Public Education & Outreach on Stormwater Impacts

Because stormwater runoff is generated from dispersed land surfaces—pavements, yards, driveways, and roofs—efforts to control stormwater pollution must consider individual, household, and public behaviors and activities that can generate pollution from these surfaces. These common individual behaviors have the potential to generate stormwater pollution:

- littering
- disposing of trash and recyclables
- disposing of pet-waste
- applying lawn-chemicals
- washing cars,
- changing motor-oil on impervious driveways
- household behaviors like disposing leftover paint and household chemicals



It takes individual behavior change and proper practices to control such pollution. Therefore it is important to make the public sufficiently aware and concerned about the significance of their behavior for stormwater pollution, through information and education, that they change improper behaviors.

Phase II MS4s are required to educate their community on the pollution potential of common activities, and increase awareness of the direct links between land activities, rainfall-runoff, storm drains, and their local water resources. Most importantly the requirement is to give the public clear guidance on steps and specific actions that they can take to reduce their stormwater pollution-potential.

The benefits of public education efforts cannot be understated, especially on topics such as "nonpoint source" or "stormwater" pollution. A 2005 report, Environmental Literacy in America (3 pp, 2.94MB, About PDF) by the National Environmental Education & Training Foundation (NEETF) found that 78 percent of the American public does not understand that runoff from agricultural land, roads, and lawns, is now the most common source of water pollution; and nearly half of Americans (47 percent) believes industry still accounts for most water pollution.

Additional information on this minimum measure, including the stormwater Phase II <u>regulatory</u> <u>requirements</u> for public education and a <u>fact sheet on the public education minimum measure</u> (3 pp, 232K, <u>About PDF</u>), is also available.

Key BMPs and Resources:

MS4s developing a public education program should first create a public outreach strategy. An

excellent document to help MS4s develop this strategy is EPA's *Getting in Step: A Guide for Conducting Watershed Outreach Campaigns*. The additional BMPs in the next section below will help MS4s conduct different activities to educate the public.

- <u>Developing an Outreach Strategy</u> BMP Fact Sheet
- Getting in Step: A Guide for Conducting Watershed Outreach Campaigns [EPA 841-B-03-002] provides many of the tools you will need to develop and implement an effective watershed outreach plan.

BMP Fact Sheets:

The fact sheets in this section describe BMPs and how to use them to help municipal stormwater programs and construction site operators comply with the stormwater Phase II requirements.

EPA has started updating these fact sheets to include new practices and technologies. Several of these updated fact sheets are now available in PDF format.

Developing Municipal Outreach Programs

Developing an Outreach Strategy

Promoting the Stormwater Message

Classroom Education on Stormwater

Stormwater Outreach for Commercial Businesses

Tailoring Outreach Programs to Minority and Disadvantaged Communities and Children

Using the Media

Stormwater Outreach Materials

Educational Displays, Pamphlets, Booklets, and Bill Inserts

Promotional Giveaways

Stormwater Outreach Materials

Education for Homeowners

Alternatives to Toxic Substances

Chlorinated Water Discharge Options

Landscaping and Lawn Care

Pest Control

Pet Waste Management

Proper Disposal of Household Hazardous Wastes

Residential Car Washing

Trash and Debris Management

Water Conservation Practices for Homeowners

Education for Businesses

Automobile Maintenance

Pollution Prevention for Businesses

Promoting Low Impact Development

EPA Internet Resources:

- <u>Stormwater case studies on public education</u> includes case studies of how a Phase I or Phase II community has implemented the public education requirements.
- <u>Stormwater Outreach Materials and Reference Documents</u> provides outreach materials that municipalities, watershed groups, state, and local governments can customize and use for their own stormwater outreach campaigns.
- After the Storm is a half-hour television special produced by EPA and The Weather Channel
 on how polluted runoff threatens watersheds. The video is intended for educational and
 communication purposes in classrooms, conferences, public meetings, public access cable
 stations etc.
- Marine Debris often called litter, is any man-made, solid material that enters our
 waterways. EPA's marine debris website and <u>factsheet</u> are useful resources for educating the
 public about impacts and ways to prevent marine debris.
- Nonpoint Source Outreach Digital Toolbox includes a catalog of over 700+ materials (TV/print/radio/give-aways/mascots/ public attitude surveys, evaluations of public response to media campaigns) that can be used in a stormwater public education campaign. (Release date: Fall 2006)

Other Internet Resources:

- <u>Stormwater Education Toolkit</u> EXIT Disclaimer from the University of Central Florida (Stormwater Management Academy) includes thousands of educational products organized by target audience, and type of activity that can impact stormwater pollution.
- City of Grand Rapids Environmental Protection Services Department <u>Water Spots</u>

 EXIT Disclaimer includes over twenty different radio spots created to educate the public on different aspects of stormwater pollution prevention.
- Santa Clara Valley Urban Runoff Pollution Prevention Program Watershed Watch Education

 Site EXIT Disclaimer includes numerous downloadable materials and kits.

- City of San Diego's <u>Think Blue program</u> EXIT Disclaimer is an award-winning multi media campaign on preventing polluted runoff.
- Cooperative Extension's <u>National Extension Water Outreach Education</u> includes information on improving outreach efforts using "Best Education Practices".

Note: If you are referencing this page, please use this alias web address: http://www.epa.gov/npdes/stormwater/menuofbmps/publiceducation