UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MISSOURI
SOUTHEASTERN DIVISION

CITY OF KENNETT, MISSOURI,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	**Case No. 1:14-CV-33-SNLJ**
	)	
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.	)	
	)	
Defendants.	)	

MEMORANDUM and ORDER

This matter is before the Court on the parties' cross motions for summary judgment (#50, #63) and plaintiff's motion to exclude exhibits (#67). After an extended briefing schedule, this matter is ripe for disposition.

I. Factual Background

The following facts are undisputed except where indicated.

Congress enacted the Clean Water Act ("CWA") in 1972 to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" and attain "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water." 33 U.S.C. § 1251(a), (a)(2). Section 303 of the CWA requires each state to establish and implement water quality standards subject to review and approval by the Environmental Protection Agency ("EPA"). 33 U.S.C. §§ 1313(a)-(c), 1362(3).

For the waters designated on a state's "impaired waters" list under Section 303(d), the state must establish a total maximum daily load ("TMDL") for any pollutants the EPA identifies as being suitable for such calculation. The TMDL sets the maximum allowable "load allocation" of a pollutant to a waterbody --- a sort of "pollution diet" --- with the goal of meeting water quality standards.

The States have primary responsibility for developing, reviewing, revising, and adopting water quality standards. The EPA has authority to review and approve or disapprove a state's standards. 33 U.S.C. § 1311(c); 40 C.R.F. § 131. States adopt water quality standards to meet the objectives of the Clean Water Act, which includes restoration and maintenance of the chemical, physical, and biological integrity of the waters and protection and propagation of aquatic life, wildlife, and recreation in and on the water when attainable. 33 U.S.C. § 1251. Water quality standards consist of three components: the designated beneficial uses, water quality criteria to protect those designated beneficial uses, and a policy to prevent degradation of those designated beneficial uses. 33 U.S.C. § 1311(c); 40 C.F.R. § 131.

This litigation pertains to "Buffalo Ditch," a man-made stream that originates on the northeast side of Kennett, Missouri and flows south-southwest into the State of Arkansas. It is part of the "Little River Drainage District," which was formed in 1907 with the goal of opening the region for settlement and agricultural production. Historically, the area comprising the Buffalo Ditch watershed was a swampland, but the

area was transformed between 1893 and 1989 through construction of a system of ditches, levees, and canals throughout the Bootheel Region of Missouri.

Missouri adopted water quality standards for Buffalo Ditch and, in doing so, designated its beneficial uses to include protection of warm water aquatic life. The "pollutant" identified by Missouri causing the impairment of the designated beneficial use is "dissolved oxygen," which is one of the most critical components of waterbodies because aquatic life uses dissolved oxygen to survive. The Missouri Department of Natural Resources ("MDNR") assesses and ensures attainment of the designated beneficial use through the maintenance of adequate levels of dissolved oxygen. The water quality criterion adopted by Missouri for the amount of dissolved oxygen in Buffalo Ditch is a daily minimum of 5 mg/L.

In 1994, Missouri placed Buffalo Ditch on its list of "impaired waters" pursuant to Section 303(d) of the Clean Water Act, with the Kennett, Missouri Wastewater Treatment Plant ("KWTP") listed as a source of pollutants. The EPA approved MDNR's list of "impaired waters" on February 13, 1995.

The MDNR sampled and analyzed Buffalo Ditch in July 2003, August 2003, and January 2004. The sampling data revealed that Buffalo Ditch was not meeting the water quality standard for dissolved oxygen. In accordance with the CWA, 33 U.S.C. § 1313(d), the MDNR developed the "Buffalo Ditch TMDL" to address the low dissolved oxygen impairment of Buffalo Ditch identified on the Missouri 2004/2006 and 2008 "303(d) Lists" of impairments.

The addition of nutrients and other organic material to waterbodies, including nitrogen, phosphorous, and suspended solids, causes the promotion of algae and aquatic plants which results in depletion of dissolved oxygen during the plants' nighttime respiration processes. Nitrogen, phosphorous, and suspended solids are found in wastewater effluent. In addition, organic matter can come from both wastewater effluent and "nonpoint" sources. The rate at which organic matter decays and consumes oxygen can be measured instream as biochemical oxygen demand. The MDNR found that high nutrient loads (total nitrogen and total phosphorous) and total suspended solids ("TSS") are "contributing to excessive algal growths in Buffalo Ditch . . . [which] in turn are causing low dissolved oxygen to occur late at night, when the algae are consuming but not producing oxygen . . . . Large amounts of algae may also be contributing to low dissolved oxygen when the plants die and decay." (#64-3 at 14; AR 4014[1].)

The parties dispute the characterization of Buffalo Ditch's dissolved oxygen problems. The EPA states that "the area where the dissolved oxygen water quality standard is not attained is within the three-mile section immediately downstream of the KWTP." (#65 at ¶ 20.) In response to that statement, the City states that "the TMDL itself recognizes that Buffalo Ditch is impaired across its entire length, including upstream of the KWTP, and acknowledges the role natural background conditions play in preventing the dissolved-oxygen standard from being met." (#70 at ¶ 20, citing AR 38.) The City did not dispute, however, that the MDNR reported that water quality studies

[1] "AR ____" refers to the Bates-stamped page number of the Administrative Record in this case.

revealed "that there are no aquatic macroinvertebrates downstream of the [KWTP] for many miles" (#65 at ¶ 21) or that "MDNR found that the [KWTP] 'is contributing to the high nutrient loads that are causing levels of dissolved oxygen to be below the criterion required by State water quality standards'" (id. at ¶ 22). In addition, the EPA explains that although diurnal fluctuations of dissolved oxygen occur both upstream and downstream, the amplitude of these fluctuations is higher downstream of the KWTP.

The MDNR targeted pollutants that result in depletion of dissolved oxygen, including fine particle size sediment, high nutrient levels, and suspended particles of organic matter. As part of the TMDL for Buffalo Ditch, MDNR calculated a "loading capacity," which is the greatest amount of a pollutant that a waterbody can receive without exceeding water quality standards. A "loading capacity" is expressed as wasteload allocations, plus load allocations, plus a margin of safety. Hazardous dissolved oxygen levels generally occur during periods of low flow, so "critical low flow condition" was considered when the load capacity was calculated. MDNR calculated wasteload allocations and load allocation using a Load Duration Curve ("LDC"). MDNR then assigned a wasteload allocation for total nitrogen, total phosphorus, and TSS, for each of the seven point sources covered by the TMDL, including the KWTP, the Kennett Municipal Separate Store Sewer System, and other permits not associated with the City of Kennett. The wasteload allocations reflect that the KWTP is allocated 85% of the TMDL load capacity during the critical low flow. The load allocation assigned to nonpoint sources in low flow conditions was zero pounds per day, based on MDNR's

best estimate that during critical low flow conditions there is effectively no flow from nonpoint sources.

The Buffalo Ditch TMDL is intended to be implemented in phases, with the first phase implemented through the state's permitting process --- that is, Missouri will issue a permit to KWTP incorporating the TMDL that states how much of particular pollutants it may discharge. The TMDL also states that

> Waste load allocations developed for this TMDL will be used to derive new effluent limits for biochemical oxygen demand and total suspended solids that are protective of the dissolved oxygen criterion and aquatic life use in Buffalo Ditch. However, it is the intention of the department that prior to implementation of these waste load allocations, either the department or the city will determine whether the dissolved oxygen criterion of 5 mg/L found in 10 CSR 20-7.031, Table A is appropriate or if a site-specific dissolved oxygen criterion may be promulgated. Further, it is recommended that additional sampling, including biological sampling, be conducted in the affected segment of Buffalo Ditch prior to implementation of the uses. These sampling events should begin prior to the end of the calendar year 2012 and continue as necessary.
>
> If it is determined that the current water quality criterion for dissolved oxygen is appropriate, the waste load allocations from the TMDL will be implemented. If it is determined not to be appropriate, and a new dissolved oxygen criterion is promulgated, the new waste load allocations will be calculated and implemented.

(#64-3 at 29.)

MDNR provided an opportunity for public comment on the TMDL from October 2 to November 1, 2009, and extended the comment period through December 28, 2009 at the request of the City of Kennett. The TMDL included modeling input and output data, explanations of how the load calculations for nutrients and suspended solids were derived, and information regarding the use of the Load Duration Curve. The City

submitted a single set of comments to MDRN on the draft TMDL on December 11, 2009. No other person or entity submitted comments. The City did not comment on the modeling used in the TMDL, the applicable standard for dissolved oxygen for Buffalo Ditch and/or whether the 5 mg/L standard used for streams and ditches throughout most of the State should be deemed inapplicable to Buffalo Ditch, nor whether the TMDL included appropriate reasonable assurance analyses, nor whether the TMDL was appropriately established under critical conditions and the TMDL's use of an implicit margin of safety, nor whether the TMDL is designed to meet the water quality criterion of 5 mg/L of dissolved oxygen or otherwise achieve the water quality standards established for Buffalo Ditch. Furthermore, the City did not present any data for scientific or technical evidence for consideration by the MDNR. Finally, the City did not challenge either MDNR's decision to use the 5 mg/L standard for dissolved oxygen in Buffalo Ditch or the EPA's approval of that standard for Buffalo Ditch, which was a separate process from the TMDL.

The MDNR formally submitted the Buffalo Ditch TMDL to the EPA on January 12, 2010. Revisions were received by the EPA on February 23, 2010. The EPA approved the Buffalo Ditch TMDL on March 3, 2010, within the statutorily-required 30-day time period.

The City filed this lawsuit seeking review of the EPA's approval of the TMDL on March 24, 2014. As of January 2016, the City's application for a new permit to discharge wastewater into Buffalo Ditch was still under review by the MDNR, and the

MDNR is required to issue a permit that implements the Buffalo Ditch TMDL. But plaintiff asserts that the TMDL will not address the impairment to dissolved oxygen levels and that, instead, the City's taxpayers will be forced to fund construction of ineffective remedial structures and programs at the KWTP rather than funding other social needs. Plaintiff therefore filed this lawsuit against the EPA seeking, among other things, an order vacating the Buffalo Ditch TMDL and enjoining the EPA or MDNR from enforcing it. The City and the EPA have filed cross-motions for summary judgment.

II. Motions for Summary Judgment

Summary judgment is proper if there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c). This Court's review of the EPA's approval of the Buffalo Ditch TMDL is governed by the Administrative Procedure Act, 5 U.S.C. § 706 ("APA"). Under the APA, this Court must review the validity of the agency's action to determine whether the actions were "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; … in excess of statutory jurisdiction, authority, or limitations, or short of statutory right; [or] without observance of procedure required by law," among other considerations. 5 U.S.C. § 706(2)(A).

The City's complaint includes three counts: that the EPA exceeded its statutory authority "in establishing the Buffalo Ditch TMDL" (Count I), that the EPA's approval of

the TMDL was arbitrary and capricious (Count II), and the EPA failed to provide adequate notice and comment for its approval of the TMDL (Count III).

A TMDL must be developed to implement and attain applicable water-quality standards. 33 U.S.C. § 1313(d)(1)(C). Here, the City argues that the EPA has approved a TMDL that, when followed, would still fail to implement applicable water quality standards, so the City claims the EPA exceeded its authority and the TMDL is necessarily null and void. Specifically, the City suggests that the desired dissolved oxygen levels are unattainable due to background conditions endemic to the Buffalo Ditch watershed. The City faults the TMDL for presuming zero non-point source contributions to the Buffalo Ditch's low dissolved oxygen levels during periods of critically low-flow conditions.

The EPA responds that the City's Count I fails because the City has no standing. Because this Court agrees, the Court lacks jurisdiction to address the City's substantive arguments.

Article III of the United States Constitution limits federal courts' jurisdiction to certain "Cases" and "Controversies." One element of the case-or-controversy requirement is that plaintiffs must establish they have standing to sue. Clapper v. Amnesty Intern. USA, 133 S.Ct. 1138, 1146 (2013) (quoting Raines v. Byrd, 521 U.S. 811, 818 (1997)). "To show standing under Article III of the U.S. Constitution, a plaintiff must demonstrate (1) injury in fact, (2) a causal connection between that injury and the challenged conduct, and (3) the likelihood that a favorable decision by the court will redress the alleged injury." Young Am. Corp. v. Affiliated Computer Servs. (ACS), Inc., 424 F.3d 840, 843 (8th Cir. 2005) (citing Lujan v. Defenders of Wildlife, 504 U.S. 555, 560-61 (1992)). "Allegations of possible future injury" are not sufficient. Clapper,

133 S.Ct. 1147 (internal quotation and changes omitted). The City must establish that harm is likely to occur --- that the injury is "certainly impending" --- and that a favorable decision by this Court will redress that injury. Whitmore v. Arkansas, 495 U.S. 149, 158 (1990) (citations omitted). ACS, Inc., 424 F.3d at 843.

This Court determines that the City will suffer no harm until load allocations are actually incorporated into KWTP's permit. In fact, the TMDL, itself, states that its determination is not final. A "TMDL does not, by itself, prohibit any conduct or require any actions. Instead, each TMDL represents a goal that may be implemented by adjusting pollutant discharge requirements in individuals NPDES permits." City of Dover v. United States Envtl. Prot. Agency, 36 F. Supp. 3d 103, 109 (D.D.C. 2014) (quoting City of Arcadia v. EPA, 265 F.Supp.2d 1142, 1144 (N.D. Cal. 2003)).

Critically, the MDNR has indicated it will consider variances or adjustments to the 5 mg/L criterion for Buffalo Ditch. The TMDL explicitly states:

> it is the intention of the department that prior to implementation of these wasteload allocations, either the department or the city will determine whether the dissolved oxygen criterion of 5 mg/L…is appropriate or if a site-specific dissolved oxygen criterion is required.

(#64-3 at 29 (emphasis added).) That is, the City's concern regarding the impossibility of attaining the 5 mg/L criterion has already been addressed by the TMDL --- the MDNR is open to changing the 5 mg/L standard, but that would occur in a milieu entirely separate from these proceedings.

The TMDL further states

> If it is determined that the current water quality criterion for dissolved oxygen is appropriate, the waste load allocations from the TMDL will be implemented. If it is determined not to be appropriate, and a new dissolved

> oxygen criterion is promulgated, the new waste load allocations will be calculated and implemented.

(#64-3 at 29 (emphasis added).) The City's substantive arguments against the approval of the TMDL largely pertain to the appropriateness of the 5 mg/L criterion. The TMDL acknowledges that the dissolved oxygen criterion may be inappropriate, too, and, as quoted above, it explains what will happen in the event that a new criterion is promulgated. The City does not appear to address this matter, and the cases it cites to support its standing to challenge a TMDL approval do not apply here. American Farm Bureau Federation v. EPA, 984 F. Supp. 2d 289, 312 (M.D. Pa. 2013), for example, rejects a standing challenge because, if it applied, then "no party…would ever have standing to challenge a TMDL." But the TMDL in American Farm Bureau Federation did not itself call into question water quality criteria, and, in fact, the TMDL in that case had been implemented by the states as part of Watershed Implementation Plans, which were the cause of the plaintiffs' injuries in that case. Id. In contrast, the Buffalo Ditch TMDL has not been implemented, and it may not be implemented at all. If and when an NPDES permit containing load targets for the KWTP has been issued, the City will then have standing to challenge the TMDL --- unless, of course, the City is satisfied with the outcome of the remaining TMDL-related proceedings.

The Court also raises, on its own motion, the issue of ripeness. See Nat'l Park Hosp. Ass'n v. Dep't of Interior, 538 U.S. 803, 808 (2003) ("the question of ripeness may be considered on a court's own motion"). "Ripeness is a justiciability doctrine designed 'to prevent the courts, through avoidance of premature adjudication, from entangling themselves in abstract disagreements over administrative policies, and also to protect the agencies from judicial interference until an administrative decision has been formalized

and its effects felt in a concrete way by the challenging parties.'" Id.at 807-08 (quoting Abbott Laboratories v. Gardner, 387 U.S. 136, 148–149 (1967)).

To determine whether a matter is ripe for judicial review, the Court must evaluate (1) the fitness of the issues for judicial decision, and (2) the hardship to the parties of withholding judicial consideration. Id. at 808. In light of the fact that the TMDL itself states that the dissolved oxygen criterion is not certain, the allowable pollutant allocation for the KWTP is not certain, and the City might ultimately have no injury. Thus, the same factors giving rise to the standing problems articulated above also suggest that this matter is not yet fit for judicial decision. Furthermore, although much time and energy has been devoted to the apparently premature litigation of this matter, the parties will experience no hardship if they now continue the process set into motion by the TMDL. It hardly seems appropriate for this Court to decide this case, which in large part pertains to the 5 mg/L dissolved oxygen criterion and efforts to achieve it, when the TMDL itself states that re-evaluation of that criterion will take place. (See #64-3 at 29 ("prior to implementation of these wasteload allocations, either the department or the city will determine whether the dissolved oxygen criterion of 5 mg/L…is appropriate….").)

The Court need not address Counts II and III, as the above-stated reasons for granting defendant's motion apply.

III. Motion to Exclude Exhibits

Plaintiff has moved to exclude expert declarations submitted by the defendant (#67). The motion is mooted by the Court's conclusion above and will be denied.

Accordingly,

IT IS HEREBY ORDERED that plaintiff's motion for summary judgment (#50) is DENIED.

IT IS FURTHER ORDERED that defendant's motion for summary judgment (#63) is GRANTED.

IT IS FINALLY ORDERED that plaintiff's motion to exclude (#67) is DENIED as moot.

Dated this 28th day of February, 2017.

STEPHEN N. LIMBAUGH, JR.
UNITED STATES DISTRICT JUDGE