

APPENDIX 8 CURRENT STATUS OF VIRGINIA'S TMDL PROGRAM

In 1997, the Virginia General Assembly enacted the Water Quality Monitoring, Information, and Restoration Act (WQMIRA), §62.1-44.19:4 through 19:8 of the Code of Virginia. This statute directs DEQ to develop a list of impaired waters, a Total Maximum Daily Load (TMDL) or TMDL alternative for each impairment, and implementation plans for these TMDLs.

During its 2013 Legislative Session, the General Assembly passed Chapters 756 (HB2048) and 793 (SB1279) of the 2013 Virginia Acts of Assembly which designated, effective July 1, 2013, the Virginia Department of Environmental Quality as the lead agency for nonpoint source programs in the Commonwealth of Virginia. Effective July 1, 2013 DEQ has the lead for the entire TMDL program, including implementation, for the Commonwealth of Virginia. The Department of Mines, Minerals, and Energy (DMME) has signed Memoranda of Understanding (MOU) with DEQ agreeing to a cooperative effort in the TMDL and Implementation Plan (IP) processes. DMME assists with the development and implementation of TMDLs involving pollutants from mineral extraction activities. The Virginia Department of Health also participates in a cooperative effort by assisting in the development of TMDLs and TMDL IPs for impaired shellfish waters.

Fulfillment of 1999 Consent Decree and Post-CD TMDL Development

In 1998, the American Canoe Association and the American Littoral Society filed a complaint against EPA for failure to comply with the provisions of §303(d) of the Clean Water Act in Virginia. As a result of this legal action, EPA signed a Consent Decree (CD) with the plaintiffs in 1999 that contained Virginia's TMDL development schedule through year 2010. Also under the CD, EPA agreed to develop TMDLs on these impaired waters to meet the schedule if Virginia failed to do so.

To meet the Consent Decree, Virginia completed TMDLs covering approximately 225 shellfish and 333 non-shellfish CD impairments, and approximately 185 non-CD impairments. In addition, Virginia completed TMDLs for 28 CD waters and 18 non-CD waters covered under the EPA-lead Chesapeake Bay TMDL. Virginia has also received credit under the CD for an additional 145 delisted or recategorized impairments.

Virginia continues to development TMDLs and estimates that over 1000 impaired waters will require TMDL development in the coming years. Virginia has developed several strategies to sustain this rigorous TMDL Development pace with level funding. These include a) developing TMDLs using a watershed approach to address multiple impairments in watersheds with similar characteristics, b) developing TMDLs in-house, c) identifying non-TMDL solutions, such as straight to implementation, to address impairments, and d) developing TMDLs that are more easily implemented. Virginia continues to explore tools and options for restoring and protecting water quality, both for environmental benefit and efficient program management.

TMDL Implementation

Once the TMDL is developed and approved Virginia state law under WQMIRA requires the development of a TMDL IP. The IP describes the measures that must be taken to reduce pollution levels in the stream, and includes a schedule of actions, costs, and monitoring. While there is not a mandated schedule for IP development, local or state agencies, as well as community watershed groups, can take the lead in developing IPs. The following table presents the state's TMDL implementation projects funded with federal 319(h) and/or state funds VNRCF and/or WQIF (current to F2016).

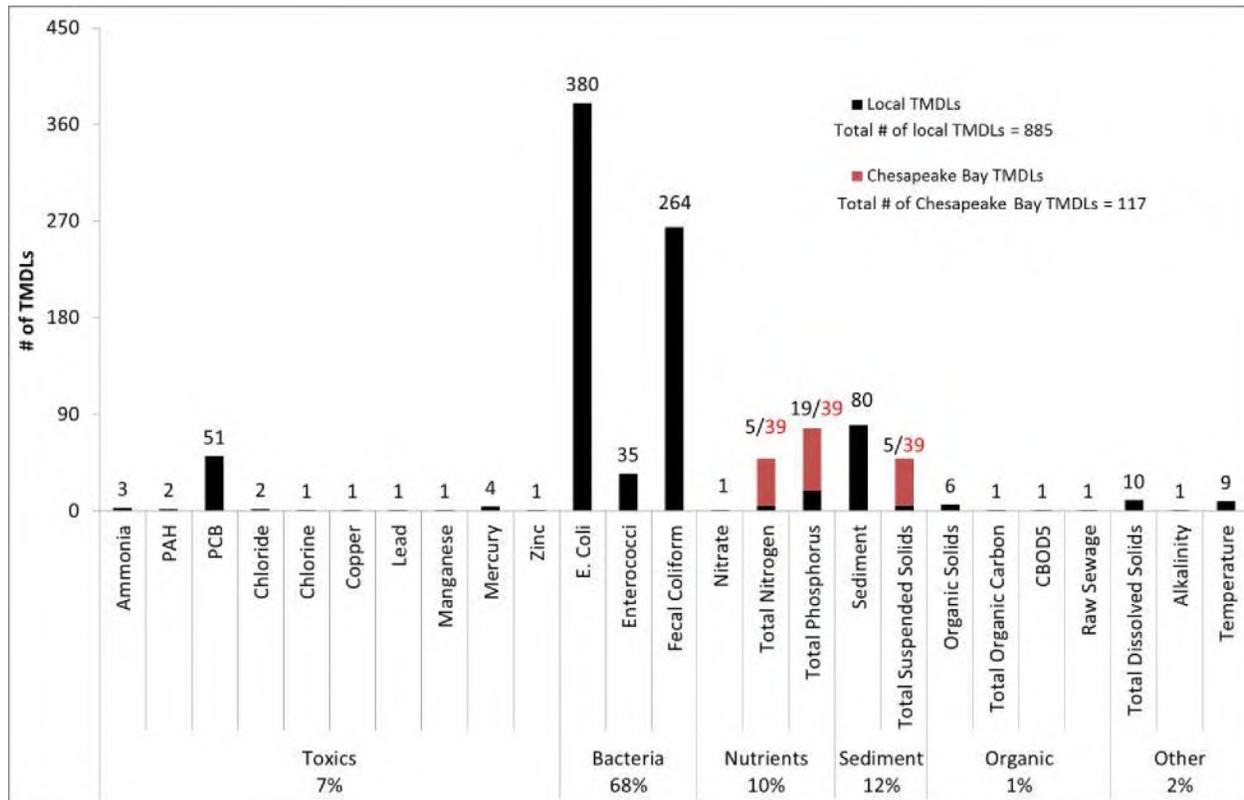
Watershed Area	TMDL Segment	Years of Implementation and Funding
<i>28 Projects in 2016 that actively receiving targeted TMDL funds either from Federal §319(h) (19 projects), or only State WQIF/VNRCF (8 projects) for both BMP installation and technical assistance</i>		
Willis River	VAC-H36R	§319(h): 2005-2015
Thumb, Great, Carter and Deep Runs	VAN-E01R, E02R & E10R	§319(h):2006-2015, VNRCF: 2011-2015)
Upper Hazel River	VAN-E03- 05R	§319(h):2009-2015, VNRCF: 2011-2015), WQIF RFP: 2007-2009
Craig Run, Browns Run and Marsh Run	VAN-E08R	§319(h)/VNRCF:2012-2015:, VNRCF-CBLEI (2011)
Slate River and Rock Island Creek		§319(h): 2010-2015
Guest River	VAS-P11R	§319(h)/VNRCF: 2012-2015:
Upper York River	VAN-F06R, F07R	§319(h): 2012-2015,VNRCF: 2012-2015:
Hays, Moffats, Otts, and Walker Creeks	VAN-I34R	§319(h): 2012-2015,VNRCF: 2012-2015:
Rockfish River	VAV-H09-10R, H13R	§319(h): 2013-2015
Spout Run	VAV-B57R	§319(h): 2014-2015
South Mayo River and North Fork Mayo River	VAW-L43R	§319(h)(2014+), VNRCF (2012-2015)
Lower Banister River	VAC-L67R, L70R, L71R	§319(h)(2014+), VNRCF (2012-2015)
James River	VAP-G01R, H39R	§319(h): 2014-2015
Middle Fork Holston River	VAS-O03R	§319(h): 2014-2015
Stroubles Creek	VAW-N22R	§319(h)(2014-2015), WQIF RFP: (2006-2008):
Greenvale, Payne and Beach Creeks	VAN-E25R	§319(h): 2014-2015
Flat, Nibbs, Deep and West Creeks	VAP-J08-09R, J11R	§319(h): 2015-2016 (septic only); WQIF/VNRCF: 2007-2015– Agriculture only
Linville Creek		§319(h): 2015-2016
Little Dark Run and Robinson River		§319(h): 2015-2016
Tye River		§319(h): 2015-2016
Falling River	VAW-L34R	WQIF/VNRCF: 2007-2015 – Agriculture only
Cub, Turnip and Buffalo Creeks	VAC-L36R, L37R,	WQIF/VNRCF: 2007-2015– Agriculture only
Pigg River	VAW-L13R- L18R	WQIF/VNRCF: 2007-2015– Agriculture only
Christians Creek and South River	VAV-B14, B30	WQIF/VNRCF: 2007-2015– Agriculture only
Briery, Little Sandy, Spring, Saylers Creeks and Bush River	VAC-J02- J06R	WQIF/VNRCF: 2007-2015– Agriculture only
Upper Bannister River	VAC-L65, L66, L68, L69	VNRCF: 2012-2015– Agriculture only
Hardware River		§319(h): 2015-2016
Moffett Creek, Middle River, Polecat Draft	VAV-B10, B13, B15	§319(h): 2015-2016: WQIF/VNRCF: 2007-2015– Agriculture only
Federal EPA Nonpoint Source Implementation Grant (319h); Watershed Improvement Fund Request for Proposals (WQIF RFP), State Virginia Natural Resources Commitment Fund (VNRCF), Virginia Natural Resources Commitment Fund - Chesapeake Bay Livestock Exclusion Initiative (VNRCF- CBLEI)		

Source: [FY2016 The Chesapeake Bay and Virginia Waters Clean-Up Plan-Progress Report](#)

TMDL Progress

As of June 2016, 12 TMDL equations, each representing a watershed area draining to impaired surface waters, have been EPA approved since July 2015. Another 33 (31 new, 2 revised) are complete, have been State Water Control Board approved, and submitted to EPA for final approval. The figure below shows the number of TMDL equations by pollutant set across Virginia since the inception of the TMDL program:

TMDL Equations by Pollutant¹



TMDL Success Stories

The success of Virginia's Nonpoint Source Management Program and the TMDL Implementation Program is also documented by describing improvement of water quality conditions via [NPS Success Stories](#). Through [Section 319 Nonpoint Source Success Stories](#), EPA and DEQ document progress of partially or fully restoring waterbodies associated with NPS implementation actions.

Since 2002 Virginia's Nonpoint Source Management Program and associated TMDL Implementation Program and its partners have written 18 success stories that address delisting and/or water quality improvement of 27 impaired stream segments. These stories are classified into two types: Type 1 stories are related to partial or full restoration (delisting of impairments), Type 2 indicates significant water quality improvement.

¹ The graph includes TMDL equations reported previously, newly adopted equations, as well as corrections. The corrections reflect an internal review of the Water Quality Management Planning Regulation (9 VAC 25-720) that occurred in December, which resulted in changes to the number of TMDL equations by pollutant (e.g. PCBs, E. coli).

Type	# Segments delisted or WQ improved	Name of Success Story	Year Approved by EPA	Topic
2	1	Cabin Branch Mine Orphaned Land Project	2001	Mining
2	1	Toncræ Mine Orphaned Land Project	2002	Mining
2	1	Middle Fork Holston River (Three Creeks)	2005	TMDL Implementation
2	2	Muddy Creek and Lower Dry River	2007	TMDL Implementation
1	1	Batie Creek	2008	Karst Program
1	3	Lynnhaven, Broad and Linkhorn Bays	2009	Shellfish
2	1	Valzinco Mine Orphaned Land Project	2008	Mining
1	3	Willis River	2010	TMDL Implementation
1	1	Middle Creek	2012	Mining
2	1	Black Creek	2012	Mining
1	1	Muddy Creek	2012	TMDL Implementation
2	1	Carter Run	2013	TMDL Implementation
2	1	Flat Creek	2013	TMDL Implementation
1	1	Upper Clinch River	2014	TMDL Implementation
1	2	Cub Creek	2014	TMDL Implementation
1	2	Byers and Hutton Creeks	2015	TMDL Implementation
1	1	Little Sandy Creek	2015	TMDL Implementation
1	2	Blackwater River	2016	TMDL Implementation
2	1	Big Chestnut Creek	2016	TMDL Implementation
Total	27			