STORMWATER UPDATES

Rachel Herbert, EPA/OW/OWM
National Stormwater Practitioners Meeting
July 2014
Stormwater Concerns

We can’t afford to be like this guy.
Municipal Separate Storm Sewer System (MS4) Program Updates
Major Focus Areas for Stormwater

Focusing on a suite of actions to help communities effectively address their stormwater challenges

1. Federal Partnerships
2. Education, Technical Assistance & Engagement with Key Partners
3. Recognition/Incentive Programs
4. Strengthening the MS4 Program
### Website Updates

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Foster innovation by identifying &amp; promoting good practices that other DOTs can emulate</th>
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<tbody>
<tr>
<td>Dissemination</td>
<td>Develop key documents that can help DOTs + share any other documents that may be useful</td>
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<tr>
<td>Emerging Topics</td>
<td>Asset management, climate adaptation and resiliency, etc.</td>
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**Website:**
[www.epa.gov/npdes/stormwater/roads](http://www.epa.gov/npdes/stormwater/roads)
FHWA & EPA 2014 Co-hosted Webinars

**March**
Innovative Transportation Stormwater Management: Green Infrastructure in Road Projects

**June**
Roadway Design & Maintenance of Post-Construction Stormwater Controls

**September**
Topic to be determined

**December**
Topic to be determined

For more information:
[www.epa.gov/npdes/training](http://www.epa.gov/npdes/training)
EXISTING RESOURCES: POST-CONSTRUCTION PERFORMANCE STANDARDS & WATER QUALITY-BASED REQUIREMENTS

Available at:
www.epa.gov/npdes/pubs/sw_ms4_compendium.pdf
Asset Management
Rocks, bridges, and... stormwater practices?

You’ve started tracking road and bridge conditions...

Why not track stormwater at the same time to be efficient?
Climate Resiliency & Stormwater

FHWA Climate Resilience Pilots
• Vulnerability assessments
• Risk assessments
• Identifying strategies to make infrastructure more resilient and adaptable
• Identify priority-based work plans for addressing the most vulnerable assets first
• Incorporate climate vulnerability assessments into existing standards, guidelines, and tools
• Methodology and decision support and screening tool
• Incorporate potential adaptation/mitigation projects in MPO Plans
• Partnering with local jurisdictions to complete

Potential Impacts

- Flooding, sea level rise/storm surge
- Landslides
- Drought
- Coastal erosion
Green Infrastructure Program Updates
Green Infrastructure Technical Assistance Program

- Since 2012, EPA’s Office of Water has provided more than $1.4 million in direct assistance to local communities

- Goal is to build capacity to implement green infrastructure and share lessons learned

- Projects are identified through a Request for Letters of Interest posted on the Green Infrastructure website (www.epa.gov/greeninfrastructure)

- Projects have included code and ordinance reviews, cost benefit analyses, and development of green infrastructure designs
Audits
National Enforcement Initiative: Keeping Raw Sewage and Contaminated Stormwater Out of Our Nation’s Waters

Goal

EPA will take action to reduce raw sewage overflows and storm water discharges from municipal sewer systems that pose a significant threat to water quality and public health.

Background

- Set every three years
- Chosen with state and public input and support EPA’s seven priorities
- After comments received and considered, decision was made to continue the FY 2011-2013 National Enforcement Initiatives for FY 2014-2016
Illicit Discharge Detection & Elimination

What’s required?

- A storm sewer system map showing outfalls and locations of receiving waters
- Prohibit non-stormwater discharges into the system and appropriate enforcement procedures and actions
- A plan to detect and address illicit discharges
- Education about the hazards of illegal discharges
- Determination of appropriate practices and measurable goals

Remember...

- Procedures to conduct investigations
- Criteria to identify illicit discharges
- Tracking illicit discharges
- Training
- Proactive vs. Reactive

Examples of Illicit Discharge Sources

- Spills from roadway accidents
- Improper disposal of auto and household toxics
- Improper oil disposal
- Radiator flushing disposal
- Effluent from septic tanks

Education about the hazards of illegal discharges
Construction Site Runoff

What’s required?

- Code or ordinance requiring proper erosion and sediment controls
- Construction site plan reviews that consider water quality impacts
- Have sanctions to ensure compliance
- Establish procedures for receipt and consideration of information submitted by the public
- Determination of appropriate practices and measurable goals

Remember...

- Frequency of site inspections
- Review procedures
- Qualified inspectors
- Maintenance of stormwater controls
- System to track stormwater controls
- Procedures for enforcement response

Pollutants Commonly Discharged from Construction Sites

- Sediment
- Solid and sanitary wastes
- Phosphorus
- Nitrogen
- Pesticides
- Oil and grease
- Concrete truck washout
- Construction chemicals
- Construction debris
Post-Construction Runoff Control

What’s required?
- Develop and implement strategies which include a combination of structural and/or non-structural practices
- Ordinance requiring implementation of controls
- Ensure adequate long-term operation and maintenance of controls
- Determine appropriate practices and measureable goals

Remember...
- Frequency of site inspections
- Review procedures
- Maintenance of stormwater controls
- Inspection training
- Tracking stormwater controls
- Procedures for enforcement response

Project Timeline

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<tr>
<th>Site Design</th>
<th>Active Construction</th>
<th>Post-Construction</th>
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Pollution Prevention/Good Housekeeping

What’s required?

- Develop and implement an operation and maintenance program
- Train employees on how to incorporate pollution prevention/good housekeeping techniques
- Determine appropriate BMPs and measurable goals for this minimum measure

Remember...

- Stormwater controls/measures
- Procedures/plan and documentation
- Maintenance of stormwater controls
- Training
Public Education/Outreach & Public Involvement

What’s required

- Distribute educational materials to the community, or conduct equivalent outreach activities
- Determine the appropriate best management practices (BMPs) and measurable goals
- Comply with applicable State, Tribal, and local public notice requirements

Remember...

- Coordination with other MS4s
- Documentation
Thank You!

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