# Stormwater Management 2.0

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#### MCM #1 - Public Education and Outreach

- 1. Develop, implement, and maintain a <u>written</u> Public Education and Outreach Program.
- 2. Develop and maintain lists of target audience groups that are present within the areas served by the permittee's regulated small MS4.
  - Municipal Stormwater Advisory Committee?
- 3. The permittee <u>shall annually publish at least one issue</u> of a newsletter, a pamphlet, a flyer, or a website that includes general stormwater educational information, a general description of the permittee's SWMP, and/or information about the permittee's stormwater management activities.
- 4. Distribute stormwater educational materials and/or information to the target audiences <u>using two methods annually</u>.



#### MCM #2 — Public Participation and Involvement

- 1. Develop, implement and maintain a <u>written</u> Public Involvement and Participation Program (PIPP).
- 2. Provide adequate <u>public notice</u> and opportunities for public review, input, and feedback <u>prior to adoption of any ordinance</u>, <u>SOP or plan required by the General Permit</u>.
  - Public comment on PRP? TMDL plan?
- 3. Regularly solicit public involvement and participation from the target audience groups using available distribution and outreach methods.
  - Municipal Stormwater Advisory Committee?



#### MCM #3 – Illicit Discharge Detection and Elimination

- 1. Develop and implement a <u>written</u> program for the detection, elimination, and prevention of illicit discharges into the regulated MS4.
- 2. Develop and maintain a map of the regulated small MS4's outfalls and surface waters.
  - GIS?
  - Drone fly-overs for mapping?
  - Watershed asset management plan
- 3. In conjunction with the map(s) created under BMP #2 (either on the same map or on a different map), new permittees shall show, and existing permittees shall update, the entire storm sewer collection system, including roads, inlets, piping, swales, catch basins, channels, basins, and any other features of the permittee's storm sewer system including municipal boundaries and/or watershed boundaries.



### MCM #3 – Illicit Discharge Detection and Elimination (continued)

- 4. The permittee shall conduct outfall field screening, identify the source of any illicit discharges, and remove or correct any illicit discharges.
  - Dry weather outfall inspections? Flow source forensics.
  - Intergovernmental cooperation sharing stormwater pipe inspection services?
  - Stormwater fee to help underwrite such activities.
  - What staff?
- 5. Enact a Stormwater Management Ordinance (municipal permittees) or SOP (non-municipal permittees) to implement and enforce a stormwater management program that includes prohibition of non-stormwater discharges to the regulated small MS4.
  - DEP sample ordinance?
  - Pool water draining prohibition? Car washing?
- 6. Provide educational outreach to public employees, business owners and employees, property owners, the general public and elected officials (i.e., target audiences) about the program to detect and eliminate illicit discharges.



#### MCM #4 – Construction Site Stormwater Runoff Control

- 1. If an NPDES permit is required for earth disturbance activities, do not issue a building permit or approval until confirmation that a valid NPDES permit is obtained.
- 2. Notify DEP or CCD within 5 days of the receipt of an application for a permit involving an earth disturbance activity consisting of one acre or more.
- 3. Enact, implement, and enforce an ordinance to require the implementation of erosion and sediment control BMPs, as well as sanctions to ensure compliance.
- 4. Review Erosion and Sediment (E&S) control plans to ensure that such plans adequately consider water quality impacts and meet regulatory requirements.



### MCM #4 – Construction Site Stormwater Runoff Control (continued)

- 5. Conduct inspections regarding installation and maintenance of E&S control measures during earth disturbance activities. Maintain records of site inspections, including dates and inspection results, in accordance with the record retention requirements in this General Permit.
  - CCD? Municipal staff?
  - GIS for record keeping?
- 6. Conduct enforcement when installation and maintenance of E&S control measures during earth disturbance activities does not comply with permit and/or regulatory requirements.



### MCM #4 – Construction Site Stormwater Runoff Control (continued)

- 7. Develop and implement requirements for construction site operators to control waste at construction sites that may cause adverse impacts to water quality. The permittee shall provide education on these requirements to construction site operators.
- 8. Develop and implement procedures for the receipt and consideration of public inquiries, concerns, and information submitted by the public to the permittee regarding local construction activities. The permittee shall demonstrate acknowledgement and consideration of the information submitted, whether submitted verbally or in writing.



#### MCM #5 – Post Construction Stormwater Mgmt. in New Dev. and Redevelopment

- 1. Enact, implement, and enforce an ordinance or other regulatory mechanism to address post-construction stormwater runoff from new development and redevelopment projects, as well as sanctions and penalties associated with non-compliance.
  - What staff to enforce? BCO? SEO? ZO? CCD? PE?
- 2. Develop and implement measures to encourage and expand the use of Low Impact Development (LID) in new development and redevelopment.
  - Municipality's Comprehensive Plan, SALDO, zoning ordinances?
  - Planning Commission education.
- 3. Ensure adequate operation and maintenance of all post-construction stormwater management BMPs installed at all development or redevelopment projects that disturb greater than or equal to one acre.
  - GIS?
  - Certified inspectors?
  - CCD? Contractors? Staff?
  - "Determining the True Cost of BMPs"



# MCM #5 – Post Construction Stormwater Mgmt. in New Dev. and Redevelopment (cont.)

- 4. Review PCSM Plans and require the implementation of structural and/or non-structural BMPs that are appropriate to the local community, that minimize water quality impacts and that are designed to maintain predevelopment runoff conditions, and implement a tracking system for qualifying projects and associated PCSM BMPs.
  - "Balancing Grey Infrastructure and Green Infrastructure"
- 5. Inspect all qualifying development or redevelopment projects to ensure proper installation of the approved structural PCSM BMPs.
  - Certified inspectors?
- 6. Develop a <u>written</u> program that describes how the permittee shall implement and enforce all required components of this MCM.



### MCM #6 – Pollution Prevention / Good Housekeeping

- 1. Identify and document all operations that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4.
  - Municipal road crews, public works departments, and parks and recreation staff.
    - They can also be called on to help determine when BMPs, both grey and green, can be added to ongoing maintenance activities or planned construction initiatives ... if they are included early!
  - Stormwater "team" = land design (architects, landscapers), construction, and maintenance
- 2. Develop, implement and maintain a <u>written</u> O&M program for all operations that could contribute to the discharge of pollutants from the regulated small MS4.
  - Municipal garages, salt and chemical storage areas, fuel storage tanks.
- 3. Develop and implement an <u>employee training program</u> that addresses appropriate topics to further the goal of preventing or reducing the discharge of pollutants from operations to the regulated small MS4.



### The Next "STEPP" in Protocol Standardization?

- Stormwater Testing and Evaluation for Products and Practices (STEPP)
  - ... seeks to improve local water quality by accelerating the implementation and adoption of innovative stormwater management technologies by removing current barriers to innovation, creating regulatory confidence, minimizing duplicative performance evaluation efforts, and establishing a common framework for testing and evaluating both public domain and proprietary stormwater control measures.
  - The STEPP Initiative was triggered, in part, by the end of the only national evaluation program for stormwater technologies, the U.S. Environmental Protection Agency (EPA) Environmental Technology Verification (ETV) program.
  - How can this initiative help with reciprocity for innovative BMPs from around the nation/world?
    - International Stormwater BMP Database
    - 2006 PA DEP Stormwater BMP Manual is being updated



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