STATE OF MINNESOTA
MINNESOTA POLLUTION CONTROL AGENCY

In the Matter of the Decision to Deny the Petitions For a Contested Case Hearing and to Submit the Draft Little Rock Creek Dissolved Oxygen, Nitrate, Temperature, and Fish Bioassessment Total Maximum Daily Load Study to the U.S. Environmental Protection Agency For Approval	**FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER**

Pursuant to the federal Clean Water Act (33 U.S. Code Sec. 1251-1387) the Minnesota Pollution Control Agency (MPCA) staff prepared the Draft Little Rock Creek Dissolved Oxygen (DO), Nitrate, Temperature, and Fish Bioassessment Total Maximum Daily Load (TMDL) study (referred to herein as "the Little Rock Creek TMDL") for submission to the U.S. Environmental Protection Agency (EPA) for approval. After affording all interested persons the opportunity to present written and oral data, statements, and arguments to the MPCA, and after considering all of the evidence in the records, files, and proceedings herein, the MPCA Commissioner, being fully advised, hereby adopts the following Findings of Fact, Conclusions of Law and Order.

I. FINDINGS OF FACT

A. Jurisdiction

1. The MPCA is authorized and required to administer and enforce all laws relating to the pollution of any waters of the state. Minn. Stat. § 115.03, subd. 1(a) (2015).

2. The MPCA is also authorized "to investigate the extent, character, and effect of the pollution of the waters of this state and to gather data and information necessary or desirable in the administration or enforcement of pollution laws, and to make such classification of the waters of the state as it may deem advisable." Minn. Stat. § 115.03, subd. 1(b).

3. The MPCA is authorized to develop and approve TMDLs for impaired waters and submit an approved TMDL to EPA for final approval. Minn. Stat. § 114D.25, subd. 1(2).

4. The approval of a TMDL by the MPCA is a final agency decision and is subject to Contested Case Hearing (CCH) procedures in accordance with agency procedural rule. Minn. Stat. § 114D.25, subd. 2.

5. The MPCA Commissioner is authorized to decide on behalf of the MPCA whether to grant or deny the Petitioners request for a CCH in this matter. Minn. Stat. § 116.03, subd. 1(c).

B. Background/ Overview of TMDL Process

Clean Water Act goal and water quality standards

6. The Clean Water Act (CWA) seeks to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" through the elimination of discharge of pollutants into navigable waters. 33 U.S.C. § 1251(a).

7. The CWA requires states to establish water quality standards to protect designated beneficial uses for water bodies. 33 U.S.C. § 1313 (a)-(c). Minnesota water quality standards are established in Minn. R. ch. 7050 (2015).

To meet the goal and meet established water quality standards, the CWA requires encouragement of best practices controls for nonpoint sources of pollution and permit-based controls for point sources of pollution

8. The CWA focuses on two possible sources of pollution: point sources and nonpoint sources. 33 U.S.C. § 1251(a)(7); 40 C.F.R . § 130. Point sources are "any discernible, confined, and discrete conveyance," including pipes, ditches, conduits or vessels "from which pollutants are or may be discharged." 33 U.S.C. § 1362(14). Nonpoint sources include any non-discrete source that does not meet the 33 U.S.C. § 1362(14) definition of "point source," such as runoff from agriculture, silviculture, forestry or construction activities.

9. Pollution from nonpoint sources is controlled by best management practices. 40 C.F.R. § 130.0 (d). Nonpoint sources are not regulated by permits due to the difficulty involved in tracing pollution to a particular point, measuring it and setting an acceptable level for that point. *Sierra Club v. Meiburg*, 296 F.3d 1021, 1025 (11th Cir. 2002).

10. For control of pollution from point sources, the CWA includes two types of permit-based pollution control requirements: technology-based effluent limits (TBELs) (40 C.F.R. § 125); and water quality-based effluent limits (WQBELs) (40 C.F.R. § 130). *See* 33 U.S.C. §§ 1311(b)(1)(C) and (b)(2)(A), 1313, 1342(a).

11. The TBELs are minimum pollution control requirements that must be met regardless of the potential impact a discharge may have on a receiving water. 40 C.F.R. § 125.3(a). The TBELs are discharge limitations based on the capabilities of an industry or class of dischargers to treat influent by using pollution control technology. 33 U.S.C. § 1311. TBELs consider technological feasibility and cost and specify the quality of effluent a discharger may release to surface waters. *Id.*

12. If TBELs are not sufficient to ensure attainment of water quality standards in the receiving water, Water Quality Based Effluent Limits (WQBELs) must be used. The WQBELs consider the impact a discharge will have on the receiving water. 40 C.F. R. § 130.7. When WQBELs are developed, technical feasibility and economic reasonableness are not factors considered. *Id.*

13. Both TBELs and WQBELs for point sources are imposed on point source dischargers through the National Pollution Discharge Elimination System (NPDES) permit process. 40 C.F.R. § 125. The NPDES permit process sets quantitative limits on the amount of pollutants released from a point source. *See* 33 U.S.C. § 1342.

14. Pursuant to 33 U.S.C. §1342(b), the EPA delegated its duties to establish and operate its NPDES permit programming authority to the State of Minnesota, which operates the program through the MPCA. Minn. Stat. § 115.03, subd. 5.

To improve waters that do not meet water quality standards the CWA establishes the TMDL program for impaired waters

15. Section 303(d) of the CWA establishes the TMDL program, a water-quality based approach to regulating waters that fail to meet water quality standards despite the application of effluent limits and other pollution control requirements. 33 U.S.C. § 1313(d)(1)(A)-(C). A TMDL expresses the maximum amount of a particular pollutant that can pass through a water body each day without violating water quality standards (i.e. the receiving water's loading capacity). *Id.* TMDLs are water-quality based controls used to supplement technology-based controls where necessary. 33 USC § 1313(d)(1)(C) and(D).

16. Section 303(d)(1) of the CWA requires each state to provide EPA a list of all waters within the state boundaries that fail to meet applicable water quality standards despite the application of effluent limits and other pollution control requirements to those waters. 33 U.S.C. § 1313(d)(1)(A)-(B). This list is known as the "impaired waters list" or the "303(d) list."

17. Each body of water where it is known that water quality does not meet applicable water quality standards, or is not expected to meet applicable water quality standards, even after the application of required TBELs is known as a "water quality limited segment" (WQLS). 40 C.F.R. § 130.2(j).

18. Minnesota must set a TMDL in each WQLS for every pollutant that is preventing or impeding compliance with applicable water quality standards. 33 U.S.C. § 1313(d)(1)(C); 40 CFR 130.7(c)(1)(ii).

Components of a TMDL and EPA guidance for developing TMDLs for dissolved oxygen (DO), nutrient eutrophication (nitrates), temperature, and fish bioassessment impairments

19. The EPA promulgated guidance for states to follow in developing proposed TMDLs. The Little Rock Creek TMDL is consistent with EPA guidance as set forth in: 1) *Technical Guidance Manual for Developing Total Maximum Daily Loads: Book 2, Rivers and Streams; Part 1 Biochemical Oxygen Demand/DO and Nutrient Eutrophication*, EPA/823/B-97-002, Year 1997 http://water.epa.gov/scitech/datait/models/upload/2006_12_05_standards_tmdl_guidance.pdf ; and 2) *Protocol for Developing Nutrient TMDLs*, EPA 841-B-99-007, Year 1999 http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/2000_01_10_tmdl_nutrient_nutrient.pdf ; and 3) *Quality Criteria for Water*, EPA, Year 1986 http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/upload/2009_01_13_criteria_goldbook.pdf.

20. In characterizing a receiving water's loading capacity, a TMDL is expressed as the sum of the allocated loads of pollutants set at a level necessary to meet the applicable water quality standards. 40 C.F.R. § 130.2(i). A TMDL includes: wasteload allocations from point sources; load allocations from nonpoint sources; natural background conditions; a margin of safety (MOS); and in some cases a reserve capacity if determined to be necessary for future growth. *Id.* A TMDL must also consider seasonal variations. 33 U.S.C. § 1313(d)(1)(C) and (d)(1)(D)(3); 40 C.F.R. § 130.7(6)(c)(1); 40 C.F.R. § 130.7(c)(1). (*See also,* U.S. Environmental Protection Agency, *Guidance for Water Quality-based Decisions: The TMDL Process*, Office of Water, *WH-S53,* Washington D.C., April 1991, http://water.epa.gov/scitech/datait/models/upload/1999_11_05_models_SASD0109.pdf).

21. A Wasteload Allocation (WLA) is the portion of a receiving water's loading capacity allocated to existing and/or future **point sources**. 40 C.F.R. § 130.2(h).

22. The Little Rock Creek TMDL sets waste load allocations (WLAs) at zero for point sources because there are no Concentrated Animal Feedlot Operations (CAFOs), industrial point sources, or municipal wastewater treatment facilities in the Little Rock Creek TMDL project area. Construction stormwater and industrial stormwater are combined in a categorical WLA based on an approximation of the land area covered by those activities. To account for industrial stormwater, as well as reserve capacity (to allow for the potential of higher rates of construction and additional industrial facilities), this TMDL assumes 0.1% of the land area for a combined construction and industrial stormwater category. The allocation to this category (WLA) is made after an explicit MOS (where applicable) is subtracted from the total loading capacity. That remaining capacity is divided up between construction and industrial stormwater and all of the nonpoint sources (the LA) based on the percent land area covered. See Draft *Little Rock Creek Watershed Total Maximum Daily Load Report: Dissolved Oxygen, Nitrate, Temperature and Fish Bioassessment Impairments* (Draft Little Rock Creek TMDL), MPCA January 2013, at 26.

23. A Load Allocation (LA) refers to the portion of a receiving water's loading capacity attributed to **nonpoint sources** of pollution and **natural background sources**. Load allocations are best estimates of the loading from these sources, which can range from reasonably accurate estimates to gross allotments, depending on the availability of data and appropriate techniques for predicting the loading. Wherever possible, nonpoint source loads and natural background source loads should be distinguished. 40 CFR § 130.2(g).

24. In the Little Rock Creek TMDL, the LAs representing nonpoint agricultural and natural background sources are made after the WLAs are determined and the MOS is subtracted from the total loading capacity. Subtracting the 0.1% allocated to construction and industrial stormwater WLA and 10% for MOS results in the other 89.9% of loadings allocated to the LA. Nonpoint pollution sources are not subject to NPDES permit requirements, therefore, implementation of pollutant reductions by landowners is voluntary. See Draft *Little Rock Creek TMDL* at 26.

25. The EPA defines "natural background levels" as "chemical, physical, and biological levels representing conditions that would result from natural processes, such as weathering and dissolution." U.S. E.P.A., *Clean Water Act, Total Maximum Daily Loads (303d): Glossary*, http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/glossary.cfm.

26. The Minnesota Statute governing TMDLs, the Clean Water Legacy Act (CWLA), defines "natural background" as "characteristics of the water body resulting from the multiplicity of factors in nature, including climate and ecosystem dynamics, that affect the physical, chemical, or biological conditions in a water body, but does not include measurable and distinguishable pollution that is attributable to human activity or influence." Minn. Stat. § 114D.15, subd. 10.

27. Minnesota's water quality standards rule defines "natural causes" as the multiplicity of factors that determine the physical, chemical, or biological conditions that would exist in a water body in the absence of measurable impacts from human activity or influence. Minn. R. 7050.0150, subp. 4.

28. Based on the definitions provided by EPA and in Minnesota statute and rule, the MPCA hereby finds that "natural background" is the condition that occurs outside of human influence.

29. An important distinction must be made between a water body impaired due to natural background and a water body impaired due to anthropogenic (i.e. human influenced) factors. If a water body is determined not to meet water quality standards solely due to natural background conditions, a TMDL is not required and the natural background condition becomes the standard. Minn. R. 7050.0170; U.S. E.P.A., Office of Wetlands, Oceans, and Watersheds, *Consolidated Assessment and Listing Methodology, Toward a Compendium of Best Practices* (2002), http://water.epa.gov/type/watersheds/monitoring/calm.cfm.

30. A MOS accounts for the uncertainty about the relationship between the pollutant loads and the quality of the receiving water body. The MOS is normally "implicit", which means the MOS is incorporated into the conservative assumptions used to develop TMDLs (generally within the calculations or models). This is particularly true where the pollution is largely by nonpoint sources. If the MOS needs to be larger than the "implicit" levels, additional MOS can be added explicitly and expressed as a separate component of the TMDL. See *Technical Guidance Manual for Developing Total Maximum Daily Loads: Book 2, Rivers and Streams; Part 1 Biochemical Oxygen Demand/DO and Nutrient Eutrophication*, EPA/823/B-97-002, Year 1997.

31. A 10% explicit MOS was used to account for uncertainty within the TMDL calculation process for the Little Rock Creek TMDL. See Draft *Little Rock Creek TMD*, at 28.

32. Reserve Capacity (RC) is that portion of the receiving water's loading capacity, as expressed as a TMDL, which accommodates future loads. See *Technical Guidance Manual for Developing Total Maximum Daily Loads: Book 2, Rivers and Streams; Part 1 Biochemical Oxygen Demand/DO and Nutrient Eutrophication*, EPA/823/B-97-002, Year 1997. Reserve capacity can be ascribed to the WLA, the LA or both. Inclusion of an allocation for reserve capacity is necessary in a number of situations where future loading is anticipated. These situations include: new and expanding Wastewater Treatment Facilities (WWTFs); Municipal Separate Storm Sewer Systems (MS4s) that will be covered by a permit in the future or that are permitted now and may expand; or anticipated land use changes. If an allocation for reserve capacity is not included, either no new future loads are anticipated or allowed, or increased loads must be accommodated by pollutant trading. *Id.*

33. RC to account for future increased industrial development and construction activity was built into the categorical WLA assigned to industrial and construction stormwater in the proposed Little Rock Creek TMDL. See Draft *Little Rock Creek TMDL* at 26.

34. Combining all of the components described above, a TMDL may be expressed as the equation: ∑WLA + ∑LA + MOS + RC = TMDL (note: seasonal flow variations are considered throughout the TMDL development by using a load duration curve approach).

35. The proposed Little Rock Creek TMDL is consistent with EPA guidance. The MPCA followed EPA protocols in calculating all components (i.e., WLA, LA, MOS and RC) of the EPA recommended approach for developing DO, nutrient eutrophication (nitrates), temperature, and fish bioassessment impairments TMDLS. *Technical Guidance Manual for Developing Total Maximum Daily Loads: Book 2, Rivers and Streams; Part 1 Biochemical Oxygen Demand/DO and Nutrient Eutrophication*, EPA/823/B-97-002, Year 1997 http://water.epa.gov/scitech/datait/models/upload/2006_12_05_standards_tmdl_guidance.pdf *; Protocol for Developing Nutrient TMDLs*, EPA 841-B-99-007, Year 1999 http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/2000_01_10_tmdl_nutrient_nutrient.pdf ; *Quality Criteria for Water*, EPA, Year 1986 http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/upload/2009_01_13_criteria_goldbook.pdf.

State guidance for developing TMDLs

36. In June 2009, the MPCA formed a "Natural Background for Streams Workgroup" to develop an approach for considering natural background conditions when assessing streams for dissolved oxygen. Similarly, in June 2010, the MPCA formed a workgroup to develop an approach for considering natural background conditions when assessing lakes for eutrophication.

37. Based on the work of the two workgroups, the MPCA developed and issued documents related to the assessment of natural background in water quality: Minnesota Pollution Control Agency, *Natural Background and Water Quality: Guidance Document for Assessment of Aquatic Life Use Support,* Doc. No. wq-s1-62 (2009), http://www.pca.state.mn.us/index.php/view-document.html?gid=8603. Minnesota Pollution Control Agency, *Guidance for Considering Natural Background When Assessing Lakes for Eutrophication.* Document number wq-s1-63 (2011), http://www.pca.state.mn.us/index.php/view-document.html?gid=16325.

38. In addition to the EPA's guidance documents on the topics of DO and biota assessments in TMDLs, the MPCA developed "Dissolved Oxygen TMDL Protocols and Submittal Requirements" and "Biota TMDL Protocol and Submittal Requirements" guidance documents to further aid local entities in the development of TMDLs. Minnesota Pollution Control Agency, *Dissolved Oxygen TMDL Protocols and Submittal Requirements*, (2008), http://www.pca.state.mn.us/index.php/view-document.html?gid=8529; Minnesota Pollution Control Agency, *Biota TMDL Protocols and Submittal Requirements*, (2008), http://www.pca.state.mn.us/index.php/view-document.html?gid=8524.

39. The MPCA followed the guidance and processes for setting a TMDL specified by the CWA, EPA guidance, state law and MPCA's own policy in developing the Little Rock Creek TMDL.

C. Development of the Little Rock Creek Dissolved Oxygen, Nitrate, Temperature and Fish Bioassessment TMDL

40. The proposed TMDL study at issue in this case is the Little Rock Creek DO, Nitrate, Temperature and Fish Bioassessment TMDL study, which encompasses two impaired reaches (or WQLS); a segment of Little Rock Creek (07010201-548); and Bunker Hill Creek (07010201-511), a major tributary to Little Rock Creek. See *Draft Little Rock Creek Watershed TMDL*, Figure 1-1. Little Rock Creek is impaired for lack of coldwater fish assemblage, dissolved oxygen, and nitrates in drinking water. Bunker Hill Creek is impaired for nitrates in drinking water. *2014 Proposed Impaired Waters List,* MPCA (2014)

41. The specific objective of the Little Rock Creek TMDL is to determine the type and degree of pollutant source reductions needed to achieve the water quality standards of 7 mg/L DO as a daily minimum (Minn. R. 7050.0222, subp. 2), 10 mg/L nitrate for drinking water (Minn. R. 4717.7860, subp. 13), and 19°C temperature at each of the impaired reaches (Minn. R. 7050.0222, subp. 2).

42. The MPCA staff began working with Benton and Morrison County Soil and Water Conservation Districts (SWCDs) on Phase I of the Little Rock Creek TMDL study in 2002. Phase II (stressor identification development) began in 2006 and Phase III (TMDL development) began in 2010 after a Request for Proposals (RFP) was developed and sent to potential consultants.

43. The MPCA created a Little Rock Creek Technical Advisory Committee (TAC) that reviewed and scored the Phase III proposals. Barr Engineering Inc. was selected to conduct the modeling and develop the TMDL.

44. Cooperatively, the MPCA, Benton SWCD staff and Barr Engineering, Inc., in conjunction with the Little Rock Creek TAC, and other local, state and federal entities, developed the Little Rock Creek TMDL work plan (Phase III).

45. The draft Little Rock Creek TMDL study was developed in a manner consistent with EPA guidance, the MPCA protocol, and previous EPA approved Dissolved Oxygen, nitrate and temperature TMDLs.

Stakeholder involvement, EPA review, Public Notice and comment period

46. The EPA advises that, "Analysts should be resourceful and creative in selecting TMDL approaches. Decisions regarding the extent of the analysis should always be made on a site-specific basis as part of a comprehensive, problem-solving approach." *Protocol for Developing Nutrient TMDLs*, EPA 841-B-99-007, Year 1999 http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/2000_01_10_tmdl_nutrient_nutrient.pdf.
47. To gain site-specific perspectives, the MPCA partnered with the Benton County SWCD to implement a stakeholder and TAC process for the development of the draft Little Rock Creek TMDL study. The MPCA and SWCD invited local, state, and federal agencies, interest groups, organizations, and citizens to participate in this process, many of which provided input in the development of the TMDL study.

48. Stakeholders and TAC members reviewed and provided comments on the draft TMDL study throughout the process and prior to the public notice comment period. Stakeholder meetings were held on: May 15, 2012, at the Pine Country Bank Conference Room in Rice, Minnesota; on June 21, 2012, at the city of Foley Council Boardroom in Foley, Minnesota; and on August 3, 2012, at the Benton County Commissioner Boardroom in Foley, Minnesota.

49. To gain additional local perspectives, public information meetings were held in Sauk Rapids on: September 3, 2003; September 23, 2007; and September 16, 2009.

50. On November 8, 2012, the MPCA sent the draft TMDL study to the EPA for preliminary review and comment. The EPA submitted preliminary comments to the MPCA on November 30, 2012. The MPCA revised the draft TMDL study based on the EPA preliminary comments.

51. The MPCA published notice of a public comment period for the Little Rock Creek TMDL in the Minnesota *State Register* on February 4, 2013. The public comment period was February 4, 2013, through March 6, 2013. 37 *State Register*, 1162-64.

52. In addition to the public notice, on February 4, 2013, the MPCA posted the draft Little Rock Creek TMDL and a press release on its website.

Comments and petitions for a contested case hearing received during public comment period

53. The MPCA received a total of nine (9) timely written comments during the comment period for the draft Little Rock Creek TMDL study.

54. The MPCA prepared a Response to Comments that is hereby incorporated by reference as Appendix A to these findings.

55. In order to be valid, CCH petitions must be received during the public comment period. Minn. R. 7000.1800, subp. 1.A.

56. On March 6, 2013, the MPCA received two (2) timely requests, each with multiple signatures, for a CCH on the draft Little Rock Creek TMDL study. The letters requesting a CCH are hereby incorporated by reference as Appendix B to these findings. The two letters are hereinafter identified as "CCH A" and "CCH B." The text of the two letters is identical except for one additional "matter of concern" on stream classification in CCH B.

57. On March 29, 2013, the MPCA received a letter identical in content to CCH B with five (5) signatures. The MPCA received the March 29, 2013, letter outside the comment period and therefore, the letter was not timely.

D. Criteria for Content and Evaluation of Petitions for a Contested Case Hearing

58. The MPCA must determine if a request for a CCH meets certain criteria specified in Minnesota rules. Minn. R. 7000.1800, subp. 2(A), requires that a CCH petition include:

(1) a statement of reasons or proposed findings supporting a board or commissioner decision to hold a CCH pursuant to the criteria in Minn. R. 7000.1900, subp. 1; and

(2) a statement of the issues proposed to be addressed by a CCH and the specific relief requested or resolution of the matter.

59. The MPCA notes that while the information specified in Minn. R. 7000.1800, subp. 2(B) is not required in a CCH petition; it is information that is helpful to the agency as it considers whether a hearing will aid the agency in making a final decision. The information specified in subp. 2(B) is:

    (1) a proposed list of prospective witnesses to be called at the hearing, including experts, with a brief description of the testimony they will provide;

    (2) a proposed list of publications, references, or studies that the petitioner would introduce at the hearing; and

    (3) an estimate of the time required for the petitioner to present the case at a hearing.

60. The MPCA's decision whether to grant the petitions for a CCH is governed by Minn. R. 7000.1900, subp. 1, which states:

    Subp. 1. **Board or commissioner decision to hold Contested Case Hearing.** The board or commissioner must grant the petition to hold a contested case hearing or order upon its own motion that a contested case hearing be held if it finds that:

    A. there is a material issue of fact in dispute concerning the matter pending before the board or commissioner;

    B. the board or commissioner has the jurisdiction to make a determination on the disputed material issue of fact; and

    C. there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the board or commissioner in resolving the disputed facts in making a final decision on the matter.

61. To satisfy the first requirement, Minn. R. 7000.1900, subp. 1(A), the hearing requester must show there is a material issue of fact in dispute as opposed to a disputed issue of law or policy. A fact is material if its resolution will affect the outcome of a case. *O'Malley v. Ulland Brothers,* 540 N.W.2d 889, 892 (Minn. 1996).

62. In order to satisfy the second requirement, Minn. R. 7000.1900, subp. 1(B), the petitioner(s) must show that the MPCA has jurisdiction or authority to make a determination on the disputed issues of material fact. "Agencies are not permitted to act outside the jurisdictional boundaries of their enabling act." *Cable Communications Board v. Nor-West Cable,* 356 N.W.2d 658, 668 (Mum. 1984). Therefore, each issue in the contested case request has to be such that it is within the MPCA's authority to resolve.

63. Finally, under Minn. R. 7000.1900, subp. 1(C), the petitioner(s) has the burden of demonstrating there is a reasonable basis underlying the disputed material issue of fact or facts such that the holding of a CCH would allow the introduction of information that would aid the MPCA in making a final decision on the matter. *In the Matter of Solid Waste Permit for the NSP Red Wing*

Ash Disposal Facility, 421 N.W.2d 398, 404 (Minn. App. 1988). To do so, the petitioner(s) may provide the MPCA with specific expert's names, and with any indication of what specific *new facts* an expert might testify to at a CCH. The Minnesota Supreme Court has recognized that to meet this test, "it is simply not enough to raise questions or pose alternatives without some showing that evidence can be produced which is contrary to the action proposed by the MPCA." *See In the Matter of Amendment No. 4 to Air Emission Facility Permit,* 454 N.W.2d 427, 430 (Minn. 1990).

64. All three criteria of Minn. R. 7000.1900, subp. 1 must be satisfied for the MPCA to grant a petition for a CCH.

E. Evaluation of Contents of Petitions for Contested Case Hearing Against Criteria

65. The CCH A and CCH B petitions contained identical language identifying issues to be addressed by a CCH. The issues identified relate to the topics of: (1) natural background in load allocations; and (2) the effect of reducing nitrate loading on bio-accumulative toxin methyl-mercury and for blue-green algae.

66. CCH B identifies an additional matter of concern related to the classification of Little Rock Creek and Bunker Hill Creek as trout streams.

67. The MPCA evaluated the CCH A and CCH B petitions to determine if they meet the threshold requirements for petition content of Minn. R. 7000.1800, subp. 2(A). The MPCA finds that the petitions do meet the threshold petition content requirements by stating reasons to hold a CCH and by stating issues to be addressed and specific relief requested.

68. The MPCA also evaluated the CCH A and CCH B petitions to determine if the petitions meet the three required criteria for granting a request for a contested case hearing in Minn. R. 7000.1900, subp. 1. The petitions for a contested case hearing fail to satisfy the requirements of Minn. R. 7000.1900, subp. 1, for the reasons stated in the following specific Findings.

Regarding the CCH A and CCH B petitions' matter of concern related to natural background, the petitions fail criterion A of Minn. R. 7000.1900, subp. 1, because they fail to state a disputed material issue of fact and instead dispute an issue of law or policy

69. The CCH A and CCH B petitions contend that the Little Rock Creek TMDL fails to properly account for and quantify natural background levels as required by state law, specifically the Minnesota CWLA (Minn. Stat. § 114D.15, subd. 10), and Minn. R. 7050.0170, regarding natural water quality.

70. The CCH A and CCH B petitions mischaracterize the requirements of the CWLA and Minn. R. 7050.0170, and ignore additional federal rule and guidance.

71. Federal rule and EPA guidance state that a separate, explicit load allocation for natural background sources is not required if it is not possible to separate natural background from nonpoint sources (i.e., the two components of load allocations). 40 CFR § 130.33(b). The final sentence of the federal definition of load allocation in 40 CFR § 130.2 (g) states that natural and nonpoint source loads should be distinguished "wherever possible." *Technical Guidance Manual*

for Developing Total Maximum Daily Loads: Book 2, Rivers and Streams; Part 1 Biochemical Oxygen Demand/DO and Nutrient Eutrophication, EPA/823/B-97-002, Year 1997 http://water.epa.gov/scitech/datait/models/upload/2006_12_05_standards_tmdl_guidance.pdf

72. The CCH A and CCH B petitions' contention that the State CWLA requires separate quantification of natural background levels is inaccurate. Similar to the Federal rules, the State definition of a TMDL in the CWLA indicates nonpoint sources and natural background are both part of the load allocation, however, the definition does not require a separate, explicit load allocation for natural background sources in a TMDL. Minn. Stat. § 114D.15, Subd. 10.

73. The Little Rock Creek TMDL project area is highly altered by human influenced agricultural land uses. Alterations include removal of native perennial cover and hydrologic modification through irrigation and artificial drainage. According to the National Agricultural Statistical Service, in 2009 the land use in the watershed consisted of 50% crops, 14% woodland, 22% grass/pasture, 13% water/wetlands and less than 1% residential development. Due to the predominance of sandy soils in the watershed, 16% of row crops are irrigated. Channelization is not prevalent on the main stem of Little Rock Creek although many tributaries in the upper watershed have been ditched and straightened. See *Draft Little Rock Creek Watershed TMDL* at 6 and A-9.

74. The MPCA finds the CCH A and CCH B petitions' contention that Minn. R. 7050.0170 requires separate quantification of natural background levels in a TMDL is a misapplication of the rule. Minn. R. 7050.0170, states that natural background levels can be used as the water quality standard in streams that are in a "natural condition." Minn. R. 7050.0170 further states that, "Natural conditions exist where there is no discernible impact from point or nonpoint source pollutants attributable to human activity or from a physical alteration of wetlands." The Little Rock Creek TMDL project area is not in a natural condition due to human activity such as extensive agricultural cultivation, thus the Little Rock Creek TMDL project area is not in a natural condition at present. As Minn. R. 7050.0170 is not applicable for the TMDL project area the load allocation sources in the Little Rock Creek TMDL project area include both human influenced factors and natural background conditions, therefore a TMDL is required and natural background levels cannot be used as a water quality standard.

75. The MPCA does not dispute that the Little Rock Creek TMDL does not include a separate, explicit load allocation for natural background sources. Natural background loading is included in, but not separately identified, in the load allocations. Natural background sources are not separately identified in the LAs because nearly the entire pollutant loading to Little Rock Creek is from nonpoint sources and natural background, and current research is not sufficient to differentiate between nonpoint and natural background sources of pollutants.

76. Following federal and state law and guidance, the MPCA determined that it was not possible to distinguish natural background loads clearly enough from nonpoint sources to support separate load allocations in the Little Rock Creek TMDL.

77. On the CCH A and CCH B petitions' matter of concern related to natural background, the MPCA finds that the petitioners fail to show the existence of a disputed material issue of fact concerning the matter pending before the board or commissioner. The petitions instead dispute the interpretation and application of law and guidance. This is a question of law or policy, not a question of fact. The MPCA finds the petitions' contention that the proposed Little Rock Creek

TMDL fails to properly account for and quantify natural background levels as required by state law, specifically the CWLA fails the criterion of Minn. R. 7000.1900, subp. 1(A) because the petitions state an issue of law or policy, not of fact.

Regarding CCH A and CCH B petitions' matter of concern related to increased impairment of Little Rock Lake, the petitions fail criterion A of Minn. R. 7000.1900, subp.1, because they fail to state a material issue of fact in dispute concerning the matter pending before the commissioner[1] as issues related to Little Rock Lake do not relate to the matter pending before the commissioner

78. The CCH A and CCH B petitions assert that the load allocations for nitrate established in the Little Rock Creek TMDL will result in increased impairment of Little Rock Lake, which they contend is contrary to federal and state law prohibiting increased loading of a pollutant to an already impaired water body. Specifically, petitioners assert that bio-accumulative toxin methyl-mercury and blue-green algae will be increased in Little Rock Lake if nitrate loading is decreased as planned in the Little Rock Creek TMDL.

79. The Little Rock Creek TMDL project area encompasses two impaired stream reaches that contribute to impairments of Little Rock Creek; a segment of Little Rock Creek (07010201-548); and Bunker Hill Creek (07010201-511), a major tributary to Little Rock Creek. The Little Rock Creek TMDL does not cover Little Rock Lake, which is located downstream from the two impaired stream reaches that are the focus of the TMDL. See *Draft Little Rock Creek Watershed TMD,* Figure 1-1.

80. In 2011, a TMDL was completed for nutrient impairments in Little Rock Lake. *Little Rock Lake Nutrient TMDL,* MPCA, November 2011. The EPA approved the Little Rock Lake Nutrient TMDL on February 2, 2012.

81. The MPCA finds that the petitioners' matters of concern related to Little Rock Lake do not relate to the matter pending before the commissioner as required by Minn R. 7000.1900 subp. 1 A, because the matter pending is the Little Rock Creek TMDL and its project area does not include Little Rock Lake.

The CCH A and CCH B petitions' assertion that meeting the nitrate water quality standard in the Little Rock Creek TMDL will decrease nitrate loading in Little Rock Lake is not a disputed fact

82. Petitioners CCH A and CCH B also claim that blue-green algae will be increased in Little Rock Lake if nitrates are reduced in Little Rock Creek, as is needed to meet the objective of the Little Rock Creek TMDL.

83. The MPCA does not dispute the fact that when implemented, the Little Rock Creek TMDL will result in the decrease of nitrate loading downstream into Little Rock Lake.

84. The MPCA does not dispute the fact that decreases in nitrates flowing in to Little Rock Lake may result in increases in blue-green algae. The MPCA states this fact on page 47 of the *Little Rock*

[1] Minn. R. 7000.1900 subp. 1 refers to "board or commissioner," however, 2015 Minn. Law ch. 4, sec. 114, eliminated the MPCA board and transferred all powers previously resting with the board to the commissioner.

Lake Nutrient TMDL: "The predominance of blue-green algae could be enhanced by decreases in summer nitrate loads…"

85. Cyanobacteria (also known as blue-green algae) are common native algae naturally occurring in lakes, ponds and rivers around the world. Wetzel, Robert G., *Limnology Lake and River Ecosystems*, 3rd edition, 2001. Blue-green algae is not a pollutant for which a water quality standard is established.

86. Because the MPCA completed the Little Rock Lake Nutrient TMDL prior to the Little Rock Creek TMDL, the fact that blue-green algae could increase in Little Rock Lake if nitrates were reduced in Little Rock Creek was known to the MPCA during the development of the Little Rock Creek TMDL. The issue of the potential for blue-green algae increases in Little Rock Lake because of decreases in nitrate loading from Little Rock Creek was addressed in the Little Rock Lake TMDL. (Little Rock Lake TMDL at 47) Revisiting the issue of the effect of reduced nitrate loading on Little Rock Lake did not, and will not, result in a different conclusion for the Little Rock Creek TMDL because the fact was well known to the MPCA prior to, and throughout, the development of the Little Rock Creek TMDL.

87. The MPCA finds that when implemented the Little Rock Creek TMDL will result in the decrease of nitrate loading downstream into Little Rock Lake is not in dispute and was known to the MPCA during the development of the Little Rock Creek TMDL. Therefore, petitioners fail to state fail to show the existence of a disputed material issue of fact concerning the matter pending before the board or commissioner as required by Minn. R. 7000.1900, subp. 1(A).

The MPCA also finds that, in addition to failing to state an issue that relates to the matter pending before the commissioner, the petitioners' issues related to Little Rock Lake fail to raise a material issue of fact in dispute as the applicable nitrate standard for Little Rock Creek TMDL is a matter of law, not a matter of fact

88. The relief requested by the CCH A and CCH B petitions is to revise the Little Rock Creek TMDL to allow for nitrate loading to Little Rock Creek in excess of the maximum loading required by the water quality standard for nitrate in state and federal law.

89. Little Rock Creek is a Class 2A water (Minn. R. 7050.0470, subp. 4, A(148)), which is protected for the following beneficial uses: *"The quality of Class 2A surface waters shall be such as to permit the propagation and maintenance of a healthy community of cold water sport or commercial fish and associated aquatic life, and their habitats. These waters shall be suitable for aquatic recreation of all kinds, including bathing, for which the waters may be usable. This class of surface waters is also protected as a source of drinking water."* Minn. R. 7050.0222, subp. 2.

90. Little Rock Creek, which discharges via the Harris Channel upstream of St. Cloud to the Mississippi River, is a designated drinking water source for the cities of St. Cloud, Minneapolis and St. Paul. See *City of St. Cloud Source Water Assessment, MDH,* September 2001.

91. The federal Safe Drinking Water Act (SDWA) establishes standards to protect drinking water in the United States. 42 U.S.C. §300(f) et seq. Under the SDWA, the EPA must determine the level of contaminants in drinking water at which no adverse health effects are likely to occur. The

federal drinking water standard for nitrate is 10 milligrams per liter (mg/L) of nitrate-nitrogen in drinking water. 42 U.S.C. §300(g)-(l).

92. The Minnesota Department of Health (MDH) implements provisions of the SWDA in Minnesota to ensure public water supplies are safe for human consumption. The MDH has set a standard of 10 mg/L for nitrate in drinking water. Minn. R. 4717.7860, subp. 13.

93. The federal and state nitrate standards are set to be protective of human health. Drinking water with nitrate levels above 10 mg/L can cause methemoglobinemia and lead to death. Infants under six months of age and pregnant women are especially susceptible to high levels of nitrates.

94. When assessing a waterbody for impairments, the CWA requires the MPCA to apply standards set by the state to protect the designated use classification for the waterbody. 33 U.S.C. §1313 (a)-(c). The MPCA uses the MDH standard of 10 milligrams per liter for nitrate in Class 2A waters protected for drinking water beneficial uses. Minn. R. 7050.0220.subp. 3a(18).

95. Since Little Rock Creek and Bunker Hill Creek are Class 2A waters protected as a drinking water sources, the MPCA finds that it is a matter of law that the nitrate standard applicable to the Little Rock Creek TMDL is 10 mg/L because the MDH has established this standard as protective of human health. The MPCA has no discretion to apply a standard that exceeds the standard established by the MDH and the MPCA must apply that standard as the objective of the Little Rock Creek TMDL.

96. The MPCA assessments clearly show both Little Rock Creek and Bunker Hill Creek exceeded the state and federal human health nitrate standards of 10 mg/L, and therefore, are included on the federal 303(d) list as impaired for nitrate in drinking water.

97. Regarding the CCH A and CCH B petitions' matter of concern related to the applicable nitrate standard for the Little Rock Creek TMDL, the MPCA finds that the petitions fail to show the existence of a disputed material issue of fact concerning the matter pending before the board or commissioner. The petitioners instead dispute a matter of law (i.e., the applicable nitrate water quality standard), and therefore, fail to meet the criterion of Minn. R. 7000.1900, subp. 1(A) that requires that petitions state a disputed material issue of fact.

The CCH A and CCH B petitions' assertion that meeting the nitrate water quality standard in the Little Rock Creek TMDL will result in increased methyl-mercury levels in Little Rock Lake is not related to the matter before the commissioner

98. The CCH A and CCH B petitions also claim that the bio-accumulative toxin methyl mercury will increase in Little Rock Lake if nitrates are reduced in Little Rock Creek.

99. Little Rock Lake (ID: 05-0013-00) has been on the Minnesota impaired waters list for mercury in fish tissue since 1998. See *Minnesota Statewide Mercury TMDL;* Appendix A, Table 3; MPCA March 2007

100. The Statewide Mercury TMDL approved in 2008 covers impairments for mercury in fish tissue for all waterbodies of the state listed in Appendix A of the *Minnesota Statewide Mercury TMDL.*

101. The MPCA finds that the petitions' claim that methyl mercury may increase in Little Rock Lake is not related to matter before the commissioner because it concerns Little Rock Lake and the Statewide Mercury TMDL, neither of which are related to the matter before the commissioner which is the Little Rock Creek TMDL.

Regarding the CCH B petitions' matter of concern related to stream classification, the CCH B petition fails criterion A of Minn. R. 7000.1900, subp. 1, because it fails to state a disputed material issue of fact and instead disputes an issue of law or policy and fails criterion B of Minn. R. 7000.1900, subp. 1, as it fails to raise an issue where the board or commissioner has jurisdiction

102. The CCH B petition "disagrees" with the classification of Little Rock Creek and Bunker Hill Creek as trout streams. The petition claims evidence does not exist supporting such a classification. The petitioner requests that MPCA discontinue the Little Rock Creek TMDL and "change the designated use of these streams to warm water fisheries."

103. The Minnesota Department of Natural Resources (DNR) is responsible for officially designating trout streams to protect and foster the propagation of trout. Minn. Stat. § 97C.005. The list of DNR designated trout streams is found in Minn. R. 6264.0050, subp. 4.

104. The MPCA has no jurisdiction over the designation of trout streams in Minnesota.

105. The DNR designated Little Rock Creek as a trout stream in 1964. The DNR Commissioner Order # 1669 (February 28, 1964). The DNR designated trout stream portion for Little Rock Creek can be found at Minn. R. 6264.0050, subp. 4, D(2) (listed as "Rock Creek, Little (Morrison)") and subp. 4, EE(3) (listed as "Rock Creek, Little (Benton)") .

106. The DNR designated trout stream portion for Bunker Hill Creek can be found at Minn. R. 6264.0050, subp. 4, D(1) (listed as "Bunker Hill Brook").

107. Naturally reproducing cold-water species have been frequently documented in Little Rock Creek since 1975. The DNR *Stream Population Assessment* reports of electroshocking data document naturally reproducing cold-water species in the following years: 1982, 1984, 1988, 1998, 1999, 2000, 2001, 2003 and 2006. Naturally reproducing brook trout and brown trout were documented in 2009 and 2011. Naturally reproducing cold-water species were not found in 1995, 1996 or 1997.

108. The CWA requires the MPCA to classify water bodies to protect beneficial uses. 33 U.S.C. § 1313 (a)-(c). The MPCA has the authority to classify and establish standards for waters of the state pursuant to Minn. Stat. § 115.44.

109. The CWA also requires the MPCA to protect water bodies for uses that existed on or before November 28, 1975 (referred to as "existing uses"). 40 CFR 131.12(a)(1). An "existing use" can be established by demonstrating that the use actually occurred since November 28, 1975. The

CWA requires the MPCA to protect the existing use and to protect the level of water quality to protect those uses.

110. The MPCA finds that the CWA coupled with the DNR designation of Little Rock Creek and Bunker Hill Creek as trout streams requires the MPCA by law to classify the waterbodies for the protection of the existing use as trout streams. The MPCA designated Class 2A portion of Little Rock Creek can be found at Minn. R. 7050.0470, subp. 4, A(148).

111. The MPCA further finds that the MPCA has no authority to change the trout stream designation.

112. Therefore, on the petitioners' matter of concern related to stream classification, the MPCA finds that the petitioners fail to show the existence of a disputed material issue of fact concerning the matter pending before the board or commissioner. The petitioners instead dispute a matter of law (i.e., the classification of Little Rock Creek and Bunker Hill Creek as trout streams) and jurisdiction (i.e., the MPCA does not have jurisdiction over trout stream designation), and therefore fail to meet criterion A. and B. of Minn. R. 7000.1900, subp. 1 that requires the petitioners to state a disputed material issue of fact and that the board or commissioner has the jurisdiction to make a determination on the disputed material issue of fact.

113. Based on the preceding Findings, the MPCA finds there is no material issue of fact in dispute concerning the matter pending before the commissioner as required by Minn. R. 7000.1900, subp. 1, criterion A and criterion B.

The petitions fail criterion C of Minn. R. 7000.1900, subp. 1, because there is no reasonable basis underlying a disputed material issue of fact such that the holding of a contested case hearing would allow the introduction of information that would aid the commissioner in making a final decision on the matter

114. Petitioners raise questions of law and policy and fail to raise a disputed material issue of fact. Thus, a contested case hearing is not appropriate.

115. Based on the preceding Findings, the MPCA finds there is no reasonable basis underlying a "disputed material issue of fact or facts such that the holding of a contested case hearing would allow the introduction of information that would aid the board or commissioner in resolving the disputed facts in making a final decision on the matter" as required by Minn. R. 7000.1900, subp. 1, criterion C.

II. CONCLUSIONS OF LAW

1. The MPCA commissioner is authorized by Minn. Stat. § 116.03, subd. 1(c) to decide on behalf of the MPCA, whether to grant or deny the Petitioner's request for a Contested Case Hearing in this matter, thereby meeting the requirement of Minn. R. 7000.1900, subp. 1(B), to show the commissioner has the jurisdiction to make a determination on a disputed material issue of fact.

2. Due, adequate and timely public notice of the proposed *Little Rock Creek TMDL* was given in accordance with Minn. R. 7001.0100, subps. 4 and 5.

3. The CCH A and CCH B Petitions for a Contested Case Hearing were timely received.

4. The letter received by the MPCA on March 29, 2013, requesting a contested case hearing was not timely received.

5. The MPCA determines the issues raised by petitioners on the proposed *Little Rock Creek TMDL* do not meet the requirements for granting a CCH because the petitions fail to meet the requirements of criteria A, B and C of Minn. R. 7000.1900, and therefore, the petitions should be denied, based upon the reasons set forth in this document.

6. Any finding more properly considered a conclusion shall be considered a conclusion. Any conclusion more properly considered a finding shall be considered a finding.

III. ORDER

All of the Petitions for Contested Case Hearing are hereby denied in their entirety.

The Draft *Little Rock Creek Dissolved Oxygen (DO), Nitrate, Temperature, and Fish Bioassessment TMDL* shall be sent to EPA for approval.

IT IS SO ORDERED:

John Linc Stine
Commissioner
Minnesota Pollution Control Agency

12/17/15
Date

Appendix A – MPCA's Response to Comments

APPENDIX A

Response to Comments

BUCKMAN TOWNSHIP

Comment: Regarding beaver dams

Response: Beaver dams were not identified as a significant stressor for trout as a part of the Stressor Identification Report completed for Little Rock Creek in 2009. The TMDL study does discuss the potential sources of longitudinal connectivity stressors to trout in Section 1.3.6. It was further recommended in Section 4.1 that more specific data on longitudinal connectivity stressors be collected in the future. This discussion will be expanded to include beaver dams.

Comment: Regarding precipitation data
Comment: Regarding temperature data

Response: Typical precipitation and temperature levels are discussed in Section 1.2 of the report, but then Page A-9 describes how we used all of the available National Weather Service daily temperature, precipitation and other climatic data as inputs to the modeling that was done to simulate the results for this study on a daily basis between 1989 and 2010.

Comment: Regarding trout

Response: DNR designates the cold-water classification of streams in Minnesota. MPCA is bound by the federal Clean Water Act to apply the standards set by the state to the designated use classification when assessing for impairments. The Clean Water Act mandates that the "highest" use attained on
November 28, 1975 or thereafter must be protected (i.e. existing use). Since reproducing cold-water species have been documented in Little Rock Creek since 1975, the current classification of cold-water must be maintained.

Comment: Regarding effect of debris in the creek

Response: While deadfalls, rocks and trash may be expected to play a role in the course or current of the stream in localized areas these objects would not be expected to affect the flow rate, nor the makeup of the flow, in Little Rock Creek. As a result, it would not affect the TMDL computations or conclusions for this study.

Comment: Regarding removal of the Sartell dam

Response: The TMDL report concludes that the Sartell Wildlife Management Area (WMA) impoundment is negatively impacting the ability to meet the temperature and dissolved oxygen standards. As a result, the implementation section of the report recommends measures to mitigate the negative impacts of the impoundment. The watershed and water quality modeling conducted for this study provides several implementation scenarios that allowed us to separate the individual effects that both the impoundment and lower summer flow had on temperature and dissolved oxygen. In this way we have separately accounted for the benefits that could be derived from improved summer flow conditions versus mitigation of flow conditions associated with the impoundment. The results indicated that mitigation for the Sartell WMA impoundment would improve the conditions for both temperature and dissolved oxygen in Little Rock Creek.

MINNESOTA AGRICULTURAL WATER RESOURCE CENTER

1. Comment: Regarding classification of Little Rock and Bunker Hill Creek

Response: As you stated in your comment, DNR designates the cold-water classification of streams in Minnesota. MPCA is bound by the federal Clean Water Act to apply the standards set by the state to the designated use classification when assessing for impairments. The Clean Water Act mandates that the "highest" use attained on November 28, 1975 or thereafter must be protected (i.e. existing use). Since reproducing cold-water species have been documented in Little Rock Creek since 1975, the current classification of cold-water must be maintained.

2. Comment: Regarding modeling and irrigation

Response:

1. Yes, the modeling does maintain a comprehensive water budget. The entire Quaternary aquifer system is included in the model, including both shallow and deep components of this system. The shallow and deep components of the aquifer system are not disconnected entities and do interact. Groundwater is allowed to flow between the shallow and deep components of the aquifer system as allowed by the geologic properties and physics of groundwater flow. Precipitation is accounted for in the SWAT model and allowed to either runoff, infiltrate, evaporate, transpire or a combination of all. Water that is infiltrated is accounted for in the MODFLOW model as groundwater recharge. All irrigation pumping as reported to the Minnesota DNR is included as a withdrawal from the aquifer system and also applied to irrigated crop lands at the surface. All water applied as irrigation that is not used for the crops or evaporated is allowed to infiltrate as groundwater recharge for the aquifer system. Other components of the water budget also include groundwater storage, and leakage to and from the lakes and stream reaches.

2. Data from Figure 1-4 come from the Minnesota Department of Natural Recourses State Water Use Data System (SWUDS). These data are reported to the DNR by each irrigator as part of the water appropriation permit process. Additional data and information is available at http://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/wateruse.html

3. Pumping rates were not normalized to the Palmer drought index Z values to develop Figure 1-7, but were normalized to the cropland area that was irrigated in each case to determine the unit volume irrigated (in inches). The right (or secondary) Y-axis on the graph is being used to show both the irrigated volume in inches (the blue line) and the weighted Palmer drought Z index values (the maroon line).

3. Comment: Regarding livestock

Response:

The primary purpose of the TMDL process is to determine the nature and extent of the water quality and biological impairments for each water body, develop the pollutant loading capacity and allocations of allowable pollutant load for each impairment. It is not a requirement of the TMDL to provide quantifiable watershed source assessments. Continuing watershed source

assessment work is planned as a part of the future monitoring efforts and adaptive management to future implementation activities.

4. **Comment:** Regarding natural background discussion

Response:

We will add a discussion of natural background sources of each of the pollutants to Section 1.3 of the report.

5. **Comment:** Regarding water appropriations

Response:

It seems there is confusion regarding what constitutes the actual TMDL (allocations) and required supporting TMDL study sections. The EPA requires each TMDL study to have a general implementation section that identifies potential Best Management Practices (BMPs) that can be applied to aid restoration of the impaired water. This is a preliminary implementation plan (IP) that is basically a "laundry list" of BMPs that have been proven to be suitable to address the given impairments. The IP section demonstrates that there has been discussion about restoration activities and to help local focus transition from study to implementation. Minnesota requires the formal IP be developed within a year of the TMDL study approval by EPA to allow ample time for a locally lead process to be utilized. The Little Rock Creek plan was developed concurrent with the TMDL studies for both the lake and creek. The BMPs included in both the studies and the plan were initiated, discussed and approved by local stakeholders and representatives. (The members and their respective affiliations can be found listed in both the TMDL study and implementation plan.)

MPCA does not have any regulatory authority over water appropriations.

KROLL

1. **Comment:** Regarding trout

Response: DNR designates the cold-water classification of streams in Minnesota. MPCA is bound by the federal Clean Water Act to apply the standards set by the state to the designated use classification when assessing for impairments. The Clean Water Act mandates that the "highest" use attained on November 28, 1975 or thereafter must be protected (i.e. existing use). Since reproducing cold-water species have been documented in Little Rock Creek since 1975, the current classification of cold-water must be maintained.

2. **Comment:** Regarding ET and groundwater

Response: The TMDL requirements necessitate that we evaluate the relationship between current land use, land cover and land management conditions with each of the pollutant impairments to meet the existing water quality standards. The TMDL does not require an evaluation of the native vegetation under pre-settlement conditions. This may warrant further investigation if restoration of native vegetation is considered as a feasible alternative to the current land use, land cover and land management in the watershed.

3. Comment: Regarding effects of dam and impoundment to LRC system

Response: Your assessment of the temperature and dissolved oxygen impacts is consistent with what the TMDL report concludes for the Sartell Wildlife Management Area impoundment. As a result, the implementation section of the report recommends measures to mitigate the negative impacts of the impoundment. In addition, the watershed and water quality modeling conducted for this study provides several implementation scenarios that allowed us to separate the individual effects that both the impoundment and lower summer flow had on temperature and dissolved oxygen. In this way we have separately accounted for the benefits could be derived from improved summer flow conditions versus mitigation of flow conditions associated with the impoundment. The results indicated that improvements to the flow regime during dry conditions will improve the conditions for both temperature and dissolved oxygen in Little Rock Creek.

Comment: Regarding irrigation and groundwater levels

Response: It is unclear what formed the basis of the 4% value that was cited. Figure 1-8 in the report shows that the unit volume of water used for irrigation has typically ranged from 4 inches under wet conditions to 17 inches under the driest condition. The modeling and analysis conducted for the TMDL report maintained a comprehensive water budget. The entire Quaternary aquifer system is included in the model, including both shallow and deep components of this system. The shallow and deep components of the aquifer system are not disconnected entities and do interact. Groundwater is allowed to flow between the shallow and deep components of the aquifer system as allowed by the geologic properties and physics of groundwater flow. Precipitation is accounted for in the SWAT model and allowed to either runoff, infiltrate, evaporate, transpire or a combination of all. Water that is infiltrated is accounted for in the MODFLOW model as groundwater recharge. All irrigation pumping as reported to the Minnesota DNR is included as a withdrawal from the aquifer system and also applied to irrigated crop lands at the surface. All water applied as irrigation that is not used for the crops or evaporated is allowed to infiltrate as groundwater recharge for the aquifer system. Other components of the water budget also include groundwater storage, and leakage to and from the lakes and stream reaches. All of these components of the modeling were run and calibrated to stream flow observations over an extended period of time, that included many dry periods, which enabled us evaluate the effects on stream flow. The modeling results indicated that increases in irrigation exacerbated the low stream flows during dry periods.

4. Comment: Regarding reasonable assurance

Response: Little Rock Creek is impaired solely by NPS. According to the EPA regarding reasonable assurance for NPS, "You must demonstrate reasonable assurance by specific procedures and mechanisms that ensure load allocations for nonpoint sources will be implemented for that waterbody. Specific procedures and mechanisms for nonpoint sources must apply to the pollutant for which the TMDL is being established, must be implemented expeditiously and must be supported by adequate funding. Examples of specific procedures and mechanisms which may provide reasonable assurance for nonpoint sources include State, Territorial, and authorized Tribal regulations, local ordinances, performance bonds, contracts, cost-share agreements, memorandums of understanding, site-specific or watershed-specific voluntary actions, and compliance audits of best management practices." The funding mechanism along with the implementation strategies included in the TMDL fulfills these EPA requirements for reasonable assurance.

5. Comment: Regarding stakeholder process

Response: Two committees were established for the Little Rock project. One was the technical advisory committee you referenced and the other was a citizen stakeholder committee. The Little Rock Watershed Stakeholder Committee was established to develop and implement management actions in the Little Rock watershed related to the Little Rock Lake and Little Rock Creek Total Maximum Daily Load (TMDL) projects. The Little Rock Watershed Committee consisted of 16 members who live or work in the Little Rock Watershed, including one citizen representative from each township within the Little Rock Watershed boundary, a County Commissioner from Benton and Morrison Counties and one SWCD Supervisor from each county, as well as representatives from the Little Rock Lake Association, Mid-Minnesota Trout Unlimited Association, East Central Irrigation Association and New Heights Dairy. The list of volunteer representatives that responded to the request from Benton and Morrison SWCDs to serve on the stakeholder committee is included in the TMDL document.

6. Comment: Regarding fish bio-assessments

Response: Biological indicators integrate the effects of environmental variables over time and space. Because aquatic organisms reside in waterbodies, utilize the full range of aquatic habitats, and have life spans ranging from weeks to years, they experience the entire spectrum of environmental conditions to which a waterbody is exposed. Biological communities reflect these conditions in their community structure and function. On the other hand, some individual environmental parameters (such as water temperature, dissolved oxygen, and turbidity) may vary greatly over time, and as a result, require more frequent monitoring in order to understand their dynamics.

MINNESOTA DEPARTMENT OF AGRICULTURE

1. **Comment:** Regarding limiting total water appropriations and sub-irrigation.

Response: The draft TMDL does discuss limiting water appropriations and sub-irrigation as possible implementation options since lack of flow is a factor in the impairments. We also support the use of science and current information. Benton Soil and Water Conservation District (SWCD) has been awarded a Legislative Citizen Commission on Minnesota Resources (LCCMR) grant to work with landowners to assure a sustainable water supply for the watershed while also managing nutrients.

2. **Comment:** Regarding nitrogen management.

Response: This section of the report will be edited as recommended by MDA.

3. **Comment:** Regarding feedlots.

Response: We agree. Feedlot and all associated practices, such as you have described, have been identified as a "first priority" in the approved combined Little Rock Lake and Creek Implementation Plan.

4. **Comment:** Regarding water diversion, retention and wetland restoration, bio-reactors.

Response: The implementation section of the TMDL simply lists options that could be used to positively impact the impaired waters. The approved implementation plan has many of these Best Management Practices (BMPs) as "first priority" practices.

5. **Comment:** Regarding nitrate levels and low DO.

Response: The statement on page 8 should have been attributed to the Stressor Identification report. We agree with MDA's statement as our water quality modeling does not corroborate the statement. As such, the sentence will be edited to eliminate the reference to nitrate.

6. **Comment:** Regarding Nitrate drinking water standards.

Response: It is agreed that the statement needs to be reconsidered with regard to both points that were made in the comment. We intend to remove the reference to nitrite and compare the nitrate levels to aquatic health literature instead of the state drinking water standard.

7. **Comment:** Regarding technical terms defined.

Response: We will define the technical terms in the document as suggested by MDA.

SOYBEAN GROWERS

1. **Comment:** Regarding stream designation

Response: Minnesota Department of Natural Resources (DNR) designates the cold-water classification of streams in Minnesota. MPCA is bound by the federal Clean Water Act to apply the standards set by the state to the designated use classification when assessing for impairments. The Clean Water Act mandates that the "highest" use attained on

November 28, 1975, or thereafter must be protected (i.e., existing use). Since reproducing cold-water species have been documented in Little Rock Creek since 1975, the current classification of cold-water must be maintained.

2. **Comment:** Regarding natural background

Response: The U.S. Environmental Protection Agency (EPA) load allocation definition indicates that natural and nonpoint source loads should be distinguished "wherever possible." In the case of the Little Rock Creek TMDL study, and other dissolved oxygen (DO), nutrient, and temperature TMDLs completed by the MPCA and approved by EPA, MPCA staff examined whether it was possible to differentiate natural background loads from nonpoint source loads and determined it was not possible to distinguish natural background loads clearly enough to support separate load allocations.

3. **Comment:** Regarding mercury and algae

Response: Little Rock Creek is a designated drinking water source that begins in Morrison County and flows southwest through Little Rock Lake in Benton County. Bunker Hill Creek is a tributary to Little Rock Creek upstream from Little Rock Lake. The creek ultimately discharges to the Mississippi River via the Harris Channel upstream of St. Cloud in the Mississippi River Basin. The cities of St. Cloud, Minneapolis, and St. Paul all withdraw drinking water from the Mississippi River downstream of the Little Rock Creek discharge point. The federal government and the Minnesota Department of Health have both set 10 milligrams per liter (mg/L) standard for nitrate in drinking water to be protective of human health. Since both Little Rock Creek and Bunker Hill Creek violate that standard, they are impaired and required by federal and state law to meet the standard.

4. **Comment:** Regarding agricultural practices impact

Response: The quoted language from this comment was taken from Section 1.4 of the report, in which the sole context of the statement is intended to utilize the results of the two modeling scenarios to evaluate the potential effects on bedded sediment and habitat stressors for trout. The context for the results of these two modeling scenarios is the exact opposite for the remaining stressors for trout that form the basis of the TMDL for each pollutant. As the remaining sections of the report indicate, the results of these two modeling scenarios do implicate agricultural management as a nonpoint source contributor to the impairments because the lower flows estimated under drier, late-summer conditions reduce the capacity for Little Rock Creek to meet the nitrate, temperature, and DO standards.

5. **Comment:** Regarding stakeholder involvement

Response: Two committees were established for the Little Rock project. One was the technical advisory committee and the other was a citizen stakeholder committee. The Little Rock Watershed Stakeholder Committee was established to develop and implement management actions in the Little Rock Watershed related to the Little Rock Lake and Little Rock Creek TMDL projects. The Little Rock Watershed Committee consisted of 16 members who live or work in the Little Rock Watershed, including one citizen representative from each township within the Little Rock Watershed boundary, a county commissioner from each Benton and Morrison Counties, one Soil and Water Conservation District (SWCD) supervisor from each county, as well as representatives from the Little Rock Lake Association, Mid-Minnesota Trout Unlimited Association, East Central Irrigation Association, and New Heights Dairy. The list of volunteer representatives that responded to the request from Benton and Morrison SWCDs to serve on the stakeholder committee is included in the TMDL document along with the details of each stakeholder meeting, technical advisory committee meeting, and public information meetings.

WILCZEK

Comment: Regarding modeling related to irrigation

Response:

1. Yes, the modeling does maintain a comprehensive water budget. The entire Quaternary aquifer system is included in the model, including both shallow and deep components of this system. The shallow and deep components of the aquifer system are not disconnected entities and do interact. Groundwater is allowed to flow between the shallow and deep components of the aquifer system as allowed by the geologic properties and physics of groundwater flow. Precipitation is accounted for in the SWAT model and allowed to either runoff, infiltrate, evaporate, transpire or a combination of all. Water that is infiltrated is accounted for in the MODFLOW model as groundwater recharge. All irrigation pumping as reported to the Minnesota DNR is included as a withdrawal from the aquifer system and also applied to irrigated crop lands at the surface. All water applied as irrigation that is not used for the crops or evaporated is allowed to infiltrate as groundwater recharge for the aquifer system. Other components of the water budget also include groundwater storage, and leakage to and from the lakes and stream reaches.

2. Data from Figure 1-4 come from the Minnesota Department of Natural Recourses State Water Use Data System (SWUDS). These data are reported to the DNR by each irrigator as part of the water appropriation permit process. Additional data and information is available at http://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/wateruse.html

3. Pumping rates were not normalized to the Palmer drought index Z values to develop Figure 1-7, but were normalized to the cropland area that was irrigated in each case to determine the unit volume irrigated (in inches). The right (or secondary) Y-axis on the graph is being used to show both the irrigated volume in inches (the blue line) and the weighted Palmer drought Z index values (the maroon line).

Comment: Regarding livestock

Response: The primary purpose of the TMDL process is to determine the nature and extent of the water quality and biological impairments for each water body, develop the pollutant loading capacity and allocations of allowable pollutant load for each impairment. It is not a requirement of the TMDL to provide quantifiable watershed source assessments. Continuing watershed source assessment work is planned as a part of the future monitoring efforts and adaptive management to future implementation activities.

Comment: Regarding natural background discussion

Response: We will add a discussion of natural background sources of each of the pollutants to Section 1.3 of the report. There is NOT a place in this TMDL report where we consider a lack of water to be a pollutant. All of the pollutant allocations have been based on the assumption that the same flow duration conditions that existed during the data collection phase of this project are applicable for the development of the Total Maximum Daily Load for each pollutant.

Comment: Regarding igneous intrusion

Response: Bedrock in the area of the Little Rock Creek watershed is considered for the model as it constitutes the base of the model and is simulated as a no-flow boundary. The permeability of the bedrock is very low compared to the

unconsolidated sediments, with groundwater flow primarily within bedrock fractures, and for the purpose of this study is considered a no-flow boundary. This is further explained in Appendix A. Recharge area for the irrigation aquifer(s) has been established because the groundwater model extends to the regional groundwater divides and includes all potential recharge source areas for the aquifer system most commonly used for irrigation wells.

Comment: Regarding data utilized

Response: A little more than 20 years of groundwater appropriation data were available for this study, however, the 2006-2008 period represented the only time frame where the biological, habitat, water quantity and quality data was collected at the same time. In addition, TMDLs must be developed for the critical conditions for the attainment of each standard. As a result, the 2006-2008 time period provided the best flow and water quality data for evaluating each biological stressor and water quality impairment and subsequently determine the respective total maximum daily loads. Some additional flow data was collected during 2009 and 2010, so our watershed modeling results were extended to the 2006-2010 period in the analysis.

Comment: Regarding water appropriations

Response: It seems there is confusion regarding what constitutes the actual TMDL (allocations) and required supporting TMDL study sections. The EPA requires each TMDL study to have a general implementation section that identifies potential Best Management Practices (BMPs) that can be applied to aid restoration of the impaired water. This is a preliminary implementation plan (IP) that is basically a "laundry list" of BMPs that have been proven to be suitable to address the given impairments. The IP section demonstrates that there has been discussion about restoration activities and to help local focus transition from study to implementation. Minnesota requires the formal IP be developed within a year of the TMDL study approval by EPA to allow ample time for a locally lead process to be utilized. The Little Rock Creek plan was developed concurrent with the TMDL studies for both the lake and creek. The BMPs included in both the studies and the plan were initiated, discussed and approved by local stakeholders and representatives. (The members and their respective affiliations can be found listed in both the TMDL study and implementation plan.)

MPCA does not have any regulatory authority over water appropriations.

ZIMMERMAN

Comment: Regarding watershed area
Comment: Regarding Rice Skunk dam

Response: The groundwater modeling portion of the TMDL was purposely extended beyond the surface water boundary of the Little Rock Creek watershed to ensure that we could capture the potential effects from all sources of water recharge and withdrawal, including the Rice-Skunk Lakes impoundment. Put another way, the area of the groundwater model is primarily set up so that it encompasses an area large enough that boundary conditions used in the model do not affect its predictive capability. If the area of the groundwater model is too small, predictions from the model may be affected by boundaries of the model, rather than actual conditions such as changes in pumping, land use, or climate. Also, the groundwater model must extend beyond the ground-watershed for the creek. It is a common misconception that a watershed (i.e. area where water runoff along the ground surface contributes to a stream) and ground-watershed (i.e. area where groundwater flows to a stream) are the same. In fact, ground-watersheds and watersheds can be vastly different. It is also commonly misconceived that pumping on the other side of a groundwater divide (line dividing ground-watersheds) will have no influence on a stream across the divide. In fact, pumping across groundwater divides can affect stream flow. All pumping wells within the groundwater model area, and for which records are available, were included in the simulations. It is not the intention of this study to single out individual wells and their effect on stream flow. However, typically, wells closer to the stream and wells pumping larger volumes will tend to have greater effects on stream flows.

Comment: Regarding Little Rock Creek dam

Response: The dam was originally built to create a wildlife management area. The TMDL study helped to define its effect on the Little Rock system. Consequently, one implementation option is to remove the dam.

Comment: Regarding climate

Response: The study does not take global warming or climate change into account in the modeling because the TMDL regulations do not mandate it, and instead, require that we address the "critical conditions" for demonstrating compliance with the state standards. Critical conditions are defined in Section 3.2 of the report, which also summarizes EPA's requirements for TMDL development. Our assessment, based on the monitoring data collected between 2006 and 2008, was that this time period represented the critical conditions for all of the pollutants for which TMDLs were developed.

Comment: Regarding "lack of data"

Response: The study cited a lack of data only with regard to identifying other specific locations, besides the four known areas, in the system where connectivity could be contributing as a Stressor for trout. It was further recommended that more specific data on longitudinal connectivity stressors be collected in the future. There was not a lack of data to support the development of the TMDLs that were set (to meet State standards) for the other Stressors that were identified, which included temperature, dissolved oxygen and nitrate.

Comment: Regarding nonnative species

Response: DNR designates the cold-water classification of streams in Minnesota. MPCA is bound by the federal Clean Water Act to apply the standards set by the state to the designated use classification when assessing for impairments. The Clean Water Act mandates that the "highest" use attained on November 28, 1975 or thereafter must be protected (i.e. existing use). Since reproducing cold-water species have been documented in Little Rock Creek since 1975, the current classification of cold-water must be maintained.

Comment: Regarding irrigation

Response: The modeling completed for this study maintains a comprehensive water budget. The entire Quaternary aquifer system is included in the model, including both shallow and deep components of this system. The shallow and deep components of the aquifer system are not disconnected entities and do interact. Groundwater is allowed to flow between the shallow and deep components of the aquifer system as allowed by the geologic properties and physics of groundwater flow. Precipitation is accounted for in the SWAT model and allowed to either runoff, infiltrate, evaporate, transpire or a combination of all. Water that is infiltrated is accounted for in the MODFLOW model as groundwater recharge. All irrigation pumping as reported to the Minnesota DNR is included as a withdrawal from the aquifer system and also applied to irrigated crop lands at the surface. All water applied as irrigation that is not used for the crops or evaporated is allowed to infiltrate as groundwater recharge for the aquifer system. Other components of the water budget also include groundwater storage, and leakage to and from the lakes and stream reaches.

All of these components of the modeling were run and calibrated to stream flow observations over an extended period of time, that included many dry periods, which enabled us evaluate the effects on stream flow. The modeling results indicated that increases in irrigation exacerbated the low stream flows during dry periods.

UPPER MISSISSIPPI RIVER SOURCE WATER PROTECTION PROJECT

Thank you for taking the time to submit your comments in response to the public notice of the above referenced Total Maximum Daily Load (TMDL) study. You can follow the progress of the TMDL study and the Implementation Plan process by checking in at the Benton Soil and Water District (SWCD) website listed here: http://www.soilandwater.org/tmdl-mwrpp/lrc

After this report is finalized and approved by the Environmental Protection Agency (EPA), Benton and Morrison Soil and Water Conservation Districts (SWCD) and partners will proceed with existing and new restoration efforts to restore the impaired waters covered in this report. The SWCDs will continue work with the public to install Best Management Practices (BMPs) identified in the Implementation Plan that was developed in conjunction with watershed stakeholders.

The SWCDs recognized early on that clean water was essential to maintaining the economic health within the counties and the Little Rock watershed area. The SWCDs began work with the MPCA, landowners and local and state government representatives to talk about impaired waters through the Local Water Management Plans many years ago. Understanding that public participation is a key element of any TMDL Study, the SWCDs have methodically formed working relationships and partnerships, with other governmental units and agencies, as well as with groups of private property owners. These relationships, built on common needs and a growing trust in the abilities and motives in both sectors, have been mutually gratifying and productive. The SWCDs will continue to utilize these strong partnerships as they move from TMDL studies to implementation and restoration.

PETERS

Thank you for taking the time to submit your comments in response to the public notice of the above referenced Total Maximum Daily Load (TMDL) study. You can follow the progress of the TMDL study and the Implementation Plan process by checking in at the Benton Soil and Water District (SWCD) website listed here: http://www.soilandwater.org/tmdl-mwrpp/lrc

After this report is finalized and approved by the Environmental Protection Agency (EPA), Benton and Morrison Soil and Water Conservation Districts (SWCD) and partners will proceed with existing and new restoration efforts to restore the impaired waters covered in this report. The SWCDs will continue work with the public to install Best Management Practices (BMPs) identified in the Implementation Plan that was developed in conjunction with watershed stakeholders.

The SWCDs recognized early on that clean water was essential to maintaining the economic health within the counties and the Little Rock watershed area. The SWCDs began work with the MPCA, landowners and local and state government representatives to talk about impaired waters through the Local Water Management Plans many years ago. Understanding that public participation is a key element of any TMDL Study, the SWCDs have methodically formed working relationships and partnerships, with other governmental units and agencies, as well as with groups of private property owners. These relationships, built on common needs and a growing trust in the abilities and motives in both sectors, have been mutually gratifying and productive. The SWCDs will continue to utilize these strong partnerships as they move from TMDL studies to implementation and restoration.

You can contact the SWCD to become an active participant in implementation. The SWCD meets at the United States Department of Agriculture (USDA) Service Center in Foley, Minnesota on the third Wednesday of every month at 8:30 a.m. CST. All of the board meetings are open to the general public. Please feel free to attend these meetings to offer your insights and discuss implementation strategies you may have. It is only through the continued efforts and implementation of Best Management Practices (BMPs) on private land by concerned citizens such as you that impaired waters can be restored.

APPENDIX B – Comment Letters and Petitions for Contested Case Hearing

All comment letters submitted to the MPCA during the public comment period on the Draft Little Rock Creek Dissolved Oxygen (DO), Nitrate, Temperature, and Fish Bioassessment TMDL are included on the following pages. Because of their length, documents that were submitted as attachments to comment letters can be found at: http://www.pca.state.mn.us/..... The documents at the listed website are hereby incorporated by reference into this Appendix A and are thereby made a part of the administrative record supporting the Order of the commissioner in this matter.

Margaret Leach
Minnesota Pollution Control Agency
7678 College Road, Suite 105
Baxter, MN 56425
218-316-3895
margaret.leach@state.mn.us

RE: Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL Study report.

Ms. Leach:

The undersigned petitioners include residents, landowners and farmers in and near the Little Rock Creek watershed. We support the long term objective of improving water quality, and are concerned that the proposed Little Rock Creek TMDL fails to achieve this objective. Further, we are concerned that inadequate understanding of the cause and effect relationships between natural and man-induced water quality impacts will lead to misdirection of scarce resources. As local stakeholders, we have an interest in the protection and management of local soil and water resources.

Matters of Concern

The undersigned petitioners find that the Little Rock Creek TMDL study report fails to properly account for "natural background" levels as required by the Minnesota Clean Water Legacy Act (CWLA) (MS 114D.15, subdivision 10); as well as, the Natural Water Quality section (7050.0170) of the MN Chapter 7050 rules. "Where background levels exceed applicable standards, the background levels may be used as the standards for controlling the addition of the same pollutants from point or nonpoint source discharges in place of the standards."

The CWLA (MS 114D.15, subdivision 10) states that "*Natural background' means characteristics of the water body resulting from the multiplicity of factors in nature, including climate and ecosystem dynamics, that affect the physical, chemical, or biological conditions in a water body, but does not include measurable and distinguishable pollution that is attributable to human activity or influence.*" This definition of Natural Background was developed and agreed to by the G-40 Stakeholder group that provided substantial input for the Minnesota Clean Water Legacy Act legislation. The G-40 included representatives from state agencies, including the Minnesota Pollution Control Agency (MPCA), Agricultural Groups and Environmental Groups.

The natural background definition clearly indicates non-point sources must be distinguishable and measureable to be given an allocation other than natural background. In addition, natural background levels are not just associated with native ecosystems. Biological ecosystems change

over time (ecosystem dynamics); and therefore, the existing ecosystems, whether agricultural or managed by the Department of Natural Resources (DNR) have their own level of natural background contributions. Measurable and distinguishable evidence that establishes the source of the Load Allocation being attributable to human activity or influence was not provided in this TMDL. It is unreasonable to try to reduce loadings from sources that can't be identified and quantified as to anything other than Mother Nature.

The undersigned petitioners also find that the load allocations established in the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL study report will result in increased impairment of Little Rock Lake. It is not allowable under the Federal Clean Water Act or the Minnesota Clean Water Legacy Act to increase the loading to an already impaired water body. Little Rock Lake is impaired for the bio-accumulative toxin methyl-mercury and for blue-green algae. Both of these impairments will be increased if nitrates are reduced, as is needed to meet the load allocation of the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL study.

Methyl-mercury is primarily produced by the methylation of mercury in wetland conditions. It has been established through past research (Dr. Robert Hudson, U of Illinois) that reducing nitrate levels will increase the rate of methyl-mercury production in water bodies. Therefore, reducing nitrate levels in Little Rock Creek will increase methyl-mercury levels in Little Rock Lake. In addition, it is a well established principle that blue-green algae thrive in nitrogen limiting conditions. The reductions of nitrate nitrogen that will be required by the Little Rock Creek TMDL will magnify the nitrogen limiting condition that already exists in Little Rock Lake; and therefore, increase the magnitude of the existing blue-green impairments in the lake.

In summary, the petitioners ask that the MPCA properly determine the natural background levels of the load allocation for dissolved oxygen, temperature and nitrates as required by the Minnesota Clean Water Legacy Act. In addition, the petitioners ask the MPCA to re-determine the load reductions of nitrate to insure that impairments of methyl-mercury and blue-green algae are not increased in Little Rock Lake.

Proposed Actions

The undersigned petitioners request that MPCA hold a contested case hearing in this matter.

The MPCA must grant a party's petition to hold a contested case hearing if it finds that:

A. There is a material issue of fact in dispute concerning the matter pending before the agency;
B. The agency has the jurisdiction to make a determination on the disputed material issue of fact; and

C. There is a reasonable basis underlying the disputed material issue of fact such that the holding of a contested case hearing would allow the introduction of information that would aid the agency in resolving the disputed facts in making a final decision on the matter. Minn. R. 7000.1900, subpart 1.

Issues to be addressed by contested case hearing:
The undersigned petitioners request that the MPCA address the technical, scientific and legal requirements of the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL under the US Clean Water Act and the Minnesota Clean Water Legacy Act; including the load allocations, quantification of natural background loadings and natural background standards, and insure that load reductions established in this TMDL do not increase water quality impairments in Little Rock Lake.

Witnesses in this matter shall include the undersigned witnesses and other expert witnesses to be named later.

Publications, references and studies to be introduced include available data from US EPA Storet system, US EPA and MPCA Impaired Waters - TMDL protocols and various scientific studies and reports.

The undersigned petitioners estimate that it will require two full days to adequately address these matters.

Request for information
In preparing for contested case, and pursuant to the Minnesota Government Data Practices Act (MS 13.01) the undersigned petitioners request MPCA provide an opportunity at the earliest convenient date to inspect and review the following data connected with the development of the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

1. All documents, final or drafts, regarding scope of work in preparing the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

2. All documents regarding the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report and work plan, including final and draft documents.

3. All technical, scientific, monitoring, laboratory testing data and Quality Control and Quality Assurance protocols, including electronic data (i.e. spreadsheets and data stored in electronic media) compiled or used in the development the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

4. Software utilized to analyze electronic data, including any models used in the development of the load and waste load allocations used to develop the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

5. Any and all documents including staff memorandums, emails or other correspondence relating to the technical, scientific, monitoring, laboratory testing data and Quality

Control and Quality Assurance protocols used to develop the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

6. All correspondence by the Technical Advisory Committee members, as well as, minutes of any meetings regarding the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

In accordance with Minn. Stat. 13.03, Subdivision 3, the petitioners further request that the MPCA designate one or more individuals to explain the meaning of all data that is produced.

We respectfully request that the MPCA to provide the information herein requested at the earliest convenient opportunity. Please contact me at the phone number and address below and the Minnesota Soybean Growers office at 507-388-1635 to make the necessary arrangements.

CONTACT PERSON
JOE PRZYBILLA
8807-210 AVE
ROYALTON MN 56373

Joe Przybilla 320-248-3590
Rosemary Przybilla 320-420-5687

Control and Quality Assurance protocols used to develop the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

6. All correspondence by the Technical Advisory Committee members, as well as, minutes of any meetings regarding the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

In accordance with Minn. Stat. 13.03, Subdivision 3, the petitioners further request that the MPCA designate one or more individuals to explain the meaning of all data that is produced.

We respectfully request that the MPCA to provide the information herein requested at the earliest convenient opportunity. Please contact me at the phone number and address below and the Minnesota Soybean Growers office at 507-388-1635 to make the necessary arrangements.

Peter + JEAN BALASKI
9753 IRIS Rd
LOYALTON, MN 56373

Jean Balaski 3-2-13
Peter Balaski 3-2-13
Darrell [illegible] 3-2-13
Marlene Hopwood 3-2-13
Marlene Hopwood 3-2-13
Jeff Kaeter 3-3-13
Daniel Zimmer 3-3-13
Chad Bazzell 320-630-1096
Guy Hewell 320 630 9456
Gary Funk 320-232-7467
Gary Funk 320 0630-1440
ALSO SIGNATURES ON BACK

Willie Schirmer	320-468-2276
Clara Zimmerman	320-584-5296
[illegible]	320-761-2374
Roy Sahe	612-228-0685

Control and Quality Assurance protocols used to develop the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

6. All correspondence by the Technical Advisory Committee members, as well as, minutes of any meetings regarding the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

In accordance with Minn. Stat. 13.03, Subdivision 3, the petitioners further request that the MPCA designate one or more individuals to explain the meaning of all data that is produced.

We respectfully request that the MPCA to provide the information herein requested at the earliest convenient opportunity. Please contact me at the phone number and address below and the Minnesota Soybean Growers office at 507-388-1635 to make the necessary arrangements.

Dean Zimmerman
21331 Kettle Road
Royalton, MN 56373

Dean Zimmerman

320-630-5318

John Schult 320 630 1708
Donald Hingry 320 290 7194
Bruce Johnson 320-360-5382
Teresa Meerkin 218-770-1038
Thomas Dall 218 924 2469
Leroy Wiese 371 0866
Curt Olcanti 218-838-6994
D F Zerse 218 640 2644
Andrew Legatt 320 584-5741
Andrew Schock 218-270-0053
Bruce Sutter 218-631-3470
Marvin M. Runyon 218 445 5810
Jim Runyon 218-445-5853
ALSO SIGNATURES ON BACK

[illegible] - 218-821-5029
Don Honea 218 738-2269
Arlin Rehbein 218-346-6120
Donald Johnson 218 445-5580
[illegible] 320-760-2170
Tom Dalen 218-445-5645
[illegible] 218-640-7638
James Riepe 218-371-0441
[illegible] 218-371-0771
Wayne [illegible] 218 679-1674
[illegible] 701-367-1131

Control and Quality Assurance protocols used to develop the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

6. All correspondence by the Technical Advisory Committee members, as well as, minutes of any meetings regarding the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

In accordance with Minn. Stat. 13.03, Subdivision 3, the petitioners further request that the MPCA designate one or more individuals to explain the meaning of all data that is produced.

We respectfully request that the MPCA to provide the information herein requested at the earliest convenient opportunity. Please contact me at the phone number and address below and the Minnesota Soybean Growers office at 507-388-1635 to make the necessary arrangements.

Don Kloss
7501 210 AVE
Royalton MN 56373

Don Kloss
320-492-5107

[illegible] 320-232-9044
Alvin Kloss 320 393-2535
Tom [illegible] 320 232-9051
Wendell Drayer 218-385-3991
Nick Schmitz 218-631-3733
Hazel Koehl 320-392-5892
Andy Moerkedik 218-234-4009
Gary Meerman 218-731-1066
Jeff Webb 218-371-0505
Jack Plante 320-632-8055
Chuck Plante 218-829-8059
Elvin Rochell 218-495-4322 5

ALSO SIGNATURES ON BACK

[illegible]	320-290-4948
Keith Lorenz	320 360 4652
[illegible]	218 371 1346
[illegible]	218 371 5967
Steve Dombeck	218 841 9357
Frank Tepley	218 894 2243
Mike Thorson	218 296 1150
Alex Kempenich	218 639 5775
Jack Richter	218 631-3472
Bob Sauer	320-468-6561
Lloyd Hoffman	320-468-2402
Terry Ryglilla	320-468-6156
Richard Korst	320-468-2641
Robert Kempenich	218-631-9271

Control and Quality Assurance protocols used to develop the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

6. All correspondence by the Technical Advisory Committee members, as well as, minutes of any meetings regarding the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

In accordance with Minn. Stat. 13.03, Subdivision 3, the petitioners further request that the MPCA designate one or more individuals to explain the meaning of all data that is produced.

We respectfully request that the MPCA to provide the information herein requested at the earliest convenient opportunity. Please contact me at the phone number and address below and the Minnesota Soybean Growers office at 507-388-1635 to make the necessary arrangements.

Duane Kroll MCT V.P.

Duane Kroll,
on behalf of the MCT Corn Growers Association

MORRISON - CROW WING - TODD
CORN GROWERS ASSOCIATION

8618 200th Avenue
Royalton, MN 56373
320-360-3800

David Kloss
Dale Schall 320-360-1626
Daniel Kloss
Thomas Wick - 320-291-7563
Pam Jedinger
William Paroulek
Keith Hockett
Dent Ohr
Michael Phelps

Control and Quality Assurance protocols used to develop the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

6. All correspondence by the Technical Advisory Committee members, as well as, minutes of any meetings regarding the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

In accordance with Minn. Stat. 13.03, Subdivision 3, the petitioners further request that the MPCA designate one or more individuals to explain the meaning of all data that is produced.

We respectfully request that the MPCA to provide the information herein requested at the earliest convenient opportunity. Please contact me at the phone number and address below and the Minnesota Soybean Growers office at 507-388-1635 to make the necessary arrangements.

Duane Kroll,
on behalf of the MCT Corn Growers Association

MORRISON - CROW WING - TODD CORN GROWERS ASSOCIATION

8618 200th Avenue
Royalton, MN 56373
320-360-3800

Petitioner
Mark J Trout Trout Companies

Gene Buckley	320-584-5911
Holly Buckley	320-584-5911
Roger Lorren	320-584-5370
James Block	320-584-8349
[illegible]	320-584-5078
[illegible]	320 584 5120
[illegible]	360 4467
[illegible]	320-632-4057
[illegible]	320-584-8089
Frank Kasella	320-584-8089
Gloria J. Dingsy	320-584-5657
Arlene Dingsy	320-584-5657
Al Ringstad	320-584-5814
Lynn Dingsy	320-630-8708
[illegible]	320 292-1988
Donna Porter	320-232-5074
Ashley Schwab	320-584-5196
Craig Schwab	320-584-5196
Ewald Gabel	320-393-2282
Kevin Popp	393-2327
[illegible]	393-2327
Mark Schmitt	320-393-2999
Al Schmitt	320-393-2223
[illegible]	320-761-2378
Roger Jensen	320-468-6011
[illegible]	320-468-6011
Paul M. Anor CCA	320-637-1961
James Jaap	320-749-2337
[illegible]	320 749-2045
[illegible]	320-749-2031
[illegible]	320-749-2045
Brian Erickson	320-630-9579
Marc Erickson	320-630-3357
Rob [illegible]	320-267-1059

[illegible]	320-584-5757
Greg Smoyer	320-290-6251
Mary Aschenbrenner	320.393-2617
Richard Aschenbrenner	320 393 2617
Larry [illegible]	320 393-4105
[illegible]	320 584-7472
[illegible]	320 584-5442
Diane Warzecha	320-584-5442
Kurt Warzecha	320-584-5442
Frank Rohrman	320-584-0047
Bob Sorch	320-630-6886
Mike Ludwig	320-468-2509
Roger Dalbeath	320-277-3771

Margaret Leach
Minnesota Pollution Control Agency
7678 College Road, Suite 105
Baxter, MN 56425
218-316-3895
margaret.leach@state.mn.us

RE: Little Rock Creek Dissolved Oxygen, Nitrate, Temperature and Bio-assessment TMDL Study.

Ms. Leach:

The undersigned petitioners include residents, landowners and farmers in and near Brown County Minnesota. We support the long term objective of improving water quality, but are concerned that the proposed Little Rock Creek TMDL fails to achieve this objective. Further, we are concerned that inadequate understanding of the cause and effect relationships between natural and man-induced water quality impacts will lead to misdirection of scarce resources. In addition, as stakeholders in an area that has a drainage ditch which has been designated a trout stream we are concerned that the Little Rock Creek TMDL process could set a precedent in how the TMDL process for JD 10 in Brown County will be handled.

Matters of Concern

The undersigned petitioners disagree with the classification of Little Rock Creek and Bunker Hill Creek as trout streams. There isn't evidence that native species of trout ever reproduced in Little Rock or Bunker Hill Creeks and the effort by the Minnesota Department of Natural Resources (DNR) to introduce a non-native European Brown trout to these creeks and force a change in the ecosystems is inappropriate. In spite of the fact that Brown Trout are not native, there is evidence from past survey work that Brown Trout may survive and reproduce in these creeks. However, the impoundment that was created for waterfowl habitat north of Little Rock Lake clearly helps to warm the waters and lowers the dissolved oxygen levels of the creek waters. Stakeholders, in this and other similar watersheds that are designated as trout streams, should not be burdened by the decision of the DNR to manage a stream for a non-native sport fish. The Minnesota Pollution Control Agency (MPCA) should immediately discontinue the TMDL and change the designated use of these streams to warm water fisheries.

The undersigned petitioners find that the Little Rock Creek TMDL study report fails to properly account for "natural background" levels as required by the Minnesota Clean Water Legacy Act (CWLA) (MS 114D.15, subdivision 10); as well as, the Natural Water Quality section (7050.0170) of the MN Chapter 7050 rules. "Where background levels exceed applicable standards, the background levels may be used as the standards for controlling the addition of the same pollutants from point or nonpoint source discharges in place of the standards."

The CWLA (MS 114D.15, subdivision 10) states that "*Natural background' means characteristics of the water body resulting from the multiplicity of factors in nature, including climate and ecosystem dynamics, that affect the physical, chemical, or biological conditions in a water body, but does not include*

measurable and distinguishable pollution that is attributable to human activity or influence." This definition of Natural Background was developed and agreed to by the G-40 Stakeholder group that provided substantial input for the Minnesota Clean Water Legacy Act legislation. The G-40 included representatives from state agencies, including the Minnesota Pollution Control Agency (MPCA), Agricultural Groups and Environmental Groups.

The natural background definition clearly indicates non-point sources must be distinguishable and measureable to be given an allocation other than natural background. In addition, natural background levels are not just associated with native ecosystems. Biological ecosystems change over time (ecosystem dynamics); and therefore, the existing ecosystems, whether agricultural or managed by the Department of Natural Resources (DNR) have their own level of natural background contributions. Measurable and distinguishable evidence that establishes the source of the Load Allocation being attributable to human activity or influence was not provided in this TMDL. It is unreasonable to try to reduce loadings from sources that can't be identified and quantified as to anything other than Mother Nature.

The undersigned petitioners also find that the load allocations established in the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL study report will result in increased impairment of Little Rock Lake. It is not allowable under the Federal Clean Water Act or the Minnesota Clean Water Legacy Act to increase the loading to an already impaired water body. Little Rock Lake is impaired for the bio-accumulative toxin methyl-mercury and for blue-green algae. Both of these impairments will be increased if nitrates are reduced, as is needed to meet the load allocation of the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL study.

Methyl-mercury is primarily produced by the methylation of mercury in wetland conditions. It has been established through past research (Dr. Robert Hudson, U of Illinois and others) that reducing nitrate levels will increase the rate of methyl-mercury production in water bodies. Therefore, reducing nitrate levels in Little Rock Creek will increase methyl-mercury levels in Little Rock Lake. In addition, it is a well established principle that blue-green algae thrive in nitrogen limiting conditions. The reductions of nitrate nitrogen that will be required by the Little Rock Creek TMDL will magnify the nitrogen limiting condition that already exists in Little Rock Lake; and therefore, increase the magnitude of the existing blue-green impairments in the lake.

In summary, the petitioners ask that the MPCA properly determine the natural background levels of the load allocation for dissolved oxygen, temperature and nitrates as required by the Minnesota Clean Water Legacy Act. In addition, the petitioners ask the MPCA to re-determine the load reductions of nitrate to insure that impairments of methyl-mercury and blue-green algae are not increased in Little Rock Lake.

Proposed Actions

The undersigned petitioners request that MPCA hold a contested case hearing in this matter.

The MPCA must grant a party's petition to hold a contested case hearing if it finds that:

A. There is a material issue of fact in dispute concerning the matter pending before the agency;
B. The agency has the jurisdiction to make a determination on the disputed material issue of fact; and

C. There is a reasonable basis underlying the disputed material issue of fact such that the holding of a contested case hearing would allow the introduction of information that would aid the agency in resolving the disputed facts in making a final decision on the matter. Minn. R. 7000.1900, subpart 1.

Issues to be addressed by contested case hearing:

The undersigned petitioners request that the MPCA address the technical, scientific and legal requirements of the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL under the US Clean Water Act and the Minnesota Clean Water Legacy Act; including the load allocations, quantification of natural background loadings and natural background standards, and insure that load reductions established in this TMDL do not increase water quality impairments in Little Rock Lake.

Witnesses in this matter shall include the undersigned witnesses and other expert witnesses to be named later.

Publications, references and studies to be introduced include available data from US EPA Storet system, US EPA and MPCA Impaired Waters - TMDL protocols and various scientific studies and reports.

The undersigned petitioners estimate that it will require two full days to adequately address these matters.

Request for information

In preparing for contested case, and pursuant to the Minnesota Government Data Practices Act (MS 13.01) the undersigned petitioners request MPCA provide an opportunity at the earliest convenient date to inspect and review the following data connected with the development of the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

1. All documents, final or drafts, regarding scope of work in preparing the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

2. All documents regarding the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report and work plan, including final and draft documents.

3. All technical, scientific, monitoring, laboratory testing data and Quality Control and Quality Assurance protocols, including electronic data (i.e. spreadsheets and data stored in electronic media) compiled or used in the development the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

4. Software utilized to analyze electronic data, including any models used in the development of the load and waste load allocations used to develop the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

5. Any and all documents including staff memorandums, emails or other correspondence relating to the technical, scientific, monitoring, laboratory testing data and Quality Control and Quality Assurance protocols used to develop the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

6. All correspondence by the Technical Advisory Committee members, as well as, minutes of any meetings regarding the Little Rock Creek Dissolved Oxygen, Nitrate and Temperature TMDL report.

In accordance with Minn. Stat. 13.03, Subdivision 3, the petitioners further request that the MPCA designate one or more individuals to explain the meaning of all data that is produced.

We respectfully request that the MPCA to provide the information herein requested at the earliest convenient opportunity. Please contact me at the phone number and address below and Steve Commerford at 507-359-4429 to make the necessary arrangements.

Richard Trebesch
President, Brown County Corn and Soybean Growers Assn
20912 County Rd 8
Sleepy Eye, MN 56085
507-794-6149

Steven Commerford