**Title:** **Virginia Watershed Program Uses Drinking Water Intake Locations to Prioritize Impairments for TMDL Development**

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**Departments/Programs Involved:** Virginia DEQ

**Actions:** The Virginia DEQ used public water system (PWS) intake locations (via a GIS map layer) to prioritize impaired waters for the development of Total Maximum Daily Loads (TMDLs). Virginia’s priority setting process began by taking a broad look at designated use impairments statewide, and initially prioritizing them for TMDL development using spatial criteria, as well as their proximity to public water supply intakes.  Therefore, if a recreational use, shellfishing use, or aquatic life use impairment was within proximity to potentially impact a PWS intake, then it was ranked at the top of the priority list.  After this first list of priorities was assembled, then other ranking determinations were made using spatial criteria to identify additional overlapping priorities, and by practical considerations such as the severity of the impairment, the age of the impaired status, existing monitoring plans, watershed characteristics, and stakeholder participation. Thirty-seven of Virginia’s water quality impairments (out of a total of 919 impairments for all uses) are now at the top of the state’s priority list as a result of this ranking process.

For reference, while Virginia lacks numeric nutrient criteria to assess the aquatic life designated use for flowing or estuarine waters, it does have a numeric Nitrate criterion of 10 mg/L for any waters with a public water supply designated use (i.e., waters that are within five miles of a PWS intake). In addition, Virginia’s recreational and shellfishing use impairments are caused by excessive amounts of bacteria that are sometimes associated with other microorganisms (e.g., cryptosporidium) that could impact drinking water treatment processes.

**Results:** These TMDLs are expected to help improve the efficiency of public water supply treatment processes in the future by prescribing load reductions for bacteria, nutrients, and sediment. At this time, Virginia has begun the standard data collection process for each of the 37 waters with public water supply use impairments on their priority list. They hope to begin development of the TMDLs for these waters starting in 2017.

**Federal/state guidance/tools/funding:** [A Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program](https://www.epa.gov/sites/production/files/2015-07/documents/vision_303d_program_dec_2013.pdf): The document specifically includes “SDWA” programs in its integration goal statement as follows. “Integration: By 2016, EPA and the States (will) identify and coordinate implementation of key point source and nonpoint source control actions that foster effective integration across CWA programs, other statutory programs (e.g., CERCLA, RCRA, SDWA, CAA), and the water quality efforts of other Federal departments and agencies (e.g., Agriculture, Interior, Commerce) to achieve the water quality goals of each state.”