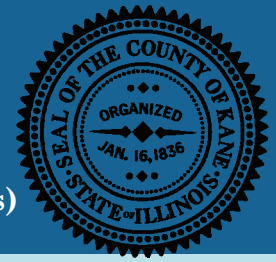


# MS4 Corner

for Managers of Kane County  
*Municipal Separate Storm Sewer Systems (MS4s)*



## 2008 Summer Update

### Summer 2008 is here—do you have your 2008 NOI submitted?

2008 brings with it the official end of the first five-year Illinois Environmental Protection Agency NPDES Phase II permit cycle and the beginning of a new five-year cycle. As of July 2008 each Kane County MS4 Manager is responsible for the following:

1. New Notices of Intent (NOI—permit applications) are due to IEPA. They should include any changes to your NPDES program including:
  - Best Management Practices (BMPs) and measurable goals for the six minimum control measures – Any new BMPs for 2008-2013?
  - Timetable for implementation for any new or revised BMPs
  - Person or persons responsible for implementation – Has this changed?
  - Identify your own program and any partnering programs
2. All 2003 NOI/ permit activities should be complete
3. Final report for 2003-2008 NPDES Phase II permit is due to IEPA

### Need Help? (Or just having a hard time figuring this out?)

- IEPA NPDES Phase II Information: [www.epa.state.il.us/water/permits/storm-water/ms4.html](http://www.epa.state.il.us/water/permits/storm-water/ms4.html)  
(includes blank NOI and Annual Report forms)
- Kane County NPDES Phase II Information: [www.co.kane.il.us/kcstorm/npdes.asp](http://www.co.kane.il.us/kcstorm/npdes.asp)
- Contact Karen Kosky, Watershed Engineer, Kane County Department of Environmental and Building Management  
Phone: (630) 208-8665  
Email: [koskykaren@co.kane.il.us](mailto:koskykaren@co.kane.il.us)

### Who are the Kane County MS4s?

According to the Illinois Environmental Protection Agency, along with Kane County itself, the following jurisdictions are responsible for submitting a Notice of Intent (permit application) to the IEPA, and for regular reporting. In the case of the townships, either the township or the road commission may submit the NOI, or they may submit a joint application.

The IEPA says they will review this list sometime in the next several years, and any new or growing communities could be added to this list.

#### Townships

Aurora Township  
 Batavia Township  
 Blackberry Township  
 Campton Township  
 Dundee Township  
 Geneva Township  
 Plato Township  
 St. Charles Township

#### Villages/Cities

Algonquin      Gilberts  
 Aurora          Hoffman Estates  
 Barrington Hills      Huntley  
 Bartlett          Montgomery  
 Batavia          North Aurora  
 Carpentersville      Sleepy Hollow  
 East Dundee      South Elgin  
 Elburn              St. Charles  
 Elgin                Sugar Grove  
 Geneva              West Dundee

# Kane County MS4 Corner

## 2008 Summer Update

### Six Minimum Control Measures

#### Kane County Progress June 2008

##### Special Note:

Beginning in 2008, MS4s are required to submit Notice of Intent (NOI) & Notice of Termination (NOT) documentation to IEPA for each MS4-owned construction project which disturbs 1 acre of soil or more. No permit fee is required for MS4-owned activities. For more information, see [www.epa.state.il.us/water/permits/storm-water/construction.html](http://www.epa.state.il.us/water/permits/storm-water/construction.html) and <http://cfpub.epa.gov/npdes/stormwater/cgp.cfm> or contact Karen Kosky for more information

##### Check it Out!

The 6/4/08 EPA webcast "Assessing the Effectiveness of Your Municipal Stormwater Program" was informative—especially the first 1/2 hour which was a general review of where municipal stormwater programs should be at this point. To access the webcast, go to <http://www.epa.gov/owow/watershed/wacademy/webcasts/archives.html>

#### #1 & #2: Public Education & Outreach/ Public Involvement & Participation

Kane County provides educational and public involvement tools that municipalities can use to meet the two Public Education & Involvement measures. Following are some updates on these activities:

- A new **Kane County Stormwater Education website** is available at [www.co.kane.il.us/kcstorm/education](http://www.co.kane.il.us/kcstorm/education). It is the first of its kind in Kane County, and pulls together the best stormwater/ water quality educational resources for adults, children, educators, and public officials. Feel free to send in suggestions for additional content!
- Kane County distributed two **brochures** in early 2008; one for the general public and one for Kane County riparian landowners. Brochures are available online at [www.co.kane.il.us/kcstorm/education](http://www.co.kane.il.us/kcstorm/education)

- Kane MS4 communities were offered **storm drain stencil kits** to use or make available to local environmental groups. To date, the following communities have picked up storm drain stenciling kits:

*Hampshire, Big Rock Township, St. Charles, South Elgin, Campton Township, St. Charles Township, Sugar Grove Township, Montgomery, East Dundee*

Please contact the Kane County Department of Environmental and Building Management (630-208-5118/ [koskykaren@co.kane.il.us](mailto:koskykaren@co.kane.il.us)) if you are interested in obtaining a kit.

#### #3 & #4: Construction Site Runoff Control and Post-Construction Runoff Control

Kane's countywide stormwater management ordinance meets these two construction-related NPDES Phase II minimum control measures. An amendment is expected to be passed in 2008, and Kane County certified communities will be informed of that required change. Additionally, Kane County implements best management practices on its in-house construction projects.

#### #5 & #6: Illicit Discharge Detection & Elimination/ Pollution Prevention/ Good Housekeeping For Municipal Operations

These two categories of control measures are implemented separately by each local unit of government. Kane County has worked over the last five years on a number of fronts to implement internal measures to improve the quality of stormwater runoff from its County facilities.



The following is information from the Environmental Protection Agency's (EPA's) website, [Hhttp://cfpub.epa.gov/npdes/stormwater/cgpfaqs.cfm](http://cfpub.epa.gov/npdes/stormwater/cgpfaqs.cfm)H.

The information below is provided for NPDES Phase II communities which undertake construction (road, building) projects. The information describes the triggers and requirements for obtaining construction permits under the NPDES Phase II program.

7/2/2008

## IEPA Construction General Permit Frequently Asked Questions

### What is the Goal of This Permit?

The goal of this permit is to protect the quality and beneficial uses of the Nation's surface water resources from pollution in stormwater runoff from construction activities. To achieve this goal, the permit requires operators to plan and implement appropriate pollution prevention and control practices for stormwater runoff during the construction period. These Best Management Practices (BMPs) are aimed primarily at controlling erosion and sediment transport, but also include controls, including good housekeeping practices, aimed at other pollutants such as construction chemicals and solid waste (e.g., litter). As used in this permit, the terms "Construction and Construction-related activities" include all clearing, grading, excavation, and stockpiling activities that will result in the disturbance of one or more acres of land area.

### What Types of Construction Activities May Need a Stormwater Permit?

Any construction activity that will, or is part of a "common plan" of development or sale that will, disturb one or more acres must either have a permit OR have qualified for a waiver. These regulated discharges are broken into two categories: "Large" and "Small". A large construction activity is one that will disturb, or is part of a "common plan" that will cumulatively disturb, five or more acres. A small construction activity is one that will disturb, or is part of a "common plan" that will cumulatively disturb, one or more acres.

Construction and construction-related activities refer to the actual earth disturbing construction activities and those activities supporting the construction project such as construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck washout, fueling), measures used to control the quality for stormwater associated with construction activity, or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants). It does not refer to construction activities unrelated to earth disturbing activities such as interior remodeling, completion of interiors of structures, etc. "Construction" does not include routine earth disturbing activities that are part of the normal day-to-day operation of a completed facility (e.g., daily cover for landfills, maintenance of gravel roads or parking areas, landscape maintenance, etc.) nor activities under a State or Federal reclamation program to return an abandoned facility property to an agricultural or open land use (as opposed to demolition of something in order to build something new).

### Are There Situations Where a Permit is Not Needed?

If all of the stormwater from the construction activity is captured on-site and allowed to evaporate, soak into the ground on-site, or is used for irrigation, you do not need a permit. Under the Clean Water Act, it is illegal to have a point source discharge of pollutants to a water of the United States that is not authorized by a permit. If you believe there is a potential for a discharge, EPA recommends that you apply for permit coverage before any discharge occurs. The best management practices that you use to keep the stormwater on your site must be effective under any size storm. You may also have an obligation to the State/Tribe concerning discharges to ground water or impoundment of runoff (e.g., water rights).

### If a Construction Activity Does Not Adversely Impact Water Quality, is Coverage Under the Construction General Permit Still Necessary?

Waivers are possible only for discharges of stormwater associated with SMALL construction activity (i.e., construction disturbing less than 5 acres). These waivers are authorized by federal regulation at 40 CFR 122.26(b)(15)(i)(A) & (B) and are explained in Addendum C of this permit. Waivers are not available for any construction activity disturbing 5 acres or greater, or less than 5 acres if part of a common plan of development or sale that will ultimately disturb 5 or more acres (or if designated for permit coverage by EPA).

## Who Must Apply for the Permit?

You must apply if you meet either of the two parts of the definitions of "Operator." This means you should apply for permit coverage if you have operational control over either:

- the construction plans and specifications, including the ability to make modifications to those plans and specifications (e.g., owner or developer of project), or you have day-to-day operational control of those activities at a project which are necessary to ensure compliance with a stormwater pollution prevention plan for the site or other permit conditions (e.g., general contractor).

You are probably not an operator and subsequently do not need permit coverage if:

- You are a subcontractor hired by, and under the supervision of, the owner or a general contractor (i.e., if the contractor directs your activities on-site, you probably are not an operator); or
- Your activities on site result in earth disturbance and you are not legally a subcontractor, but a SWPPP specifically identifies someone other than you (or your subcontractor) as the party having operational control to address the impacts your activities may have on stormwater quality (i.e., another operator has assumed responsibility for the impacts of your construction activities). EPA anticipates that this will be the case for many, if not most, utility service line installations.

## With All the People Involved in a Construction Project, How Do I Know If I Am the One That Needs to Apply for the Permit?

In many instances, there may be more than one party at a site performing the tasks relating to "operational control" and hence, more than one operator must submit an NOI. Exactly who is considered an operator is largely controlled by how the "owner" of the project chooses to structure their contracts with the "contractors" hired to design and/or build the project. The following are three general operator scenarios (variations on any of the three are possible, especially as the number of "owners" and contractors increases):

- "Owner" as sole permittee. The property owner designs the structures for the site, develops and implements the SWPPP, and serves as general contractor (or has an on-site representative with full authority to direct day-to-day operations). The "Owner" would likely be the only party that needs a permit, in which case everyone else on the site may be considered subcontractors and not need permit coverage.
- "Contractor" as sole permittee. The property owner hires one company (i.e., a contractor) to design the project and oversee all aspects of the construction project, including preparation and implementation of the SWPPP and compliance with the permit (e.g., a "turnkey" project). Here, the contractor would likely be the only party needing a permit. It is under this scenario that an individual having a personal residence built for his own use (e.g., not those to be sold for profit or used as rental property) would not be considered an operator. EPA believes that the general contractor, being a professional in the building industry, should be the entity rather than the individual who is better equipped to meet the requirements of both applying for permit coverage and developing and properly implementing a SWPPP. However, individuals would meet the definition of "operator" and require permit coverage in instances where they perform general contracting duties for construction of their personal residences.
- *Owner and contractor as co-permittees.* The owner retains control over any changes to site plans, SWPPPs, or stormwater conveyance or control designs; but the contractor is responsible for overseeing actual earth disturbing activities and daily implementation of SWPPP and other permit conditions. In this case both parties need coverage.

## My Project Will Disturb Less Than One Acre, But it May Be Part of a "Larger Common Plan of Development or Sale." How Can I Tell and What Must I Do?

In many cases, a common plan of development or sale consists of many small construction projects. For example, an original common plan of development for a residential subdivision might lay out the streets, house lots, and areas for parks, schools and commercial development that the developer plans to build or sell to others for development. All these areas would remain part of the common plan of development or sale until the intended construction occurs.

If your smaller project is part of a larger common plan of development or sale that collectively will disturb one or more acres (e.g., you are building on 6 half-acre residential lots in a 10-acre development or are putting in a fast food restaurant on a 3/4 acre pad that is part of a 20 acre retail center) you need permit coverage. The "common plan" in a common plan of development or sale is broadly defined as any announcement or piece of documentation (including a

sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. You must still meet the definition of operator in order to be required to get permit coverage, regardless of the acreage you personally disturb. As a subcontractor, it is unlikely you would need a permit.

However, where only a small portion of the original common plan of development remains undeveloped and there has been a period of time where there is no ongoing construction activities (i.e., all areas are either undisturbed or have been finally stabilized), you may re-evaluate your individual project based on the acreage remaining from the original "common plan." If less than five but more than one acre remains to build out the original "common plan" a permit may still be required, but you can treat your project as part of a "small" construction activity and may be eligible for the waivers available for small construction activities (e.g., one of six lots totaling 2 acres in a 50 acre subdivision can be treated as part of a 2 acre rather than 50 acre "common plan"). If less than one acre remains of the original common plan, your individual project may be treated as part of a less than one acre development and no permit would be required.

### **When Can You Consider Future Construction on a Property to be Part of a Separate Plan of Development or Sale?**

After the initial "common plan" construction activity is completed for a particular parcel, any subsequent development or redevelopment of that parcel would be regarded as a new plan of development. For example, after a house is built and occupied, any future construction on that lot (e.g., reconstructing after fire, adding a pool or parking area for a boat, etc.), would stand alone as a new "common plan" for purposes of calculating acreage disturbed to determine if a permit was required. This would also apply to similar situations at an industrial facility, such as adding new buildings, a pipeline, new wastewater treatment facility, etc. that was not part of the original plan.

### **What if the Extent of the Common Plan of Development or Sale is Contingent on Future Activities?**

EPA recognizes that there are situations where you will not know up front exactly how many acres will be disturbed, or whether some activities will even occur with certainty. If you are not sure exactly how many acres will be disturbed, you should make the best estimate possible and may wish to overestimate to ensure you do not run into the situation where you should have a permit, but don't. For example, if you originally estimated less than 5 acres would actually be disturbed and took advantage of the "R" Factor waiver, but you actually disturbed 5.5 acres, you would lose your waiver and may have to go through the permit process mid-stream. This could result in delays in obtaining permit authorization and costs associated with contract changes to implement permit requirements - in addition to being liable for any unpermitted discharges.

If you have a long range master plan of development where some portions of the master plan are a conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended time period, you may consider the "conceptional" phases of development to be separate "common plans" provided the periods of construction for the physically interconnected phases will not overlap. For example, a university or an airport may have a long-range development concept for their property, with future development based largely on future needs and availability of funding. A school district could buy more land than needed for a high school with an indefinite plan to add more classrooms and a sports facility some day. An oil and gas exploration and production company could have a broad plan to develop wells within a lease or production area, but decisions on how many wells would be drilled within what time frame and which wells would be tied to a pipeline would be largely driven by current market conditions and which, if any, wells proved to be commercially viable.

### **What if the "Common Plan of Development or Sale" Actually Consists of Non-Contiguous Separate Projects?**

There are several situations where discrete projects that could conceivably be considered part of a larger "common plan" can actually be treated as separate projects for the purposes of permitting:

- A. A public body (e.g., a municipality, State, Tribe, or Federal Agency) need not consider all their construction projects within their entire jurisdiction to be part of an overall "common plan." For example, construction of roads or buildings in different parts of a state, city, military base, university campus, etc. can be considered as separate "common plans." Only the interconnected parts of single project would be considered to be a "common plan" (e.g., a building and its associated parking lot and driveways, airport runway and associated taxiways, a building complex, etc.)
- B. Where discrete construction projects within a larger common plan of development or sale are located at least 1/4 mile apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed. For example, two oil and gas well pads

separated by 1/4 mile could be treated as separate "common plans." However, if the same two well pads and an interconnecting access road were all under construction at the same time, they would generally be considered as part of a single "common plan" for permitting purposes. If a utility company was constructing new trunk lines off an existing transmission line to serve separate residential subdivisions located more than 1/4 mile apart, the two trunk line projects could be considered to be separate projects.

### **What Do You Need to Do to Apply for Permit Coverage?**

First - you will need a copy of the permit language to determine if you are eligible for the permit. The text of the permit explains, for example, what must be included in your pollution prevention plan and what you need to do in order to comply with the permit.

Second - you need to determine if you are eligible to use the permit. You will need to document how you determined your eligibility with regards to protection of endangered species, total maximum daily loads, etc.

Third - you will need to prepare your Stormwater Pollution Prevention Plan. You will also need to include a copy of the permit language and documentation on your eligibility determination(s) in your Plan.

Fourth - you will need to fill out the NOI form and submit it to EPA at least seven days before you start construction (so you can be covered in the event it rains the day you break ground).

### **What are My Options For Meeting the "Final Stabilization" Criteria?**

In most cases, you can terminate permit coverage as soon as the portion(s) of the project for which you are an operator are finally stabilized. A definition of "Final Stabilization" is in the permit and is required only of areas that are not otherwise covered by some sort of structure. For the purpose of these discussions, "structure" is used not only in the more traditional sense of "buildings," but to refer also to other things built on the ground whose intended purpose would require it to remain in a non-vegetated condition after construction has ended. Examples of "structures" include: buildings; parking lots; roads; gravel equipment pads, sidewalks, runways, etc. All other disturbed areas must be finally stabilized by either vegetative or non-vegetative practices, except disturbed areas on lands that will be returned to an agricultural use such as cropland, rangeland, or silviculture need only be returned to the preexisting agricultural use condition (e.g., tilled land, grass rangeland, agricultural buffer strip, etc.) and where a residential homeowner has decided to install their lawn themselves, only temporary stabilization is required. Perennial vegetation could include grasses, ground covers, trees, shrubs, etc. Vegetative final stabilization only requires getting to 70 percent of the "natural" vegetative cover in that part of the country. If the natural cover is only 50 percent, you only have to get back to 35 percent cover (70 percent of 50 percent). Non-vegetative stabilization could include rip-rap, gravel, gabions, etc. Impervious cover such as concrete or asphalt should be avoided as a final stabilization technique. Long term semi-permanent erosion control practices combined with seeds that would establish vegetative stabilization (e.g., properly secured seed impregnated erosion control mats, etc.) could also be used as "final stabilization." To qualify as "long-term," the erosion control practice must be selected, designed, and installed so as to provide at least three years of erosion control.

EPA believes where the environmental threat is low (i.e., in arid and semi-arid climates), "final stabilization" can also include techniques that employ re-vegetation combined with other stabilization measures. "Other stabilization measures" in this context include what are known as "temporary degradable rolled erosion control products," a.k.a., "erosion control blankets" (ECBs) along with an appropriate seed base. With proper selection (degradability, application, siting, etc), design, and installation, ECBs can be very effective in preventing the detachment and transportation of soil until they naturally degrade and vegetation has assumed this function. Therefore, upon proper selection, design, and installation of the combination ECB-seed technique in arid or semi-arid areas, a permittee can be considered to have achieved final stabilization and can terminate permit coverage. If longer than 3 years (i.e., three growing seasons) is required to establish the 70 percent of natural vegetative cover, this technique cannot be used or cited for fulfillment of permit termination requirements prior to actual establishment of vegetative cover.

### **What if the Operator(s) Changes Before the Project is Completed?**

If operational control changes, the old operator submits a Notice of Termination (NOT) and the new operator submits a Notice of Intent (NOI) before taking over operational control.

In many instances, operational control changes, but only for a portion of the site. In these instances, the new operator must:

1) submit an NOI because their site is part of a larger common plan; and

2) develop their own SWPPP or adopt the SWPPP of the previous owner if it's still applicable (revisions are likely to be necessary to update the explanations of the operators and BMPs - BMPs that were designed for site grading and utility installation for the overall project (e.g., perimeter controls) may not be adequate for the single "big box" or home site.

In these instances, the new operator may not rely on another operator's BMPs (e.g., a sediment basin or inlet protection) that are not located on the new operator's property unless the new operator has an agreement with the other operator and has included the BMPs in the new/revised SWPPP.

### **What if Earth Disturbance is a Normal Part of the Post-Construction Use of the Site?**

The earth disturbing activity has to be part of a project to build, demolish, or replace a structure (e.g., building, road, pad, pipeline, transmission line, etc.) to trigger the need for permit coverage. Earth disturbance that is a normal part of the long-term use or maintenance of the property is not covered by the construction general permit. For example, re-grading a dirt road or cleaning out a roadside drainage ditch to maintain its "as built" state is road maintenance and not construction. Restoring the original well pad to work over an existing oil or gas well is operation of a well and not construction. Re-grading and re-graveling a gravel parking lot or equipment pad is site maintenance and not construction. Repaving is routine maintenance unless underlying and/or surrounding soil is cleared, graded, or excavated as part of the repaving operation. Where clearing, grading, or excavating (i.e., down to bare soils) takes place, permit coverage is required if more than one acre is disturbed. Reworking planters that are part of the landscaping at a building is landscape maintenance and not construction. Applying daily cover at a landfill is simply part of operating a landfill and not construction.

### **Does the term "Routine Maintenance" apply to all construction activity?**

Yes. The definition of small construction at 40 CFR 122.26(b)(15)(i) includes the phrase "Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility." EPA has revised the definition of "large construction" in this permit to include similar language. However, the term "routine maintenance" should not be confused with activities such as repairs, replacement, and other types of non-routine maintenance that are required to obtain permit coverage where more than one acre is disturbed.

### **How Many Notices of Intent (NOIs) Must I Submit? Where and When Are They Sent?**

You only need to submit one NOI to cover all activities on any one common plan of development or sale. The site map you develop for the stormwater pollution prevention plan identifies which parts of the overall project are under your control. For example, if you are a homebuilder in a residential development, you need submit only one NOI to cover all your lots, even if they are on opposite sides of the development.

A complete NOI must be sent at least seven days before work begins on-site. The address for submitting NOIs is found in Part 2 of the CGP. You must also look in Part 9 of the permit to determine if copies of the NOI form must be sent to a State or Indian Tribe.

### **Do I Have Flexibility in Preparing the Stormwater Pollution Prevention Plan (SWPPP) and Selecting Best Management Practices (BMPs) For My Site?**

Stormwater pollution prevention plan requirements were designed to allow maximum flexibility to develop the needed stormwater controls based on the specifics of the site. Some of the factors you might consider include: more stringent local development requirements and/or building codes; precipitation patterns for the area at the time the project will be underway; soil types; slopes; layout of structures for the site; sensitivity of nearby water bodies; safety concerns of the stormwater controls (e.g., potential hazards of water in stormwater retention ponds to the safety of children; the potential of drawing birds to retention ponds and the hazards they pose to aircraft); and coordination with other site operators.

The approach and BMPs used for controlling pollutants in stormwater discharges from small construction sites may vary from those used for large sites since their characteristics can differ in many ways. Operators of small sites may have more limited access to qualified design personnel and technical information. Sites may also have less space for installing and maintaining certain BMPs. A number of structural BMPs (mulching, use of inlet protection, or silt fence) and non-structural BMPs (minimizing disturbance, good housekeeping) have been shown to be efficient, cost effective, and versatile for small construction site operators to implement. As is the case with large construction sites,

erosion and sediment control at small construction sites is best accomplished with proper planning, installation, and maintenance of controls.

### **Must Every Permittee Have His or Her Own Separate SWPPP or is a Joint Plan Allowed?**

The only requirement is that there be at least one SWPPP for a site that incorporates the required elements for all operators, but there can be separate plans if individual permittees so desire. EPA encourages permittees to explore possible cost savings by having a joint SWPPP for several operators. For example, the prime developer could assume the inspection responsibilities for the entire site, while each homebuilder shares in the installation and maintenance of sediment traps serving common areas.

### **If a Project Will Not Be Completed Before This Permit Expires, How Can I Keep Permit Coverage?**

If the permit is reissued or replaced with a new one before the current one expires, you will need to comply with the new permit conditions in order to transition coverage from the old permit. This may include submitting a new NOI. If the permit expires before a replacement permit can be issued, the permit will be administratively "continued." You are automatically covered under the continued permit, without needing to submit anything to EPA, until the earliest of:

1. The permit being reissued or replaced;
2. Submittal of a Notice of Termination (NOT);
3. Issuance of an individual permit for your activity; or
4. EPA issues a formal decision not to reissue the permit, at which time you must seek coverage under an alternative permit.

### **When Can I Terminate Permit Coverage? Can I Terminate Coverage (i.e., Liability for Permit Compliance) Before the Entire Project is Finished?**

You can submit an NOT for your portion of a site providing: (1) You have achieved final stabilization (e.g., 70 percent revegetation) of the portion of the site for which you are a permittee (including, if applicable, returning agricultural land to its pre-construction agricultural use); (2) another operator/permittee has assumed control according to Subpart 5.1.B of the permit over all areas of the site that have not been finally stabilized for which you are responsible (for example, a developer can pass permit responsibility for lots in a subdivision to the homebuilder who purchases those lots, providing the homebuilder has filed his or her own NOI); (3) coverage under an alternative NPDES permit has been obtained for the discharge; or (4) for residential construction only, you have completed temporary stabilization and the residence has been transferred to the homeowner.



# RAIN GARDENS

## Why do you need a rain garden?

As a service to Kane County MS4 Partners, this brochure is included for use by community staff or in local public newsletters. Copies of this brochure can be downloaded or ordered from [www.raingardens.org](http://www.raingardens.org).



*Saving the Great Lakes, one garden at a time*  
[www.raingardens.org](http://www.raingardens.org)

Rain Gardens of West Michigan  
West Michigan Environmental Action Council  
1514 Wealthy SE, Suite 280  
Grand Rapids, MI 49506  
616-454-RAIN  
[www.raingardens.org](http://www.raingardens.org)

*We are intimately connected to one of the largest fresh water systems on earth, and that water is in trouble.*



20% of the fresh surface water on Earth is in the Great Lakes.

*What threatens it? We do.*

When rain and snowmelt flow off our yards, roofs, sidewalks, roads and parking lots, the resulting stormwater runoff washes pollution into our streams, rivers and lakes.

Up to 70% of the water pollution in our region is carried there by stormwater. And much of this pollution comes from things we do in our yards and gardens!



Polluted stormwater runoff entering a river

*Water wasn't meant to run off our land.*

Nature's original plan for rain is this: To soak into the soil, replenish groundwater supplies, be taken up by and filtered by plants, and enter our surface waters as clean, cool groundwater, nurturing and nourishing our world.

*This is where rain gardens come in.*

A rain garden is a special kind of stormwater garden designed to collect and absorb runoff from a roof or parking lot. By planting a rain garden, you can help solve some of our stormwater problems.



Courtesy Maplewood Minnesota



*Rain Gardens...*

*Come in all shapes and sizes*

*Can be designed for any site*

*Are easy to install and maintain*

*Are beautiful landscaping features*

*Attract birds and butterflies*

[www.raingardens.org](http://www.raingardens.org)

## How to create a rain garden

*Designing and planting a rain garden is much like creating any other perennial garden, with a few unique differences.*

The garden must be located where runoff can be diverted into it, away from building foundations and utilities.

A shallow, saucer-shaped depression is created in the garden to hold rain as it soaks in.

Soil replacement and additional preparation are sometimes needed for success. A good soil mix for rain gardens is 50-60% sand, 20-30% topsoil, and 20-30% compost.

Species of perennial plants native to our region are recommended, as they are adapted to local conditions and will not need extra care once they are established.

A mulch of shredded hardwood is an integral part of your rain garden. It keeps the soil moist and ready to soak up rain, and makes your garden low-maintenance.

**You can easily create a simple rain garden in a weekend, for no cost if you use plants you already have. Or, you can install a deluxe rain garden that will take more effort and investment. It's all up to you!**

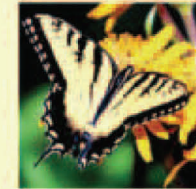
*A beautiful solution to water pollution*



The deep roots of native perennials make channels into the soil

*You can help protect the Great Lakes and our streams, rivers, and inland lakes by planting a beautiful rain garden.*

*Keeping rain on your property, where it naturally belongs, will help solve some of our water pollution problems.*



Tiger Swallowtail



New England Asters



Joe Pye Weed



Black-eyed Susans



Cardinal Flower



Culvers Root



Great Blue Lobelia

**rain gardens**  
of West Michigan

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