

What is a Public Education and Involvement Plan Anyway?!



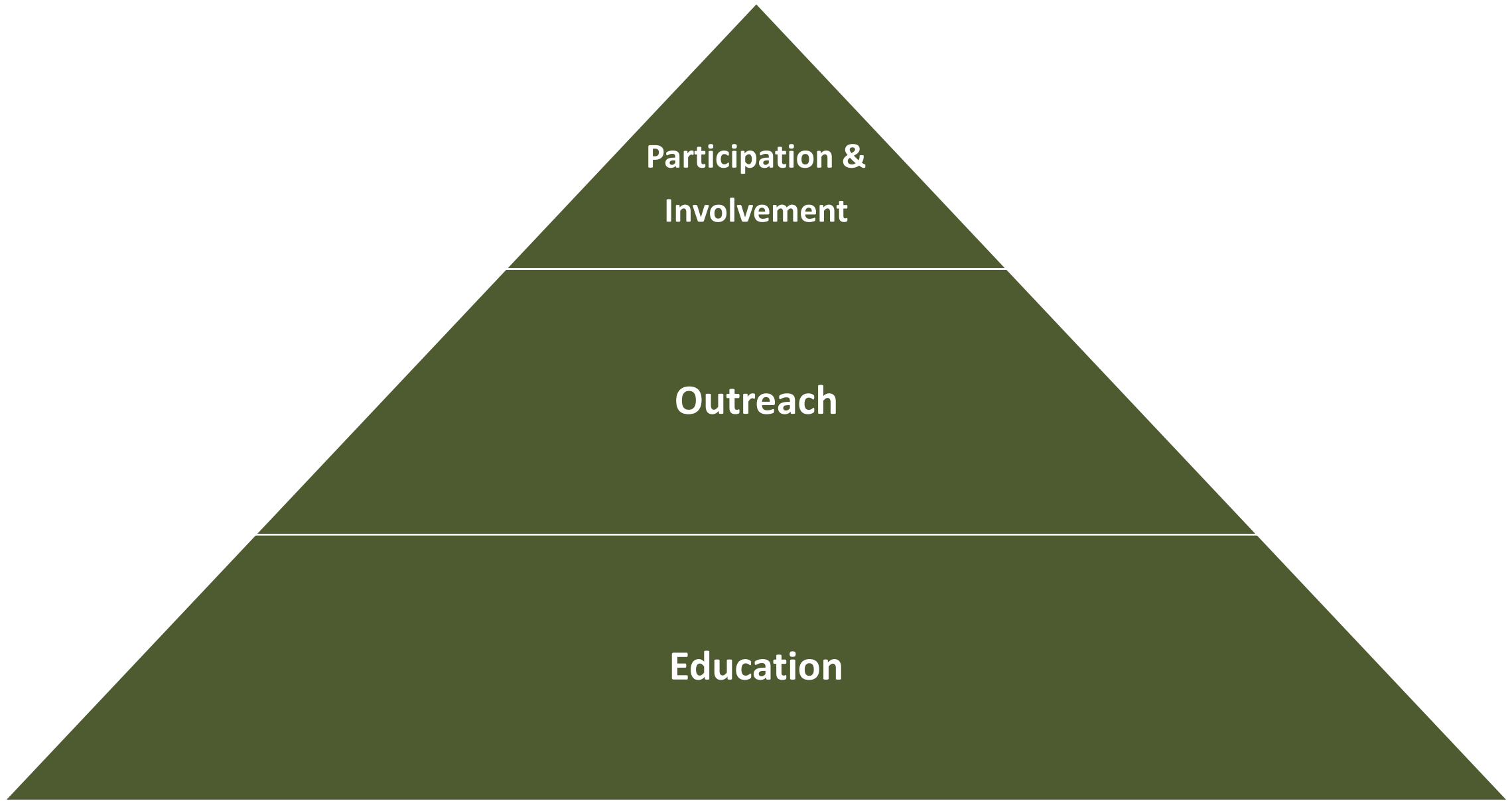
INAFSM Conference
September 13, 2023



Agenda

1. Introduction
2. Key Components of the Plan
3. Building Your Plan
4. Tracking Public Education Materials
5. Group Discussion

Introduction

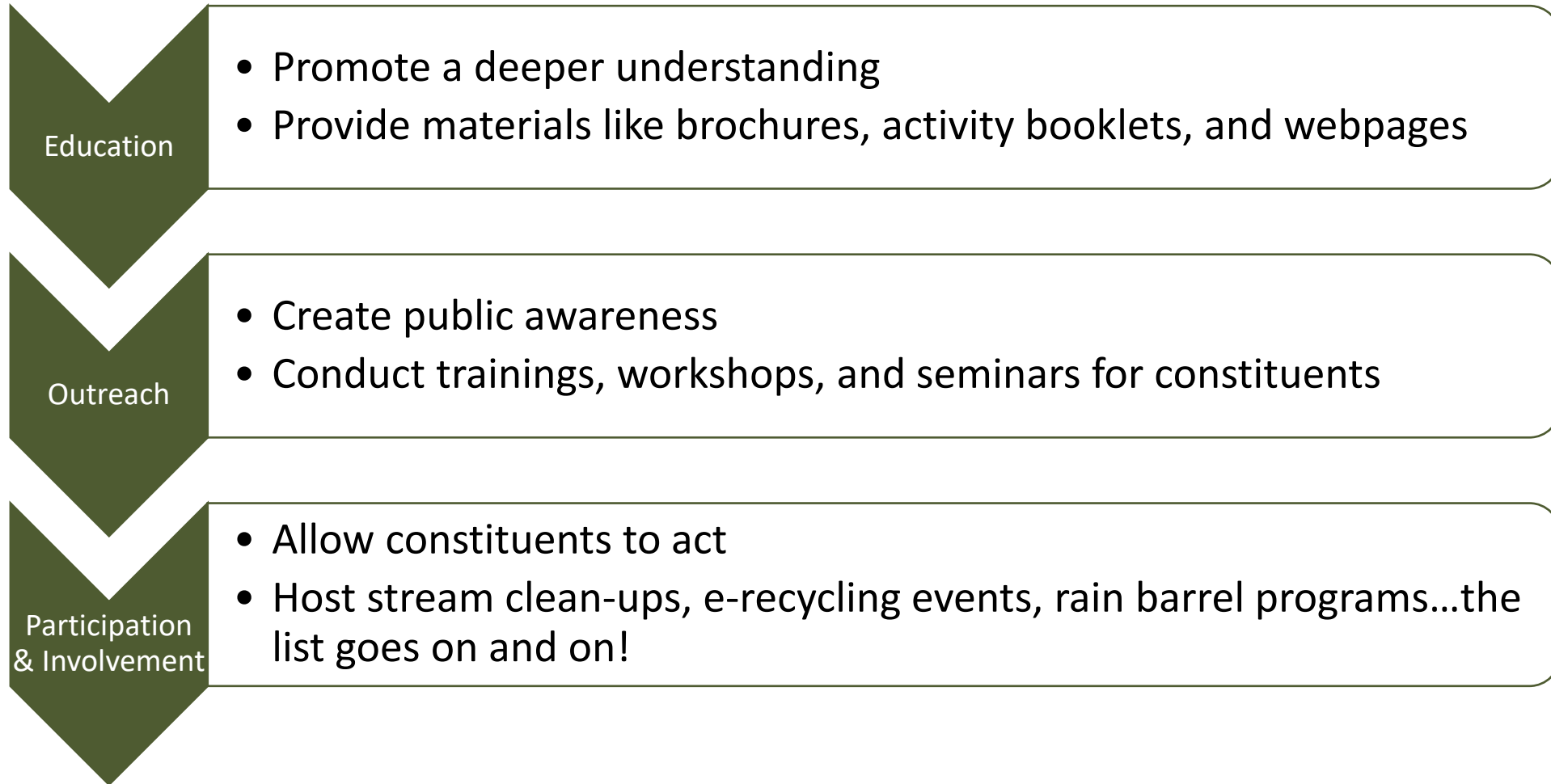


**Participation &
Involvement**

Outreach

Education

What is the goal of a Public Education & Involvement Plan?



The Plan should inform groups about stormwater runoff impacts

	PUBLIC EDUCATION AND INVOLVEMENT MCM	
<input type="checkbox"/>	Update Public Education/Involvement Plan	4.3(a)
<input type="checkbox"/>	Identify 3 Local Stormwater Quality Issues	4.3(a)(2)
<input type="checkbox"/>	Plan for Public Education & Involvement	4.3(a)(1)
<input type="checkbox"/>	Plan for Distribution of Educational Materials	4.3(b)(2)
<input type="checkbox"/>	Implement Education & Involvement Plans	
<input type="checkbox"/>	Develop Educational Materials	4.3(a)(4)
<input type="checkbox"/>	Conduct Two Events Annually	4.3(a)(3)
<input type="checkbox"/>	Maintain List of Educational Materials Used	4.3(d)
<input type="checkbox"/>	Annual Training for Builders, Developers, etc.	4.3(a)(5)
<input type="checkbox"/>	Annual Update to Local MS4 Web Page	4.3(c)
<input type="checkbox"/>	Annual Program Assessment/Improvement Plan	4.3(g)

Key Components of the Plan

Target Constituents



Identify & Plan

MS4GP
4.3(a)(2)



- ✓ Identify 3+ community wide stormwater quality issues
- ✓ Target at least one event during the permit cycle to each of the following groups:
 - Construction
 - Residential
 - Commercial & industrial



Host Events for Constituents

MS4GP
4.3(a)(3)



✓ Conduct 2+ public events annually or work collaboratively with other entities to achieve this requirement



Education & Training

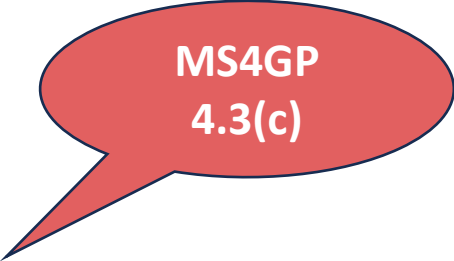
MS4GP 4.3(a)(4)

- ✓ **Develop educational materials**
- ✓ **Distribute materials at outreach opportunities**

MS4GP 4.3(a)(5)

- ✓ Provide annual training for builders, developers, contractors, engineers, etc. related to the construction site run-off and post-construction MCMs
- ✓ The training may be completed in cooperation with other entities

Illicit Discharge & Waste Disposal Education



MS4GP
4.3(c)

- ✓ **Develop and implement a program for educating public employees, schools, businesses, and the general public about illicit discharges and proper disposal of waste.**
- ✓ **The educational effort must include but is not limited to:**
 - ✓ Informational brochures and guidance documents that target specific audiences and;
 - ✓ An outreach plan for distribution of educational materials.

Tracking & Reporting

✓ **Maintain list of all public education materials developed and used throughout the permit cycle, including those resources from existing programs**

MS4GP
4.3(d)

✓ **Report stormwater program updates to elected officials or an advisory board annually**

MS4GP
4.3(e)

✓ **Implement and assess the program annually and update goals, as necessary**

✓ **Describe changes in public awareness resulting from implementation of the program**

✓ **Annual report prep and SWQMP review**

MS4GP
4.3(g)

Annual

Conduct 2 public events

Contractors' training

Update stormwater/MS4
web page

Elected official/advisory
board update

Permit Term

Identify target constituents

Identify 3+ community
stormwater quality issues

Conduct residential event

Conduct
industrial/commercial event

IDDE education program

Conduct
construction
event

Maintain
educational
materials list

Building Your Plan

Are you a new MS4...?

MS4GP
4.3(f)

- ✓ Newly designated MS4s must complete, sign, and submit a certification form to IDEM within 180 days of program development or the initial NOI submittal date, whichever comes first
- ✓ IDEM MS4GP Schedule of Compliance – start date is April 12, 2023
- ✓ Certification should be completed & submitted by October 12, 2023



RULE 13 –
Certification of the Informational Program for the Public Education and Outreach MCM
State Form 51279 (R3 / 4-08)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NOTE:

- This form must be used to comply with section 12(b) of 327 IAC 15-13.
- The storm water quality Public Education and Outreach program must be implemented within three hundred sixty-five (365) days of the Notice of Intent (NOI) letter submittal date.
- Submit this completed form when the education program has been developed and implemented.
- Return this completed and signed form, and any required addenda by mail to the IDEM Rule 13 Coordinator at the address listed in the box on the upper-right.

For questions regarding this form, contact:

IDEM – Rule 13 Coordinator
100 North Senate Avenue, Rm 1255
MC 65-42
Indianapolis, IN 46204-2251
Phone: (317) 234-1601 or
(800) 451-6027, ext. 41601 (within Indiana)
Web Access:
<http://www.in.gov/idem> (Search for Stormwater)

Reset Form

CERTIFICATION AND SIGNATURE

The State of Indiana requires _____ (MS4 Operator) to develop and implement an informational program with educational materials for informing constituents about the impacts of polluted storm water run-off on water quality, and ways they can minimize their impact on storm water quality. This program must be implemented within three hundred sixty-five (365) days of the Notice of Intent (NOI) letter submittal date.

The "authorized signature" required below must be either that of the MS4 operator, or, if another entity is responsible for this MCM, the responsible individual. The "title" must either be "MS4 operator", or, if a responsible individual signs, the title of that individual and associated MS4 entity represented (for example, mayor of the City of Indianapolis).


► The following statement, required by the State of Indiana, and the accompanying signature serve as the required certification that the program has been developed and implemented per the requirements of 327 IAC 15-13 and authorized under NPDES permit number INR040_____.

"I certify, under penalty of law, that this program and all required materials were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the above statement is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signature: _____ Date: _____
(mm/dd/year)

Title: _____
(typed or printed)

Identify & Plan



MS4GP
4.3(a)(2)

- ✓ **Choose stormwater issues that may already exist in your community**
- ✓ **Identify events or outreach that occur**
- ✓ **Decide if new events need to be held**
- ✓ **Reach out to potential partners**
- ✓ **Choose measurable goals and timelines**

Identify & Plan

- ✓ Where possible, identify issues that correspond to existing community stormwater problems
- ✓ Utilize:
 - ✓ Outfall dry weather screening results
 - ✓ Complaint data
 - ✓ Construction inspection reports
 - ✓ Direct interactions with residents or businesses
 - ✓ Pre-treatment program inspections/reports
 - ✓ SWMD/HHW collections data





COMMUNITY STORMWATER ISSUES

This document is intended to assist MS4s in identifying community stormwater issues per Section 4.3 Public Education, Outreach, Participation, and Involvement MCM. These activities or programs may already be occurring in your MS4 and could be coordinated with 4.3 (a)(2), (a)(3) and (a)(5). These could be in the form of training checklists, educational brochures, webinars, videos, social media posts, fact sheets, utility mailers, meetings, etc.

Construction:

- Contractor or builder workshops
- Educational materials provided with building permits
- Review/training checklist for contractors & builders on the basics of the MS4's ordinance, plan review process, review procedures, and web locations for ordinances, standards, and forms
- Develop a fact sheet on good vs. bad for soil tracking to roads (use pictures!)
- Conduct preconstruction meetings and review how the local process is administered.
- How to spot improper concrete washout & other failing best management practices
- Importance of secondary containment and use on jobsites
- Preventing jobsite waste and debris pollution
- Checklist for contractors & builders to ensure implementation for self-monitoring and Project Management Log that meets the local ordinance
- Provide websites for concrete washout educations/videos and have the contractor/builder attest that they reviewed
- Provide information on what is expected after a MS4 inspection – corrective actions, timeframe, documentation, etc.
- Develop an SOP for internal processing of plans (timeframes, contacts, fees, invoicing, long-term recordkeeping, etc.)
- Provide information on proper dewatering techniques, site management, seeding and stabilization practices, and sediment control measures

Residential:

- Proper placement for grass clippings (mow inward)
- Leaf collection dates, where to place (not in the streets or on a stormwater inlet)
- How to compost yard waste
- Litter pick-up in your neighborhood
- Community recycling programs and Household Hazardous Waste collection events
- Dog parks – poo pick up
- Preferred locations for residential car washing
- Local requirements for fundraiser car washing
- Pressure washing surfaces and equipment
- Where and how to properly discharge pool water at the end of the season
- Environmentally friendly deicing tips
- Stormwater Utility education
- Survey residents on the best method for outreach – social media, paper, mailers, utility bill stuffers, etc.
- Property owner responsibilities for waterways, outfalls, ponds, wetlands, and floodways
- Ways to conserve water with rain gardens and rain barrels
- What is pollution and where or how to report it (provide IDDE ordinance link)
- Basic understanding of stormwater & drainage, swales, inlets, point vs. nonpoint source, etc.
- Correct home vehicle, mowers & other equipment maintenance (locations and disposal)
- Identifying residential spills and or spills while fueling vehicles at gas stations (Do not top off)
- Adopt-a-Drain program & help prevent flash flooding
- What are Combined Sewer Overflows
- Wellhead Protection Programs – education is provided for septic systems, water wells & abandonment, household chemical application, & pesticide/herbicide/fertilizers application
- Clear or Clean Water Reduction Programs - disconnecting roof down spouts and sump pumps from sanitary sewers to the ground
- Residential fats, oils and grease disposal or collection centers
- Planting trees to help with stormwater runoff
- Plant native vegetation and pollinator plants; remove invasive species
- Biological indicators (fish, mussels, macros)
- Stormwater and climate change



COMMUNITY STORMWATER ISSUES

Industrial/Commercial:

- Proper management of dumpsters and spills and general housekeeping
- Reviewing post-construction BMPs for site infrastructure and required maintenance
- Understanding the Industrial Stormwater Permit program and how the MS4 Program can be involved
- Where does my site drain to – Industrial Stormwater Permit and exclusions to the program (example: drainage into a combined sewer system)
- Ways to identify active industrial facilities: work with local Pretreatment Programs and the IDEM Permit Excel Document
- Benefit of sweeping lots and roads
- Internal spill procedures and reporting to the municipality
- Facility Maintenance and site BMPs
- Coordinate with businesses on their training or safety days Proper refueling of vehicles and equipment
- BMPs for bulk salt storage, application, and using the proper salt type
- Industrial and Restaurant fats, oils, and grease programs
- Disconnecting roof top and surface drainage from sanitary sewers
- Wellhead Protection Programs provide education on tanks, spills & contamination
- Utilize existing Pretreatment Program – Wastewater Department inspects industrial sites annually
- Industrial SPCC Training reviews proper secondary containment, bulk fueling, spill response, and routine inspections
- Ask a business to volunteer for river cleanups or Adopt-a-Stream events

Available Resources:

Construction:

- [IDEM: Storm Water Permitting: Construction / Land Disturbance Permitting](#)
- [Stormwater Quality Inspection](#) – general education for construction inspections
- [Proper Concrete Washout for Contractors](#)
- [Construction BMPs – Site Access and Preparation](#)
- [Construction BMPs – Stormwater Runoff/Run on](#)
- [Construction BMPs – Surface Stabilization](#)
- [Construction BMPs – Outlet Protection and Grade Stabilization](#)

Residential:

- [Blue is the New Green](#)
- [Stormwater Pond Maintenance for Homeowners](#)

Commercial/Industrial:

- [Proper Refueling](#)
- [Management of Dumpsters and Trash Fact Sheet](#)
- [Shop Posters for Municipal Activities](#) – similar practices used at industrial sites

Multiple Uses:

- [IDEM: Storm Water Permitting: Municipal Separate Storm Sewer Systems \(MS4\)](#)
- [Illicit Discharge Tip Card](#) – provide to residential, commercial, industrial and construction
- [INAFSM Help Sheet: Educational Resources](#) – identifies educational sources for elected official, general municipal employees, construction/post-construction, and municipal activities that could be used for residential, contractors, and industrial/commercial sites.

Build Partnerships

- ✓ Most communities already have departments or groups that promote citizen education



[M54 Permit \(montva.com\)](http://M54Permit(montva.com))



[Annual Stormwater Training - Environmental Works, Inc.](#)



[Is stormwater training required? \(rmagreen.com\)](#)

Residential Education Partnerships

- ✓ Local schools (K-12 and universities/colleges)
- ✓ Parks Departments
- ✓ Libraries
- ✓ Local scout groups
- ✓ Non-profits (watershed action groups, environmental protection groups, etc.)
- ✓ Wellhead protection program
- ✓ 4-H/FFA
- ✓ Job shadowing opportunities across departments



Easy Ways to Educate...



Easy Ways to Educate...

Hart Ditch 2-stage Channel Improvements

Healthy Neighborhoods Need Healthy Environments

We all live in neighborhoods

Our neighborhoods include...food, shelter, water, and safe places for us to grow.

Birds, mammals, fishes, aquatic creatures, insects, bees, butterflies, and moths all need the same things to be healthy and happy in their neighborhoods too.

Hart Ditch/Plum Creek was an environmentally unfriendly place for a long time - but not anymore!

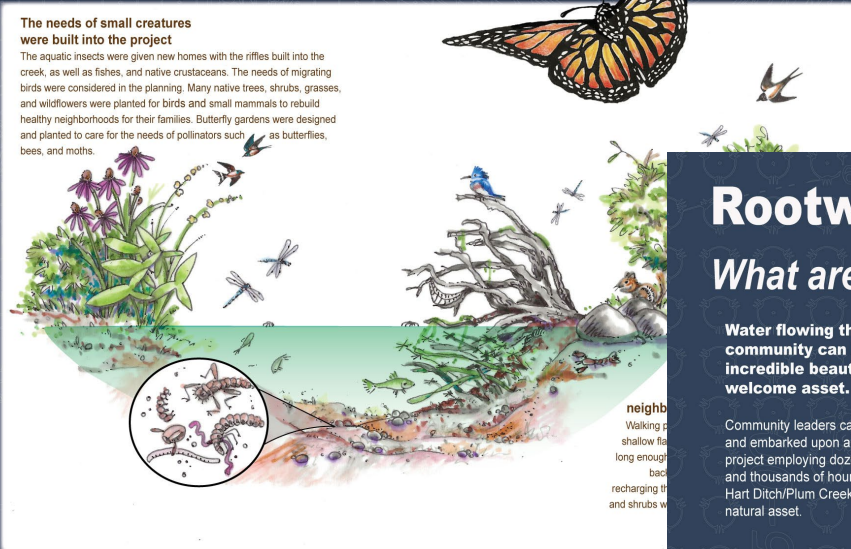
Hart Ditch/Plum Creek had no public access. The nearly vertical stream banks were a danger. Trees fell into the ditch when their soil washed away downstream, causing pollution issues. Flooding along the creek in Town also was a serious problem.

Community leaders gathered to find a solution to Hart Ditch/Plum Creek's unhealthy impact on the neighborhoods of people, plants, and animals living near Hart Ditch/Plum Creek. Finding a long-term solution became the highest priority.

Lots of very smart folks worked together to re-imagine every possible way to make Hart Ditch/Plum Creek environmentally friendly, healthy for all creatures, and an asset for the entire neighborhood.



Constructed in 2022 by Dyer Construction
Designed by Christopher B. Burke Engineering, LTD
Graphics & Illustrations by Freelance Illustrators



The needs of small creatures were built into the project

The aquatic insects were given new homes with the riffles built into the creek, as well as fishes, and native crustaceans. The needs of migrating birds were considered in the planning. Many native trees, shrubs, grasses, and wildflowers were planted for birds and small mammals to rebuild healthy neighborhoods for their families. Butterfly gardens were designed and planted to care for the needs of pollinators such as butterflies, bees, and moths.

neighb
Walking p
shallow fl
long enough
back
recharging th
and shrubs w

Little Ca

Rootwads, J-Hooks, and Rock Vanes

What are they? Here are a few ways Hart Ditch/Plum Creek was transformed.

Water flowing through a community can be its most incredible beauty and a welcome asset.

Community leaders came together and embarked upon a multi-year project employing dozens of solutions and thousands of hours to transform Hart Ditch/Plum Creek into a beautiful natural asset.

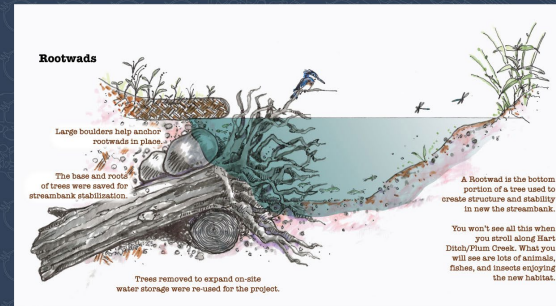
A Do-Over

Top-to-bottom, side-to-side, Hart Ditch/Plum Creek needed a complete do-over. The earth along the creek was resculpted to ensure a healthy flow of water. Hundreds of native trees, shrubs, grasses, and wildflowers were planted along the waterway.

Rootwads, J-hooks, rock vanes, and 2-stage benches are also some of the many solutions used for the urban stream restoration of Hart Ditch/Plum Creek.



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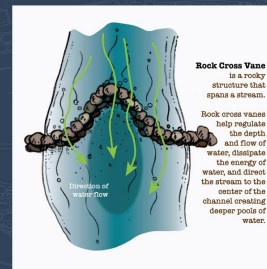


Rootwads

Large boulders help anchor rootwads in place.
The base and root of trees were saved for streambank stabilization.

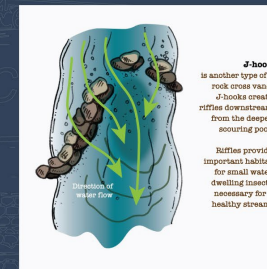
Trees removed to expand on-site water storage were re-used for the project.

A rootwad in the bottom portion of a tree used to create structure and stability in new streambank.
You won't see all this when you stroll along Hart Ditch/Plum Creek. What you will see are lots of animals, fishes, and insects enjoying the new habitat.



Rock Cross Vane

Rock cross vanes help regulate the depth and flow of water, dissipate the energy of waves, and direct the stream to the center of the channel creating deeper pools of water.



J-hook

J-hooks create riffles downstream from the deeper scouring pool. Riffles provide important habitat for small water-dwelling insects necessary for a healthy stream.

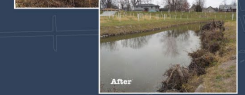
A local long-term solution was needed

For most of its history, Hart Ditch/Plum Creek could have been a better asset in the Town of Dyer. Upstream issues caused problems the Town of Dyer had no control over.

Sediment washed downstream, thickly coating the creek bed prohibiting a healthy environment. The waterway constantly overflowed its banks, causing repeated flooding of nearby homes and roadways, impacting the hospital grounds and buildings. There was no public access to the waterway as the banks were nearly vertical.



A local long-term solution was designed and implemented.



Project Partners:
Town of Dyer Stormwater Management Board
Lake County Surveyor's Office
Franciscan Hospital Dyer
Little Calumet River Basin Development Commission
Lake Michigan Coastal Program
Lake County Highway Department

Construction Education

- ✓ **Close MS4 entities**
- ✓ **Utilize state and federal resources**
 - ✓ **IDEM trainings**
 - ✓ **EPA Construction Inspection Training Course Modules**
- ✓ **Contractors' workshop – provide information to all involved with each step of a project**
- ✓ **Pre-construction meetings and site walks**
- ✓ **Involve superintendents/contractors in inspections**
- ✓ **Focus on the construction related issues you identified**

Industrial/Commercial Education Partnerships



- ✓ Health Department (FOG program, illicit discharges)
- ✓ Utilities Department
- ✓ Provide education to commercial businesses such as restaurants, laundromats, and car washes
- ✓ IDEM – industrial stormwater

How do I fund my program?

- ✓ **Local funding opportunities**
 - ✓ **Permit/inspection/SWPPP review fees**
 - ✓ **Stormwater utilities**
 - ✓ **General funds**
 - ✓ **Municipal bonds**
 - ✓ **Stormwater incentive programs**
 - ✓ **Local grants**
- ✓ **Make sure to allocate portion of the MS4 budget for education!**

Tracking Public Education Materials



- ✓ Track program between all staff and assign tasks
- ✓ Clip documents to a central location
- ✓ Log staff training
- ✓ Prepare for IDEM audits and annual reports

A - Tasks Identified in the IDEM MS4 General Permit:	B - Task Type	C - MS4 Citation	D - Rule 13	E - Template	F - MS4 GP DOC	H - Start Date	I - End Date	J - Duration	K - % Complete	L - Assigned to	M - Status
CLIENT LOGO	DOCUMENT DEADLINE TRAINING DATA NEED										July 7, 2023
Tasks Identified in the IDEM MS4 General Permit:	Task Type	MS4 Citation	Rule 13	Template	MS4 GP DOCS	Start Date	End Date	Duration	% Complete	Assigned to	Status
PERMIT DOCUMENTS AND REPORTS						6/13/2022	4/1/2023	293d	55%		Review
New Permit Notice of Intent (NOI)	DOCUMENT	6.5				6/13/2022	7/5/2022	23d	100%		Completed
List of Responsible Individuals	DOCUMENT	4.1 (c)				1/3/2023	2/28/2023	57d	90%		Review
Water Quality Characterization Report	DOCUMENT DEADLINE	3.0				7/5/2022	12/16/2022	165d	75%		Review
Stormwater Quality Management Plan	DOCUMENT DEADLINE	4.2				7/5/2022	12/16/2022	165d	75%		Review
Annual MS4 Program Report/Update to Elected Officials		4.3 (e)				1/3/2023	3/31/2023	88d	0%		Review
Prepare Annual MS4 Program Report/Update to Elected Officials	DOCUMENT	4.3 (e)				1/3/2023	2/28/2023	57d	0%		Review
Present Annual MS4 Program Report/Update to Elected Officials	DOCUMENT DEADLINE	4.3 (e)				3/1/2023	3/31/2023	31d	0%		Review
Document Presentation	DOCUMENT DATA NEED	4.3 (h) (4)				3/31/2023	3/31/2023	1d	0%		Review
Annual Report Submittal to IDEM						1/3/2023	4/1/2023	89d	0%		Review
Begin Assembling Data for IDEM Annual Report	DOCUMENT	8.1				1/3/2023	2/28/2023	57d	0%		Review
Get Signatures on Annual Report	DOCUMENT	8.3				3/1/2023	3/10/2023	10d	0%		Review
Submit MS4 Annual Report to IDEM	DOCUMENT DEADLINE	8.2				3/13/2023	4/1/2023	20d	0%		Review
MS4 STAFF TRAINING						1/3/2023	12/15/2023	347d	0%		Active
Staff Responsible for MS4 Implementation (12 Hrs. of Annual Training)						1/3/2023	12/15/2023	347d	0%		Active
Staff Member #1 (See "Staff Training Tracker for Status)	DOCUMENT TRAINING	4.1 (d)				1/3/2023	12/15/2023	347d	0%		Active
PUBLIC EDUCATION AND INVOLVEMENT						10/3/2022	12/31/2022	116d	0%		Active

[Launch demo of education materials tracker](#)

Traditional Options

- ✓ **Excel spreadsheet or electronic files**
- ✓ **Physical binder or folders**

2022 Clean Up Day Summary

Date: April 29th, 2022, from 3:00pm to 5:00 pm

Number of Participants: approximately 27 people

Area Covered: 3-mile radius spread throughout town including but not limited to drainage ditches, city parks, retention ponds, roadsides, and the downtown square area.

Bags of trash collected: 25-30 large industrial size

Status of Measurable Goals – Annual Report Requirement

✓ This includes the status of the MS4 program requirements, compliance schedules, & timetables



✓ If objectives are not being met for a specific element, explain the implementation problems encountered, and changes made to resolve problems identified

Group Discussion

 **What are some existing stormwater issues in your community?**

 **Which types of outreach have you found the most successful and why?**

 **What experiences have you had with unique, successful, positive communication with constituents?**

 **What funding opportunities have you taken advantage of?**

 **How do you track your educational program?**

Tips for a successful Public Education program...

- ✓ Plan early and often – advertise your events!
- ✓ Revise as needed
- ✓ Don't re-invent the wheel
- ✓ Realize your program will grow over time
- ✓ Take credit for all educational opportunities



Questions?

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