



# Keep It Fresh: The Salt Watch Community Science Initiative

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May 27, 2026



**Abby Hileman**

Salt Watch Coordinator

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# Izaak Walton League of America

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*To conserve, restore, and promote the sustainable use and enjoyment of our natural resources, including **soil, air, woods, waters, and wildlife.***





# Salt Watch

SaltWatch.org

- Launched 2018
- Mobilizing community scientists to monitor chloride levels in streams
- Goals:
  - **Raise awareness** about the connection between salt and stream health
  - Identify chloride **hot spots** in freshwater
  - Advocate for **smarter application** of road salt

Chloride test instructions on reverse  
Does your reading fall above or below the values on this chart? Visit [iwla.org/saltwatchfaqs](http://iwla.org/saltwatchfaqs) to find out what to do.

Quantab Units	%NaCl	ppm(mg/L) Cl <sup>-</sup>	Quantab Units	%NaCl	ppm(mg/L) Cl <sup>-</sup>
1.4	0.005	30	4.8	0.035	211
1.6	0.006	36	5.0	0.037	227
1.8	0.007	42	5.2	0.040	245
2.0	0.008	49	5.4	0.044	264
2.2	0.009	56	5.6	0.047	283
2.4	0.011	64	5.8	0.050	304
2.6	0.012	72	6.0	0.054	326
2.8	0.013	81	6.2	0.058	349
3.0	0.015	91	6.4	0.062	373
3.2	0.017	101	6.6	0.066	400
3.4	0.019	113	6.8	0.070	427
3.6	0.021	124	7.0	0.075	458
3.8	0.023	137	7.2	0.081	490
4.0	0.025	150	7.4	0.087	525
4.2	0.027	164	7.6	0.093	564
4.4	0.030	179	7.8	0.100	607
4.6	0.032	194			

USE BY: 11/2025 Lot A3346A

QUANTAB® Test Strip

Yellow Band

White Peak

# Salt Watch Kit

Includes:

- 4 Hach 30-600ppm chloride test strips
- Sample testing instructions
- Conversion chart
- Data uploading instructions



# Salt Watch QAPP

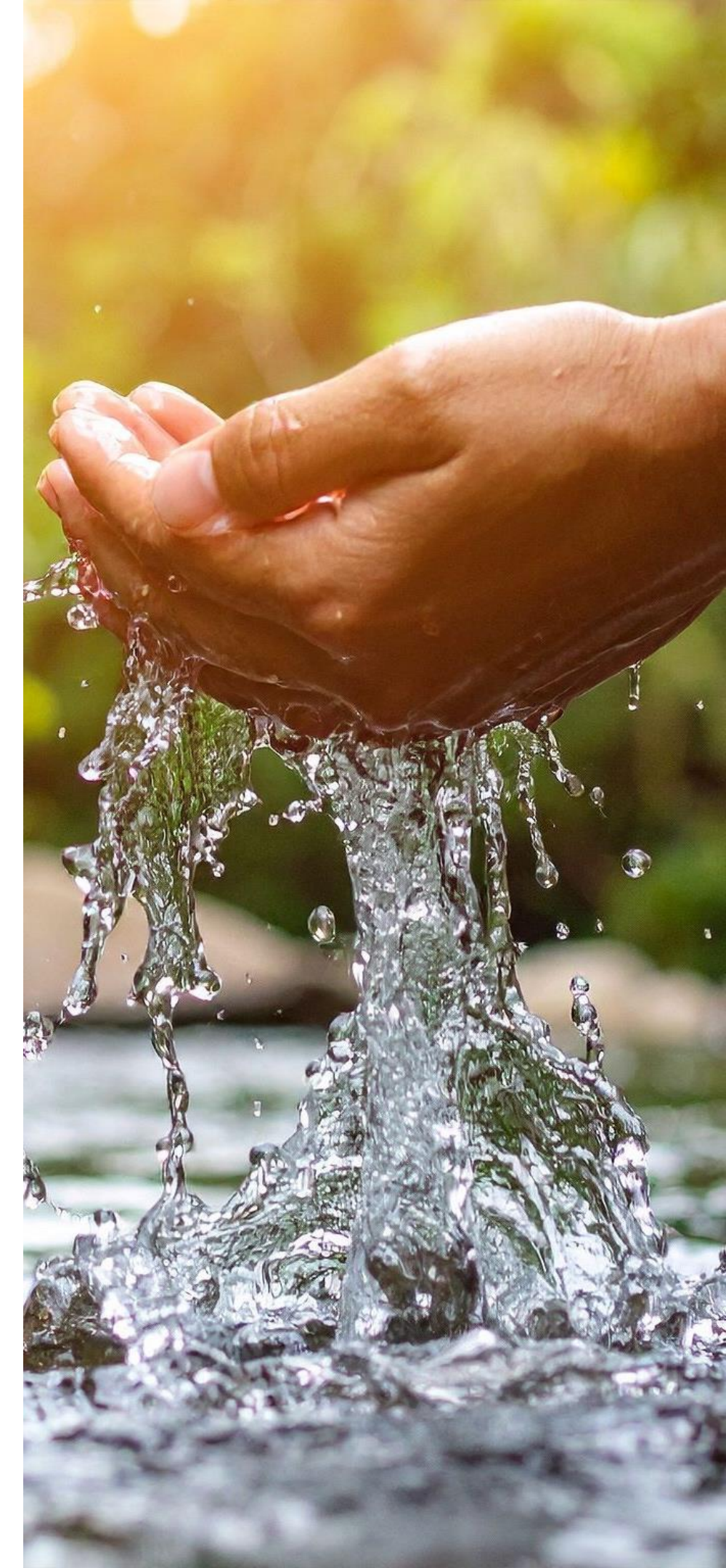
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New as of 2026, Environmental Protection Agency (EPA) approved Quality Assurance Project Plan (QAPP) via partnership with the Chesapeake Monitoring Cooperative.

Hach Chloride Quantab<sup>®</sup> Test Strips (strips used in Salt Watch kits) have +/-10% accuracy.



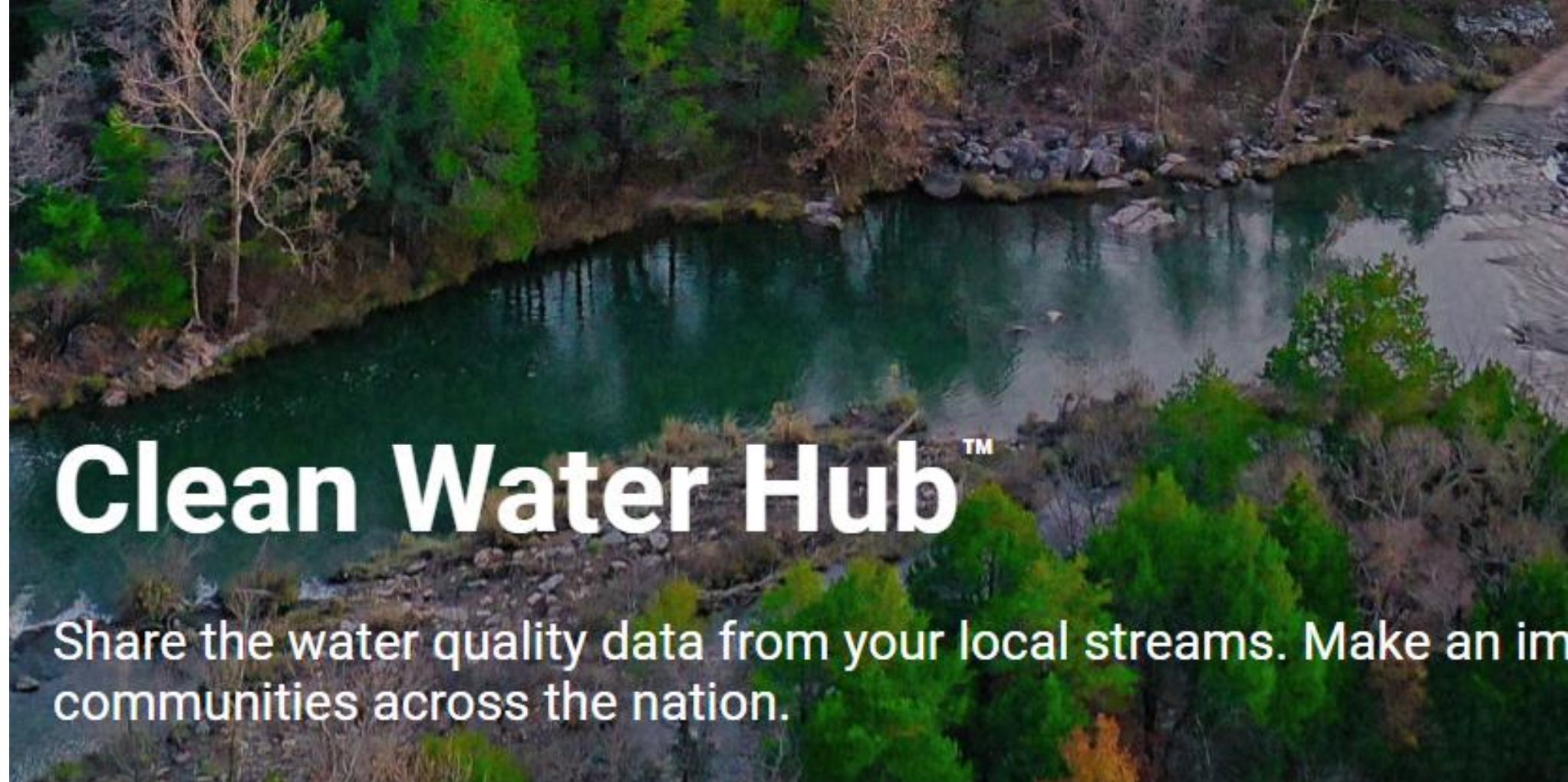
**Chesapeake  
Monitoring  
Cooperative**



# Clean Water Hub

[www.CleanWaterHub.org](http://www.CleanWaterHub.org)

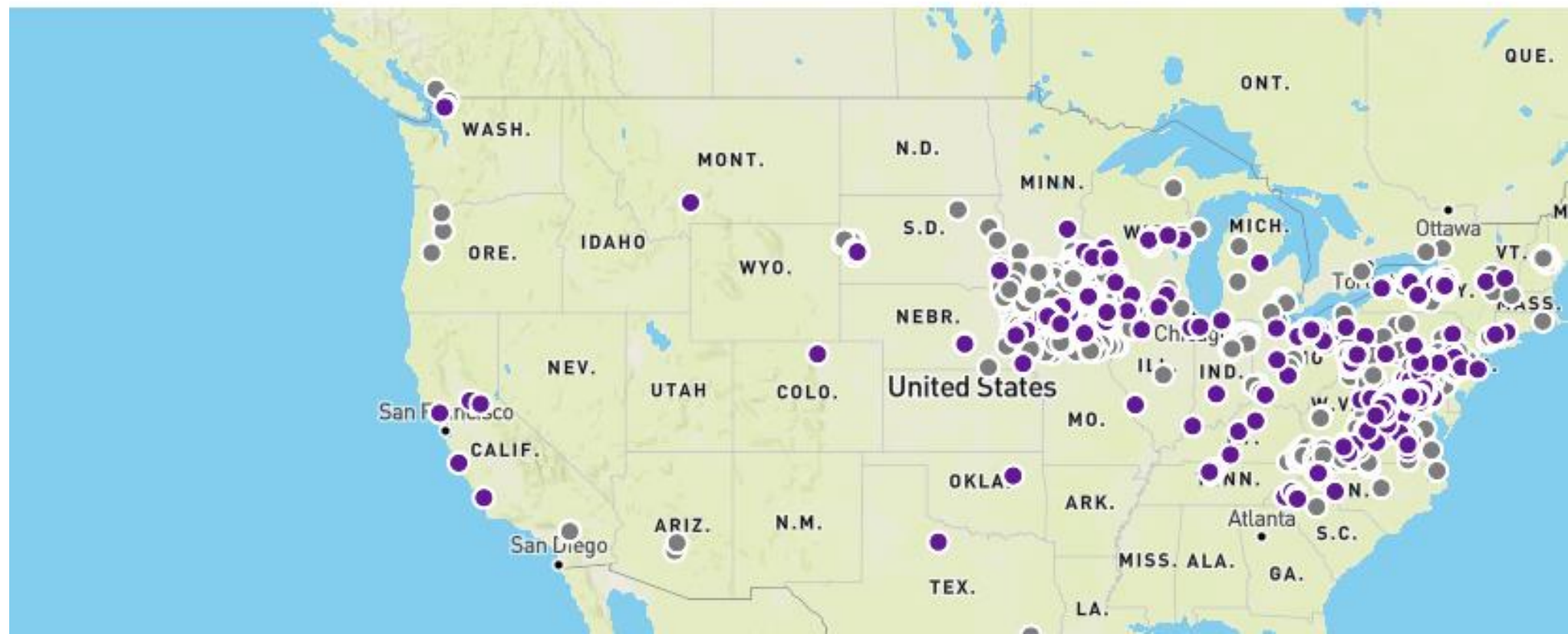
- National water quality database
- Publicly accessible
- Created with usability in mind
  - Data is meant to be easy to access, understand, and share
- Color-coded, interactive maps



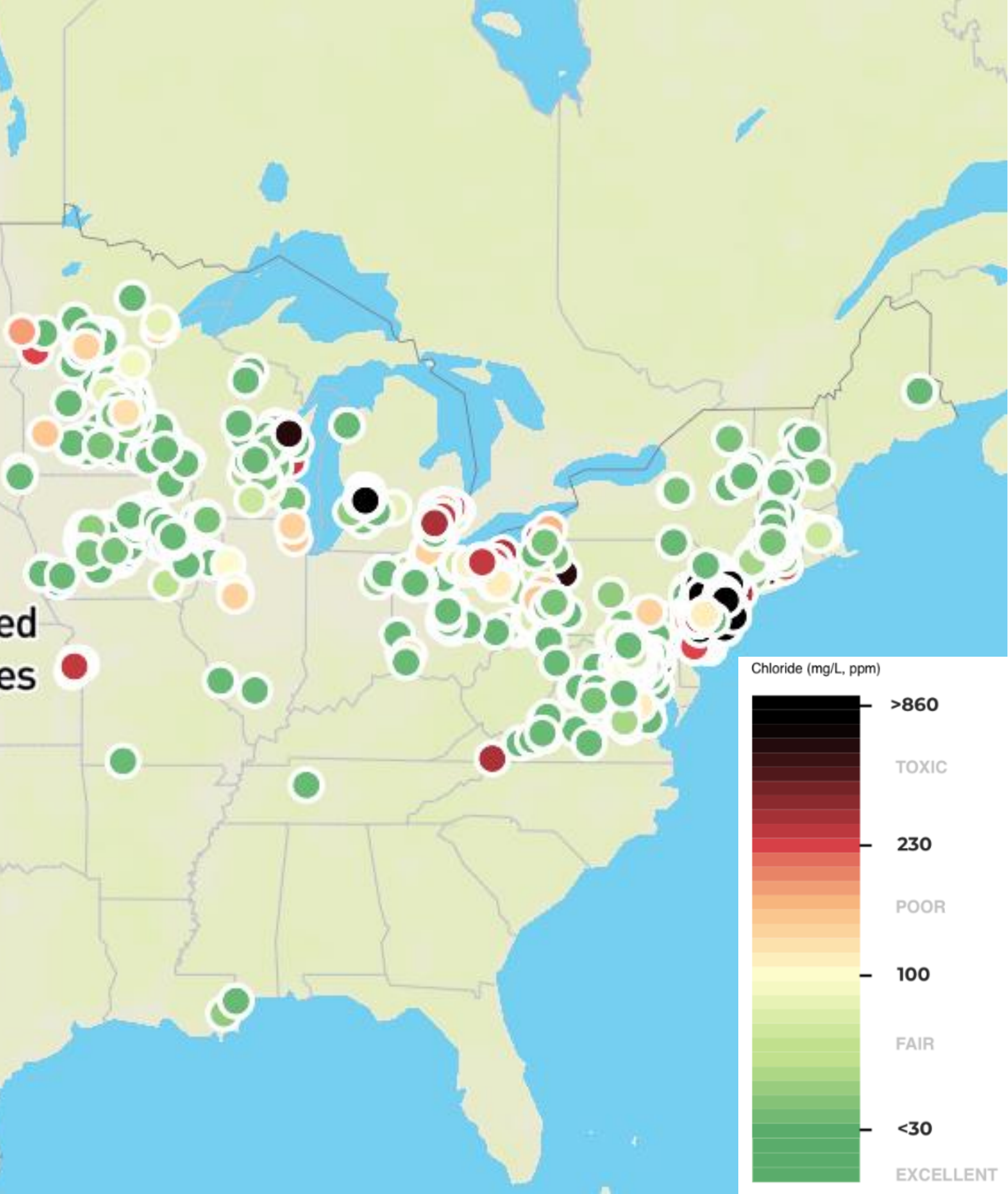
SIGN UP

SIGN IN

EXPLORE THE MAP

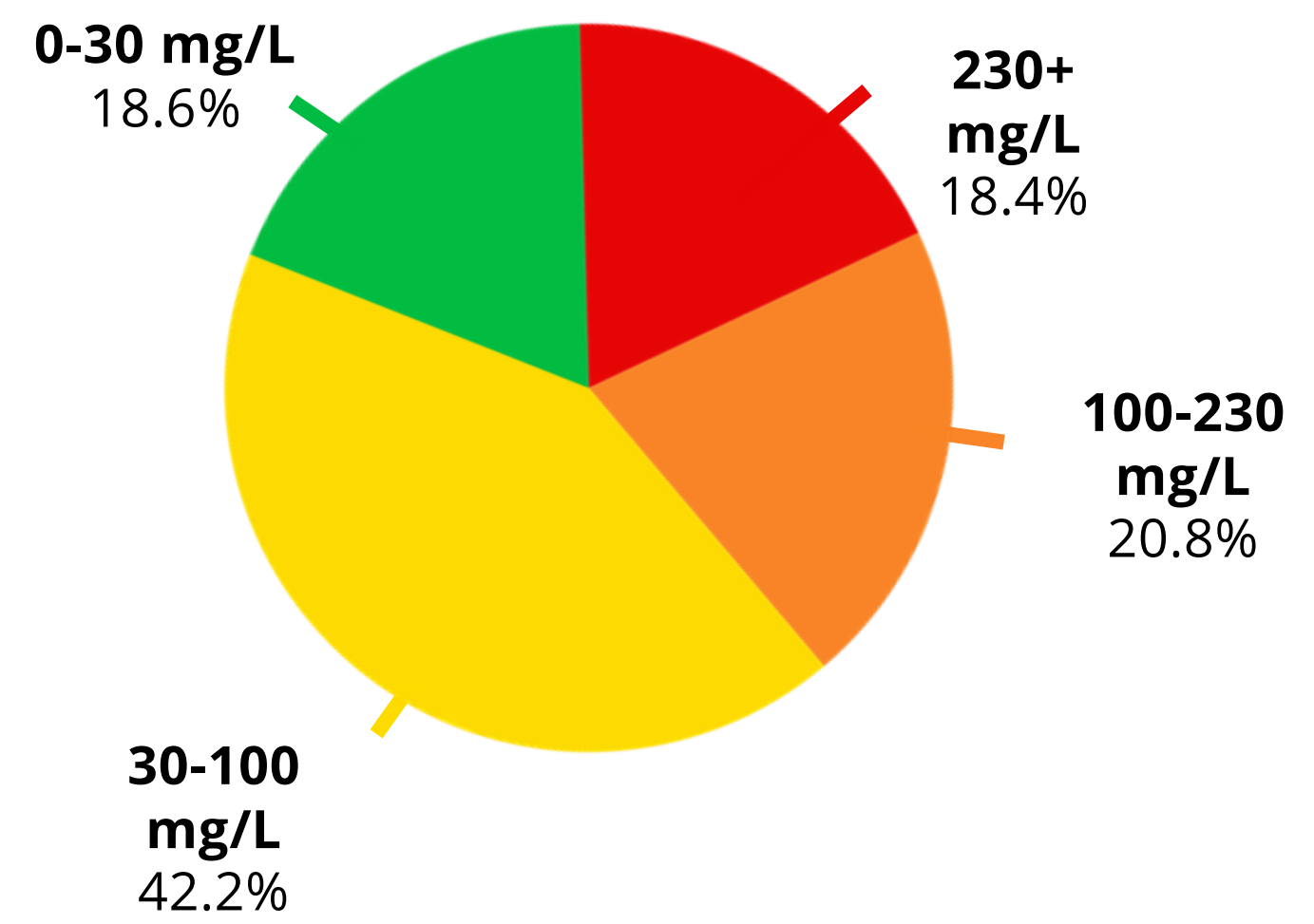
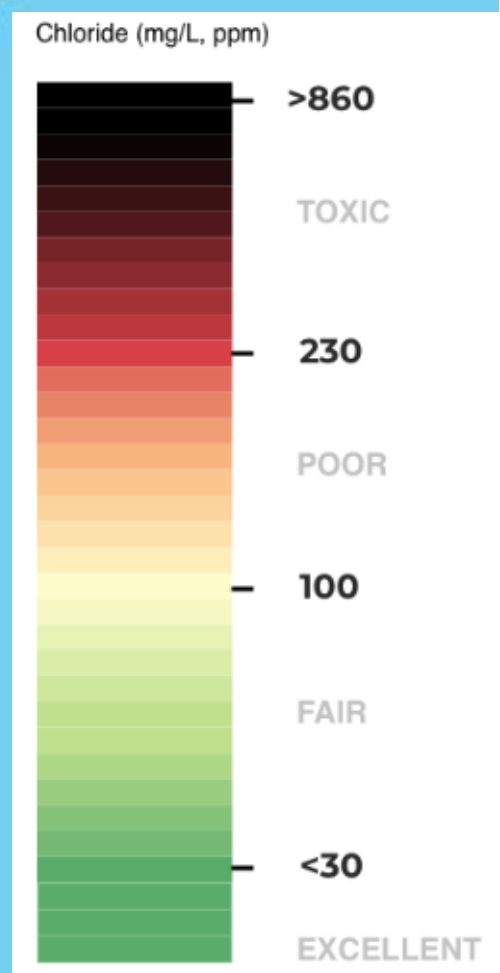


# 2024-2025 National



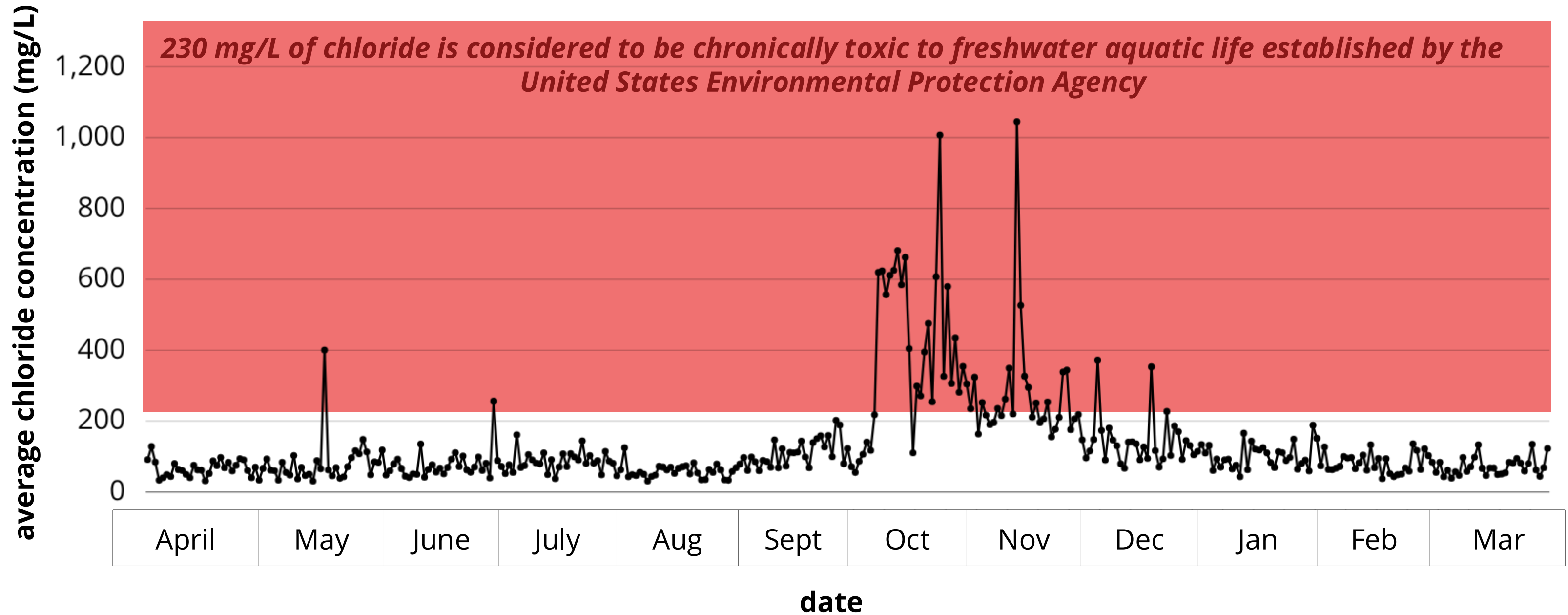
Total chloride readings: **8,689**

- 0-30 mg/L: 1,617**
- 30-100 mg/L: 3,663**
- 100-230 mg/L: 1,811**
- 230+ mg/L: 1,598**

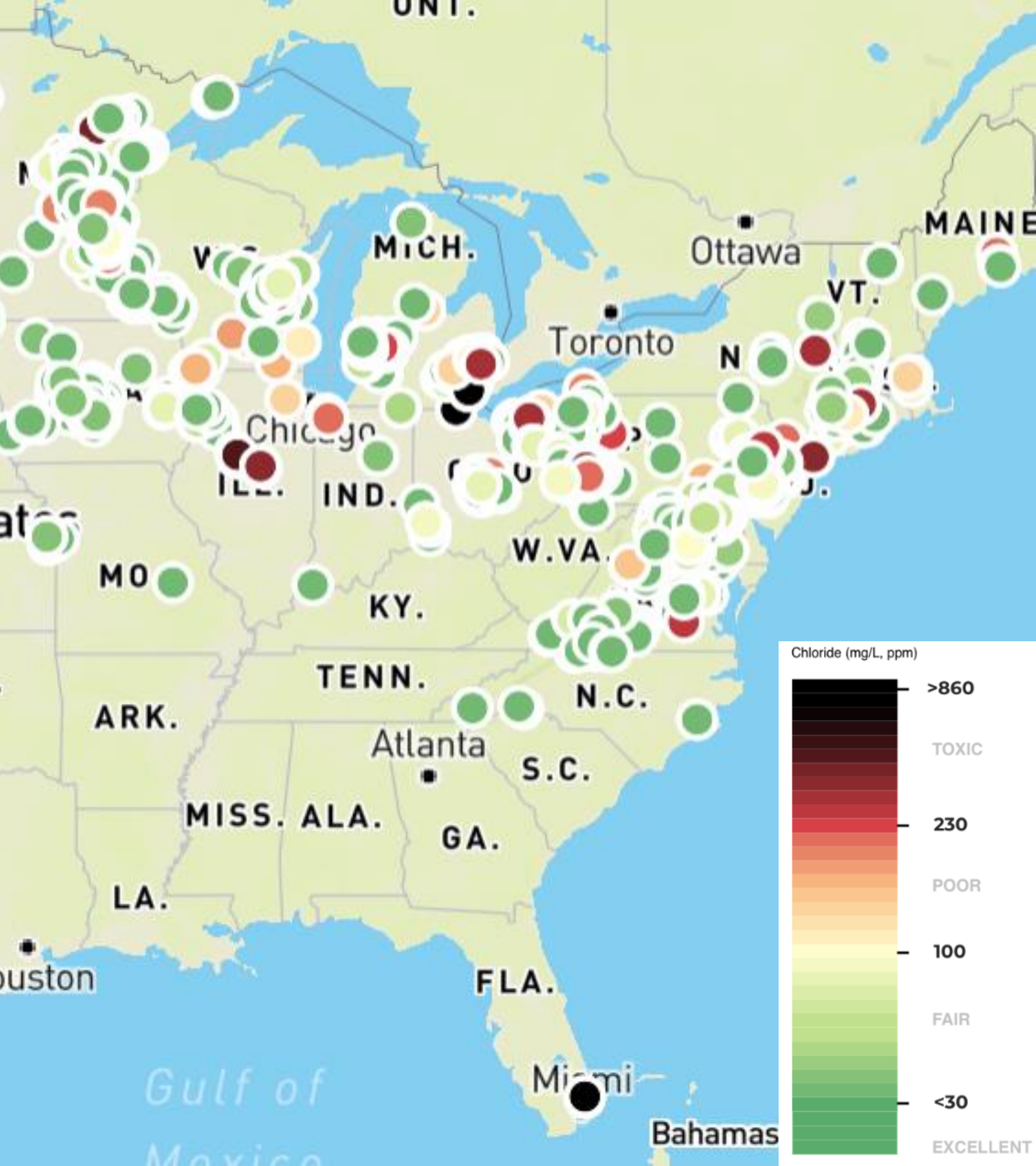


# Average chloride (Cl-) concentrations (mg/L) in water reported by Salt Watch volunteers nationwide

July 1, 2024 - June 30, 2025

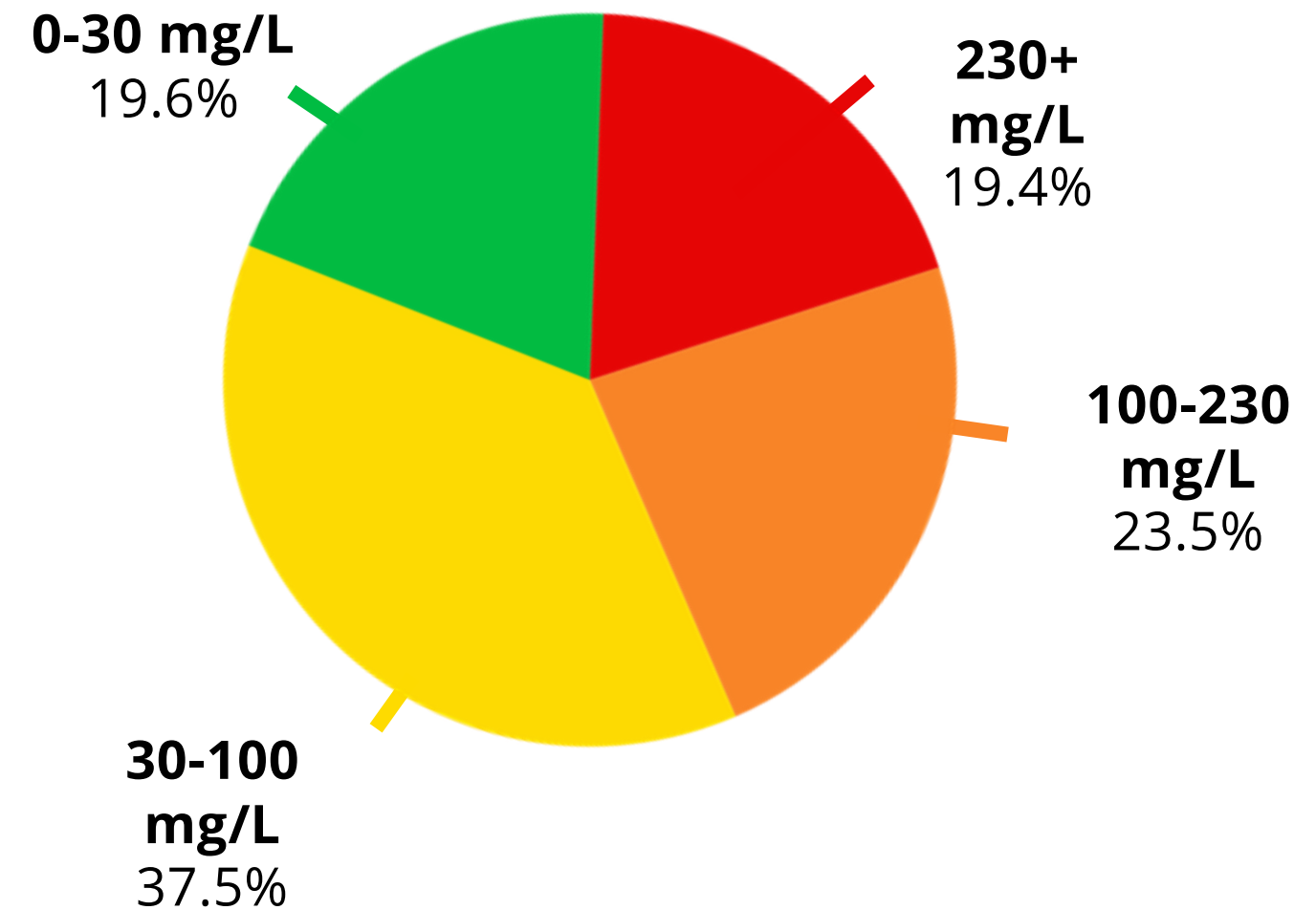


# 2025-2026 National



Total chloride readings: **7,863**

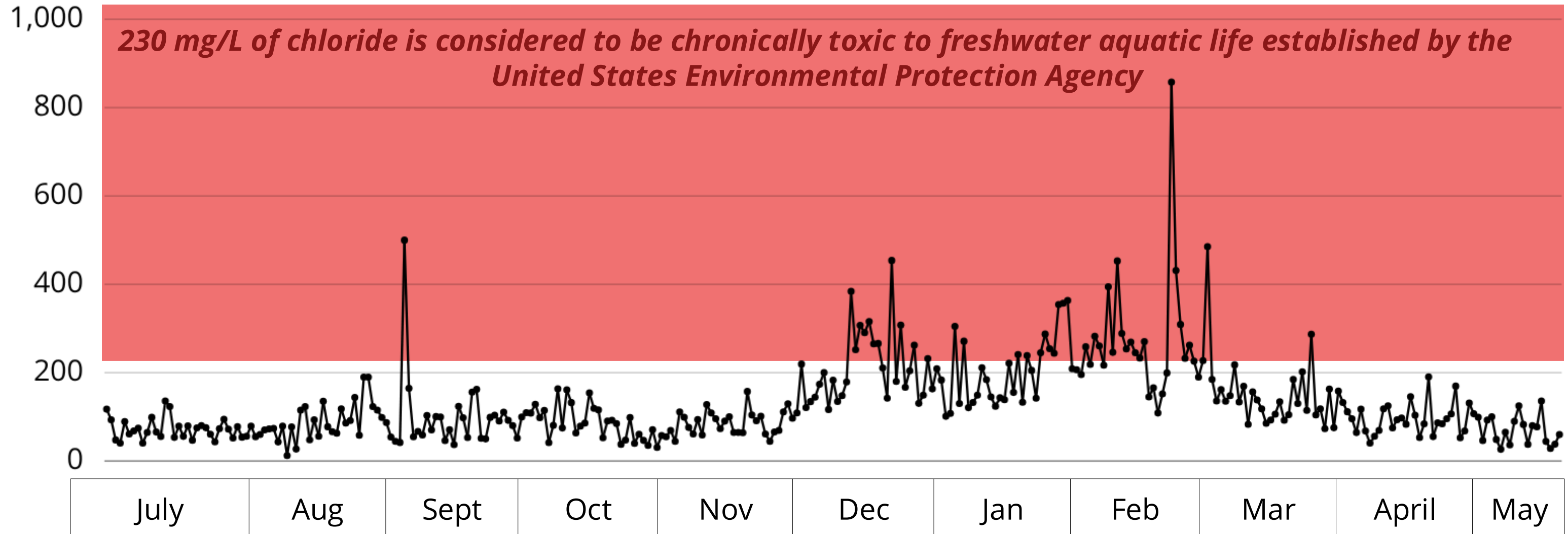
- 0-30 mg/L: 1,541**
- 30-100 mg/L: 2,948**
- 100-230 mg/L: 1,845**
- 230+ mg/L: 1,529**



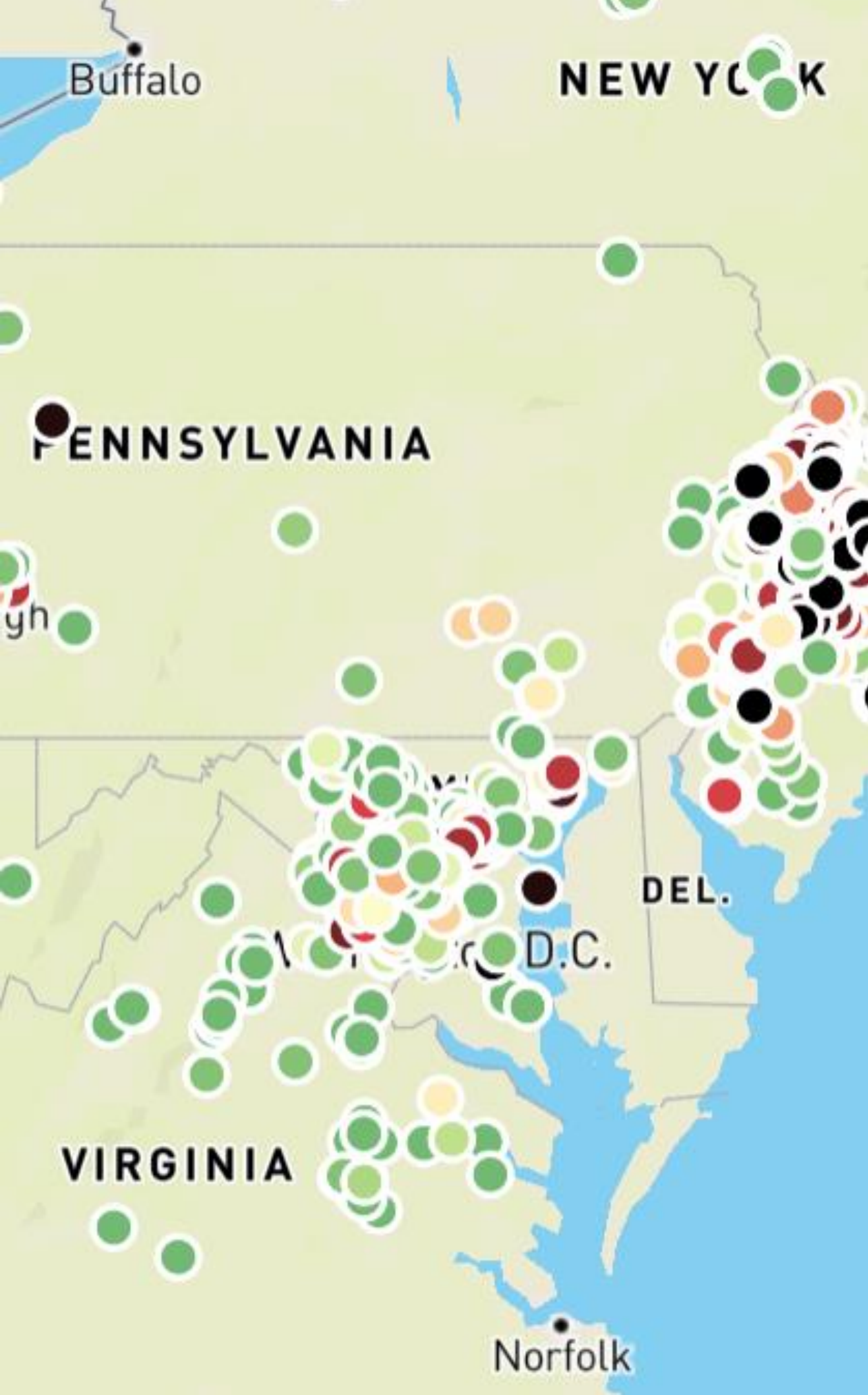
# Average chloride (Cl-) concentrations (mg/L) in water reported by Salt Watch volunteers nationwide

July 1, 2025 - May 20, 2026

average chloride concentration (mg/L)



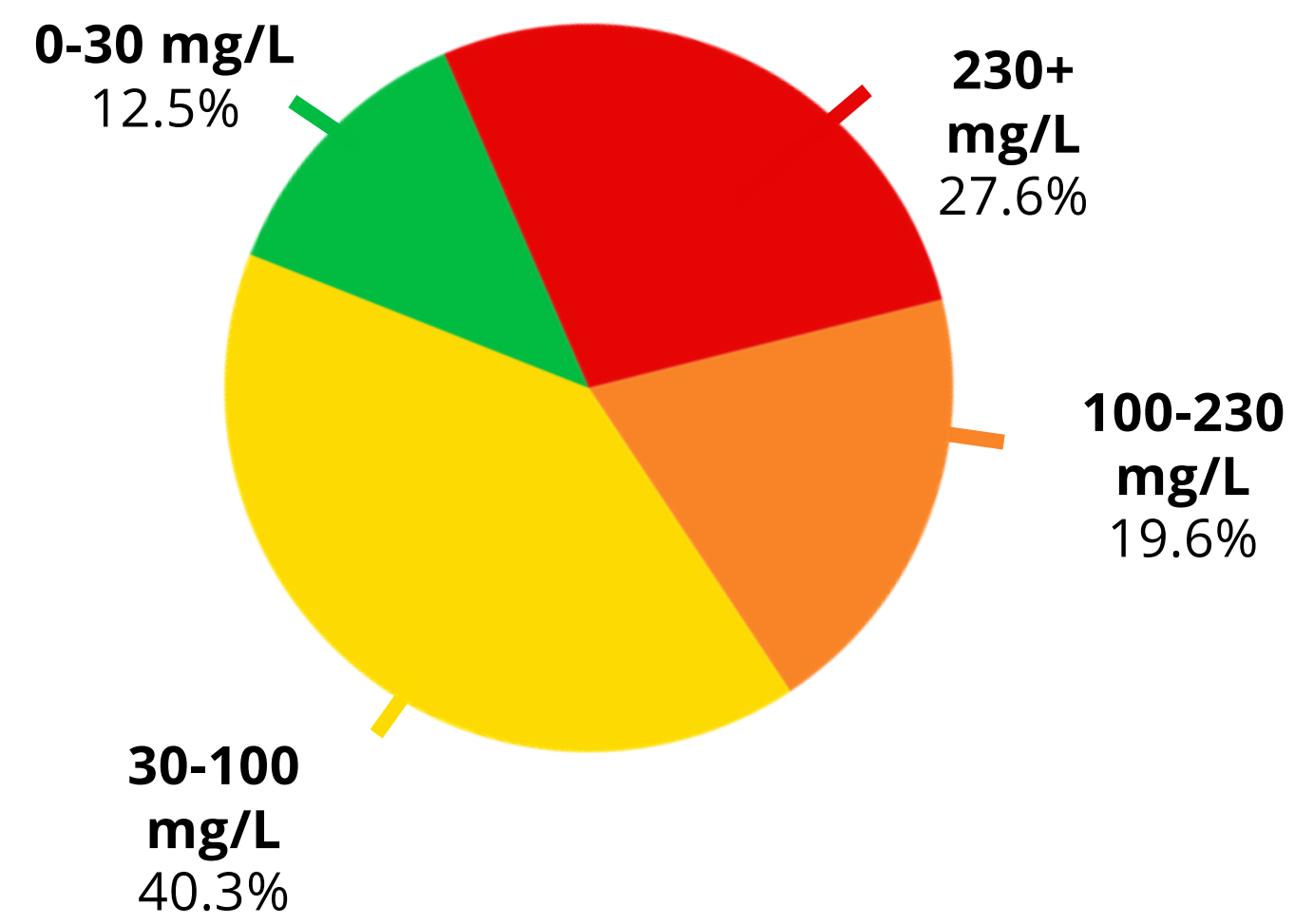
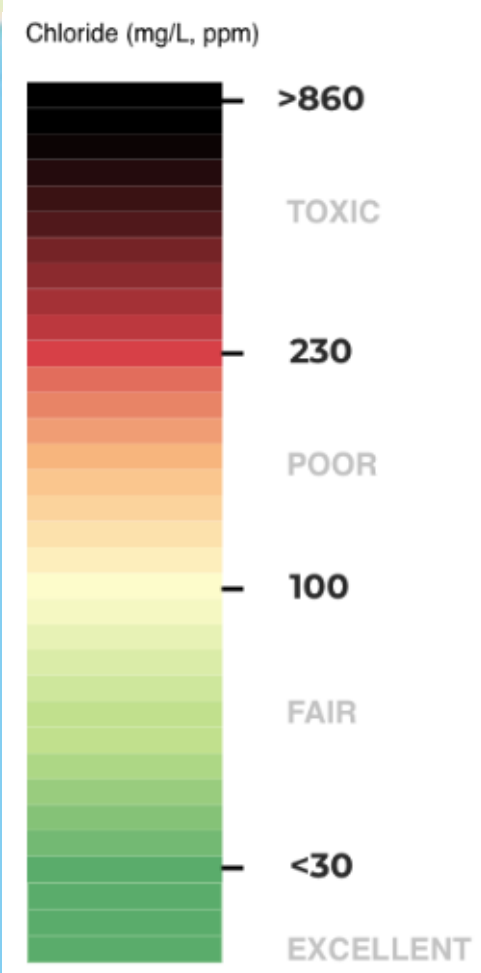
date



# 2024-2025 Chesapeake Bay

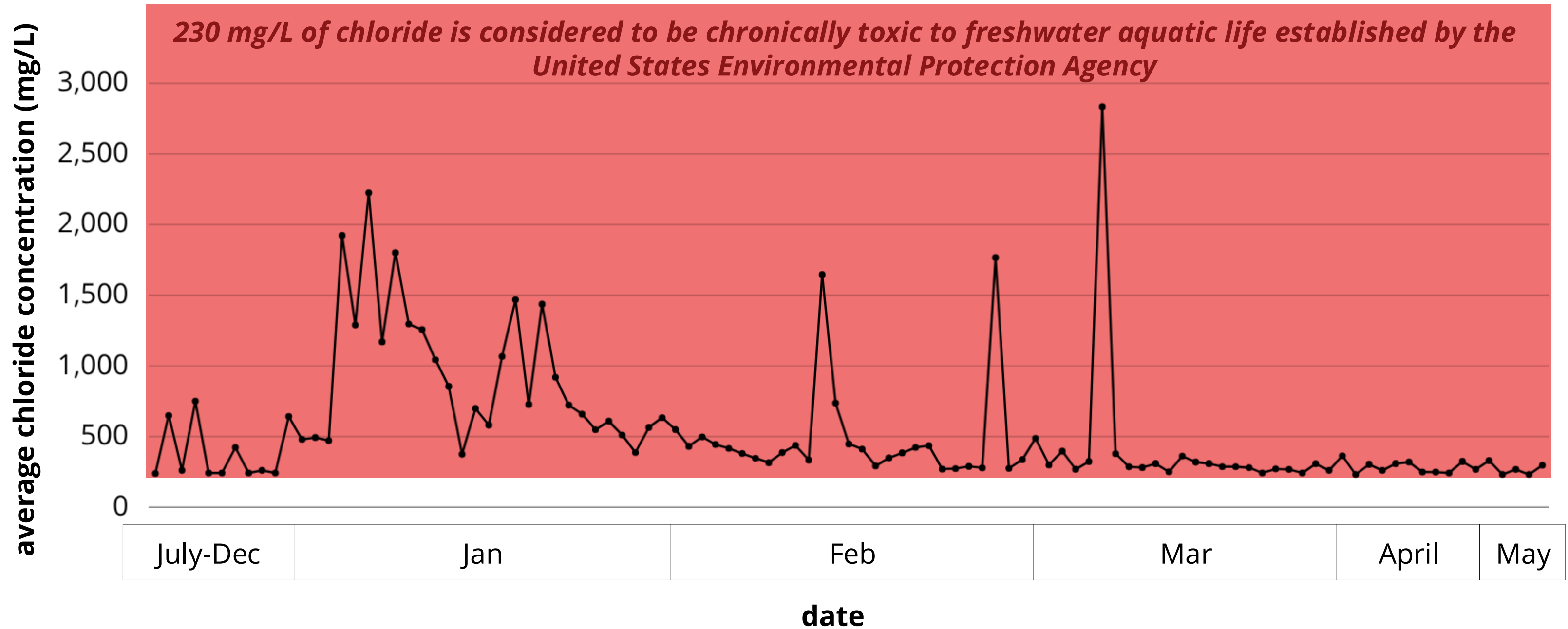
Total chloride readings: **3,234**

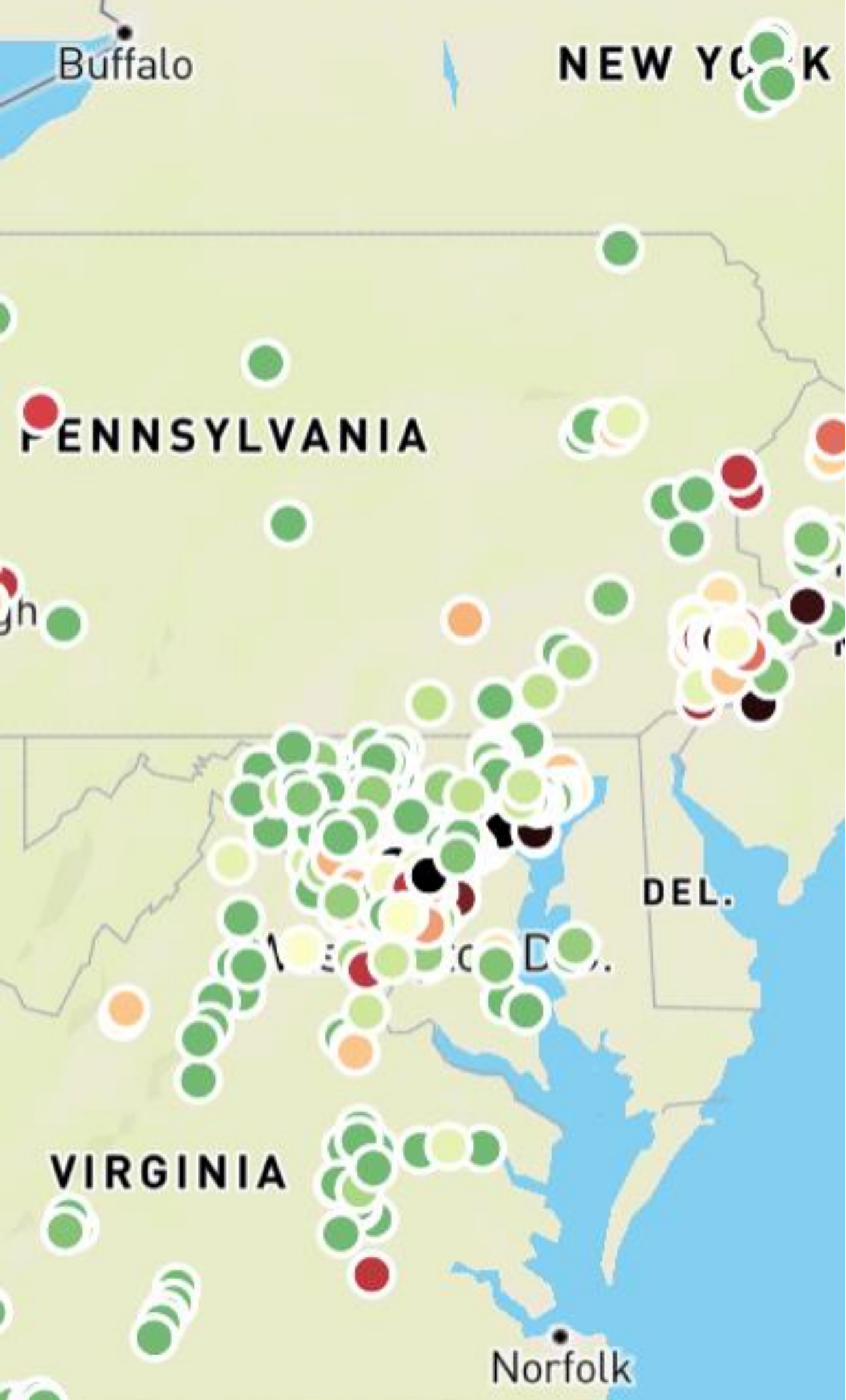
- 0-30 mg/L: **405**
- 30-100 mg/L: **1,304**
- 100-230 mg/L: **633**
- 230+ mg/L: **892**



# Average chloride (Cl-) concentrations (mg/L) in water reported by Salt Watch volunteers in the Chesapeake Bay Watershed

July 1, 2024 - June 30, 2025

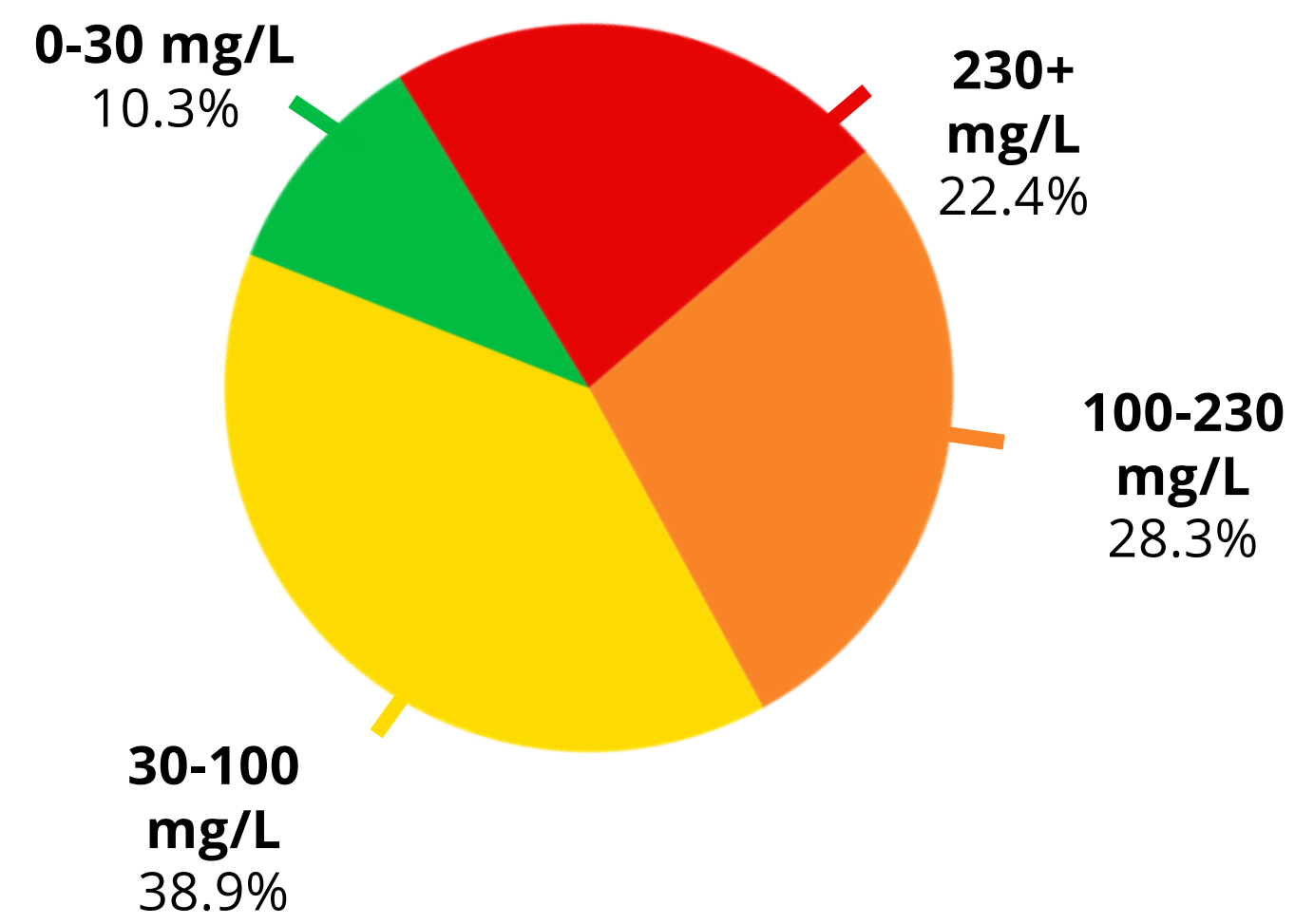
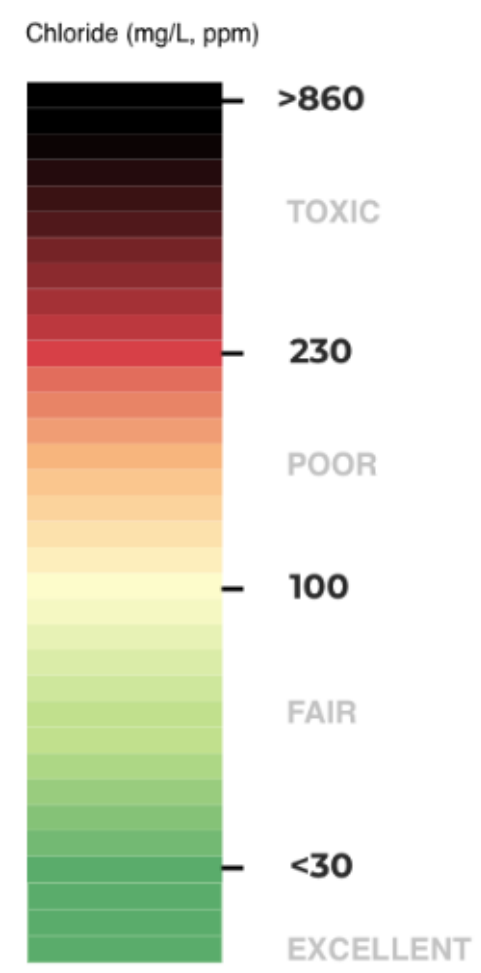




# 2025-2026 Chesapeake Bay

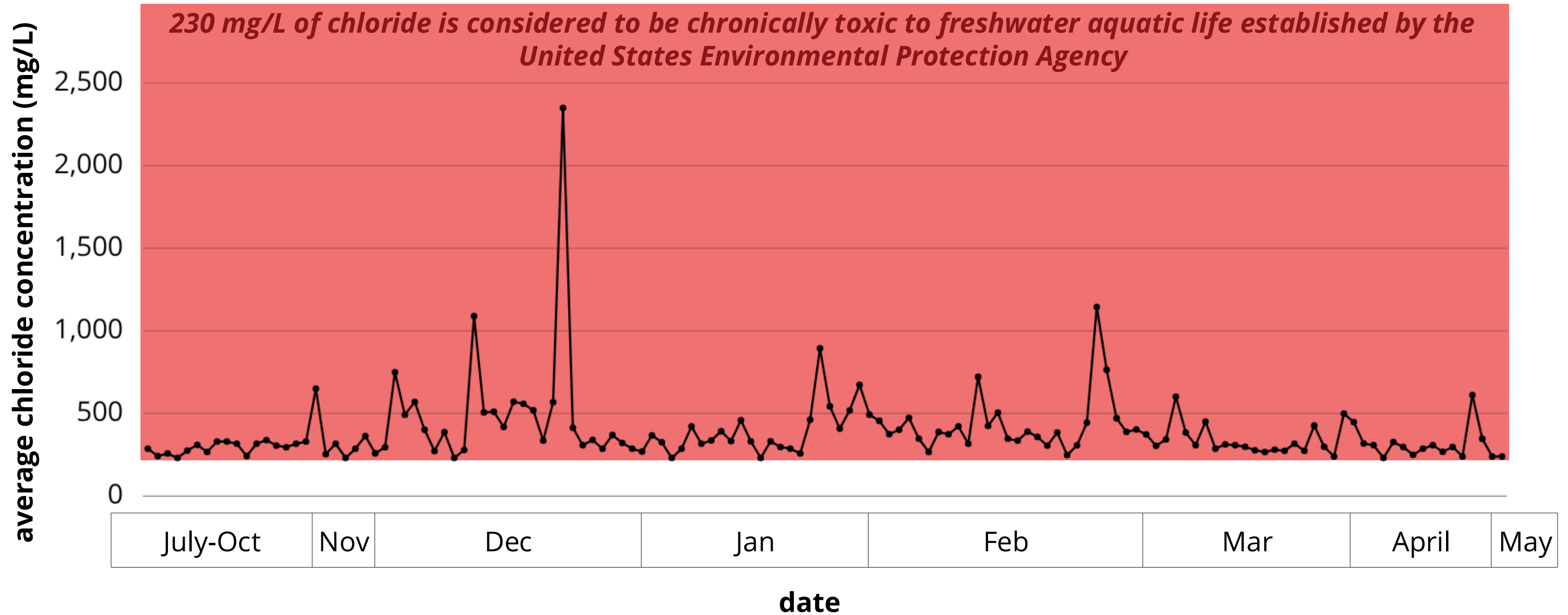
Total chloride readings: **3,511**

- 0-30 mg/L: **362**
- 30-100 mg/L: **1,367**
- 100-230 mg/L: **994**
- 230+ mg/L: **788**



# Average chloride (Cl-) concentrations (mg/L) in water reported by Salt Watch volunteers in the Chesapeake Bay Watershed

July 1, 2025 - May 20, 2026



# Data Use

## Government Agencies

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- Available to government agencies and water quality organizations to...
  - identify areas in need of further study, restoration
  - track impact of BMPs
  - track progress of restoration
- Integrating into the Chesapeake Monitoring Cooperative

## IWLA Clean Water Team

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- Annual report
- Updates to volunteers
- Outreach to media sources



## Clean Water Advocates

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- Letters to the editor
- Contacting local representatives
- Educating community members



# Be a Smart Salter

Once you put salt down, it doesn't go away...

Salt alters the soil, harms plants, and weakens infrastructure like bridges and roads.

It gets into our streams, lakes, and rivers, putting aquatic life and human health at risk.

It only takes 1 teaspoon of salt...  
...to pollute 5 gallons of water

Salt applied by cities, businesses, and homes adds up.



Reduce your salt use to protect our water!

## Do your own salt application?

### 1. Shovel

Clear snow from sidewalks and parking lots before it turns to ice. The more snow you remove, the less salt you'll have to use - and the more effective it will be!

### 2. Scatter

If you use salt, scatter it so there's space between the grains. A coffee mug of salt is enough to treat an entire 20 foot driveway!

### 3. Sweep

Once the salt has done its job, sweep up the extra so you can reuse it for later storms - and prevent it from washing away.

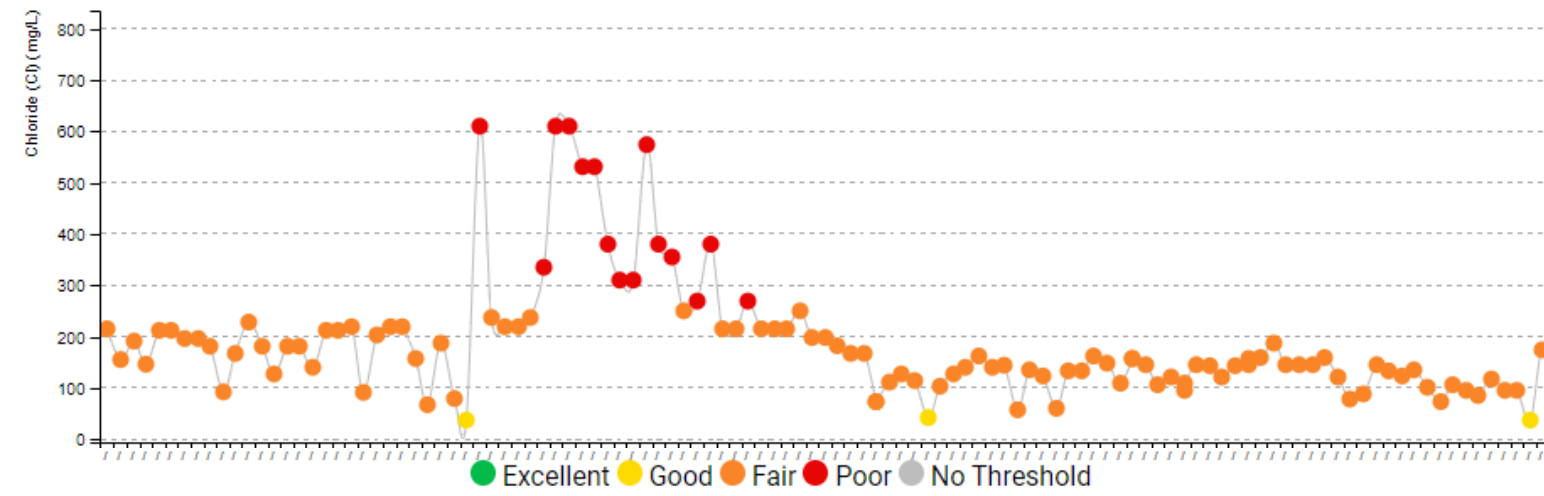
### 4. Switch

Salt doesn't work when the pavement temperature is 15 degrees or lower. Switch to sand or use a different deicer that works at low temperatures.

## Hiring a snow removal contractor?

Choose a contractor who is certified through a winter salt certification program.

Find out about salt application courses from your state Department of Transportation or visit [www.saltwatch.org](http://www.saltwatch.org)



**Data** **Action**

# TTF Streamkeeper Testifies at Philadelphia City Council about Road Salt

Jamilee Hoffman  
Mar 17, 2022



## Opinion: The true cost of salt on the D.C. area's roads



An Annapolis city employee spreads salt on the downtown sidewalks as a slow-moving winter storm dumped snow and ice across the region in February 2021. (Jonathan Newton/The Washington Post)  
By Karl Van Neste  
January 19, 2022 at 2:46 p.m. EST



Keep freshwater fresh for future generations!

**Abby – Stand up for clean water in Minnesota by reducing salt pollution!** In many areas of the United States, road salt is used in the winter to create safe travel conditions, but excessive salting is a growing problem. Excess road salt ends up in our waterways, creating toxic conditions for aquatic life and threatening human health.

You can take action on this pervasive problem! [Let your state representatives know that you would like to see reduced road salt pollution in Minnesota.](#)

# Resources

## Chloride in Drinking Water

Road salt pollution is the leading cause of chloride pollution in waterways throughout the United States. Chloride pollution also comes from other sources including water softener discharge and sewage discharge. The impact of chloride on human health is an area of ongoing research, but there are several health risks that are known to be linked to increased chloride in drinking water.

### DRINKING WATER STANDARD

The drinking water standard for chloride is 250 mg/L, as established by the US Environmental Protection Agency (EPA) in 1988. At this level, water starts to taste "salty." There is no health-based guidance for chloride in drinking water, but there are health implications for consuming sodium. Sodium and chloride concentrations in water are often related since sodium chloride (NaCl) is the most common type of road salt being applied in the winter. The EPA recommends sodium in drinking water be less than 20 mg/L for individuals on severely restricted sodium diets.

## Be a Smart Salter

Once you put salt down, it doesn't go away...

Salt alters the soil, harms plants, and weakens infrastructure like bridges and roads. It gets into our streams, lakes, and rivers, putting aquatic life and human health at risk.

It only takes 1 teaspoon of salt... ...to pollute 5 gallons of water

Salt applied by cities, businesses, and homes adds up.

Americans use 20 million tons of road salt every year.

Reduce your salt use to protect our water!

### Do your own salt application?

- 1. Shovel**  
Clear snow from sidewalks and parking lots before it turns to ice. The more snow you remove, the less salt you'll have to use - and the more effective it will be!
- 2. Scatter**  
If you use salt, scatter it so there's space between the grains. A coffee mug of salt is enough to treat an entire 20 foot driveway!
- 3. Sweep**  
Once the salt has done its job, sweep up the extra so you can reuse it for later storms - and prevent it from washing away.
- 4. Switch**  
Salt doesn't work when the pavement temperature is 15 degrees or lower. Switch to sand or use a different deicer that works at low temperatures.

### Hiring a snow removal contractor?

Choose a contractor who is certified through a winter salt certification program.

Find out about salt application courses from your state Department of Transportation or visit [www.saltwatch.org](http://www.saltwatch.org)

## How to Start a Salt Watch Campaign in Your Community

## ¿Cuánta sal de carretera hay en sus arroyos?

¡Solicite un kit de prueba GRATIS para averiguarlo! Ideal para estudiantes y científicos comunitarios de todas las edades.

[www.SaltWatch.org](http://www.SaltWatch.org)

SALT WATCH Español

ÚNETE A SALT WATCH

Bonus: Letter to State Representative (edit with your own experience and voice)

Dear Representative/Senator [your rep's name],

Every winter, snowy weather creates dangerous conditions on our roads. Since the 1940s, communities across the U.S. have been spreading road salt on streets, sidewalks and parking lots to melt ice and create safer traveling conditions. Road salt is effective when used correctly, but we have fallen into a pattern of over-applying and misusing road salt in ways that have damaging side effects on wildlife, human health and the environment. I am asking that you work towards salt reduction in [the name of your community/state].

Road salt inevitably ends up in our streams, rivers and lakes. USGS monitored 30 streams from 1960-2011 in Wisconsin, Illinois, Colorado, Michigan, Ohio, Pennsylvania, Maryland, Texas and the District of Columbia and found that 84 percent of those streams experienced high chloride concentrations due to road salt. And once road salt enters bodies of water, it is extremely difficult and expensive to remove; it's simply not feasible to filter it out at water treatment plants.

Road salt threatens our water quality in multiple ways, by contaminating drinking water, corroding pipes and leaching metals into our water. High levels of chloride are dangerous to human health, especially for people with pre-existing conditions such as high blood pressure. Chloride is also toxic to aquatic life and can degrade vegetation and soil. All told, our current road salt practices cost the U.S. \$16-19 billion a year in damages.

It's possible to reduce salt usage without endangering travelers; some communities are already doing it. Minnesota, for example, has substantially reduced salt usage without seeing any loss of safety on the roads. They've accomplished this through strategies including training salt applicators in smarter salting practices, offering a smart-salting certification to professional applicators and private property owners, drafting model contracts between applicators and owners (<https://www.pca.state.mn.us/water/smart-salting-training>), and requiring applicators and manufacturers to properly store salt supplies.

[Your community/state] can take these steps too. By supporting smarter salting practices, you will be protecting water quality for generations of [Marylanders/lowans/etc.] to come. Please [insert specific action you want legislator to take: introduce a bill requiring smarter salting practices, co-sponsor an existing bill, etc.].

Sincerely,

[Your Signature]

[Your Name]

Fact Sheets

Flyers

Advocacy Guide

Spanish Resources

Template Letters

# Toolkits



INSPIRING

AT HOME ACTIONS:

Making a Difference Faithfully:  
A Steward's Guide to Reducing  
Road Salt

ACTION KIT



GOING FORTH

Faith-based  
Communities

**SALT WATCH™**  
Izaak Walton League  
Chapter Toolkit

Quantab Units	%NaCl	ppm(mg/L) Cl <sup>-</sup>	Quantab Units	%NaCl	ppm(mg/L) Cl <sup>-</sup>
1.4	0.005	30	4.8	0.035	215
1.6	0.006	36	5.0	0.038	232
1.8	0.007	42	5.2	0.041	250
2.0	0.008	48	5.4	0.044	269
2.2	0.009	54	5.6	0.048	289
2.4	0.011	64	5.8	0.051	310
2.6	0.012	72	6.0	0.055	332
2.8	0.014	82	6.2	0.059	355
3.0	0.015	90	6.4	0.063	380
3.2	0.017	102	6.6	0.067	407
3.4	0.019	114	6.8	0.072	435
3.6	0.021	127	7.0	0.077	466
3.8	0.023	140	7.2	0.082	499
4.0	0.025	153	7.4	0.088	535
4.2	0.028	167	7.6	0.095	574
4.4	0.030	182	7.8	0.102	618
4.6	0.033	198			

Monitoring  
Outreach  
Advocacy

IWLA Chapters

**SALT WATCH™**  
IZAAK WALTON LEAGUE OF AMERICA

**HOW TO**  
Run a Successful  
Paint the Plow Event

**SALT WATCH**

IZAAK WALTON LEAGUE OF AMERICA

Paint the Plow

# Salt Watch Resources

Check out the Resources Library!

*[www.saltwatch.org](http://www.saltwatch.org)*





**Business Outreach**



**Virtual Webinars**



**Farmers Market Tabling**



**Regional Outreach Workgroups**



**NO CLEAN WATER**



**NO GOOD BEER**

# SALT RESPONSIBLY



Visit:  
[www.saltwatch.org](http://www.saltwatch.org)

Email:  
[saltwatch@iwla.org](mailto:saltwatch@iwla.org)