

# STORM DRAIN STENCILING ACTIVITY

## WHAT IS A STORM DRAIN STENCILING ACTIVITY?

Storm drain stenciling is a neighborhood or community awareness and education tool.

The actual storm drain stenciling activity is but one part of a larger education campaign. A successful storm drain stenciling activity typically includes door-to-door neighborhood education and/or a media campaign. The education campaign lets the citizens of a community know why young people are stenciling storm drains. It makes them aware that the drains connect with surface or ground water and that dumping of oil, antifreeze, fuels, paint, leaves, grass clippings or other materials in storm drains causes damage to surface and groundwater.

Citizens need to know that:

- Huge quantities of pollutants come from our everyday activities through runoff or nonpoint source pollution
- Most storm drains, contrary to popular belief, are **NOT** attached to treatment systems and drain to streams, lakes or groundwater
- Other activities such as overutilization of fertilizer or chemicals and dumping waste fluids, leaves or grass clippings in the gutter also causes needless pollution



**Educators Learn How To Stencil  
Storm Drains During 1997  
Nonpoint Source Institute**

## WHY DO PEOPLE ORGANIZE STORM DRAIN STENCILING ACTIVITIES?

- To educate a neighborhood or community on the water quality impacts and other hazards of putting waste materials into storm drains
- To involve young people in an educational community service project
- To meet the educational requirement in the U.S. Environmental Protection Agency mandated Stormwater Permit Program
- To help to solve an illegal dumping problem that has been detected in a neighborhood or community

## WHO IS TYPICALLY INVOLVED IN STORM DRAIN STENCILING ACTIVITIES?

- Students: school classes, school clubs
- Scouts or other youth groups
- Citizen volunteer monitoring groups and watershed improvement groups
- Stormwater programs and public utilities

## WHAT IS INVOLVED IN ORGANIZING A STORM WATER STENCILING ACTIVITY?

- Defining who the active participants will be
- Obtaining permission for applying stenciling from your public works department
- Identifying and contacting sources of support (printing, door hangers, stencils, paint, safety vests, adult sponsors and traffic watchers)
- Obtaining from the local public works department the names or types of water bodies (streams, rivers, lakes, bays, wetlands, groundwater etc.) into which storm drains flow in different parts of the community
- Obtaining information on the impacts of stormwater runoff for use in educational materials (this could be a class assignment for students involved in the stenciling project)
- Designing a community education plan (door-to-door, newspapers, radio, TV etc.)

- Writing, layout and reproduction of printed materials
- Obtaining materials for stenciling
- Conducting the pre-stenciling education activity
- Conducting pre-stenciling safety training for adults and young people
- Arranging for placement of traffic cones or men-working signs by the local public works department when appropriate for safety

### **WHAT ITEMS ARE NEEDED FOR STORM DRAIN STENCILING?**

- A map or maps of the neighborhood or community
- Stencils
- Paint (a CFC free aerosol can of traffic-zone latex paint, one can will do about 20 stencils)
- Broom or whisk broom
- Wire brush
- Safety vests
- Traffic cones, traffic flag
- Cardboard box (for overspray shield)
- Cleanup rags and bags

### **CHECKLIST FOR THE WEEK PRIOR TO THE EVENT:**

- Have flyers or door hangers been distributed in the neighborhood(s) or are they ready for distribution?
- Has written permission been received?
- Have sufficient adult safety volunteers (traffic watchers) been trained and assigned?
- Are all supplies on hand and organized for the groups that will participate?
- Have local media sources been contacted and invited to cover the event?
- Have participants teams of 4 to 6 (each with an adult traffic watcher) been organized?
- Is there a plan for postponing the event if the weather is unsuitable (a phone tree, meeting place etc.)?

## **TIPS FOR STENCILING DAY**

### **WATCH THE WEATHER**

If the pavement is not dry, if rain is likely, if it is very windy or if the air temperature is not above 50 degrees, reschedule. Also, if it is very windy, reschedule. The purpose of stenciling is not to have paint running into the storm drains or to spray nearby cars due to drift. If there is any wind at all, avoid painting near parked vehicles and utilize a large box (2 to 3 feet tall) folded flat as a shield to avoid overspray.

### **WORK IN TEAMS**

Teams of 4 to 6 work well for storm drain stenciling. Two persons can prepare the area to be painted, two to four can secure the stencil while one applies the paint and one can be the traffic lookout. These jobs can be rotated periodically for maximum enjoyment.

### **TIPS FOR APPLYING STENCILS**

- Remind stencilers beforehand to wear old clothes. They might also want to wear rubber gloves, plastic bags over shoes, and protective eyewear.
  - Scrub the area briskly with a wire brush and remove loose dirt with a broom or whisk broom.
  - Lay the stencil on the sidewalk, street or manhole cover.
  - One or two people can hold the stencil flat or bricks or rocks work well as weights on the corners.
  - When using spray paint, shake the can for one full minute. Hold the can 6 to 8 inches from the stencil and use a series of back and forth motions to spray one line at a time until the letters are uniformly covered.
- DON'T USE TOO MUCH PAINT** - it will run underneath and blur the letters. (Paint rollers can be utilized but are much more difficult to use. Excess paint must be frequently struck from rollers. Paint rollers should only be used by adults).

- When the paint application is finished, carefully lift the stencil up off the surface. If the stencil is not clearly readable do not attempt to wipe it off and try again! That will only make a bigger mess. Learn from your small mistakes - simply try to use less paint the next time. Your purpose is to get the message out not to create a work of art.
- After all stenciling is finished, lay stencils out flat to dry in a warm, dry place for a day or so. When the paint is completely dry Mylar stencils can be gently rolled to chip off excess paint. This works best if the paint does not build up too thick between cleanings.



The primary purpose for storm drain stenciling is to create public awareness of the street to waterbody and street to groundwater connections. Your distribution of flyers, the storm drain stencils and media coverage of your project should have increased public awareness of the connection. Once that connection has been made and the citizens in a community realize the impacts of their activities, the increased level of public awareness can and hopefully will create a ripple effect. That ripple effect might include formation of local groups that do stream cleanups, streambank or wetlands restoration. Increased awareness might lead to formation of a new Alabama Water Watch group in the community.

For both classroom and informal educators, stenciling is an effective community service project that combines learning with environmental studies, civics, and language arts, especially if students research the subject and create their own flyers. Some cities have involved young people in youth-at-risk programs in storm drain stenciling. Action projects empower young people!

## FOLLOW UP

### **REPORT YOUR ACTIVITIES**

The Alabama Nonpoint Source Education Program Coordinator is interested in knowing what successes you have with storm drain stenciling in your neighborhood or community. The NPS Education Program wants to recognize outstanding education and pollution reduction efforts. The NPS Education Program can also benefit by capturing volunteer time for part of the match required by U.S. EPA Section 319 NPS grants.

### **RELATED WATER QUALITY ACTIVITIES FOR CITIZENS WHO WANT TO DO MORE**

There are a number of activities available for citizens who want to do more to improve and protect water quality in the community. These activities include:

- StreamWalk, a visual stream assessment activity. Contact Mike Mullen at 334-670-3624 or e-mail him at mmullen@trojan.troyst.edu to request a copy.
- Adopt-A-Stream, a stream crossing clean up program of Alabama PALS (People Against A Littered State). Contact Alabama PALS at 334-263-7737 for information.
- Alabama Water Watch Program, Alabama's citizen volunteer monitoring program. Contact Alabama Water Watch at 334-844-4785 or 888-844-4785 for information about upcoming training workshops.
- Alabama Water Watch Association, the Association is the citizen arm of the Alabama Water Watch Program. Citizens do not have to be monitors to support the Association although many members are monitors.
- Soil Watch, a program that prepares citizens to recognize and report erosion and sedimentation problems, is being designed at the present time and will be available in the future.
- In areas with Stormwater Management Permit Programs there are excellent opportunities for citizen involvement. All of these stormwater programs are required to have an education component. These programs should be interested in involving citizens in water quality education and monitoring efforts.

## SOURCES FOR STENCILS

Storm drain stencils can be made locally or they can be purchased from a commercial source. Stencils can be made from cardboard or Mylar. Mylar stencils can be used over and over again if care is taken to clean and store them after use. Cardboard stencils are less durable. One commercial source for storm drain stencils is Earthwater Stencils, 4425 140th Avenue SW, Rochester, WA 98579-9703. Phone 360-956-3774; Fax 360-956-7133. Generic Drains To Stream, Drains To Lake, Drains To Ground Water stencils are available. Custom stencils with your organization's name can also be supplied.

# STORM DRAIN STENCILING REPORTING FORM

Please find time to complete and send the following form along with a copy of your education materials with photocopies of any newspaper articles or other information you would like to include. Please send to: Michael William Mullen, Alabama NPS Education Coordinator, CERS, Troy State University, Troy, AL 36082.

Person Reporting: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ FAX Number \_\_\_\_\_

Date Stenciling Took Place: \_\_\_\_\_

Estimated Number of Storm Drains Stenciled: \_\_\_\_\_

Number of Adults Participating: \_\_\_\_\_

Number of Young People Participating: \_\_\_\_\_

Local Organizations Contributing To The Project \_\_\_\_\_

Were Any Signs Of Dumping Of Wastes Into Storm Drains Observed During The Activity?  Yes  No

If So, Were These Reported To The Local Utility Department?  Yes  No

In Your Opinion Has The Storm Drain Stenciling Activity Created Awareness That Will Lead To Other Community Water Resource Protection Activities?  Yes  No

**THANK YOU FOR YOUR EFFORTS TO KEEP  
ALABAMA'S STREAMS, RIVERS, LAKES,  
ESTUARIES AND GROUNDWATER CLEAN!**

**PUBLICATION OF THIS STORM DRAIN STENCILING ACTIVITY WAS  
MADE POSSIBLE BY A U.S. EPA SECTION 319 NPS GRANT.**