RAIN TO RIVER
Raise Awareness about Stormwater Pollution

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Sarah Cornwell, Environmental Specialist
Lincoln Whitlow, Ohio University Student
Ohio University Voinovich School of Leadership and Public Affairs
Schedule for Today’s Webinar

- Watershed Issues in the Appalachian Region of the Ohio River Basin
- Rain to River Program
- Stenciling Kit Contents
- How to Stencil
- Event Planning
- Volunteer Safety
- Best Practices
- Questions
Appalachian Ohio Clean Watershed Initiative

The Appalachian Ohio Clean Watershed Initiative (AOCWI) is a collaboration to improve water quality and restore watersheds in the Appalachian region through education, training, partnership building, connecting resources and project implementation.

Grant Partners:
- Ohio University’s Voinovich School
- Rural Action

Major Project Partners:
- ODNR-Division of Mineral Resources Management
- Ohio Environmental Protection Agency
- Appalachian Ohio Watershed Council (formerly the Southeast Ohio Watershed Council)

Service Area
- 33 counties
- Ohio River Basin tributaries
- Coal bearing region
- Appalachian rural counties
- 509 12 digit HUCs

[Map of Appalachian Ohio Clean Watershed Initiative]
Appalachian Ohio Clean Watershed Initiative Outreach Area

AOCWI Services

- Watershed planning
- Site and project assessment
- Data analysis
- Identification of project funds
- Project development
- Grant preparation
- Project management
- Grant administration
- Financial management
- Community education
- Environmental literacy and training
Stormwater Pollution is a Type of NPS Water Pollution

Nonpoint Source (NPS) Water Pollution
- Comes from many diffuse sources
- Caused by rainfall or snowmelt
- Runoff carries away natural and human-made pollutants

Can result in:
- Decrease in Water Quality
- Harm to aquatic life
- Damage to local aquatic ecosystems

Items that frequently end up in local waterways as a result of stormwater pollution include:
- Trash & Lawn Waste
- Grease & Soaps
- Pesticides & Fertilizer
- Motor Oil & Antifreeze
- Paint & Plastics
- Various Other Chemicals

Source: US EPA
Ohio Environmental Education Fund awarded to raise community awareness about protecting local waterways

- Storm drain stenciling
- Educational hangtags
- Interactive portable stormwater display
- Water quality demonstrations
- Informational webinars
- 1-2 Stenciling events with Rural Action Stream Restore Corps AmeriCorps members
Storm Drain Stenciling

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.

1,500 drain goal throughout AOCWI service area.
Educational Hangtags

Public Outreach

- Hangtags describe the project
- Share information about proper disposal of common pollutants

Goal to reach 10,000 households in AOCWI region
Interactive Portable Stormwater Display

Interactive display will show the path stormwater takes from house to river bypassing treatment to illustrate the importance of proper use/disposal of potential pollutants from residential activities.

- The display is being professionally designed and constructed by Gerald Hilferty & Associates.
- Display will be available to borrow in the AOCWI region for Soil & Water Conservation Districts, local schools, community fairs/events, etc.

Goal to reach 500 people at approx. 20 events
Water Quality Demonstrations & Webinars

Community Education

- Demonstrate water quality sampling at Athens Library stormwater outfall and community events with transparency tubes for local residents
  
  Goal: 20 people at 3 events

- Hold 1-2 webinars sharing Rain to River program
  
  (this is webinar #1)
Stenciling Events

Communities in the AOCWI region have already had some of their drains stenciled while receiving positive feedback from the community:

- Gallipolis, Gallia Co.
- Racine, Meigs Co.
- Mineral City, Tuscarawas Co.
- Somerset, Perry Co.
- New Straitsville, Perry Co.
- Shawnee, Perry Co.

Stenciling projects were undertaken by:

- AmeriCorps Members
- Ohio University Students
- Hocking College Students
- Ohio Certified Volunteer Naturalists
- Community Volunteers
Stenciling Project

Gallia SWCD partnered with the Raccoon Creek Partnership on a the Rain to River Project to help promote water quality which helped pay for some of the rainbarrel kits, workshop speakers, and supplies as well as a new stenciling project. On June 1st, the Raccoon Creek Crew came and painted signs around the Gallipolis City Park storm drains. The City Commissioners were very happy to help with this endeavor and said “even if this prevents just one person from dumping pollution or trash into the drains that would be worth it!” We want to thank Raccoon Creek Partnership for all their hard work in completing this project. This project is called Rain to River and is part of the Appalachian Ohio Clean Watershed Initiative which is a partnership between Ohio University’s Voinovich School of Leadership and Public Affairs and Rural Action. It was financed in 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. Please call Ohio EPA 1-800-282-9378 to report if you see someone dumping items like: trash, grass clippings, grease, pesticides, motor oil, antifreeze, paint, plastics, soap, chemicals. If you have questions about the Rain to River Project contact Jen Bowman 740-597-3101 or email: bowmanj2@ohio.edu
What Makes an Outing Successful?

Coordination is Key

- Volunteers and the Community
  - Community members have a vested interest in protecting local waterways
  - Volunteers familiar with the community have the benefit of communicating more effectively
  - Well trained and informed volunteers can communicate with people on the street and local businesses while stenciling

- Organizers and the Government
  - Communication is very important
  - Organizers express project goals, Government expresses desires
    - Stencil placement & uniformity
    - Agreed upon area to be stenciled
Obtaining Permission

In the early stages of project planning, obtain permission from the county or city where you plan to stencil

Information to provide to local governments when asking permission to stencil storm drains

- A short statement describing the project
- A description of the group(s) doing the stenciling
- A list or map of the streets or neighborhoods that will be stenciled
- Proposed day and time of event with an accompanying rain date
- Include stencil photo with total image dimensions
- Description of how the stenciling process works
What Will You Need?

Volunteers!

- Older high school students or youth accompanied by parent/guardian
- College students
- Civic organizations
- Neighborhood associations
- Church groups
- Other local service organizations

And... A storm drain stenciling kit!
Documents Included with Kit

- Stenciling Guide
- Educational Hangtags
- Borrower’s Agreement
- Photo inventory of kit contents
- Sample liability waivers
- Post-event Report to be filled out after event
  - Event date and location
  - Number of storm drains stenciled
  - Number of volunteers and volunteer demographics
  - Photos with captions
Each Kit Contains

- A minimum of 2 Stencils
- A minimum of 2 cans of inverted spray paint
- Hand Broom
- Wire Brush
Each Kit Contains

- Plastic Drop Cloth
- Packing Tape
- Scissors
- Permanent Marker
Each Kit Contains

- Traffic Cones
- Orange Safety Vests
- Door Hangers
- Rubber Gloves
- Mineral Spirits
The Process

• Prepare the Stencil
  – Tape a drop cloth outline to the stencil to prevent excess paint from getting onto other surfaces
  • Trace around the stencil and remove center rectangle
  • Tape the Stencil onto the drop cloth
The Process

- Identify & prepare area around storm drain
  - Make sure surface is dry
  - Begin with a wire brush to loosen dirt
  - Use the hand broom to brush away the loose dirt
- Place stencil with the attached drop cloth adjacent to the drain in the basin of the curb
The Process

• One or two volunteers will hold the stencil in place while another applies a thorough, yet even coat of paint onto the stencil.

• After painting carefully lift the stencil taking care not to smudge the image. Place a traffic cone to warn of wet paint.
Cleaning

• After completing a project the stencils need to be cleaned.
• To easily clean: remove the plastic drop-cloth and start by wiping the stencil off with a rag soaked in mineral spirits.
• Depending on the amount of paint and how long it has been left on the stencil, sometimes hot water is enough to remove the paint.
Volunteer Safety & Education

During event planning inform volunteers of the following:

- Liability waivers (if applicable)
- Volunteers must be comfortable standing on or adjacent to city streets
- Wear comfortable shoes and dress for the weather
- Volunteer may get spray paint on their clothes
- Bring water and snacks or let volunteers know if water will be provided
- Rain date and establish communication plan for rescheduling
Volunteer Safety & Education

• Go over safety and proper painting procedures with all volunteers before stenciling.
• Do not paint on busy streets with no pedestrian access.
• Consider time of day and weekday vs. weekend.
• Paint in groups of 3 or more.
• Wear safety vests or bright clothing.
• Do not direct traffic; observe it and communicate appropriately.
Best Practices

Location:
• Stencil drains in areas visible to the public
• When possible, paint on the downhill side of the drain
• Remember to keep uniformity

Weather:
• Must be at least 50 degrees in order for paint to dry
• Pavement must be dry, limit painting in high humidity
• Be aware of the wind
Best Practices

Painting:
• Two light coats of paint work better than one heavy coat of paint
• A single can of spray paint can last for 20-25 stencils depending upon thickness of paint application

Stencil:
• Lifespan depends on care and use
• Paint builds up on the stencil and can blur the message
  – Retire the stencil for the day if paint builds up
• Generally, each stencil will last for 12-15 applications
Next Steps

Are you ready to host your own storm drain stenciling event?

Would you like to use our interactive stormwater model?

Would you like to learn more about watershed restoration, conservation and preservation in the Appalachian region of the Ohio River Watershed?

Contact:
Sarah Cornwell, Environmental Specialist
Ohio University Voinovich School of Leadership and Public Affairs
Landerss@ohio.edu
740-593-9601
For More Information

**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**

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

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QUESTIONS?