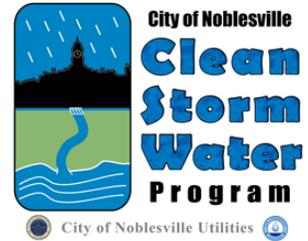




Stormwater Education Plan

Noblesville Clean Storm Water Program



Background & Rationale

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. 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. A 2005 report by the National Environmental Education & Training Foundation 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) believe industry still accounts for most water pollution.¹

Public Education Principles:

- Keep It Simple
- Little Message – High Frequency
- For the public, the practical message is important (do's and don'ts) – understanding the details and definitions of industry words is not
- The unifying theme – separate storm systems
- Notice what is going on in media/public attention and build on this momentum (like the plastic bag ban recently, drought season during summer, etc)
- Like taking a new product to market
 - Identify Customer (citizens)
 - Identify Product (develop brand)
Info about clean water and environment
 - Build on Each Other (series)
- To build a effective campaign, you need to hit people about every three weeks²
- We must be *cost-effective*: get the most messages out for the least amount of money

Elements of Stormwater Education Plan

(1) Goals

Match outreach goals with the goals of the overall stormwater program and its environmental and water protection concerns.

¹ "Public Education and Outreach on Storm Impacts," U.S. Environmental Protection Agency, http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=min_measure&min_measure_id=1.

² Daniel McCarthy, Quality Printing Company

(2) Target Audiences

Effort may be well spent on understanding their language of communication, media (e.g., newspapers/radio stations) they commonly use, points in their workflow where they are most likely to engage in polluting behaviors, and where they purchase materials that are likely to end up as pollution (e.g., motor oil, fertilizers).

(3) Messages

Specific action steps that the audience should take to prevent pollution - don't be vague.

(4) Format and Distribution

The outreach strategy should ideally employ a variety of complementary formats to help reach diverse audiences. For broad audiences, media such as radio or television, or movie theater slides, might be appropriate. Messages can refer to a website for more information. Focus particularly at the "point-of-sale" for activities that could generate stormdrain pollution. For example, messages on stormdrain pollution prevention could be distributed on yard-waste bags distributed by the municipality or sold at the local hardware store. Partnering with local cinemas, newspapers, local festivals, and local sporting events are all ways you can use the power of public gatherings and media to take messages on stormwater to ever-wider audiences.

(5) Evaluation

Branding

- Logo
- Similar font
- Color scheme
- Unifying theme ("separate storm sewers - what goes into storm drains flows straight into the environment untreated")

Two-Pronged Approach

(1) General Messages – Blanket Sweep

- Develop set of overall messages that can be used in a variety of settings
- Saturate the market area (bill stuffers, website, posters, banners, billboards, etc)
- The messages created here can then be reused in specific target audiences

(2) Target Messages – Focused on Specific Groups

- Focus on face-to-face opportunities and presentations
- Develop age-appropriate curriculum for specific target groups (3rd/4th Grade classes, Scout Troops, Home Owners Associations, Rotary Club, etc)
- Develop "Take Home Kit" for the different messages/groups (Rain Garden Kit, Rain Barrel Kit, Storm Drain Marking Kit, etc)
- Have Project WET come and pitch their ideas/products
- Hire company/consultant/intern to develop curriculum/kits

Household Campaign

HAMILTON COUNTY COMMUNITIES PARTNERSHIP:

Potential Name

Hamilton County Communities – A Partnership for Clean Storm Water

Communities Represented

Community	Mailer Size	Bill Frequency	Mailer Medium
Carmel	27,000	Monthly	Stuffer
Noblesville	17,100	Monthly	Stuffer
Westfield	9,500	Monthly	Stuffer
Fishers	20,000	Quarterly	Postcard
Zionsville	4,200	Quarterly	Postcard

Core Messages

Where to Start:

Survey (in conjunction with overall Upper White Watershed)

1. Fertilizer, Pesticides, Herbicides
2. Washing Vehicles
3. Separate Storm Sewers
4. Pet Waste
5. Litter/Trash
6. Yard Waste
7. Household Hazardous Wastes (Paint Disposal, etc)
8. Yard Habits
9. Auto Fluids
10. Rain Barrels

See back of plan for addition information on core messages

Delivery Vehicles

Strategy

- Simultaneous release across all 4 communities represented (4 times per year)
- Simultaneous release across multiple venues (Stuffer, 100 Posters Across Noblesville, Billboard, News Updates, Internet)

Venues

1. Stuffer in with Utility Bills (8 ½" x 3 2/3" with 1/8" bleed over edge on every side for printing)
2. Postcard for those not able to use Stuffers³
3. Fact Sheet (for Web and as Tri-fold)
4. Posters (libraries, schools, city buildings)
55 ½" x 34" Poster by our Drive-Up Window (every month)
5. Banners
6. Billboards
7. City Hall Kiosk (Screen Rotation)
"Fertilizer Awareness Month": 30-second blurb at city council meeting
8. Newspaper – connection with Chris Sikich at The Ledger

³ The single most effective mass mail delivery vehicle is the postcard/folded postcard (Daniel McCarthy)

- 9. Newsletter
 - 10. Press Release
 - 11. Video PSA's (use Brad Wariner?)
 - a. TV
 - b. Web
 - c. Movie Theater
 - 12. Radio PSA's
- } Amanda write?

Ideas:

- Launch with Video about Dead Zone in Gulf of Mexico
 - Stats on how much comes from Indiana
 - Show close up of storm drain in Noblesville – zoom out from storm drain (storm drain images pop up everywhere there is a storm drain – map covered – shows scale)
 - Show as commercial
 - Convert to Flash file and use on website
- Launch with Video using camera truck to track piece of litter from ground to river
- Good Video Examples:
 - “We All Live Downstream” - http://www.epa.gov/nps/toolbox/tv/SCCMovie_01_2004.mpg
 - “It’s Our Water” - <http://www.epa.gov/nps/toolbox/tv/Coloradopsa.mpg>
 - “Think Blue” (Rubber Duckies) - http://www.epa.gov/nps/toolbox/tv/TBMaine_30.mpg
 - “River Smart” - http://www.epa.gov/nps/toolbox/tv/timechange_oil.mpg
- Good Audio Examples:
 - “The Call” - <http://www.epa.gov/nps/toolbox/radio/thecalltx1.mp3>
 - “Hosed” - http://www.epa.gov/nps/toolbox/radio/santarosa_pesticides.mp3
- White River Clean-Up Day – Media Event with Duck (ducksuit) paddling down river

Next Steps:

- Refine Name for Group - Everyone
- Determine Target Delivery Date for initial launch – Everyone
 - Fertilizer (Jason’s Question)?
- Develop Template for Stuffer and Fact Sheet – Jonathan/Tim
- Research Video PSA’s – Amanda
- Call for other quotes – Quality Printing Company, Fine Line
- Slogan? (i.e. “Think Blue, Maine”, “It’s Your Water, Colorado”)
- What paper poundage can each of the community’s machine stuffers handle? (100 lb?)

Website Ideas:

- Path: www.cityofnoblesville.org/cleanwater
(For editing: www.cityofnoblesville.org/egov/apps/manager/admin.egov)
- Use www.stormwaterelkco.org/homeowners.php as example
- Fact Sheet for each mailer (PDF)
 - Do’s & Don’ts
 - Facts & Figures
 - File with references (if people want to know where we got our info)
- Interactive site for kids (and/or adults)
 - Use image on www.eastpikeland.org as example

- Different pollutants on picture – moves when you mouse over – click to pop up more info about that pollutant (pet waste, fertilizer, etc)
- Key Questions:
 - Potential neutral page that has all the HamCo logos on it and links to our individual sites
 - Register on website for email distribution list – monthly clean water tips, resource links; give away free ipod as incentive to register and direct people to the website
 - Hire independent web consultant that Tim knows to develop web site as well as kids branding
 - Is it possible to add flash video to our website? (Misty)

Printing Information

- Software Format: Adobe InDesign (industry standard)
- If use Publisher, need to estimate paying for 2 hours +/- of pre-printing layout work
- \$65/hour for Quality Printing Company man-hours

Advertising Agencies

- InnerPlay Consulting
 - Donated service time
 - Stewart Knowlton
 - stewart@unleashingsuccess.com
 - 317.644.0101
- Soper & Smith Advertising
 - www.sopersmith.com
 - Smaller, local company
 - Mike Soper
 - 317.299.9920 (office)
 - 317.319.8827 (cell)
- Matchbook Creative
 - www.sparktoignite.com
 - Eco-nitch, green focus
 - Donna Gray and Christy Mineo

Costs for Various Options

- See quote for Anderson printing company
- Research costs for other delivery vehicles (billboards, etc)

Survey

- Do a study before education campaign begins (in partnership with Upper White Watershed)
- Survey
 - Where live? Where work?
 - Do they know they live in a watershed?
 - Understand non-point source pollution (not in word, but in concept)?
- Electronic survey on website
- Measure results
- Do a study after and compare results/measurable impacts

Kids/Students Campaign

Restaurant Placemat

- Placemat with crossword puzzle/activities – distribute to kid-friendly restaurants in area (benefits both parties – track how many given out)

Traveling Educator for Classrooms

- In partnership with other communities, hire traveling educator (on contract) to go to schools around the county and share stormwater presentation in classrooms
- “After the Storm” video
- 3D Watershed Board
- Next Steps – handout/website/etc

Classroom Education

- Work with schools and curriculum decision makers to get stormwater education (water pollution component) built into curriculum across the board (ex: every 4th Grader).
- Ideal target age from research: 4th Grade
- Send group of teachers to Project WET training
- Project WET instructors across the state – available to come in and do teacher trainings (should do a teacher training every year)
- The importance of having a dedicated educator as part of our MCM 1 & 2 program

City Park Hands-On Activity Center

- New park on Hague Road in future? Complete with water quality testing and education center. Destination for field trips.
- Dillon Park this summer (trial run – get our feet wet)
- Order 1 or 2 MacroPacs, 3-5 Turbidity Tubes, and 50-100 Kids Healthy Water Booklets

Mascot & Branding

- Hendricks County branded whole program around a mascot (Kipper) – had high school art classes submit drawings to get mascot – paid for stuff through contributions of 5 partner towns and corporate sponsorships (make T-shirts with their names on back – banks, waste management companies, etc).
- Frisbees, T-Shirts, Tote-bags – all with mascot on them

General Ideas

- Web key connection point with this target audience – animated videos (sprink?), online activities (fertilizer game?)
- Series of animated characters/theme
- Bracelets (like the “Live Strong” ones) – Blue
- Hire Tim’s Contact: graphic designer

Commercial Campaign

Rule 6 Facilities

- Any manufacturing company (according to SIC code) – like Lusco, IDI, Warner Bodies
- Direct oversight by IDEM, not us
- Inventory of all Rule 6 facilities in Noblesville
- Copy of all their SWQMP's
- Map on GIS where they connect with our system (Rule 6 Layer)
- Assist them in doing what they are doing better (more of a partnership)
- Use training video

Big Box Retailers

- Lowe's, Home Depot, Garden Center, Wal-Mart, Meijer
- Stormwater Quality Management Plan (SWQMP) for entire site (Operation Plan)
- Develop template/generic example
- 5-6 page document covering major potential pollution areas (look at all vulnerable areas)
Where Risks Are & Practices to Manage Those Risks
 - Tremendous amount of pollution coming out of garden center (fertilizer, washed down daily)
 - Chemical bag breaks (fertilizer)
 - Dumpster Area (keep lid closed, covered area)
 - Receiving Dock
 - Staff Training
- Main Idea: Take ownership of the backside of your store just like you do with the front side
- Show video in person when meet with manager (don't have one yet)

Retail in General

- Build on Plastic Bag Ban media attention
- Clean up your lot

Concrete Washout

- Make Poster – “Don't wash out your concrete over a storm drain – it's a crime. You can and will be fined”
- Combine this poster with the video we're already producing (training program/package)

Other Info

Target-Specific Messages

Specific Issue	Medium	Target Audience	Approach
Fertilizer	Something w/ Co-op	Farmers	
Erosion	Construction Poster	Construction Industry	
Concrete Washout	Poster	Concrete Workers	
	EPA Newsletter	Auto Recyclers	
		Carpet Cleaners	
		Group Carwash Organizers	
Aquatic Life		Fishermen	"Do you like to fish?"

Additional Brainstorming

Medium Ideas

- Stickers on storm drains ("no dumping – drains to waterway")
- Signs by waterways ("report polluters")
- Trash can wraps during trash part of the campaign
- Send bookmark with monthly utility bill
- Fridge magnets and calendars for home-owners
- Paper-based educational/curriculum exercise packets for school programs
- Section of our website that shows the public what an illicit discharge looks like (or faulty or inadequate construction site runoff controls), and supplement it with an online-reporting form and stormwater citizens complaint hotline
- Other city departments such as Parks and Recreation, Transportation, or Schools, can help you promote the public's awareness of stormwater.
- Illustrated posters for auto shops, dry-cleaners, and restaurant workers on preventing illegal waste-dumping into stormdrains and better waste disposal practices
- A kiosk to showcase the program at county fairs, farmers markets, and public gatherings
- A Web-based training module for landscapers and condominium associations on stormwater infrastructure, with an incentive like a "certificate of completion" from your office
- Bulletin tidbits (church bulletins, school bulletins, parent newsletters) – get email addresses of people (or companies) that put them together – email water tip every so often

General Ideas

- www.stormwatereducation.com website with "Sprink" – customizable website and PSA
 - price?
 - change "sprink" name?
- <http://www.co.hamilton.in.us/services.asp?id=3921&entity=2200>

Additional Video Ideas

- <http://www.clu-in.org/search/t.focus/id/602/> (30-minute video "After the Storm")
 - Get video to each Noblesville school science department (order from EPA)
- <http://www.in.gov/dnr/stormdrain/psa.html>
- http://www.stormwatereducation.com/stormwater_education_psas.html

Additional Audio Ideas

- <http://www.co.hamilton.in.us/services.asp?id=3921&entity=2200>

Additional Info on Core Messages

Separate Storm Sewers

- Use storm drain marking decal as image for this one
- Explain marking system
- Everything starts or finishes with this message
- Storm drains are connected directly to the environment with no filtration
- Runoff from agricultural land, roads, and lawns, is now the most common source of water pollution; Industry is no longer accounts for most water pollution.
- Our waterways are now impaired (aquatic life suffering)
- Don't dump anything into storm drains. Most lead directly into area waterways. This is a violation!
- Definition: Nonpoint source pollution is our nation's largest remaining water quality problem. It is not caused by discharges from big factories or from sewage treatment plants. Rather, it is generated by all of us, a product of millions of actions that we take each day, including activities such as applying pesticides, fertilizing our lawns, or the manner in which we dispose of oil. While most of our individual actions have relatively small impacts on water quality, the cumulative impacts of how we choose to interact with our land and water is huge.
- Definition: What is Storm Water Pollution? Any toxic discharge that enters into the storm water sewer system, as storm water flows (or snow melts), it picks up debris, chemicals - such as fertilizers and pesticides - dirt, cigarette butts and other pollutants . This discharge enters a storm sewer system and is discharged to a lake, stream, river, wetland, or coastal water.
- "If it's on the ground, it's in your water."
- Report a Polluter – Report any illegal dumping into storm drainage inlets, such as soil running off of construction sites into drains, or falling septic systems. Call 1-888-233-7745.

Fertilizers, Pesticides, & Herbicides

- Use phosphorus-free lawn fertilizers. Phosphorus runoff from lawns is washed into streams and lakes, where it encourages algae growth. But only newly-seeded lawns or phosphorus-deficient soils (as indicated by testing) require phosphorus. When buying lawn fertilizer, look for the three numbers on the bag and choose products where the middle number is zero. This indicates that the fertilizer does not contain phosphorus (the other numbers indicated the amount of nitrogen and potassium, respectively).
- Use fertilizers sparingly and sweep up driveways, sidewalks, and gutters
- Use least toxic pesticides, follow labels, and learn how to prevent pest problems
- Use lawn and garden chemicals sparingly or use organic alternatives. Whatever you put on your lawn could find its way to a stream.

Household Hazardous Wastes

- Paint – When painting, do not rinse brushes off in the lawn or dump extras into storm drains. Instead, rinse brushes and rollers off in a sink or tub, and drop your extra paint off at the household hazardous waste facility for reuse.

Pet Waste

- Pick up after your pet and throw the waste into the trash or in the toilet. Otherwise, disease causing pathogens in the waste can be transferred directly into streams.

Oil Spill

- Fix that oil leak in your car, and recycle oil and other car fluids.
- Use cat litter to soak up leaked oil, which can be then thrown away in the trash once dry.

Car Wash

- Do not wash cars, RVs, or boats at home because the detergent laden water runs into storm drains and then into creeks. Remember, soap destroys dirt and organisms, it will do the same in creeks. Instead, go to a full or self serve car wash because the water used there is cleaned in a waste water treatment plant.
- Wash your car on the lawn or gravel, which filter the dirt and soap out of the water. Use soaps without phosphates, which remove oxygen from the water. Or go to a car wash that recycles wash water.

Litter

Trash Can Wraps on Trash Cans around Town

- Littering pollutes. Litter thrown on the ground can end up in our storm drains, ditches, and streams.
- Throw all litter in appropriate trash cans.
- Keep litter out of pick up truck beds and cover loads so items aren't blown off to the ground.
- Recycle and reuse items whenever possible.

Yard Habits

- Practice dry cleanup methods when cleaning your driveway or sidewalk. By using a broom instead of a hose, debris will be prevented from entering storm drain inlets and eventually streams.
- Dispose of lawn waste in compost piles and use a mulching mower. Never place leaves or other lawn debris in waterways because it will cause a decrease in oxygen in waterways, killing fish.
- Reduce the amount of impervious surfaces around your home. Alternatives such as paving blocks, gravel, cobbles, brick and natural stone can replace asphalt and concrete in driveways, parking lots and walkways.
- Direct downspouts away from paved surfaces; consider a rain garden to capture runoff
- Vegetate bare spots in your yard
- Choose low-maintenance, native plants that require fewer chemicals and less watering.
- Have your soil tested. A soil test is an inexpensive and informative way to determine the quality of your soil. The laboratory will test soil pH, nutrient content, and percentage of organic matter. From these results, you can determine exactly what nutrients your lawn and garden need, which will help minimize the use of chemicals which can runoff into streams.
- www.prairienursery.com
native plants
- Additional PDFs available as links
- Sell Rain-Garden-in-a-Box (Simultaneous Creative Launch)
 - Upper White Watershed Partnership – Work with local distributors to provide easy opportunities to purchase the boxed versions across the communities represented
 - Set up at the wastewater plant & in other public places (city hall)

- Sell Rain-Barrel-in-a-Box
 - Give away old polymer barrels to help jump-start people in building their own
 - Assemble our own version using polymer barrels and parts from Tractor Supply
 - Test setup at our plant and give to operators to set up at home to work out the bugs
 - Sell to public

Yard Waste

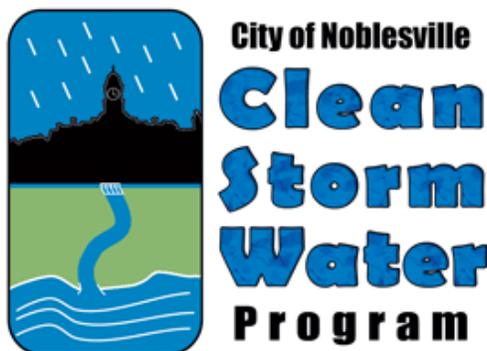
- Grass Clippings – very high in Nitrogen & Phosphorus
- Blowing your grass out onto the street is the same thing as dumping it into a storm drain
- Compost Yard Waste

Additional Messages

- “We all Live in a Watershed”
 - Your watershed
 - Why pollution matters
- Swimming Pools
 - Do not drain your swimming pool, spa water, or filter backflush water directly into a storm drain. Direct this water into the sanitary sewer or allow it to overland flow to a storm inlet after it has been dechlorinated.
 - Backwashing – discharge pump can NOT be directly tied to the environment/storm drain
 - Emptying – when emptying your pool at the end of the season, discharge into the sanitary system or into your yard. It is a violation to discharge into a storm drain. Let the water sit for at least a week before dumping it – this allow the chlorine to break down and dilute. Or you can add a dilution chemical (_____). Emptying your pool without dealing with your chlorine residual is very bad for the environment as chlorine kills aquatic life. The maximum chlorine level permitted for discharge is _____.
- Septic Tanks
 - Keep your septic system maintained to prevent leaks.
 - Have your septic tank pumped and system inspected regularly
- Adopt a Storm Drain
 - Adopt a storm drain in your neighborhood by yourself or with neighbors, and take turns cleaning away debris from it after storm events.
 - Drain marking

Household Summary

These common individual behaviors have the potential to generate stormwater pollution: Disposing of pet-waste, Applying lawn-chemicals, Washing cars, Changing motor-oil on impervious driveways, and Disposing leftover paint and household chemicals



www.cityofnoblesville.org/cleanwater