

Rain to River Storm Drain Stenciling Guide

Using paint and stencils, volunteers mark educational messages on storm drains and catch basins that flow to nearby creeks, streams, lakes, coastal waters and ultimately the ocean. Painted messages include the phrase “NO DUMPING, DRAINS TO RIVER” accompanied by the image of a fish. The message alerts people that discharges into storm drains pollute valuable water resources, and it can also heighten community awareness of nearby waters.

Rain to River is a project of the Appalachian Ohio Clean Watershed Initiative. The purpose of this initiative is to improve water quality and restore watersheds in the coal-bearing region of Ohio through education, training, partnership building, connecting resources and project implementation. This program is a partnership between Ohio University’s Voinovich School of Leadership and Public Affairs and Rural Action and is funded in part through Ohio EPA’s Section 319 Clean Water Act Grant Program.

Benefits of Storm Drain Stenciling

Unlike household water systems, storm sewers flow directly into our local waters, depositing whatever they pick up along the way. Marking storm drains can raise awareness about the connection between storm drains and receiving waters and can help to deter littering, excess fertilizer use, dumping, and other practices that contribute to storm water pollution. Items that frequently end up in storm drains include: trash, grass clippings, grease, pesticides, motor oil, antifreeze, paint, and plastics.

Starting a Stenciling Project

Permission must be first obtained from the county or city department that maintains the storm drains. This can often be the Department of Public Works or any other street department equivalent. In some cases, approval can be a Mayoral or City/Village Council decision. Share the following information and acquire written approval to move forward with the project.

Information to provide to local governments when undertaking stenciling project

1. A short statement describing the project
2. A description of the group(s) doing the stenciling (AmeriCorps members, students, Scouting groups, community groups, or other service organizations), the number of participants expected, their ages, and how the work will be supervised.
3. A list or map of the streets or neighborhoods that will be stenciled.
4. Proposed day and time of event with an accompanying rain date.
5. Include stencil photo with letter sizes and total image dimensions.
6. Description of how the stenciling process works, including type of paint, method of application (inverted spray paint), placement of the message relative to the drain, and how the surface will be cleaned before painting.

Community Outreach

Have door hangers and flyers on hand to distribute to nearby homes and businesses during the stenciling project. Inform the community of the project and ask for their support while making a visual connection between the newly stenciled drains and local water quality. A flyer/door hanger may include the following additional information:

- Purpose of the project
- Dates of project including a rain date if applicable
- Neighborhood area to be painted
- Group doing the project
- Contact person if residents have questions

Volunteer Safety

Safety during the project should be of the utmost importance. Do not paint on busy streets. Also, consider the day and time that painting will occur. In some instances, the time of day can affect the amount of traffic in the area. Messages should be painted only on streets that are traveled by pedestrians. Paint in groups of three or more. It is recommended that persons stenciling must be 18 years old to participate. However, groups of students with either a parent or teacher in each group may be acceptable depending on the age group. All team members must wear orange safety vests or brightly colored clothing, and one person on each team should be assigned to observe traffic and warn the others of any potential danger. Volunteers should not stop or direct traffic. Use safety equipment such as orange safety vests and traffic cones. All participants must be trained on safety procedures and painting technique to be used at the start of the event as well as sign a waiver of liability.

Care and Use of Equipment

Each storm drain stencil kit includes the following:

1. At least two stencils with text: "No Dumping, Drains to River"
2. Cans of inverted spray paint. The number of cans depends on stenciling location.
3. Hand broom
4. Wire brush
5. Plastic drop cloth
6. Packing tape
7. Scissors
8. Permanent Marker
9. Traffic cones
10. Orange safety vests
11. Door hangers
12. Rubber gloves
13. Paint thinner/mineral spirits



Storm Drain Stenciling (How to)

1. Prepare your stencil. Place the stencil on top of the drop cloth and trace around it. Take scissors and cut out the area you just traced around



2. Tape the stencil to the inside of the hole that you just cut out.
-These first two processes may have to be repeated depending on how many teams you have and drains to stencil



3. Sweep and scrape area to be painted, using wire brushes and the hand broom to remove dirt and other debris from the target area. Make sure a teammate is watching the road



4. Place the stencil with attached drop-cloth next to the drain in the basin of the curb. Sometimes the municipality will have a specific location. Otherwise, keep it uniform
5. Have one or two people hold the stencil in place while the painting is in progress. It helps to wear the latex gloves when holding the stencil



6. Take the inverted spray paint and evenly distribute two coats of paint on the stencil while making sure that those holding the stencil remain still



7. After the painting is complete, carefully pull the stencil straight up off the ground as to limit the possibilities of smudging the wet paint
8. Place a traffic cone or two included in the kit next to newly painted message so that they may not be disturbed and left to dry
9. After 5–10 minutes come back and see if the paint has dried and remove the cones. Also, do a quick check to verify the quality of the message

Stencil Cleaning (How to)

1. Unless the municipality has a specific place for you to clean your materials, do this upon returning to your home destination
2. Take the abrasive brush and rinse it with water to remove any excess dirt that may be left in between the bristles
3. To clean the stencils, remove the taped-on drop-cloth and wipe it off with a rag soaked with paint thinner or other mineral spirits. Depending on how many coats of paint and how long it has been left on the stencil, sometimes hot water is enough to get the paint off
4. If simply wiping off the stencil fails to remove all the paint, consider using a tub or plugging a sink and letting the stencils soak in the paint thinner. Soaking tubs are available for groups to borrow if desired.



Additional Considerations

- **Location:** Place markers where they can be easily read by pedestrians. Storm drain messages can be placed on the curb facing the street or on the street just downstream of the storm drain or on the street in front of the drain. Whenever possible, paint on the downhill side of the storm drain. This way your message won't be worked off by flowing water or covered by debris and leaves. Remember to keep uniformity throughout the process.
- **Weather:** It must be at least 50 degrees outside to ensure paint will dry (usually mid-April through mid-October). The pavement must be dry for the paint to be applied effectively. Avoid stenciling in high humidity, in the rain, or on wet surfaces. Also, be on the lookout for wind. Keep the excess paint to a minimum.
- **Painting:** Two light coats of paint work better than 1 heavy coat of paint. A can of spray paint can last for 15-30 stencils depending on the size of the can.
- **Stencil:** A stencil lifespan depends on care and use. When paint builds up and blurs the message, discard the stencil. Generally, a stencil can last for 12-15 applications before getting too clogged up. Keep this in mind for larger projects and look for decreasing quality in the finished message over time.

Sources (accessed 1/3/17):

USEPA – Water: Best Management Practices Storm Drain Marking
<http://water.epa.gov/polwaste/npdes/swbmp/Storm-Drain-Marking.cfm>

Friends of the Mississippi River
<http://fmr.org/participate/events/stenciling>

Chesapeake Bay Foundation
<http://www.cbf.org/join-us/education-program/resources/storm-drain-stenciling>

University of Wisconsin-Extension
<http://cfpub.epa.gov/npstbx/files/wiexstencil.pdf>

Ottawa River Coalition
<http://www.cityhall.lima.oh.us/DocumentCenter/View/765>



Borrower's Agreement

The Rain to River program offers an opportunity for organizations to borrow storm drain stenciling kits to accomplish storm drain stenciling projects in local communities to raise awareness about storm water pollution.

I/We agree:

- To return all of the equipment found inside of the kit(s) to a Rain to River Project staff member. The kit will be checked to make sure all borrowed equipment is returned and in good condition.
- I will make sure to fill-out and sign the Post Event Report (included with kit) when returning the kit which includes a signature from a Rain to River Project Member.
- To not tamper with any of the equipment found in the kit, but to only use the equipment found in the kit for it purposes of storm drain stenciling.
- To accept full responsibility including finically liability for the storm drain stenciling kit while it is in my possession and to replace kit supplies if any supplies are damaged, lost, or stolen.
- To clean the stencils after use and to make sure that as much paint as reasonably possible is removed from the stencils. Stencils should be cleaned well enough so they may be used again for another project.
- To return the kit on time. You will have 2 weeks to use the kit and complete your stenciling project from the day the kit is checked-out.

I have read and accepted the agreements of The Rain to River Borrower's Agreement and my signature indicates my agreement to comply with these set regulations. Failure to comply with these rules, regulations, and guidelines will result in a loss in privilege of borrowing storm drain stenciling kits.

Organization: _____

Print Name: _____ Relationship to Organization: _____

Signature: _____ Date: _____

Phone Number: _____ Email: _____

The Appalachian Ohio Clean Watershed Initiative (AOCWI) combines the technical expertise of Ohio University's Voinovich School of Leadership and Public Affairs with Rural Action's regional collaboration networks to reach communities with support and technical assistance for water quality improvements. AOCWI is financed in part or totally through a grant from the State of Ohio Environmental Protection Agency and the United States Environmental Protection Agency, under the provisions of Section 319(h) of the Clean Water Act.

Stenciling Kit Supply List

Safety Vests	Traffic Cones	1 Pair Scissors
		
1 Wire Brush	1 Hand Broom	Cans of White Spray Paint
		

Plastic Drop Cloth



Packing Tape



Permanent Markers



Permanent Marker



Mineral Spirits



Door Hangtags



“No Dumping Drains to River” Stencil



Supply Tub



Each kit will also include a binder with the following documents:

- **Stenciling Guide**
- **Print-out of Webinar PowerPoint Presentation**
- **Borrower’s Agreement**
- **Photo Inventory of Kit Contents**
- **Sample Liability Waivers**
- **Post Event Report**



Storm Drain Stenciling Post Event Report

Please complete this form following your stenciling event and return it when you return your stenciling kit. If you have questions about the contents of the kit, stenciling process, or this form please contact us:

Contact: Jen Bowman Email: Bowmanj2@ohio.edu Phone: (740) 597-3101

Rain to River Project
Ohio University Voinovich School of Leadership and Public Affairs
Building 22, The Ridges, Ohio University
Athens, Ohio 45701

Required Information:

Stenciling event date(s): _____

Location (City/County): _____

Number of storm drains stenciled: _____

Number of cans of spray paint used: _____

Number of kits used: _____

Please send event photos with descriptions or captions to:
Bowmanj2@ohio.edu

You may email photos directly or upload them to Google Drive and share.

Also let us know if there will be any media coverage of your event.

Volunteer Demographic Information:

# of Adults		# of Children	
# of Veterans/Active Duty or in Military Families		# Disadvantaged Children/Youth	
# Disabled Volunteers		# of College Student Volunteers	
Total # of Volunteers			

Contact Information:

Organization: _____

Representative Name: _____

Phone: _____ Email: _____

The Appalachian Ohio Clean Watershed Initiative (AOCWI) combines the technical expertise of Ohio University's Voinovich School of Leadership and Public Affairs with Rural Action's regional collaboration networks to reach communities with support and technical assistance for water quality improvements. AOCWI is financed in part or totally through a grant from the State of Ohio Environmental Protection Agency and the United States Environmental Protection Agency, under the provisions of Section 319(h) of the Clean Water Act.



Sample Waiver of Liability¹

I, the undersigned, being of lawful age or the parent or legal guardian of the volunteer involved in the storm drain stenciling project sponsored by (Municipality/Organization), in consideration of my or another’s voluntary participation in the stenciling project, I hereby, for myself and any volunteer for who I am parent of legal guardian, agree to release, discharge, hold harmless, and forever acquit the (Municipality and/or Organization) from any and all actions, causes of action, claims or liabilities whatsoever, known or unknown now existing or which may arise in the future, on account of or in any way related to or arising out of participation in the (marking/stenciling) project.²

Further, I assume all liability for any non-participants who accompany me.

PARTICIPANT’S NAME (please print) _____

PARTICIPANT’S SIGNATURE _____

PARTICIPANT’S AGE (if a minor) _____

SIGNATURE OF PARTICIPANT’S PARENT OR LEGAL GUARDIAN (if a minor)

DATE SIGNED _____

IN ORDER TO PARTICIPATE, YOU MUST SIGN THIS WAIVER.

¹ FOR DEMONSTRATION PURPOSES ONLY. To help protect your municipality against liability, establish safety guidelines that will prevent injury to volunteers and damage to property, have participants sign a waiver of liability, and have the municipality’s lawyer review the language and program. Liability waivers should verify that participants understand the nature of the work, agree to follow the safety guidelines, and will not hold the municipality liable for injury to themselves or damage they may cause.

² Developed in reference to “Waiver of Liability.” Storm Drain Stenciling Notebook: A Guide for Local Communities. Connecticut River Watershed Team, Massachusetts Watershed Initiative and Franklin, Hampden & Hampshire Conservation Districts: <http://www.mass.gov/eea/docs/eea/water/stencilingnotebook.pdf>.