

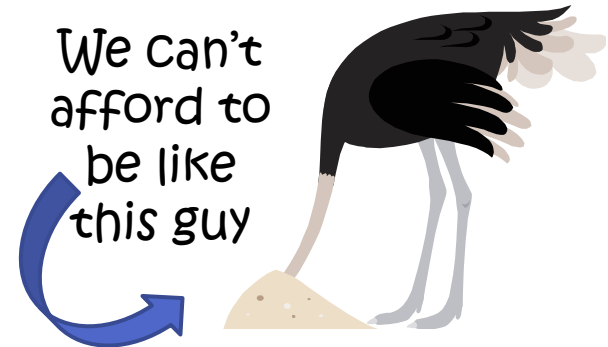
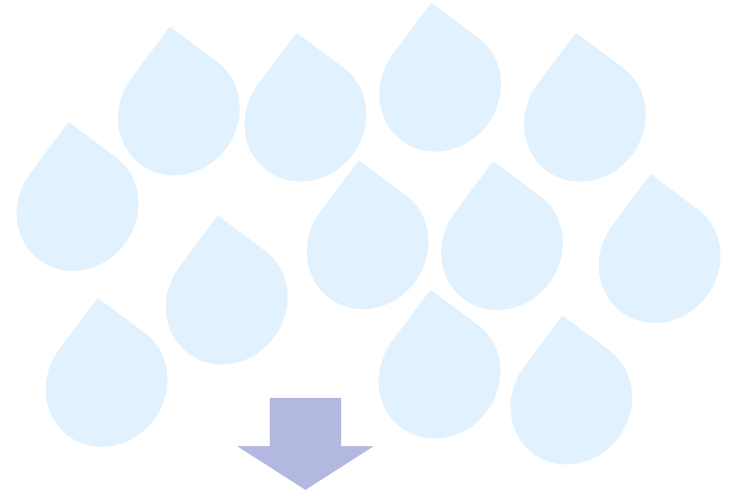
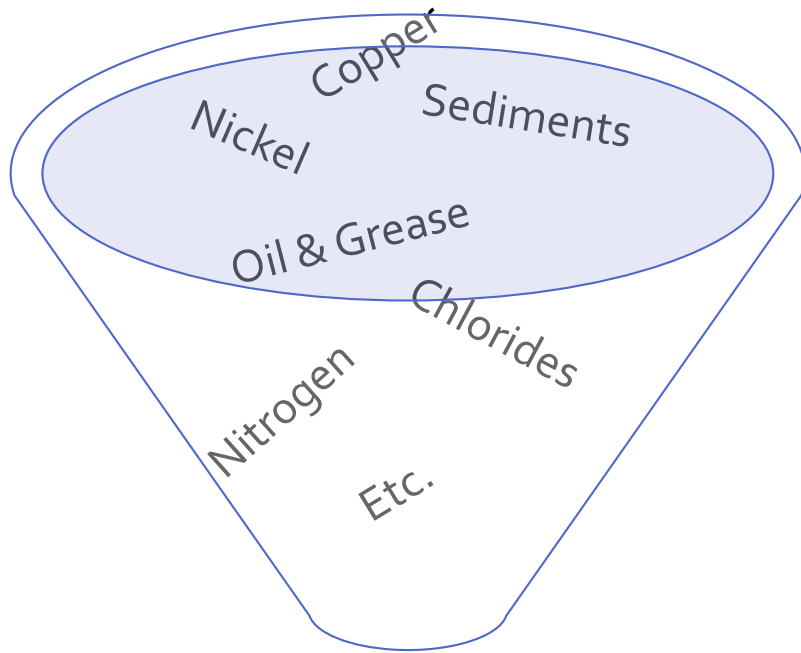
# STORMWATER UPDATES

---



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

# Stormwater Concerns





# 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 MS<sub>4</sub> Program



# Website Updates



## Innovation

Foster innovation by identifying & promoting good practices that other DOTs can emulate



## Dissemination

Develop key documents that can help DOTs + share any other documents that may be useful



## Emerging Topics

Asset management, climate adaptation and resiliency, etc.

Website:

[www.epa.gov/npdes/stormwater/roads](http://www.epa.gov/npdes/stormwater/roads)



# FHWA & EPA 2014 Co-hosted Webinars



Innovative Transportation Stormwater Management:  
Green Infrastructure in Road Projects



Roadway Design & Maintenance of  
Post-Construction Stormwater Controls



Topic to be determined



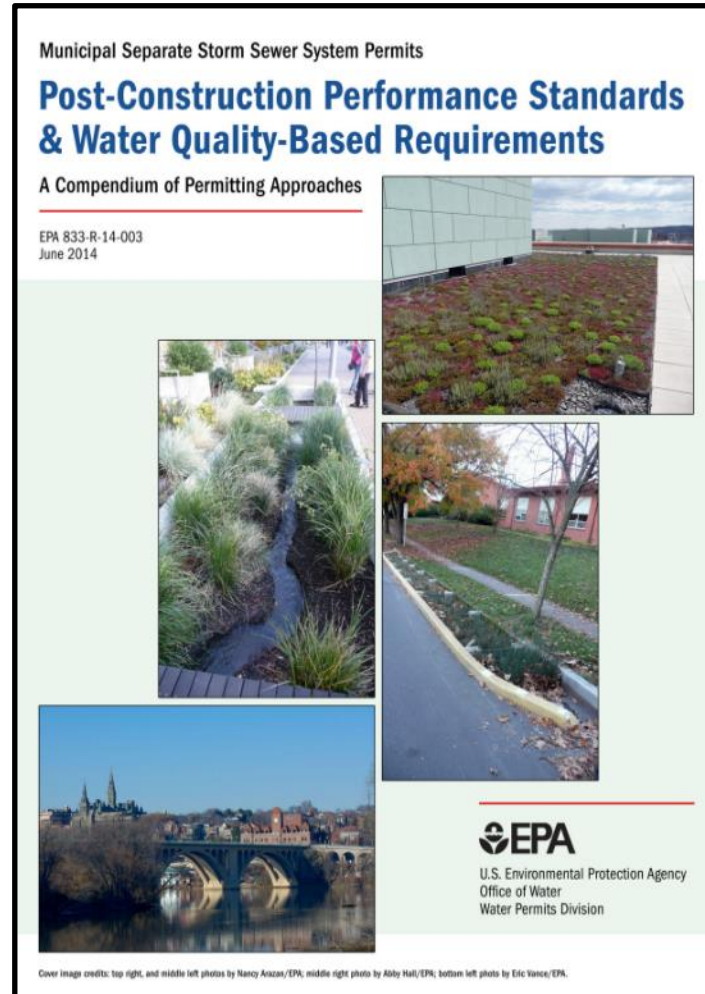
Topic to be determined

For more information:

[www.epa.gov/npdes/training](http://www.epa.gov/npdes/training)



# EXISTING RESOURCES: POST-CONSTRUCTION PERFORMANCE STANDARDS & WATER QUALITY-BASED REQUIREMENTS



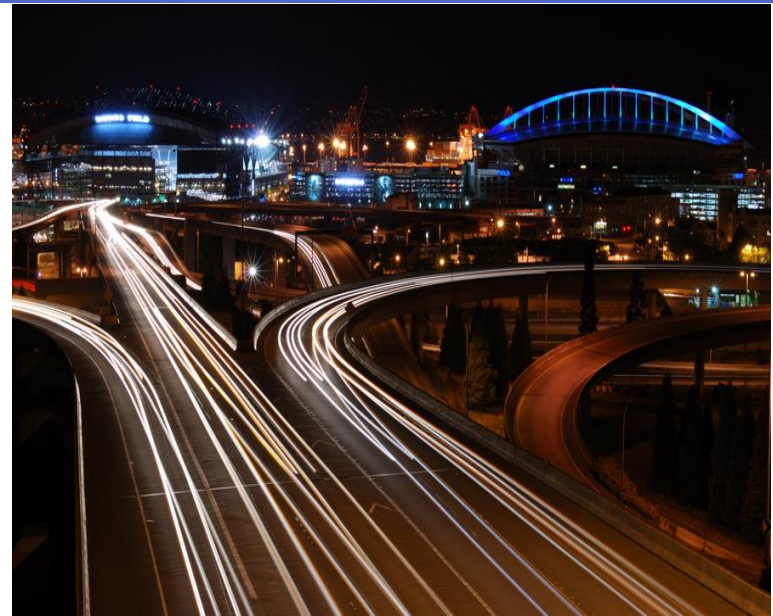
Available at:  
[www.epa.gov/npdes/pubs/sw\\_ms4\\_compendium.pdf](http://www.epa.gov/npdes/pubs/sw_ms4_compendium.pdf)

# Asset Management

Roads, bridges, and...stormwater practices?

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

Why not track stormwater at the same time to be efficient?

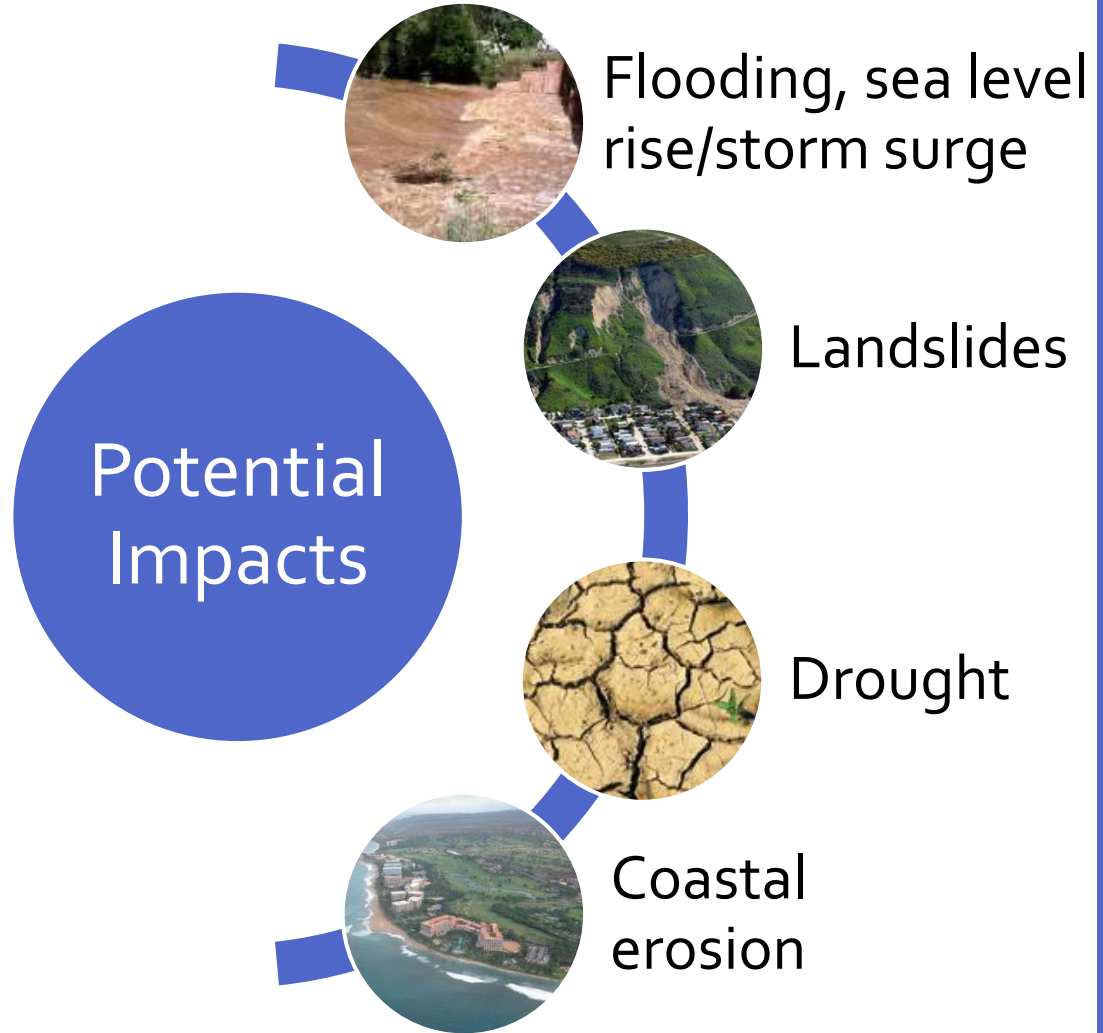




# Climate Resiliency & Stormwater

## 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

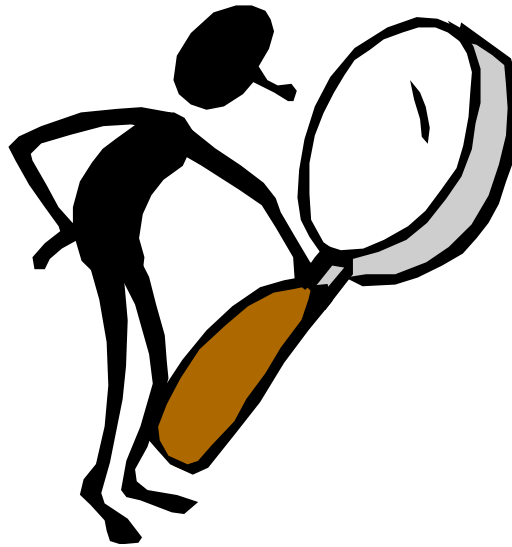




# Green Infrastructure Program Updates

# 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](http://www.epa.gov/greeninfrastructure))
- Projects have included code and ordinance reviews, cost benefit analyses, and development of green infrastructure designs

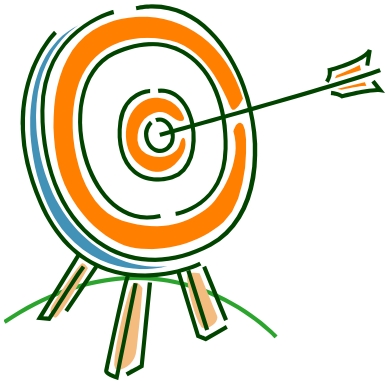


---

# 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
- Sanitary wastewater
- Effluent from septic tanks

# 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 measurable goals

## Remember...

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

## Project Timeline

Site Design | Active Construction | Post-Construction →



# 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

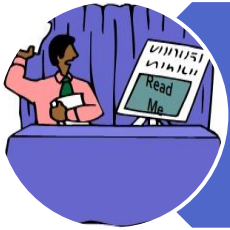
## Remember...

- 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!



Rachel Herbert

[herbert.rachel@epa.gov](mailto:herbert.rachel@epa.gov)

202-564-2649