

Key Updates on Water Quality Regulation Affecting Virginia

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Overview

- **Shenandoah River Algae Litigation**
- **Chesapeake Bay TMDL Phase III Watershed Implementation Plan**
- **James River Chlorophyll a Criteria**
- **Ammonia Criteria**
- **James River PCB TMDL**
- **Executive Order 6**

Shenandoah River Algae Litigation

- Shenandoah and Potomac Riverkeepers and the Potomac River Smallmouth Club challenged EPA's approval of Virginia's CWA 303(d) list of impaired waters in U.S. District Court for the District of D.C.
- Claim Virginia failed to evaluate data and information showing impairments to the North Fork, South Fork, and main stem of the Shenandoah River and their tributaries due to algae blooms resulting from nutrient over-enrichment, and as a result failed to add the Shenandoah River to the impaired waters list
- Claim that EPA's approval of Virginia's Integrated Report violated the CWA because EPA relied on Virginia's determination that it is too challenging to apply Virginia's water quality standards to algal blooms
- EPA failed to require that the Shenandoah River be listed as impaired by excessive algae and also failed to promulgate a Total Maximum Daily Load (TMDL) for the pollutants causing the impairment in violation of its obligations under CWA § 303(d)(2)

Riverkeepers' Submissions



Shenandoah River Algae Litigation

- Potomac Riverkeeper and the Shenandoah Riverkeeper submitted public comments with evidence and pictures showing the extent of algal growth and its impairment of the Shenandoah River
- Allege violations of designated uses for recreation and aquatic life and the narrative water quality criteria supporting those designated uses
- DEQ classified seven assessment units totaling 25 miles of stream as Category 3C waters in the 2014 Integrated Report
 - Category 3C waters are waters for which there is “data collected by a citizen monitoring or another organization indicating water quality problems may exist but the methodology and/or data quality has not been approved for a determination of support of designated use(s).”
 - DEQ has committed to developing a field methodology to evaluate impacts of algal growth and will prioritize monitoring of these segments
- Ask the court to find that EPA’s approval of the 2014 Integrated Report was arbitrary and capricious, an abuse of discretion, and beyond EPA’s statutory authority under the APA

Shenandoah River Algae Litigation

- EPA argues that it was reasonable for it to rely on Virginia's determination that the data presented by Plaintiffs to support an impairment listing for the entire Shenandoah River was not a reliable basis for listing the entire river as impaired
- EPA states that it is lawful to rely on Virginia's judgment that additional information is needed to make an impairment determination and that Virginia has committed to taking further steps to evaluate the impacts of algae on the Shenandoah River
- The D.C. District Court upheld EPA's Approval of the 303(d) List on March 31, 2019.
 - DEQ evaluated the information that the groups submitted and properly excluded the data
 - EPA acted reasonably in deferring to DEQ's judgment that additional data and information collection is necessary before it could resolve the question of whether the waterbody was in attainment in light of Virginia's narrative criteria.
- Riverkeepers appealed to the D.C. Circuit May 31
- The fun continues!

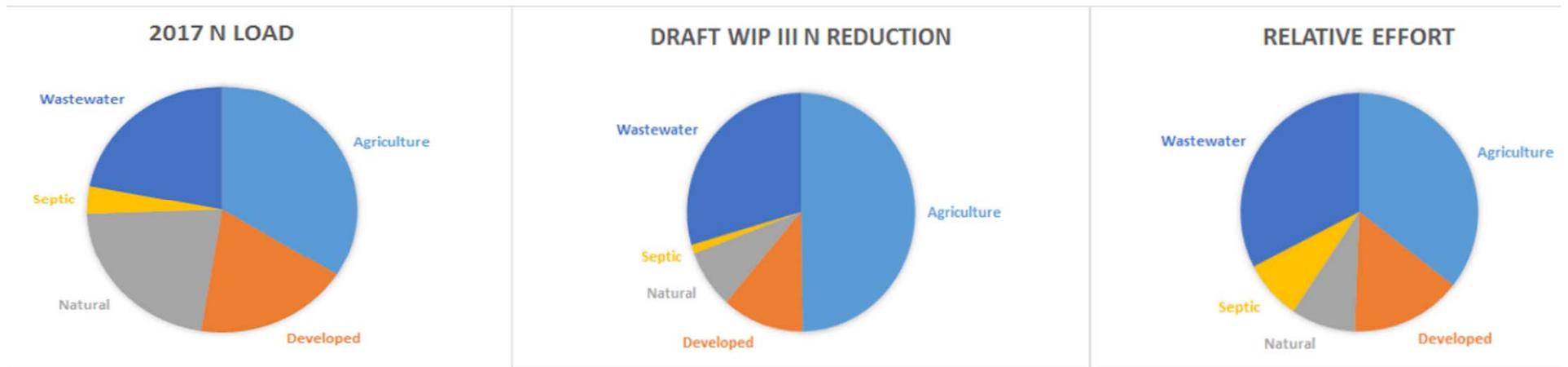
Chesapeake Bay TMDL Phase III Watershed Implementation Plan

- Virginia's Draft Phase III WIP is Virginia's road map for meeting the final Bay TMDL reduction goals by 2025
- Changes since previous WIP
 - Additional reductions to account for climate change (additional reductions of 9 million pounds of Nitrogen and 0.5 million pounds of Phosphorus needed by 2025 Bay wide; Virginia's share is expected to be 1.722 million pounds of Nitrogen and 0.193 million pounds of Phosphorus)
 - Accounting for growth (using 2025 population projections)
 - Agricultural BMP focus
 - Co-benefits
 - Intra- and Inter-basin exchanges of nitrogen and phosphorus as endorsed by the Chesapeake Bay Program Partnership
- New Initiatives (by sector)
 - Agriculture
 - Wastewater
 - Developed Lands
 - Septic Systems
 - 7 – Multiple Sectors

Basin	2017 Progress	2025 Basin Target	2017 Gap to Target	2017 Gap to Target + Climate Change
Potomac				
Nitrogen	17,109,000	16,000,000	1,109,000	1,729,000
Phosphorus	1,976,000	1,892,000	84,000	166,000
Eastern Shore				
Nitrogen	2,304,000	1,430,000	874,000	984,000
Phosphorus	174,000	164,000	10,000	15,000
Rappahannock				
Nitrogen	8,093,000	6,850,000	1,243,000	1,553,000
Phosphorus	910,000	849,000	61,000	88,000
York				
Nitrogen	6,225,000	5,520,000	705,000	905,000
Phosphorus	559,000	556,000	3,000	17,000
James				
Nitrogen	24,423,000	25,920,000	-1,497,000	-1,017,000
Phosphorus	2,503,000	2,731,000	-228,000	-169,000
Virginia				
Nitrogen	58,154,000	55,720,000	2,434,000	4,154,000
Phosphorus	6,122,000	6,192,000	-70,000	117,000

Chesapeake Bay TMDL Phase III Watershed Implementation Plan

The Draft Phase III WIP – Overview of Reductions



Chesapeake Bay TMDL Phase III Watershed Implementation Plan

- Agricultural New Initiatives
 - Update and Fully Fund the Virginia Agricultural BMP Cost Share Program; Cost Share and Technical Assistance
 - Reinstate the Agricultural BMP Loan Program
 - Increase Tax Credits for Agricultural BMPs and Add Technical Assistance
 - Enhance Resource Management Plan Program; Pilot Long-Term Marketing Plan
 - Enhance Coordination Among State and Federal Agencies Assisting Farmers
 - Establish Collaborative Efforts to Document “Voluntary” BMPs
- Wastewater
 - POTWs that have not already upgraded required to upgrade to achieve 4 mg/l of TN and 0.3 mg/l of TP or “a more cost effective approach that achieves an equivalent reduction in nutrient load”
 - Of the 87 significant publicly owned treatment works (POTWs) included in the Watershed General Permit, 34 facilities have already received WQIF grants, achieving 4 mg/l TN and 0.3 mg/l TP.

Chesapeake Bay TMDL Phase III Watershed Implementation Plan

- **Developed Lands**
 - Focus on enhancing BMP reporting
 - Funding Stormwater Local Assistance Fund (including defining needs)
- **Septic**
 - Require reporting of sewer connections
 - Shift oversight of septic maintenance to VDH
- **Multiple Sectors**
 - Carbon Trading regulations
 - Expansion of Chesapeake Bay Preservation Act west of 95
 - Creation of a Coastal Resiliency Master Plan
 - E&S regulation amendments to require nutrient management plans for land-disturbing activities equal to or greater than one acre

Chesapeake Bay TMDL Phase III Watershed Implementation Plan

- EPA Supporting Comments
 - Identifying key strengths and “potential enhancements”
 - Praise agricultural strategies especially those with teeth (e.g. legislation for Agricultural Nutrient Management Plans)
 - Note additional wastewater reductions
 - Annual needs assessments for agricultural and urban sectors in addition to wastewater
- Potential Enhancements
 - Need for more detailed information on funding needed for agricultural and stormwater implementation
 - More details on how unregulated urban/suburban stormwater reductions will be incentivized
 - How POTW reductions will be used to offset regulated stormwater
 - Concerns over achieving reductions for Eastern Shore
 - EPA includes some interesting language regarding Virginia’s Chlorophyll a criteria for the James River that is inconsistent with previous Virginia model runs
 - Ask Virginia to clarify how “additional reductions” from proposed Chlorophyll a standards for the James River will be incorporated into Watershed General Permit

James River Chlorophyll a Criteria

- After years of study (7 years), DEQ proposed amended chlorophyll a criteria for the James River
- DEQ shared model runs showing attainment of all proposed criteria when tested against 2017 Watershed General Permit individual point source allocation levels plus existing nonpoint source allocations
- Modified seasonal mean criteria (eight proposed criteria are lower than the existing criteria and two proposed criteria are higher)
- New short-duration criteria that protect aquatic life from the effects of toxic algae.
- Changes to the Assessment method - moving to a six-year geometric mean, two exceedances in six years
- State Water Control Board approved criteria in June
- Secretary of Natural Resources review completed (7/28/19); Governor's review underway, then on to EPA for approval

Ammonia Criteria

- EPA finalized new ammonia criteria in 2013 (last updated in 1999).
- Nearly twice as stringent as previous criteria – due to inclusion of toxicity data for mussels and snails (assumed to be in all perennial freshwater streams)
- DEQ pushed back adoption from the rest of the Triennial Review of Water Quality Standards to allow time to explore implementation flexibilities – compliance schedules beyond permit term
- Facilities must demonstrate a longer period is necessary, compliance required “as soon as possible” but not later than the applicable statutory deadline under the CWA
- Facilities can also demonstrate an absence of sensitive species
- Expected capital costs to POTWs \$512 Million (VAMWA) – doesn’t consider industrial or commercial facilities
- State Water Control Board approved in December
- Awaiting Governor’s Review and EPA approval

James River PCB TMDL

- DEQ announced earlier this year it would begin preparations for a PCB TMDL for the James River
- DEQ planning on contracting out technical work late fall/early winter.
- The start of the public portion of it will follow that, likely late winter
- DEQ has been collecting PCB data over the past 2 years
- Splitting watershed from the headwaters to the fall line in Richmond and Tidal James
- Tidal James PCB TMDL development will follow likely next year
- DEQ seeking information from possible PCB sources such as POTWs (including CSOs), rail yards, landfills, MS4s, and industrial facilities
- Affected facilities likely required to implement Pollution Minimization Plan and receive Wasteload Allocations or Load Allocations

Executive Order 6

- Governor Northam issued Executive Order 6 last year which involves a comprehensive review of DEQ
- An interim report was due to the Governor on October 1, and final report was due in April 2019
- This requires DEQ to evaluate its permitting, monitoring, enforcement, and citizen engagement throughout all program offices
- Report being treated as “Governor’s working papers”
- Recommendations
 - Strengthening Virginia’s environmental justice program (including potentially enacting a Virginia-specific environmental justice statute)
 - Enhancing transparency and communication with the public
 - Need for more resources
 - Likely to be legislative proposals that come out of the report
- Unclear if/what public involvement available



QUESTIONS?

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