IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
ALEXANDRIA DIVISION

VIRGINIA DEPARTMENT OF TRANSPORTATION 1401 E. Broad St. Richmond, VA 23219, and BOARD OF SUPERVISORS, FAIRFAX COUNTY, VIRGINIA 12000 Government Center Pkwy. Fairfax, VA 22035 Plaintiffs, v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, and LISA P. JACKSON, ADMINISTRATOR 1200 Pennsylvania Ave., N.W. Washington, DC 20460, and UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III, and SHAWN M. GARVIN, REGIONAL ADMINISTRATOR 1650 Arch St. Philadelphia, PA 19103 Defendants.	Civil Action No. _____

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

The Virginia Department of Transportation ("VDOT") and the Board of Supervisors of Fairfax County, Virginia ("Fairfax County" or the "County") (collectively, the "State Plaintiffs"), by and through counsel, bring this action pursuant to the federal Clean Water Act ("CWA"), 33 U.S.C. § 1251 *et seq.*, and the Administrative Procedure Act ("APA"), 5 U.S.C. §

551 *et seq.* and 5 U.S.C. § 701 *et seq.*, for declaratory and injunctive relief against the United States Environmental Protection Agency, its Administrator Lisa P. Jackson, the United States Environmental Protection Agency Region III, and Regional Administrator Shawn M. Garvin (collectively, "EPA" or "Defendants"), and allege as follows:

NATURE AND PURPOSE OF ACTION

1. This case challenges a massive expansion of EPA's regulatory power, from its CWA-authorized role of establishing Total Maximum Daily Load ("TMDL") restoration plans with maximum acceptable levels of "pollutant" discharges to meet water ***quality*** standards, to EPA's recently claimed authority to control the ***quantity*** or flow of water itself and related land use characteristics such as the amount of "impervious cover" (*e.g.*, rooftops, roads, and parking lots) in any given watershed. *See* Glossary of Acronyms (attached hereto for the Court's convenience).

2. The final agency action at issue is EPA's establishment of the Total Maximum Daily Load for Benthic Impairments in the Accotink Creek Watershed (the "Accotink TMDL"), which was signed and issued by the Director of the Water Protection Division of EPA Region III on April 18, 2011 (*available at* http://www.epa.gov/reg3wapd/pdf/pdf_tmdl/AccotinkPortfolio.pdf).

3. The Accotink TMDL is one of the first four so-called "flow TMDLs" established by EPA anywhere in the United States. All were established in 2011 and have been appealed to federal district courts.

4. Like most urban streams across the nation, Accotink Creek, which flows through Fairfax County and drains into a tidal embayment of the Potomac River, has experienced both the water quality and water quantity effects of urbanization, ranging from higher pollutant loads

(water quality) to physical changes in stream condition, shape, size, and hydrology (water quantity).

5. The Accotink TMDL purportedly was established to remedy a "benthic" impairment—the lack of a healthy benthic biological community (*e.g.*, insects, worms, and other species typically found on the bottom of non-impaired streams)—due to excessive amounts of sediment, which is a "pollutant" as defined in the CWA.

6. EPA's action in establishing the Accotink TMDL, however, violated the CWA and the APA by unlawfully and arbitrarily limiting the flow of water in Accotink Creek as a claimed "surrogate" for the pollutant sediment and by similarly limiting flows from the State Plaintiffs' drainage systems known under the CWA as Municipal Separate Storm Sewer Systems ("MS4s").

7. Desiring to push its jurisdictional envelope with an admittedly "non-conventional" TMDL approach, and facing a deadline under a consent decree previously entered by this Court, EPA assumed this effort to establish the Accotink TMDL from the Commonwealth.

8. Notably, the Commonwealth determined the legal authority for a TMDL regulating water quantity was lacking, despite operating under state law which is broader than the CWA, and opted to first amend its own TMDL-related regulations through an open and transparent rulemaking process.

9. EPA acknowledged no similar constraint and proceeded to act on a stated "belief" that it possessed the legal authority to regulate the flow of water.

10. In so doing, EPA sought to change a nearly 40-year history of CWA interpretation and implementation and radically expand the scope of its water ***quality*** jurisdiction to include water ***quantity*** as well, regardless of the presence of a discharge of "pollutants."

11. Even if EPA were found to have the statutory authority to regulate the flow of water through TMDLs and related National Pollutant Discharge Elimination System ("NPDES") discharge permits, which the State Plaintiffs fervently deny, the Accotink TMDL remains fatally flawed due to other significant CWA and APA violations and major technical deficiencies that lack a rational basis in the administrative record.

12. Among other errors, EPA acted beyond its authority and arbitrarily chose to regulate a surrogate that is demonstrably inferior to the actual pollutant of concern (sediment), implemented its flow approach by adopting a flawed numeric flow standard for Virginia without observing required CWA and APA procedures, failed to establish the "maximum" loading capacity as required for a T**M**DL, and significantly over-regulated the State Plaintiffs by rejecting uncontroverted data and information on the size of the regulated area.

13. The State Plaintiffs share EPA's desire to improve stream characteristics such as the makeup of the benthic organism population and, in fact, have made and continue to make major water quality investments.

14. Disappointingly, the surrogate-based Accotink TMDL will cost more to implement than the "pollutant"-based alternative while failing to restore the benthic community.

PARTIES

Virginia Department of Transportation

15. VDOT is an agency of the Commonwealth of Virginia that is responsible for building, maintaining and operating Virginia's roads, bridges and tunnels—the third-largest

state-maintained highway system in the country. VDOT's mission is to plan, deliver, operate and maintain a transportation system that is safe, enables easy movement of people and goods, enhances the economy, and improves quality of life. VDOT maintains all interstate, primary, and secondary roads in Virginia, including in the Accotink Creek watershed. Accotink TMDL at 6-9.

16. During the public comment period for the challenged action, VDOT provided extensive legal, policy, and technical comments on EPA's Draft Benthic TMDL Development for Accotink Creek (the "Draft Accotink TMDL"), which EPA largely disregarded. *See* EPA, Accotink TMDL, Response to Comments Document, *available at* http://www.epa.gov/waters/tmdldocs/va/VA_AccotinkResponsetoComments3-24-2011.pdf (the "EPA Response").

17. Since the 1970s, erosion and sediment control plans have been a major component of the activities undertaken by VDOT and, since the early 1990s, post-construction stormwater best management practices ("BMPs") have been an integral design component of all roadway and facility construction plans regulated under the Virginia Stormwater Management Act, Va. Code Ann. § 10.1-603.1 *et seq.*, and attendant regulations, 4 Va. Admin. Code § 50-60-10 *et seq*.

18. As a delegated administrator of its erosion and sediment control and stormwater management programs, VDOT has produced numerous guidance documents, including Road and Bridge Standards, Road and Bridge Specifications, and design, construction, and maintenance directives. Many of these guidance documents are recognized as standard-setting and are used by localities and private entities statewide to protect water quality.

19. This year, VDOT expects to apply erosion and sediment control practices on approximately 2,000 acres of disturbed area. Erosion and sediment control practices, which include silt fences, storm drain inlet protection, slope drains, rock check dams, sediment traps, dewatering structures and soil stabilization matting, are employed to protect surface waters by intercepting and preventing sediment from leaving active construction sites, protecting exposed soil until a vegetative cover can be established, and by decreasing the velocity of sheet flows or channelized flows to prevent scour and erosion. VDOT also expects to install permanent water quality BMPs to treat over 250 acres. These permanent water quality BMPs are employed to protect soil from erosive forces, slow velocity of concentrated runoff, and encourage infiltration.

20. VDOT partners with various service and conservation groups to reforest areas of state-owned property. Through this effort, over one million trees have been planted along Northern Virginia's roadsides. The resulting restoration of the tree canopy supports filtering of air and stormwater, slows the erosive acceleration of stormwater runoff, and lowers stormwater runoff temperatures from heated impervious surfaces. In a given year, VDOT expects to street sweep over 8,000 acres in the Commonwealth. Street sweeping is a BMP recognized by EPA to remove accumulated pollutants such as sediment, debris, trash, road salt, and trace metals, from stormwater runoff and prevent the entry of such pollutants into surface waters.

21. VDOT has also partnered with localities to construct regional stormwater management facilities. In Prince William County, VDOT assisted in the development of a large regional facility constructed in conjunction with the Route 234 project. In Hanover County, VDOT provided funds to construct two planned regional facilities intended to comply with the water quality requirements of the I-95 Atlee/Elmont Interchange project. In Henrico County, VDOT provided funds to the County's Stream Restoration Fund to comply with the water quality

requirements of the I-64/I-295 Interchange improvements. VDOT has also entered into agreements with private entities for shared use of stormwater management facilities. In the City of Chesapeake, VDOT preserved and utilized the existing wetlands to compensate for a portion of the Route 17 project's water quality impacts.

22. VDOT's research arm, the Virginia Center for Transportation Innovation and Research, has conducted numerous environmentally progressive research projects, including a pilot project in partnership with Fairfax County to evaluate the effectiveness of Low Impact Development ("LID") measures for potential use on linear highway projects. Other projects have resulted in the evaluation and development of new and innovative practices in erosion and sediment control, pollution prevention, and post construction stormwater management.

23. In Northern Virginia, VDOT has developed 85.5 acres of project-specific wetland compensation, created 14.1 acre-credits in its own Great Oaks Mitigation Bank, purchased 30.24 acre-credits for advanced wetland mitigation, and purchased 2,085 linear-feet credits for advanced stream mitigation. In Fairfax County alone, VDOT has created approximately 10 acres of wetlands and restored 2,635 linear feet of streams to compensate for unavoidable impacts from highway construction projects. VDOT also participates as a watershed advisory group member to support Fairfax County's development of watershed management plans.

24. VDOT continues to innovate in the area of pollutant management practices by conducting research and requesting approval for pollutant removal efficiencies for vegetated roadway shoulders and drainage ways; scheduling a pilot project for the installation of pervious asphalt pavement on a portion of a Park and Ride lot in Prince William County; and participating in a workgroup for the Sustainable Shoreline and Community Management Project sponsored by the Northern Virginia Regional Commission.

25. The Accotink TMDL assigns an aggregated MS4 and construction stormwater wasteload allocation to VDOT, requiring a 50.5% reduction in the one-year, 24-hour flow rate over an allocated 4,109.4 acres in the Accotink Creek watershed. Accotink TMDL at 6-9.

26. Such a reduction in flow as demanded by EPA in a highly urbanized area cannot be achieved by VDOT through retrofitting existing stormwater management structures due to functionally impervious soils, the presence of environmentally sensitive areas, and the public safety needs of maintaining the structural integrity of building foundations, roadways, bridge abutments, and retaining walls. Consequently, efforts to achieve such a reduction in stormwater flow as demanded by EPA would require significant public takings of private property in order to build numerous new stormwater management structures.

27. In addition, since much of the stormwater flow from VDOT property into Accotink Creek originates from adjacent properties, EPA is effectively forcing VDOT to regulate runoff from property that it neither owns nor controls.

28. VDOT has coverage under the Virginia Stormwater Management Program ("VSMP") General Permit (Permit Number VAR040115) for Stormwater Discharges from Small Municipal Storm Sewer Systems, which is a Phase II MS4 NPDES permit. The area of coverage for VDOT's MS4 permit includes areas within the Accotink Creek watershed. Accotink TMDL at 2-14 and B-1.

29. VDOT is, or imminently will be, adversely affected by EPA's Accotink TMDL because EPA takes the position that 40 C.F.R. § 122.44(d)(1)(vii)(B) requires that the terms and conditions of NPDES permits for MS4s, such as VDOT's, must be consistent with any applicable TMDL and the individual wasteload allocations contained therein, notwithstanding the specific maximum extent practicable standard for pollutant reductions for MS4 permits set

forth in CWA § 402(p)(3)(B)(iii). *See* EPA, Accotink TMDL, Response to Comments Document at Comment # 42, *available at* http://www.epa.gov/waters/tmdldocs/va/VA_AccotinkResponsetoComments3-24-2011.pdf (the "EPA Response"); *see also* Memorandum from James A. Hanlon, Director, EPA Office of Wastewater Management, regarding "Revisions to the November 22, 2002 Memorandum 'Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs'" at 3 (November 12, 2010) (the "EPA Flow Memo") (attached hereto as Exhibit A).

30. The Accotink TMDL mandates stormwater flow rate reductions by VDOT that VDOT estimates will cost $70 million or more to implement. However, these costly flow reductions are not expected to achieve the desired healthy benthic population in Accotink Creek.

31. These adverse impacts, including the inevitable exorbitant costs associated with implementation of this unlawful flow-based TMDL, constitute a concrete and particularized injury to VDOT which is fairly traceable to EPA's action and which will only be redressed by a favorable decision of this Court.

Fairfax County

32. Fairfax County is a political subdivision of the Commonwealth of Virginia.

33. During the public comment period for the Accotink TMDL, Fairfax County provided extensive legal, policy, and technical comments on the Draft Accotink TMDL, which EPA largely disregarded. *See* EPA Response.

34. Fairfax County has a long history of progressive environmental management, including many water quality protection and restoration initiatives and activities that far exceed

CWA requirements applicable to the County. This history dates at least back to the 1950s, when the Fairfax County Park Authority began acquiring stream valley land for protection.

35. In the 1960s, in what became a model for Virginia's subsequent Erosion and Sediment Control Law, Fairfax County adopted its Erosion and Sediment Control Ordinance and began to require new development to manage stormwater by reducing peak flow rates to pre-development peak flow rates. Also in the 1960s, in anticipation of widespread development in the Pohick Creek Watershed, Fairfax County strategically planned and built six large dams to provide water quality and flood-protection benefits, among others, within the watershed.

36. In the 1970s, Fairfax County incorporated an Environmental Quality Corridor Policy into its Comprehensive Plan to protect areas adjacent to streams from development.

37. In the 1980s, Fairfax County rezoned nearly 41,000 acres of its Occoquan River Watershed to significantly reduce development densities for water quality improvement. At the same time, the Board created a Water Supply Protection Overlay District, implementing water quality BMPs on approximately 63,000 acres.

38. In the 1990s, Fairfax County adopted the Chesapeake Bay Preservation Ordinance to protect areas along tributary streams as Resource Protection Areas ("RPAs") and went above and beyond state requirements by extending water quality BMP requirements to all areas in Fairfax County through a voluntary countywide Resource Management Area designation. Then, in 2003, Fairfax County significantly expanded the areas designated as RPAs to include smaller perennial streams.

39. In 1998, Fairfax County launched an ambitious stream protection strategy initiative focusing not only on chemical water quality but on the overall health of the aquatic ecosystem. Based on the results of its initial study, the County undertook a watershed planning

initiative from 2001 to 2011 to develop Watershed Management Plans for all thirty of its watersheds.

40. In 2004, Fairfax County adopted an Environment Agenda that establishes goals and procedures for water quality protection and environmental stewardship efforts. This led to initiation of an Environmental Improvement Program, which is updated annually to address environmental and policy needs and assist in decision making regarding environmental funding and project planning.

41. In 2006, Fairfax County's Public Facilities Manual ("PFM") was revised to require more stringent stormwater outfall analysis and design that minimizes impacts from development. In 2007, the PFM was further revised to promote the use of LID techniques, and subsequently many County-owned facilities and school system-owned facilities have been retrofitted with innovative LID stormwater controls.

42. Fairfax County is committed to green building initiatives and smart growth principles, including an emphasis on higher density development around transit stations.

43. Fairfax County was the first county in Virginia to establish a Tree Conservation Ordinance, and the County recently amended its Comprehensive Plan to strengthen protection of headwater streams. Fairfax County has established forty-two Agricultural and Forestal Districts, all of which have conservation plans, maintain open space, and protect streams.

44. Fairfax County's jurisdictional area includes the majority of Accotink Creek and a significant portion of the Accotink Creek watershed.

45. The Accotink TMDL assigns an aggregated MS4 and construction stormwater wasteload allocation to Fairfax County, requiring a 47.2% reduction to the one-year, 24-hour

flow rate over an allocated 17,998.3 acres in the Accotink Creek watershed. Accotink TMDL at 6-9.

46. Fairfax County holds a Phase I MS4 permit (Permit Number VA0088587), which applies to thousands of acres in the Accotink Creek watershed. Accotink TMDL at 2-14 and B-1.

47. Fairfax County is, or imminently will be, adversely affected by EPA's Accotink TMDL because EPA takes the position that 40 C.F.R. § 122.44(d)(1)(vii)(B) requires that the terms and conditions of NPDES permits for MS4s, such as the County's, must be consistent with any applicable TMDL and the individual wasteload allocations contained therein, notwithstanding the specific standard for MS4 permits set forth in CWA § 402(p)(3)(B)(iii). *See* EPA Response at Comment # 42; *see also* EPA Flow Memo at 3; Accotink TMDL at 8.2 and 8.3.

48. If the Accotink TMDL were established in the typical manner, *i.e.*, as a TMDL for the pollutant of concern (sediment) rather than EPA's illegal and improper "surrogate" (flow), Fairfax County estimates that it would cost the County $295 million to address the sediment TMDL.

49. To meet the Accotink TMDL's mandatory flow reductions, Fairfax County estimates that it will cost the County an ***additional*** $110 million to $215 million in compliance costs, for a total of approximately $405 million to $510 million.

50. Fairfax County is injured by the Accotink TMDL's mandated flow rate reductions, by the associated costs of compliance with the mandated flow reductions, and by the needless significant increase in its compliance costs to address the benthic impairment in

Accotink Creek as a result of the Accotink TMDL and the MS4 permit conditions that will imminently result from the Accotink TMDL.

51. The County, its residents, and its environment are also injured in that the Accotink TMDL will force the County to divert approximately $110 million to $215 million of its finite resources to use EPA's unlawful means (flow reduction) rather than a more cost-effective and direct approach to addressing the habitat needs of benthic organisms.

52. These adverse impacts, including the inevitable exorbitant costs associated with implementation of this unlawful flow-based TMDL, constitute a concrete and particularized injury to Fairfax County which is fairly traceable to EPA's action and which will only be redressed by a favorable decision of this Court.

The Federal Defendants

53. Defendant United States Environmental Protection Agency is the federal agency primarily responsible for overseeing the implementation of the CWA, including the review, approval, and, if necessary, direct establishment of TMDLs in the states, including Virginia.

54. Defendant Lisa P. Jackson is the Administrator of the United States Environmental Protection Agency and, as such, is charged with the supervision and management of all decisions and actions of the agency, including those taken pursuant to the CWA in Virginia. She is sued in her official capacity only.

55. Defendant United States Environmental Protection Agency Region III is one of ten regional offices of Defendant United States Environmental Protection Agency and is the regional office with jurisdiction including Virginia and Accotink Creek.

56. Defendant Shawn M. Garvin is the Regional Administrator of the United States Environmental Protection Agency Region III and is sued in his official capacity only.

JURISDICTION AND VENUE

57. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1331 because State Plaintiffs' claims arise under the laws of the United States, and pursuant to the APA's provisions for judicial review of final agency action at 5 U.S.C. §§ 701-706. *See also Friends of the Earth v. EPA*, 333 F.3d 184, 189 (D.C. Cir. 2003) ("[O]riginal jurisdiction over EPA actions not expressly listed in [33 U.S.C. §] 1369(b)(1) lies . . . with the district court.").

58. The declaratory and injunctive relief requested is authorized by 28 U.S.C. §§ 2201 and 2202, and by 5 U.S.C. §§ 701-706, including immediate postponement of the effective date of the Accotink TMDL to preserve the status and rights of the State Plaintiffs and their respective MS4 NPDES permits pending the conclusion of this litigation, as authorized by 5 U.S.C. § 705.

59. Venue is appropriate in this judicial district pursuant to 28 U.S.C. § 1391(e) and 5 U.S.C. § 703 because EPA is an agency of the United States, Plaintiff VDOT's roads and highways and its MS4 affected by the Accotink TMDL are located in this district, Plaintiff Fairfax County and its MS4 affected by the Accotink TMDL are located in this district, and a substantial part of the events giving rise to the claims occurred within this district.

STATUTORY AND REGULATORY BACKGROUND

60. Congress enacted the CWA in 1972 with a goal to "restore and maintain the chemical, physical and biological integrity of the Nation's waters." CWA § 101(a), 33 U.S.C. § 1251(a).

61. The CWA is an exercise in cooperative federalism and explicitly recognizes "the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and

water resources, and to consult with the Administrator in the exercise of his authority under [the CWA]." CWA § 101(b), 33 U.S.C. § 1251(b); *see Arkansas v. Oklahoma*, 503 U.S. 91, 101 (1992); *New York v. United States*, 505 U.S. 144, 167 (1992); *United States v. Cooper*, 482 F.3d 658, 667 (4th Cir. 2007).

62. In Virginia, most CWA-related programs and activities, whether regulatory or non-regulatory in nature, are administered by the Department of Environmental Quality and its associated State Water Control Board (collectively, "DEQ") or the Department of Conservation and Recreation and its associated Soil and Water Conservation Board (collectively, "DCR").

Water Quality Standards

63. The CWA requires states to establish and periodically review and revise "water quality standards," which include "designated uses" for water bodies in the state, as well as narrative and/or numeric "water quality criteria" that define the water quality conditions considered to be protective of the uses designated by the state. CWA § 303(a)-(c), 33 U.S.C. § 1313(a)-(c); 40 C.F.R. §§ 130.3, 131.2, and 131.3(i).

64. "Designated uses" are those uses specified in water quality standards for each water body or segment, whether or not those uses are being attained. 40 C.F.R. § 131.3(f); 9 Va. Admin. Code § 25-260-5.

65. The Commonwealth, acting through DEQ, has currently designated all Virginia waters for the following uses as part of its EPA-approved Water Quality Standards Regulation: "recreational uses, *e.g.*, swimming and boating; the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them; wildlife; and the production of edible and marketable natural resources, *e.g.*, fish and shellfish." 9 Va. Admin. Code § 25-260-10 (*cited in* Accotink TMDL at 1-6).

66. "Water quality criteria" are "elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When criteria are met, water quality will generally protect the designated use." 40 C.F.R. § 131.3(b); 9 Va. Admin. Code § 25-260-5.

67. The Commonwealth, acting through DEQ, has promulgated the following narrative water quality criteria as part of its EPA-approved Water Quality Standards Regulation: "State waters, including wetlands, shall be free from ***substances attributable to sewage, industrial waste, or other waste*** in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant or aquatic life." 9 Va. Admin. Code § 25-260-20 (*cited in* Accotink TMDL at 1-6) (emphasis added).

Listing of Impaired Waters and Establishment of TMDLs

68. Each state is required to identify those waters within its boundaries for which technology-based effluent limitations for point sources are insufficient to implement applicable water quality standards, CWA § 303(d)(1)(A), 33 U.S.C. § 1313(d)(1)(A), and submit its "303(d) list" of such impaired waters to EPA for review and approval every two years, 40 C.F.R. § 130.7(d).

69. "Point source" means "any discernible, confined, and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which ***pollutants*** are or may be discharged . . . ." CWA § 502(14), 33 U.S.C. § 1362(14) (emphasis added); *see also* 40 C.F.R. § 122.2; 9 Va. Admin. Code § 25-31-10.

70. EPA is required to publish an "identification of ***pollutants*** suitable for maximum daily load measurement." CWA § 304(a)(2)(d), 33 U.S.C. § 1314(a)(2)(D) (emphasis added).

71. "Pollutants" are defined in the CWA, as well as EPA's implementing regulations and Virginia's Water Quality Standards Regulation, to mean "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." CWA § 502(6), 33 U.S.C. § 1362(6); *see also* 40 C.F.R. § 122.2; 9 Va. Admin. Code § 25-31-10. This definition includes many specific substances, but ***not*** the flow of water. *See* CWA § 502(6), 33 U.S.C. § 1362(6); *see also* 40 C.F.R. § 122.2; 9 Va. Admin. Code § 25-31-10.

72. In 1978, pursuant to CWA § 304(a)(2)(d), 33 U.S.C. § 1314(a)(2)(D), EPA identified all pollutants as suitable for TMDL calculations. 43 Fed. Reg. 60665 (Dec. 28, 1978) ("All pollutants, under the proper technical conditions, are suitable for the calculation of total maximum daily loads.").

73. Each state is required to establish a TMDL for those pollutants identified by EPA pursuant to CWA § 304(a)(2)(d), 33 U.S.C. § 1314(a)(2)(D), for each water identified on its 303(d) impaired waters list. CWA § 303(d)(1)(C), 33 U.S.C. § 1313(d)(1)(C); 40 C.F.R. § 130.7(c)(1).

74. States must submit TMDLs to EPA for EPA's approval. CWA § 303(d)(2), 33 U.S.C. § 1313(d)(2). If EPA disapproves a state's TMDLs, the EPA Administrator must "establish such loads for such waters as [EPA] determines necessary to implement the water quality standards applicable to such waters." *Id*.

75. A TMDL for a pollutant must "be established at a level necessary to implement the applicable water quality standard(s) with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality." CWA § 303(d)(1)(C), 33 U.S.C. § 1313(d)(1)(C); 40 C.F.R. § 130.7(c)(1).

76. According to EPA's implementing regulations, a TMDL is comprised of wasteload allocations ("WLAs") for point sources and load allocations ("LAs") for nonpoint sources and natural background pollutant loads. 40 C.F.R. § 130.2(i).

77. "Wasteload allocation" is defined as "[t]he portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution." 40 C.F.R. § 130.2(h).

78. "Load allocation" means "[t]he portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources." 40 C.F.R. § 130.2(g).

79. "Loading capacity" is defined as "[t]he greatest amount of loading that a water can ***receive*** without violating water quality standards." 40 C.F.R. § 130.2(f) (emphasis added).

80. "Load" or "loading" means "an amount of matter or thermal energy that is introduced into a receiving water; to introduce matter or thermal energy into a receiving water." 40 C.F.R. § 130.2(e).

81. In other words, a TMDL establishes a water body's "loading capacity," which is the maximum amount of a pollutant that can be introduced into a water body per day without violating water quality standards. *See* 40 C.F.R. § 130.2 (e)-(i).

82. EPA's implementing regulations provide that TMDLs may be established "using a pollutant-by-pollutant or biomonitoring approach" (*e.g.*, directly measuring aquatic life), 40 C.F.R. § 130.7(c)(1)(i), "for all ***pollutants*** preventing or expected to prevent attainment of water quality standards." 40 C.F.R. § 130.7(c)(1)(ii) (emphasis added). The regulations do not purport to authorize the use of non-pollutant surrogates.

83. In contrast to the definition of "pollutants" for which a TMDL is required, the CWA defines "pollution" more generally and more broadly to include "the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water." CWA § 502(19), 33 U.S.C. § 1362(19).

84. This statutory distinction between "pollutant" and "pollution" is fundamental to the structure and scope of the CWA, which makes pollutants the authorized focus of the TMDL program and NPDES permits. *See, e.g.*, CWA § 303(d)(1)(C), 33 U.S.C. § 1313(d)(1)(C) ("Each State shall establish for the waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those ***pollutants*** which the Administrator identifies under section 1314(a)(2) of this title as suitable for such calculation." (emphasis added)); CWA § 402(p)(3)(B)(iii), 33 U.S.C. § 1342(p)(3)(B)(iii) ("Permits for discharges from municipal storm sewers . . . shall require controls to reduce the discharge of ***pollutants*** to the maximum extent practicable . . . ." (emphasis added)).

85. The flow or discharge of water itself, whether comprised of stormwater or otherwise, is not a "pollutant." *See* CWA § 502(6), 33 U.S.C. § 1362(6); 9 Va. Admin. Code § 25-31-10. EPA itself concedes that it "does not believe that flow, or lack of flow, is a pollutant as defined by the CWA Section 502(6)." *See Guidance for 2004 Assessment, Listing, and*

Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act at 8 (July 21, 2003) (relevant excerpts attached hereto as Exhibit B).

86. Furthermore, neither the CWA nor EPA's implementing regulations provide express authority to regulate the discharge of water alone as a "surrogate" for a defined pollutant.

NPDES Permit Program

87. The CWA prohibits the discharge of "pollutants" by "point sources" to waters of the United States unless authorized by an NPDES permit. CWA § 301(a), 33 U.S.C. § 1311(a); CWA § 402, 33 U.S.C. § 1342.

88. Point sources include certain MS4s subject to EPA's so-called Phase I and Phase II stormwater NPDES regulations, including State Plaintiffs' MS4s in the Accotink Creek watershed. *See* 40 C.F.R. § 122.26.

89. "Storm water," or "stormwater," is defined as "storm water runoff, snow melt runoff, and surface runoff and drainage." 40 C.F.R. § 122.26(b)(13).

90. Medium MS4s in cities and counties with populations of 100,000-249,999, and large MS4s in cities and counties with populations of at least 250,000 (including Fairfax County's MS4), are regulated under the Phase I stormwater regulations. *See id.*

91. Small MS4s (including VDOT's MS4) in urbanized areas are regulated under the Phase II stormwater regulations. *See id.*

92. With respect to stormwater, the CWA's NPDES permit program is limited to addressing the "discharge" of pollutants. CWA § 402(p), 33 U.S.C. § 1342(p); CWA § 502(12), 33 U.S.C. § 1362(12) ("The term 'discharge' when used without qualification includes a discharge of a pollutant, and a discharge of pollutants."). Thus, stormwater must contain a pollutant in order to be regulated by an NPDES permit.

93. For point source stormwater discharges, NPDES permits require controls to reduce the discharge of pollutants to the maximum extent practicable, which may include various practices, techniques, methods, and other provisions. CWA § 402(p)(3)(B)(iii), 33 U.S.C. § 1342(p)(3)(B)(iii).

94. In Virginia, DCR is authorized by EPA to administer the NPDES permit program as to stormwater discharges from MS4s. DCR-issued NPDES permits are known as VSMP permits and are authorized as a matter of state law under the Virginia Stormwater Management Act, Va. Code Ann. § 10.1-603.1 *et seq.*, and the VSMP Permit Regulations, 4 Va. Admin. Code § 50-60-10 *et seq.*

95. Notwithstanding the specific compliance standard of the CWA applicable to urban stormwater runoff through MS4s established by Congress at 33 U.S.C. § 1342(p)(3)(B)(iii) (a "maximum extent practicable" level of pollutant control), EPA takes the position that NPDES permits for MS4s must contain water quality-based effluent limitations "consistent with the assumptions and requirements of any available wasteload allocation" in a TMDL and that "EPA has the authority to object to the issuance of an NPDES permit that is inconsistent with WLAs established for that point source." Accotink TMDL at 8-2 to 8-4; *see also* EPA Response at Comment # 42; EPA Flow Memo at 3 (citing 40 C.F.R. § 122.44(d)(1)(vii)(B)). Hence, according to EPA's interpretation, the WLAs for Fairfax County and VDOT established in the Accotink TMDL must be included in their MS4 permits.

96. While this EPA position may apply to traditional point source discharges from wastewater treatment plants and industrial manufacturing facilities regulated under federal law, MS4s are instead subject to a statutory, MS4-specific compliance standard enacted by Congress in 1987, subsequent to EPA's adoption of 40 C.F.R. § 122.44(d)(1)(vii)(B). CWA §

402(p)(3)(B)(iii), 33 U.S.C. § 1342(p)(3)(B)(iii) ("Permits for discharges from municipal storm sewers . . . shall require controls to reduce the discharge of pollutants to the ***maximum extent practicable*** . . . ." (emphasis added)).

FACTUAL BACKGROUND

***American Canoe Association v. EPA* Consent Decree**

97. In 1998, the American Canoe Association and the American Littoral Society filed a lawsuit in this Court against EPA for allegedly failing to fulfill its non-discretionary duty under CWA § 303(d) to disapprove Virginia's "constructive non-submission" of TMDLs and for EPA failing to establish TMDLs itself for impaired waters in Virginia. *See American Canoe Ass'n, Inc. v. EPA*, 30 F. Supp. 2d 908, 911-12, 919 (E.D. Va. 1998).

98. That litigation was resolved by a Consent Decree entered by this Court in 1999, which included a schedule for development of TMDLs in Virginia. Consent Decree, *American Canoe Ass'n*, No. 98-979-A (E.D. Va. June 11, 1999) (the "Consent Decree") (relevant excerpts attached hereto as Exhibit C).

99. While Virginia was not a party to the Consent Decree and is not directly regulated thereby, the Consent Decree set forth EPA's expectation that TMDLs for each listed "water" (including Accotink Creek) and associated "pollutant" be completed by Virginia by May 1, 2010. *Id*. at 11 and at Attachment A at 4.

100. Under the heading of "Pollutant," Attachment A of the Consent Decree does not list "water" or the "flow of water," and in no way expands EPA's legal authority to regulate the flow of water. *Id*. at Attachment A at 4.

101. In the event that Virginia failed to develop the TMDLs by May 1, 2010, the Consent Decree required EPA to establish all of the identified TMDLs by May 1, 2011, *i.e.*, within only twelve months of Virginia's deadline. *Id*. at 11.

102. Although EPA was required to establish a TMDL for the pollutant(s) impairing Accotink Creek by May 1, 2011, EPA was neither required nor authorized by the Consent Decree to regulate the flow of water into Accotink Creek. *See id*.

EPA's New "Non-Conventional TMDL" Model for the Mid-Atlantic Region

103. Upon information and belief, EPA encouraged DEQ to adopt a "flow TMDL" for Accotink Creek, which would regulate the flow of water rather than a traditional "pollutant" regulated by the Clean Water Act.

104. DEQ, however, declined to issue a flow TMDL without first conducting a rulemaking in accordance with the Virginia Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, to establish flow TMDL-related implementing regulations under the statutory authority of the Virginia State Water Control Law, Va. Code Ann. § 62.1-44.2 *et seq.*, and the Virginia Stormwater Management Act, Va. Code Ann. § 10.1-603.1 *et seq*. Those Virginia statutes are broader than the federal CWA in many significant respects, including the management of flow and other water ***quantity*** issues, as well as non-pollutant water quality issues. Nevertheless, DEQ recognized that, even under its significantly broader state statutory authority, notice and comment rulemaking was a necessary prerequisite to issuing a flow TMDL. *See* Agency Background Document *available at* http://www.townhall.state.va.us/L/viewstage.cfm?stageid=5168&display=general ("DEQ Background Document"); 25 Va. Reg. Regs. 4,466 (August 31, 2009); Letter from Jon M.

Capacasa, Director, EPA Region III Water Protection Division, to Ellen Gilinsky, Director, DEQ Division of Water Quality Programs (Undated) (attached hereto as Exhibit D).

105. In 2009, DEQ issued a Notice of Intended Regulatory Action pursuant to its broad state-law authority to "correct or reduce the alteration of the physical, chemical or biological properties of any state waters due to flow." DEQ Background Document; 25 Va. Reg. Regs. 4,466 (August 31, 2009).

106. EPA was not deterred by the narrower scope of its authority under the CWA or (even assuming EPA has authority to regulate flow) by APA rulemaking requirements. In its undated letter to DEQ (Exhibit D), EPA commended DEQ on its efforts to develop a "non-conventional TMDL that would use the volume and velocity (*i.e.*, flow) of urban runoff" and announced EPA's "belief" that this "non-conventional" approach would be "consistent with the Clean Water Act and its implementing regulations," despite the lack of express statutory authority and the obvious constraints described above related to the regulation of "pollutants" as defined by the CWA itself. Notably, in the letter, EPA did not cite any statutory or regulatory authority for this "belief."

107. In the undated EPA letter, EPA "recognizes that DEQ may face a scheduling problem" due to DEQ's need to adopt regulations governing water flow and states that EPA will take over development of the Accotink TMDL to meet the Consent Decree deadline. *Id*.

108. On April 18, 2011, as EPA's twelve-year compliance period under the 1999 Consent Decree was drawing to a close, EPA issued the Accotink TMDL to regulate the flow of water.

109. In so doing, EPA effectively short-circuited the public participation safeguards of the Virginia Administrative Process Act that DEQ was honoring. *See id*. Instead, EPA decided

to proceed with its own "non-conventional TMDL" based on authority that EPA "believes" it may possess, despite the plain language of the CWA to the contrary. *Id*.

110. Upon information and belief, prior to 2011, EPA had never established a flow TMDL in the nearly forty years since the 1972 enactment of the TMDL provisions in CWA § 303(d), and EPA intends this new manner of regulation to "serve as a model for TMDLs to be developed and implemented in watersheds throughout the [Mid-Atlantic EPA] Region . . . ." EPA Region III, Water Info Newsletter, Vol. 3, Iss. 1, at 4 (March 2009) (relevant excerpts attached hereto as Exhibit E).

111. Even if EPA were correct in its belief that it has the statutory authority to regulate the flow of water, EPA should have followed the example of Virginia and engaged in notice and comment rulemaking in accordance with 5 U.S.C. § 553 prior to implementing such a drastic change in its existing regulations or their implementation, particularly since EPA intends to use this approach as a prototype for the entire Mid-Atlantic region, if not nationally. However, EPA failed to carry out the requisite APA rulemaking procedures.

Accotink Creek's Benthic Impairment

112. DEQ and EPA consider Accotink Creek to be impaired because it does not fully support the designated use of "propagation and growth of a balanced, indigenous population of aquatic life," specifically benthic macroinvertebrates or simply "benthics." 9 Va. Admin. Code § 25-260-10.

113. Benthic macroinvertebrates are invertebrate organisms, such as insects, crustaceans, snails, or worms, which live on the bottom of streams and rivers, are large enough to be seen with the naked eye, and are often extremely sensitive to pollutants, according to DEQ. *See*

http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/WaterQualityMonitoring/BiologicalMonitoringOverview.aspx (last visited June 25, 2012).

114. DEQ has not adopted numeric water quality criteria for benthic organisms and instead interprets its aquatic life designated use, and more specifically the health of the benthic macroinvertebrate population, by means of the Virginia Stream Condition Index ("VSCI"). *See* Accotink TMDL at 3-4.

115. DEQ considers a VSCI score of 60 or greater to represent aquatic life use attainment and a score below 60 to be indicative of aquatic life use (benthic) impairment. Accotink TMDL at 3-4.

116. Based on data collected at various monitoring locations within Accotink Creek at various times between 1994 and 2008, the long-term average VSCI score for Accotink Creek is approximately 30. Accotink TMDL at 3-10.

117. To determine the cause of this benthic impairment, the Accotink TMDL includes a "stressor identification analysis," which identified many possible "stressors," including nutrients (nitrogen and phosphorus) that exceed screening values (Accotink TMDL at 4-3); toxicity of the water in the creek to living organisms (Accotink TMDL at 4-4); various metals, pesticides, and other organic contaminants, including heptachlor epoxide, PCBs, dieldrin, chlordane, mercury, and arsenic, all of which exceeded screening values for fish tissue (Accotink TMDL at 4-4 to 4-5); and excessive sediment (Accotink TMDL at 4-5 to 4-6).

118. Despite these numerous contributing causes to the benthic impairment, EPA selected sediment alone as the "most probable" stressor and the "pollutant of concern." Accotink TMDL at 5-1.

EPA's Preference for an Inferior "Surrogate" for the Pollutant

119. According to EPA's website, EPA has approved or established 3,691 TMDLs for the pollutant actually at issue here (sediment) since 1995. EPA, National Summary of Impaired Waters and TMDL Information, National Cumulative TMDLs by Pollutant, http://ofmpub.epa.gov/tmdl_waters10/attains_nation_cy.control?p_report_type=T (last visited June 25, 2012).

120. Upon information and belief, EPA has historically interpreted and applied the CWA to exclude the regulation of the quantity of water alone (including flow rate, volume, and velocity) by TMDLs and NPDES permits and had never established a TMDL for flow prior to 2011.

121. Among the EPA-approved sediment TMDLs are TMDLs for Popes Head Creek, Bull Run, and Difficult Run in Fairfax County, Virginia, each of which has an aquatic life impairment similar to Accotink Creek. None of these TMDLs regulate the flow of water.

122. Attachment A of the Consent Decree lists 111 water bodies as impaired for benthics, in addition to Accotink Creek. All of these TMDLs were due to be approved or established by EPA by May 1, 2011, and ***none*** of these impairments were addressed by regulating flow. Instead, upon information and belief, EPA established or approved TMDLs for "pollutants" for these impairments, as required by the CWA.

123. Nevertheless, upon information and belief, EPA selected the Accotink Creek watershed area of Virginia and certain watersheds in Missouri to drastically change and expand EPA's national TMDL regulatory program. EPA took this action without adhering to rulemaking procedures and instead merely issued a guidance document (the EPA Flow Memo) to justify its approach. EPA now seeks to apply the authority presumed in this guidance document

through individual TMDLs. EPA asserts the regulatory power to control the flow of clean water, and by implication, land use and the amount of "impervious cover" (*e.g*., buildings and roads) from which the stormwater flows run off.

124. EPA recognized the problems of addressing benthic impairments through regulating pollutants alone in its Response to Comments, citing to the 2008 National Research Council Report *Urban Stormwater Management in the United States*. EPA Response at Comments # 22, 25, and 42. That Report itself, however, notes, "Even though 'pollutant' is defined broadly in the Act to include virtually every imaginable substance added to surface waters, including heat, it has not traditionally been read to include water volume [33 U.S.C. § 1362(6)]." National Research Council, *Urban Stormwater Management in the United States* 50 (2008). The Report further notes, "[s]ince the primary federal statute—the CWA—is concerned with limiting ***pollutants*** into surface waters, the volume of discharges are secondary and are generally not regulated at all." *Id*. at 119 (emphasis added).

125. In light of the limitations of its existing authorities, EPA impermissibly established the flow TMDLs to expand its regulatory reach beyond its previously, and commonly, understood limitations. EPA understood, and understands, that it does not have the legal authority to regulate the flow of water.

126. Upon information and belief, EPA has based the four flow TMDLs it has established on guidance written by EPA staff and issued in final form on December 28, 2010 and on the "non-conventional" approach set forth therein. *See* EPA Flow Memo.

127. The EPA Flow Memo encourages TMDL writers to use "numeric parameters acting as surrogates for pollutants" and specifically recommends "stormwater flow volume or

impervious cover" as "surrogate pollutant parameter[s]," which itself is a misleading name given that neither flow nor impervious cover is a pollutant. EPA Flow Memo at 2, 5.

128. Upon information and belief, the EPA Flow Memo generated such a national controversy that EPA subsequently agreed to an informal comment process on its already final memorandum. During that comment process, many parties objected to the legality and appropriateness of EPA's planned regulatory program expansion, by guidance, for the control of the flow of water. As of this time, EPA has yet to issue revised guidance.

129. It is unknown to the State Plaintiffs whether EPA's revised guidance will retain flow or impervious cover as a "surrogate pollutant parameter." However, even if it will, such guidance cannot amend the statutory requirement that TMDLs are maximum loads of "pollutants," rather than the volume, velocity, or flow rate of water.

130. The EPA Flow Memo recommends, pursuant to 40 C.F.R. § 122.44(d)(1)(vii)(B), that the permitting authority (EPA or a state agency such as DCR) impose effluent limits and conditions in MS4 NPDES Permits consistent with the TMDL, *i.e.*, permit limits on the flow of stormwater that may be conveyed by and discharged from an MS4 drainage system. The State Plaintiffs dispute that such federal statutory or regulatory authority exists.

131. Each of EPA's three flow TMDLs established for water bodies in Missouri have been appealed to the United States District Court for the Western District of Missouri, Southern Division.

132. In *City of Columbia, Missouri et al. v. EPA*, No. 2:11-cv-04155 (W.D. Mo.), EPA has agreed to an extensive settlement agreement styled as a Collaborative Adaptive Management Implementation Schedule and Agreement for Hinkson Creek TMDL.

133. The *City of Springfield, Missouri et al v. EPA*, No. 6:11-CV-03383 (W.D. Mo.) case regarding EPA's other two flow TMDLs is at a preliminary stage and ongoing.

134. EPA's choice of flow as a surrogate is especially problematic because flow accounts for only 75% or less of the identified sediment problem. *See* Accotink TMDL at 4-7, Figure 4-1. Therefore, there is no rational basis for EPA to choose this surrogate, given that the Accotink TMDL itself and the public comment made to EPA demonstrate flow regulation to be inferior or ineffective as compared to the direct regulation of the real pollutant at issue (sediment). *See id.*; EPA Response at Comments # 4, 6, 10, 21, 23, 30, and 49.

135. Flow is an unnecessary, unjustified, and inferior surrogate that never should have been selected for Accotink Creek. The result is that the State Plaintiffs—and all Virginians—are left with a "non-conventional" TMDL leading to higher costs and worse water quality results than a traditional, lawful TMDL addressing a pollutant of concern.

136. EPA's concept of regulating a surrogate, as encouraged in the EPA Flow Memo and applied in the Accotink TMDL, appears to know no bounds or criteria for its application, opens the door to regulating any number of land uses and human activities such as existing buildings and roads ("impervious cover"), and expands EPA's TMDL and NPDES permit jurisdiction far beyond the management of "pollutants" authorized by the CWA.

137. Regulation of the flow of water or any other non-pollutant or human activity based on an alleged correlation to a CWA pollutant contravenes the clear congressional intent to limit EPA's regulatory authority to the control of only the substances specifically enumerated in the definition of "pollutant." *See* CWA §§ 303(d)(1)(C), 502(6), 33 U.S.C. §§ 1313(d)(1)(C), 1362(6). EPA has no authority to arbitrarily expand the list of "pollutants" set by statute or to

eviscerate the CWA's explicit distinction between "pollution" and "pollutant," as EPA has done in the Accotink TMDL. *See* CWA § 502(6), (19), 33 U.S.C. §§ 1362(6), (19).

138. Although EPA frequently claims in the TMDL to be regulating flow as a surrogate for the pollutant sediment, elsewhere in the TMDL EPA admits that it is actually regulating flow itself because high flows scour the creek's banks and bottom. *See, e.g.,* Accotink TMDL at 4-5 to 4-8. To the extent that EPA is regulating flow because it believes that the flow or quantity of water, in and of itself, is "the problem," EPA is not applying a surrogate approach at all, and instead is directly regulating a non-pollutant in excess of EPA's statutory authority. EPA literally is treating water itself—the very substance the Clean Water Act was created to protect—as a pollutant.

EPA's Flawed Numeric Flow Criterion

139. The Accotink TMDL next sets about determining and adopting a permissible flow rate to define the "total maximum daily flow" that EPA will allow in Virginia streams from MS4 drainage systems. Accotink TMDL at 5-11 to 5-20.

140. EPA has calculated and adopted a generally applicable "Non-impaired Composite Unit-Area Flow Rate" of 681.8 ft^3/acre-day (the "Numeric Flow Criterion"). *See* Accotink TMDL at 5-19 to 5-20.

141. EPA adopted the Numeric Flow Criterion (681.8 ft^3/acre-day) based on two "reference streams" that together became the *de facto* water quality standard for Accotink Creek. *See* Accotink TMDL at 5-4, 6-11.

142. The chosen reference streams—the rather pristine rural streams of Buffalo Creek and Catoctin Creek—are both fundamentally different from Accotink Creek in many respects

(*e.g.*, different eco-regions, physiographic conditions, soils, and watershed shape, slope, and size). *See* Accotink TMDL at 5-5 to 5-9.

143. Buffalo Creek's very low natural flow skews the resulting Numeric Flow Criterion to a significantly lower level than would result from consideration of Catoctin Creek alone or other streams.

144. The chosen reference streams are non-representative of even a pristine Accotink Creek and are an inappropriate basis for setting the total maximum daily flow allowed to discharge from the State Plaintiffs' MS4s.

145. The reference streams both significantly exceed Virginia's definition of aquatic life use attainment (*i.e.*, a VSCI score of 60 or greater) and, therefore, fail to define the "maximum" loading capacity of the T**M**DL for Accotink Creek (*i.e.*, the highest flow tolerable under the aquatic life use water quality standard).

146. EPA made no meaningful effort to determine the true "maximum" loading capacity of Accotink Creek in the T**M**DL.

147. EPA uses the Numeric Flow Criterion to model a flow rate that EPA believes would protect a hypothetical pristine stream from impairment, but neither the criterion nor the Accotink TMDL itself provide any information predicting the in-stream effects of meeting this criterion in Accotink Creek, which is already impaired.

148. The State Plaintiffs and others commented on these major deficiencies associated with the reference streams, but the final Accotink TMDL and the EPA Response summarily dismiss these significant issues and, thus, fail to establish a rational connection between these facts and decisions EPA made. *See, e.g.*, EPA Response at Comments # 140 (Fairfax County), 141 (VDOT), and 142 (Virginia DCR).

149. Nevertheless, EPA used the in-stream flow rates of the reference streams to adopt the Numeric Flow Criterion for Accotink Creek and for establishing WLAs for MS4 discharges thereto.

150. The Numeric Flow Criterion is a generally applicable numeric criterion based on a defined, non-urban, pre-development flow condition from other watersheds (*i.e.*, not specific to Accotink Creek).

151. The Numeric Flow Criterion is applied in Accotink Creek as a binding legal norm and would necessarily govern permissible flow rates under EPA's new "model" TMDL approach that EPA intends to use for other urban streams in Virginia. *See* Exhibit E.

152. Just as EPA never subjected its expansion of the TMDL program to the public safeguards of APA notice and comment rulemaking under 5 U.S.C. § 553, EPA similarly evaded the CWA and APA procedural requirements that apply to EPA's adoption of a Numeric Flow Criterion on behalf of the Commonwealth of Virginia.

153. The Numeric Flow Criterion was adopted by EPA for Virginia in violation of the terms and procedures set forth in CWA § 303(c)(4)(B), 33 U.S.C. § 1313(c)(4)(B), for the adoption of such criteria. EPA's action denied Virginia the state primacy that it is assured by the CWA. *See, e.g.*, CWA § 101(b), 33 U.S.C. § 1251(b) ("It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter."); CWA § 303(c), 33 U.S.C. § 1313(c) (adoption of water quality standards); CWA § 303(d), 33 U.S.C. § 1313(d) (identification of impaired waters and establishment of TMDLs).

154. EPA's action denied the State Plaintiffs and the public generally the important procedural safeguards assured by the APA, not to mention appropriate transparency and accountability.

Flow Reduction Will Not Meet Water Quality Standards

155. Even if the Numeric Flow Criterion had been within EPA's authority, technically appropriate, and lawfully adopted, the Accotink TMDL would still be arbitrary and unlawful because it completely fails to take account of the physical characteristics of Accotink Creek's channel and its now urban watershed, which have changed materially and irreversibly since colonial times due to land clearing and development (*e.g.*, a deeper, wider channel that has cut lower into the surface and become more divorced from its flood plain).

156. As the State Plaintiffs and others commented during the TMDL development process, simply returning Accotink Creek's flow rate to a presumed representation of pre-development levels, as would be required under the Numeric Flow Criterion, has in no way been demonstrated by EPA to meet the target required by law—a balanced, indigenous population of benthic organisms in Accotink Creek. *See, e.g.*, EPA Response at Comments # 12, 13, 14, 19, 23, 30, 49, 51, 55 and 57. Instead, all that will result is that the same severely changed creek bed will have less water at the selected "1-year, 24-hour flow" condition.

157. The biological objective of a balanced, indigenous population of benthic organisms in Accotink Creek is the statutory linchpin of the Accotink TMDL, yet it is completely overlooked by the TMDL documentation, and a rational relationship is never established between the Numeric Flow Criterion of 681.8 ft^3/acre-day and the restoration of Accotink Creek and its aquatic life.

158. Aquatic life use attainment is not possible without a comprehensive approach—completely ignored here—that takes into account the physical changes to the channel itself in combination with changes to the amounts of sediment and patterns of flow delivered from the watershed to the creek. *See, e.g.*, EPA Response at Comments # 12, 13, 14, 19, 23, 30, 49, 51, 55 and 57.

159. Failure to consider all three in combination, and instead focusing on making just one of the three factors (flow) behave like two rural "reference streams," means that there is no rational basis to conclude that the Accotink TMDL is designed to achieve the aquatic life use other than by coincidence or accident.

160. If all three factors were actually considered in combination, EPA's particular Numeric Flow Criterion of 681.8 ft^3/acre-day would have no special biological relevance and need not control over any other adequate balance of the three factors.

161. The State Plaintiffs and others commented on this major issue and concern—whether the Accotink TMDL is actually designed to restore the habitat needed to support a balanced, indigenous population of benthic organisms in Accotink Creek—yet the final Accotink TMDL and the EPA Response utterly fail to address this point. *See, e.g.*, EPA Response at Comments # 12, 13, 14, 19, 23, 30, 49, 51, 55 and 57.

162. The Accotink TMDL contains indisputable errors of fact as well as statistical errors central to the determination of the TMDL and related WLAs.

163. For example, in calculating the MS4 WLA in the Accotink TMDL, EPA relied upon the unfounded assumption that "90% of the acreage of all land uses in the watershed drain to a permitted stormsewer." EPA Response at Comment # 188. EPA provided no analysis in the TMDL document to support this assumption. *See* EPA Response at Comment # 189.

164. On information and belief, significantly less than 90% of developed lands in Fairfax County drains through the MS4. *Id*. For example, and of particular concern to Fairfax County, the Accotink TMDL over-regulates the County by assigning approximately 18,000 acres as the allocated area for the point source MS4 WLA, Accotink TMDL at 6-9, Table 6-7, rather than the County's actual MS4 area of 10,600 acres, EPA Response at Comment # 188. This error nearly doubles the County's burden and responsibility under the Accotink TMDL, and illustrates the weakness of the entire Accotink TMDL. *Id.*

165. VDOT expressed similar concerns in its comments regarding EPA's assumptions for its MS4 drainage area. EPA Response at Comment # 190.

166. Although the State Plaintiffs and others commented regarding these errors and, in the case of Fairfax County, even provided the correct data based on an actual MS4 drainage area delineation, EPA declined to fix these clear errors. *See, e.g.*, EPA Response at Comments # 188, 189, 190, 191, 192, and 193.

167. For all of the above reasons, EPA failed to establish the Accotink TMDL "at a level necessary to implement applicable water quality standards" as required by CWA § 303(d)(1)(C).

CLAIMS FOR RELIEF

COUNT I
EPA's Accotink TMDL Exceeds EPA's Statutory Authority and Violates the CWA Because Flow Is Neither a "Pollutant" Nor a Permissible "Surrogate"

168. The State Plaintiffs hereby incorporate by reference and re-allege all preceding paragraphs of this Complaint as if set forth in this Count I.

169. Agency action, findings and conclusions must be held unlawful and set aside if found to be, among other things, *ultra vires*, in excess of statutory jurisdiction, authority, or

limitations, or short of statutory right, 5 U.S.C. § 706(2)(C); or arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, 5 U.S.C. § 706(2)(A).

170. Pursuant to the CWA and EPA's implementing regulations, a TMDL must be established for a "pollutant" in an impaired water "at a level necessary to implement the applicable water quality standards." CWA § 303(d)(1)(C), 33 U.S.C. § 1313(d)(1)(C); *see also* 40 C.F.R. § 130.7(c)(1) and (d)(2).

171. Neither the CWA nor EPA's implementing regulations authorize EPA to regulate the flow of water (including volume, velocity, and flow rate) in, or that may be introduced into, a receiving water because the flow of water, by itself, is not a pollutant.

172. Moreover, neither the CWA nor its implementing regulations expressly authorize EPA to regulate a "surrogate" in the place of a pollutant.

173. EPA violated the CWA § 303(d) and its own implementing regulations, exceeded its authority, and acted in an *ultra vires* manner in establishing the Accotink TMDL because EPA chose to regulate the non-pollutant flow.

COUNT II
EPA's Accotink TMDL Is Unlawful Because EPA Adopted the Flow Requirements in Contravention of Required CWA and APA Procedures

174. The State Plaintiffs hereby incorporate by reference and re-allege all preceding paragraphs of this Complaint as if set forth in this Count II.

175. Agency action, findings, and conclusions must be held unlawful and set aside if taken without observance of procedure required by law. 5 U.S.C. § 706(2)(D). In addition, the reviewing court shall compel agency action unlawfully withheld or unreasonably delayed. 5 U.S.C. § 706(1).

176. Like Virginia, EPA was required to adopt its new "non-conventional," "model" approach to TMDL regulation of non-pollutant surrogates (including the flow of water) by amending its TMDL regulation, 40 C.F.R. Part 130, in accordance with the public safeguards and requirements of notice and comment rulemaking, 5 U.S.C. § 553, because (a) EPA's regulations do not provide for regulating flow or other non-pollutants, and (b) for nearly 40 years EPA has interpreted and applied the CWA's TMDL and NPDES permit programs as not regulating the flow of water. EPA violated the CWA and the APA by failing to engage in rulemaking before addressing flow in a TMDL.

177. EPA violated the CWA by adopting the Numeric Flow Criterion without observance of the procedures required by CWA § 303(c), 33 U.S.C. § 1313(c), for the adoption of water quality standards for a state.

178. EPA violated the APA by adopting the Numeric Flow Criterion, which is a "rule" within the meaning of 5 U.S.C. § 551(4), with force and effect of law, without observance of the public safeguards and requirements of notice and comment rulemaking under 5 U.S.C. § 553.

COUNT III
Even If EPA Has the Authority to Regulate Flow and Adopt the Numeric Flow Criterion, the Accotink TMDL Is Contrary to Law and Arbitrary and Capricious

179. The State Plaintiffs hereby incorporate by reference and re-allege all preceding paragraphs of this Complaint as if set forth in this Count III.

180. Agency action, findings and conclusions must be held unlawful and set aside if found to be, among other things, arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law, 5 U.S.C. § 706(2)(A); *ultra vires*, in excess of statutory jurisdiction, authority, or limitations, or short of statutory right, 5 U.S.C. § 706(2)(C); without observance of

procedure required by law, 5 U.S.C. § 706(2)(D); or unsupported by substantial evidence, 5 U.S.C. § 706(2)(E).

181. Even assuming that EPA has the authority to regulate flow as a surrogate, EPA violated the CWA and the APA by establishing a "non-conventional TMDL" with an inferior surrogate, which will lead to higher implementation costs and worse water quality results.

182. EPA violated the CWA and the APA by adopting the Numeric Flow Criterion based on two reference streams that provide an inappropriate basis for regulating Accotink Creek, the parties in the Accotink Creek watershed, and the maximum flow rate for discharges from the State Plaintiffs' MS4s.

183. EPA violated the CWA and the APA by failing to determine, or even attempting to determine, the "maximum" loading capacity of the T**M**DL for Accotink Creek.

184. EPA violated the CWA and the APA by incorrectly and unreasonably determining the acreage and associated obligation for "Reduction to the one-year, 24-hour Flow" for the State Plaintiffs' MS4s-regulated areas.

185. EPA violated the CWA and the APA by failing to take into account stressor pollutants other than sediment and physical changes other than flow to Accotink Creek's channel and watershed, which have changed materially and irreversibly over time, such that there is no rational basis to conclude that the Accotink TMDL will meet its target of a balanced, indigenous population of benthic organisms simply by reducing stormwater flow.

186. EPA violated the CWA and the APA by unlawfully imposing upon MS4 permittees the inapplicable requirement of 40 C.F.R. § 122.44(d)(1)(vii)(B) that "effluent limits in permits be consistent with 'the assumptions and requirements of any available wasteload allocation' in an EPA-approved TMDL" and further establishing that "EPA has the authority to

object to the issuance of an NPDES permit that is inconsistent with WLAs established for that point source." Accotink TMDL at 8-2 to 8-4.

187. For the reasons stated herein, as well as for all of the reasons set forth in the comments on the Draft Accotink TMDL, which are hereby incorporated by reference, the Accotink TMDL is contrary to law and is arbitrary and capricious, in violation of the CWA and APA.

REQUEST FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court:

1. Immediately postpone the effective date of the Accotink TMDL pending the conclusion of this litigation, as authorized by 5 U.S.C. § 705, to preserve the status and rights of the State Plaintiffs and their respective MS4 NPDES permits and to prevent the imminent harm to State Plaintiffs that would result from incorporation of the costly flow rate reductions mandated by the Accotink TMDL into State Plaintiffs' MS4 NPDES Permits;

2. Declare that EPA's action in establishing the Accotink TMDL is unlawful because it is in excess of EPA's statutory authority and *ultra vires*; violates the Clean Water Act and the Administrative Procedure Act; is arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law; and was adopted without observance of required procedures, including that:

(a) EPA lacks the statutory authority under the CWA to regulate the flow of water in the Accotink TMDL because the flow of water is neither a "pollutant" nor a permissible "surrogate" for a pollutant;

(b) EPA violated the APA and CWA by regulating the flow of water and imposing the Numeric Flow Criterion in the Accotink TMDL without observance of required procedures;

(c) It was arbitrary, capricious, and contrary to law for EPA to base the Accotink TMDL on an inferior "surrogate," inappropriate reference streams, and incorrect MS4 acreage determinations; for EPA to fail to determine the maximum loading capacity of the creek and fail to take into account significant factors other than flow; and for EPA to adopt MS4 permitting requirements contrary to the CWA's "maximum extent practicable" standard for MS4s; and

(d) Establishment of the Accotink TMDL was unlawful for any additional reasons set forth in this Complaint or the administrative record or to be demonstrated to this Court;

3. Vacate the Accotink TMDL or, in the alternative, remand the Accotink TMDL to EPA for reconsideration in light of the Court's decision;

4. Enjoin EPA from regulating the flow of water via TMDLs and NPDES permits;

5. Enjoin EPA from enforcing, requiring the Commonwealth of Virginia to enforce, or otherwise acting pursuant to the Accotink TMDL; and

6. Grant such other relief as may be necessary and appropriate or as the Court deems just and proper, including all fees and expenses herein incurred.

DATED: July 12, 2012

Respectfully submitted,

FOR THE VIRGINIA DEPARTMENT OF TRANSPORTATION:

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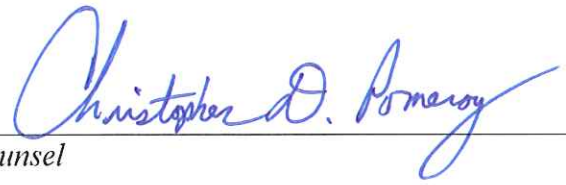
FOR THE BOARD OF SUPERVISORS OF FAIRFAX COUNTY, VIRGINIA



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Glossary of Acronyms

APA: Administrative Procedure Act (5 U.S.C. §§ 551 through 559).

BMPs: Best Management Practices. Methods, measures, or practices determined to be reasonable and cost-effective means for a landowner to meet certain generally nonpoint source, pollution control needs. BMPs include, but are not limited to, structural and nonstructural controls and operation and maintenance procedures. *See* 40 C.F.R. § 130.2(m); Va. Code Ann. § 10.1-603.15.1; 9 Va. Admin. Code § 10-20-40.

CWA: The Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) (33 U.S.C. §§ 1251 through 1387).

DCR: Virginia Department of Conservation and Recreation (Va. Code Ann. §§ 10.1-100 through 10.1-104.6) and its associated Soil and Water Conservation Board (Va. Code Ann. §§ 10.1-502 through 10.1-505). Authorized to administer the NPDES permit program as to stormwater discharges from MS4s. *See* Va. Code Ann. § 10.1-603.2:1.

DEQ: Virginia Department of Environmental Quality (Va. Code Ann. §§ 10.1-1182 through 10.1-1197.11) and its associated State Water Control Board (Va. Code Ann. §§ 62.1-44.7 through 62.1-44.15:5.2). Responsible for carrying out the mandates of the State Water Control Law (Va. Code Ann. §§ 62.1-44.2 through 62.1-44.34:28), as well as meeting Virginia's obligations under the CWA.

EPA: United States Environmental Protection Agency.

LA: Load allocation, the portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources. Load allocations are best estimates of the loading, which can range from reasonably accurate estimates to gross allotments, depending on the availability of data and appropriate techniques for predicting the loading. Wherever possible, natural and nonpoint source loads should be distinguished. *See* 40 C.F.R. § 130.2(g); 9 Va. Admin. Code § 25-720-10.

LID: Low Impact Development, a comprehensive land planning and engineering design approach to stormwater management with a goal of maintaining and enhancing the pre-development hydrologic regime of urban and developing watersheds. Includes the use of porous pavers and landscaping.

MS4s: Municipal Separate Storm Sewer Systems, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains designed or used for collecting or conveying stormwater, that are not a combined sewer and not part of a publicly-owned treatment works. *See* 4 Va. Admin. Code § 50-60-10.

NPDES: National Pollutant Discharge Elimination System. The CWA's NPDES program requires permits for the discharge of "pollutants" from any "point source" into "waters of the United States." *See* CWA § 402, 33 U.S.C. § 1342; 40 C.F.R. § 122.1(b).

RPAs: Resource Protection Areas, a designation made, pursuant to the Chesapeake Bay Preservation Act (Va. Code Ann. §§ 10.1-2100 through 10.1-2115), by Fairfax County and other Virginia local governments of lands adjacent to water bodies with perennial flow that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters. *See* 9 Va. Admin. Code §§ 10-20-40, 10-20-80.

TMDL: Total Maximum Daily Load, the sum of the individual wasteload allocations (WLAs) for point sources, load allocations (LAs) for nonpoint sources and natural background loading, plus a margin of safety (MOS). TMDLs can be expressed in terms of mass per time, toxicity, or other appropriate measures that relate to a state's water quality standard. *See* 40 C.F.R. § 130.2(i); 4 Va. Admin. Code § 50-60-10; 9 Va. Admin. Code § 25-720-10.

VDOT: Virginia Department of Transportation. Responsible for building, maintaining and operating Virginia's roads, bridges and tunnels. *See* Va. Code Ann. §§ 33.1-1 through 33.1-223.9.

VSCI: Virginia Stream Condition Index. Based on data collected at monitoring locations, a long-term average score is developed for each water body. A VSCI score of 60 or greater represents aquatic life use attainment, whereas a score below 60 indicates aquatic life use (benthic) impairment.

VSMP: Virginia Stormwater Management Program. *See* Virginia Stormwater Management Act, Va. Code Ann. §§ 10.1-603.1 through 10.1-603.15, and the VSMP Permit Regulations, 4 Va. Admin. Code §§ 50-60-10 through 50-60-1240.

WLA: Wasteload Allocation, the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation. *See* 40 C.F.R. § 130.2(h); 4 Va. Admin. Code § 50-60-10; 9 Va. Admin. Code § 25-720-10.

Exhibit A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 12 2010

OFFICE OF WATER

MEMORANDUM

SUBJECT: Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs"

FROM: James A. Hanlon, Director
Office of Wastewater Management

Denise Keehner, Director
Office of Wetlands, Oceans and Watersheds

TO: Water Management Division Directors
Regions 1 - 10

This memorandum updates aspects of EPA's November 22, 2002 memorandum from Robert H. Wayland, III, Director of the Office of Wetlands, Oceans and Watersheds, and James A. Hanlon, Director of the Office of Wastewater Management, on the subject of "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs" (hereafter "2002 memorandum").

Background

Section III of the 2002 memorandum "affirm[ed] the appropriateness of an iterative, adaptive management best management practices (BMP) approach" for improving stormwater management over time as permitting agencies, the regulated community, and other involved stakeholders gain more experience and knowledge. Since 2002, States and EPA have obtained considerable experience in developing TMDLs and WLAs that address stormwater sources. The technical capacity to monitor stormwater and its impacts on water quality has increased. In many areas, monitoring of the impacts of stormwater on water quality has become more sophisticated and widespread. Better information on the effectiveness of stormwater controls to reduce pollutant loadings and address water quality impairments is now available. In many parts of the country, permitting agencies have issued several rounds of permits for Phase I municipal separate storm sewer systems (MS4s), Phase II MS4s, and stormwater discharges associated with industrial activity, including stormwater from construction activities. Notwithstanding these developments, stormwater discharges remain a significant cause of water quality

impairment in many places, highlighting a continuing need for more useful WLAs and better NPDES permit provisions to restore impaired waters to their beneficial uses.

With this additional experience in mind, EPA is updating and revising the following four elements of the 2002 memorandum to better reflect current practices and trends in permits and WLAs for stormwater discharges:

- Providing numeric water quality-based effluent limitations in NPDES permits for stormwater discharges;
- Disaggregating stormwater sources in a WLA;
- Using surrogates for pollutant parameters when establishing targets for TMDL loading capacity; and
- Designating additional stormwater sources to regulate and treating load allocations as wasteload allocations for newly regulated stormwater sources.

EPA is currently reviewing other elements of the 2002 memorandum and will consider making appropriate revisions in the future.

Providing Numeric Water Quality-Based Effluent Limitations in NPDES Permits for Stormwater Discharges

In today's memorandum, EPA is revising the 2002 memorandum with respect to water quality-based effluent limitations (WQBELs) in stormwater permits. Since 2002, many NPDES authorities have documented the contributions of stormwater discharges to water quality impairment and have identified the need to include clearer permit requirements in order to address these impairments. Numeric WQBELs in stormwater permits can clarify permit requirements and improve accountability and enforceability. For the purpose of this memorandum, numeric WQBELs use numeric parameters such as pollutant concentrations, pollutant loads, or numeric parameters acting as surrogates for pollutants, such as such as stormwater flow volume or percentage or amount of impervious cover.

The CWA provides that stormwater permits for MS4 discharges shall contain controls to reduce the discharge of pollutants to the "maximum extent practicable" and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. CWA section 402(p)(3)(B)(iii). Under this provision, the NPDES permitting authority has the discretion to include requirements for reducing pollutants in stormwater discharges as necessary for compliance with water quality standards. *Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1166 (9th Cir. 1999).

Where the NPDES authority determines that MS4 discharges have the reasonable potential to cause or contribute to a water quality standard excursion, EPA recommends that, where feasible, the NPDES permitting authority exercise its discretion to include numeric effluent limitations as necessary to meet water quality standards. The 2002

memorandum stated "EPA expects that most WQBELs for NPDES-regulated municipal and small construction stormwater discharges will be in the form of BMPs, and that numeric limitations will be used only in rare instances." Those expectations have changed as the stormwater permit program has matured. EPA now recognizes that where the NPDES authority determines that MS4 discharges and/or small construction stormwater discharges have the reasonable potential to cause or contribute to water quality standards excursions, permits for MS4s and/or small construction stormwater discharges should contain numeric effluent limitations where feasible to do so. EPA recommends that NPDES permitting authorities use numeric effluent limitations where feasible as these types of effluent limitations create objective and accountable means for controlling stormwater discharges.

The Clean Water Act (CWA) requires that permits for stormwater discharges associated with industrial activity comply with section 301 of the Act, including the requirement under section 301(b)(1)(C) to contain WQBELs for any discharge that the permitting authority determines has the reasonable potential to cause or contribute to a water quality standard excursion. CWA section 402(p)(3)(A), 40 CFR 122.44(d)(1)(iii). When the permitting authority determines, using the procedures specified at 40 CFR 122.44(d)(1)(ii) that the discharge causes or has the reasonable potential to cause or contribute to an in-stream excursion of the water quality standards, the permit must contain effluent limits for that pollutant. EPA recommends that NPDES permitting authorities use numeric effluent limitations where feasible as these types of effluent limitations create objective and accountable means for controlling stormwater discharges.

Where WQBELs in permits for stormwater discharges from MS4s, small construction sites or industrial sites are expressed in the form of BMPs, the permit should contain objective and measurable elements (e.g., schedule for BMP installation or level of BMP performance). The objective and measureable elements should be included in permits as enforceable provisions. Permitting authorities should consider including numeric benchmarks for BMPs and associated monitoring protocols or specific protocols for estimating BMP effectiveness in stormwater permits. These benchmarks could be used as thresholds that would require the permittee to take additional action specified in the permit, such as evaluating the effectiveness of the BMPs, implementing and/or modifying BMPs, or providing additional measures to protect water quality.

If the State or EPA has established a TMDL for an impaired water that includes WLAs for stormwater discharges, permits for either industrial stormwater discharges or MS4 discharges must contain effluent limits and conditions consistent with the requirements and assumptions of the WLAs in the TMDL. See 40 CFR § 122.44(d)(1)(vii)(B). Where the WLA of a TMDL is expressed in terms of a surrogate pollutant parameter, then the corresponding permit can generally use the surrogate pollutant parameter in the WQBEL as well. Where the TMDL includes WLAs for stormwater sources that provide numeric pollutant load or numeric surrogate pollutant parameter objectives, the WLA should, where feasible, be translated into numeric WQBELs in the applicable stormwater permits.

The permitting authority's decision as to how to express the WQBEL(s), either as numeric effluent limitations or BMPs, including BMPs accompanied by numeric benchmarks, should be based on an analysis of the specific facts and circumstances surrounding the permit, and/or the underlying WLA, including the nature of the stormwater discharge, available data, modeling results or other relevant information. As discussed in the 2002 memorandum, the permit's administrative record needs to provide an adequate demonstration that, where a BMP-based approach to permit limitations is selected, the BMPs required by the permit will be sufficient to implement applicable WLAs. Improved knowledge of BMP effectiveness gained since 2002 should be reflected in the demonstration and supporting rationale that implementation of the BMPs will attain water quality standards and WLAs.

EPA's regulations at 40 CFR § 122.47 govern the use of compliance schedules in NPDES permits. Central among the requirements is that the effluent limitation(s) must be met "as soon as possible." 40 CFR 122.47(a)(1). EPA expects the permitting authority to include in the permit record a sound rationale for determining that any compliance schedule meets this requirement. Where a TMDL has been established and there is an accompanying implementation plan that provides a schedule for an MS4 to implement the TMDL, the permitting authority should consider the schedule as it decides whether and how to establish enforceable interim requirements and interim dates in the permit.

Lastly, NPDES permits must specify monitoring requirements necessary to determine compliance with effluent limitations. See CWA section 402(a)(2); 40 C.F.R. 122.44(i). Where WQBELs are expressed as BMPs, the permit must require adequate monitoring to determine if the BMPs are performing as necessary. When developing monitoring requirements, the NPDES authority should consider the variable nature of stormwater as well the availability of reliable and applicable field data describing the treatment efficiencies of the BMPs required and supporting modeling analysis.

Disaggregating Stormwater Sources in a WLA

As stated in the 2002 memorandum, EPA expects TMDL authorities will make separate aggregate allocations to NPDES-regulated storm water discharges (in the form of WLAs) and unregulated storm water (in the form of LAs). EPA also recognized that the available data and information usually are not detailed enough to determine waste load allocations for NPDES-regulated storm water discharges on an outfall-specific basis.

EPA still recognizes that decisions about allocations of pollutant loads within a TMDL are driven by quantity and quality of existing and readily available water quality data. However, today, TMDL writers may have better data or better access to data and, over time, may have gained more experience since 2002 in developing TMDLs and WLAs in a less aggregated manner. Moreover, since 2002, EPA has noted the difficulty of establishing clear, effective, and enforceable NPDES permit limitations for sources covered by WLAs that are expressed as single categorical or aggregated wasteload allocations.

Accordingly, for all these reasons, EPA recommends that WLAs for NPDES-regulated stormwater discharges should be disaggregated into specific categories (e.g., separate WLAs for MS4 and industrial stormwater discharges) to the extent feasible based on available data and/or modeling projections. In addition, these disaggregated WLAs should be defined as narrowly as available information allows (e.g., for MS4s, separate WLAs for each one; and, for industrial sources, separate WLAs for different sources or types of industrial sources or discharges.)

Where appropriate, EPA encourages permit writers to assign specific shares of the wasteload allocation to specific permittees during the permitting process.

Using Surrogate for Pollutant Parameters When Establishing Targets for TMDL Loading Capacity

Many waterbodies affected by stormwater discharges are listed as impaired under Section 303(d) due to biological degradation or habitat alteration, rather than for specific pollutants (e.g., metals, pathogens, sediment). Impairment can be due to pollutants where hydrologic changes such as quantity of flow and variation in flow regimes are important factors in their transport. Since the stormwater-source impairment is usually the result of the cumulative impact of multiple pollutants and physical effects, it may be difficult to identify a specific pollutant (or pollutants) causing the impairment. Using a surrogate parameter in developing wasteload allocations for waters impaired by stormwater sources may, at times, be the appropriate approach for restoring the waterbodies.

In the 2009 report *Urban Stormwater Management in the United States,* the National Research Council suggests: "A more straightforward way to regulate stormwater contributions to waterbody impairment would be to use flow or a surrogate, like impervious cover, as a measure of stormwater loading . . . Efforts to reduce stormwater flow will automatically achieve reductions in pollutant loading. Moreover, flow is itself responsible for additional erosion and sedimentation that adversely impacts surface water quality."

Therefore, when developing TMDLs for receiving waters where stormwater sources are the primary source of impairment, it may be suitable to establish a numeric target for a surrogate pollutant parameter, such as stormwater flow volume or impervious cover, that would be expected to provide attainment of water quality standards. This is consistent with the TMDL regulations that specify that TMDLs can be expressed in terms of mass per time, toxicity or other appropriate measure (40 C.F.R. §130.2(i)).

Where a surrogate parameter is used, the TMDL document must demonstrate the linkage between the surrogate parameter and the documented impairment (e.g., biological degradation). In addition, the TMDL should provide supporting documentation to indicate that the surrogate pollutant parameter appropriately represents stormwater pollutant loadings. Monitoring is an essential undertaking to ensure that compliance with the effluent limitations occurs.

Recent examples of TMDLs using flow or impervious cover as surrogates for pollutants in setting TMDL loading targets include: the Eagleville Brook (CT) TMDL and the Barberry Creek (ME) TMDL which used impervious cover as a surrogate; and, the Potash Brook (VT) TMDL which used stormwater flow volume as a surrogate.

Designating Additional Stormwater Sources to Regulate and Treating Load Allocations as Wasteload Allocations for Newly Regulated Stormwater Sources

The 2002 memorandum states that "stormwater discharges from sources that are not currently subject to NPDES regulation may be addressed by the load allocation component of a TMDL." Section 402(p)(2) of the Clean Water Act (CWA) requires industrial stormwater sources, certain municipal separate storm sewer systems, and other designated sources to be subject to NPDES permits. Section 402(p)(6) provides EPA with authority to identify additional stormwater discharges as needing a permit.

In addition to the stormwater discharges specifically identified as needing an NPDES permit, the CWA and the NPDES regulations allow for EPA and NPDES authorized States to designate, additional stormwater discharges for regulation. See 40 CFR 122.26 (a)(9)(i)(C), (a)(9)(i)(D), (b)(4)(iii), (b)(7)(iii), (b)(15)(ii) and 122.32(a)(2). Since 2002, EPA has become concerned that NPDES authorities have generally not adequately considered exercising these authorities to designate for NPDES permitting stormwater discharges that are currently not required to obtain permit coverage but that are significant enough to be identified in the load allocation component of a TMDL. Accordingly, EPA encourages permitting authorities to consider designation of stormwater sources in situations where coverage under NPDES permits would afford a more effective mechanism to reduce pollutants in stormwater discharges than available nonpoint source control methods.

In situations where a stormwater source addressed in a TMDL's load allocation is not currently regulated by an NPDES permit but may be required to obtain an NPDES permit in the future, the TMDL writer should consider including language in the TMDL explaining that the allocation for the stormwater source is expressed in the TMDL as a "load allocation" contingent on the source remaining unpermitted, but that the "load allocation" would later be deemed a "wasteload allocation" if the stormwater discharge from the source were required to obtain NPDES permit coverage. Such language, while not legally required, would help ensure that the allocation is properly characterized by the permit writer should the source's regulatory status change. This will help ensure that effluent limitations in a NPDES permit applicable to the newly permitted source are consistent with the requirements and assumptions of the TMDL's allocation to that source.

Such recharacterization of a load allocation as a wasteload allocation would not automatically require resubmission of the TMDL to EPA for approval. However, if the TMDL's allocation for the newly permitted source had been part of a single aggregated or gross load allocation for all unregulated stormwater sources, it may be appropriate for the NPDES permit authority to determine a wasteload allocation and corresponding

effluent limitation specific to the newly permitted stormwater source. Any additional analysis used to refine the allocation should be included in the administrative record for the permit. In such cases, the record should describe the basis for
(1) recharacterizing the load allocation as a wasteload allocation for this source and
(2) determining that the permit's effluent limitations are consistent with the assumptions and requirements of this recharacterized wasteload allocation. For purposes of this discussion, it is assumed that the permit writer's additional analysis or recharacterization of the load allocation as a wasteload allocation does not change the TMDL's overall loading cap. Any change in a TMDL loading cap would have to be resubmitted for EPA approval.

If you have any questions please feel free to contact us or Linda Boornazian, Director of the Water Permits Division or Benita Best-Wong, Director of the Assessment and Watershed Protection Division.

cc: Association of State and Interstate Water Pollution Control Administrators
Water Quality Branch Chiefs, Regions 1 – 10
Permits Branch Chiefs, Regions 1 – 10

Exhibit B

July 21, 2003

MEMORANDUM

SUBJECT: Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act; TMDL-01-03

FROM: Diane Regas, Director /s/
Office of Wetlands, Oceans, and Watersheds

TO: Water Division Directors
Regions 1 - 10

This memorandum transmits EPA's guidance for preparing the 2004 Integrated Report. The Integrated Report is intended to satisfy the listing requirements of Section 303(d) and the reporting requirements of Sections 305(b) and 314 of the Clean Water Act (CWA). This guidance replaces and supercedes the following documents:

- Guidance for 1994 Section 303(d) Lists - Geoffrey H. Grubbs, November 26, 1993;
- National Clarifying Guidance for 1998 State and Territory Section 303(d) Listing Decisions - Robert H. Wayland III, August 27, 1997;
- EPA Review of 2000 Section 303(d) Lists - Robert H. Wayland III, April 28, 2000;
- 2002 Integrated Water Quality Monitoring and Assessment Report Guidance - Robert H. Wayland III - November 19, 2001; and
- Clarification of the Use of Biological Data and Information in the 2002 Integrated Water Quality Monitoring and Assessment Report Guidance.

This guidance is intended to be used by States and Interstate Commissions (that prepare 305(b) reports) in the preparation of their 2004 Integrated Report. Building on the 2002 guidance, the 2004 guidance stresses the use of the same five reporting categories and emphasizes the need for scheduling monitoring activities to ensure that future reports build on increasingly robust data and information and continuing documentation of improved water quality. In addition, the 2004 guidance emphasizes the need for each State to develop a technically sound assessment methodology – a thorough documentation and discussion of the links between a State's water quality standards (WQS) and the rationale on which their assessment determinations are based. EPA believes that a transparent methodology, driving scientifically-based assessment decisions, fits within the Agency's goal of an information-based strategy to environmental protection.

Note: TMDL0103 represents a new nomenclature for AWPD guidance; TMDL represents the program, 01 represents the first in the series of AWPD guidance documents in a particular year, and 03 represents the year.

greater, unless a shorter time frame is required by a compliance schedule.

For nonpoint sources, the time frame for achieving the WQS may be difficult to accurately predict; however, States have some flexibility in gauging whether the attainment will occur quickly enough to justify including a water in Category 4B. EPA suggests that the State provide a reasonable calculation that demonstrates that pollutant reductions (resulting from the implementation of the "other controls") will lead to attainment of WQS. The degree of certainty may depend on how many sources must be controlled and the degree of specificity of control that exists with respect to each source.

6. Which waters belong in Category 4C?

Waters should be listed in this subcategory when an impairment is not caused by a pollutant. States should schedule these segments for monitoring to confirm that there continues to be no pollutant-caused impairment and to support water quality management actions necessary to address the cause(s) of the impairment.

Pollution, as defined by the CWA, is "the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water" (Section 502(19)). In some cases, the pollution is caused by the presence of a pollutant and a TMDL is required. In other cases, pollution does not result from a pollutant and a TMDL is not required. Elevated temperature that results from man-made thermal discharges does require a temperature TMDL based on the protection or propagation of a balanced indigenous population of shellfish, fish, and wildlife.

The following are two examples of pollution caused by pollutants. The discharge of copper from an NPDES regulated facility is the introduction of a pollutant into a water. To the extent that this pollutant alters the chemical or biological integrity of the water, it is also an example of pollution. (Copper is not likely to cause an alteration to the water's physical integrity). Similarly, actions that modify the landscape and may result in the introduction of sediment into a water constitute pollution when sediment (which is a pollutant) results in an alteration of the chemical, physical, biological or radiological integrity of the water. TMDLs would have to be established for each of these waters.

EPA does not believe that flow, or lack of flow, is a pollutant as defined by CWA Section 502(6). Low flow can be a man-induced condition of a water (i.e., a reduced volume of water) which fits the definition of pollution. Lack of flow sometimes leads to the increase of the concentration of a pollutant (e.g., sediment) in a water. In the situation where a pollutant is present a TMDL, which may consider variations in flow, is required for that pollutant.

F. Which waters belong in Category 5?

This category constitutes the Section 303(d) list that EPA will approve or disapprove under the CWA. Waters should be placed in Category 5 when it is determined, in accordance with the State's assessment and listing methodology, that a pollutant has caused, is suspected of causing, or is projected to cause an impairment or threat. If that impairment or threat is due to a pollutant, the water should be placed in Category 5 and the pollutant causing the impairment identified.

Exhibit C

UNITED STATES DISTRICT COURT FOR THE
EASTERN DISTRICT OF VIRGINIA
Alexandria Division

AMERICAN CANOE ASSOCIATION, INC., and THE AMERICAN LITTORAL SOCIETY Plaintiffs, v. THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, CAROL BROWNER, in her official capacity as the Administrator of the U.S. Environmental Protection Agency, and MICHAEL McCABE, in his official capacity as Regional Administrator of Region III of the U.S. Environmental Protection Agency, Defendants.	)	Civil Action No. 98-979-A

FILE
JUN 11 1999
CLERK US DISTRICT COURT
ALEXANDRIA, VIRGINIA

CONSENT DECREE

WHEREAS, on July 9, 1998, Plaintiffs American Canoe Association, Inc., and the American Littoral Society filed this action against Defendants United States Environmental Protection Agency ("EPA"), Carol M. Browner in her official capacity as Administrator of EPA, and W. Michael McCabe in his official capacity as Regional Administrator of EPA Region III (collectively, "EPA").

WHEREAS, Section 303(d) of the Clean Water Act ("CWA"), 33 U.S.C. § 1313(d), and EPA's implementing regulations at 40 C.F.R. § 130.7(b)-(e) require each State to (1) identify those State waters that it expects will fail to achieve applicable water quality standards after application of technology-based effluent limitations and other controls; (2) establish a priority

III. ESTABLISHMENT OF TMDLS

5. (a) For all waters described below, EPA expects Virginia to develop TMDLs for all pollutants for which each WQLS is identified and to submit those TMDLs to EPA for review and approval or disapproval (or to provide data and information showing that a TMDL is unnecessary) in accordance with the schedule set forth below. Subject to Paragraph 6(a) below, EPA shall establish TMDLs for each water and pollutant identified in Attachments A and C, according to the deadlines set forth below if Virginia fails to do so. EPA's commitment does not apply to any other waters or pollutants included in the next Section 303(d) list or any subsequent Section 303(d) list.

(b) Deadlines

(1) CATEGORY 1 WATERS. These waters are identified in Attachment A.

Date for State Action	Deadline for EPA Action	Number of Category 1 Waters for Each Deadline	Maximum Number of Category 1 Waters for Which EPA may Invoke Paragraphs 6(a)(3) & 6(a)(4) for each Deadline Herein
5/1/99	5/1/00	1	0
5/1/00	5/1/01	12	2
5/1/02	5/1/03	30	6
5/1/04	5/1/05	55	11
5/1/06	5/1/07	64	13
5/1/08	5/1/09	69	14
5/1/10	5/1/11	70	14

ATTACHMENT A

CATEGORY 1 WATERS

Part 1: Waters Listed on Part 1 of Virginia's October 14, 1998 303(d) Report

WATERBODY NAME	WATER ID	POLLUTANT	BASIN
GOOSE CREEK	VAN-A08R	Fecal Coliform, Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
LITTLE RIVER	VAN-A08R	Fecal Coliform, Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
SYCOLIN CREEK	VAN-A08R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
DIFFICULT RUN	VAN-A11R	Fecal Coliform, Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
FOUR MILE RUN	VAN-A12E	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
FOUR MILE RUN	VAN-A12R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
HUNTING CREEK	VAN-A13E	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
ACCOTINK CREEK	VAN-A15R	Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
ACCOTINK CREEK	VAN-A15R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
CEDAR RUN	VAN-A17R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
LICKING RUN	VAN-A17R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
CEDAR RUN	VAN-A18R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
SOUTH RUN	VAN-A19R	Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
BULL RUN	VAN-A23R	Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
MATTOX CREEK	VAP-A31E	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
WEST STRAIT CREEK	VAV-B02R	Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
OPEQUON CREEK	VAV-B08R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
ABRAMS CREEK	VAV-B09R	Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
OPEQUON CREEK	VAV-B09R	Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
MIDDLE RIVER	VAV-B10R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
COCKRAN SPRING	VAV-B10R	Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
MIDDLE RIVER	VAV-B11R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
LEWIS CREEK	VAV-B12R	Fecal Coliform, Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
MOFFETT CREEK	VAV-B13R	Fecal Coliform, Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
CHRISTIANS CREEK	VAV-B14R	Fecal Coliform, Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
MIDDLE RIVER	VAV-B15R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
POLECAT DRAFT	VAV-B15R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
NORTH RIVER	VAV-B17R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
MOSSY CREEK	VAV-B19R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
DRY RIVER	VAV-B21R	Fecal Coliform	POTOMAC AND SHENANDOAH RIVER BASIN
MUDDY CREEK/DRY RIVER/NORTH RIVER	VAV-B21R	Nitrate-Nitrogen	POTOMAC AND SHENANDOAH RIVER BASIN
MUDDY CREEK/DRY CREEK/NORTH RIVER	VAV-B22R	Nitrate-Nitrogen	POTOMAC AND SHENANDOAH RIVER BASIN
MUDDY CREEK/DRY CREEK/NORTH RIVER	VAV-B22R	Nitrate-Nitrogen	POTOMAC AND SHENANDOAH RIVER BASIN
MUDDY CREEK	VAV-B22R	Fecal Coliform, Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
NORTH RIVER	VAV-B23R	Benthic	POTOMAC AND SHENANDOAH RIVER BASIN
COOKS CREEK	VAV-B25R	Fecal Coliform, Benthic	POTOMAC AND SHENANDOAH RIVER BASIN

Exhibit D

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Ellen Gilinsky, Ph.D., Director
Division of Water Quality Programs
Virginia Department of Environmental Quality
629 East Main Street
P.O. Box 1105
Richmond, Virginia 23218

Dear ~~Dr.~~ Ellen Gilinsky:

This letter is in reference to the Total Maximum Daily Load (TMDL) currently being developed by the Virginia Department of Environmental Quality (DEQ) to address benthic impairments within Accotink Creek in Fairfax County, Virginia. The U.S. Environmental Protection Agency (EPA) commends DEQ on their proactive efforts to develop a non-conventional TMDL that would use the volume and velocity (i.e., flow) of urban runoff as a surrogate to address the impairment to Accotink Creek. EPA supports the establishment of a stormwater TMDL to restore the aquatic life use in Accotink Creek, and believes such a TMDL is consistent with the Clean Water Act and its implementing regulations.

EPA recognizes that DEQ may face a scheduling problem as they attempt to move forward with the development of the Accotink TMDL. Before they complete the TMDL, DEQ intends to revise its regulatory definitions of a TMDL, wasteload allocation, and load allocation to more fully embrace the allocation of flow via TMDLs. As part of a Consent Decree commitment with the American Canoe Association and the American Littoral Society, EPA must approve or establish a TMDL to address the Accotink's benthic impairment by May 1, 2010.

Because the timing of the regulation revisions may prevent meeting the Consent Decree deadline, EPA and DEQ have reached an agreement that EPA will complete the Accotink Creek TMDL to address its benthic impairment. This option will allow time for Virginia to further refine its current regulations while still allowing the TMDL development to proceed on schedule.

Sincerely,

Jon M. Capacasa, Director
Water Protection Division

Exhibit E

U. S. Environmental Protection Agency
Mid-Atlantic Region

WaterInfo

Progress in Water Programs...

Green Infrastructure news….

Green Infrastructure (GI) Workshop
Exploring challenges...

See page 2

Volume 3, Issue 1

March 2009

IN THIS ISSUE

Welcome to the latest edition of WaterInfo – a newsletter promoting the progress of the Water Programs of the U.S. EPA Mid-Atlantic Region 3. This issue focuses on the progress of the Healthy Waters Priority, specifically the Developing & Developed Land Sector (Land Sector). This issue looks at innovative approaches to Green Infrastructure, as well as Stormwater Management issues and Best Management Practices all related to land and water issues. Articles include: greener clean-ups; how removing trash can reveal natural treasures; and keeping it clean from source to stream. These and other articles provide new and innovative ideas to restore and protect our water resources.

We hope you enjoy this issue!!

Join WaterInfo on the web in the Quickplace Forum - see page 7 for details

Jon M. Capacasa, Director
Water Protection Division

John "Randy" Pomponio, Director
Environmental Assessment & Innovation Division

HEALTHY WATERS - Feature - Land Sector

The Healthy Waters Land Sector has been very busy with ten individual projects, spanning almost every program.

Efforts include**:**

- Using TMDL modeling to address stormwater impacts in urban streams
- Coordinating with other federal agencies and partners to adopt smart growth and more ecologically-sensitive land management practices
- Working to preserve and protect the land and water in and around growing population centers
- Making the most of the NPDES-Stormwater Program
- Working with the Chesapeake Bay Program Office to develop and implement actions which address water quality impacts
- Supporting a national definition for Maximum Extent Technically Feasible (METF); implementing the rule and integrating the 2007 Energy Act's MEFT language into the Land Development Strategy
- Understanding how EPA can best support states and local governments to address the effects of future land use
- Seeking opportunities for innovative and creative use of existing EPA tools and authorities, including Green Remediation and Brownfields projects
- Communicating the latest information; identifying research needs regarding development and implementation of "best practices"; hosting a regional Science Workshop on Green Infrastructure and Green Infrastructure controls
- Collaborating with PA, MD & VA to develop and implement new approaches to protect high quality waters/ aquatic ecosystems from the effects of future land use

The Land Sector has been a very busy Healthy Waters Team and its far reaching strategy spans almost every program with 10 individual project plans underway.

For more info, visit EPA's Quickplace- Land Sector Team
http://epaqpx.rtp.epa.gov/waterinfo
Not registered? See page 7

Events

L'acqua e Vita,
La Vita e Acqua
Water is Life,
Life is Water

EPA's 2009 Philadelphia Flower Show exhibit wins 3 awards!

Exhibit photos:
www.epa.gov.region03

Green Exhibition 2009

March 14-15, 2009

PA Convention Center

Philadelphia, PA

STORMWATER - Keeping it Clean from Source to Stream

The Region 3 Stormwater Program is tasked with many important functions in order to ensure that Clean Water Act objectives of fishable and swimmable waters are met. Among these functions are reviewing and commenting on permits, performing compliance inspections, taking appropriate enforcement actions, providing resources for assisting states with their stormwater manuals, municipalities with the implementation of their stormwater plans, and striving for the highest standards of protection available. The Stormwater Program is undertaking several initiatives to further the efforts of stormwater protection. These initiatives include:

The Stormwater Program is undertaking several initiatives to further the efforts of stormwater protection.

- reviewing and commenting on the many upcoming stormwater permits for reissuance (MS4, Construction, and Industrial)
- implementing a stormwater permitting approach consistent with the recent OIG report to maximize protection of Chesapeake Bay from the impacts of existing development and new construction
- developing tools and approaches to assist stormwater permittees in ensuring that discharges comply with TMDLs

- reviewing and providing assistance in the development of an Effluent Limit Guidelines (ELG) for stormwater construction activities
- reviewing and commenting on state standards and manuals (with a particular focus on encouraging green practices)
- developing stormwater permit review checklists
- providing training and compliance assistance to states and permittees regarding MS4s
- Implementing stormwater compliance strategies with a focus on home building, large retail development, Ready-Mixed concrete operations, and Phase 1 and Phase 2* MS4s

How are we doing?

The Program has inspected:

- 26 homebuilding sites
- 11 retail development sites
- 4 Ready-Mixed concrete facilities
- 5 ports **

*MS4 Phase 1/Phase 2- size of system

**Office of Enforcement, Compliance and Environmental Justice

STORMWATER - Stormwater TMDLs

EPA is partnering with Virginia to develop and implement a "pilot" Total Maximum Daily Load (TMDL) addressing impairments attributable to stormwater that can be imitated across the Region. This pilot storm water
TMDL will provide allocations that represent reductions in the flow of stormwater from point and nonpoint sources to achieve water quality standards within an impaired watershed. If successful, the TMDL can serve as a model for TMDLs to be developed and implemented in watersheds throughout the Region which are impaired by pollutants associated with development and excess stormwater flow. The stormwater TMDL will directly address the cause of stream impairment in urban areas and reduce stormwater flow by permitting the use of Municipal Separate Storm Sewer System (MS4) Best Management Practices. In addition, the techniques may also be used to protect high quality streams threatened by future land use changes.

The stormwater TMDL can serve as a model for TMDLs to be developed and implemented in watersheds throughout the Region which are impaired by pollutants associated with development and excess stormwater flow.

Accotink Creek

How are we doing?

EPA and Virginia plan to develop the stormwater TMDL in Accotink Creek based on its 1998 Section 303(d) listing due to failing to attain aquatic life use for benthics. The Accotink Creek watershed is a highly urbanized watershed with about eight miles of impaired streams. Stakeholders have been actively involved in developing this TMDL.

Healthy Waters Priority
US EPA Region 3

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
MID-ATLANTIC REGION 3

WATER PROTECTION DIVISION
&
ENVIRONMENTAL ASSESSMENT & INNOVATION DIVISION

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The Mid-Atlantic Region's water programs focus on protecting, preserving and enhancing water resources. We are working with our partners to develop comprehensive environmental programs that help achieve improvements in water quality and public health.

WaterInfo highlights the progress we have made in achieving the greatest water quality benefits.

For FY'09 WPD priority areas include:

- ***Healthy Waters Priority and 4 Sector Strategies***
- ***Meeting Core Water Program Obligations***
- ***Leadership in Interstate Water Protection***
- ***Agency Level Support - Economic Recovery & Water Security***
- ***A Stronger EPA Workforce & Communication***

For FY '09 EAID Priorities include:

- ***Healthy Waters Priority and 4 Sector Strategies***
- ***Oysters***
- ***Mid-Atlantic Wetlands Work Group***
- ***Clean Energy***
- ***Pharmaceuticals***
- ***Chemical Weapons /Homeland Security***
- ***Biology (Investigating Fish in Shenandoah)***
- ***Ocean Survey***
- ***Logic Model/MIRA***
- ***Continued Laboratory and Full Science Support***
- ***Natural Infrastructure***
- ***Mining***
- ***Climate Change***

We're on the Web—Check us out at:

https://epaqpx.rtp.epa.gov/waterinfo

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