



From Streets to Streams

A Guide to Storm Drain Stewardship and
Clean Water

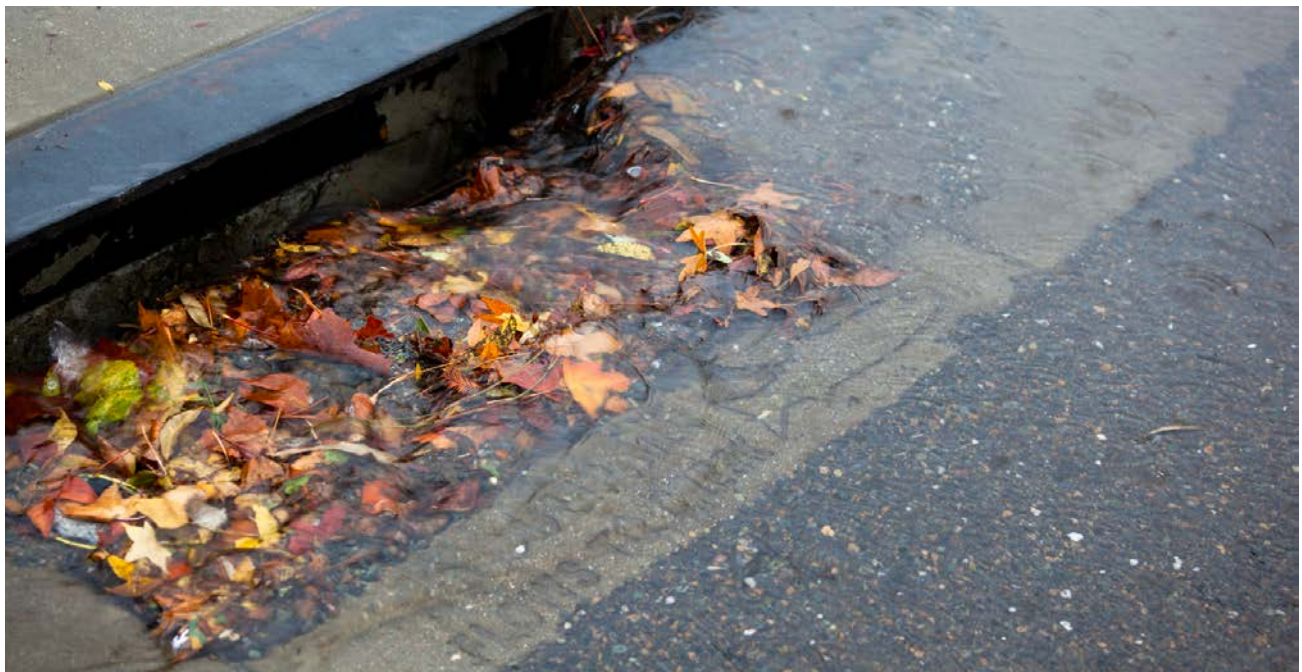




Rise to the Challenge

Water covers about 70 percent of the Earth's surface; therefore, it may appear that we have an abundant supply. However, 97 percent of that supply is salt water, and 2 percent is fresh water frozen in glaciers. That leaves only 1 percent as a readily usable resource for drinking, cooking, bathing, agriculture, industry, recreation, and other needs.

This limited supply of fresh water and our dependence on it mean that we must use this resource wisely. Every human being plays an important role in caring for water. It is our responsibility to manage our local, regional, and national waters respectfully. We invite you to rise to EarthEcho's Water Challenge: **check** your local resources; **share** your data on EarthEcho's global database; and TAKE ACTION to **protect** your waters!



This guide outlines how YOUth can take action to **protect and restore** local water resources through **storm water protection**. Follow this step-by-step guide to confidently plan, host, and capture the impact of storm drain cleaning and stenciling events in your own community!



Know Before You Go!

Before you can go into the streets to clean and/or mark your local storm drains, there's some important information you will need to know! This section will help you build a strong foundation for your storm drain event!

Stormwater and drains 101

Stormwater is rain or snowmelt that runs off watertight surfaces like streets, sidewalks, driveways, or parking lots. Typically, stormwater is not absorbed into the ground. Stormwater can pick up pollutants like oils from cars, chemicals from fertilizers and pesticides, and other materials before it reaches the stormwater systems. Stormwater systems, like storm drains and ditches, gather stormwater and collect it to discharge into rivers, streams, lakes, and oceans.

Stormwater is commonly not treated before being released and therefore, can add harmful pollutants directly to our water systems! Keeping storm drains clean helps to stop trash, chemicals, and other pollutants from reaching our local waterways and harming wildlife.

👉 To learn more about stormwater systems and common pollutants, [watch this video!](#)

Gather Intel in Your Area

Research what kind of stormwater systems your local area has to better understand how you can improve your stormwater quality!

- On the ground research: Start to observe your local drains and ditches. Do you see these in your neighborhood? Near your school?
- Online Research: Explore your local community and stormwater.

 Tip: When searching online, use keywords like “your city/town/village” + “stormwater” or “storm drain” or “ditches” or “culverts.” You should be able to find government webpages that will outline ordinances, FAQs, and actions you can take.

Identify a Location In Need

Once you know what you're looking for, the next step is to find a location in your community that could benefit from some extra care. This includes high traffic areas with storm drains or ditches that are often clogged with litter, leaves, or dirt, all of which can lead to water pooling up! Before moving forward with any of the planning, make sure:

- The improvement site is safe and easy to access (and not near major highways)
- You have permission: For stormwater ditches, you will need to communicate with property owners about this project. For stormwater drains, connecting with your local city/village/town government is important. For United States-based projects, you will typically want to reach out to the Department of Public Works. It is better to ask for approval before beginning any further planning.

 Tip: Storm water drains are located on public property and owned by the local government. While ditches are typically on private property and owned by the property owner. If you live in a primarily ditch-heavy community, you will need to get permission from property homeowners for a stormwater improvement project!



Mark, get set, go!

Now that you've learned about stormwater systems and explored your community, it's time to decide what kind of stormwater project you want to lead! Whether you're cleaning, marking, or maintaining storm drains and ditches, each action helps protect your local waterways from pollution. Here are a few types of projects to consider:



Storm Drain Cleaning

Storm drains are one of the most direct pathways between your neighborhood and your local rivers, lakes, and oceans. When drains are clogged with trash, leaves, or dirt, stormwater can't flow properly leading to flooding, pollution, and damage to wildlife habitats.

What you can do: Work with your local government to safely remove debris from storm drains and nearby curbs. Focus on visible litter and natural build-up like leaves or sediment, which can block water flow.

What you will need: Gloves, trash grabbers, buckets, safety vests, brooms, Event Day Checklist, Stormwater Action Data Sheet.

Ditch & Culvert Cleanings

In many communities, open ditches carry stormwater runoff instead of underground drains. These channels can easily fill with trash or overgrown vegetation, slowing the flow of water and creating pollution hotspots.

What you can do: Organize a ditch clean-up day! Partner with property owners or your local public works department to clear litter, fallen branches, or debris blocking water flow.

What you will need: Gloves, buckets, trash bags, shovels, or rakes, Event Day Checklist, Stormwater Action Data Sheet.



Storm Drain Marking

Storm drain stenciling or marking helps raise awareness that "Drains Lead to Waterways." These visual reminders encourage community members not to dump oil, paint, soap, or waste into drains.

What you can do: Partner with your local government or watershed organization to stencil or attach decals near storm drains that say messages like: "No Dumping - Drains to River", "Only Rain in the Drain", "Drains to Ocean".

What you will need: Stencils and/or official decals, paint, brushes, or adhesive materials, Event Day Checklist, Stormwater Action Data Sheet.



Make a Plan!

Now that you know what needs to be done in your area and where to host. It's time to begin planning!

1 Date and Time

Think about when your community will be most available and what local issues you want to address. For example, in spring and summer, storm drains often collect debris left over from winter or washed in during heavy rains. In the fall, falling leaves can quickly build up and block drains.

 **Tip:** Check the **weather forecast** and choose a **time of day** that will be comfortable for volunteers-early morning or late afternoon often works best in warmer months.

 **Tip:** Always set a rain date as a backup in case of bad weather!

2 Recruit Volunteers

Use your network to gather friends, classmates, community groups, or local organizations to build your storm drain clean up team. Partnering with local conservation groups like nature centers, watershed alliances, a local park, or your area's conservation department can help expand your reach and impact!

 **Tip:** Recruiting help from local organizations may lead to local experts attending your event!

When recruiting volunteers, it can be helpful to assign roles and responsibilities such as: photographer, drain coordinator, sign-in lead, and more. Assigning tasks can help everyone have a purpose and make the event more organized!

3 Spread the Word

Use flyers, social media, and community centers to spread the word. Include clear instructions and event details, such as date, time, how to sign up, what to bring, what to wear, and who should attend the event.

 **Tip:** Use RSVP tools like Google Forms or SignUp Genius to track interest and contact information. This helps you to get a better understanding of how many people will be there and also gives you contact information to send updates!

Bonus: Reach out to the local press to share information about your event! Be sure to tag @earthecho in any social media posts!



Event Day Checklist

You have done the research and planned your storm drain clean up event! Now it's time to bring your project to life. Use this checklist to ensure the event goes smoothly:

- ☐ **Meeting & Sign In**
Designate a central meeting spot, like a pavilion or table, for volunteers to gather. During check-in, have volunteers sign in and fill out any paperwork, such as waivers or photo releases.
Tip: If you're partnering with a local community organization, they will usually have the releases and waivers you need.
- ☐ **Welcome, Kick Off & Overview**
Once everyone has arrived, welcome the group and set the tone for the day. Take a few minutes to explain the importance of storm drains and the impact stormwater has on your local environment. Be sure to review the plan for the day and any guidelines and safety tips.
Tip: Start your event on time. It's important to remember that participants have dedicated their free time to help, so be respectful, even if some people are running late.
- ☐ **Demonstrate Cleaning and/or Stenciling Techniques**
Before sending volunteers out, show everyone the correct way to remove debris from storm drains. Walk through safety precautions and collection methods, like traffic awareness, avoiding sharp materials, and working in groups. Remind volunteers to be aware of their surroundings.
Tip: If you are also doing storm drain stenciling with permission for your local government, this would be the time to demonstrate how to properly mark storm drains!
- ☐ **Divide into Groups**
Split volunteers into small groups of 2-5 people. Assign each group a specific area to focus on (street, neighborhood, side of street). If possible, recruit experienced volunteers to help lead each small group or float between the groups. If you know what areas you want to focus on, it can be helpful to create a map of areas for volunteers to tackle in order for your efforts to have a larger reach. Encourage volunteers to take breaks and stay hydrated.
- ☐ **Clean Up**
Once you have cleaned and/or marked all your storm drains or you have reached the end time of your event, be sure to gather all debris and tools. Track how much debris was removed and how many storm drains were marked using the Stormwater Action Data Sheet. Leave the site better than you found it!
- ☐ **Take Photos**
Celebrate your hard work! Take a group photo (with those who've given photo permission) and capture before-and-after shots of the site to showcase your impact.
- ☐ **Report**
Use the Stormwater Action Data Sheet to record your debris removed, drains marked, and any other efforts taken. Log your data at monitorwater.org and be sure to share your impact with any agency that helped support your work!
- ☐ **Thank your volunteers**
A little appreciation goes a long way! Follow up with volunteers via social media and send an email to thank them for their dedication. Share photos and highlight the positive impact they made!



Stormwater Action Data Sheet

This sheet is designed to help you track and record your stormwater action accurately, making it easier to report your findings.

Be sure to take **BEFORE** and **AFTER** pictures.

When complete, add your **Water Protection Data** to MonitorWater.org

Date of Event

TOTAL # of participants

Location of Event

AGES: 0-10 years

11-14 years

15-17 years

18+ years

Did you mark any storm Drains? *yes/no* (circle one)

If yes, how many?

Estimated number of storm drains/ditches cleaned

Estimated weight of debris removed (kg/lb)

Type of Waste Collected (Select all that apply)

☐ Cigarettes

☐ Face Masks

☐ Food wrappers

☐ Glass

☐ Paper

☐ Plastic Bags

☐ Plastic Bottles

☐ Other (specify)

What was the most unique item you found?

Any other observations?



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www.EarthEcho.org

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