



EPA'S STORMWATER RULE

EPA/OW/WATER PERMITS
DIVISION



11.7.12

Stormwater is a leading cause of water quality impairment and growing

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- ❑ Urban stormwater is a leading source of impairment
- ❑ Fast growing water quality concern
 - Approximately 800,000 acres being developed every year, growing to over 1.0 million acres by 2039
- ❑ Development increases the amount of impervious cover in the landscape
- ❑ Small increase in impervious cover leads to big impacts in receiving waters
- ❑ Development upstream can cause downstream impacts in communities



Stormwater Impacts: Pollutant Loading and Hydrology

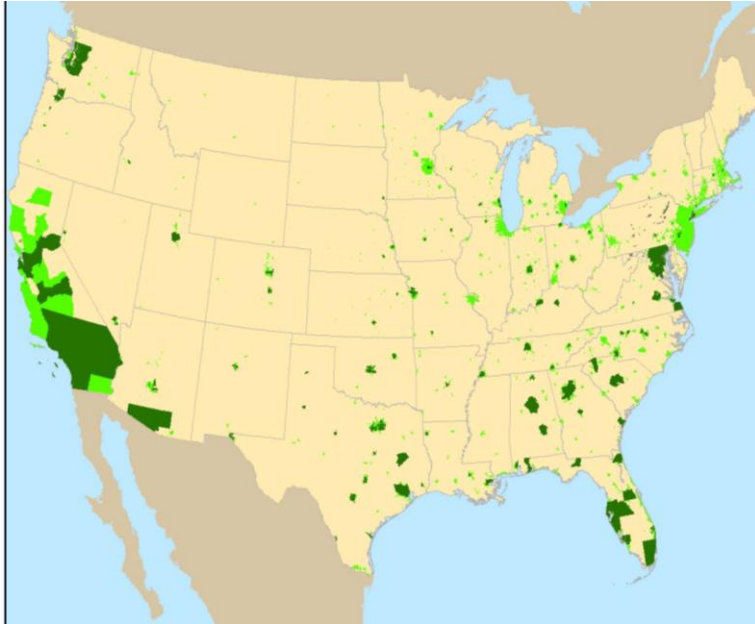
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- Stormwater pollutants
 - Cause beach closures and swimming illnesses through bacterial contamination
 - Impact fisheries and shellfish harvesting through excess sedimentation, nutrients, metals, and temperature
 - Increase the costs of treating drinking water supplies
- Hydrologic impacts
 - Increase stormwater volume causing flooding, scouring and sewer overflows
 - Reduce groundwater recharge causing stream baseflows to become extremely low



Existing Program

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Current coverage

- Primarily in urbanized area
- Accounts for much of the population
- Only about 2% of the land area

Regulated MS4s

- Medium and Large MS4s > 100,000 pop.
- Small MS4s in urbanized areas

MS4 Permit Requirements

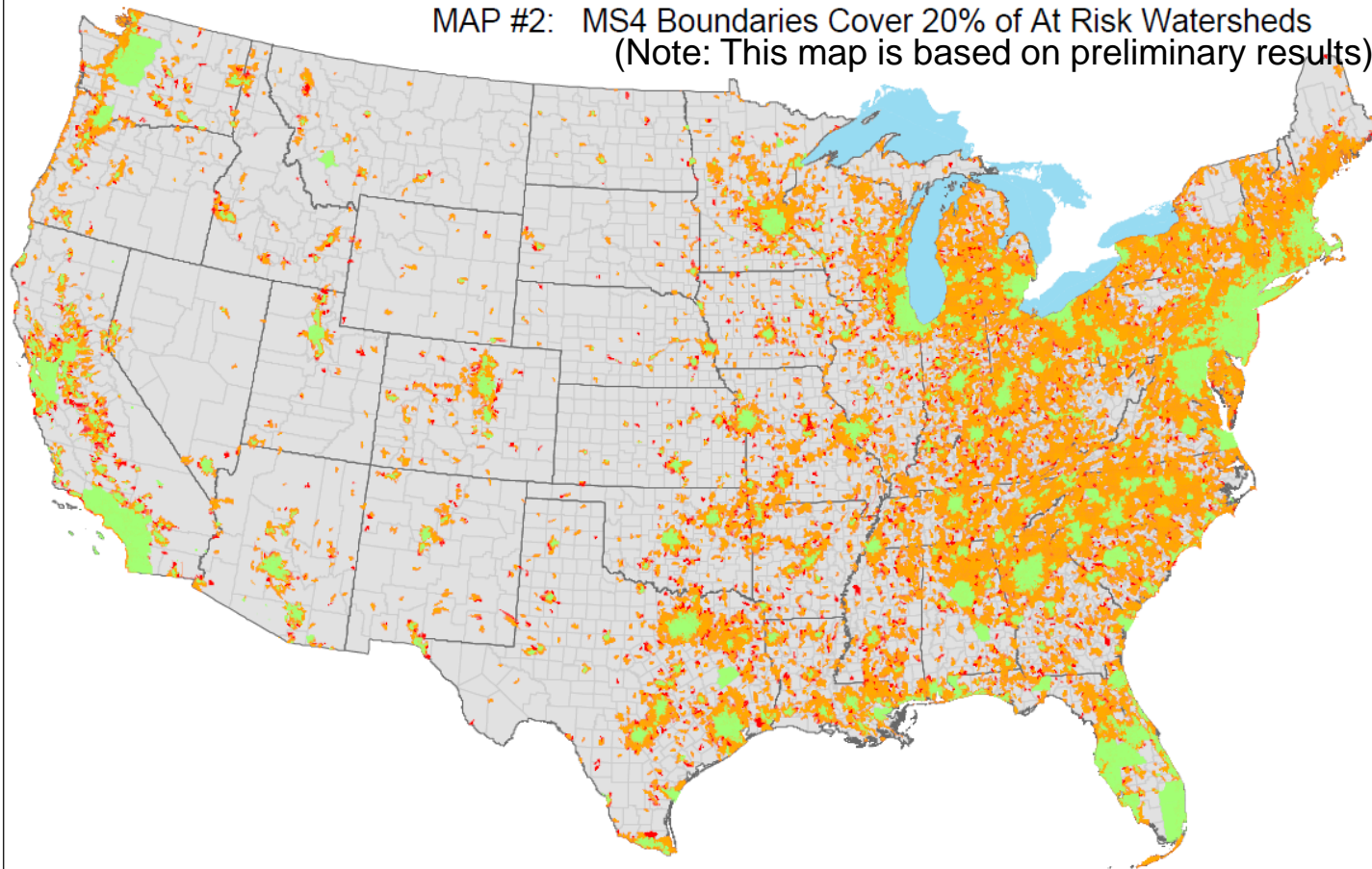
- Public Education & Outreach
- Public Participation
- Illicit Discharge Detection and Elimination
- Pollution Prevention/Good Housekeeping
- Active Construction Program
- Post construction program for new development and redevelopment sites ≥ 1 acre
 - General requirement
 - No performance standards required

Regulatory Coverage vs. Watershed Imperviousness

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Regulated MS4 Boundaries & At Risk HUC 12 Watersheds

MAP #2: MS4 Boundaries Cover 20% of At Risk Watersheds
(Note: This map is based on preliminary results)



2010 MS4 Boundaries At Risk Watersheds (>5% Impervious) 2010 At Risk Watersheds (>5% Impervious) 2040



Challenges

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- Better controlling stormwater discharges from new development and redevelopment where it is most cost effective to include sustainable controls
- Reducing existing stormwater impacts in urban areas which can be a significant contributor to water quality impairments
 - Could be addressed by including stormwater improvements in areas



ASLA Honor Award Recipient, NE Siskiyou Green Street by Kevin Robert Perry, ASLA (Photo: Kevin Robert Perry)

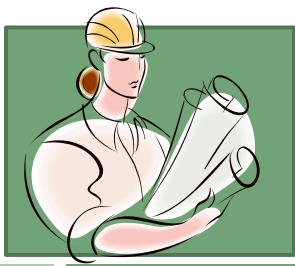


Key Focus of the Proposed Stormwater Rule

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Establish performance standards for discharges from newly developed and redeveloped sites.





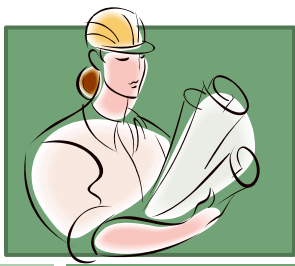
Performance Standards

*Why · What · Who · Where · When ·
How*

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Why and What

- Considering a retention-based performance standard to reduce pollutants resulting from the increased volume and velocity of stormwater discharges at newly developed and redeveloped sites.
- Considering standard that varies according to an area's climate, soil, and other location-specific characteristics
 - e.g. certain percentile storm event
- Flexibilities
 - Could accommodate site constraints (including water rights laws)
 - managed through treatment
 - off-site mitigation in the same subwatershed
 - payment in lieu.
 - States could also develop alternative programs that are better suited to their needs, but that are as protective as the national standard
 - Delayed implementation of the performance standard following promulgation of the rule to allow time for municipalities to update codes and ordinances to allow for reducing impervious cover and green infrastructure practices



Performance Standards

*Why · What · Who · Where · When ·
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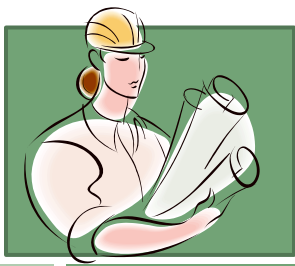
Who

- ❑ All types of newly developed and redeveloped projects including residential, commercial, industrial, and institutional.
- ❑ Owner of a construction project which meets the site size threshold.

Applying the standard nationwide would create a level playing field for developers among municipalities and protect downstream communities from upstream development.

Where

- ❑ The standard could be directly applied to newly developed and redeveloped sites nationwide or only those sites discharging to regulated MS4s.
- ❑ Does not have to be the same size threshold in all areas.



Performance Standards

*Why · What · Who · Where · When ·
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When

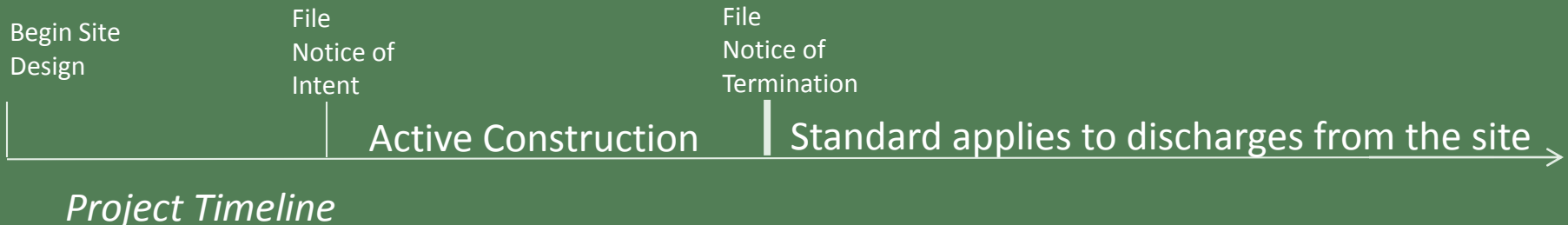
Would apply to stormwater discharges after construction is complete.

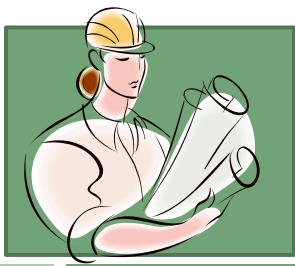
Could
improve the
livability of

How

Cost effective ways to meet the standard

- Incorporate controls in the site design by preserving vegetation, reducing impervious cover
- Integrate green infrastructure practices into landscape or other areas which would manage the specified volume in the standard.
- Options for alternative solutions (e.g. off-site mitigation, payment-in-lieu)





Performance Standards

*Why · What · Who · Where · When ·
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Discharges from Redeveloped Sites

Recommend lower standard for redevelopment

- Recognize site constraints
- To encourage redevelopment to revitalize urban communities
- Considering additional incentives for smart growth and brownfields development



LA Infiltration Planters. *Photo courtesy of Bill DePoto.*

Other Considerations

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Extend the protection of the MS4 program	Require large regulated municipalities to manage discharges from existing sites	Designate government-owned maintenance yards as industrial sources
<ul style="list-style-type: none"> Ensures stormwater controls are properly implemented and prevents water quality from being degraded as cities are developed Implements 6 minimum measures which help prevent contamination 	<ul style="list-style-type: none"> Addresses degradation from existing sites and helps restore urban waters Identify long-term goals, high priority projects, and milestones Implement via an iterative approach as part of stormwater 	<p>Addresses a variety of pollutants of concern:</p> <ul style="list-style-type: none"> organic and inorganic chemicals fuels, such as coal and oil paints metals solvents oil and grease

Rulemaking Schedule

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Proposal: June 2013

Final Action: December 2014



www.epa.gov/npdes/stormwater/rulemaking