

## STORM DRAIN STENCILING

Educate your community about stormwater pollution by stenciling the message: “Dump no Waste – Drains to Stream” (or River or Lake) next to storm drains. You may choose to distribute or create fliers that educate the community about stormwater pollution.

### Learning Objectives:

- Students will learn about the sources of stormwater pollution.
- Students will understand why stormwater pollution is a threat to the environment.
- Students will stencil messages next to storm drains to encourage others to be more aware of stormwater pollution.

### Standards:

Agricultural Education A.6-8.3, A.9-12.3; Environmental Education D.8.5, E.12.3

**Materials:** For each group of 4 to 6:

- 1 or 2 stencils
- Door hanger cards/fliers
- A map of the stenciling area
- Parent/guardian permission slips
- A letter of authorization from the Department of Public Works for stenciling
- 2 cans of spray paint – preferably inverted-tip white traffic zone latex paint.
- A wire brush to clean the gutter before painting
- Whisk broom and dust pan
- 1 or 2 pairs of work gloves
- 1 or 2 bright orange safety vests, or have students wear brightly colored clothing
- 2 garbage bags – 1 for wet stencils and 1 for garbage such as tape used on the stencils and debris cleaned out of the gutter
- Paper towels or rags\*
- Traffic cones or flags for use on busy streets\*
- Duct tape and scissors\*
- Cardboard box the size of stencil\*

#### Note:

One can of latex paint is enough to paint approximately 10 drains.

*\*optional*

**Time:**

It will take approximately one hour for a team of four to six people to stencil 15 storm drains.

**Background:**

Why should people be concerned about what enters a storm drain?

Because anything that is flushed down a storm drain is not “treated” before it reaches a stream or river. This means that oil, antifreeze, paint, grass clippings, household waste, pet wastes or any other waste on streets and sidewalks goes directly into a nearby stream, river or lake.

The next time you wash your car on your driveway, consider where the water goes. The soapy, dirty water runs down the street into the storm sewer. This sewer carries the wash water to a waterbody. In the water, the soap acts like a fertilizer for aquatic plants and causes too much plant growth, which creates problems for fish.

You can help increase awareness of the storm drain connection. Educate your community about stormwater pollution by stenciling the street next to storm drains and distributing door hanger cards.

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**PROCEDURE:**

**Before You Stencil**

1. Get permission to stencil storm drains from the Department of Public Works in your city, village or town. Be sure to ask for a letter of authorization to provide proof if you are questioned by a road crew or police officer.

To stencil on private property, contact the landowner, whether the property is a home, business or apartment complex.

2. Weather conditions are important for the success of this project. You should choose a day when the pavement is dry and warm. Windy days are not good because the spray paint can drift onto nearby automobiles and debris can be blown onto the painted surface.
3. Using a neighborhood map, carefully consider the area your group will stencil. Divide the area into routes and assign a team to each route.
4. A day or two before you plan to paint, distribute door hanger cards or fliers explaining the stenciling program. If you can't distribute the information ahead of time, have one or two team members distribute the cards and fliers while others paint.

Examples of a door hanger card and a flier are posted on the Water Action Volunteers website. If your group is participating in a large storm drain stenciling project, you may want to make your own door hangers, fliers or posters, using the opportunity to conduct an all-out education campaign.

**How to Stencil**

1. Scrub the street area surrounding the storm drain with the wire brush, and use the whisk broom to sweep dirt into the dust pan. Use your garbage bags to take debris away. Do not sweep dirt and debris into the drain.

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2. Position the stencil in the gutter next to the storm drain inlet where the message will be most visible. Tape or hold the stencil in place. You might place a cardboard box with its bottom removed over the stencil to create a “wall” to contain drifting paint.
  3. Spray paint the stencil message, making sure paint doesn’t get into the storm drain. Two light coats of paint will work better than one heavy coat. Allow the first coat of paint to dry before applying the second coat. The stenciled messages last for approximately two years on a paved surface.
  4. When you’re done with the project, have one team member check that all storm drains in your area have been stenciled. It’s easy to miss one.
  5. Place the used stencils in a plastic bag for transportation. When storing used stencils, allow the paint to dry before stacking the stencils. A stencil’s lifespan is determined by use. Discard the stencil when the message is blurred by excess paint build-up (typically about ten separate events, depending on the material used to make the stencil).
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