



**Maryland Department of the Environment**

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## MDE 2014 Regulatory Update

### Overview of Regulatory Changes Impacting the Utility Industry in Maryland

**Presentation to the MD-DC Utilities  
Association  
October 21, 2014**



# 12 Month Look Ahead

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- 2014 Legislative Update
- Chesapeake Bay TMDL – WIP
- Proposed Regulatory Program Changes – Water Management
- Waters of the US
- Other Updates



# 2014 Legislative Session

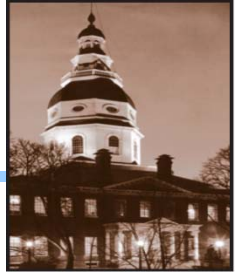


- 20 Bills introduced to repeal or modify the Watershed Protection and Restoration Program Act of 2012. All failed to pass.
- The BRFA of 2014, Senate Bill 172 (passed), authorizes Carroll and Frederick counties to enter into a memorandum of understanding with the Maryland Department of the Environment (MDE) to develop an alternative source of financing, instead of a stormwater remediation fee, for the purpose of meeting the requirements of each jurisdiction's federal stormwater permit.



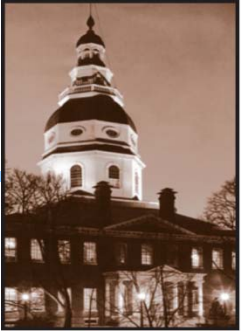


# 2014 Legislative Session



- House Bill 987 requires Phase I MS4 counties to establish an annual stormwater remediation fee and a local watershed protection and restoration fund.
- House Bill 11 (Ch. 80) gives local governments more flexibility in using Septics Account funds to address their septic system needs. House Bill 12 (passed) requires that up to 10% of the funds in the Septics Account be distributed to the local public entities delegated administration authority by MDE in order to cover reasonable administrative costs.
- Senate Bill 564/House Bill 834 increase, from \$5,000 to \$10,000, the maximum administrative penalty per violation, and increase, from \$50,000 to \$100,000, the maximum total penalty that may be imposed on a person for water pollution control violations.

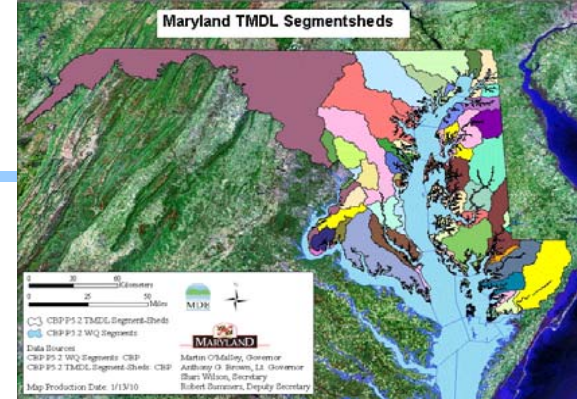




- House Bill 615 (passed) establishes a Coast Smart Council within DNR and, among other things, requires the council to develop specified “Coast Smart” citing and design criteria to address sea level rise and coastal flood impacts on capital projects.
- House Bill 118 (passed) establishes the Task Force to Study the Impact of Ocean Acidification on State Waters. The task force must analyze the best available science regarding ocean acidification and the potential effects of acidification on the ecology of State waters and fisheries and make recommendations regarding potential strategies to mitigate the effects of acidification.

# Chesapeake Bay TMDL

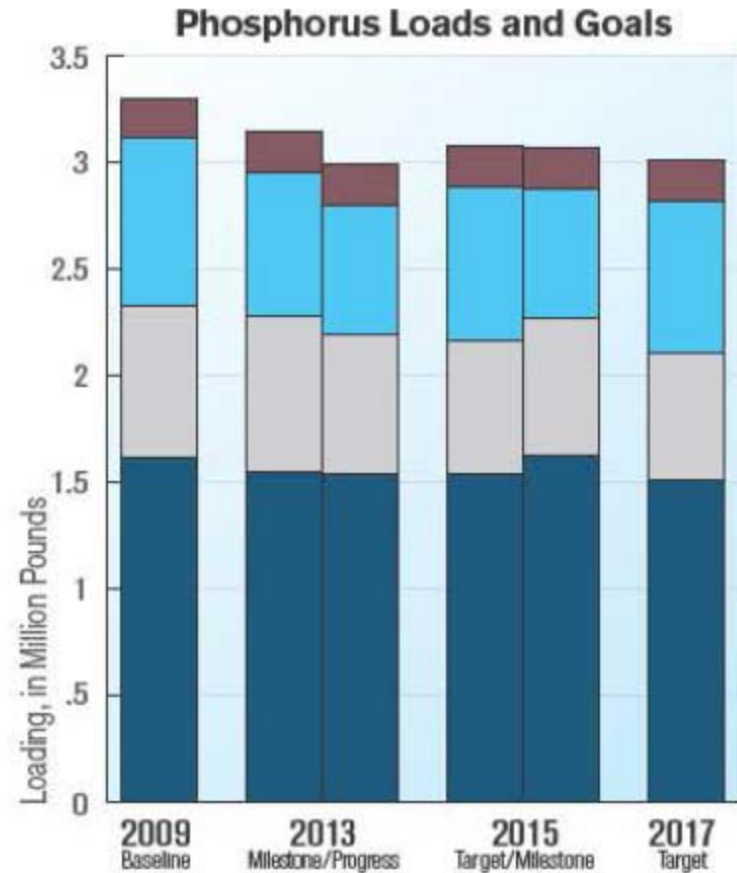
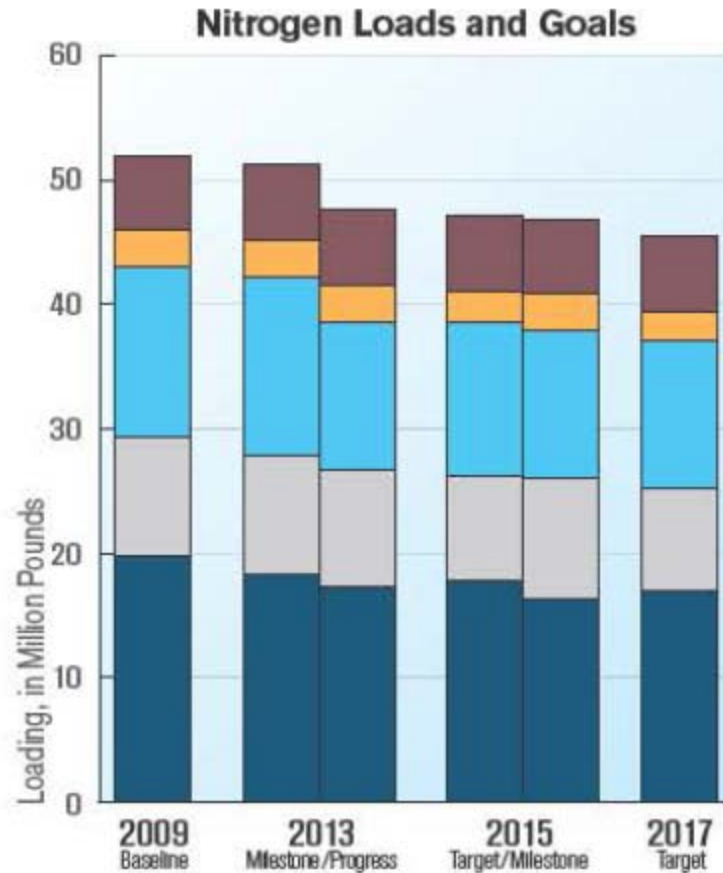
- The Accountability Framework requires the six states and DC to reach 60% of their WIP restoration targets by 2017 and 100% by 2025. (Measured from the year 2009)



	2013 Progress Toward 2025 Targets	
Sector	Nitrogen	Phosphorus
*Agriculture	58%	32%
*Urban Runoff	0%	34%
Wastewater + CSO	57%	156%
*Septic	2%	
All Sectors	41%	62%

- \*Pace of urban runoff and septic systems influenced, in part, to growth and implementation cost
- Atmospheric reductions already credited
- Statewide on track for 2017

# Nutrient Reduction Progress



# Milestone Progress

- 2012 – 2013 Milestones

- Maryland more than met its nitrogen, phosphorus and sediment reduction goals for the two year milestone period
- In large part due to record cover crops planted, wastewater treatment plant upgrades and Fertilizer Use Act of 2011
- Ahead of schedule
- Achieved both statewide and sector milestone goals

- 2014 – 2015 Milestones

- On track to meet the key 2017 target of having practices in place to achieve 60% of the reductions necessary to obtain water quality standards in the Chesapeake Bay
- Stormwater and Septic sector pace



# Water Program Regulatory Updates

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- NPDES General Permit for Stormwater Associated with Construction
- NPDES Industrial Stormwater General Permit
- State implementation of federal mitigation rule for In-Lieu Fee
- 316 (B) Cooling Water Intake Structures

# 316 (B) Cooling Water Intake Structures

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- Clean Water Act Section 316(b) regulates “cooling water intake structures,”
  - beginning at the location where water is first withdrawn from Waters of the United States and
  - up to and including intake pumps and constructed waterways.
- New regulations became effective October 14, 2014, for existing power plants and manufacturing facilities which
  - Include a Design Intake Flow (DIF) of 2 million gallons per day or higher AND
  - Utilize 25 percent or more of the intake flow exclusively for cooling purposes.
- Note: A variety of related rules were adopted by EPA for new facilities beginning in 2001 and other rulemakings regarding existing facilities were promulgated and then remanded due to court actions

- “Existing Facilities” Rule addresses
  - impingement (organisms being pinned against cooling water intake structures) and
  - entrainment (being drawn into cooling water systems and affected by heat, chemicals or physical stress).

- Entrainment Obligations
  - Any facility with an Actual Intake Flow of 125 million gallons per day or higher must submit an entrainment study consisting of a minimum of 2 years of collected data.
  - The regulations do not list specific methods of compliance with entrainment, instead leaving this up to the best professional judgment of the NPDES permit writer.
  - The permit writer shall also determine submission requirements for facilities with intake flows beneath the 125 million gallon threshold.

- Impingement Obligations
  - All facilities subject to the rule must select one of seven alternatives
  - These alternatives include things such as
    - reduction of intake flow volumes or velocities,
    - installation of specific modified travelling screens,
    - reduction of impingement mortality to a standard of below 24 percent, or
    - a demonstration that the technologies in place represent best technology available, (must be approved by the State).

# Waters of the U.S.

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- Proposed rulemaking April 21, 2014 to clarify definitions of “Waters of the United States” under the Clean Water Act.
- Purpose of rulemaking is to clarify jurisdictional definitions in response to Supreme Court rulings (SWANCC v. USACOE, Rapanos v. United States)
- EPA Connectivity study under internal review.
- Comment period extended from October 20 to November 15, 2014.

# Unchanged Categories of Jurisdiction Waters

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- 1) Traditional navigable waters.
- 2) Interstate waters, including interstate wetlands.
- 3) The territorial seas.
- 4) Impoundments of traditional navigable waters, interstate waters (including interstate wetlands), and tributaries, as defined, of such waters.
- 5) Tributaries of a traditional navigable water, interstate water, the territorial seas or impoundment.

# Categories Changed under the proposed rule.

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- 6) **Adjacent waters** - all waters, including wetlands, adjacent to a traditional navigable water, interstate water, the territorial seas, impoundment or tributary. This category replaces and expands upon the previous category of “adjacent wetlands,” and largely accounts for the projected 3% increase in jurisdiction put forth in the EPA/Corps March, 2014 report, Economic Analysis of Proposed Revised Definition of Waters of the United States.
- 7) **Other waters** – waterbodies not covered by the first six categories waters and that may or may not share a “significant nexus” to navigable waters



## “Other Waters”

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- This category replaces the previous category that included as jurisdictional all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: which are or could be used by interstate or foreign travelers for recreational or other purposes; from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or which are used or could be used for industrial purposes by industries in interstate commerce.
- These waters would only be regulated if a case-by-case analysis determines that they — alone or in combination with other similarly situated waters located in the same region — share a **significant nexus** to a downstream traditional navigable water, interstate water or territorial sea. (See below for new definition of significant nexus.)

# “Significant Nexus”

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- *this term indicates that a water, including wetlands, either alone or in combination with other similarly situated waters in the region (i.e., the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section), significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (a)(1) through (3) of this section. For an effect to be significant, it must be more than speculative or insubstantial. Other waters, including wetlands, are similarly situated when they perform similar functions and are located sufficiently close together or sufficiently close to a “water of the United States” so that they can be evaluated as a single landscape unit with regard to their effect on the chemical, physical, or biological integrity of a water identified in paragraphs (a)(1) through (3) of this section.*



# Exempted Waters

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- 1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act.
- 2) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act the final authority regarding Clean Water Act jurisdiction remains with EPA.
- 3) Ditches that are excavated wholly in uplands, drain only uplands, and have less than ***perennial*** flow.
- 4) Ditches that do not contribute flow, either directly or through another water, to a water identified in paragraphs (a)(1) through (4) of this section.

# Exempted Waters cont'd

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The following features:

- (i) Artificially irrigated areas that would revert to upland should application of irrigation water to that area cease;
- (ii) artificial lakes or ponds created by excavating and/or diking dry land and used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- (iii) artificial reflecting pools or swimming pools created by excavating and/or diking dry land;
- (iv) small ornamental waters created by excavating and/or diking dry land for primarily aesthetic reasons;
- (v) water-filled depressions created incidental to construction activity;
- (vi) groundwater, including groundwater drained through subsurface drainage systems; and
- (vii) gullies and rills and non-wetland swales.

# Ditches

- Ditches not excluded under paragraphs (b)(3) and (b)(4) of the proposed regulation meet the definition of tributary where they have a bed and banks and ordinary high water mark and they contribute flow directly or indirectly through another water to (a)(1) through (a)(4) waters. Such jurisdictional ditches may include, but are not limited to, the following:
  - natural streams that have been altered (e.g., channelized, straightened or relocated);
  - ditches that have been excavated in “waters of the United States,” including jurisdictional wetlands;
  - ditches that have perennial flow; and
  - ditches that connect two or more “waters of the United States.”
- Previous EPA/Corps guidance on CWA jurisdiction after Rapanos only exempted ditches that are excavated wholly in uplands, drain only uplands, and do not carry a relatively permanent flow of water. This left intermittent/seasonal ditches in uplands protected

# Ditches cont'd

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## From EPA/ACOE WOTUS Q & A Document

19. Will the proposed rule expand CWA jurisdiction over ditches, canals, and similar man-made channels?

ANSWER: No. The proposed rule would reduce jurisdiction over ditches currently covered by the CWA. For example, the rule would exclude ditches constructed on dry land and that flow less than year round. This would exclude from CWA protection, for example, many roadside ditches and irrigation ditches. Simply put, if a ditch is not constructed through a wetland or a stream, and if it doesn't flow year round, it would not be included in the jurisdiction of the CWA. Where a ditch is constructed through a wetland or a stream and connects to a navigable water, it will be treated the exact same way it was treated before this proposal. ditches in uplands protected

# Impact in Maryland

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- Changes to Definitions Should Improve Clarity Over Which Waters Are Under Federal Jurisdiction
- Historically Corps of Engineers in Maryland has asserted broad jurisdiction over most waters and wetlands
- *MDE does not anticipate an increase in waters under federal jurisdiction*
- Maryland's State Authorities Over Wetlands, Waterways, and 100-Year Floodplains Are Unchanged
- Potentially fewer waters in Maryland could be regulated under Section 404
- There will be no effect on MDSPGP from proposed definition changes

# Other Updates

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- National Stormwater Rule
- Steam Electric Effluent Limit Guidelines
- Marcellus Shale
- Responsible Party Certification





# National Stormwater Rule

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- September 2012: Original Due Date for Final Rule
- June 2013 – New date for release of proposed rule.
- December 2014 – Proposed Date for Final Action
- **March 2014 – EPA defers further action on the Rule**





# Steam Electric Effluent Guidelines

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- June 7, 2013 EPA published proposed rulemaking pertaining to revisions to the “Steam Electric Effluent Guidelines.
- The public comment period on the proposal closed on September 20, 2013.
- EPA is reviewing public comments on the proposal and shall sign a final action no later than September 30, 2015 per a legal action by the Sierra Club.
- Proposal allows for delayed implementation of up to 8 years



# Steam Electric Effluent Guidelines

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- Includes four preferred regulatory options that differ in the number of waste streams covered, size of the units controlled and stringency of controls.
  - In particular, proposed options differ in their treatment of FGD (flue gas desulfurization) waste and bottom ash.
  - For some waste streams (e.g., FGD wastewater), water treatment technologies can be used to remove pollutants.
  - For other waste streams (e.g., fly ash transport water), industry can achieve “zero discharge” by switching to dry handling or a closed loop system that recirculates the water.
  - Depending on the preferred regulatory option, 66-200 facilities with coal fired units may incur compliance costs (approximately 6-19% of all steam electric power plants).
  - Under all regulatory options, all gas, nuclear, oil, and small ( 50 MW or smaller) generating units will not incur compliance costs for the proposed revisions.

# Executive Order June 2011

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- Purpose: help State policymakers and regulators determine whether and how gas production from the Marcellus shale in Maryland can be accomplished without unacceptable risks
- Studies to be done by MDE and DNR in consultation with an Advisory Commission
- Charge: Look at long-term, short-term and cumulative impacts of shale gas development

# Three Reports

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- Sources of Revenue and Standards of Liability (December 2011)
- Interim Final Best Practices (July 2014)
- The Final Report (Fall 2014)

# Subsidiary Studies

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- Outside contractors
  - Survey of Best Practices in other states
  - Economic Impacts
  - Health Impacts
- Agency studies
  - Air emissions
  - Recreational and aesthetic resources in western Maryland
  - Risk Assessment
  - Traffic

# Next Steps

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- After close of comment period, issue final risk assessment
- Prepare final report integrating all information
- Make findings and recommendations
- Submit report to Governor and General Assembly
- If appropriate, draft regulations to govern high volume hydraulic fracturing



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## Responsible Personnel Training for Erosion and Sediment Control

Maryland Department of the Environment

Water Management Administration

This course is presented in two parts with several subsections under each. Part 1 introduces Maryland's unique natural resources, the erosion and sediment control process, and State requirements. Part 2 covers the erosion and sediment control practices found in the MDE's handbook the *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*.





# Questions?