

US EPA ARCHIVE DOCUMENT

# STORMWATER PERMITTING UPDATE

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# Summary of Topics

- Program background
- Construction general permit
- Multi-sector general permit
- MS4 permitting
- National stormwater rulemaking

# 1987 WATER QUALITY ACT STORMWATER PROGRAM

- Phase I regulations: November 1990
- Phase II regulations: December 1999
- Phase I discharges:
  - Associated with industrial activity
  - Municipal separate storm sewer systems (MS4s) serving a population of 100,000 or more

# CLASSES OF FACILITIES THAT DISCHARGE STORM WATER ASSOCIATED WITH INDUSTRIAL ACTIVITY

- Manufacturing facilities
- Mining and oil and gas
- Hazardous waste treatment, storage or disposal facilities
- Landfills
- Auto dismantlers and recycling facilities
- Steam electric power plants
- Transportation facilities (e.g. airports, trucking) with vehicle maintenance
- Sewage treatment plants
- Construction activity

# EPA Construction General Permit (CGP)

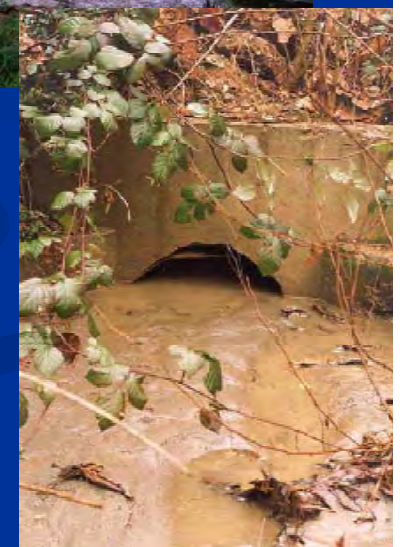
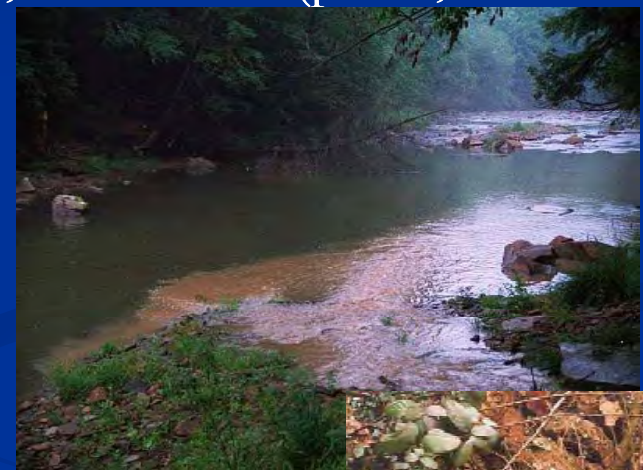
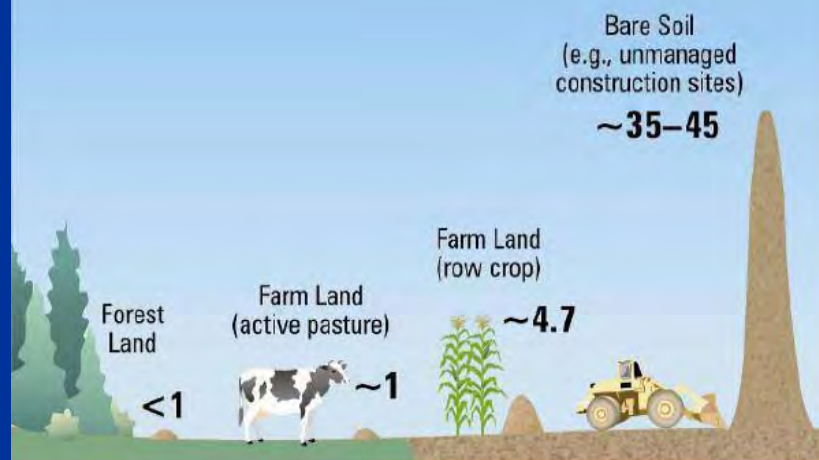
- Issued on June 30, 2008
  - On July 8, 2011 EPA extended the expiration date to February 15, 2012 from the previous June 30, 2011
- Covers all Tribal lands in Region 9 (CA, NV and AZ) and most Tribal lands elsewhere
- Authorizes discharges from projects of 1 or more acres
- Prepare stormwater pollution prevention plan (SWPPP)
- Submit notice of intent (NOI) requesting permit coverage

# ENVIRONMENTAL CONCERNS OF CONSTRUCTION SITES

- The primary pollutant of concern is sediment for construction
- Other pollutants include trash and debris, chemicals (paint, concrete washout) oil and grease, etc.

## Typical erosion rates for land-based activities

(soil loss from various land areas, in tons per acre per year)



# SMALL CONSTRUCTION PERMIT WAIVER

- Small construction refers to projects of 1 to 5 acres
- Permit waivers for small construction:
  - When the rainfall erosivity factor "R" in the revised universal soil loss equation is less than 5; or
  - Controls are not needed based on a total maximum daily load (TMDL) or equivalent analysis
- Online erosivity factor calculator at:  
<http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm>

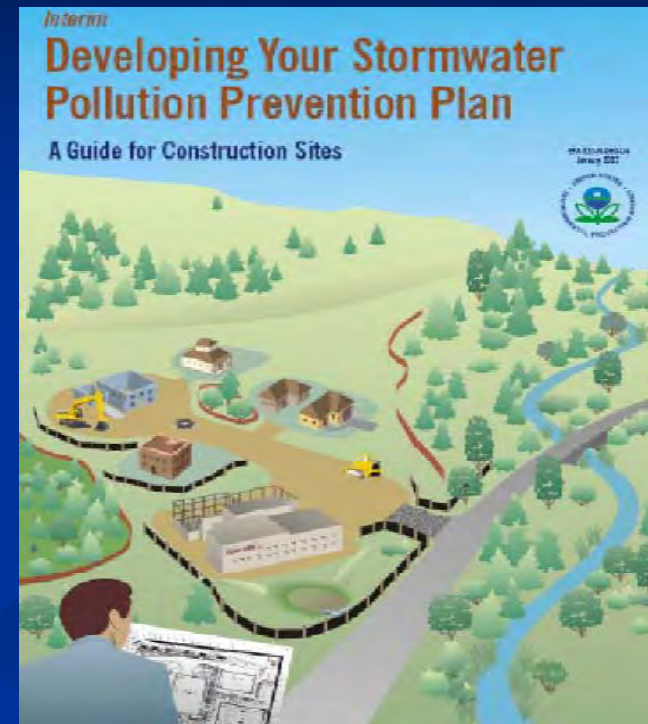


# 2011 Proposed CGP

- New CGP proposed April 25, 2011 to replace existing CGP in February 2012
- SWPPP and NOI requirements
- Incorporates most 2009 effluent guidelines for construction
- Placeholder for numeric turbidity limit – EPA is currently revising the 2009 limit of 280 NTU
- EPA anticipates finalizing new turbidity limit in time to incorporate into the final CGP in February 2012.

# EPA SWPPP RESOURCES

- EPA SWPPP Guide
- SWPPP Template (MS Word)
- Self-Inspection Form
- Example SWPPPs for two hypothetical projects
  - Residential
  - Commercial
- [http://cfpub.epa.gov/npdes/home.cfm?program\\_id=6](http://cfpub.epa.gov/npdes/home.cfm?program_id=6)
- <http://www.cicacenter.org/> (compliance assistance website for construction)





# Multi-Sector General Permit (MSGP)


- Issued on September 29, 2008 and expires September 29, 2013
- Covers all Tribal lands in Region 9 (CA, NV and AZ) and most Tribal lands elsewhere
- Prepare stormwater pollution prevention plan (SWPPP)
- Submit notice of intent (NOI) requesting permit coverage

# Multi-Sector General Permit (MSGP)


- Authorizes discharges from 29 industrial sectors
- Monitoring requirements
  - Benchmark monitoring for some sectors
  - Compliance monitoring for facilities with effluent guidelines (e.g. sand and gravel)
  - Visual monitoring for all sectors
- Annual report requirement
- Electronic reporting available (eNOI)

# EPA MSGP RESOURCES

- EPA SWPPP guide
- SWPPP template (MS Word)
- Industrial sector fact sheets
- Recordkeeping template
- Annual report form
- Monitoring guide
- <http://cfpub.epa.gov/npdes/stormwater/msgp.cfm>




EPA 833-B-09-002



## Developing Your Stormwater Pollution Prevention Plan

### A Guide for Industrial Operators

February 2009



**EMERGENCY SPILL CONTAINMENT SUPPLIES**

**CONTENTS:**

1. Containment Dam
2. Absorbent Socks
3. Containment Dike Material
4. Spill Response Material Bag
5. Pallet Shear

# CONSTRUCTION AT OIL AND GAS SITES

- 2005 Energy Act (construction stormwater permit exemption for most oil and gas exploration, production, treatment, processing and transmission facilities)
- Final EPA regulations of June 12, 2006
- November 2006 NRDC lawsuit
- Ninth Circuit opinion of May 2008 vacating June 2006 regulations
- Construction at oil and gas sites permitted under multi-sector general permit



# STORMWATER PHASE II MUNICIPAL PERMITS

- Small MS4s in urbanized areas (urbanized area consists of core city and urban fringe with population of 50,000 or more)
  - Maps of urbanized areas at:
    - <http://cfpub.epa.gov/npdes/stormwater/urbanmaps.cfm>
- Designated small MS4s outside urbanized areas with a population over 10,000

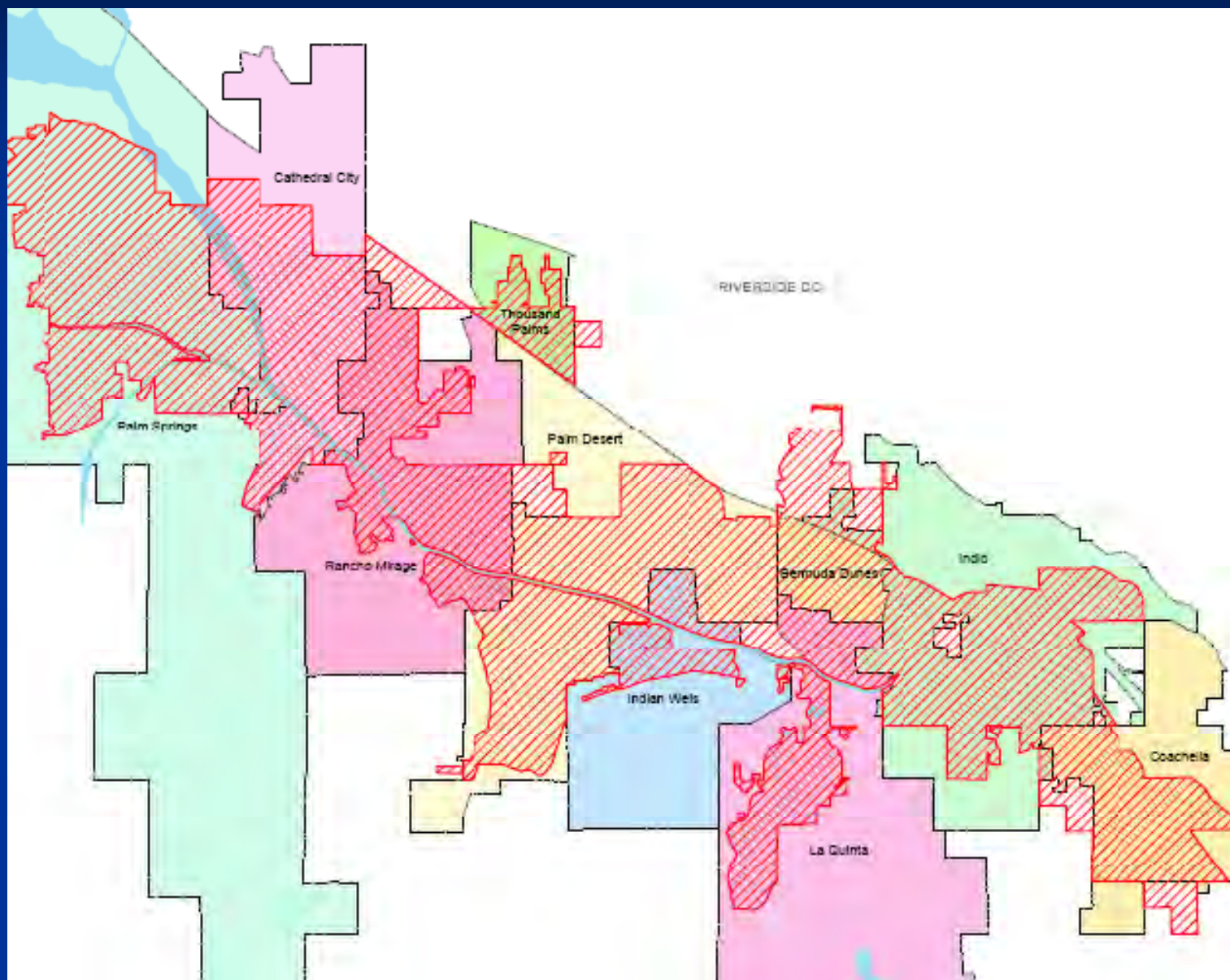




# MS4 PERMITTING FOR TRIBES IN REGION 9

- Ten tribes in Region 9 within urbanized areas and subject to permitting under Phase II regulations
  - Permit is discretionary if population < 10,000
  - Permit required if population > 10,000
- One Tribe (Agua Caliente) > 10,000 and received an MS4 permit in 2004
  - In 2011, Region 9 declined to reissue the permit since County operates the MS4
- Other Tribes not permitted at this time
- Requirements may change based on 2010 census

# PALM SPRINGS URBANIZED AREA





# STORMWATER MANAGEMENT PROGRAM REQUIREMENTS FOR PHASE II MS4s

- Six minimum requirements:
  - Public education/outreach
  - Public involvement
  - Illicit discharge elimination
  - Construction site erosion control
  - Post-construction storm water management
  - Good housekeeping/pollution prevention for municipal operations

# Stormwater Rulemaking

- EPA has initiated a national rulemaking to reduce stormwater discharges from, at a minimum, new development and redevelopment projects and otherwise strengthen the stormwater program.
- Notice of proposed rulemaking on December 28, 2009 (74 FR 68617).
- Rulemaking is in response to the 2008 National Research Council (NRC) report on stormwater management in the U.S.

# Rulemaking Considerations

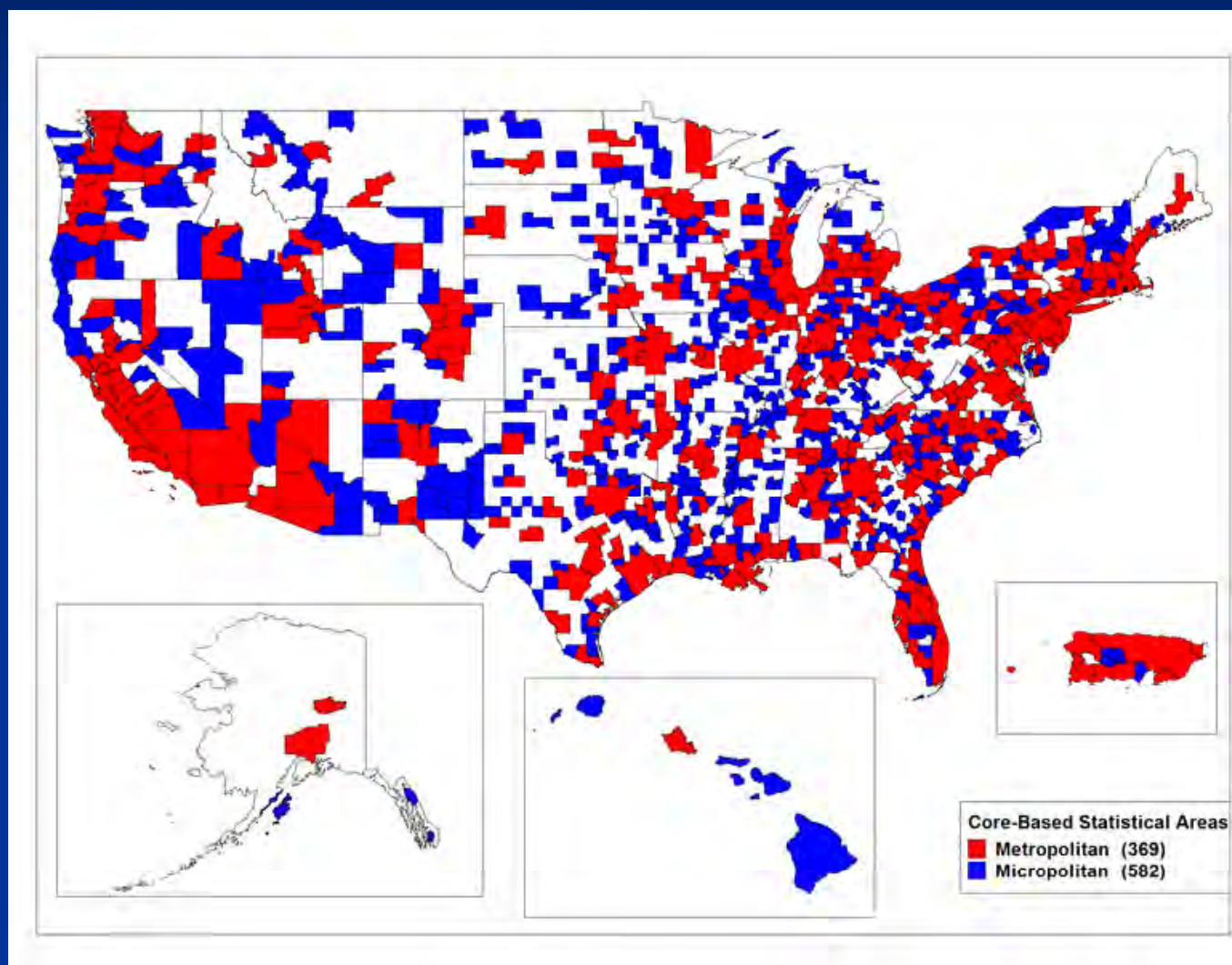
- Six principal rulemaking considerations:
  - Expand the MS4 area subject to stormwater regulation
  - Establish specific requirements to control stormwater from new development and redevelopment
  - Require MS4s to address existing stormwater discharges through retrofitting
  - Develop a single set for requirements for all MS4s (Phase I/II)
  - Special requirements for transportation facilities (e.g. state highway departments)
  - Specific provisions for the Chesapeake Bay.

# Expand the MS4 Areas?



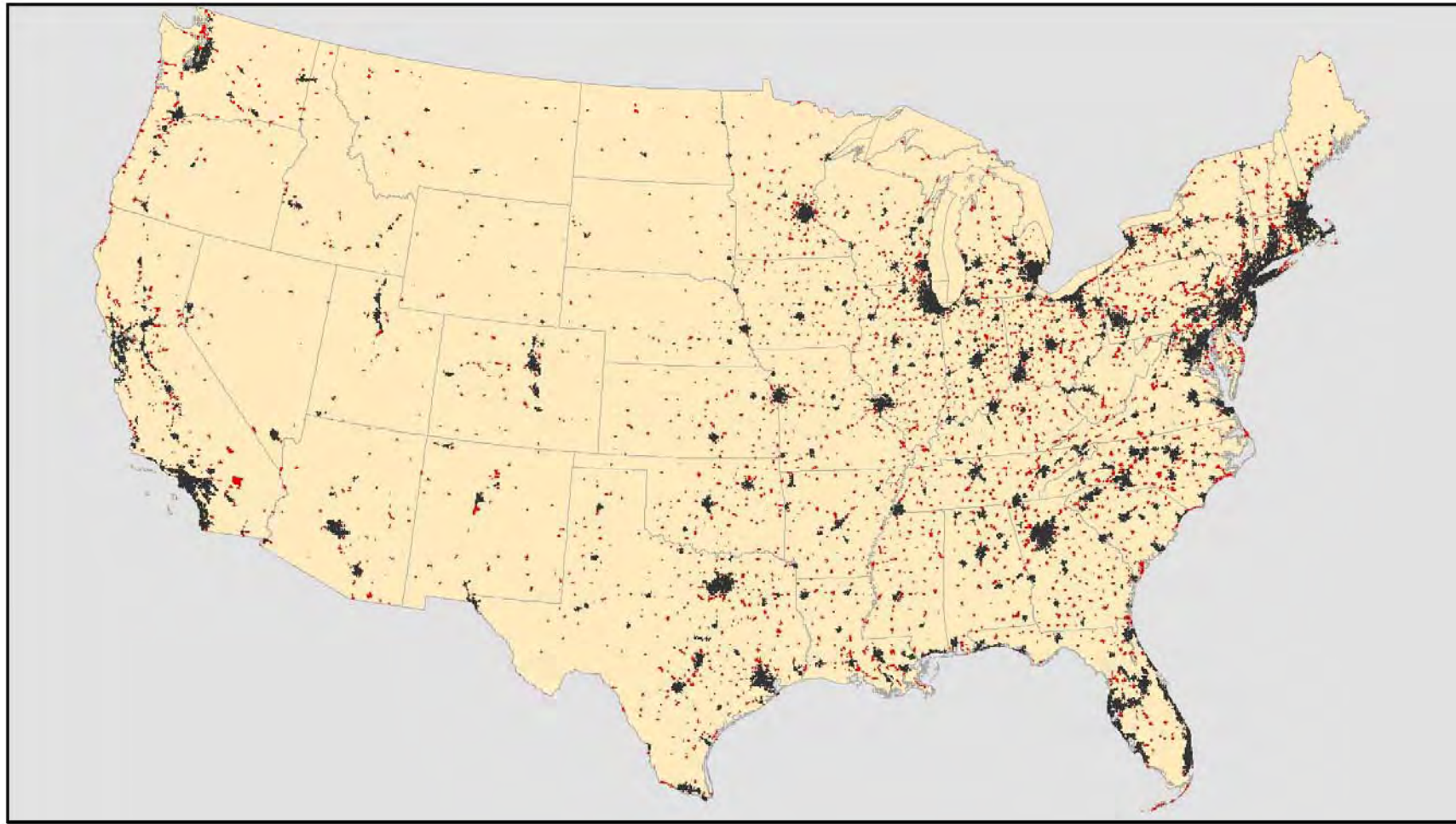
- Regulated small MS4s limited to urbanized areas as defined by the Census Bureau.
- Federal regulations cover only 2% of U.S. land, which is where most development is occurring outside this area.
- What is the best way to expand the universe? County boundary? Size of Development?

# Metropolitan Statistical Areas





# Urbanized Areas and Clusters



# Post-Construction Requirements for New and Redevelopment

- Options under consideration
  - For new development, manage runoff onsite from a design storm (e.g., 85% or 95% storm) thru green infrastructure practices that infiltrate, evapotranspire, or harvest/reuse the excess discharge volume.
  - Lower standard for redevelopment
- Alternative compliance options for sites where onsite retention is not feasible.
  - Off-site mitigation
  - Payment into in lieu programs.

# Green Infrastructure Practices to Mimic Natural Conditions



# Retrofitting Controls into Existing Development

- Should EPA consider retrofit requirements in MS4 permits?
  - Develop a retrofit plan?
  - Start with large MS4s?
  - Limited to impaired waterbodies?
- Stormwater from developed areas is a significant source of water quality impairments.

# Stormwater Rulemaking Schedule

- September 2011 – proposed rule
- November 2012 – final rule