

STATE OF MINNESOTA  
OFFICE OF ADMINISTRATIVE HEARINGS

In the Matter of the Proposed Rules of the  
Pollution Control Agency for Rule  
Amendments Governing Water Quality  
Standards - River Eutrophication, Total  
Suspended Solids and Minor Corrections  
and Clarifications to Minnesota Rules 7050  
and 7053

**REPORT OF THE  
ADMINISTRATIVE LAW JUDGE**

This matter came before Administrative Law Judge James E. LaFave for two rulemaking hearings on January 8, 2014. The public hearings were held at 9:00 a.m. and 6:00 p.m. in Training Room #2 in the Minnesota Pollution Control Agency's St. Paul office. Additionally, the St. Paul office was linked by video conference to locations in Duluth, Brainerd, Marshall, Rochester and Detroit Lakes.

The Minnesota Pollution Control Agency (Agency) proposes to amend its rules to address river eutrophication and total suspended solids (TSS).<sup>1</sup> In addition the Agency seeks minor revisions of related rules in chapters 7050 and 7053, including updating the Minnesota Ecoregions Map.<sup>2</sup>

The hearing and this Report are part of a larger rulemaking process under the Minnesota Administrative Procedure Act.<sup>3</sup> The Minnesota legislature has designed this process to ensure that state agencies have met all of the requirements that the state has specified for adopting rules.

The hearing was conducted to permit Agency representatives and the Administrative Law Judge to hear public comment regarding the impact of the proposed rules and what changes might be appropriate. Further, the hearing process provides the general public an opportunity to review, discuss and critique the proposed rules.

The Agency must establish that: the proposed rules are necessary and reasonable; that the rules are within the Agency's statutory authority; and any modifications that the agency may have made after the proposed rules were initially published in the *State Register* are within the scope of the matter that was originally announced.<sup>4</sup>

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<sup>1</sup> Hearing Exhibit (HE Ex.) 3, Book 1 at 1 (Statement of Need and Reasonableness – SONAR).

<sup>2</sup> *Id.*

<sup>3</sup> See, Minn. Stat. §§ 14.131 through 14.20.

<sup>4</sup> Minn. Stat. §§ 14.05, 14.131, 14.23 and 14.25.

The Agency panel at the public hearings included Carol Nankivel (Rules Coordinator), Steven Heiskary (Research Scientist III), Philip Monson (Research Scientist II), Will Bouchard (Research Scientist), David Christopherson (MPCA), Mark Tomasek (Supervisor – MPCA) and Jean Coleman (Staff Attorney – MPCA).<sup>5</sup>

Approximately 46 people attended the hearings and signed the hearing register. The proceedings continued until all interested persons, groups or associations had an opportunity to be heard concerning the proposed rules. Seven members of the public made statements or asked questions during the hearings.<sup>6</sup>

After the close of the hearings, the Administrative Law Judge kept the rulemaking record open for another 20 calendar days to permit interested persons and the Agency to submit written comments. Following the initial comment period, the hearing record was open an additional five business days so as to permit interested parties and the Agency an opportunity to reply to earlier-submitted comments.<sup>7</sup> All comments were to be posted on the Agency's River Eutrophication/TSS Water Quality Standards webpage.

On February 7, 2014, the Administrative Law Judge was informed that two comments made within the original 20-day comment period were inadvertently not posted. By Order dated February 11, 2014, the Administrative Law Judge required the comments be posted to the webpage and allowed an additional five business days for interested parties and the Agency to comment on those two specific posts.

On March 13, 2014, the Minnesota Environmental Science and Economic Review Board (MESERB) filed a Motion to Supplement the Administrative Record. On March 18, 2014, the Agency filed a Memorandum Opposing the Motion to Supplement the Administrative Record. Both documents were posted on the MPCA's River Eutrophication/TSS Water Quality Standards webpage. No other comments on the Motion to Supplement the Administrative Record were received. By Order dated March 25, 2014, the Administrative Law Judge re-opened the comment period to the close of business on March 28, 2014. Following the re-opened comment period, reply comments were allowed to be filed until 4:30 p.m. on April 4, 2014.<sup>8</sup>

On March 27, 2014, the Chief Administrative Law Judge granted an extension of time to complete this report until April 28, 2014.<sup>9</sup> On April 28, 2014, the Chief Administrative Law Judge granted an extension of time to complete this report until May 2, 2014.

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<sup>5</sup> Hearing Transcript (9:00 a.m. Hr'g Tr.) 10-12, 9:00 a.m., January 8, 2014.

<sup>6</sup> See, Testimony (Test.) of Michael Schmidt, 9:00 a.m. Hr'g Tr. 44-52; Test. of Randy Neprash, 9:00 a.m. Hr'g Tr. 52-63; Test. of Paul Nelson, 9:00 a.m. Hr'g Tr. 63-68, 158-59; Test. of Tim Sundby, 9:00 a.m. Hr'g Tr. 68-76, 156-57; Test. of Curtis Sparks, 9:00 a.m. Hr'g Tr. 76-88; Test. of Steven Nyhus, 9:00 a.m. Hr'g Tr. 88-95; and Test. of John Hall, 9:00 a.m. Hr'g Tr. 95-156.

<sup>7</sup> See, Minn. Stat. § 14.15, subd. 1.

<sup>8</sup> Order Granting Extension (Mar. 27, 2014).

<sup>9</sup> Minn. Stat. § 14.15, subd. 2.

## SUMMARY OF CONCLUSIONS

The Agency has established that it has the statutory authority to adopt the proposed rules and that the proposed rules are needed and reasonable.

Based upon all the testimony, exhibits, and written comments the Administrative Law Judge makes the following:

### FINDINGS OF FACT

#### I. Background to the Proposed Rules

1. The Agency is the designated Minnesota state agency for implementing the requirements of the federal Clean Water Act (CWA). The CWA requires states to adopt water quality standards (WQS) to protect the beneficial uses of surface waters and groundwater. The rule amendments proposed in this rulemaking follow from the Agency's obligation to review and revise the state's WQS every three years (Triennial Review) as required by the CWA.<sup>10</sup>

2. The Agency's 2008 Triennial Review identified a number of areas of possible amendments to the state of Minnesota's WQS.<sup>11</sup>

3. The amendments addressed in this rulemaking are:

- a. **River Eutrophication** – the adoption of numeric phosphorus variable standards for rivers, streams, Mississippi River pools and Lake Pepin.
- b. **Total Suspended Solids (TSS)** – replace the existing standard for water turbidity with more accurate, region-specific TSS standards.
- c. **Minor “housekeeping” revisions and re-phrasing of supporting rule language** in Minnesota Rules (Minn. R.) chs. 7050 and 7053, including updating the Minnesota Ecoregions Map.<sup>12</sup>

4. The Agency's last Triennial Review began in 2008. The scope of the amendments that are the subject of this rulemaking was developed in collaboration with the United States Environmental Protection Agency (EPA), and upon adoption will be submitted for approval by the EPA Regional Administrator (Region 5) as required by federal regulation.<sup>13</sup>

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<sup>10</sup> HE Ex. 3, Book 1 at 2 (SONAR); see, 33 U.S.C § 1313(c)(1).

<sup>11</sup> *Id.* at 1 (SONAR).

<sup>12</sup> *Id.* at 1 and 2 (SONAR).

<sup>13</sup> *Id.* at 2 (SONAR). See, 40 C.F.R. § 131.5.

## II. Rulemaking Authority

5. The Agency cites both state and federal law as its source of statutory authority for these proposed rules. The CWA, section 303(c)(1), requires states to review and amend their WQS every three years as a condition of receiving a federal delegation to administer the water program. The EPA must approve a state's WQS and any revision to WQS, so as to ensure that those standards meet the requirements of the CWA.<sup>14</sup>

6. State authority for the Agency to adopt water quality standards and to classify waters of the state is found in Minn. Stat. § 115.03, subs 1(b) and 1(c). Those subdivisions provide the Agency with the authority:

(b) 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 necessary.

(c) to establish and alter such reasonable pollution standards for any waters of the state in relation to the public use to which they are or may be put as it shall deem necessary for the purposes of this chapter and, with respect to the pollution of waters of the state, chapter 116.

## III. Procedural Requirements of Chapter 14

### A. Publications

7. On July 28, 2008 and March 2, 2009, the Agency published in the *State Register* a Request for Comments seeking comments on "its planned amendments to the rules governing water quality standards found in Minn. R. chs. 7050 and 7052."<sup>15</sup>

8. On June 11, 2012, the Agency published in the *State Register* a Request for Comments seeking "comments on specific additions to its previously noticed plans to amend Minnesota Rules chapters 7050, 7052 and 7053 governing state water quality. At this time the Agency is seeking two additional amendments of the water quality rules:<sup>16</sup>

- a. "The first additional amendment simply expands the rule chapters that may be affected in this rulemaking. The original Requests only identified Minnesota Rules chapters 7050 and 7052. ... At this time the MPCA is

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<sup>14</sup> 33 U.S.C § 1313(c)(1).

<sup>15</sup> HE Exs. 1-a and 1-b; 33 *State Register* 224-225 (July 28, 2008), 33 *State Register* 1493-1494 (Mar. 2, 2009).

<sup>16</sup> HE Ex. 1-c, 36 *State Register* 1511-1512 (June 11, 2012).

considering amending Minnesota Rules chapter 7053 to address how minimum stream flow relates to phosphorous discharges, and to explain how a Total Suspended Solids standard applies to certain types of discharge.”<sup>17</sup>

- b. “The second additional amendment is MPCA’s intent to amend Minnesota Rules chapter 7050 to change the use classification for specific waters that may support cold water communities (historically considered as trout lakes and trout streams).”<sup>18</sup>

9. By letter dated July 5, 2013, the Agency requested review and approval of its additional notice plan.

10. Administrative Law Judge James E. LaFave issued an Order on July 15, 2013, approving the Additional Notice Plan and Hearing Notice.<sup>19</sup>

11. On September 25, 2013, the Agency requested review and approval of its Notice of Hearing.

12. Administrative Law Judge James E. LaFave issued an Order on October 2, 2013, approving the Notice of Hearing.<sup>20</sup>

13. The Notice of Hearing was signed and dated November 8, 2013, and published in the *State Register* on November 18, 2013.<sup>21</sup>

14. The Agency, on November 18, 2013, sent via electronic mail the Notice of Hearing and proposed rules to all persons and associations who, on the rulemaking mailing list established by Minn. Stat. § 14.14, subd. 1a, indicated that they preferred receiving notices via electronic mail.<sup>22</sup>

15. The Notice of Hearing identified the date and location of the hearing in this matter.<sup>23</sup>

16. At the hearing on January 8, 2014, the Agency filed copies of the following documents as required by Minn. R. 1400.2220:

- a. MPCA’s Request for Comments as published in the *State Register* on July 28, 2008, March 2, 2009 and June 11, 2012;<sup>24</sup>

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<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

<sup>19</sup> HE Ex. 7.

<sup>20</sup> *Id.*

<sup>21</sup> HE Ex. 5-b; *See*, 38 *State Register* 637-674 (Nov. 18, 2013).

<sup>22</sup> HE Ex. 6-a.

<sup>23</sup> HE Ex. 5-a.

<sup>24</sup> HE Exs. 1-a, 1-b, 1-c.

- b. Proposed rules dated September 6, 2013, including the Revisor's approval;<sup>25</sup>
- c. SONAR;<sup>26</sup>
- d. Certificate of Mailing the SONAR to the Legislative Reference Library on November 18, 2013;<sup>27</sup>
- e. Notice of Hearing as mailed, signed and dated on November 8, 2013 and as published in the *State Register* on November 18, 2013;<sup>28</sup>
- f. Certificate of Mailing the Notice of Hearing to the rulemaking mailing list on November 18, 2013, and the Certificate of Accuracy of the Mailing List;<sup>29</sup>
- g. Written comments on the proposed rules that were received by the Agency;<sup>30</sup> and
- h. Certificate of Sending the Notice and the SONAR to legislators and the Legislative Coordinating Commission on November 7, 2013.<sup>31</sup>

17. At the hearing on January 8, 2014, the Agency failed to file Certificates of Mailing to the Additional Notice List for the Notice of Hearing.<sup>32</sup>

## **B. Additional Notice Requirements**

18. Minn. Stat. §§ 14.131 and 14.23 require that an agency include in its SONAR a description of its efforts to provide additional notification to persons or classes of persons who may be affected by the proposed rule; or alternatively, the agency must detail why these notification efforts were not made.

19. Pursuant to the Additional Notice Plan approved by the Office of Administrative Hearings, on November 18, 2013, the Agency:

- a. provided an electronic copy of the Notice of Hearing to interested parties as certified in the MPCA's Certificate of Mailing Notice;
- b. provided an electronic copy of the Notice of Hearing to municipalities as required by Minn. Stat. § 115.44, subd. 7;

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<sup>25</sup> HE Ex. 2.

<sup>26</sup> HE Ex. 3.

<sup>27</sup> HE Ex. 4.

<sup>28</sup> HE Ex. 5.

<sup>29</sup> HE Ex. 6.

<sup>30</sup> HE Ex. 8.

<sup>31</sup> HE Ex. 9-a.

<sup>32</sup> See, HE Ex. 7.

- c. posted the Notice of Hearing with links to the SONAR and proposed rule language on the Agency's public notice website for the term of the public notice comment period;
- d. posted the Notice of Hearing, SONAR and proposed rule language on an Agency webpage established to provide information about the proposed amendments.<sup>33</sup>

## **C. Notice Practice**

### **1. Notice to Stakeholders**

20. On November 18, 2013, the Agency provided a copy of the Notice of Hearing to its official rulemaking list (maintained under Minn. Stat. § 14.14), and to stakeholders identified in its additional notice plan.<sup>34</sup>

21. The hearing on the proposed rules was held on January 8, 2014.<sup>35</sup>

22. There are 51 days between November 18, 2013 and January 8, 2014.

23. The Administrative Law Judge concludes that the Agency fulfilled its responsibility to mail the Notice of Hearing "at least 33 days before the ... start of the hearing."<sup>36</sup>

### **2. Notice to Legislators**

24. On November 7, 2013, the Agency sent a copy of the Notice of Hearing and the SONAR to legislators and the Legislative Coordinating Commission as required by Minn. Stat. § 14.116.<sup>37</sup>

25. Minn. Stat. § 14.116 requires the agency to send a copy of the Notice of Hearing and the SONAR to certain legislators on the same date that it mails its Notice of Hearing to persons on its rulemaking list and pursuant to its additional notice plan.

26. The Administrative Law Judge concludes that the MPCA fulfilled its responsibilities to mail the Notice of Hearing "at least 33 days before the . . . start of the hearing."<sup>38</sup>

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<sup>33</sup> HE Exs. 6a, 6b, 7 and 7a.

<sup>34</sup> HE Ex. 6a and HE Ex. 7a.

<sup>35</sup> HE Ex. 5a.

<sup>36</sup> Minn. R. 1400.2080, subp. 6.

<sup>37</sup> HE Ex. 9-a.

<sup>38</sup> Minn. R. 1400.2080, subp. 6.

### 3. Notice to the Legislative Reference Library

27. On November 18, 2013, the MPCA mailed a copy of the SONAR to the Legislative Reference Library.<sup>39</sup>

28. Minn. Stat. § 14.23 requires the agency to send a copy of the SONAR to the Legislative Reference Library when the Notice of Intent to Adopt is mailed.

29. The Administrative Law Judge concludes that the Agency fulfilled its responsibilities to mail the Notice of Intent to Adopt “at least 33 days before the end of the comment period . . . .”

### 4. Assessment of the Agency’s Notice Practice

30. Minn. Stat. § 14.15, subd. 5, requires an administrative law judge to disregard an error or defect in the proceeding due to an “agency’s failure to satisfy any procedural requirement” if the administrative law judge finds “that the failure did not deprive any person or entity of an opportunity to participate meaningfully in the rulemaking process . . . .”

31. The agency must place into the hearing record “any other document or evidence to show compliance with any other law or rule which the agency is required to follow in adopting this rule.”<sup>40</sup>

32. The Agency did not file at the hearing, during the initial comment or the initial rebuttal period, any document or evidence to show it complied with its obligation to give notice pursuant to the Additional Notice Plan.<sup>41</sup>

33. On March 28, 2014, during the re-opened comment period, the Agency made a supplemental filing of the Certificate of Giving Additional Notice under the Additional Notice Plan.<sup>42</sup> The notice required by the Additional Notice Plan was made on November 18, 2013.<sup>43</sup>

34. The Agency timely complied with the Additional Notice Plan as required by law.

35. The Administrative Law Judge concludes that the Agency’s failure to file evidence that it complied with the Additional Notice Plan during the hearing or the initial comment period did not deprive any person or entity of an opportunity to participate meaningfully in the rulemaking process. For those reasons, the procedural error constituted harmless error under Minn. Stat. § 14.15, subd. 5(1).

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<sup>39</sup> HE Ex. 4.

<sup>40</sup> Minn. R. 1400.2220, subp. 1(K).

<sup>41</sup> See, Minn. Stat. §§ 14.131 and 14.23.

<sup>42</sup> See, HE Ex. 7a.

<sup>43</sup> *Id.*

## D. Impact on Farming Operations

36. Minn. Stat. § 14.111 imposes additional notice requirements when the proposed rules affect farming operations. The statute requires that an agency provide a copy of any such changes to the Commissioner of Agriculture at least 30 days prior to publishing the proposed rules in the *State Register*.

37. The purpose of the notice requirement in Minn. Stat. § 14.111 is to allow for inter-agency discussion of rules in advance of the rules being made available to the public. This notice requirement is fundamental to the rulemaking process. The wholesale failure to afford the Commissioner the pre-publication notice required by the statute is not one that can be easily remedied or waived as harmless error.

38. Following the initial Request for Comments in this matter, the Agency received written comments from the Minnesota Agricultural Water Resource Coalition,<sup>44</sup> the Minnesota Farm Bureau,<sup>45</sup> and the Minnesota Corn Growers Association.<sup>46</sup> The comments from these parties, all of whom are clearly associated with Minnesota agriculture, put the Agency on notice that the proposed rules may affect farming operations.

39. The SONAR states that the amendments relating to eutrophication and TSS may have a limited effect on agricultural practices, because of voluntary programs designed to reduce erosion and runoff.<sup>47</sup>

40. The Administrative Law Judge finds that the comments received from agriculture groups in 2008 and 2009 in addition to the Agency's statement in the SONAR that the proposed amendments "may have a limited effect on agricultural practices" are sufficient to trigger the notice requirements of Minn. Stat. § 14.111.

41. The Agency did not file or offer at the hearing, during the initial comment or initial rebuttal period, any document or evidence to show it complied with its obligation to provide a copy of the rule changes to the Commissioner of Agriculture at least 30 days prior to the publishing of the proposed rules in the *State Register*.

42. On March 27, 2014, during the re-opened comment period, the Minnesota Department of Agriculture made a supplemental filing of a letter from Mathew Wohlman, Assistant Commissioner of Agriculture, stating that the Minnesota Department of Agriculture received notification of the Agency's rulemaking via e-mail through the GovDelivery message service in June of 2013.<sup>48</sup>

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<sup>44</sup> Ex. A-10; E-mail from Warren Formo to PCA, "MinnRule7050" (Sep. 26, 2008, 11:21 a.m.).

<sup>45</sup> Ex. A-21; E-mail from Jeremy Geske to PCA, "MinnRule7050" (Oct. 13, 2008, 8:05 a.m.).

<sup>46</sup> Ex. A-31; E-mail from Riley Maanum to PCA, "MinnRule 7050" (Apr. 20, 2009, 3:28 p.m.).

<sup>47</sup> HE Ex. 3, Book 1 at 20 (SONAR); See, HE Ex. 3, Book 2 at 11 (SONAR).

<sup>48</sup> See, HE Ex. 8-25, Letter from Mathew Wohlman, Assistant Commissioner of Agriculture, to the Honorable James E. LaFave (Mar. 27, 2014).

43. The Minnesota Department of Agriculture had staff assigned to review this rulemaking docket on a regular basis. Additionally, MPCA staff met with assigned representatives of the Commissioner of Agriculture's office on a regular basis to evaluate the impact of rules or regulations that potentially affect agriculture.<sup>49</sup>

44. There are more than 30 days between June of 2013 and November 18, 2013, when the proposed rules were published in the *State Register*.

45. The Administrative Law Judge finds that while the Agency did not provide notice directly to the Commissioner, as required by Minn. Stat. § 14.111, it did provide notice to the Minnesota Department of Agriculture more than 30 days in advance of the date the proposed rules were published in the *State Register*. In addition, the record demonstrates the Agriculture Commissioner's designees monitored the proposed changes to the rules. The Administrative Law Judge concludes that the Agency's failure to notify the Commissioner as required by law did not deprive any person or entity of an opportunity to participate meaningfully in the rulemaking process. For those reasons, the omission constituted harmless error under Minn. Stat. § 14.15, subd. 5 (1).<sup>50</sup>

#### **E. Statutory Requirements for the SONAR**

46. The Administrative Procedure Act obliges an agency adopting rules to address certain factors in its SONAR.<sup>51</sup> Those factors are:

- a. a description of the classes of persons who probably will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule;
- b. the probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues;
- c. a determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule;
- d. a description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule;
- e. the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable

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<sup>49</sup> *Id.*

<sup>50</sup> See *also*, Minn. Stat. § 14.111 ("A rule may not be invalidated for failure to comply with this section if an agency has made a good faith effort to comply").

<sup>51</sup> Minn. Stat. § 14.131.

categories of affected parties, such as separate classes of governmental units, businesses, or individuals;

- f. the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals; and
- g. an assessment of any differences between the proposed rule and existing federal regulations and a specific analysis of the need for and reasonableness of each difference.
- h. an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

## 1. The Agency's Regulatory Analysis

- (a) **A description of the classes of persons who probably will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule.**

47. The proposed statewide water quality standards, which are based on the most up-to-date scientific information, affect and benefit all of the citizens of Minnesota.<sup>52</sup>

48. The main classes of persons who will benefit from these amendments are those who use state waters and persons who are interested in, or rely on, the quality of those waters. This would include any person who uses Minnesota waters for drinking water, recreation, business, hunting, fishing or enjoys the waters for aesthetic purposes. The classes of persons who would benefit from clean water also include shoreland property owners, water-related businesses, resorts, recreational facilities and communities supported by water-related businesses.<sup>53</sup>

49. The classes of persons who will bear the costs of the amendments will be certain businesses and municipalities that must treat their wastewater discharges or stormwater runoff to meet the more stringent standards. The Agency forecasts that the costs of compliance will vary among affected entities depending upon the applicable standard and the nature of the discharges.<sup>54</sup>

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<sup>52</sup> HE Ex. 3, Book 1 at 24 (SONAR).

<sup>53</sup> *Id.*

<sup>54</sup> HE Ex. 3, Book 2 at 106 (SONAR).

**(b) The probable costs to the Agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues.**

50. The Agency expects to incur additional costs to implement the proposed eutrophication and TSS standards. The need for additional staff or monitoring resources, however, is expected to be short-term and can be paid for through available budgets. The Agency expects that these two standards will result in an increase in the number of state waters that are designated “impaired.” The MPCA and other agencies will incur costs to address those impairments.<sup>55</sup>

51. Promulgation of the proposed eutrophication standards will result in additional work for Agency staff responsible for setting and implementing the phosphorus effluent limits. Staff needs, workloads, and overall costs will increase during the first round of permit issuances following adoption of the proposed rules.<sup>56</sup>

52. The Agency’s costs relating to implementing and enforcing the existing turbidity standards are primarily in the area of TMDL development. The Agency expects the cost of TMDL development under the proposed rules to be similar to the cost of TMDL development under the existing turbidity standard, with one exception: the Agency estimates that the proposed TSS standards will create a slight increase in the number of waters listed as newly impaired.<sup>57</sup>

**(c) The determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule.**

53. The Agency asserts there are no less costly or less intrusive methods to achieve the goals of the proposed eutrophication and TSS standards. The Agency concluded that rulemaking was the most direct and efficient method of updating state water quality standards.<sup>58</sup>

**(d) A description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule.**

54. The Agency considered other mechanisms for addressing eutrophication. After reviewing the other possible alternatives, the Agency concluded that because the

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<sup>55</sup> HE Ex. 3, Book 1 at 24.

<sup>56</sup> HE Ex. 3, Book 2 at 106 (SONAR).

<sup>57</sup> HE Ex. 3, Book 3 at 16 (SONAR).

<sup>58</sup> HE Ex. 3, Book 1 at 25 (SONAR).

data collected supports the proposed numeric standards and accompanying narrative, revisions of the Agency's rule was the best option.<sup>59</sup>

55. The MPCA did not consider alternatives to the TSS WQS. The application of WQS is fundamental to the existing program for the protection of Minnesota's water quality. Because there is currently a turbidity WQS, and the amendments are simply an improvement on the existing standard, the MPCA did not consider any other alternatives.<sup>60</sup>

**(e) The probable costs of complying with the proposed rules, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals.**

56. Complying with the proposed eutrophication and TSS WQS will result in costs to regulated entities.<sup>61</sup> Those entities include concentrated animal feeding operations (CAFO), and entities that discharge municipal wastewater, industrial wastewater, and urban stormwater.<sup>62</sup> The Agency projects that the costs for implementing the eutrophication WQS will vary widely. It projects very modest compliance costs for CAFOs and substantial capital, operation and maintenance costs for some large wastewater dischargers.<sup>63</sup>

57. Costs may be incurred by permitted discharges relating to wastewater treatment as more waters are listed as "impaired." The Agency does not expect that the amendments to the existing turbidity standards will impose costs beyond those already associated with impaired waters.<sup>64</sup>

58. The MPCA estimates the cost of reducing total phosphorus from 0.8 to 0.1 mg/L to be:

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<sup>59</sup> HE Ex. 3, Book 2 at 108 (SONAR).

<sup>60</sup> HE Ex. 3, Book 3 at 17 (SONAR).

<sup>61</sup> HE Ex. 3, Book 1 at 26 (SONAR).

<sup>62</sup> HE Ex. 3, Book 2 at 118 (SONAR).

<sup>63</sup> *Id.*

<sup>64</sup> HE Ex. 3, Book 3 at 17 (SONAR).

Table 22. Tier C cost estimates for reducing phosphorus from 0.8 to 0.1 mg/L

**Tier C: Additional Cost Estimates for Reducing Total Phosphorus from 0.8 to 0.1 mg/L  
(in \$ million)**

Design Flow (mgd)	Total Capital Costs (Low)	Total Capital Costs (Avg)	Total Capital Costs (High)	Annual O & M Costs (Low)	Annual O & M Costs (Avg)	Annual O & M Costs (High)
0.2	0.760	1.660	2.600	0.008	0.060	0.110
1.5	1.120	3.530	6.480	0.105	0.210	0.320
5.0	2.460	7.780	16.480	0.145	0.525	0.905
10.0	3.100	11.930	25.750	0.365	0.950	1.535
15.0	3.640	16.680	36.000	0.400	1.255	2.110
20.0	4.280	21.250	44.800	0.905	2.155	3.400
30.0	24.929	38.849	52.770	0.749	2.459	4.170
40.0	33.190	50.795	68.400	1.925	5.042	8.160
75.0	59.840	83.595	107.350	2.174	6.527	10.880
315.0	182.369	310.017	450.865	8.035	20.953	45.695

59. The Agency estimates that the planning level costs for industrial facilities to meet 0.1 mg/L TP effluent limit to be:

**Table 23. Planning Level Cost Estimates for Industrial Facilities to meet 0.1 mg/L TP effluent limit.**

Industry Sector	Estimated Design Flow MGD*	# of Plants in Sector	Capital Costs per Facility (\$ Million)	Annualized Capital Cost per Facility (\$ millions)	Annual O/M per Facility (\$ millions)	Total Annual Cost per Facility (\$ millions)
Ethanol Plants	0 to 0.2 (range)	6 (no TP trading)	0 to 2	0 to .2	0.0 to 0.1	0 to 0.3
Contact Cooling (food processing)	0.55	1	2.5 to 4	0.26 to 0.41	0.02 to 0.12	0.28 to 0.53
Egg Processing Facility	.8	1	3 to 5.5	0.31 to 0.56	0.03 to 0.2	0.34 to 0.76
Dairy Processing	0.14	1	0.7 to 2	0.07 to 0.2	0.02 to 0.1	0.09 to 0.3
Rendering Plant	0.15	1	0.7 to 2	0.07 to 0.2	0.02 to 0.1	0.09 to 0.3

60. The Agency projects that proposed river eutrophication standards will not have a direct economic effect on municipalities with unregulated stormwater or agricultural producers, despite a projected increase in the number of impaired waters.<sup>65</sup>

<sup>65</sup> HE Ex. 3, Book 2 at 116 (SONAR).

61. A number of commentators criticized the Agency's costs estimates.<sup>66</sup> For example, one local official asserted: "The MPCA's cost estimates drastically underestimate the financial impacts of the proposed standards."<sup>67</sup>

62. The city of Worthington estimates the capital costs for meeting a 0.4 mg/L TP limit to be in excess of \$3.5 million for each of its facilities.<sup>68</sup> Further, its studies show that needed improvements may cost \$7.9 million if pilot tests of lower-cost improvements do not demonstrate compliance with the proposed standard.<sup>69</sup>

63. MESERB evaluated the Agency's preliminary cost estimates against a sample of treatment facilities of various sizes on the assumption that proposed standards would be adopted as "end-of-pipe" effluent limits. MESERB believes the Agency's cost estimates are too low by a factor of three.<sup>70</sup>

64. The record indicates that some entities or governmental units will incur substantial costs in complying with the proposed rules.

**(f) The probable costs or consequences of not adopting the proposed rule, including those costs borne by individual categories of affected parties, such as separate classes of governmental units, businesses, or individuals.**

65. All of the proposed amendments are the result of the Agency's Triennial Review of WQS mandated by the CWA. The Triennial Review requires a public examination of the state's water quality standards followed by necessary changes to the state rules. As indicated by the Triennial Review, the consequences of not adopting the proposed rules is that Minnesota's water quality program will not comply with the requirements of the CWA.<sup>71</sup>

66. Maintaining adequate WQS has many other benefits. These benefits include safe drinking water and maintaining the quality of water for recreational activities. Those activities include fishing, swimming, boating, and nature viewing. In addition, those benefits ensure the viability of commercial enterprises and maintain the property values of land around Minnesota's waterways. Failure to adopt the rules may lead to a deterioration of those benefits which could have significant costs.<sup>72</sup>

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<sup>66</sup> See, HE Exs. 8-6, 8-7, 8-10, and 8-15.

<sup>67</sup> HE 8-10, Letter from Linda Holst, City of Worthington, Chief, Water Quality Branch to The Honorable James E. LaFave (Jan. 8, 2014).

<sup>68</sup> *Id.*; it should be noted the MPCA is proposing a 0.1 mg/L TP limit as opposed to the 0.4 mg/L TP limit referenced by the city of Worthington. See, HE Ex. 3, Book 2 at 125-126 (SONAR).

<sup>69</sup> *Id.*

<sup>70</sup> Test. of S. Nyhus, 9:00 a.m. Hr'g Tr. 93-94

<sup>71</sup> HE Ex. 3, Book 1 at 26 (SONAR).

<sup>72</sup> *Id.*

**(g) An assessment of any differences between the proposed rules and existing federal regulation and a specific analysis of the need for and reasonableness of each difference.**

67. It is not possible to provide a comparison of how the proposed amendments differ from federal regulations. The CWA established a program that requires state-specific standards be developed based on federal guidelines and criteria. The state standards will vary depending on state-specific needs. The Agency maintains that the proposed standards are consistent with the intent of the CWA and are reasonable interpretations of the federal guidance. None of the proposed amendments to the WQS have counterparts in the federal regulations.<sup>73</sup>

68. The Agency contacted other governmental entities within EPA Region V and the states that border Minnesota to determine whether they have adopted TSS standards. Additionally, the Agency inquired how those standards compare to the standards Minnesota is proposing in this rulemaking. The Agency surveyed the following states and tribes:

- a. Wisconsin;
- b. Michigan;
- c. Illinois;
- d. Indiana;
- e. Ohio;
- f. Iowa;
- g. North Dakota;
- h. South Dakota;
- i. Fond du Lac; and
- j. Grand Portage.<sup>74</sup>

69. Except for South Dakota, no states or tribes in the region had a TSS WQS. Minnesota's proposed TSS WQS are comparable to South Dakota's standards.<sup>75</sup>

70. The Administrative Law Judge finds that the Agency has met its obligation to assess the differences between the proposed rule and federal regulations and the reasonableness of each difference.

71. The Administrative Law Judge also finds that the Agency has met its special obligations under Minn. Stat. § 116.07, subd. 2(f) to assess the impact of the proposed rule and the approaches taken by neighboring states.

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<sup>73</sup> HE Ex. 3, Book 1 at 26 (SONAR)

<sup>74</sup> HE Ex. 3, Book 3 at 14 (SONAR)

<sup>75</sup> *Id.* at 15.

**(h) Assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.**

72. “Cumulative effect” means the incremental impact of the proposed rule in addition to other rules, regardless of what state or federal agency has adopted the other rules. Cumulative effects can result from individually minor, but collectively significant, rules adopted over a period of time.<sup>76</sup>

73. The proposed rule will not result in any cumulative effect in association with any other state or federal regulations. WQS covering the spectrum of beneficial uses currently exist in state rule as required by the CWA. The CWA requirement for the state to adopt WQS has existed since 1965. The proposed amendments do not extend the impact of existing rules. The proposed amendments merely refine and amend the existing standards and do not add additional sources of regulatory requirements.<sup>77</sup>

74. The Administrative Law Judge finds the Agency has met its obligation to assess the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the proposed rule.

**2. Performance-Based Regulation**

75. The Administrative Procedure Act<sup>78</sup> also requires an agency to describe how it has considered and implemented the legislative policy supporting performance based regulatory systems. A performance based rule is one that emphasizes superior achievement in meeting the agency’s regulatory objectives and maximum flexibility for the regulated party and the agency in meeting those goals.<sup>79</sup>

76. The existing WQS are a performance-based regulatory system. The WQS identify, using the best-available science, the conditions that must exist in Minnesota’s water bodies to fully support each waters’ designated uses. Attaining the designated use is the objective of the WQS. The WQS do not dictate how a regulated party must achieve the designated use or how they operate in order to ensure compliance with the WQS. There are usually many alternatives and options available to meet the WQS and the rules do not dictate or prescribe any single course. The WQS and the proposed amendments allow the sufficient flexibility to the regulated parties in choosing how to achieve the standards.<sup>80</sup>

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<sup>76</sup> Minn. Stat. § 14.131.

<sup>77</sup> HE Ex. 3, Book 1 at 27 (SONAR).

<sup>78</sup> Minn. Stat. § 14.131.

<sup>79</sup> Minn. Stat. § 14.002.

<sup>80</sup> HE Ex. 3, Book 1 at 27 (SONAR).

### **3. Consultation with the Commissioner of Minnesota Management and Budget (MMB)**

77. As required in Minn. Stat. § 14.131, by letter dated January 28, 2013, the Commissioner of MMB responded to a request by the Agency to evaluate the fiscal impact and benefit of the proposed rules on local units of government. MMB noted that the Agency recognized there will be additional costs to those municipalities that treat wastewater discharges or stormwater runoff. MMB projected that in some cases these entities could incur millions of dollars in retrofitting costs depending on the state of technology or how close the facility is to meeting the current water quality standard. MMB went on to note that the Agency will work with affected parties to allow for a phased-in compliance schedule if needed, when the wastewater permit is up for renewal. MMB reviewed the Agency's proposed rules and concluded that: "MPCA has adequately analyzed and presented the potential costs and benefits of the proposed rule changes."<sup>81</sup>

78. The Administrative Law Judge finds that the Agency has met the requirements set forth in Minn. Stat. § 14.131 for assessing the impact of the proposed rules, including consideration and implementation of the legislative policy supporting performance-based regulatory systems, and the fiscal impact on units of local government.

### **4. Cost to Small Businesses and Cities under Minn. Stat. § 14.127**

79. Minn. Stat. § 14.127 requires the Agency to "determine if the cost of complying with a proposed rule in the first year after the rule takes effect will exceed \$25,000 for: (1) any one business that has less than 50 full-time employees; or (2) any one statutory or home rule charter city that has less than ten full-time employees." The Agency must make this determination before the close of the hearing record, and the Administrative Law Judge must review the determination and approve or disapprove it.<sup>82</sup>

80. The Agency believes it is extremely unlikely that the cost of complying with the proposed rule will exceed \$25,000 for any business or any statutory or home rule charter city in the first year after the rule takes effect.<sup>83</sup>

81. The Agency notes, however, if the following series of events occur within the first year after adoption, the \$25,000 threshold may be exceeded. Those events are:

- a. The Agency would have to submit its CWA 303(d) listing of impaired waters to EPA within the year the revised WQS are adopted;
- b. The EPA would have to approve this list within 60 days (historically this approval process takes longer);

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<sup>81</sup> HE Ex. 19 b.

<sup>82</sup> Minn. Stat. § 14.127, subs. 1 and 2.

<sup>83</sup> HE Ex. 3, Book 1 at 28 (SONAR).

- c. A small business or city would have to be due for a NPDES/DSD permit reissuance (either individual or general); and
- d. The permit would have to be issued within that year and would have to impose new effluent limit controls based on the amendments.<sup>84</sup>

82. The Agency considers this scenario extremely unlikely to happen within one year after adoption of the proposed amendments. The Agency also notes that the process that leads to the impaired water listings typically takes more than one year.<sup>85</sup> The Administrative Law Judge agrees that while unlikely, if these events occur, the costs to a city or small business could far exceed \$25,000.

83. The Administrative Law Judge finds that the Agency has made the determinations required by Minn. Stat. § 14.127 and approves those determinations.

## 5. Adoption or Amendment of Local Ordinances

84. Minn. Stat. § 14.128 mandates that the agency must determine if a local government will be required to adopt or amend an ordinance or other regulation to comply with a proposed agency rule. The agency must make this determination before the close of the hearing record, and the Administrative Law Judge must review the determination and approve or disapprove it.<sup>86</sup>

85. The Agency failed to make a determination, prior to the close of the hearing record, as to whether a local unit of government will be required to adopt or amend an ordinance or other regulation in order to comply with the proposed rule.<sup>87</sup>

86. The Administrative Law Judge finds that the Agency did not fulfill its responsibilities under Minn. Stat. § 14.128.

87. Ordinarily, the penalty for omitting this assessment from the rulemaking record is a delayed effective date for the proposed rules; unless the Governor specifically waives the requirement for the analysis and permits the promulgation of the rules notwithstanding the defect.<sup>88</sup>

88. In this case, however, another statutory exception applies. Because the CWA mandates a triennial review and revision of Minnesota's WQS standards,<sup>89</sup> and further requires that Minnesota revise its standards to include any recently-listed

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<sup>84</sup> *Id.*

<sup>85</sup> *Id.*

<sup>86</sup> Minn. Stat. § 14.128, subd. 1. Moreover, a determination that the proposed rules require adoption or amendment of an ordinance may modify the effective date of the rule, subject to some exceptions. Minn. Stat. § 14.128, subds. 2 and 3.

<sup>87</sup> See, Minn. Stat. § 14.128, subd. 1 ("An agency must determine if a local government will be required to adopt or amend an ordinance or other regulation to comply with a proposed agency rule").

<sup>88</sup> See, Minn. Stat. § 14.128, subds. 2 and 3(4).

<sup>89</sup> See, 33 U.S.C. § 1313(c).

pollutants,<sup>90</sup> this rulemaking must occur notwithstanding the defect. The MPCA “has been *directed by law to adopt the rule* or to commence the rulemaking process,” as those terms are used Minn. Stat. § 14.128, subd. 3(2).<sup>91</sup>

89. The federal directive thus triggers an exception to the ordinary protections for local units of governments that are in Chapter 14.<sup>92</sup>

90. In this circumstance, the Administrative Law Judge concludes that the requirements of the CWA oblige a prompt completion of this rulemaking process, notwithstanding the missing analysis.

#### IV. Rulemaking Legal Standards

91. The Administrative Law Judge must make the following inquiries: 1) whether the agency has statutory authority to adopt the rule; 2) whether the rule is unconstitutional or otherwise illegal; 3) whether the agency has complied with the rule adoption procedures; 4) whether the proposed rule grants undue discretion to government officials; 5) whether the rule constitutes an undue delegation of authority to another entity; and 6) whether the proposed language meets the definition of a rule.<sup>93</sup>

92. Under Minn. Stat. § 14.14, subd. 2, and Minn. R. 1400.2100, the agency must establish the need for and reasonableness of a proposed rule by an affirmative presentation of facts. In support of a rule, the agency may rely upon materials developed for the hearing record,<sup>94</sup> “legislative facts” (namely, general and well-established principles that are not related to the specifics of a particular case, but which guide the development of law and policy),<sup>95</sup> and the agency’s interpretation of related statutes.<sup>96</sup>

93. A proposed rule is reasonable if the agency can “explain on what evidence it is relying and how the evidence connects rationally with the agency’s choice of action to be taken.”<sup>97</sup> By contrast, a proposed rule will be deemed arbitrary and capricious where the agency’s choice is based upon whim, devoid of articulated reasons or “represents its will and not its judgment.”<sup>98</sup>

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<sup>90</sup> See, 33 U.S.C. § 1313(c)(2)(B).

<sup>91</sup> See, Minn. Stat. § 14.128, subd. 3(2) (emphasis added).

<sup>92</sup> *Id.*

<sup>93</sup> See, Minn. R. 1400.2100.

<sup>94</sup> See, *Manufactured Housing Institute v. Petterson*, 347 N.W.2d 238, 240 (Minn. 1984); *Minnesota Chamber of Commerce v. Minnesota Pollution Control Agency*, 469 N.W.2d 100, 103 (Minn. Ct. App. 1991).

<sup>95</sup> Compare generally, *United States v. Gould*, 536 F.2d 216, 220 (8th Cir. 1976).

<sup>96</sup> See, *Mammenga v. Agency of Human Services*, 442 N.W.2d 786, 789-92 (Minn. 1989); *Manufactured Housing Institute v. Petterson*, 347 N.W.2d 238, 244 (Minn. 1984).

<sup>97</sup> *Manufactured Hous. Inst.*, 347 N.W.2d at 244.

<sup>98</sup> See, *Mammenga*, 442 N.W.2d at 789; *St. Paul Area Chamber of Commerce v. Minn. Pub. Serv. Comm'n*; 312 Minn. 250, 260-61, 251 N.W.2d 350, 357-58 (1977).

94. An important corollary to these standards is that when proposing new rules an agency is entitled to make choices between different possible regulatory approaches, so long as the alternative that is selected by the agency is a rational one.<sup>99</sup> Thus, while reasonable minds might differ as to whether one or another particular approach represents “the best alternative,” the agency’s selection will be approved if it is one that a rational person could have made.<sup>100</sup>

95. Because the Agency suggested changes to the proposed rule language after the date it was originally published in the *State Register*, it is also necessary for the Administrative Law Judge to determine if this new language is substantially different from that which was originally proposed. The standards to determine whether any changes to proposed rules create a substantially different rule are found in Minn. Stat. § 14.05, subd. 2. The statute specifies that a modification does not make a proposed rule substantially different if:

“the differences are within the scope of the matter announced . . . in the notice of hearing and are in character with the issues raised in that notice;”

the differences “are a logical outgrowth of the contents of the . . . notice of hearing, and the comments submitted in response to the notice;” and

the notice of hearing “provided fair warning that the outcome of that rulemaking proceeding could be the rule in question.”

96. In reaching a determination regarding whether modifications result in a rule that is substantially different, the Administrative Law Judge is to consider:

whether “persons who will be affected by the rule should have understood that the rulemaking proceeding . . . could affect their interests;”

whether the “subject matter of the rule or issues determined by the rule are different from the subject matter or issues contained in the . . . notice of hearing;” and

whether “the effects of the rule differ from the effects of the proposed rule contained in the . . . notice of hearing.”

## **V. Analysis of the Proposed Rule**

97. Several sections of the proposed rule were not opposed by any member of the public and were adequately supported by the SONAR. Accordingly, this Report will not necessarily address each comment or rule part. Rather, the discussion that follows below focuses on those portions of the proposed rules as to which commentators prompted a genuine dispute as to the reasonableness of the Agency’s regulatory choice or that otherwise require closer examination.

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<sup>99</sup> *Peterson v. Minn. Dep’t of Labor & Indus.*, 591 N.W.2d 76, 78 (Minn. Ct. App. 1999).

<sup>100</sup> *Minnesota Chamber of Commerce v. Minnesota Pollution Control Agency*, 469 N.W.2d 100, 103 (Minn. Ct. App. 1991).

98. The Administrative Law Judge finds that the Agency has demonstrated by an affirmative presentation of facts the need for and reasonableness of all rule provisions that are not specifically addressed in this Report.

99. Further, the Administrative Law Judge finds that all provisions that are not specifically addressed in this Report are authorized by statute and that there are no other defects that would bar the adoption of those rules.

100. While many stakeholders took issue with the Agency's regulatory choices, scientific methodology and cost estimates, there was overwhelming support for the MPCA's efforts to match water quality standards with the most-current data.<sup>101</sup>

### **A. Support for the proposed rule**

101. An independent scientific review of Minnesota's proposed nutrient water quality standards for rivers and streams was prepared at the request of the EPA.<sup>102</sup> The EPA routinely utilizes external technical review when evaluating state and tribal water standards to help identify potential scientific issues.<sup>103</sup> The three independent experts reviewed the proposed Agency rule and all three expressed support for the proposal.<sup>104</sup>

102. In addition, the EPA conducted its own independent review of the Agency's proposed rule.<sup>105</sup> The EPA determined that "based on the experts' comments in total and our independent review of the proposal, Region 5's preliminary evaluation is that the technical components of Minnesota's proposed eutrophication standards under peer review for rivers and streams appear to be scientifically defensible."<sup>106</sup>

103. The EPA also conducted a preliminary technical review of Minnesota's proposed TSS rule. Based on the EPA's review of the technical support documents for the TSS rule the EPA believes the criteria scientifically defensible and sufficiently stringent to protect the uses of the waters to which they will be applied.<sup>107</sup>

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<sup>101</sup> See, Test. of M. Schmidt, 9:00 a.m. Hr'g Tr. 45 (MCEA feels that these standards are necessary for protecting Minnesota's waters"); Test of S. Nyhus, 9:00 a.m. Hr'g Tr. 90 ("MESERB supports the MPCA's efforts to address excess nutrients and sediments in rivers and streams"), HE Ex. 8-4 ("[w]e appreciate the efforts of the MPCA to replace turbidity ... with TSS. Ultimately this will be a more satisfactory approach"); HE Ex. 8-5 ("We believe the ... revision is necessary to address numerous problems with application of parameter Turbidity." and "PRMB supports in principal the approach that the TSS standard should be based on aquatic life"); HE Ex. 8-9 ("I support the river criteria for TSS and Eutrophication as presented by MPCA ..."); Ex HE 8-10 ("The City has no quarrel with the 'need' to address excess phosphorous affecting Minnesota surface waters"); HE Ex. 8-27 ("We feel that the proposed water quality standards for the Mississippi River pools and Lake Pepin have been developed through sound scientific methods and adequate peer review").

<sup>102</sup> HE Ex. 8-3.

<sup>103</sup> *Id.*

<sup>104</sup> *Id.*

<sup>105</sup> *Id.*

<sup>106</sup> *Id.* at 2.

<sup>107</sup> HE Ex. 8-11.

104. The Minnesota Department of Natural Resources' (DNR) Mississippi River Team consists of biologists and managers from multiple disciplines in the DNR.<sup>108</sup> The DNR Mississippi River Team believes the TSS standard for the Mississippi River above Lake Pepin is well-grounded in empirical evidence and enjoys the support of the scientific community that studies the Mississippi River.<sup>109</sup> It also supports the proposed nutrient standard of 0.10 mg/L for total phosphorus. The DNR Mississippi River Team asserts that not only would this reduction in phosphorus help achieve the proposed Lake Pepin chlorophyll goal, but that it would also likely improve the health of the Mississippi River by reducing excess duckweed and filamentous algal growth.<sup>110</sup> The DNR Mississippi River team believes the "proposed water quality standards for the Mississippi River pools and Lake Pepin have been developed through sound scientific methods and adequate peer review."<sup>111</sup>

105. Ms. Leslie Everett is an agronomist at the Water Resources Center of the University of Minnesota. She designs and manages programs that address agriculture practices related to water quality and quantity. In that capacity she serves on agency advisory committees, including the long running Lake Pepin and Minnesota River TMDL science and stakeholder advisory committees. Ms. Everett supports the river criteria for TSS and eutrophication as presented by the Agency as well as the methodology used to arrive at those criteria.<sup>112</sup>

#### **B. The use of ecoregions (Minn. R. 7050.0486)**

106. Several stakeholders complained about the Agency's use of ecoregions or how their particular community was categorized under the River Nutrient Region Map.<sup>113</sup>

107. Carver County argued that it should not be listed in the Central Region of the River Nutrient Region Map, but rather included in the Southern region.<sup>114</sup> It suggested the use of the Rosgen Classification System which better accounts for stream slope, stream bed material, entrenchment, width/depth ratios and sinuosity.<sup>115</sup>

108. Scott County likewise challenged the Agency's drawing of the boundary between the Central and Southern Regions in the River Nutrient Map.<sup>116</sup> It argues that imposing the proposed standards on the Lower Minnesota River basin is neither appropriate nor scientifically justifiable.<sup>117</sup>

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<sup>108</sup> HE Ex. 8-27.

<sup>109</sup> *Id.*

<sup>110</sup> *Id.*

<sup>111</sup> *Id.*

<sup>112</sup> HE Ex. 8-9.

<sup>113</sup> See, 9:00 a.m. Hr'g Tr. 63-68; Test. of Paul Nelson, 9:00 a.m. Hr'g Tr. 68-72; Test. of Tim Sundby, 9:00 a.m. Hr'g Tr.; HE Ex. 8-3; HE Ex. 8-4; and HE Ex. 8-12.

<sup>114</sup> Hr'g Tr. 68; Test. of T. Sundby, 9:00 a.m.; HE Ex. 8-2.

<sup>115</sup> *Id.* at 70-71.

<sup>116</sup> Test. of P. Nelson, 9:00 a.m. Hr'g Tr. 63-68; HE Ex. 8-4.

<sup>117</sup> HE Ex. 8-2.

109. The Agency acknowledges that the Rosgen Classification is a good framework for physical management of streams and stream restoration, but asserts that it is not appropriate for setting eutrophication or TSS standards.<sup>118</sup>

110. The Agency's use and development of the River Nutrient Regions was based on ecoregions established by the EPA.<sup>119</sup>

111. Ecoregions were developed by the EPA based on maps of land surface form, soils, potential natural vegetation and land use. The approach grew out of an effort to classify streams for more efficient water quality management.<sup>120</sup>

112. The ecoregion approach is recommended by the EPA as a means for regionalizing nutrient water quality standards.<sup>121</sup> Ecoregions are the framework of choice for developing nutrient criteria pursuant to the EPA's technical guidance.<sup>122</sup>

113. The Agency asserts that based on the River Nutrient Region approach, Carver County and surrounding areas are characterized appropriately.<sup>123</sup>

114. The Agency also claims that based on the River Nutrient Region approach, the tributaries in Scott County were mapped appropriately.<sup>124</sup>

115. The Administrative Law Judge concludes that the EPA's mapping framework, and part 7050.0406, are needed and reasonable.

### **C. Defining rivers and streams (Minn. R. 7050.0150, subp. 4)**

116. Several stakeholders, including the Minnesota Department of Transportation (MnDOT), request that the MPCA define "rivers and streams" in this rulemaking.<sup>125</sup>

117. The Agency notes that Minnesota statutes do not define the term "rivers and streams." Minn. Stat. § 115.01, subd. 22, defines "waters of the state" expansively. The definition includes the terms "stream," "watercourses," "waterways," "drainage systems," and other waters which "flow through or border upon the state or any portion thereof." The inclusion of "rivers" and "streams," which are undefined terms, within the definition of "waters of the state" and in Minnesota statutes and rules indicates they are common terms. Minn. R. 7050.0130, subp. 7, directs the Agency to construe the terms within the context in which they are being used and within current professional usage.

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<sup>118</sup> MPCA Preliminary Response (Jan. 28, 2014).

<sup>119</sup> *Id.* at Attachment II; see, Ex. EU-5.

<sup>120</sup> MPCA Preliminary Response Attachment II (Jan. 28, 2014).

<sup>121</sup> *Id.*; see, Exs. EU 10, 11, 12, 14 and HE Ex. 8-11.

<sup>122</sup> Ex. EU-9.

<sup>123</sup> MPCA Preliminary Response Attachment II (Jan. 28, 2014).

<sup>124</sup> *Id.*

<sup>125</sup> See, HE Ex. 8-14 and HE Ex. 8-15.

The Agency does not believe this rulemaking is the appropriate forum for creating definitions of common terms that may be used in other statutes or rules.<sup>126</sup>

118. The Administrative Law Judge concludes that the proposed rules are not impermissibly vague without the requested definitions and that the Agency's decision to decline the invitation was reasonable.

#### **D. Large rivers and streams versus small rivers and streams**

119. Several stakeholders suggested that the Agency adopt different standards for large and small rivers and streams.<sup>127</sup>

120. The Agency asserts that, based on the data it collected, there is no justification for separate TSS standards for large and small rivers and streams.<sup>128</sup>

121. The Agency made a thorough review of the scientific data on turbidity in river and streams. Its decision to decline the invitation to adopt different TSS standards was not unreasonable.

#### **E. The science underlying the Agency's proposed rule**

122. A majority of the comments challenge the science that provided the basis for the Agency's proposed rule. Some of those comments are addressed below. The Agency did, however, consider and respond to every comment that was submitted.<sup>129</sup> In each case, the Agency's response was reasonable and adequately supported by the record.

123. The Minnesota Center for Environmental Advocacy (MCEA) and MESERB, among others, challenged the reasonableness of the scientific analysis supporting the river eutrophication standards.<sup>130</sup>

124. While MCEA agreed that the three response variables selected by Agency and the use of quantile regression and changepoint were valid, it challenged the Agency's use of midpoints.<sup>131</sup> MCEA claims the use of midpoints "will not protect the beneficial aquatic life in Minnesota rivers from significant adverse impacts due to nutrient pollution."<sup>132</sup>

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<sup>126</sup> MPCA Rebuttal (Feb. 4, 2014).

<sup>127</sup> HE Ex. 8-14; Test. of J. Hall, 9:00 a.m. Hr'g Tr. 130.

<sup>128</sup> MPCA Rebuttal (Feb. 4, 2014); Ex. EU-1 at 74-75.

<sup>129</sup> MESERB objected to MPCA's preliminary responses to the public comments. (See, HE Ex. 8-24 at 4-6, MESERB Rebuttal, February 4, 2014). MESERB challenges the Agency's use of responding to a comment as "declarative" and that no further response was required. MESERB also questioned the Agency's references to the January 8 hearing transcript in response to comments. (See, *id.*) MESERB's objections were considered by the Administrative Law Judge and do not change the analysis.

<sup>130</sup> HE Ex. 8-8; HE Ex. 8-6; and Test. of J. Hall, 9:00 a.m. Hr'g Tr. 95-156.

<sup>131</sup> HE Ex. 8-8.

<sup>132</sup> *Id.* at 5.

125. The Agency counters that development of river eutrophication criteria, including the use of midpoints, complies with the CWA's interim goal. The CWA provides that "whenever attainable, [a state should develop] an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the waters."<sup>133</sup> The MPCA asserts that the goal does not require that all waters be in pristine condition and, therefore the use of midpoints is justified.<sup>134</sup>

126. MESERB challenged the validity of the changepoint and quantile regression analysis.<sup>135</sup> It specifically requested that the biochemical oxygen demand (BOD) and dissolved oxygen (DO) flux be removed as response variables. They argue that the use of BOD and DO as response variables render the proposed standards subject to "false positives" due to factors that are unrelated to the excess nutrients.<sup>136</sup> MESERB argues that the problem with BOD is that the test replicates conditions that do not exist in nature.<sup>137</sup> Likewise, it maintains that DO flux is subject to confounding factors unrelated to excess nutrients such that it does not make an appropriate response variable.<sup>138</sup>

127. In direct response to the MESERB's testimony regarding the relationship between biological responses and DO flux, the Agency undertook additional analysis. The additional analysis confirmed the negative impact of increased DO flux in biological communities.<sup>139</sup>

128. The Agency maintains that throughout the analysis, the effects of covarying factors were identified and addressed using several approaches to ensure that the relationship between biological endpoints, nutrients, and related stressors were understood.<sup>140</sup> The analysis revealed a basis for linking BOD and chlorophyll for TMDL and NPDES permits.<sup>141</sup>

129. The Agency chose river eutrophication and TSS standards that reflect available science and contemporary practice. The proposed standards are needed and reasonable.

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<sup>133</sup> 33 U.S.C. § 1251(a)(2).

<sup>134</sup> MPCA Preliminary Response at 5 (Jan. 28, 2014).

<sup>135</sup> HE Ex. 8-6; Test. of J. Hall, 9:00 a.m. Hr'g Tr. 95-156.

<sup>136</sup> HE Ex. 8-6 at 7; Test. of J. Hall 9:00 a.m. Hr'g Tr. 92,

<sup>137</sup> HE Ex. 8-6 at 8.

<sup>138</sup> *Id.* at 10.

<sup>139</sup> See, MPCA Preliminary Response, Attachment IV (Jan. 28, 2014); MPCA Preliminary Response at 6 (Jan. 28, 2014).

<sup>140</sup> HE Ex. 3, Book 2 (SONAR); Ex. EU-4.

<sup>141</sup> MPCA Rebuttal at 2-3 (Apr. 3, 2014).

## F. Additional actions urged by stakeholders and the Agency modifications

130. There were other comments that addressed specific provisions of the rule. The Agency considered them all and adopted the changes listed below. The Agency rejected most of the proposed revisions to the rule. In each instance, the Agency's rationale in declining to make the proposed change was well grounded in the record and was reasonable.

131. The Agency, consistent with input received from stakeholders, intends to make the following changes to the rule as approved by the Revisor's office on September 6, 2013:

The proposed definition of "River nutrient region" in Minn. R. 7050.0150, subp. 4 should be revised to read:

**Subp. 4. W.** "River nutrient region" means the geographic basis for regionalizing the river eutrophication criteria as described in Heiskary, S. and K. Parson, *Regionalization of Minnesota's Rivers for Application of River Nutrient Criteria*, Minnesota Pollution Control Agency (2010 2013), which is incorporated by reference. The document is not subject to frequent change and is available through the Minitex interlibrary loan system.

Minn. R. 7050.0150, subp. 4 should be revised to read:

**Subp. 4 H.** "Eutrophication Standard," means the combination of indicators of enrichment and indicators of response as described in subpart 5. The indicators upon which the eutrophication standard for specific water bodies are based are as provided under subparts 5a to 5c.

132. The Agency states that these changes do not result in a substantially different rule, and are being made to comply with federal and state law or are supported by the views submitted to the Agency.

133. The Agency's action in revising the text is needed and reasonable and would not be a substantial change from the rule as originally proposed.

## G. Recommended determination of the Administrative Law Judge regarding the proposed rule

134. The proposed rule presents two major changes to the state of Minnesota WQS. First, the rule introduces numeric phosphorus variable standards for rivers, streams, Mississippi River pools and Lake Pepin. Second, it replaces the existing standard for water turbidity and replaces it with more scientifically accurate, region-specific TSS standards. When introducing a new, science-based approach, it is inevitable that there will be disagreement between people about how to structure and

implement such a rule. Here, reasonable minds can, and do, disagree as to the most effective water quality standards.

135. Commentators provided compelling evidence and testimony challenging the underlying basis for the rule as well as the implementation of the River Nutrient Region Map.<sup>142</sup> The duty of the Administrative Law Judge, however, is not to evaluate the relative merits of the conflicting scientific evidence.

136. The Agency's proposed rule was independently peer reviewed by three different experts and the scientific underpinnings for the proposed rule were found to be defensible. The EPA evaluated the technical components of the proposed eutrophication rule and found them to be scientifically defensible. The EPA also evaluated the technical basis for the TSS rule and found that to be scientifically defensible as well. The DNR Mississippi River Team endorsed the scientific methods employed by the Agency. Finally, an agronomist from the University of Minnesota supported the purpose and methodology of the proposed rules. The opinions articulated by these independent parties, knowledgeable in the field, demonstrate the reasonableness of the Agency's proposed rule.

137. As noted above, the Agency is legally entitled to make choices between possible approaches as long as its choice is rational. It is not the role of the Administrative Law Judge to determine which policy is "best" or to substitute his judgment for that of the Agency, for that would invade the policy making discretion of the Agency. The question is whether the choice made by the Agency is one that a rational person could have made.<sup>143</sup>

138. The Administrative Law Judge concludes the Agency has shown there is a rational basis for the proposed rule. In compliance with Minnesota law the Agency considered the advice of members of the public, businesses, and other organizations. As described in the SONAR, the MPCA engaged in an extensive review process. The process afforded significant opportunities for input from members of the public, organizations, businesses and others.

139. The Agency's SONAR and post-hearing submissions provide an adequate explanation of the need for and reasonableness of the proposed rule and the rule falls within the broad authority the legislature has given to the Agency to create the proposed rule. The Administrative Law Judge concludes that in accordance with applicable case law,<sup>144</sup> the Agency has provided ample explanation of the facts on which it is relying and how those facts connect rationally with the approach it has taken in creating the proposed rule.

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<sup>142</sup> In particular MESERB, MCEA and Scott County all made strong presentations. The input from all the commentators was greatly appreciated.

<sup>143</sup> *Federal Sec. Adm'r v. Quaker Oat Co.*, 318 U.S. 218, 233 (1943).

<sup>144</sup> *Manufactured Hous. Inst. V. Pettersen*, 347 N.W.2d 238, 244 (1984).

140. Accordingly, the Administrative Law Judge finds that the Agency has demonstrated: i) that the proposed rule is needed and reasonable, ii) that there are no other impediments to preclude its adoption, and iii) that there are no defects found in the rule as proposed.

Based upon the Findings of Fact and the contents of the rulemaking record, the Administrative Law Judge makes the following:

### **CONCLUSIONS OF LAW**

1. The Agency has demonstrated its statutory authority to adopt the proposed rules.
2. The Notice of Hearing complied with Minn. R. 1400.2080, subp. 5.
3. The Agency gave notice to interested persons in this matter.
4. The Agency has fulfilled its additional notice requirements.
5. Except as noted in Finding 86, the Agency has fulfilled the procedural requirements of Minn. Stat. §§ 14.05, subd. 1, 14.15, subd. 3, and 14.50 (i) and (ii).
6. Except as noted in Findings 35, 45 and 86, the Agency has fulfilled the procedural requirements of Minn. Stat. § 14.14 and all other procedural requirements of law or rule. The Administrative Law Judge concludes that the cited omissions are harmless errors under Minn. Stat. § 14.14, subd. 5.
7. The Agency has demonstrated the need for and reasonableness of the proposed rules by an affirmative presentation of facts in the record within the meaning of Minn. Stat. §§ 14.14 and 14.50.
8. The modification to the proposed rules suggested by the Agency after publication of the proposed rules in the *State Register* are not substantially different from the proposed rules as published in the *State Register* within the meaning of Minn. Stat. §§ 14.05, subd. 2, and 14.15, subd. 3.
9. As part of the public comment process, a number of stakeholders urged the Agency to adopt other revisions to Part 7050 or Part 7053. In each instance, the Agency's rationale in declining to make the requested revisions to its rules was well grounded in this record and reasonable.
10. A finding or conclusion of need and reasonableness with regard to any particular rule subsection does not preclude and should not discourage the Agency from further modification of the proposed rules based upon this Report and an examination of the public comments, provided that the rule finally adopted is based upon facts appearing in this rule hearing record.

Based upon the foregoing Conclusions, the Administrative Law Judge makes the following:

### **RECOMMENDATION**

IT IS HEREBY RECOMMENDED that the proposed rules be adopted.

Dated: May 2, 2014

s/James E. LaFave  
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JAMES E. LAFAVE  
Administrative Law Judge

Reported: Kirby A. Kennedy & Associates

Two Volumes

### **NOTICE**

This Report must be available for review to all affected individuals upon request for at least five working days before the agency takes any further action on the rules. The agency may then adopt the final rules or modify or withdraw its proposed rule. If the agency makes any changes in the rule, it must submit the rule to the Chief Administrative Law Judge for a review of the changes prior to final adoption. Upon adoption of a final rule, the agency must submit a copy of the Order Adopting Rules to the Chief Administrative Law Judge. After the rule's adoption, the OAH will file certified copies of the rules with the Secretary of State. At that time, the agency must give notice to all persons who requested to be informed when the rule is adopted and filed with the Secretary of State.