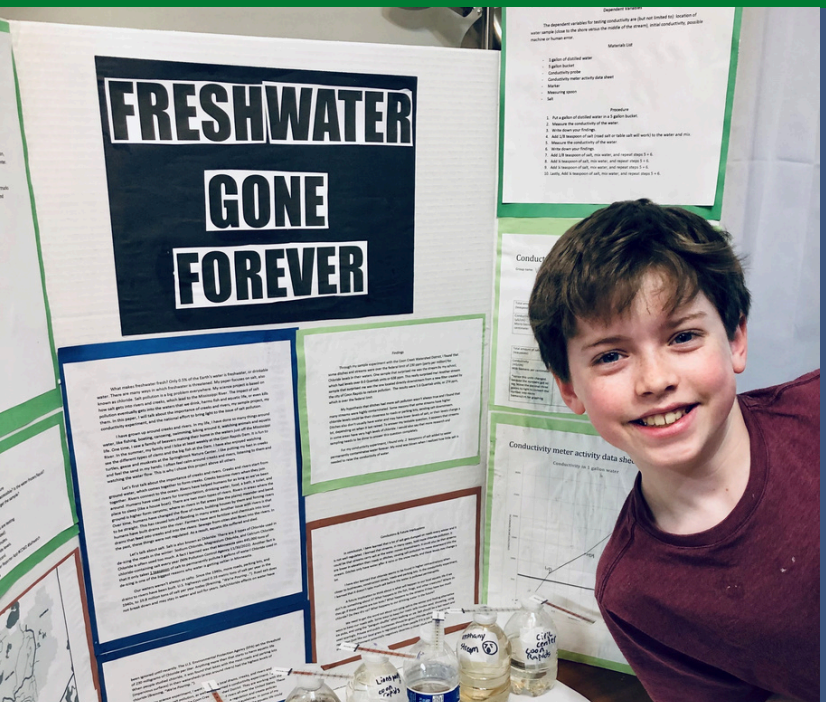
Minnesota

W. J. McCabe Izaak Walton League Chapter

Salt Watcher of the Month:

January 2024
Julie O'Leary (MN)

Julie O'Leary is a member of the W. J. McCabe Chapter of the Izaak Walton League of America in Duluth, Minnesota. In her community and across the state, she has been rallying support for road salt reductions and smart salting practices. She has been working closely with groups like the League of Women Voters to raise awareness and support of such legislation at the state and local level.



Salt Watcher of the Month:

September 2023
Vincent (MN)

Vincent, a middle school student in Minnesota, sampled waterways with Salt Watch kits and conductivity probes. He wrote an incredible 10-page research report (while learning how to type!) that he submitted to his fifth-grade science fair.
Read Vincent's blog **here**.

Thank you to our partners and funders.

Salt Watch would not be a success without the hard work, dedication and collaboration from our partners! With 57 official partners and over 560 more participating organizations, we depend on groups to pick up the Salt Watch program. Schools and teachers have added Salt Watch to their curriculum, watershed groups have added it to their monitoring programs, and others are using Salt Watch to start monitoring for the very first time! We're also excited to see the advocacy actions some of our partners are starting to take to reduce road salt pollution in their communities! Check out our **Partner map** to see more of our key partners across the country, from government agencies to school groups. This map is not comprehensive, and we are adding new partners every day!

We'd also like to thank the Chesapeake Bay Trust, Montgomery County Maryland, City of Gaithersburg, Raines Family Fund, Horne Family Foundation, National Science Foundation, Aegon Transamerica Foundation, Izaak Walton League of America Endowment, Chesapeake Bay Restoration Fund, and many individual donors that make Salt Watch a success.

To get your organization involved in Salt Watch, please email us at **saltwatch@iwla.org**.