
UNITED STATES COURT OF APPEALS

FOR THE TWELFTH CIRCUIT

C.A. No. 21-000123

CONSOLIDATED WITH

C.A. No. 21-000124

CHESAPLAIN LAKE WATCH,

Plaintiff-Appellant-Cross Appellee,

and

THE STATE OF NEW UNION,

Plaintiff-Appellee-Cross Appellee

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Defendant-Appellant.

On Appeal from the United States District Court for the District of New Union in.

BRIEF FOR THE STATE OF NEW UNION, *Plaintiff-Appellee-Cross-Appellee*

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JURISDICTIONAL STATEMENT

Chesaplain Lake Watch (“Lake Watch”) and New Union filed this consolidated action in the New Union District Court challenging the Environmental Protection Agency’s (“EPA”) rejection of New Union’s Total Maximum Daily Load (“TMDL”) for phosphorus loadings in the Lake Chesaplain watershed and substitution of its own TMDL under the Clean Water Act. 33 U.S.C. § 1313(d). The district court has federal-question jurisdiction over this action pursuant to 28 U.S.C. § 1331. The district court granted summary judgment on issues one, two, and four in favor of New Union. The district court granted summary judgment on issue one and three in favor of Lake Watch. Finally, the district court granted summary judgment on issue four in favor of EPA. Following the district court’s issuance of an order, dated August 15, 2021, Lake Watch, New Union, and EPA each filed a timely notice of appeal, pursuant to Fed. R. App. P. 4(a)(1)(A), in the Twelfth Circuit. *See R.* at 2. The Twelfth Circuit has jurisdiction pursuant to 28 U.S.C. §1291.

STATEMENT OF ISSUES

(1) Article III requires that administrative decisions are ripe for judicial review. The EPA adopted a final TMDL based upon a complete factual record, and New Union must start planning to implement the TMDL, putting regulated parties in anticipation of new permit limits and new Best Management Practices (“BMPs”). Did the district court properly decide that the issues are ripe for review?

(2) The Act requires that states establish a TMDL for impaired waters. New Union adopted a single-value TMDL that the EPA subsequently rejected. Did the district court properly grant summary judgment to New Union in deciding that a single-value TMDL satisfies the statutory requirement?

(3) The Act requires states to establish TMDLs for impaired waters as necessary to implement water quality standards, accounting for seasonal variations. EPA accepted New Union’s original TMDL, which involved an annual phased reduction in phosphorus discharges into Lake Chesaplain over a period of five years. Was EPA’s acceptance of the TMDL proper, contrary to the district court’s ruling?

(4) EPA regulations allow trade-offs in pollution allocation between point and nonpoint sources to achieve the TMDL. The Chesaplain Watershed Implementation Plan gives pollution reduction credit to point sources for anticipated BMPs pollution reduction programs. Was the district court correct in ruling that EPA was not required to have reasonable assurance and was not arbitrary and capricious?

STATEMENT OF THE CASE

A. The Act

Congress passed the Act with the goal of restoring and maintaining the “chemical, physical, and biological integrity” of the waters of the United States. 33 U.S.C. § 1251(a). EPA is charged with administering the Act. *Id.* § 1251(d). Because states have authority over their own waters, EPA works with the states—through cooperative federalism—to protect the waters without overstepping its jurisdiction. *Id.* § 1251(g).

The process for protecting waters is a shared responsibility: after water quality standards are published for pollutants in surface waters, states identify waterbodies that are not meeting the requirements and must work with EPA to establish a plan to correct the issue. *See* 33 U.S.C. § 1313(d). Generally, that plan of correction takes the form of a TMDL, which is a planning tool that sets the maximum amount of a specific pollutant that can be discharged into a waterbody and still meet the water quality standards set by EPA. *Id.* States have the option of drafting a TMDL

and submitting it to EPA for approval, or simply allowing EPA to write the TMDL for the impaired waterbody. *Id.* When EPA disapproves of a state-submitted TMDL, EPA has the responsibility of drafting a replacement TMDL for the waterbody. *Id.* The Act directs the state to incorporate the TMDL into an implementation plan. *See id.* § 1313(d)(1)(D)(2). Unlike the TMDL, the Act does not give the EPA the alternative to create an implementation plan if the state does not. *See id.* § 1313(e)(2). Rather, if the state does not adopt an implementation plan, the EPA can deny the state permitting authority under the Act. *See id.* § 1313(e)(2).

TMDLs are expected to cover all sources of pollution in the waterbody, including point and nonpoint sources. 40 C.F.R. § 130.7. Point sources are those subject to permitting requirements, such as wastewater treatment facilities and other factories. *Id.* Nonpoint sources are those that do not require permits to operate, such as neighborhoods, most agriculture, and stormwater runoff. *Id.* Point sources receive a wasteload allocation, while nonpoint sources receive a load allocation. *Id.* Altering wasteload allocations is relatively simple since point sources are permitted through the National Pollutant Discharge Elimination System (“NPDES”) program. *Id.* Load allocations are more difficult and generally require approved BMPs to implement. *Id.*

BMPs are methods of changing the current pollution levels for nonpoint sources and often include “structural and nonstructural controls and operation and maintenance procedures.” 40 C.F.R. § 130.2(m). They may be applied “before, during and after pollution-producing activities” with the same effect of reducing or eliminating a specific pollutant. *Id.*

B. The Chesaplain Watershed Implementation Plan

Lake Chesaplain is a waterbody in the State of New Union. R. at 7. The lake is surrounded by industry and development. R. at 7. On the east side of the lake there are agricultural lands—including ten concentrated animal feeding operations (“CAFOs”) and a slaughterhouse—and

vacation homes with septic systems. R. at 7. Also, on the north side of the Lake is the City of Chesaplain Mills, which has a sewage treatment plant. R. at 7. As a result of economic development in the 1990s, water quality has declined. R. at 7. Because Lake Chesaplain is a recreational body of water, it is designated Class AA—meaning it is held to the highest water quality standards. R. at 8. New Union created a Commission in 2008 to study the decline in water quality. R. at 8. In 2012, the Commission issued a report finding Lake Chesaplain was experiencing excess phosphorus. R. at 8. The maximum phosphorus level ideal for a healthy waterbody is 0.014 mg/L, and thus, the New Union Division of Fisheries and Environmental Control (“DOFEC”) adopted a water quality standard of 0.014 mg/L for phosphorus. R. at 8. Since Lake Chesaplain’s phosphorus levels ranged from 0.020 to 0.0340 mg/L during the study, it was included on the listing of impaired waters sent to EPA. R. at 8.

In 2016, the Commission issued a supplemental report listing the existing sources of phosphorus pollutants and the maximum annual loading at 120 metric tons. R. at 8. Existing loadings—split between two point sources (i.e., Chesaplain Mills’ sewage treatment plant and Chesaplain Slaughterhouse), three nonpoint sources (i.e., CAFOs, other agriculture, and septic tanks), and natural sources—totaled 180 metric tons. R. at 8–9. In 2017, DOFEC published a proposal to achieve the TMDL. R. at 9. The plan included a staged reduction in phosphorus discharges, by the point and nonpoint sources, over five years. R. at 9. Each year, there would be a 7% reduction, totaling a 35% reduction from the 180 metric ton baseline. R. at 9. Point sources would be subject to permit limits; nonpoint source reduction would be achieved through BMPs. R. at 9. Specifically for the nonpoint sources, the CAFOs would need to modify the animal feed to reduce phosphorus in manure, implement treatment of manure streams, and restrict manure spreading when the soil is frozen or saturated. R. at 9. Also, the septic systems in a nearby vacation

community would be subject to increased inspection and pumping schedules. R. at 9. These nonpoint source reductions would allow a less stringent reduction for the point sources, which are important to the economy of New Union. R. at 8–9.

DOFEC received substantial pushback on this proposal from the local industries and environmental groups. R. at 9–10. Homeowners objected to the cost of the septic tank maintenance and the hog CAFOs objected to the “possible imposition” of the BMPs on their current daily operation. R. at 9–10. Lake Watch took issue with the credit for anticipated pollution reductions by nonpoint sources, claiming the BMP proposed would not be enough to reach the 35% reduction, that New Union lacked authority to impose and enforce the BMPs, and that the Act does not allow for staged annual reductions. R. at 10. In response, DOFEC proposed a TMDL consisting of a 120 metric ton annual maximum with no wasteload or load allocations. R. at 10. EPA rejected this TMDL; one year later and after notice and comment proceedings, EPA adopted the original TMDL planned by DOFEC and incorporated all DOFEC’s years of research into the administrative record. R. at 10.

Now, both the slaughterhouse and sewage treatment plant are operating on expired but extended NPDES permits without phosphorous discharge limits. R. at 10. DOFEC proposed new permits for the slaughterhouse and treatment plant consistent with the wasteload allocations in the TMDL, and both the slaughterhouse and plant seek to challenge the proposed permits in administrative hearings. R. at 10. Further, New Union has not implemented the BMPs for nonpoint sources, and the lake is still impaired. R. at 10.

C. Proceedings Below

New Union filed an action against EPA under the Act seeking declaratory relief. R. at 4, 10. Specifically, New Union challenged EPA’s rejection of the final proposed TMDL, consisting

of the yearly 120 metric ton loading, arguing that it satisfied the requirements of a TMDL and that EPA's regulation requiring allocations is "contrary to law." R. at 11. Lake Watch filed an action against the EPA under the Administrative Procedure Act seeking declaratory relief. *See* R. at 4, 10. Those actions were consolidated. R. at 10. Specifically, Lake Watch challenged EPA's decision to adopt a staged annual loading TMDL and to allow credits for anticipated pollution reductions stemming from BMPs. R. at 11. Those actions were consolidated. R. at 10. Then, the parties filed cross motions for summary judgment. R. at 5.

There were four issues before the district court. The district court granted summary judgment to New Union on issues one, two, and four. R. at 12–16. On issue three, the district court granted summary judgment to Lake Watch. More specifically, the district court rejected EPA's first argument that the claims are not ripe for judicial review and granted summary judgment in favor of New Union and Lake Watch finding that the issues are ripe for review because EPA's TMDL was based on the administrative record, the TMDL requires New Union to take actions to implement it, and judicial delay would cause harm to New Union. R. at 12. Second, the district court rejected EPA and Lake Watch's argument that TMDLs require an allocation between point and nonpoint sources and granted summary judgment in favor of New Union finding that EPA's regulation requiring allocations is contrary to the Act. R. at 12, 14. Third, the district court granted summary judgment in favor of Lake Watch finding that a TMDL should be a daily limit, rejecting EPA and New Union's argument that a staged annual plan meets the requirements of a TMDL. R. at 13–14. Finally, the district court rejected Lake Watch's argument that EPA's decision to allow a credit for anticipated pollution reductions by BMPs without reasonable assurance was arbitrary and capricious and granted summary judgment to the EPA and New Union finding that "reasonable assurance" is not required and the decision was not arbitrary and capricious. R. at 15–16.

Lake Watch, EPA, and New Union all filed notices of appeal. R. at 2.

STANDARD OF REVIEW

The New Union District Court granted summary judgment on all four issues based solely on questions of law. Thus, this Court reviews the district court's opinion *de novo*. *See, e.g., U.S. Bank Nat. Ass'n ex rel. CW Capital Asset Mgt. L.L.C. v. Village at Lakeridge, L.L.C.*, 138 S. Ct. 960, 965 (2018); *see also Am. Farm Bureau Fed'n v. U.S. Env't Prot. Agency*, 792 F.3d 281, 292 (3d Cir. 2015).

SUMMARY OF THE ARGUMENT

An informational tool is there to help, not to limit. A TMDL is an informational tool—imposing no enforcement obligations—for states to enhance water quality. In enacting the Act, Congress adopted a policy of placing primary responsibility on states to manage waterbodies. The Act tasks states with adopting a TMDL for waterbodies that do not meet water quality criteria. Here, the EPA's decision to adopt an alternate TMDL (1) is ripe for review; (2) invalidly rejected the State's proposed single-value TMDL; (3) was reasonably expressed as an annual rate to be phased in over five years; and (4) did not require reasonable assurances from the State.

First, the district court correctly held that the case is ripe for review because the EPA adopted a final TMDL that pressures New Union to issue permits and implement BMPs consistent with the TMDL. To determine if an administrative decision is ripe for review, courts consider the fitness of the issues for judicial review and the hardship to the parties from withholding judicial review. Final agency actions based on a complete factual record and challenged on a legal basis are fit for judicial review. Courts find that a legal challenge to a TMDL is ripe for review even where the TMDL has not been implemented because the TMDL requires the state to create an

implementation plan, and the TMDL pressures regulated actors to modify pollutant discharges in anticipation of forthcoming permit limits.

Here, the issues are ripe for review because the EPA adopted a final TMDL based on a complete factual record, the issues are legal concerning the appropriate interpretation of the Act's statutory requirements, and the court would cause hardship to New Union and regulated groups from delaying review.

Second, the district court correctly held that EPA invalidly rejected New Union's single-value TMDL. Courts apply Congress's intent where a statute is clear. Only when a statute is ambiguous will courts defer to an agency's reasonable interpretation of the statute. Here, Congress clearly only requires a single value to satisfy the TMDL requirement. Even if this Court finds that the TMDL requirement is ambiguous and EPA's regulation reasonable, EPA's regulation does not require pollutant allocations amongst sources.

The Act requires that a state adopt a TMDL for impaired waterbodies; namely, waterbodies that do not meet water quality standards. In separate provisions, the Act requires states to engage in a planning process to carry out the TMDL. Therefore, reviewing courts distinguish between the TMDL and subsequent planning process. Here, the Act clearly requires the "total maximum" value of a pollutant that can enter into a waterbody to comply with water quality standards. New Union's single-value TMDL complies with Congress's express intent in the statutory provision.

Even if this Court finds that the statutory requirement for a TMDL is ambiguous and the agency's interpretation reasonable, the regulation does not require New Union to provide allocations in the final TMDL. The regulation simply defines a TMDL to be the sum of: (1) wasteload allocations for point sources; and (2) load allocations for nonpoint sources and natural background sources. Here, New Union complied with this regulation by considering the various

point and nonpoint sources and then providing the final sum of those allocations as the TMDL. Additionally, *American Farm Bureau* is distinguishable because EPA established the TMDL in the first instance and chose to include both wasteload and load allocations, and the court only held that EPA could include allocations. In contrast, New Union proposed the TMDL in the first instance and chose not to go above and beyond what was required by statute and regulation.

Third, the district court incorrectly held that New Union's annual phased TMDL calculation did not comply with the Act and that EPA's acceptance of the TMDL was improper. When a statute is ambiguous and Congress's intent is unclear, the court will give substantial weight to an Agency's promulgated interpretation of the ambiguous terms. Within the Act, the word "daily" in total maximum daily load renders the phrase ambiguous because daily calculations are implicit in both annual and seasonal calculations. Further, the broader Act requires TMDL calculations to incorporate seasonal variations and margins of safety. In addition, TMDLs are ambiguous regarding the timeframe in which pollution loading reductions should be achieved. When passing the Act, Congress recognized situations in which water quality may not be achieved by the year set as the statute's goal. Thus, Congress built in some ambiguity to allow EPA and the states to take a flexible approach to TMDLs and pollution reduction.

Further, EPA has promulgated interpretations of the Act that this court should accord *Chevron* deference to. While Congress has never provided guidance on how to calculate TMDLs, EPA has clarified that they may be calculated as any mass over time. In addition, EPA has released guidance advising on the appropriateness of a staged implementation plan. Staged implementation plans, which are those that allow an agency to implement the TMDL at key points, are recognized by EPA as a valid approach when flexibility in implementation is needed. As the agency tasked with implementing the Act, EPA's reasonable interpretation of the statute should be accorded

deference. Thus, because the Act is ambiguous regarding TMDL calculations and EPA has promulgated reasonable interpretations of TMDLs, New Union's annual phased TMDL calculation was appropriate.

Fourth, the district court correctly held that EPA's decision to allow the credit for anticipated pollution reduction was not arbitrary and capricious, and EPA was not required to have reasonable assurance that New Union would implement the BMPs. In the process of approving the Chesaplain Watershed Implementation Plan, EPA had to first reject New Union's proposed TMDL and review New Union's original draft which included numerous facts about the current loading and the anticipated impact of the BMPs. By reviewing this information, EPA showed a clear factual basis for the credit-based plan. The decision was not arbitrary and capricious.

Lake Watch relies on an EPA guidance document from 1991 to assert that EPA needed to have reasonable assurance that pollution reduction would occur. This is only a guidance document that does not have the force of law since the guidance would impose a requirement on EPA which it would follow if it was intended to be binding. Additionally, requiring reasonable assurance would run counter to the goals of TMDLs as planning programs, rather than implementation plans. EPA was not required to have reasonable assurance. Because EPA was not required to have reasonable assurance, the decision was not arbitrary and capricious. Thus, this Court should affirm the lower court's ruling on issue four.

For these reasons, this Court should affirm the district court on issues one, two, and four. This Court should reverse and remand back to the agency on issue three.

ARGUMENT

An informational tool is there to help, rather than to limit. A TMDL is an informational tool that helps states enhance water quality, and the TMDL alone imposes no enforcement

obligation on states. Congress created this informational tool as part of the Act's overarching policy to "recognize, preserve, and protect the primary responsibilities and rights of States" to manage water resources. 33 U.S.C § 1251. In rejecting a state's TMDL for invalid reasons, EPA interferes with a state's process of managing water resources and thwarts Congress's policy to give the states the primary role in creating TMDLs. Under the Act, states must adopt a TMDL—for waters that do not meet water quality criteria—to initiate the process of bringing that water into compliance with the relevant water quality standards. *See* 33 U.S.C. § 1313(d).

This Court should affirm the district court on issues one, two, and four; and reverse and remand back to the agency on issue two. Specifically, this Court should affirm issues one, two and four because (1) EPA's decision to reject New Union's TMDL and adopt an alternate TMDL is ripe for review; (2) the Act does not require that a TMDL include pollutant allocations, and thus, EPA invalidly rejected New Union's single-value TMDL; and (4) EPA did not act arbitrary and capriciously because the Act does not require reasonable assurances from the state for the implementation of BMPs. In contrast, this Court should reverse and remand back to the agency on issue three because the Act is ambiguous as to the content of a daily load, but EPA has clarified that the calculation may be annual and may include a staged implementation approach; thus EPA did not violate the Act by accepting New Union's original annual phased reduction TMDL.

I. THE DISTRICT COURT WAS CORRECT TO EXERCISE JURISDICTION IN FINDING THE CASE RIPE FOR REVIEW BECAUSE THE EPA ADOPTED A TMDL THAT REQUIRES NEW UNION TO TAKE IMMEDIATE ACTION.

As a matter of law, the district court correctly held that the case is ripe for review because EPA adopted a final TMDL, the dispute is legal not factual in nature, and New Union must start spending resources to implement the TMDL. Article III limits the jurisdiction of federal courts to "[c]ases" and "[c]ontroversies." U.S. Const. art. III, § 2. To comply with this Article III

requirement, the Supreme Court has developed jurisdictional doctrines including the ripeness doctrine. *E.g.*, *Poe v. Ullman*, 367 U.S. 497, 503–04 (1961). In the context of challenges to administrative decisions, the Court makes two inquiries—fitness and hardship—to determine if an agency action is ripe for judicial review. *Abbott Laboratories v. Gardner*, 387 U.S. 136, 148–149 (1967). First, the reviewing court considers whether the issues are fit for judicial review. As part of the fitness inquiry, courts consider whether the issues are purely legal—weighing in favor of fitness—or would benefit from further factual development—weighing against fitness. *E.g.*, *Id.* at 149. Fitness also requires a final agency action. *Id.* An agency action is final where the action has a “direct effect on [] day-to-day business.” *Id.* at 152. More specifically, the agency action should be the “consummation” of the agency’s decision-making process, and the agency action should result in legal consequences or determine rights or obligations. *Bennett v. Spear*, 520 U.S. 154, 178 (1997) (quoting *Chi. & S. Air Lines v. Waterman S.S. Corp.*, 333 U.S. 103, 113 (1948)). Second, the reviewing court considers hardship: what hardship to the parties will result from the court withholding judicial review? *Abbott Laboratories*, 387 U.S. at 148–149.

Multiple circuits have held that a challenge to a TMDL is ripe for review even if that TMDL has not been implemented through permit limits and other management practices. *Am. Farm Bureau*, 792 F.3d at 293; *City of Kennett, Mo. v. Env’t Prot. Agency*, 887 F.3d 424, 434 (8th Cir. 2018). In a case where trade associations challenged the EPA’s final-published TMDL for Chesapeake Bay, the Third Circuit held that the case was ripe for review even though the state had not yet developed a plan to implement the TMDL. *Am. Farm Bureau*, 792 F.3d at 292–93. First regarding fitness, the court explained that the issues were fit for review because it was a “purely legal dispute on a well-developed record about the EPA’s process of promulgating a TMDL.” *Id.* at 293. Second, regarding hardship, the court explained that delaying review would result in

hardship to both trade associations, who would alter pollutant discharges in anticipation of permit modifications, and EPA and states who will continue to spend time and energy developing an implementation plan for the TMDL. *Id.* at 293–94.

Similarly, the Eighth Circuit held that a city’s challenge to a TMDL was ripe for review where the EPA approved but had not yet implemented the TMDL. *City of Kennett, Mo.*, 887 F.3d at 433. The TMDL’s wasteload allocation for the city’s wastewater treatment plant required the state and EPA to incorporate more stringent limits in the new NPDES permit for the city, whose permit had expired. *Id.* at 428–29, 433. For the fitness analysis, the court explained that the action was final because there was an administrative record supporting the EPA’s decision, and it was clear how the state and EPA would need to modify permits to implement the TMDL. *Id.* at 433. Then for the hardship analysis, the court explained that withholding review would result in harm to the city, who must start making planning decisions in accordance with the TMDL—even where there was a possibility that a specific water quality criterion could change and as a result impact the TMDL. *Id.* at 433–44.

In contrast, when EPA has not made a definitive finding, a challenge to the agency action is not ripe for review. *Bravos v. Green*, 306 F. Supp. 2d 48, 56 (D.D.C. 2004) (holding that a challenge to an implementation plan was not ripe for review where the EPA only commented on the presence of an implementation plan in the proposed TMDL—rather than make any definitive findings, e.g., approving the implementation plan); *cf. City of Arcadia v. U.S. Env’t Prot. Agency*, 265 F. Supp. 2d 1142, 1147, 1156–59 (N.D. Cal. 2003) (holding that California cities challenge to EPA’s approval of Los Angeles’s trash TMDL was not ripe for review where the TMDL for trash was a single-value, the TMDL did not commit any specific source to trash reductions, and Los Angeles planned to revisit and revise the TMDL after an initial two-year monitoring period).

Here, the challenge to EPA’s rejection of New Union’s TMDL and subsequent adoption of an alternative TMDL is ripe for review. Weighing in favor of ripeness, the issues are fit for review because the issues are purely legal issues, i.e., the legal requirements and limitations of a TMDL. *See R.* at 2. The administrative record is complete, and the case would not benefit from further factual development. *See R.* at 10. Unlike the agency action in *Bravos*, EPA made a final agency action in adopting the original DOFEC TMDL proposal after notice and comment. *See R.* at 10.

Also, the hardship to the parties—from withholding a decision—weighs in favor of ripeness. Unlike the TMDL in *City of Arcadia*, the TMDL sets out wasteload and load allocations for particular sources; and, in anticipation of forthcoming permit limits and BMPs, agricultural businesses (including the slaughterhouse and hog CAFOs) and the City of Chesaplain Mills will start modifying pollutant discharges. *See R.* at 7–10. Further, without review by this Court, the City and slaughterhouse will continue to face legal uncertainty in their administrative proceedings in which they plan to challenge DOFEC’s proposed permit modifications to implement EPA’s final TMDL. *R.* at 10. Even though New Union has not yet implemented the TMDL, both the City and slaughterhouse have expired permits requiring New Union to issue new permits. *R.* at 10. If this Court withholds review, in the face of legal uncertainty, New Union will need to start spending resources to apply the TMDL via new NPDES permits limits for the City’s treatment plant and the slaughterhouse. *See R.* at 10. Similarly, even though New Union has not yet implemented BMPs for the CAFOs, septic systems, and other agricultural activities, if this Court withholds review, in the face of legal uncertainty New Union will need to start spending resources to implement BMPs. *See R.* at 10.

In conclusion, the case is ripe for review because the EPA adopted a final TMDL on a complete factual record and delay would cause harm to New Union, the City, residential

communities, and agricultural businesses. Thus, this Court should affirm the district court on issue one.

II. THE DISTRICT COURT WAS CORRECT TO GRANT SUMMARY JUDGMENT FINDING THAT THE EPA VIOLATED THE ACT BY REJECTING NEW UNION’S TMDL OF PHOSPHOROUS FOR CHESAPLAIN LAKE.

The district court correctly granted summary judgment as a matter of law in favor of New Union, finding that EPA violated the Act in rejecting New Union’s TMDL. Under the Act, each state must establish a TMDL for impaired waterbodies, i.e., waterbodies that do not satisfy the water quality standard applicable to that water. *See* 33 U.S.C. § 1313(d)(1)(C); *City of Kennett, Mo.*, 887 F.3d at 427. For statutory interpretations, an agency must apply Congress’s intent if the statute is unambiguous, and only when the statute is ambiguous will a reviewing court defer to an agency’s reasonable interpretation of the statute. *See Chevron U.S.A., Inc. v. Nat. Res. Def. Council Inc.*, 467 U.S. 837, 842–43 (1984).

Here, the EPA invalidly rejected New Union’s TMDL because, under the Act, Congress unambiguously only requires a single value to satisfy the TMDL requirement. Even if this Court finds that the statute is ambiguous and EPA’s regulation a reasonable interpretation of the Act’s TMDL requirement, the regulation still does not require that the state specify how the pollution will be allocated in a TMDL.

A. EPA violated the clear meaning of the Act in rejecting New Union’s single-value TMDL.

In rejecting New Union’s TMDL, EPA violated the clear meaning of the Act, which only requires a single-value phosphorous TMDL for Chesaplain Lake. Specifically, the Act states that “[e]ach State shall establish for [impaired waters] . . . the total maximum daily load, for those pollutants which the Administrator identifies.” 33 U.S.C. § 1313(d)(1)(C). Also, the Act separately requires the state to submit an implementation plan. *See id.* § 1313(d)(2), (e)(2–3). Namely, a state

must incorporate the TMDL into its “current plan.” *Id.* § 1313(d)(2). Then, the state submits to the EPA “a proposed continuing planning process . . . which will result in plans for all navigable waters within such State, which include, but are not limited to . . . total maximum daily load for pollutants.” *Id.* § 1313(e)(2), (e)(3)(C). The Act further distinguishes between the TMDL and subsequent implementation plan in giving EPA authority to reject a state’s TMDL and adopt an alternate TMDL—but not giving EPA authority to reject a state’s implementation plan and adopt an alternate plan. *Id.* § 1313(d)(2), (e)(2). Rather, if the state fails to incorporate the TMDL into its plan, EPA can only deny the state permitting authority under the Act. *Id.* § 1313(e)(2).

Courts also distinguish between the TMDL and subsequent implementation plan requirements and explain that the detailed plan for allocating the TMDL amongst sources is an additional step—after the state establishes the TMDL. *See, e.g., Sierra Club v. Meiburg*, 296 F.3d 1021, 1025 (11th Cir. 2002) (explaining that the TMDL is a “goal for the level of that pollutant in the waterbody” and that “individual-discharge permits will be adjusted and other measures taken so that the sum of [the] pollutant in the waterbody is reduced to the level specified by the TMDL”); *Pronsolino v. Nastro*, 291 F.3d 1123, 1129 (9th Cir. 2002) (explaining that TMDLs “serve as a *link* in an implementation chain”) (emphasis added); *City of Dover v. U.S. Env’t Prot. Agency*, 36 F. Supp. 3d 103, 109 (D.D.C. 2014) (explaining that a TMDL “sets a cap” on the total amount of a particular pollutant that can enter an impaired water and can be implemented by “adjusting pollutant discharge requirements in individual NPDES permits or establishing nonpoint source controls”); *Bravos v. Green*, 306 F. Supp. 2d 48, 56 (D.D.C. 2004) (explaining that “EPA’s approval of a State’s TMDL does not translate into approval of the State’s implementation plan”); *City of Arcadia*, 265 F. Supp. 2d at 1144–45 (reiterating that “each TMDL represents a goal that *may be implemented* by adjusting pollutant discharge requirements in individual NPDES permits

or establishing nonpoint source controls”) (emphasis added); *Idaho Sportsmen’s Coal. v. Browner*, 951 F. Supp. 962, 966 (W.D. Wash. 1996) (explaining that a TMDL “in itself does not reduce pollution”).

Here, New Union provided a single value for the phosphorous TMDL in compliance with the express language of the Act and intent of Congress. *See* R. at 10. This single-value TMDL is separate from future implementation plans to determine how to achieve the pollutant cap for phosphorous set out in the TMDL. Therefore, New Union complied with the Act in submitting a single-value TMDL, and EPA violated the Act in rejecting New Union’s TMDL and subsequently requiring a TMDL with pollution allocations.

B. Alternatively, the EPA’s regulation does not require New Union to provide pollution allocations amongst sources in the phosphorous TMDL.

Even if this Court finds that the TMDL requirement is ambiguous and the regulation reasonable under the *Chevron* analysis, under the EPA regulation, the EPA still invalidly rejected New Union’s single-value TMDL. By regulation, the EPA defines TMDL to be the sum of wasteload allocations for point sources, load allocations for nonpoint sources, and “natural background sources.” 40 C.F.R. § 130.2(i). Here, New Union’s TMDL complies with the regulation, and *American Farm Bureau* is inapposite.

(1) *EPA’s regulation does not require that New Union specify how it will allocate pollution loads amongst sources, and thus EPA was incorrect to reject New Union’s TMDL.*

New Union’s TMDL complies with EPA’s regulation because the regulation does not require New Union to specify pollution allocations. By regulation, EPA defines TMDL as “[t]he sum of the individual [wasteload allocations] for point sources and [load allocations] for nonpoint sources and natural background.” *Id.* Further by regulation, “[i]f a receiving water has only one point source discharger, the TMDL is the sum of that point source [wasteload allocations] plus the

[load allocations] for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments.” *Id.* This regulatory definition does not require that the TMDL specify how allocations will be made amongst sources—rather the regulation explains how the TMDL is generated. *See id.* Similarly, a district court held that EPA did not invalidly establish a TMDL with only one wasteload allocation because under the Act and section 130.2(i), there is no express requirement that a TMDL set wasteload allocations and load allocations for all nonpoint and point sources respectively. *Dioxin/Organochlorine Ctr. v. Rasmussen*, No. C93-33D, 1993 WL 484888, at *5 (W.D. Wash. Aug. 10, 1993).

Here, New Union complied with the regulation in generating a final single-value TMDL. Namely, New Union established the TMDL by first analyzing the existing sources of pollution and calculating the required reductions from both the point (i.e., the wasteload allocations) and nonpoint sources (i.e., the load allocations) to achieve the TMDL. *See R.* at 8–10. Nothing in the regulation requires New Union to include that analysis in the final TMDL.

(2) *The district court was correct not to rely on American Farm Bureau because it is distinguishable.*

The district court was correct not to rely on *American Farm Bureau* because it is inapposite. *American Farm Bureau* is distinguishable because no party contested that EPA was creating the TMDL in the first instance. 792 F.3d at 290. Further, the court held that the EPA could *choose* to include wasteload allocations for particular point sources and load allocations for general sectors—e.g., agriculture, forest, and urban—in the TMDL. *Id.* at 300, 302–03. But EPA may not adopt a TMDL that infringes on “traditional state authority” in, for example, land use and zoning. *See id.* at 303–04. The court suggested that this would be the case if EPA made load allocations to specific nonpoint sources. *See id.* at 303–04.

In contrast to EPA in *American Farm Bureau*, here New Union created the TMDL in the first instance, and the EPA rejected the TMDL for an invalid reason. While the EPA chose to include pollutant allocations in *American Farm Bureau*, there is no requirement by the Act or regulation that the TMDL specifically plan how pollution loads will be allocated amongst sources. Additionally, EPA replaced New Union’s TMDL with a TMDL that improperly makes load allocations to vacation homes with septic systems and CAFOs. R. at 7, 9. In effect, EPA infringes on New Union’s traditional state authority over land use and zoning—exactly the action that the Third Circuit cautioned against in *American Farm Bureau*. Bedrock principles of federalism prohibit the federal government from intervening in an area of traditional state control. New Union’s TMDL complied with the regulation. Unlike EPA’s *voluntary* choice to include allocations in the first instance in *American Farm Bureau*, here EPA invalidly rejected New Union’s TMDL, which was permissible under the Act and regulation.

For these reasons, this Court should affirm the district court’s grant of summary judgment in favor of New Union on issue two.

III. EPA’S ADOPTION OF NEW UNION’S TMDL DID NOT VIOLATE THE ACT BECAUSE EPA HAS THE AUTHORITY TO INTERPRET THE TERM “DAILY LOAD” TO INCLUDE ANNUAL LIMITATIONS AND A PHASED ANNUAL APPROACH.

This Court should reverse the district court’s grant of summary judgment in favor of Lake Watch because EPA’s interpretation of “daily load” to include a phased annual approach was permissible. The Act directs EPA to oversee States’ establishment of TMDLs, ensuring that the standards are “established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety.” 33 U.S.C. § 1313(d)(C). Though section 1313 does not define what a TMDL is nor how it should precisely be calculated, Congress authorized EPA “to prescribe such regulations as are necessary to carry out [the EPA’s] functions under this

chapter.” 33 U.S.C. § 1361; *see also Am. Farm Bureau*, 792 F.3d at 298 (“Although Congress explicitly required the EPA to establish ‘total maximum daily loads,’ it nowhere prescribed how the EPA is to do so.”). EPA has provided clarification on what should be incorporated into the TMDL calculus and how that calculus should be expressed. *See, e.g.*, 40 C.F.R. § 130.7. Taking into consideration the scientific differences between pollutants, EPA allows for TMDLs to be expressed “in terms of either mass per time, toxicity, or other appropriate measure.” 40 C.F.R. § 130.2(i).

For challenges to an agency’s interpretation of a statute, a reviewing court will usually apply the two-step *Chevron* analysis. *United States v. Mead Corp.*, 533 U.S. 218, 227 (2001). In addition, the Supreme Court gives *Chevron* deference when an agency is charged with implementing a complex statutory scheme that requires scientific sophistication. *See, e.g., Nat’l Cable & Telecomms. Ass’n, Inc. v. Brand X Internet Serv.*, 545 U.S. 967, 1002–03 (2005); *Nat’l Cable & Telecomms. Ass’n, Inc. v. Gulf Power Co.*, 534 U.S. 327, 339 (2002). The first prong of the *Chevron* analysis looks to whether Congress, in enacting the statute, made its intentions clear, or whether it left open a gap for the agency to apply its own interpretation. *Chevron*, 467 U.S. at 842–43. When a question arises of whether a statute is ambiguous, courts look to the plain language of the statute, the legislative history, the purpose of the statute, and practical consequences of a specific statutory interpretation to resolve *Chevron* step one. *See Am. Farm Bureau*, 792 F.3d at 297–302. If the court determines that Congress’s intentions are clear based on a plain reading of the statute, the agency must follow that clear intent. *Am. Farm Bureau*, 792 F.3d at 297–302. If, however, the court determines that Congress intended to leave a “gap” for the agency to fill, it will then examine whether the agency’s interpretation is based on a permissible construction of the statute. *Id.*

Here, it is not apparent from the statute whether TMDLs may be in annual or seasonal terms and whether the total reduction of loadings from point sources in a watershed may be decreased by a specified percentage over a period of several years. Consequently, this Court should defer to EPA's reasonable interpretation that a TMDL can be implemented in stages and expressed as any mass over time calculation.

A. The term “daily load” is ambiguous considering the Act’s other provisions and the Act’s legislative history.

This Court should reverse the district court's ruling against New Union and EPA because the Act's TMDL provision is ambiguous considering other provisions in the Act, the legislative history, and the Act's purpose. When a question arises of whether a statute is ambiguous, courts look to the plain language of the statute, the legislative history, the purpose of the statute, and practical consequences of a specific statutory interpretation to resolve *Chevron* step one. *See Am. Farm Bureau*, 792 F.3d at 297–302. Here, the Act is ambiguous as to the requirements of the TMDL calculation and whether the TMDL may be phased in.

- (1) *TMDLs may be expressed in an annual calculation because this calculation fits within the Act’s directives and Congress was intentionally vague on how to calculate a TMDL.*

Reading the provisions of the Act as a whole, courts find that the term daily load in the TMDL provision is ambiguous. *Nat. Resources Def. Council, Inc. v. Muszynski*, 268 F.3d 91, 98 (2d Cir. 2001); *see also Anacostia Riverkeeper, Inc. v. Jackson*, 798 F. Supp. 2d 210, 245 (D.D.C. 2011). *Contra. Friends of Earth, Inc. v. Env't Prot. Agency*, 446 F.3d 140, 144 (D.C. Cir. 2006)) (“The law says “daily.” We see nothing ambiguous about this command.”). In *Muszynski*, the court held that, because the Act extends to pollutants that vary widely in their prevalence, toxicity, and total loadings, “effective regulation may best occur by some other periodic measure than a diurnal one.” *Muszynski*, 268 F.3d. at 99. The court also explained that requiring the EPA to establish pollutant

loads according to a daily calculation ignores Congress’s directive that EPA consider “seasonal variations and a margin of safety [including] any lack of knowledge concerning the relationship between effluent limitations and water quality” in every TMDL. *Id.*; 33 U.S.C. § 1313(d)(1)(C). Similarly, in *Anacostia Riverkeeper*, the court pointed out that the Act’s reference to water quality standards only requires TMDLs to be set at a level necessary to attain and maintain water quality standards but does not otherwise refer to any timeframe. *Anacostia Riverkeeper*, 798 F. Supp. 2d at 245. From there, the court reasoned that, because establishing daily pollutant loads and seasonal average loads involves setting a maximum amount of contaminants that may enter the water on any given day and specifying the timeframe over which a particular measurement must be met, respectively, “there is nothing incongruous about” establishing TMDLs framed in a seasonal or annual calculation. *See id.* Further, annual and seasonal loadings necessarily include daily loadings since “the range of daily loads must *generally* meet standards from day to day” in order to meet seasonal and annual loading caps. *Id.* at 247.

Further, Congress intended the term “daily load” to be a term of art that would be fleshed out through EPA’s regulations— not a mere one-size-fits-all approach to be applied without discretion. *See Am. Farm Bureau*, 792 F.3d at 298–99, 307. Regarding the legislative history, the Third Circuit only found one piece of pre-enactment legislative history to illuminate Congress’s definition of a TMDL. *Id.* Namely, the court found one committee report, describing the development of a TMDL as a “time consuming and difficult task.” *Id.* (citing H.R. Rep. No. 92–911, at 106 (1972) (internal quotations omitted)). Thus, the court reasoned, Congress did not intend the term “daily load” to be taken at face value; Congress intended it to be ambiguous so that EPA would have room to provide instructions through its rulemaking process. *Cf. id.*

Additionally, the purpose of the Act is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” through a cooperative federalism model between states and EPA. 33 U.S.C. § 1251; *cf. Am. Farm Bureau*, 792 F.3d at 299. In *American Farm Bureau*, the court reasoned that any reading of the Act which causes consideration of seasonal variations and margins of safety to be excised from the final TMDL does not fit within these broader statutory aims. *See Am. Farm Bureau*, 792 F.3d at 298.

Finally, courts analyze the practical conclusions that would be brought about through a particular reading of the statute. *See Muszynski*, 268 F.3d at 98. In *Muszynski*, the court reasoned that reading the Act in a way that limits TMDLs to only daily allocations of pollutant loads “strikes [the court] as absurd.” *Id.* at 99. This is because such a reading would narrowly confine the broad expertise that EPA has, limiting the options EPA may use to achieve policy goals. *Id.* at 98–99.

Here, this Court should rule that the term “daily load,” as written in the Act, with respect to annual calculations, is ambiguous because the term is never defined within the statute, and any literal reading of the phrase does not fit within the broader statutory structure.

Although the D.C. district and circuit courts have found that a “total maximum daily load” must be expressed in daily terms, such a reading is inconsistent with the broader case law and subsequent congressional actions. *Cf. Friends of Earth, Inc. v. E.P.A.*, 446 F.3d 140, 144 (D.C. Cir. 2006); *Anacostia Riverkeeper*, 798 F. Supp. 2d at 245. While *Friends of the Earth* did rule that the TMDL calculation must be a daily one, a district court in the same jurisdiction, several years later, explicitly recognized that “there is nothing incongruous about establishing daily pollutant load limits to meet water quality criteria expressed as another timeframe. . .” *Anacostia Riverkeeper*, 798 F. Supp. at 245. While the *Anacostia Riverkeeper* court did not recant the holding of *Friends of the Earth*, it weakened that court’s ruling by providing an alternative reading of

TMDL. *Id.* Further, two other courts have separately addressed the issue of whether the Act is ambiguous regarding TMDLs, and both the *American Farm Bureau* court and the *Muszynski* court found that the term was sufficiently ambiguous to require the court to move to *Chevron* step two. It is also worth noting that, had Congress not intended the term TMDL to be a term of art to be defined by EPA, it has had decades to correct that interpretation and has still not done so.

- (2) *TMDLs may be expressed as a pollutant load reduction over a specified time period because Congress only provided general guidance on when the Act's goals should be achieved.*

This Court should rule that TMDLs as written in the Act with, respect to staged loading reductions, is ambiguous because Congress only enumerated a general guideline for when pollution reduction should be achieved. The Act gives an interim goal for establishing water quality by mid-1983, clarifying that this goal should be achieved “wherever attainable.” 33 U.S.C. § 1251; *c.f. Anacostia Riverkeeper*, 798 F. Supp. at 300 (reasoning that the timeline requirements necessitate “meaningful pollution-reduction plan[s]. . . to take into account the dynamic nature of watersheds, particularly the fact that they change over time”). As noted in the district court’s opinion for *American Farm Bureau*, future target dates for implementing pollutant reductions fit within the cooperative federalism model of the Act “because the states retain sufficient flexibility to change the allocations.” *Am. Farm Bureau Fed’n. v. U.S. E.P.A.*, 984 F. Supp. 2d 289, 329 (M.D. Pa. 2013). The district court found that future implementation goals did not impermissibly “lock-in” TMDL allocations, but rather built in flexibility for the states to change allocations to different point sources as needed. *See id.*

The Act is meant to encourage cooperative federalism that allows states to tailor TMDLs, among other Act tools, to the needs of its waterways. This reading is evidenced by the Act’s goal that water quality is achieved “wherever attainable” by mid-1983. 33 U.S.C. § 1251. Had Congress

intended for all water quality goals to be completed by 1983 or 1985, it would not have included the “wherever attainable” language. *See id.*

In the case of New Union’s TMDL, it is not “attainable” for phosphorus loadings to be reduced by 35% in just one year—such a significant reduction would severely harm industrial users in the Chesaplain watershed. In addition, if Congress considered either the 1983 or 1985 goal to be a rigid deadline, then it would not continue to allow any pollutant discharges in 2021. Clearly, Congress intended the 1983 and 1985 goals to be just that—idealized goals that represent a perfect system, not rigid deadlines applicable to complex watersheds.

In sum, the term “daily load” is ambiguous in the context of the Act. Because the term is ambiguous, and Congress has never clarified it either through pre- or post-enactment history, or through subsequent revisions, the court should move on to *Chevron* step two.

B. EPA has interpreted the phrase “daily load” to include any formulation of mass over time and has also released guidance documents suggesting that a phased in reduction of pollutants is permissible, thus, formulating an annual phased reduction TMDL does not violate the CWA.

This Court should reverse the district court’s ruling and instead hold that a TMDL involving a phased annual reduction in pollutant loadings is permissible because it fits within EPA’s interpretation of the Act’s requirements. In cases where Congress has explicitly left a gap for EPA to fill, then there is an express grant of authority to clarify specific provisions of the statute by regulation. *Chevron*, 467 U.S. at 843–44. After deciding that a statute is ambiguous, courts cannot substitute their own interpretations; they must utilize the reasonable interpretation of the statute elucidated by the agency and give substantial weight to such interpretations. *Id*; *see also Anacostia Riverkeeper*, 798 F. Supp. 2d at 234. Further, courts have often adopted EPA’s definition of TMDLs. *See Am. Farm Bureau*, 792 F.3d at 295–96 (citing *Upper Blackstone Water Pollution Abatement Dist. v. Env’t Prot. Agency*, 690 F.3d 9, 14 n. 8 (1st Cir. 2012); *Thomas v. Jackson*, 581

F.3d 658, 662 (8th Cir. 2009); *Friends of the Earth*, 333 F.3d at 186 n. 5; *Meiburg*, 296 F.3d at 1025; *Hayes v. Whitman*, 264 F.3d 1017, 1021 n. 2 (10th Cir. 2001); *Dioxin/Organochlorine Ctr. v. Clarke*, 57 F.3d 1517, 1520 (9th Cir. 1995)).

- (1) *EPA has reasonably interpreted the TMDL calculation to include any allocation of pollutant mass discharged over time into a waterway.*

EPA has promulgated reasonable regulations giving its own definition of TMDLs and how the calculus should be expressed. *See* 40 C.F.R. § 130.2(i). Indeed, EPA has considered the fact that a flexible approach is needed for TMDLs and allows the calculation to be expressed “in terms of either mass per time, toxicity, or other appropriate measure.” *Id.* EPA regularly accepts TMDLs formatted in annual or seasonal calculations, as it has the power to do under its broad administrative authority. *See Muszynski*, 268 F.3d at 99; *Anacostia Riverkeeper*, 798 F. Supp. 2d at 245; *cf. Am. Farm Bureau*, 792 F.3d at 297. *But see Friends of the Earth*, 446 F.3d at 144.

Here, this Court should reverse the district court’s ruling that the New Union TMDL may not be expressed in annual terms because EPA has promulgated rules specifically allowing this formulation. Under 40 C.F.R. § 130.2(i), EPA allows TMDLs to be expressed as any formulation of mass over time. This necessarily includes formulations of phosphorous loadings (mass) into waterways over the course of the year (time). In addition, there is a history of EPA accepting TMDLs formulated in either annual or seasonal terms. While, under *Chevron*, the court may not “rewrite” the statute to align with the agency’s interpretation, no rewriting is necessary here because the court may look to EPA’s promulgated, reasonable interpretation. EPA’s interpretation of TMDLs is reasonable considering the broader context of the Act, and the interpretation is not at odds with Congress’s intent of regulating pollutant loadings in waterways.

- (2) *EPA reasonably interpreted the Act to allow for staged implementation of a TMDL in situations where increased flexibility is needed to achieve the Act's goals.*

EPA reasonably interpreted the Act to allow for staged implementation of TMDLs. Namely, EPA has provided guidance on whether TMDLs may include a staged approach to pollution reduction. U.S. ENV'T'L PROT. AGENCY, MEMORANDUM: CLARIFICATION REGARDING "PHASED" TOTAL MAXIMUM DAILY LOADS (2006), https://www.epa.gov/sites/default/files/2015-10/documents/2006_08_08_tmdl_tmdl_clarification_letter.pdf [Hereinafter *2006 Letter*]. In the 2006 Letter, the Director of the Assessment and Watershed Protection Division differentiated between TMDLs with a "phased" approach, and those with a "staged" approach. *Id.* at 5. The staged approach anticipates implementation of the TMDL in several distinct stages. *Id.* It allows the agency flexibility in the implementation stage to phase in the TMDL over time, complying with an identified need for "adaptive implementation" strategies. *Id.* at 3, 5.

While EPA may allow for a staged pollution reduction program, it cannot, in effect, extend the deadline for compliance with pollution reduction standards. *See Bethlehem Steel Corp. v. Train*, 544 F.2d 657, 663 (3d Cir. 1976). In *Bethlehem Steel Corp.*, the court held that EPA was without authority to grant a deadline extension to companies with NDPEs permits to comply with pollution reduction standards, even though EPA had agreed not to enforce those standards. *Id.* The court reasoned that the deadline given by Congress was a rigid guidepost due to indications in the legislative history that a provision allowing extensions was considered and ultimately rejected. *Id.* at 662. Thus, EPA could not ignore the legislative deadline by granting extensions for compliance to specific industries. *Id.* at 663.

Here, this Court should reverse the district court's ruling that the New Union TMDL may not be expressed as an annual "phased" reduction of phosphorus loadings because EPA reasonably

allows “staged” implementation plans for pollutant reductions. As noted within the 2006 letter, EPA recognizes the importance of flexibility in pollution reduction plans. *2006 Letter* at 4. The themes of cooperative federalism require EPA to allow for states to customize TMDLs to best fit with the state’s needs. For TMDLs requiring flexibility, EPA allows a staged implementation plan, or one that anticipates implementation at several stages, in cases where wasteload allocations will not require any significant adjustments. *Id.* at 5. Although the district court categorized New Union’s TMDL as a “phased” approach, the TMDL better fits within EPA’s definition of a “staged” approach because it requires phosphorus loadings to be reduced by a compounding seven percent per year. *R.* at 9. Thus, EPA’s allowance of New Union’s TMDL with a staged approach was valid according to EPA’s promulgated interpretation.

Further, the staged implementation approach utilized by New Union was valid because it is not an impermissible extension of an implementation deadline. The staged TMDL requires phosphorus reduction every year, unlike the deadline extensions contemplated in *Bethlehem Steel Corp.* Thus, arguments that New Union’s TMDL is invalid because it functions as an extension of the compliance date fails. By utilizing the staged implementation plan, New Union is ensuring that it ramps up its compliance every year, instead of avoiding compliance altogether, as the companies in *Bethlehem Steel Corp.* attempted to do.

In sum, this Court should reverse the New Union District Court’s ruling because phased annual TMDLs are proper under both the Act and EPA’s own regulations.

IV. THE DISTRICT COURT CORRECTLY HELD THAT THE EPA’S DECISION TO RELY ON POLLUTANT REDUCTIONS FROM NONPOINT SOURCES WAS NOT ARBITRARY AND CAPRICIOUS BECAUSE REASONABLE ASSURANCES ARE NOT REQUIRED BY THE ACT OR BY REGULATION.

The EPA’s decision to give pollution reduction credit to point sources in reliance on pollution reduction from BMPs for nonpoint sources was not arbitrary and capricious because EPA

is not required to have reasonable assurances that pollution reduction will actually occur. EPA has the authority to allow trade-offs between point and nonpoint sources to make load allocations and wasteload allocations more efficient. By regulation, if BMPs “make more stringent load allocations practicable, then wasteload allocations can be made less stringent. Thus, the TMDL process provides for nonpoint source control tradeoffs.” 40 C.F.R. § 130.2(i). Additionally, the arbitrary and capricious standard of review is highly deferential to the agency. *See Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 42–43 (1983). And the burden is on the party challenging the agency action to establish that the agency’s decision was “so implausible” that it is arbitrary and capricious. *Ctr. For Biological Diversity v. U.S. Env’t Prot. Agency.*, 90 F. Supp. 3d 1177, 1197 (2015) (citing *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 44).

Here, the EPA’s decision to adopt New Union’s original TMDL was not arbitrary and capricious because the EPA supported its decision in reliance of the record. Also, the district court was correct to reject Lake Watch’s reasonable-assurance argument and find that EPA did not need reasonable assurances to rely on pollution reductions from nonpoint sources because reasonable assurances are not required by the regulation.

A. EPA’s decision to allow credits for anticipated pollution reductions was not arbitrary and capricious because the EPA adopted the original TMDL based on evidence in the record.

The district court was correct in finding that EPA’s decision to allow a credit for anticipated pollution reduction was not arbitrary and capricious because EPA’s decision was rationally and factually connected to the agency’s goals. The decision made by the agency must be affirmed if there is a “rational connection between the facts found and the choice made.” *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 44. A decision is arbitrary and capricious only if the agency: (1) relied on a factor that Congress did not intend it to consider; (2) “entirely failed to consider an important

aspect of the problem”; (3) “offered an explanation for its decision that runs counter to the evidence before the agency”; or (4) “is so implausible that it could not be ascribed to a difference in view.” *Ctr. For Biological Diversity*, 90 F. Supp. 3d at 1197 (citing *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 44).

Here, EPA’s decision was well-reasoned and is supported by the record. EPA rejected New Union’s TMDL proposal and instituted New Union’s original draft TMDL. In adopting the original draft proposal, EPA considered facts from the studies that New Union completed, including the current load allocations, the proposed BMPs, and the pollution reduction plan. R. at 8–9. EPA based its decision on the evidence in the record, and thus the EPA’s decision was not arbitrary and capricious.

(B) EPA’s decision was not arbitrary and capricious because the EPA is not required to have reasonable assurance that the BMPs will actually be put in place because the EPA guidance document does not have the force of law.

The district court correctly held that EPA was not arbitrary and capricious because the guidance document explaining reasonable assurances is not legally binding. Namely, the guidance document explains, “[i]n order to allocate loads among both nonpoint and point sources, there must be reasonable assurances that nonpoint source reduction will in fact be achieved.” ENV’T. PROT. AGENCY, GUIDANCE FOR WATER QUALITY-BASED DECISIONS: THE TMDL PROCESS 15 (1991) <https://www.epa.gov/sites/default/files/2018-10/documents/guidance-water-tmdl-process.pdf>. But by regulation, guidance documents are non-binding and should be used to “clarify existing obligations only; they should not be a vehicle for implementing new, binding requirements.” 40 C.F.R. § 130.2. Further, EPA’s website states that guidance documents “are non-binding and do not have the force of law.” *EPA Guidance; Administrative Procedures for Issuance of Public*

Petitions; Rescission, EPA, <https://www.epa.gov/laws-regulations/epa-guidance-administrative-procedures-issuance-and-public-petitions-rescission> (last visited Nov. 13, 2021).

Only “legislative rules” that have gone through notice and comment are binding and reviewable. *Gen. Elec. Co. v. Env’t Prot. Agency*, 290 F.3d 377, 381 (D.C. Cir. 2002) (citing *Appalachian Power Co. v. Env’t Prot. Agency*, 208 F.3d 1015, 1020 & n. 11 (D.C. Cir. 2000)). The D.C. Circuit establishes three factors for courts to consider in determining whether an agency document constitutes a legislative rule: first, “the Agency’s own characterization;” second, whether it was published in either the Code of Federal Regulations or in the Federal Register; and third, whether the document has “binding effects on private parties or on the agency.” *Molycorp, Inc. v. U.S. Env’t Prot. Agency*, 197 F.3d 543, 545 (D.C. Cir. 1999) (citing *Fla. Power & Light Co. v. Env’t Prot. Agency*, 145 F.3d 1414, 1418 (D.C. Cir. 1998)). An agency document is considered to be binding when “it either appears on its face to be binding . . . or is applied by the agency in a way that indicates it is binding.” *Gen. Elec. Co.*, 290 F.3d at 382–83 (first citing *Appalachian Power Co.*, 208 F.3d at 1023; and then citing *McLouth Steel Prods. Corp. v. Thomas*, 838 F.2d 1317, 1321 (D.C. Cir. 1988)).

Here, this guidance document is not a binding legislative rule subject to appellate review because EPA does not interpret the guidance document to be a legislative rule. Further, EPA did not put this document in notice and comment proceedings, which is the standard for binding documents published by EPA. EPA also did not publish this document anywhere except on their website. It is not published in either the Code of Federal Regulations or the Federal Register. Additionally, the notable section of the guidance document would impose a requirement on EPA itself; if EPA intended this document to be binding, it would follow the reasonable assurance requirement more strictly. It is clear in its drafting of the New Union TMDL that it did not intend

the guidance document to be binding. Finally, as discussed previously, TMDLs are not intended to be implementation plans and any guidance by EPA requiring “reasonable assurance” runs counter to the goal of TMDLs operating as a planning program and interferes with the cooperative federalism goals of the Act.

To the extent that Chesaplain Lake Watch argues that EPA’s decision was arbitrary and capricious because it did not have reasonable assurance that New Union would implement the BMPs and actually realize the anticipated pollution reductions, this argument fails because EPA is not required to have reasonable assurance as the guidance document is not binding and the TMDL is a planning program, not an implementation program.

Even if the Court finds that reasonable assurance is required, it is satisfied. The Chesaplain Watershed Implementation Plan was originally written by New Union and, therefore, had information specific to Lake Chesaplain, the surrounding industries, and other sources of pollution. As discussed above, it had explicit information about the BMPs and how they would impact pollution. Without altering the meaning and goal of TMDLs, this is the most assurance EPA could ask of New Union.

In conclusion, EPA’s decision to allow a credit for anticipated pollution reductions was not arbitrary and capricious. Chesaplain Lake Watch is unable to establish its burden that the decision was arbitrary and capricious because EPA is not held to an additional requirement of reasonable assurance. We ask that this Court affirm the ruling of the district court.

CONCLUSION

For these reasons, we ask this Court to affirm the district court on issues one, two, and four. We ask this Court to reverse and remand to the agency on issue three.

Appendix A



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

AUG 2 2006

OFFICE OF
WATER

MEMORANDUM

SUBJECT: Clarification Regarding "Phased" Total Maximum Daily Loads

FROM: Benita Best-Wong, Director *Benita Best Wong*
Assessment and Watershed Protection Division

TO: Water Division Directors
Regions I - X

This memorandum clarifies the *Guidance for Water Quality-Based Decisions: The TMDL Process*, issued in 1991, by explaining EPA's interpretation of the term "phased TMDL" as used in EPA guidance, and explaining the distinction between "phased TMDLs," "staged implementation," and "adaptive implementation." Phased TMDLs are a matter of TMDL development while staged implementation and adaptive implementation are post-development implementation concepts. Greater attention to these distinctions has emerged since EPA issued the 1991 Guidance and promulgated the Water Quality Guidance for the Great Lakes system in 1995, thus warranting today's additional clarification.

Current EPA guidance for developing TMDLs speaks of a "phased approach to developing TMDLs," frequently referred to as "phased TMDLs."ⁱ This concept has sometimes been misinterpreted and resulted in TMDLs that are not calculated to meet applicable water quality standards. This misinterpretation is not consistent with EPA's interpretation of 40 CFR Part 130.7. The regulations require all TMDLs to be calculated to achieve applicable water quality standards.ⁱⁱ EPA's interpretation was affirmed by a recent court decision.ⁱⁱⁱ

BACKGROUND

The 1991 Guidance

The 1991 Guidance discusses the use of "phased TMDLs" in two situations.

In the first situation, the Guidance addresses waters impaired by both point and nonpoint sources where the wasteload allocation to point sources is predicated on nonpoint source loading reductions, i.e., where point sources receive a higher wasteload allocation because the TMDL assumes that reduced loads will come from nonpoint

sources. In such cases, the Guidance recommends that some additional provision in the TMDL, such as a schedule and description of the implementation mechanisms for nonpoint source control measures, be included to provide reasonable assurance that the nonpoint source measures will achieve the expected load reductions. Such additional provisions also assure compliance with the federal regulations at 40 CFR 130.2(i), which provide that in order for wasteload allocations to be made less stringent, more stringent load allocations must be "practicable."

In the second situation, the Guidance recommends the phased approach for situations where available data only allow for "estimates" of necessary load reductions or for "non-traditional problems" where predictive tools may not be adequate to characterize the problem with a sufficient level of certainty.^{iv}

In both of these situations, the phased approach has sometimes been misinterpreted to mean that a phased TMDL may be calculated to improve water quality, but not to meet water quality standards. However, the Guidance clearly indicates that all TMDLs must be set at levels that meet water quality standards:

"Under the phased approach the TMDL has LAs (load allocations) and WLAs (wasteload allocations) calculated with margins of safety **to meet water quality standards** (emphasis added)."^v

Additional text in the 1991 Guidance recommends that TMDLs established under the phased approach include a schedule for installation and evaluation of nonpoint source control measures, data collection, and assessment of water quality standards attainment. The Guidance also recommends that the schedule include a time frame within which water quality standards are expected to be met and within which controls will be re-evaluated if water quality standards have not been attained. The information would be used to determine whether the TMDL needs to be revised.

The Water Quality Guidance for the Great Lakes

In addition to the two scenarios described in the 1991 Guidance, there is a third scenario described in the Great Lakes Water Quality Guidance which has also sometimes been referred to as a phased TMDL:

"Some TMDLs may be based on attaining water quality standards over a period of time, with specific controls on individual sources being implemented **in stages** (emphasis added). Determining this reasonable period of time in which water quality standards will be met is a case-specific determination..."^{vi}

As with all TMDLs, these TMDLs must be established at a level necessary to meet water quality standards. However, in this situation, the time frame in which water quality standards will be achieved is based on a planned staged implementation of controls and a determination of the appropriateness of this timeframe is made on a case specific basis. Additionally, the types of additional measures that are recommended for inclusion in phased TMDLs as envisioned in the 1991 Guidance, such as monitoring to verify load reductions, evaluation of effectiveness of controls, and revision of load and wasteload allocations as necessary, are required by the Great Lakes regulations.

CLARIFICATION

Based on program experience since 1991, it is apparent that many TMDLs may be established based on data that could subsequently be improved and that may involve a certain degree of uncertainty. Additionally, most TMDLs include both point and nonpoint sources. Therefore, most TMDLs could fit the conditions of the first scenario described in the 1991 Guidance and a meaningful distinction between a phased TMDL, as described in that scenario, and a regular TMDL does not exist. Moreover, the concept of adaptive implementation has come to the fore since the 1991 Guidance was issued. In its 2001 report, *Assessing the TMDL Approach to Water Quality Management*^{vii} the National Research Council highlighted the need for EPA to encourage adaptive implementation of TMDLs. Therefore we are proposing the following clarification of the terms "phased TMDLs," "adaptive implementation," and "staged implementation."

Phased TMDLs

We recommend the use of the term "phased TMDLs" be limited to TMDLs that for scheduling reasons need to be established despite significant data uncertainty and where the State expects that the loading capacity and allocation scheme will be revised in the near future as additional information is collected. In other words, phased TMDLs would be reserved for the second scenario described in the 1991 Guidance.

The phased TMDL approach would be used in situations where limited existing data are used to develop a TMDL and the State believes that the use of additional data or data based on better analytical techniques would likely increase the accuracy of the TMDL load calculation and merit development of a second phase TMDL. Such significant uncertainty may arise, for example, because the State is using a surrogate to interpret a narrative standard, or because there is little information regarding the loading capacity of a complex system such as an estuary and it is difficult to predict how the a water body will react to the planned load reductions. An example of a phased TMDL could be a TMDL for phosphorus in a lake watershed where there are uncertain loadings from the major land uses and/or limited knowledge of in-lake processes. In such a case, the loading capacity of the water body may be difficult to establish and the State may decide to include a schedule for establishing a revised TMDL based on follow-up monitoring. Phased TMDLs may also occur when a revision of the applicable standard is underway and will necessitate development of a second phase, revised TMDL to comply with the new standard.

All phased TMDLs must include all elements of a regular TMDL, including load allocations, wasteload allocations and a margin of safety. As with any TMDL, each phase must be established to attain and maintain the applicable water quality standard.^{viii} In addition, EPA recommends that a phased TMDL document or its implementation plan include a monitoring plan and a scheduled timeframe for revision of the TMDL. (These elements would not be an intrinsic part of the TMDL and would not be approved by EPA, but may support a rationale for approving the TMDL. See also "Nonpoint Source Program and Grants Guidelines for states and Territories, Federal Register Vol. 68, pp 60653-74.)

Since phased TMDLs will in all likelihood need to be revised and therefore require more overall effort, States should carefully consider the necessity of such TMDLs, for example to meet consent decree deadlines or other mandatory schedules. Upon revision of the

loading capacity, wasteload, or load allocations, the TMDL would require re-approval by EPA.

TMDLs with Adaptive Implementation and Trading Provisions

Adaptive implementation is an iterative implementation process that makes progress toward achieving water quality goals while using any new data and information to reduce uncertainty and adjust implementation activities. The National Research Council report suggests that adaptive implementation include "immediate actions, an array of possible long-term actions, success monitoring, and experimentation for model refinement."^{ix} By using the adaptive implementation approach, one can utilize the new information available from monitoring following initial TMDL implementation efforts to appropriately target the next suite of implementation activities.

Phased TMDLs are an example of the adaptive implementation approach because each new phase utilizes new information to reevaluate the original TMDL. However, even for TMDLs where there is little uncertainty regarding the loading capacity of the water body and the necessary load reductions, an adaptive implementation approach can be a useful tool. Implementation of TMDLs can take many years and when uncertainty about the effectiveness of implementation activities exists, TMDLs would benefit from containing elements that would facilitate adaptive implementation such as, for example, provisions for a flexible load allocation/waste load allocation scheme. EPA is currently working to clarify how TMDLs can be written to provide for adjustments in the load and wasteload allocations in approved TMDLs.

EPA understands that not all TMDLs can be implemented using adaptive implementation methods due to the more intensive monitoring and added administrative steps associated with this iterative approach. Nonetheless, EPA believes that in appropriate cases it should be feasible for States to develop TMDLs that facilitate implementation of practicable controls while additional data collection and analysis are conducted to guide implementation actions. Follow-up monitoring is integral to the adaptive implementation approach. Monitoring addresses uncertainty in the efficacy of implementation actions and can provide assurance that implementation measures are succeeding in attaining water quality standards, as well as inform the ongoing TMDL implementation strategy. If adaptive implementation activities reveal that a TMDL loading capacity needs to be changed, the revision would require EPA approval. In most cases adaptive implementation is not anticipated to lead to the re-opening of a TMDL. Instead, it is a tool used to improve implementation strategies.

Another adaptive implementation tool to consider is water quality trading. Water quality trading can involve one or more TMDLs in a watershed context and include both point and nonpoint sources. Water quality trading is an effective TMDL implementation tool. More information about the feasibility of trading can be found in the Water Quality Trading Assessment Handbook.^x One successful trading example is the Long Island Sound TMDL for nitrogen where municipal dischargers participate in a nitrogen reduction credit exchange program.

TMDLs with Staged Implementation

The third type of TMDL, described in the Great Lakes Initiative, is different from the two preceding types. While not a "phased TMDL," it is a TMDL that anticipates implementation in several distinct stages. It is also different from the adaptive implementation scenario because it is anticipated that the load and wasteload allocations will not require any significant adjustments. Instead, implementation actions will be staged over a period of time. For example, EPA has approved mercury TMDLs where the wasteload allocation to point sources (which would be implemented within five years through the NPDES process) was predicated on long-term reductions in atmospheric mercury deposition. We believe that the appropriate terminology for such a TMDL, if a label needs to be applied, would be "staged implementation."

SUMMARY

EPA is providing this clarification to ensure that there is a common understanding of the concepts discussed above and that the term "phased TMDL" is not used interchangeably to describe all three scenarios. This clarification does not imply that all TMDLs must fit neatly within one of these models. We recognize that some TMDLs will require "staged implementation" to a degree, particularly if they include nonpoint sources, and that in many of these cases the staging will be significant. This staging could also go hand-in-hand with adaptive management, such that some clearly needed control measures are implemented, while others are staged until additional information is collected.

If you have any questions please contact me or have your staff contact Valentina Cabrera-Stagno in the Watershed Branch at (202) 566-2022.

cc:

Water Quality Branch Chiefs, Regions I-X
Permit Branch Chiefs, Regions I-X
Regional TMDL Coordinators, Regions I-X

ⁱ US EPA 1991. Guidance for Water-Quality-based Decisions: The TMDL Process, EPA440-4-91-001

<http://www.epa.gov/OWOW/tmdl/decisions/>

ⁱⁱ Part 130 of Title 40 of the Code of Federal Regulations, section 130.7, contains the regulations currently governing the Total Maximum Daily Load program, which were issued in 1985 and 1992

ⁱⁱⁱ Minnesota Center for Environmental Advocacy v. EPA, No. 03-5450 (D. Minn. June 23, 2005)

^{iv} US EPA, 1991 (page 22).

^v US EPA, 1991 (page 22).

^{vi} Part 132, Appendix F of Title 40 of the Code for Federal Regulations, Chapter I, contains the regulations governing the Total Maximum Daily Load program in the Great Lakes, which were issued in 1995.

^{vii} National Research Council, 2001. Assessing the TMDL Approach to Water Quality Management. National Academy Press. Washington, DC.

^{viii} Part 130 of Title 40 of the Code of Federal Regulations, section 130.7

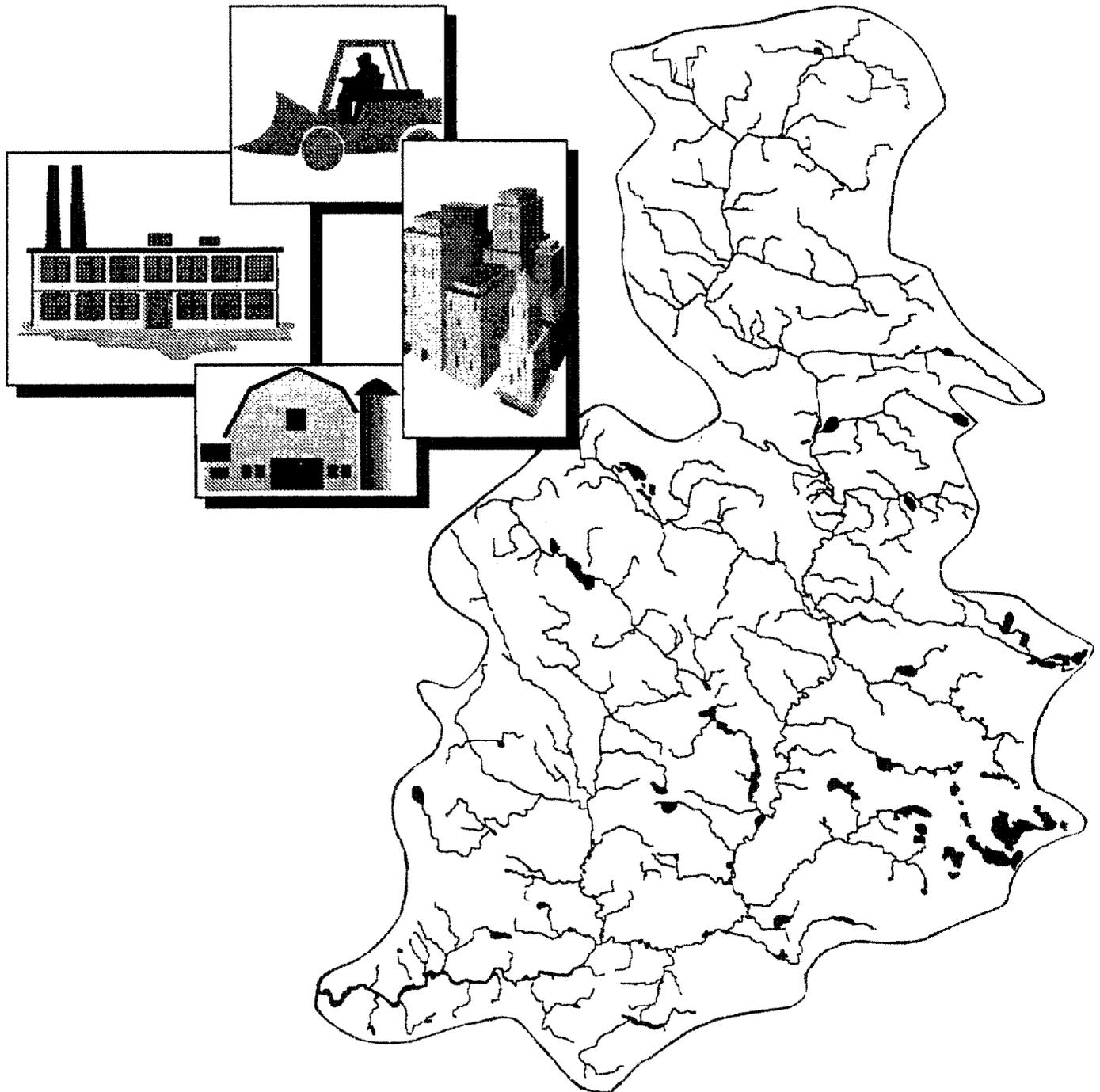
^{ix} National Research Council, 2001 (page 94).

^x US EPA 2004. Water Quality Trading Assessment Handbook, EPA841-B-04-001

Appendix B



Guidance for Water Quality-based Decisions: The TMDL Process



Guidance for Water Quality-based Decisions: The TMDL Process

**Assessment and Watershed Protection Division
U.S. Environmental Protection Agency
Washington, D.C. 20460**

This document provides guidance only. It does not establish or affect legal rights or obligations. This guidance may be reviewed and revised periodically to reflect changes in EPA's strategy for the implementation of water quality-based controls, to include new information, or to clarify and update the text. Decisions in any particular case will be made by applying the Clean Water Act and implementing regulations.

Comments are invited and will be considered in future revisions. Comments or inquiries should be directed to :

**Watershed Branch
Assessment and Watershed Protection Division (WH-553)
U.S. Environmental Protection Agency
401 M St. SW
Washington, D.C. 20460**

- Immediate programmatic needs such as wasteload allocations needed for permits that are coming up for revisions or for new or expanding discharges, or load allocations for needed BMPs.
- Waters and pollution problems identified during the development of the section 304(l) "long list."
- Court orders and decisions relating to water quality.
- National policies and priorities such as those identified in EPA's Annual Operating Guidance.

States are required to submit their priority rankings to EPA for review. EPA expects all waters needing TMDLs to be ranked, with "high" priority waters -- targeted for TMDL development within two years following the listing process -- identified. (See page 29 for further details on submission of priorities to EPA.)

In order to effectively develop and implement TMDLs for all waters identified, States should establish multi-year schedules that take into consideration the immediate TMDL development for targeted waterbodies and the long-range planning for addressing all water quality-limited waters still requiring TMDLs. While it would be expected that these schedules would change when a State's priorities change in response to "hot spots" or critical situations at any given time, a long-range schedule provides several advantages to a State (see box).

Step Three: TMDL Development

For a water quality-limited water that still requires a TMDL, a State must establish a TMDL that quantifies pollutant sources and allocates allowable loads to the contrib-

Advantages to Long-range Schedules

- Encourages integration with the permitting cycle, the water quality standards revisions, and other required water quality management activities.
- Allows for long-term monitoring which may be needed to assess control action.
- Sets consistency in developing TMDLs.
- Establishes a basis for setting overall water quality management priorities.
- Supports a geographic approach for TMDL development for targeted waterbodies.

uting point and nonpoint sources so that the water quality standards are attained for that waterbody. The development of TMDLs should be accomplished by setting priorities, considering the geographic area impacted by the pollution problem, and, in some cases, using a phased approach to establishing control measures based on the TMDL.

The TMDL is developed using one or a combination of three technical approaches to protect receiving water quality: the chemical specific approach, the whole effluent toxicity approach, and the biocriteria/bioassessment approach. The chemical specific approach is one where loadings are evaluated in terms of the impact on physical-chemical water quality conditions (e.g., dissolved oxygen or toxicant concentrations). While an integrated approach that considers all three techniques is preferred for the protection of aquatic life, the chemical specific approach is usually the one used to address loads that affect those water quality standards which protect human health.

Many water pollution concerns are area-wide phenomena that are caused by multiple dischargers, multiple pollutants (with poten-

tial synergistic and additive effects), or non-point sources. Atmospheric deposition and ground water discharge may also result in significant pollutant loadings to surface waters. As a result, EPA recommends that States develop TMDLs on a geographical basis (e.g., by watershed) in order to efficiently and effectively manage the quality of surface waters.

The TMDL process is a rational method for weighing the competing pollution concerns and developing an integrated pollution reduction strategy for point and nonpoint sources. The TMDL process allows States to take a holistic view of their water quality problems from the perspective of instream conditions. Although States may define a waterbody to correspond with their current programs, it is expected that States will consider the extent of pollution problems and sources when defining the geographic area for developing TMDLs. In general, the geographical approach for TMDL development supports sound environmental management and efficient use of limited water quality program resources. In cases where TMDLs are developed on watershed levels, States should consider modifying permitting cycles so that all permits in a given watershed expire at the same time.

For traditional water pollution problems, such as dissolved oxygen depletion and nutrient enrichment, there are well validated models that can predict effects with known levels of uncertainty. This is not true for such non-traditional pollution problems as urban stormwater runoff and pollutants that involve sediment and bioaccumulative pathways. Predictive modeling for these problems therefore uses conservative assumptions, but in many cases the degree of certainty cannot be well quantified until

more data becomes available to develop sensitivity analyses and model comparisons. For TMDLs involving these non-traditional problems, the margins of safety should be increased and additional monitoring required to verify attainment of water quality standards and provide data needed to recalculate the TMDL, if necessary.

EPA regulations provide that load allocations for nonpoint sources and/or natural background "are best estimates of the loading which may range from reasonably accurate estimates to gross allotments..."³ A phased approach to developing TMDLs may be appropriate where estimates are based on limited information. The phased approach is a TMDL that includes monitoring requirements and a schedule for re-assessing TMDL allocations to ensure attainment of water quality standards. Uncertainties that cannot be quantified may also exist for certain pollutants discharged primarily by point sources. In such situations a large margin of safety and follow-up monitoring is appropriate.

Where nonpoint source controls are involved, the phased approach is also necessary. Under the CWA, the only federally enforceable controls are those for point sources through the NPDES permitting process. In order to allocate loads among both nonpoint and point sources, there must be reasonable assurances that nonpoint source reduction will in fact be achieved. Where there are not reasonable assurances, under the CWA, the entire load reduction must be assigned to point sources. With the phased approach, the TMDL includes a description of the implementation mechanisms and the schedule for the implementation of nonpoint source control measures.

3 40 CFR 130.2(g).

By pursuing the phased approach where applicable, a State can move forward to implement water quality-based control measures and adopt an explicit schedule for implementation and assessment. States can also use the phased approach to address a greater number of waterbodies including threatened waters or watersheds which would otherwise not be managed. Specific requirements relating to the phased approach are discussed in Chapter 3.

Step Four: Implementation of Control Actions

Once a TMDL or a phased TMDL has been established for a waterbody (or watershed) and the appropriate source loads developed, implementation of control actions should proceed. The State or EPA is responsible for implementation, the first step being to update the water quality management plan. Next, point and nonpoint source controls should be implemented to meet wasteload allocations and load allocations, respectively. Various pollution allocation schemes (i.e., determination of allowable pollution among different pollution sources in the same waterbody) can be employed by States to optimize alternative point and nonpoint source management strategies.

The NPDES permitting process is used to limit effluent from point sources. Chapter 3 provides a more complete description of the NPDES process and how it fits into the water quality-based approach to permitting. Construction decisions regarding publicly owned treatment works (POTWs) and advanced treatment facilities must also be based on the most stringent of technology-based or water quality-based limitations. These decisions should be coordinated so that the facility plan for the discharge is consistent with the limitations in the permit.

In the case of nonpoint sources, both State and local laws may authorize the im-

plementation of nonpoint source controls such as the installation of Best Management Practices (BMPs). Section 319 State management programs can be a useful tool to implement nonpoint source control measures and ensure improved water quality. Many BMPs, however, may be implemented even where regulatory programs do not exist. In such cases, a State needs to document the coordination which may be necessary among State and local agencies, landowners, operators, and managers and then evaluate BMP implementation, maintenance, and overall effectiveness to ensure that load allocations are achieved. Chapter 3 discusses some of the technical issues associated with implementation of nonpoint source control measures.

Step Five: Assessment of Water Quality-Based Control Actions

Throughout the previous four steps, monitoring is a crucial element of water quality-based decision making. In this step, monitoring provides data for an independent evaluation of whether the TMDL and control actions that are based on the TMDL protect or improve the environment and are sufficient to meet changing waterbody protection requirements such as revised water quality standards or changing pollution sources (e.g., urbanization).

Monitoring programs often begin with baseline monitoring. Such monitoring should not be regarded as a prerequisite to implementing control measures for a waterbody. If monitoring has not yet begun, control measures and monitoring should be implemented simultaneously to assure that pollution abatement activities are not delayed.

In the case of point sources, assessments are facilitated in that dischargers are required to provide reports on compliance

with NPDES permit limits. In some instances, dischargers may also be required in the permit to assess impact of their discharge on the receiving water. A monitoring requirement can be put into the permit as a special condition as long as the information is collected for purposes of writing a permit limit. States are also encouraged to use innovative monitoring programs (e.g., cooperative monitoring⁴ and volunteer monitoring⁵) to provide for adequate point and nonpoint source monitoring coverage.

States should also ensure that effective monitoring programs are in place for evaluating nonpoint source control measures. EPA recognizes monitoring as a high priority activity in a State's nonpoint source management program.⁶ To facilitate the implementation and evaluation of NPS controls States should consult current guidance.^{7,8}

4 USEPA. 1984. *Planning and Managing Cooperative Monitoring Projects*. OW/OWRS. EPA 440/4-84-018. Washington, D.C.

5 USEPA. 1990. *Volunteer Water Monitoring: A Guide for State Managers*. OW, EPA 440/4-90-010. Washington, D.C.

6 55 FR 35262, August 28, 1990.

7 USEPA. February, 1988. *Draft Nonpoint Source Monitoring and Evaluation Guide*. OW/NPS Branch. Washington, D.C.

8 USEPA. September 19, 1989. *Nonpoint Source Monitoring and Reporting Requirements for Watershed Implementation Grants*. OW/NPS Branch. Washington, D.C.