



# SALT WATCH<sup>®</sup>

## MONTGOMERY COUNTY



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# WHAT IS SALT WATCH?



**OUR STORY** In 2017, a Clean Water Fellow at the Izaak Walton League of America noticed a huge pile of salt left by a salt truck sitting directly next to a storm drain. That salt was headed right for the Muddy Branch, a small stream that travels through Maryland and feeds into the Potomac River. He contacted local government agencies to try and address the problem. He quickly discovered that the world of road salt is a complicated one and that its effects on our waterways are not well known or well studied. Inspired by the success of the League's Save Our Streams community science program, IWLA staff launched Salt Watch to mobilize community scientists to monitor chloride (salt) levels in local creeks and streams.

Since 2018, the League has provided free chloride test kits to volunteers in 46 states and collected over 14,500 chloride readings in streams across the country. The initial success of the program led the League to securing a grant to pilot an intensive Salt Watch outreach program in Gaithersburg, MD where we provided kits for local schools, connected with HOA leadership around the city, and hosted our first Gaithersburg Salt Applicator Training.

In 2023, with the support of the Chesapeake Bay Trust and the Montgomery County Department of Environmental Protection, the League is expanding its efforts throughout all of Montgomery County. In addition to a second annual Applicator Training, the League will also be painting XX plows with local schools and community groups to raise "smart salting" awareness.

Our newest approach in Montgomery County is to engage local businesses, faith institutions, libraries, and property management companies to increase understanding of the harmful impacts of over salting and build skills to keep our streets AND our streams safe.



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# WHAT IS ROAD SALT POLLUTION?

When we hear the word "salt," most of us think of table salt, or *sodium chloride*. Road salt, or rock salt, can actually be a few different kinds of salts, like magnesium chloride or calcium chloride. Some cities use salt brine (a mixture of salt and water) or salt and sand to treat their roads.

**Road salt is everywhere during winter months.** It keeps us safe on roads and sidewalks, but it can also pose a threat to fish and wildlife as well as human health. Towns, cities, businesses, and individuals dump roughly 10-20 million tons of salt every year, depending on the winter weather conditions. As snow melts or rain falls, that salt gets washed into our storm drains, our streams, and even into our drinking water.

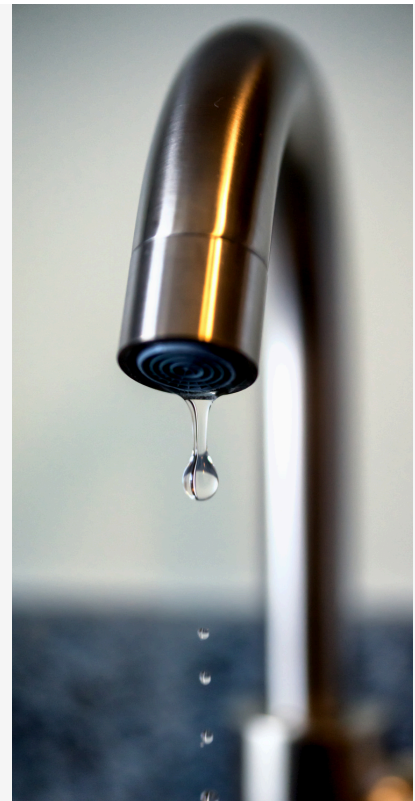
Fish and bugs that live in freshwater streams can't survive in extra salty water, and more than 118 million Americans depend on local streams for drinking water. Water treatment plants are not equipped to filter out the extra salt, so it can end up in your tap water and even corrode your pipes.

"Pet friendly" or "environmentally safe" salts are becoming more and more popular - but these products are made of salts that still put chloride on the ground and into our water. Even if we quit using road salt today, the salt already in the ground can persist for decades, and the salt content in our streams will rise as salt continues to percolate through the soil.

## HEALTH RISKS

In addition to the impacts chloride has on our ecosystems, its presence in our drinking water can also cause serious health concerns. Chloride is a highly corrosive chemical, which is why cleaning your car in the winter is important to avoid rust. Water with high chloride content can corrode our drinking water infrastructure and introduce toxic metals into your tap. Lead can cause brain damage and stunted growth in children, and high blood pressure, joint pain, difficulty with memory and concentration, and fertility issues. Road salt pollution can also cause health issues for people who are prescribed low-sodium diets for pre-existing health issues.

Water utility services are not able to remove chloride from the source water, so it is critical to focus on the prevention of road salt pollution.



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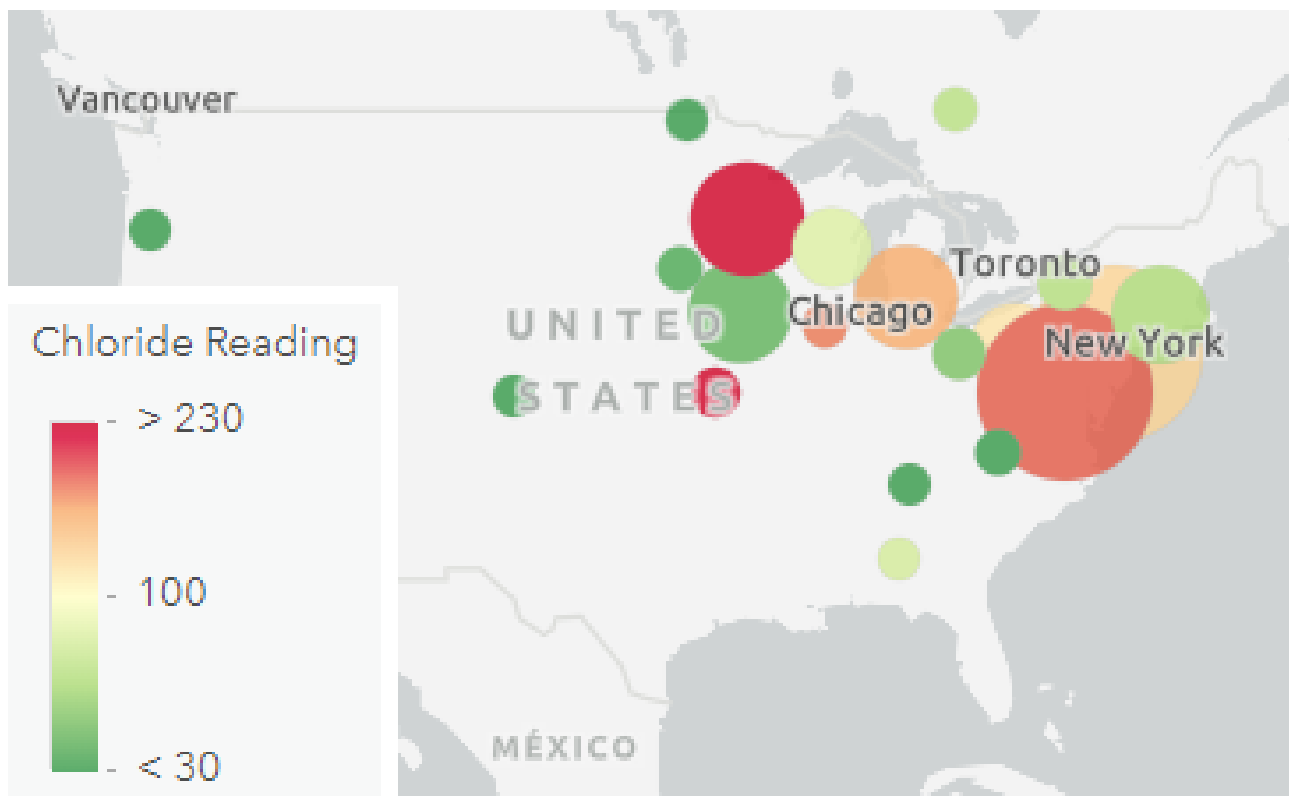
# SALT POLLUTION IN THE US

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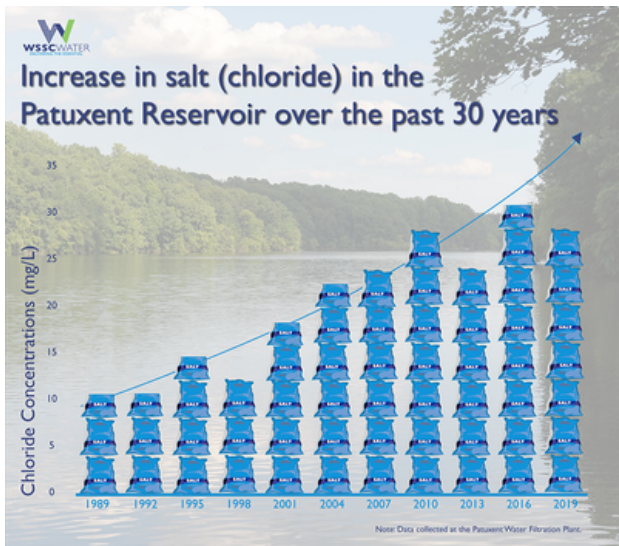
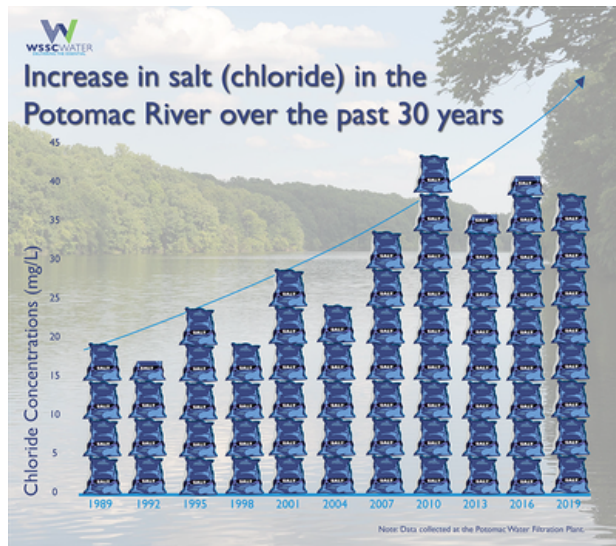
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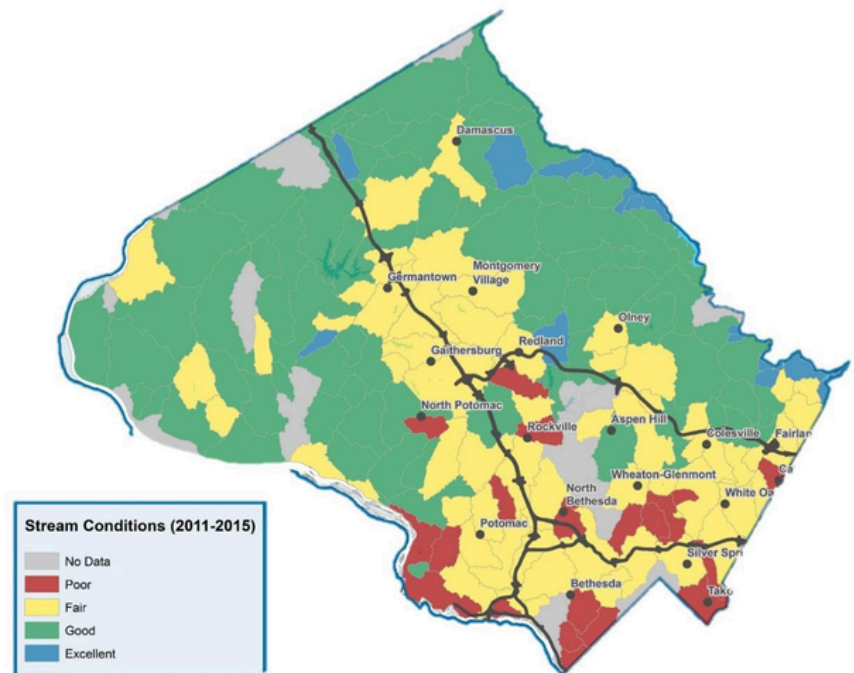


# SALT POLLUTION IN THE REGION



A big project involves overseeing a lot of moving parts, oftentimes from different people. To have a successful rollout, project managers rely on a well-crafted project plan to ensure objectives are met on time and on budget. A project plan is a formal approved document which is used to define project goals, outline the project scope, monitor deliverables, and mitigate risks. It must answer basic questions like what is the purpose of the project, what activities are involved, who will be responsible for what, and when is it expected to be completed? It is not to be confused with the Gantt chart.

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# MONTGOMERY COUNTY SALT WATCH

IWLA HAS SEVERAL GOALS FOR THE SALT WATCH PROGRAM IN MONTGOMERY COUNTY. PARTNERS LIKE YOU WILL HELP ACHIEVE THESE GOALS AND PROTECT MOCO'S STREAMS AND COMMUNITIES!

## **Raise Public Awareness**

IWLA has a suite of tools and resources to help residents, business owners, property managers, etc become smart salters! IWLA also attends a number of community events and farmers markets to distribute educational materials. Webinars with expert panelists are also a great way to raise awareness throughout the county.

## **Build Smart Salting Network**

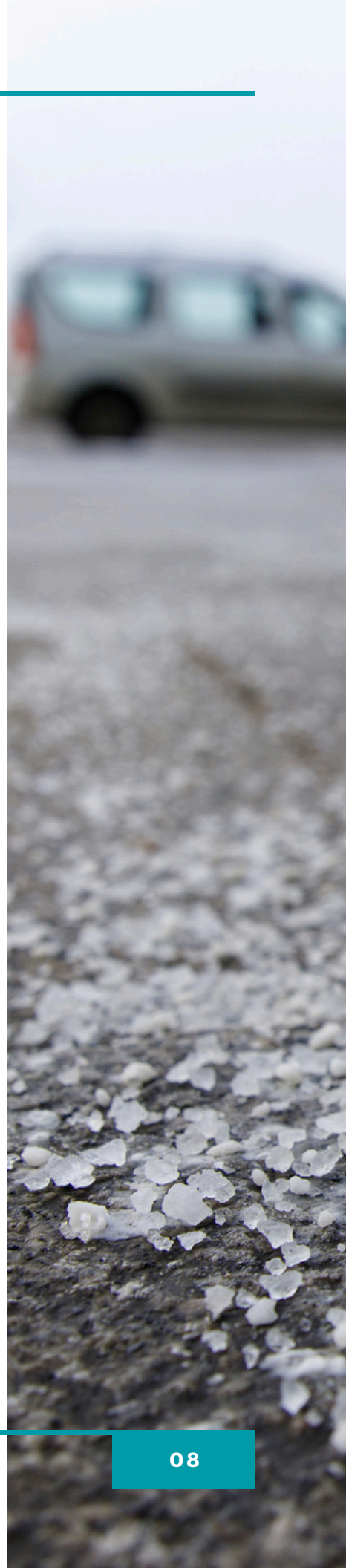
Salt Watch has over 70 official Partners across the US, and over 600 participating organizations. To increase impact, IWLA aims to grow the partner network throughout the county.

## **Distribute Stream Test Kits**

Data collection is the foundation of the Salt Watch program. In order to effectively address the issue of road salt pollution, we must identify hot spot sources and communities that are at the highest risk. Our free kits make it easy for anyone to submit data for their local streams.

## **Host Salt Applicator Training**

With support from Montgomery County DEP and the Chesapeake Bay Trust, IWLA has previously offered a virtual Smart Salting Training. This training has helped contracted salt applicators learn how to save money and protect water resources by using less salt while keeping roads, parking lots, and sidewalks safe.



# 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)!



# PROPER ROAD SALT APPLICATION



## SHOVEL



Clear walkways  
before snow  
turns to ice.

## SCATTER



A 12 oz mug holds  
enough salt to  
treat a 20'  
driveway or 10  
sidewalk squares!

## SWEEP



Sweep up excess  
salt and reuse it!

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# SALT WATCH KITS

IWLA'S FREE SALT WATCH STREAM KITS HELP VOLUNTEERS ACROSS THE COUNTRY IDENTIFY CHLORIDE POLLUTION HOT SPOTS. IDENTIFYING THESE AREAS IS THE FIRST STEP TO CURBING THE ISSUE AND PROTECTING OUR WATERWAYS AND DRINKING WATER.



**REQUEST FREE KIT AT  
SALTWATCH.ORG**



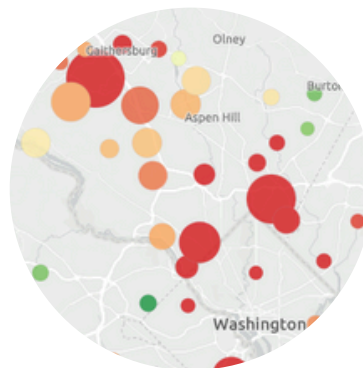
**COLLECT SMALL  
STREAM SAMPLE**



**PLACE TEST STRIP  
IN WATER**



**READ TEST STRIP  
FOR RESULTS**



**SUBMIT DATA TO THE  
CLEAN WATER HUB**

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**ANYONE CAN REQUEST THEIR FREE KIT AT  
SALTWATCHMOCO.ORG, OR EMAIL  
SALTWATCH@IWLA.ORG FOR BULK REQUESTS.**

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# SALT WATCH SURVEY FOR BUSINESSES

**BY FILLING OUT AND RETURNING THIS SURVEY, YOU ARE HELPING THE IZAAK WALTON LEAGUE AND THE MONTGOMERY COUNTY DEP PROTECT MOCO'S DRIVERS, PEDESTRIANS, ECOSYSTEMS, AND DRINKING WATER!**

Business Name:

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Name of Survey Participant:

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Have you ever received a customer complaint about lack of salt application?

**YES**

**NO**

Does your company (at this location) salt their own sidewalk/parking lot(s)?

**YES**

**NO**

If no, who does? If available, please provide contact information.

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## **IF YES,**

Who is the primary salt applicator of salt at your location?

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Are you or the employee(s) who apply salt trained on how/how much to salt or when? Circle one.

**YES**

**NO**

How do you know if there is enough salt put down?

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Is your parking lot/sidewalks shoveled or plowed prior to salt application?

**YES**

**NO**

Do you have a Standard Operating Procedure written for how to apply salt?

**YES**

**NO**

If you don't already have an SOP, would you be open to receiving one or signing up (you/your employees) for a salt applicator training?

**YES**

**NO**

Please provide an email address to be sent more information about the salt applicator training:

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# CONTACT US



**EMAIL US AT [SALTWATCH@IWLA.ORG](mailto:SALTWATCH@IWLA.ORG)**



**FIND US ONLINE AT [SALTWATCH.ORG](http://SALTWATCH.ORG)**



**CALL US AT (301) 548-0150**



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