

National Association of Home Builders

# Stormwater: National Perspectives on a Flowing Problem

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# Stormwater: National Perspectives on a Flowing Problem

- **Presentation Overview**
  - New Level of Interest and Focus
  - Initiatives in the Pipeline
  - Other Considerations

# Stormwater:

## New Level of Interest and Focus

- **Change in Administration.**
- **Increased pressure to improve sustainability/be green.**
- **Many waterbodies impaired by stormwater pollution.**
- **Litigation.**
- **New studies, such as the National Research Council Report on Urban Stormwater Management, which pushes EPA to develop improved stormwater regs.**
- **Proximity and problems of Chesapeake Bay.**

# Stormwater:

## What's In The Pipeline?

- **In General**
  - Waters of the U.S. Guidance
  - Increasingly stringent requirements for federal properties
- **Effluent Limitation Guidelines**
- **Construction General Permit**
- **Post-Construction Rule**

# What's In The Pipeline?

## In General

- **Waters of the U.S. Guidance**

- In next attempt to address *SWANCC & Rapanos*, EPA and Corps proposed new Guidance in May 2011.
- Guidance supersedes 2008 guidance and applies to all CWA programs, not just 404.
- Agencies admit Guidance will expand areas deemed jurisdictional under the CWA.
- Guidance basically says that most any water feature can be deemed to have a significant nexus if it has hydrologic or ecologic connection.
- Agencies expect to proceed with rulemaking, but timing uncertain.
- Small business meeting held Oct. 12.

# What's In The Pipeline?

## In General

- **Waters of the U.S. Guidance: Tributaries/Ditches**
  - Anything with bed, bank, OHWM = tributary = jurisdictional.
  - Nontidal ditch with bed, bank, OHWM connected to a TNW or IW and with relatively permanent flow = jurisdictional (relatively permanent = seasonal flow = predictable flow during wet seasons).
  - “Generally” not jurisdictional = erosional features (rills, gullies) and swales/ditches that are not tributaries or wetlands.
  - Other storm/wastewater management facilities (ponds, drainage systems, process water conveyances, etc) = could be jurisdictional unless system specifically built as waste treatment system.

# What's In The Pipeline?

## In General

- **Waters of the U.S. Guidance/Trad. Nav. Waters**
  - NAHB lawsuit challenging the Corps' determination that the Santa Cruz River is a TNW.
  - Oral arguments held Sept. 11, 2011/Decision expected???
- **Why WOTUS/TNW Designation Important?**
  - Determines limits of federal (and state) authority.
  - Invokes a slew of actions states must take under the CWA (WQ inventory, WQ standards, WQ cert, TMDLs, etc.).
  - Determines when permits are required (402 and 404).

# What's In The Pipeline?

## In General

- **Increasingly Stringent Federal SW Requirements**

- 2007 Energy Independence and Security Act requires federal development/redevelopment projects to restore or maintain predevelopment hydrology where feasible.
- Similar requirements seeping into state & local programs:
  - St. Johns River WMD, FL: post dev peak rate cannot exceed pre dev peak rate for mean annual 24 hr rain.
  - Maryland: post const flow = “woods in good cond.”
  - Santa Monica, CA: reduce projected runoff by 20%.

# What's In The Pipeline?

## Effluent Limitation Guidelines (ELGs)

- ELGs are national technology-based standards designed to limit the amount of pollutants in wastewater that is discharged from specific industries.
- In 2004, EPA determined an ELG for the construction industry was not needed because “construction site stormwater discharges are already being adequately addressed through the existing program.”
- Further, EPA’s Permit Writer’s Manual states “Because the nature of stormwater discharges, it is infeasible to use numeric ELs to demonstrate the appropriate levels of control. In such situations, the CWA authorizes EPA to include non-numeric ELs in NPDES permits.”

# What's In The Pipeline?

## Effluent Limitation Guidelines (ELGs)

- NRDC disagreed, and through litigation, a court ordered EPA to issue a final ELG by Dec. 1, 2009.
- EPA finalized an ELG for the construction industry in Dec. 09.
- The ELG included Best Management Practices and a turbidity limit of 280 NTU for larger sites (20 acres until 2014, then it drops to project disturbing 10 or more acres).
- The ELG requirements will be added into the NPDES stormwater permits increasing the complexity of the existing regulation.

# What's In The Pipeline?

## Effluent Limitation Guidelines (ELGs)

- **Non-Numeric Requirements**

- Erosion and Sediment Control Measures
- Pollution Prevention Practices
- Soil Stabilization
- Dewatering
- Surface Outlets

- **Numeric Requirements**

- Turbidity Limit
- Sampling Requirement

- Initial turbidity limit of 280 NTU almost impossible for many sites to meet – will require chemicals to reduce pollutants and will be very costly.



# What's In The Pipeline?

## Effluent Limitation Guidelines (ELGs)

- Throughout the rulemaking process, NAHB and others highlighted an array of problems with the data and considerations the agency used to support the rule:
  - One-Size-Fits-All Approach
  - Passive vs. Active Treatment
  - Cost/Benefit Analyses:
    - EPA estimated \$953 million/yr, SBA estimated \$9.7 billion.
    - Costs for operators/dischargers will be nearly \$11,000/acre instead of EPA's estimated \$1,518.
    - Admin costs for state/local govts estimated to be \$38 million and \$10 million, respectively.

# What's In The Pipeline?

## Effluent Limitation Guidelines (ELGs)

- **Monetized benefit of ELG:**
  - \$369 million/year benefit
  - \$953 million/year cost (EPA's estimate)
  - \$9.7 billion/year cost (NAHB's estimate)
  - = worst cost/benefit ratio of any rule since SBA started keeping track
- EPA admits regulation of C&D stormwater through the ELG will control less than 0.25% of all total sediment runoff.

# What's In The Pipeline?

## Effluent Limitation Guidelines (ELGs)

- Shortly after the ELG was finalized, NAHB/HBAWI sued EPA.
- In April 2010, SBA/NAHB submitted petitions asking EPA to reconsider the rule due to EPA's misrepresentation of data.
- In July, EPA admitted there were flaws in the final rule and that the agency had improperly interpreted some data.
- In August, the 7<sup>th</sup> Circuit Ct of Appeals remanded the limit and the record and directed EPA to develop a new numeric limit.

# What's In The Pipeline?

## Effluent Limitation Guidelines (ELGs)

- In January 2011, EPA stayed the 280 NTU limit and said it would develop a *NEW* numeric effluent limit rule by June 2011.
- In August, EPA admitted it did not have sufficient valid data to support a new numeric limit and indicated it would collect more data from the public.
- EPA has since backed off of this approach and it is not certain what its plans are.
- Two things are clear: 1) if EPA wishes to develop a new numeric limit, it must gather sufficient credible data; and 2) there will NOT be a numeric limit included in EPA's CGP that is scheduled to be finalized by Feb. 2012.

# What's In The Pipeline?

## Effluent Limitation Guidelines (ELGs)

- Importantly, the numeric limit is not the only subject of NAHB's lawsuit:
  - Internal processes.
  - Applicability to frozen/small sites.
  - Use of chemicals.
  - Cost/benefit and significant economic impact on a substantial number of small entities.

# What's In The Pipeline?

## Effluent Limitation Guidelines (ELGs)

- **Moving Forward:**
- EPA is not required to adopt a numeric ELG.
- EPA could establish that the BMPs = ELG.
- EPA could adopt an “action level” approach, under which a facility that exceeds a benchmark (action) level must reevaluate and possibly revise BMPs to minimize discharge.
- The court will revisit the lawsuit in Feb. 2012 to determine next steps.

# What's In The Pipeline?

## Construction General Permit (CGP)

- NPDES permit required for any construction project that disturbs 1 or more acre of land.
- Must apply for and obtain permit coverage prior to breaking ground by submitting a Notice of Intent (NOI).
- Vast majority of construction projects covered by a Construction General Permit (CGP).
- CGPs must be reissued every 5 years.
- EPA's CGP is currently being revised and covers construction activities in MA, NH, NM, ID, DC, Puerto Rico, the territories, and Indian Country lands.

# What's In The Pipeline?

## Construction General Permit (CGP)

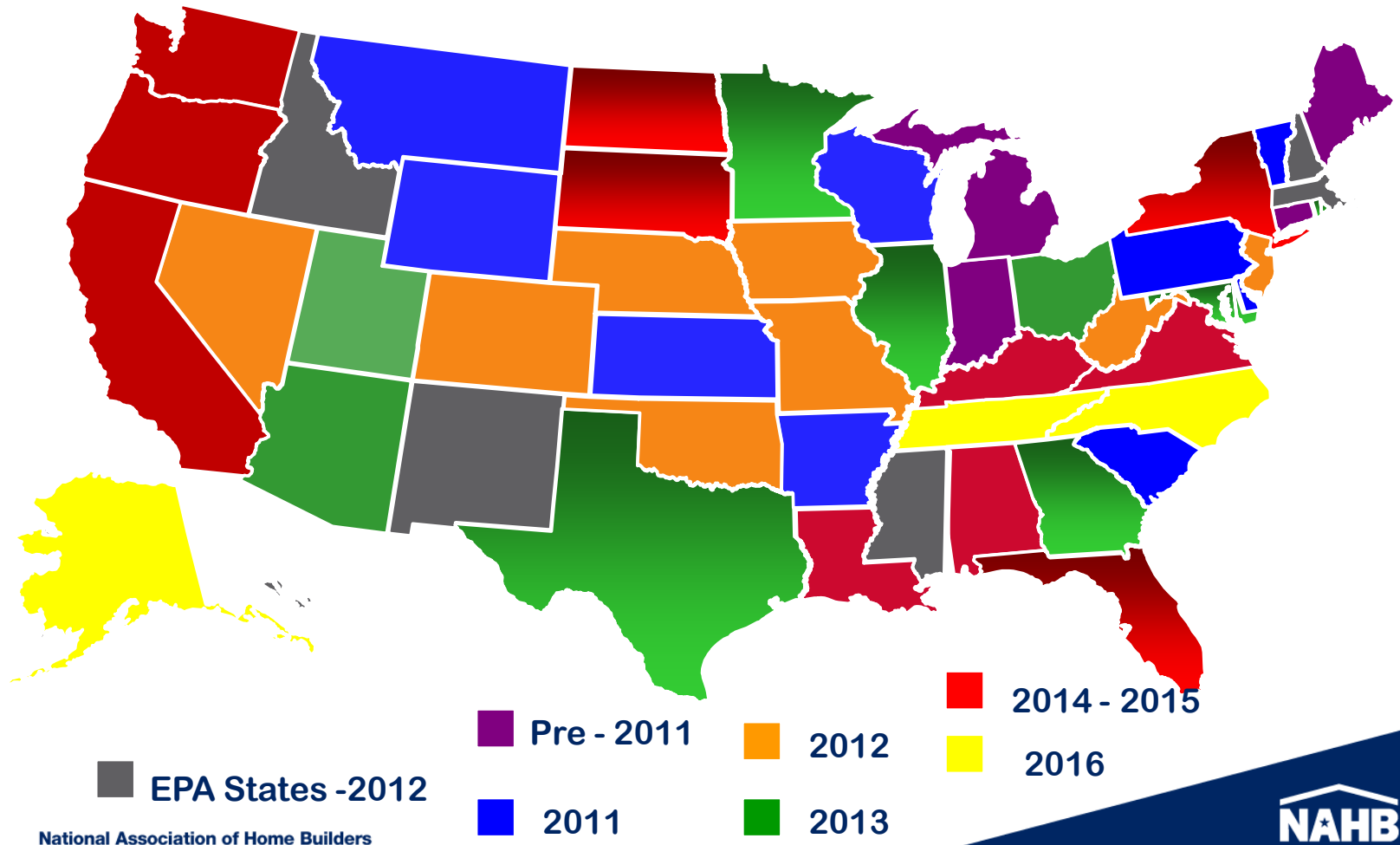
- EPA proposed a new CGP in April 2011.
- The CGP is important because it is the vehicle for incorporating the new ELG requirements into NPDES permits and provides the delegated states with a model for how they should do so.
- Lacking a valid numeric limit, EPA has inserted a placeholder that it will fill in once it completes its new rule.
- EPA has also proposed BMPs that are more stringent than the final ELG (buffers, steep slopes, stabilization, etc.)

# What's In The Pipeline?

## Construction General Permit (CGP)

- In addition to the requirements to incorporate the ELGs, one significant change is particularly problematic:
  - Benchmark monitoring for discharges into impaired waters.
- The existing CGP expires in February 2012.
- Delegated states must incorporate the ELG requirements into their permits during their next scheduled reauthorization.
- Because there currently is no numeric limit, states are not required to include one when they update their permits.

# Construction General Permit (CGP) Reauthorization Schedule



# What's In The Pipeline?

## Post-Construction Rule

- National Academy of Sciences 2008 study and *Chesapeake Bay Foundation v. EPA* led to rule.
- EPA predetermined the outcome.
- EPA data gathering efforts:
  - Held Listening Sessions.
  - Information Collection Requests (state and local government and industry).
  - Meeting with Small Entity Representatives (SBREFA-like).
  - Compiled state and local government performance standards for stormwater requirements available on EPA's website.

# What's In The Pipeline?

## Post-Construction Rule

- **EPA's Current Thinking (as of this summer)= 3 Parts:**
  1. Develop a performance standard from newly developed and redeveloped sites to address stormwater management as projects are built.
  2. Evaluate options for establishing and implementing a municipal program to reduce discharges from existing development (retrofit).
  3. Explore option for expanding the protections of the municipal separate storm sewer systems (MS4) program.

# Post-Construction Rule

## Part 1: New Development and Redevelopment

- **EPA's Current Thinking:  
Establish performance standards**
  - New Development
    - Control a specific percentile storm (85-95% rainfall event) = RETAIN ON-SITE.
  - Redeveloped Sites
    - Control a lesser percentile stormwater than for new development.
  - Could apply standards to sites in MS4 and sites of a certain size outside of MS4.

# Post-Construction Rule

## Part 1: New Development and Redevelopment

- **Questions/Concerns:**

- MS4s already required to have a post construction program for new development and redevelopment sites  $\geq 1$  acre – how is this different?
- It will be difficult to meet retention requirements on certain sites due to onsite limitations (esp. redevelopment).
- Long term operation and maintenance of post construction stormwater controls has not been considered.
- Funding sources must be established prior to implementation.
- Need to recognize existing state/local programs.

# Post-Construction Rule

## Part 2: MS4 Retrofits

- **EPA's Current Thinking:**
  - Develop plan with public comment that identifies long term goals, highest priority projects and milestones.
  - Integrate green infrastructure into projects already underway.
  - Implement plan through an iterative approach.
- **Could Apply to:**
  - MS4s serving 100,000 population or greater.
  - MS4s serving 50,000 population or greater.
  - All regulated MS4s.
  - Could allow exemptions where MS4 discharges do not cause or contribute to violations of water quality standards.

# Post-Construction Rule

## Part 2: MS4 Retrofits

- **Questions/Concerns:**
  - What authority is EPA relying on to require permits or otherwise mandate compliance for existing structures? (residual designation? New study under 402(p)5-6?)
  - Are retrofit requirements intended to apply only to MS4 operations or to private holdings, as well?
  - If only apply to MS4s, how address the legacy of stormwater pollution from all other existing development?
  - What is the timing of any expected retrofits and who will pay to have them done?

# Post-Construction Rule

## Part 3: Expanding the Scope of MS4s

- **EPA's Current Thinking:**

1. No change –Urbanized Area defined by Decennial Census.
2. Jurisdiction boundaries of the Phase II MS4 rather than urbanized area boundary.
3. Urbanized clusters as defined by Census with population limit.
4. Small watersheds that overlap w/ urbanized area w/ pop. limit.
5. Combination of 3 and 4
6. Principal Arterial Roads (Defined as a connected network of continuous routes which serve corridor movements of substantial statewide or interstate travel (based on trip length & travel density)).

# Post-Construction Rule

## Part 3: Expanding the Scope of MS4s

- **Questions/Concerns:**

- If the existing program already addresses the bulk of the population, why is this necessary – especially now?
- What will the timing of any new requirements be?
- Who will educate/train/provide experience and expertise to these newly-designated permittees?
- Which option gets to the greatest number of potentially problematic sites at the lowest cost?

# What's In The Pipeline?

## Post-Construction Rule

- **Current Status of Rulemaking:**

- EPA planning a report to Congress pursuant to CWA §402(p)(5)-(6), slated for summer 2011 (not done yet).
- EPA was to propose rule by Sept. 30, 2011; delayed to end of the year.
- EPA plans to finalize rule by November 19, 2012.
- EPA's website is [www.epa.gov/npdes](http://www.epa.gov/npdes) go to "Proposed Stormwater Rulemaking."

# Stormwater: Other Considerations

- Chesapeake Bay TMDL
- Federal Sustainability Efforts
- Regulatory Reform

# Other Considerations

## Chesapeake Bay TMDL

- CB has a watershed of 64,000 sq. miles/ million people.
- Affected Bay States (PA, MD, VA, NY, & DC) have been working on cleaning up the CB for almost 30 years.
- 2010 lawsuit is now forcing the development and implementation of a Bay-wide TMDL.
- On May 12, 2010, President Obama issued E.O. 13508 to implement a federal oversight restoration strategy.
- Will set the precedent for other nutrient reduction programs.



*Figure 1. Chesapeake Bay watershed and surrounding area.*

# Other Considerations

## Chesapeake Bay TMDL

- States expected to put forth the “Maximum Feasible Effort.”
- Very aggressive goals for stormwater programs, urban retrofit of impervious pavements, permits for existing properties, offsets for new growth, etc.
- Everything Everywhere by Everyone (E3).
- “Independent Evaluator” will monitor progress of each state and assess consequences/punishments for failure to meet goals, including insufficient funding.
- Very intrusive and costly, Tens of Billions of \$\$\$\$.
- Pollutant reductions need to almost double beyond what is achieved under existing rules.

# Other Considerations

## Federal Sustainability

- **Now, the federal government has gotten on the sustainability bandwagon ...**
  - Obama's livability principles.
  - Unprecedented Sustainable Communities partnership between HUD, DOT, and EPA.
  - Clear tie to upcoming reauthorization of federal transportation bill.
  - Federal intrusion into local land use planning.

# Other Considerations

## Federal Sustainability

- **In general, these efforts are aimed at:**
  - Greening new growth and steering development towards existing communities and infrastructure.
  - Putting the assumptions that denser is better and transit more efficient into play.
  - Getting people to drive less for climate, health, and affordability reasons.
- **In addition, they represent an increased federal role in “incentivizing” state and local land use approaches through numerous new grant programs.**

# Other Considerations

## Federal Sustainability

- **Example: “Strategic Agenda to Protect Waters and Build More Livable Communities Through Green Infrastructure” – EPA, April 2011**
- Five objectives to encourage green infrastructure: Community partnerships; Clarifying green infrastructure within the regulatory and enforcement contexts; Outreach and information exchange; Financing; and Tool development and capacity building
- Several communities have received grants to develop innovative stormwater management techniques.
- 2011 recipients include Austin, Denver, Los Angeles.

# Other Considerations

## Federal Sustainability

- **Questions/Concerns**

- Many of these programs fail to address the full range of policy/community goals (housing options, healthy environment, proximity to jobs, demographics, etc.).
- Stormwater requirements more costly and burdensome in urban areas and do not fit well into high-density environs.
- Affordability of stormwater controls often a second thought.
- Some projects may not be feasible or affordable without adequate off-site alternatives or trading for compliance.
- Not everyone wants to live in the city.
- Yet MS4s will continue to be pressured to demonstrate sustainability.

# Other Considerations

## Regulatory Reform

- In 2010, more than 80,000 pages of regulations in FR.
- Every year about 200 sig rules are finalized. In 2010, there were 224 major rules at various stages at the agencies.
- Annual cost of federal regulation reached \$1.75 trillion in 08 – the equivalent of \$15,586 per household.
- 547 of the regulations identified by the 2010 Regulatory Agenda will affect state govts and 346 will affect local.
- Small firms pay 40% more in compliance costs than larger firms (the same is likely true for sm municipalities).

# Other Considerations

## Regulatory Reform

- Many efforts currently underway to create a government that is more user-friendly, transparent, and open:
  - Executive Order 13563 *Improving Regulation and Regulatory Review*
  - *Memorandum on Regulatory Flexibility, Small Business, and Job Creation*
  - Various Congressional Efforts
    - Transparency in Regulatory Analysis of Impacts on the Nation (TRAIN) Act
    - Regulation Moratorium and Jobs Preservation Act of 2011

# Other Considerations

## Regulatory Reform

- Each agency has developed a preliminary list of regulations they will review with an eye toward modifying, streamlining, expanding, or repealing them in accordance with what has been learned.
  - A major focus of these efforts is to reduce regulatory burdens.
  - While these directives have not resulted in radical changes in the way the agencies operate, it has demonstrated that “someone is watching” and that they need to be careful as they consider, propose, and adopt new policies and regulations.
- = There is a short term window of opportunity to raise a ruckus about overall regulation.**

# Stormwater

## Epilogue

- Stormwater regulation will remain fast and furious with little coordination or collaboration among programs.
- States will continue to play games of one-upsmanship while construction operators and MS4s struggle to comply and the environment experiences limited benefit.
- The Court action will remain steady (or increase, if possible) and they will defer to the agencies' 'expertise' and allow EPA extensive leeway to do what it believes is necessary and within their realm of authority.
- EPA will continue to ratchet down, expand its reach, and ignore the data (including economic) in its never ending quest to rule the world.



# Questions?

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