WEST VIRGINIA ENVIRONMENTAL QUALITY BOARD
CHARLESTON, WEST VIRGINIA

PAUL A. STERN,
Appellant,

v. **Appeal No. 12-38-EQB**

SCOTT G. MANDIROLA, DIRECTOR,
DIVISION OF WATER AND WASTE MANAGEMENT,
DEPARTMENT OF ENVIRONMENTAL PROTECTION,
Appellee.

BRIEF AND APPENDIX IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

PRELIMINARY STATEMENT

Intervenors move for summary judgment on the legal question of whether Permit WV 0105911 was issued in violation of the federal and state regulations governing the issuance of National Pollution Discharge Elimination System permits. The Permit at issue allows construction of a new wastewater treatment plant that will discharge nutrients, sediment, fecal coliform and other pollutants into Sleepy Creek—a water quality-impaired tributary to the Potomac River and Chesapeake Bay—without identifying remaining available waste load allocations to allow for the new discharge. The Permit was thus unlawfully issued and undermines the goals of the Clean Water Act and the total maximum daily loads (TMDLs) for Chesapeake Bay and Sleepy Creek.

STATEMENT OF FACTS

The Chesapeake Bay is the largest estuary in the United States and one of the largest and most biologically productive estuaries in the world. Exec. Order No. 13, 508 (issued by President Obama); 74 Fed. Reg. 23,099. The Chesapeake Bay Watershed includes the Potomac River and its watershed, and many tributaries. Many millions of pounds of uncontrolled

sediment and nutrient pollution have found their way into the Chesapeake Bay and Potomac River watersheds and their many tributaries. Statement of Undisputed Material Facts, ¶ 3; EPA, *Chesapeake Bay TMDL* at ES-3 (Dec. 29, 2010). The Potomac River watershed provides a habitat for aquatic life such as crabs, oysters, and smallmouth bass, all of which are threatened by pollution. Material Facts, ¶ 4; Sleepy Creek Watershed Association, et al, *The Sleepy Watershed Assessment; Morgan County, WV*, available at Certified Record at 298-300 (March 2006); *See* EPA, *Chesapeake Bay TMDL* at 3-4 (Dec. 29, 2010).

To address the impairment, EPA took final action and created the Chesapeake Bay Total Maximum Daily Load ("Chesapeake Bay TMDL"), identifying the maximum amount of nitrogen, phosphorous and sediment that the Chesapeake Bay and its tributaries may receive while still meeting water quality standards. *Clean Water Act Section 303(d): Notice for the Establishment of the Total Maximum Daily Load (TMDL) for the Chesapeake Bay*, 76 Fed. Reg. 549-550 (Jan. 5, 2011). Sleepy Creek is subject to the Chesapeake Bay TMDL for nutrients and sediment, and a local TMDL for fecal coliform. Material Facts, ¶ 7; *Total Maximum Daily Loads for Selected Streams in the Potomac Direct Drains Watershed, West Virginia* (Jan. 23, 2008). available at. http://www.epa.gov/waters/tmdldocs/WV/PotomacDirectDrainsAL_DR.pdf (Jan. 23, 2008) ("Sleepy Creek TMDL Letter"). The Chesapeake Bay TMDL does not include allocations for new or expanded sources of pollution. Id. (stating that "[t]his TMDL does not include specific future growth allocations to each subwatershed."); *see also* Chesapeake Bay TMDL at S-1. Instead, EPA's adoption of the Chesapeake Bay TMDL allocations was premised on the assumption that states would "offset" new sources of pollution through "credible and transparent offset programs subject to EPA and independent oversight." EPA, *Chesapeake Bay*

TMDL at S-1.[1] West Virginia has not established a trading or offset program." WV/NPDES Permit Number WV 0105911, available in Certified Record at 419..

Sleepy Creek is a tributary of the Potomac River that is currently impaired by bacteria and sediment pollution and faces ongoing threats including sediment in runoff. Material Facts, ¶ 5; WV Conservation Agency, et al., *Watershed Based Plan: Sleepy Creek: Potomac Direct Drains Watershed*. (Jan. 2008); EPA Region III, *Decision Rationale Total Maximum Daily Loads for Selected Streams in the Potomac Direct Drains Watershed, West Virginia*, available at http://www.epa.gov/waters/tmdldocs/WV/PotomacDirectDrainsAL_DR.pdf (Jan. 23, 2008) ("Sleepy Creek TMDL Letter"). West Virginia adopted a TMDL for Sleepy Creek, which lists "the full length of Sleepy Creek's main stem and a tributary of Sleepy Creek named Indian Run" as impaired by fecal coliform. WV Conservation Agency, et al., *supra*.

Mountain Springs Public Utility LLC applied for a WV/NPDES permit to construct and operate their facility. Material Facts, ¶ 11. The proposed wastewater treatment system will serve a population of approximately 1,900 people in the Sleepy Creek and Mountain Springs developments. Certified Record at 409. The Permit application and design specifications indicate discharge of nitrogen, phosphorus, fecal coliform, dissolved oxygen and suspended solids. Certified Record at 49.

By letter dated February 23, 2010, Scott Mandirola, Director of the DEP Division of Water and Waste Management, informed Wade E. Clements, representative of the Developer, that DEP could not process the Developer's permit request unless the applicant identified the required offsets under West Virginia Potomac Strategic Implementation Plan. Material Facts, ¶

[1] Although the EPA authorized the use of offsets in the Chesapeake Bay TMDL, as discussed below, the only legal approach to new sources of pollution in impaired waters is through the use of "remaining pollutant load allocations." 40 CFR 122.4 (i)(1). Given DEP did not require offsets nor remaining load allocations before issuing the Permit in question here, this distinction is irrelevant for the purposes of this motion.

12; Letter from Scott Mandirola, Director of the Division of Water and Waste Management, West Virginia Department of Environmental Protection, to Wade E. Clements, Representative of Mountain Springs Utility LLC, available in Certified Record at 188-189 (Feb. 23, 2010). In July, 2011, the applicant's representative wrote to DEP stating, "[our client] would like to have the permit issued now, and then obtain the offsets later, prior to discharge." Material Facts, ¶ 13; Email from Josh Weiand to Yogesh Patel dated July 18, 2011; Appellant-Intervenors' Appendix in Support of Motion for Summary Judgment at 29.[2] Several days later, Mr. Weiand sent another email asking what his client could do to get the permit. Material Facts, ¶ 14; Email from Josh Weiand to Yogesh Patel dated July 21, 2011 (4:01 pm); Appendix at 28. Within minutes, Mr. Patel responded, "Nothing, we will take care of it." Material Facts, ¶ 15; Email from Josh Weiand to Yogesh Patel dated July 21, 2011(4:14 pm); Appendix at 27. In early August there were several emails between DEP and the applicant making it clear that DEP would issue the

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[2] Appellant-Intervenors hereby ask the Board to take judicial notice pursuant to W.Va. Evid. R. 201 of three documents: (1) The *Decision Rationale: Total Maximum Daily Loads for Selected Streams in the Potomac Direct Drains Watershed West Virginia* (containing a cover letter and a decision document), published by the EPA Region III on March 28, 2008; Appendix at A1 (2) the *Total Maximum Daily Loads for Selected Streams in the Potomac Direct Drains Watershed, West Virginia*, a final approved report published by the Appellee DEP; Appendix at A13 and (3) "Emails provided by the DEP to Appellant pursuant to Appellant's FOIA request" (containing a cover letter and ten (10) emails over eight (8) pages); Appendix at A20.

A judicially noticed fact is not in reasonable dispute and is "capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned." W. Va. Evid. R. 201(b). Judicial notice is mandatory "if requested by a party and supplied with the necessary information. W. Va. Evid. R. 201(c). "A court is permitted to take judicial notice of adjudicative facts that cannot reasonably be questioned in light of information provided by a party litigant." *Arnold Agency v. W. Virginia Lottery Comm'n*, 526 S.E.2d 814, 827 (1999). The West Virginia Supreme Court of Appeals has taken judicial notice of "regulations promulgated by the Board of Health governing the licensing of community mental health centers." *McGraw v. Hansbarger*, 301 S.E.2d 848, 855 (1983).

All documents requested for judicial notice are "adjudicative facts that cannot reasonably be questioned in light of information provided by a party litigant" because they are final agency actions, publicly available on the EPA's and DEP's respective websites or they were provided to Appellant by the Appellee; the information contained therein has been relied on by the DEP. *Arnold*, 526 S.E.2d at 827. None of these documents is in reasonable dispute because they are published, publicly available or provided by one of the parties. W. Va. Evid. R. 201(b). The availability of each document ensures they are "capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned." Id. Further, judicial notice is mandatory because Appellant-Intervenors are requesting judicial notice be taken, and are providing the board with the "necessary information," including the documents as well as their web addresses (where applicable). W. Va. Evid. R. 201(c). In this case, administrative authorities promulgated or provided the pertinent information just as the regulations promulgated by the administrative authority in *McGraw*. 301 S.E.2d at 855.

permit to the applicant permitting construction despite the absence of a waste load allocation or offset. Material Facts, ¶ 16; Email from Yogesh Patel to sovereignhomes@comcast.net and Josh Weiand dated August 2, 2011(8:45 am).

According to the emails, DEP indicated that because it planned to restrict the permit to a zero discharge for nutrients and modify it later to allow discharge, it would not run afoul of the requirement that a permit cannot be issued without an available waste load allocation. Material Facts, ¶ 14; Email from Yogesh Patel to Josh Weiand dated July 21, 2011 (4:14 pm); Appendix at 25. A draft permit was published on October 26, 2011 and the comment period was closed on November 25, 2011. DEP held a public hearing on March 27, 2012 and extended the comment period until April 6, 2012. At no time prior to the close of the comment period did the applicant demonstrate available waste load allocation or offsets.

On October 1, 2012, the DEP granted the WV/NPDES Permit, Permit Number WV 0105911 (the "Permit") to Mountain Springs Public Utility LLC, pursuant to W.Va. Code § 22-11-1 *et seq*. Material Facts, ¶ 17. The Permit allows the Mountain Springs Public Utility to "acquire, construct and install" a wastewater treatment system near Sleepy Creek in Morgan County, West Virginia that will discharge nutrients, sediment, fecal coliform, and other pollutants into Sleepy Creek at a designed average flow of 0.1573 million gallons per day. Material Facts, ¶ 18; Certified Record at 415.

PROCEDURAL HISTORY

Pro se Appellant Paul A. Stern filed an appeal on October 29, 2012 challenging the Permit and seeking its revocation or vacation. The Environmental Quality Board (the "Board") received the appeal on November 1, 2012. The Appellee, the Division of Water and Waste Management of the DEP, moved to dismiss Appellant's appeal, or in the alternative, request a

more definite statement on December 19, 2012. Appellant filed a response with the Board, requesting dismissal of the Appellee's motion on December 31, 2012, stating that the DEP's revisions of the draft permit violated the offset requirements and the grant of the Permit was an arbitrary and capricious exercise of the DEP's authority.

On March 4, 2013, Intervenors, The Potomac Riverkeeper and Food & Water Watch, filed a Petition to Intervene to the Board, and Intervenors' counsel filed a Motion for Admission Pro Hac Vice. Intervenors were granted permission to intervene by the Board's order on March 8, 2013. The Board also permitted Intervenors' counsel to appear *pro hac vice* by order on March 8, 2013.

STANDARD OF REVIEW

The West Virginia Legislature created the Environmental Quality Board to hear appeals of permitting and enforcement decisions of the WVDEP. W.Va. Code § 22B-1-1. The Board hears appeals of orders issued by Appellee in accordance with W.Va. Code § 22B-1-7. The Board affords no deference to the WVDEP's decision but rather acts independently based on the evidence before it. *W.Va. Div. of Envt'l Protec. v Kingwood Coal Co.* 490 S.E.2d 823, 834 (W.Va. 1997). Pursuant to W.Va. Code § 22B-1-7(g) the Board "shall make and enter a written order affirming, modifying, or vacating the order, permit or official action of the chief or secretary, or shall make and enter such order as the chief or secretary should have entered."

ARGUMENT

Under W.Va. R. Civ. P. 56(c), summary judgment "shall be rendered forthwith" when the record shows that there is "no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Summary judgment should be rendered "if, from the totality of the evidence presented, the record could not lead a rational trier of fact to find for the

nonmoving party, such as where the nonmoving party has failed to make a sufficient showing on an essential element of the case that it has the burden to prove." Williams v. Precision Coil, Inc., 459 S.E.2d 329, 336 (1995).

> "The initial burden of production and persuasion is upon the party moving for a summary judgment. If the moving party makes a properly supported motion for summary judgment and can show by affirmative evidence that there is no genuine issue of material fact, the burden of production shifts to the nonmoving party "who must either (1) rehabilitate the evidence attacked by the movant, (2) produce additional evidence showing the existence of a genuine issue for trial or (3) submit an affidavit explaining why further discovery is necessary as provided in Rule 56(f)."

Id. at 337. Here, the only question before the Board is whether DEP issued the permit in violation of 40 CFR 122.4(i); W. Va. Code Ann. § 29A-5-4(g). and W. Va. Code R. § 47-10-3.6.

THE DEP'S DECISION TO ISSUE THE PERMIT IS IN VIOLATION OF LAW

The goal of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). To further this goal, the CWA expressly prohibits the unpermitted discharge of pollutants. 33 U.S.C. §§ 1311(a), 1342. Any person discharging pollutants must comply with the National Pollutant Discharge Elimination System ("NPDES") by receiving a NPDES permit. Id. Under the NPDES, the EPA or a state can grant a permit for the discharge of a pollutant so long as the discharge complies with the CWA. 33 U.S.C. § 1342. A state may receive approval to administer a state-run NPDES program under the authority of 33 U.S.C. § 1342(b). Ohio Valley Envtl. Coal., Inc. v. Maple Coal Co., 808 F. Supp. 2d 868, 873-74 (S.D.W. Va. 2011). West Virginia has received approval and its NPDES program is administered by DEP. Id. West Virginia's approved permit program is codified in the West Virginia Water Pollution Control Act and related regulations. *See* W. Va.

Code § 22-11-1 *et seq.*; W. Va. Code R. § 47-10-1. Pursuant to this program, DEP can issue WV/NPDES permits.

In addition, under the Clean Water Act, states must identify those waters for which the technology-based pollution controls set forth in 33 U.S.C. § 1311(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard. 33 U.S.C. §1313(d)(1)(A). For such waters, known as impaired waters, such as the Potomac River and Sleepy Creek, a "total maximum daily load" of pollutants "shall be established at a level necessary to implement the applicable water quality standards." 33 U.S.C. § 1313(d)(1)(C). A TMDL specifies the maximum amount or "load" of a pollutant that can be discharged into the waters from all sources combined while still allowing that body of water to meet water quality standards. *Id.* Under a TMDL, point sources are assigned "waste load allocations." The waste load allocations for point sources are reflected in the permit as discharge limits. 40 C.F.R. 122.44(d)(1)(vii)(B) requires that effluent limits in permits be consistent with "the assumptions and requirements of any available waste load allocation" in an approved TMDL.

The CWA limits the ability of point sources to discharge into impaired waters. 33 U.S.C. § 1311(b)(1)(A). EPA's regulations for state NPDES programs prohibit the issuance of permits "[w]hen the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States." 40 C.F.R. § 122.4(d). 40 C.F.R. § 122.4(d) applies to both federal and state NPDES programs under 40 C.F.R. § 123.25.

Both EPA's and West Virginia's regulations prohibit the issuance of a permit to "a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards." W. Va. Code R. § 47-10-3; 40 C.F.R. § 122.4(i). Where TMDLs have been approved for the pollutant to be discharged, as here, the

proposed discharger "must demonstrate, before the close of the public comment period on the permit, that: (1) [t]here are sufficient remaining [TMDL] pollutant load allocations to allow for the discharge; and (2) [t]he existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards. W. Va. Code R. § 47-10-3; 40 C.F.R. § 122.4(i).

The Permit at issue in this case was issued in violation of each and every one of these provisions. The Permit purports to regulate both a wastewater collection system and a "0.1573 MGD MBR (Membrane Bioreactor) wastewater treatment plant "indicating there "is or may be a discharge of pollutants." Id. Certified Record at 412. The Permit also explicitly states there will be a discharge of pollutants from the facility by noting "[the average daily design flow of the new wastewater treatment plant has been established at 0.1573 million gallons per day." Material Facts, ¶ 18; Certified Record at 422. Operation of the Facility requires the discharge of pollutants, including, but not limited to, nitrogen, phosphorus, and fecal coliform, as described by the permit application and design. Certified Record at 8, 49. Specifically, the Facility is designed to discharge 2394 pounds per year of nitrogen, 239 pounds per year of phosphorus, and a geometric mean of 200 counts/100ml of fecal coliform per month. Material Facts, ¶ 19, 20. Letter from Scott Mandirola, Director of the Division of Water and Waste Management, West Virginia Department of Environmental Protection, *supra*, at 2. Thus, the permitted facility is a new source "from which there "is or may be a discharge of pollutants." W. Va. Code R. § 47-10-3.6-f; 40 CFR 122.2.

"[O]peration" of the Facility "will cause or contribute" to the violation of Sleepy Creek's water quality standards. W. Va. Code R. § 47-10-3.6(f). Upon operation, the Facility will discharge nitrogen, phosphorus and fecal coliform into Sleepy Creek. The discharge of these

pollutants will contribute to the violation of water quality standards in the Sleepy Creek and the Potomac watersheds because the watershed is already impaired and further additions of such discharges will only worsen the impairment.

Thus, this Permit allows the construction and installation of a new wastewater collection system and plant that, when operated, will discharge pollutants including nutrients, sediment, and fecal coliform into Sleepy Creek. Material Facts, ¶ 18. Nonetheless, it was not demonstrated by the close of the comment period, nor could it be demonstrated, that (1) [t]here are sufficient remaining [TMDL] pollutant load allocations to allow for the discharge; and (2) [t]he existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards. W. Va. Code R. § 47-10-3; 40 C.F.R. § 122.4(i).[3]

Sleepy Creek is subject to the Chesapeake Bay TMDLs for nutrients and sediment, and a local TMDL for fecal coliform. Material Facts, ¶ 7, 8; WVDEP, *Total Maximum Daily Loads for Selected Streams in the Potomac Direct Drains Watershed, West Virginia* (Jan. 23, 2008). Neither of these includes allocations for new sources of pollutants. *Id.* (stating that "[t]his TMDL does not include specific future growth allocations to each subwatershed."); Material Facts, ¶ 9; See also Chesapeake Bay TMDLs at S-1. Indeed, the permit itself acknowledges that at the time of permitting "the Chesapeake Bay Total Maximum Daily Load (TMDL) and the West Virginia Implementation Plan do not provide individual total nitrogen and total phosphorus wasteload

[3] Nor did the DEP ensure that the permittee provide offsets for total nitrogen or total phosphorus. Permit at 11 The Chesapeake Bay TMDL provides that offsets may be used to accommodate growth pursuant to "credible and transparent offset programs subject to EPA and independent oversight." Chesapeake Bay TMDLs at S-1. DEP acknowledged "[a]t present, no trading or offset program has been established by the state." Certified Record at 419. Despite the TMDL's requirement, in this case DEP stated that it would proceed on an ad hoc basis in approving an offset at some future date consequently depriving both members of the public and EPA of an opportunity to verify whether those offsets that may eventually be acquired will be "consistent with the common elements" for offsets and offset programs under the Chesapeake Bay TMDLs.

allocations for this facility." See Permit at 10, Section D.01. Without any "remaining pollutant load allocations" to allow for the discharges of pollutants contemplated by this Facility, 40 C.F.R. § 122.4(i) prohibits its permitting.

Finally, nothing in the record demonstrates that DEP ensured that the existing dischargers into Sleepy Creek are subject to compliance schedules for meeting water quality standards. DEP has not ensured that all existing sources of pollution are subject to appropriate permit limits and implementation plans and schedules. Permitting new sources of pollution under those circumstances violates West Virginia and federal regulations. W. Va. Code R. § 47-10-3.6.f.2; 40 C.F.R. § 122.4(i)(2).

Therefore, DEP erred as a matter of law when it issued Permit #WV 0105911 to Mountain Springs Public Utility, because the facility is a new source that will cause or contribute to the violation of Sleepy Creek's water quality standards; there is no remaining waste load allocation for the discharge; and DEP failed to ensure that existing dischargers into the Sleepy Creek are subject to compliance schedules designed to bring it into compliance with applicable water quality standards. For these reasons, the permit was issued in violation of 40 CFR 122.4(i) and W. Va. Code R. § 47-10-3.6 and should be reversed in accordance with W. Va. Code Ann. § 29A-5-4(g).

CONCLUSION

For the reasons set forth herein, the Environmental Quality Board should grant Intervenors' motion for summary judgment and vacate Permit #WV0105911.

Dated: March 21, 2013

Respectfully submitted,

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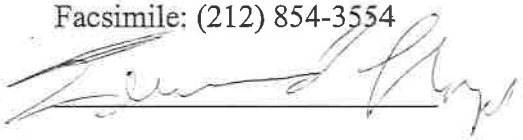

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APPENDIX FOR APPELLANT-INTERVENORS

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029
1/23/2008

Ms. Lisa A. McClung, Director
Division of Water and Waste Management
West Virginia Department of Environmental Protection
601 57th Street SE
Charleston, West Virginia 25304-2345

Dear Ms. McClung:

The U.S. Environmental Protection Agency (EPA), Region III, is pleased to approve the Total Maximum Daily Loads (TMDLs) for fecal coliform and biological impairments on 26 waterbodies in the Potomac Direct Drains Watershed. The TMDLs were submitted to EPA for approval on July 9, 2007, with corrections submitted on September 6, 2007. EPA commends West Virginia on completion of these TMDLs developed under the West Virginia TMDL program that follows the Watershed Management Framework cycle. We recognize the significant effort and dedication of you and your staff in developing these TMDLs.

In accordance with Federal regulations at 40 CFR §130.7, a TMDL must comply with the following requirements: (1) be designed to attain and maintain the applicable water quality standards; (2) include a total allowable loading and as appropriate, wasteload allocations for point sources and load allocations for nonpoint sources; (3) consider the impacts of background pollutant contributions; (4) take critical stream conditions into account (the conditions when water quality is most likely to be violated); (5) consider seasonal variations; (6) include a margin of safety (which accounts for any uncertainties in the relationship between pollutant loads and instream water quality); and (7) be subject to public participation. The TMDLs for the Potomac Direct Drains Watershed satisfy each of these requirements. In addition, these TMDLs considered reasonable assurance that the TMDL allocations assigned to nonpoint sources can be reasonably met. A copy of EPA's Decision Rationale for approval of these TMDLs has been included with this letter.

As you know, any new or revised National Pollutant Discharge Elimination System permits must be consistent with the TMDL's Wasteload pursuant to 40 CFR §122.44(d)(1)(vii)(B). Please submit all such permits to EPA for review as per EPA's letter dated October 1, 1998.

If you have any questions concerning these TMDLs, please contact Ms. Jennifer Sincock, West Virginia TMDL Coordinator at (215) 814-5766 or Ms. Mary Kuo, TMDL Team Leader at (215) 814-5721.

Sincerely,

John Armstead for

Jon M. Capacasa, Director
Water Protection Division

Enclosures

cc: Mr. Patrick Campbell, WVDEP
Mr. David Montali, WVDEP

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

Decision Rationale
Total Maximum Daily Loads for Selected Streams in the Potomac Direct Drains Watershed, West Virginia

John Armstead For

Jon M. Capacasa, Director
Water Protection Division

Date: 1/23/2008

Decision Rationale

Total Maximum Daily Loads for Selected Streams in the Potomac Direct Drains Watershed, West Virginia

I. Introduction

The Clean Water Act (CWA) requires a Total Maximum Daily Load (TMDL) to be developed for those waterbodies identified as impaired by a state where technology-based and other controls did not provide for attainment of water quality standards. A TMDL is a determination of the amount of a pollutant from point, nonpoint, and natural background sources, including a margin of safety (MOS), which may be discharged to a water quality-limited waterbody.

This document will set forth the U.S. Environmental Protection Agency's (EPA's) rationale for approving the TMDLs for fecal coliform bacteria and biological impairments on selected waterbodies in the Potomac Direct Drains Watershed. The TMDLs were developed to address impairment of water quality as identified in West Virginia's 2002, 2004, and 2006 Section 303(d) lists of impaired waters. EPA's rationale is based on the determination that the TMDLs meet the following eight regulatory conditions pursuant to 40 CFR §130.

1. The TMDL is designed to implement applicable water quality standards.
2. The TMDL includes a total allowable load as well as individual wasteload allocations (WLAs) and load allocations (LAs).
3. The TMDL considers the impacts of background pollutant contributions.
4. The TMDL considers critical environmental conditions.
5. The TMDL considers seasonal environmental variations.
6. The TMDL includes a MOS.
7. The TMDL has been subject to public participation.

In addition, these TMDLs considered reasonable assurance that the TMDL allocations assigned to nonpoint sources can be reasonably met.

From this point forward, all references in this approval rationale are found in West Virginia's TMDL Report *TMDLs for Selected Streams in the Potomac Direct Drains Watershed, West Virginia* (TMDL Report), unless otherwise noted.

II. Summary

Table 3-3 of the TMDL Report presents the waterbodies and impairments for which TMDLs have been developed for the Potomac Direct Drains Watershed by the West Virginia Department of Environmental Protection (WVDEP). The 26 waterbodies were identified on West Virginia's 2006 Section 303(d) List. TMDLs were developed for fecal coliform bacteria and/or biological impairments. These TMDLs represent the majority of the 29 segments in the Potomac Direct Drains Watershed that were identified on the 2006 Section 303(d) List. Three

segments were not included because they were either newly listed waters or the biological stressor identification did not singularly identify a causative pollutant. All waters and impairments excluded from TMDL development in this effort will remain on West Virginia's Section 303(d) List and will have TMDLs developed in 2011 or 2016 in accordance with West Virginia's Watershed Management Framework.

The TMDL is a written plan and analysis established to ensure that a waterbody will attain and maintain water quality standards. The TMDL is a scientifically-based strategy which considers current and foreseeable conditions, the best available data, and accounts for uncertainty with the inclusion of a MOS value. Conditions, available data, and the understanding of the natural processes can change more than anticipated by the MOS. The option is always available to refine the TMDLs for re-submittal to EPA for approval.

The subwatershed appendices provide additional details relative to their respective impaired waters and the applicable TMDLs (sum of wasteload allocations + sum of load allocations + margin of safety). Each subwatershed appendix presents applicable TMDLs for fecal coliform bacteria or sediment, as appropriate. Allocation spreadsheets also provide applicable TMDLs, wasteload allocations to individual point sources, and load allocations to categories of nonpoint sources. A Technical Report provides descriptions of the detailed technical approaches used throughout the TMDL development process. West Virginia developed an interactive ArcExplorer geographic information system (GIS) project that shows the spatial relationships between source assessment data and subwatershed TMDL allocations for selected streams in the Potomac Direct Drains watershed. The TMDLs are presented as average annual loads in pounds per year, or counts per year, because they were developed to meet TMDL endpoints under a range of conditions observed throughout the year. The TMDLs are also presented as equivalent average daily loads in pounds per day, or counts per day.

III. Background

The Potomac Direct Drains Watershed is located in the eastern panhandle of West Virginia and lies mostly within Morgan, Berkeley, and Jefferson Counties, with some portions of the watershed in Frederick and Clarke Counties in Virginia (Figure 3-1). The Potomac Direct Drains Watershed, a component of the Potomac River watershed, encompasses approximately 927 square miles. The Potomac River mainstem flows along the northern edge of the TMDL study area. Major tributaries include Opequon Creek, Back Creek, Sleepy Creek, and Town Run. Cities and towns in the watershed are Berkeley Springs, Martinsburg, Inwood, and Shepherdstown. The Potomac Direct Drains Watershed is dominated by forest land uses (49.9%), with some grassland (25.7%), urban/residential (9.3%), pasture (4.5%), and cropland (4.2%) (Table 3-1). All other land uses compose less than six percent of the total watershed area.

West Virginia conducted extensive water quality monitoring from July 2003 through June 2004 in the Potomac Direct Drains Watershed. The results of this effort were used to confirm the listing of waterbodies not meeting applicable water quality criteria and to identify

impaired waterbodies that were not previously listed. TMDLs were developed for the impaired waterbodies in six subwatersheds (Figure 3-2): Opequon Creek, Elks Run, Teague's Run, Jordan Run, Harlan Run, and Sleepy Creek. Table 3-3 presents the 26 impaired waters for which TMDLs are developed. The TMDLs were developed for fecal coliform bacteria and/or biological impairment including 43 TMDLs (waterbody/pollutant combinations). The six subwatersheds were further divided into 226 subwatersheds for modeling purposes (Figure 7-1). The subwatershed delineation provided a basis for georeferencing pertinent source information and monitoring data, and for presenting TMDLs.

These TMDLs were developed by West Virginia for non-consent decree waters listed on the 2002, 2004, and 2006 Section 303(d) Lists of impaired waters. These TMDLs help West Virginia to meet TMDL development pace requirements.

WVDEP recently assumed responsibility for the TMDL Program and utilized the Watershed Management Framework cycle approach for TMDL development. The framework divides the state into 32 major watersheds and operates on a five-year, five-step process. The watersheds are divided into five hydrologic groups (A - E). Each group is assessed once every five years and waters are placed on the Section 303(d) list of impaired waters, as necessary. The TMDL process begins in the first year of the cycle with pre-TMDL sampling and public meetings in the affected watersheds. The data is compiled and TMDL development begins in year two of the cycle. In the third year, TMDL development continues and the TMDL is drafted. The TMDL is finalized in the fourth year. In the fifth year of the cycle, TMDL implementation is initiated through the National Pollutant Discharge Elimination System (NPDES) permitting process and efforts toward limiting nonpoint source loading. Throughout the TMDL development process, there are numerous opportunities for public participation and input. The Potomac Direct Drains Watershed is in hydrologic group C and is one of the first TMDLs developed by WVDEP. West Virginia's TMDL process is described in Section 2.1 of the TMDL report.

Computational Procedures

Sections 4 and 5 of the TMDL Report discuss fecal coliform bacteria and sediment source assessment while Section 6 describes biological impairments and stressor identification methods. Fecal coliform bacteria sources include point sources, including individual sources covered under the NPDES program such as wastewater treatment plants, combined sewer overflows (CSOs), general sewage permits, and municipal separate storm sewers (MS4s); and unpermitted sources, including on-site treatment systems, stormwater runoff, agriculture, and natural background (wildlife). Sediment sources include: point sources, including construction stormwater general permits; MS4s and other individual and general NPDES permits for sewage treatment facilities; industrial process wastewater and stormwater associated with industrial activity; and unpermitted sources, including forestry, residential and urban lands, roads, agriculture, stream bank erosion, and other land disturbance activities. Stressor identification indicated that biological impairments were caused by sedimentation and/or organic enrichment. The Technical Report has expanded details of the source assessment and biological stressor

identification discussed in Sections 4, 5, and 6.

Biological integrity/impairment is based on a rating of the stream's benthic macroinvertebrate community using the multimetric West Virginia Stream Condition Index (WVSCI). Biological impairments were addressed by developing TMDLs for specific stressors. West Virginia utilized a stressor identification process to determine the primary causes of biologically-impaired streams including sedimentation or organic enrichment. Stressor identification was followed by stream-specific determinations of the pollutants for which TMDLs must be developed. Where the stressor identification process indicated sedimentation as a causative stressor, sediment TMDLs were developed. It is expected that implementation of those pollutant-specific TMDLs would address the biological impairment. Where organic enrichment was identified as a biological stressor, the waters also demonstrated violations of the numeric criteria for fecal coliform bacteria. It was determined that implementation of fecal coliform TMDLs would require the elimination of the majority of the existing fecal coliform sources and thereby reduce the organic and nutrient loading causing biological impairment. The TMDLs prescribe 100% fecal coliform reduction for all existing straight pipes and failing septic systems which would substantially reduce organic and nutrient loadings.

Section 7 describes the modeling processes employed during TMDL development with further details provided in the Technical Report. The Mining Data Analysis System (MDAS) was used to represent the source-response linkage in the Potomac Direct Drains watershed TMDL study area for fecal coliform. MDAS is a comprehensive data management and modeling system that is capable of representing loads from nonpoint and point sources in the watershed and simulating in-stream processes. MDAS is used to simulate watershed hydrology and pollution transport, as well as stream hydraulics and in-stream water quality. It is capable of simulating different flow regimes and pollutant loading variations. A customized Microsoft Excel spreadsheet tool was used to determine the fecal loading from failing septic systems identified during source tracking efforts by WVDEP. West Virginia's numeric and water quality criteria and an explicit MOS were used to identify the TMDL endpoints.

Sediment TMDLs were developed under a reference watershed approach and the MDAS modeling system that examined stream bank erosion and deposition processes. Load reductions for sediment-impaired waters were based on the sediment loading present in the unimpaired reference watershed. This approach is based on selecting a non-impaired watershed that shares similar land use, ecoregion, and geomorphologic characteristics with the impaired watershed. Stream conditions in the reference watershed are assumed to represent the conditions needed for the impaired stream to attain its designated uses. Given these parameters and a non-impaired WVSCI score, the Buzzard Run in the Opequon Creek watershed was selected as the reference watershed (Figure 7-3). Sediment loading rates were determined for impaired and reference watersheds. Both point and nonpoint sources were considered in the analysis and numeric endpoints were based on the calculated sediment loading from the reference watershed. Sediment load reductions necessary to meet these endpoints were then determined. TMDL allocation scenarios were developed based on an analysis of the degree to which contributing sources could be reasonably reduced.

EPA has determined that these TMDLs are consistent with statutory and regulatory requirements and EPA's policy and guidance. EPA's rationale for establishing these TMDLs is set forth according to the regulatory requirements listed below.

1. The TMDLs are designed to implement the applicable water quality standards.

The applicable numeric water quality criteria are shown in Table 2-1. The applicable designated uses for all the waters subject to this report are aquatic life protection, water contact recreation, and public water supply. Although the designated use of aquatic life protection is applicable to the streams in the Potomac Direct Drains Watershed, violations of the numeric aquatic life criteria were not observed through pre-TMDL monitoring. In various waters, the water contact recreation and public water supply uses have been determined to be violated, pursuant to exceedances of the numeric water quality criteria for fecal coliform bacteria.

All West Virginia waters are subject to the narrative criteria in Section 3 of the Standards. That section, titled *Conditions Not Allowed in State Waters*, contains various provisions relative to water quality. The narrative water quality criterion at 46 CSR 1 - 3.2.i prohibits the presence of wastes in state waters that cause or contribute to significant adverse impacts on the chemical, physical, hydrologic, and biological components of aquatic ecosystems. This provision is the basis for the "biological impairment" determinations. Biological impairment signifies a stressed aquatic community. WVDEP determines the biological integrity of each stream based on a rating of the stream's benthic macroinvertebrate community using the multimetric WVSCI.

2. The TMDLs include a total allowable load as well as individual waste load allocations and load allocations.

A TMDL is the total amount of a pollutant that can be assimilated by the receiving water while still achieving water quality standards. TMDLs can be expressed in terms of mass per time or by other appropriate measures. TMDLs are comprised of the sum of individual WLAs for point sources, LAs for non-point sources, and natural background levels. In addition, the TMDL must include an MOS, either implicitly or explicitly, that accounts for the uncertainty in the relationship between pollutant loads and the quality of the receiving stream. Conceptually, this definition is denoted by the following equation:

$$\text{TMDL} = \text{Summation of WLAs} + \text{Summation of LAs} + \text{MOS}$$

For purposes of these TMDLs only, wasteload allocations are given to NPDES-permitted discharge points and load allocations are given to discharges from activities that do not have an associated NPDES permit, such as failing septic systems and straight pipes. The decision to assign load allocations to these sources does not reflect any determination by WVDEP or EPA as to whether there are, in fact, unpermitted point source discharges. In addition, by establishing these TMDLs with failing septic systems and straight pipes treated as load allocations, WVDEP

and EPA are not determining that these discharges are exempt from NPDES permitting requirements.

Each subwatershed appendix presents applicable TMDLs for fecal coliform bacteria or sediment, as appropriate. Allocation spreadsheets also provide applicable TMDLs, wasteload allocations to individual point sources and load allocations to categories of unpermitted sources. The Fecal Coliform Bacteria Allocation Spreadsheet presents detailed fecal coliform TMDLs, LAs, WLAs, and MS4 WLAs. The Sediment Allocation Spreadsheet presents the detailed sediment TMDLs, LAs, WLAs for non-mining permits, WLAs for mining permits, MS4 WLAs, and construction stormwater WLAs. The TMDLs are presented as average annual loads in pounds per year or counts per year because they were developed to meet TMDL endpoints under a range of conditions observed throughout the year. The TMDLs are also presented as equivalent average daily loads in pounds per day or counts per day.

Fecal coliform bacteria sources are: point sources, including individual NPDES permits for wastewater treatment plants, CSOs, MS4s, and general sewage permits; and unpermitted sources, including on-site treatment systems, stormwater runoff, agriculture, and natural background (wildlife). Fecal coliform bacteria TMDLs were developed in 24 streams and will affect 36 permits including five publicly owned treatment works (POTWs), one combined sewer overflows (CSO), 27 privately owned sewage treatment plants ("package plants"), and three MS4s. The TMDLs allowed fecal coliform NPDES permits to remain at 200 counts/100 ml (monthly average) and 400 counts/100 ml (daily maximum). The City of Martinsburg, Berkeley County, and the West Virginia Department of Transportation (WVDOT) are designated MS4 entities and were given WLAs for fecal coliform bacteria. The City of Martinsburg has expended considerable effort to manage overflows from its combined collection system which currently has infrequent overflows. Modeling demonstrates that limited, infrequent overflows from the CSO can continue and a WLA was provided that may not be exceeded more than once per calendar month. Fecal coliform reductions will require elimination of illicit discharges, straight pipes, and leaking septic systems which would substantially reduce organic and nutrient loadings. Load allocations were assigned to agricultural landuses including pasture and croplands, on-site sewer systems including failing septic systems and straight pipes, residential landuses including urban/residential runoff from non-MS4 areas, and background and other nonpoint sources including wildlife sources from forested land and grasslands in non-MS4 areas. Fecal coliform reductions will require elimination of illicit discharges, straight pipes, and leaking septic systems, which would substantially reduce organic and nutrient loadings. The loadings from wildlife sources were not reduced.

Sediment TMDLs were developed in 19 streams to address biological impairments. Sediment WLAs were given to 297 construction stormwater permits encompassing 8,470 acres, three MS4s, and sewage treatment facilities. Within the sediment-impaired watersheds, there are sources that have sewage permits. WLAs for sewage treatment facilities were based on the 30 mg/l monthly average total suspended solids (TSS) effluent limitations contained in their permits. Under this TMDL, these permits are not required pollutant reductions and are authorized to continue operation under existing permit conditions. Sediment load allocations

were assigned to agricultural landuses including pasture and croplands, barren land areas including barren and burned forest areas, residential landuses including urban/residential runoff from non-MS4 areas, roads including paved and unpaved roads in non-MS4 areas, instream processes including bank erosion and deposition, and other nonpoint sources including forested areas and grassland in non-MS4 areas.

In 2003, the Virginia Department of Environmental Quality (VADEQ) completed a TMDL for fecal coliform bacteria for the Virginia portion of Opequon Creek. The Hydrologic Simulation Program – Fortran (HSPF)-based Virginia TMDL model calculated daily average stream flow and fecal coliform bacteria concentration at the point where Opequon Creek crosses the state line into West Virginia. The TMDL model output for the implemented TMDL condition was obtained from VADEQ and incorporated as a point source into the West Virginia TMDL model to account for the instream fecal contribution of Opequon Creek as it enters West Virginia.

VADEQ also completed a sediment TMDL for the Virginia portion of Opequon Creek. The TMDL calculated the average annual sediment load at the point where Opequon Creek crosses the state line into West Virginia. The Virginia TMDL's average annual sediment load under fully implemented TMDL conditions was 53,908 tons/year. This load was synchronized with modeled daily flow data to produce daily flow and TSS concentration values equal to the annual TMDL sediment load. These daily flow and TSS concentration values were incorporated as a point source into the West Virginia TMDL model to account for the instream sediment contribution of Opequon Creek as it enters West Virginia.

The TMDL development methodologies prescribe allocations that achieve water quality criteria throughout the watershed. Various provisions attempt equity between categories of sources and the targeting of pollutant reductions from the most problematic sources. Nonpoint source reductions did not result in loading contributions less than the natural conditions, and point source allocations were not more stringent than numeric water quality criteria.

3. The TMDLs consider the impacts of background pollutant contributions.

The TMDL considers the impact of background pollutant contributions by considering loadings from background sources like wildlife. MDAS also considers background pollutant contributions by modeling all land uses.

4. The TMDLs consider critical environmental conditions.

According to EPA's regulation 40 CFR §130.7 (c)(1), TMDLs are required to take into account critical conditions for stream flow, loading, and water quality parameters. The intent of this requirement is to ensure that the water quality of the impaired waterbody is protected during times when it is most vulnerable.

Critical conditions are important because they describe the factors that combine to cause a violation of water quality standards and will help in identifying the actions that may have to be undertaken to meet water quality standards. Critical conditions for waters impacted by land-based nonpoint sources generally occur during periods of wet weather and high surface runoff. In contrast, critical conditions for point source-dominated systems generally occur during low flow and low dilution conditions. Point sources, in this context, also include nonpoint sources that are not precipitation driven (i.e., fecal deposition to stream). High and low flow stream conditions and all point and nonpoint source loads were included in the development of these TMDLs, which should address the critical conditions of each water.

5. The TMDLs consider seasonal environmental variations.

Seasonal variations were considered while considering critical conditions, by running the daily simulation model for several years, from 1991 to 2004 for MDAS. Continuous simulation (modeling over a period of several years that capture precipitation extremes) inherently considers seasonal hydrologic and source loading variability.

6. The TMDLs include a margin of safety (MOS).

The CWA and Federal regulations require TMDLs to include an MOS to take into account any lack of knowledge concerning the relationship between effluent limitations and water quality. EPA guidance suggests two approaches to satisfy the MOS requirement. First, it can be met implicitly by using conservative model assumptions to develop the allocations. Alternately, it can be met explicitly by allocating a portion of the allowable load to the MOS.

An explicit MOS of five percent was included to counter uncertainty in the modeling process (Section 7.3.1). West Virginia also set the modeling endpoints to 95 percent of the water quality standards as an additional MOS, Section 7.3.1. West Virginia did not include a discussion regarding an implicit MOS but did use conservative model assumptions (such as assuming all point sources continually discharge at permit limits) to develop the allocations.

7. The TMDL has been subject to public participation.

Section 9 describes the public participation which included three meetings to present information on fundamental TMDL concepts and to present West Virginia's proposed TMDL allocation strategies, a 30-day public comment period, and final public informational meetings. The 30-day public comment period was held from February 14, 2007 to March 15, 2007, with a public meeting held on February 27, 2007, in Martinsburg, West Virginia. West Virginia received written comments from the following five entities: Elks Run Study Group, Mr. Paul Burke and Mr. Wm. Kelly Baty, the Town of Bolivar, VADEQ, and EPA. A responsiveness summary is included as part of this TMDL in Section 9.3.

While EPA was reviewing the final TMDL report for approval, EPA received four separate comment letters from Mr. Paul Burke, Ms. Barbara Humes of the Elks Run Study

Group, the Town of Bolivar, and the Corporation of Harpers Ferry which detailed their concerns regarding sewer system leaks. EPA worked with West Virginia and these entities to address their concerns.

IV. Discussion of Reasonable Assurance

EPA requires that there be a reasonable assurance that a TMDL can be implemented. Section 10 addresses reasonable assurance. There are three primary programs in effect which provide reasonable assurance that the TMDLs will be implemented. Section 10.1 discusses permit reissuance by WVDEP's Division of Water and Waste Management scheduled to begin in July 2007 for non-mining facilities and in January 2008 for mining facilities. Section 10.2 discusses the Watershed Management Framework Process. Section 10.3 discusses ongoing public sewer projects.

Section 11 discusses monitoring activities including NPDES compliance, nonpoint source project monitoring, and TMDL effectiveness monitoring.

Section 8 discusses the future growth and water quality trading in the Potomac Direct Drains watershed TMDL. In many cases, the implementation of the fecal coliform bacteria TMDLs will consist of providing public sewer service to unsewered areas. A new facility could be permitted in the watershed, provided that the permit includes average monthly and maximum daily fecal coliform limitations of 200 counts/100 ml and 400 counts/100 ml, respectively, which are the technology-based fecal coliform effluent limitations that are more stringent than applicable water quality criteria. For sediment, new mining or non-mining point sources may be permitted in the sediment-impaired watersheds with the implementation of applicable technology-based TSS requirements. Construction stormwater permits are provided specific future growth allowances in the sediment-impaired watersheds that are reserved for future construction stormwater permits.

There are no watershed associations specifically for the Potomac Direct Drains. However, there are several local watershed associations including the Sleepy Creek Watershed Association, the Opequon Creek Project Team, and the Elks Run Study Group. Also, there are Potomac River watershed associations including: Friends of the Potomac, Potomac Conservancy, and Potomac River Association.

January 23, 2008
FINAL APPROVED REPORT

Total Maximum Daily Loads for Selected Streams in the Potomac Direct Drains Watershed, West Virginia

Prepared for:
West Virginia Department of Environmental Protection
Division of Water and Waste Management
Watershed Branch, TMDL Section

Prepared by:
Water Resources and TMDL Center
Tetra Tech, Inc.
405 Capitol Street, Suite 608
Charleston, WV 25301

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TMDL WATERSHED APPENDICES

The TMDL watersheds within the Potomac Direct Drains watershed are as follows:

1. Opequon Creek
2. Sleepy Creek
3. Harlan Run and Jordan Run
4. Elks Run and UNT/Potomac River RM 12.8 (Teague's Run)

3. WATERSHED DESCRIPTION AND DATA INVENTORY

3.1 Watershed Description

The Potomac Direct Drains watershed, U.S. Geological Survey (USGS) 8-digit hydrologic unit code (02070004), lies mostly within Morgan, Berkeley, and Jefferson counties in the eastern panhandle of West Virginia, and also in portions of Frederick and Clarke counties in Virginia, as shown in Figure 3-1. A component of the Potomac River drainage, the Potomac Direct Drains watershed TMDL study area encompasses nearly 927 square miles. There are 592.6 square miles (64 percent) of the study area located in West Virginia, with the remainder in Virginia. The Potomac River mainstem flows along the northern edge of the TMDL study area. Major tributaries include Opequon Creek, Back Creek, Sleepy Creek, and Town Run. The average elevation in the watershed is 646 feet. The highest point is at 2,615 feet on High Point, which is in the western edge of the watershed near the Morgan County - Frederick County line. The minimum elevation is 300 feet at the confluence of the Potomac and Shenandoah rivers at Harpers Ferry.

Landuse and land cover estimates were originally obtained from vegetation data gathered from the West Virginia Gap Analysis Land Cover Project (GAP). The Natural Resource Analysis Center and the West Virginia Cooperative Fish and Wildlife Research Unit of West Virginia University (WVU) produced the GAP coverage. The GAP database for West Virginia was derived from satellite imagery taken during the early 1990s, and it includes detailed vegetative spatial data. Enhancements and updates to the GAP coverage were made to create a modeled landuse by custom edits derived from 911 emergency response addressable structures, 911 roads data, and 2003 aerial photography with 1-meter resolution. Additional information regarding the GAP spatial database is provided in the appendices of the Technical Report. The categories for vegetation cover were consolidated to create 16 landuse categories, summarized in Table 3-1.

A "new residential" landuse was created and incorporated into the model using GIS techniques. Exact locations of homes in the watershed were known from emergency response address data for Berkeley, Jefferson, and Morgan Counties, WV, and Frederick County, VA. These locations were used to create a polygon theme with the approximate area associated with housing development in the modeled subwatersheds. These address polygons were added to the GAP shapefile to account for homes built after the year 2000, as well as older homes not captured by GAP. The resulting shapefile showed where forest, grassland, or cropland had been replaced with new residential landuse. Where address polygons overlapped areas already counted as urban or residential in GAP 2000, the areas retained their original GAP 2000 designation. The improved resolution achieved by using emergency response address data increased the percentage of the residential landuse accounted for in the model from 4.4 percent to 9.3 percent, and addition of approximately 29,000 acres. A detailed analysis of roads was also completed using the 911 roads shapefiles and 2003 aerial photography with 1-meter resolution. A detailed description of the landuse modification process can be found in the Technical Report.

As shown in Table 3-1, the dominant modeled landuse type after modification in the Potomac Direct Drains watershed is forest, which constitutes 49.9 percent of the total landuse area. Other important modeled landuse types after modification are grassland (25.7 percent),

8. FUTURE GROWTH AND WATER QUALITY TRADING

8.1 Fecal Coliform Bacteria

This TMDL does not include specific future growth allocations to each subwatershed. However, the absence of specific future growth allocations does not prohibit new development in the subwatersheds for which fecal coliform TMDLs have been developed or preclude permitting of new sewage treatment facilities.

In many cases, the implementation of the TMDLs will consist of providing public sewer service to unsewered areas. The NPDES permitting procedures for sewage treatment facilities include technology-based fecal coliform effluent limitations that are more stringent than applicable water quality criteria. Therefore, a new sewage treatment facility may be permitted anywhere in the watershed, provided that the permit includes average monthly and maximum daily fecal coliform limitations of 200 counts/100 mL and 400 counts/100 mL, respectively. Furthermore, WVDEP will not authorize construction of combined collection systems or permit overflows from newly constructed collection systems.

8.2 Sediment

Most point source discharges are assigned technology-based TSS effluent limitations that would not cause biological impairment. For example, NPDES permits for sewage treatment and industrial manufacturing facilities contain monthly average TSS effluent limitations between 30 and 100 mg/L. New point sources may also be permitted in the sediment-impaired watersheds with the implementation of applicable technology-based TSS requirements.

In addition to the existing Construction Stormwater General Permit registrations in the sediment-impaired watersheds, specific future growth allowances are provided. The successful TMDL allocation scenarios allow a total area for each sediment-impaired stream that may be registered under the Construction Stormwater General Permit at any time. The available areas for sediment-impaired waters are displayed in Table 8-1.

For most waters, the existing registered area is less than that which has been allocated. The reserved acreage is expected to accommodate future development in the subject watersheds. If development projects are proposed in excess of the area provided, they may be permitted by implementing controls beyond those afforded by the general permit. Larger areas may be permitted if it can be demonstrated that tighter controls will result in a loading condition commensurate with the general permit area allocations provided in Table 8-1.

west virginia department of environmental protection

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Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
dep.wv.gov

February 26, 2013

Paul A. Stern
341 Round Top Lane
Berkeley Springs WV 25411

Re: ***PAUL A. STERN v. WVDEP***
Appeal No. 12-38-EQB

Mr. Stern:

I've replied to each specific information request to the best of my ability, and I don't intend to assert privilege as to anything below at this time. If that changes because of new information, I'll promptly let you know, but I don't anticipate that.

Enclosed please find copies of e-mail exchanges between Yogesh Patel and Sovereign Homes regarding the permitting process. To the best of my knowledge and belief, these are the only such communications memorialized in any form other than what's in the certified record. Again, if new information comes to light, I'll promptly pass it on.

I'll address each specific request as best I can. All answers are based on my information and belief after my inquiries and internal discussion.

When changes to the draft permit were made, in particular when the draft permit was changed to state that the distance from the discharge station to the mouth of the Potomac River is 33.6 miles.

The change was made at the final permit issuance. WVDEP received a comment during public notice that identified the error in the location. The agency responded to the comment and indicated that the error was corrected in the final permit. See Response #4 in the Responsiveness Summary, p. 431 of the Certified Record.

Drafting of the February 23, 2010 from Scott Mandirola stating that DEP was unable to continue processing the permit application because no offsets were available.

The February 23, 2010 letter is found on pp. 188 and 189 of the Certified Record. To the best of my knowledge, no other drafts exist.

Conversations or correspondence with the developer and/or Mountain Springs about the February 23rd letter, in particular any conversations regarding DEP changing from the position stated in the letter and issuing the permit.

Please see the e-mails that I've enclosed in hard copy, which, to the best of my knowledge, constitute all documentation the agency has regarding any such conversations or correspondence other than what appears in the Certified Record. As indicated during our telephone conference, some discussions were, and routinely are, held by telephone with the facility or its consultants. Accordingly, the agency has no memorialized documentation of such discussions.

Conversations or correspondence with EPA about the February 23rd letter, issuance of the permit, and why the DEP changed its position.

To the best of my knowledge, no such correspondence between the agency and EPA exists. Such discussions were, and routinely are, conducted by telephone. By way of indirect correspondence, see EPA's approval of the draft permit, pp. 323 and 324 of the Certified Record.

As always, I'll do my best to be available by telephone or e-mail, or in person, to discuss these or other matters at your convenience.

Sincerely,

Scott Driver

CSD/paf

Enclosures

Patel, Yogesh P

From: Morse, Steve <smorse@skellyloy.com>
Sent: Monday, October 17, 2011 1:15 PM
To: Patel, Yogesh P; Weiand, Josh; sovereignhomes@comcast.net
Cc: Phillips, David B; Lawson, Ty; Longenecker, Gerald
Subject: RE: Sovereign Homes/Sleep Creek

Mr. Patel:

First, I would like to let you know that Josh Weiand is no longer employed at Skelly and Loy. So please be sure to respond directly to me to be sure we get your calls or emails.

Second, based upon the conversations below, we (Skelly and Loy and Sovereign Homes) were expecting that a non-construction NPDES permit would be issued by the WV DEP. It has been almost 11 weeks since the last correspondence and we have not yet received a permit. Is there something that you need from either Skelly and Loy or Sovereign Homes to issue this permit? If not, can you issue this permit immediately? If you cannot, please email me with the explanation why today.

Thanks for your help. Anything you can do to expedite this permit would be appreciated. The application for this permit was submitted to the WV DEP on December 26, 2008, so as you can imagine, we are anxious to receive this permit. Feel free to call my cell phone (717-991-5658) if you have any questions.

Stephen R. Morse, P. E. | Senior Environmental Engineer
Skelly and Loy, Inc. | 449 Eisenhower BLVD Suite 300 | Harrisburg, PA 17111-2302 | USA
Office: 717.232.0593 | Fax: 717.232.1799 | Mobile: 717.991.5658
www.skellyloy.com | facebook.com | Linkedin.com

From: Patel, Yogesh P [mailto:Yogesh.P.Patel@wv.gov]
Sent: Tuesday, August 02, 2011 9:23 AM
To: Weiand, Josh; sovereignhomes@comcast.net
Cc: Phillips, David B; Morse, Steve; Lawson, Ty
Subject: RE: Sovereign Homes/Sleep Creek

Yes, like I said previously, he can start construction and finish it up. However, he cannot operate the facility to discharge anything into water of State until he obtain offsets.

From: Weiand, Josh [mailto:jweiand@skellyloy.com]
Sent: Tuesday, August 02, 2011 8:59 AM
To: Patel, Yogesh P; sovereignhomes@comcast.net

Cc: Phillips, David B; Morse, Steve; Lawson, Ty
Subject: RE: Sovereign Homes/Sleep Creek

So Mr. Clements will receive a permit that will enable him to begin construction of the facility?

Joshua L. Weiand, E.I.T. | Environmental Engineer
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Office:717.232.0593 | Fax:717.232.1799 | Mobile:717.576.3160
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From: Patel, Yogesh P [mailto:Yogesh.P.Patel@wv.gov]
Sent: Tuesday, August 02, 2011 8:53 AM
To: Weiand, Josh; sovereignhomes@comcast.net
Cc: Phillips, David B; Morse, Steve; Lawson, Ty
Subject: RE: Sovereign Homes/Sleep Creek

Mr. Weiand,

Yes, that action would consider "no net increase" on Potomac River Basin as far as nutrient is concern.

Thanks

Yogesh Patel, P. E.

Assistant Director

Permitting Section

Division of Water and Waste Management

601 57th Street SE

Charleston, WV 25304-2345

Phone # (304)-926-0499 Ext. 1014

Fax # (304)-926-0496

From: Weiand, Josh [mailto:jweiand@skellyloy.com]
Sent: Tuesday, August 02, 2011 8:49 AM
To: Patel, Yogesh P; sovereignhomes@comcast.net
Cc: Phillips, David B; Morse, Steve; Lawson, Ty; Hoskins, Annette L
Subject: RE: Sovereign Homes/Sleep Creek

Yogesh,

WVDEP is still going to provide a permit that enables the start of construction but zero discharge, correct?

Thanks.

Joshua L. Weiand, E.I.T. | Environmental Engineer
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prohibited. If you received this in error, please contact the sender and delete the material from any computer.

From: Patel, Yogesh P [mailto:Yogesh.P.Patel@wv.gov]
Sent: Tuesday, August 02, 2011 8:45 AM
To: sovereignhomes@comcast.net; Weiand, Josh
Cc: Phillips, David B; Morse, Steve; Lawson, Ty; Hoskins, Annette L
Subject: RE: Sovereign Homes/Sleep Creek

Mr. Clements,

Agency has not modified the permit. According to the TMDL has been completed by EPA for the Potomac River Basin and part of West Virginia Tributary Strategy Implementation plan, WVDEP is requiring offsets for any new or expanding discharges to the Potomac River Basin. Please find attached letter offers some guidance on offsets. I am forwarding your email to PIO (Public Information Office) and they will get back with you on your request.

If you have any question please feel free to contact me.

Thanks

Have a wonderful day,

Yogesh Patel, P. E.

Assistant Director

Permitting Section

Division of Water and Waste Management

601 57th Street SE

Charleston, WV 25304-2345

Phone # (304)-926-0499 Ext. 1014

Fax # (304)-926-0496

From: sovereignhomes@comcast.net [mailto:sovereignhomes@comcast.net]
Sent: Monday, August 01, 2011 8:27 PM
To: Josh Weiand
Cc: Phillips, David B; Steve Morse; Patel, Yogesh P; Lawson, Ty
Subject: Re: Sovereign Homes/Sleep Creek

It is an absolute necessity for the state to provide acceptable offsets since they are modifying the permit for this purpose. I also would like the public information on the discharge by the Morgan County PSC facilities showing them in compliance with this request and a description of how they complied.

Wade Clements

From: "Josh Weiand" <jweiand@skellyloy.com>
To: "Yogesh P Patel" <Yogesh.P.Patel@wv.gov>
Cc: "David B Phillips" <David.B.Phillips@wv.gov>, sovereignhomes@comcast.net, "Steve Morse" <smorse@skellyloy.com>
Sent: Monday, August 1, 2011 11:11:40 AM
Subject: RE: Sovereign Homes/Sleep Creek

Yogesh,

Are you able to provide any written documentation that illustrates what may be considered an acceptable source of offsets to the WVDEP? We would like to have something to reference when attempting to find the offset sources.

Thanks.

Joshua L. Weiand, E.I.T. | Environmental Engineer
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From: Patel, Yogesh P [mailto:Yogesh.P.Patel@wv.gov]
Sent: Thursday, July 21, 2011 4:14 PM
To: Weiand, Josh
Cc: Phillips, David B
Subject: RE: Sovereign Homes/Sleep Creek

Josh,

Nothing, we will take care of it. Make sure you understand issued permit will say "not to discharge anything into water of State" (basically this is zero discharge facility). This permit basically will give you permission to start moving on your project and finish it up. You cannot operate the facility or discharge any effluent from that treatment plant until you modified your permit, means you provide offset to the load you are proposing to discharge.

Thanks

Yogesh Patel, P. E.

Assistant Director

Permitting Section

Division of Water and Waste Management

601 57th Street SE

Charleston, WV 25304-2345

Phone # (304)-926-0499 Ext. 1014

Fax # (304)-926-0496

From: Weiand, Josh [mailto:jweiand@skellyloy.com]
Sent: Thursday, July 21, 2011 4:01 PM
To: Patel, Yogesh P
Cc: Morse, Steve
Subject: RE: Sovereign Homes/Sleep Creek

Yogesh,

Please provide some guidance as to what we need to do next to get this permit issued and into our client's hands.

Thank you.

Joshua L. Weiand, E.I.T. | Environmental Engineer
Skelly and Loy, Inc. | 449 Eisenhower BLVD | Harrisburg, PA 17111-2302 | USA
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From: Weiand, Josh
Sent: Monday, July 18, 2011 9:36 AM
To: 'yogesh_p.patel@wv.gov'
Cc: Morse, Steve
Subject: Sovereign Homes/Sleep Creek

Yogesh,

I spoke with our client about the NPDES permit and the offsets that are required to have the permit issued. He would like to have a permit issued now, and then obtain the offsets later, prior to discharge. What are the next steps?

Thank you for your help.

Joshua L. Weiand, E.I.T. | Environmental Engineer
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