

STATEMENT OF NEED AND REASONABLENESS

In the Matter of Proposed Additions To Minnesota Rules Chapter 7050, Relating to the Classification and Standards for Waters of the State

Proposed Additions Required By
Minnesota Session Law 2003, Chapter 128, Article 1, Section 156
As Amended By
Minnesota Session Law 2005,
First Special Session, Chapter 1, Article 2, Section 151

May 2006

Contents

		<u>Page</u>
List	of Acronyms and Abbreviations	iii
т	INTRODUCTION	1
I.	INTRODUCTION	
	A. Scope	
	B. Minn. R. ch. 7050	
	C. Statement of Need and Reasonableness	2
II.	BACKGROUND	2
	A. Beneficial Uses and Water Quality Standards	2
	B. Class 2 Water Quality Standards	4
	1. Introduction	4
	2. Numeric standards for protection of aquatic life	5
	3. Numeric standard for protection of recreation	
	C. Use Classes 1 and 3-7	
	D. How Water Quality Standards Are Used	8
	E. Assessment of Water Quality Condition and TMDLs	8
	F. Assessment Factor Rulemaking	
	G. Triennial Review and Clean Water Act	
III.	PUBLIC PARTICIPATION	10
	A. Introduction	
	B. Meetings with Interested Parties	
	C. Notice to Solicit Outside Opinion	
	D. Public Informational Meetings	11
	E. Agency Board and Rule Adoption and Variances Committee	
	F. Notification of Governor's Office	12
	G. Agency Water Quality Standards Revision Web page	
	H. Advisory Committee Not Needed	13
	I. Response to Comments	
TT 7	•	
IV.	AGENCY'S STATUTORY AUTHORITY	13
V.	NEED FOR PROPOSED RULE AMENDMENTS	14
	A. Introduction	14
	B. Required Definitions	15
	1. Minn. R. 7050.0150, Subp. 4, Item A, Definitions of "Altered Materially,"	
	"Material Increase," "Material Manner," "Seriously Impaired" and	
	"Significant Increase"	15
	2. Minn. R. 7050.0150, Subp. 4, Item I, Definition of "Normal Fishery" and	
	"Normally Present"	15
	C. Determination of Impaired Waters	
	D. Petition by Outside Party to Review Use Attainability	
	E. Consideration of Temperature and Hydraulic Residence Time	
	F. Conclusions	

VI.	REASONABLENESS OF THE PROPOSED RULE AMENDMENTS	1.0
	AS A WHOLE	19
VII.	REASONABLENESS OF PROPOSED AMENDMENTS, REQUIRED	
	INFORMATION	
	A. Introduction	19
	B. Classes of Persons Affected by the Proposed Rule Amendments, Including	
	those Classes that will Bear the Costs and those that will Benefit	19
	C. Estimate of the Probable Costs to the Agency and other Agencies of	
	Implementing and Enforcing the Rule Amendments, and any Anticipated	
	Effect on State Revenues	20
	D. Determination of Whether there are Less Costly or Less Intrusive Methods	
	for Achieving the Rule Amendment's Purpose	20
	E. Describe any Alternative Methods for Achieving the Purpose of the	
	Proposed Rule Amendments that the Agency Seriously Considered and the	•
	Reasons Why They were Rejected in Favor of the Proposed Amendments	20
	F. Estimate of the Probable Costs of Complying with the Proposed Rule	•
	Amendments, Including Costs Borne by Categories of Affected parties	21
	G. Estimate of the Probable Costs of Not Adopting the Proposed Rule	2.1
	Amendments, Including Costs Borne by Categories of Affected parties	21
	H. Differences between the Proposed Rule and Existing Federal Regulations	2.1
	and the Need for and Reasonableness of Each Difference	21
	I. Consideration and Implementation of the Legislative Policy Under Minn.	0.1
	Stat. §§ 14.002 and 14.131	
	J. Additional Notification of the Public Under Minn. Stat. §§ 14.131 and 14.23	22
	K. Consultation with the Commissioner of Finance Regarding Fiscal Impacts	2.4
	on Local Governments	24
	L. Agency Determination Regarding Whether Cost of Complying with the	
	Proposed Rule in the First Year After the Rule Takes Effect Will Exceed \$25,000	24
	Exceed \$25,000	24
VIII.	REASONABLENESS OF PROPOSED RULE AMENDMENTS	25
	A. Introduction and MESERB Comments	25
	B. Definitions	26
	C. Determination of an Impaired Condition, Beneficial Uses and Water	
	Quality Standards	27
	D. Petition for Review of Existing Beneficial Use	28
	E. Consideration of Temperature and Hydraulic Residence Time	
	F. Conclusions	32
IX.	CONSIDERATION OF ECONOMIC FACTORS	30
IA.	CONSIDERATION OF ECONOMIC PACTORS	32
X.	IMPACT ON AGRICULTURE AND OTHER REQUIRED INFORMATION	33
XI.	LIST OF WITNESSES AND EXHIBITS	33
	A. Witnesses	
	B. Exhibits	
VII	CONCLUSION	3/

LIST OF ACRONYMS AND ABBREVIATIONS

Agency	Minnesota Pollution Control Agency
CFR	Code of Federal Regulations
CGMC	Coalition of Greater Minnesota Cities
ch.	Chapter
CWA	Clean Water Act
EPA	U.S. Environmental Protection Agency
MCEA	Minnesota Center for Environmental Advocacy
MDA	Minnesota Department of Agriculture
MDH	Minnesota Department of Health
MDNR	Minnesota Department of Natural Resources
MESERB	Minnesota Environmental Science and Economic Review Board
mg/kg	milligram per kilogram
MPCA	Minnesota Pollution Control Agency
Minn. R.	Minnesota Rules part
Minn. R. ch.	Minnesota Rules chapter
Minn. Stat. ch.	Minnesota Statutes chapter
NPDES	National pollutant discharge elimination system
POTW	Publicly-owned treatment works
ppm	parts per million
§	Section
SONAR	Statement of Need and Reasonableness
SR	State Register
Stat.	Statute
STORET	EPA water quality data storage and retrieval system
TMDL	Total Maximum Daily Load
UAA	Use attainability analysis

I. INTRODUCTION

A. SCOPE

The Minnesota Pollution Control Agency (Agency) is proposing to amend Minn. R. ch. 7050 to comply with the requirements in Minn. laws 2003 ch. 128, art. 1, § 156, as amended by Minn. Laws 2005 ch. 1, art. 2, § 151. The 2005 amendment extended the deadline for the Agency to adopt the required amendments from January 1, 2006, to October 1, 2006, but did not change the required additions.

The amendments the Agency is proposing to comply with the Session Law were initially part of a much larger package of proposed amendments to Minn. R. ch. 7050. The delay in completing the requirements for promulgation of the larger package raised the possibility that the Agency might miss the October 1, 2006, deadline for just the part pertaining to the Session Law. The Agency decided to separate the amendments required by the Session Law from the larger package and proceed with the rulemaking for the Session Law requirements independently. Therefore, this Statement of Need and Reasonableness (SONAR) and proposed rulemaking pertain only to the amendments required by the Session Law. The larger package of proposed rule amendments is proceeding concurrently.

Minnesota Laws 2003 ch. 128, art. 1, §156 was part of the appropriations bill for funding state environment, natural resources, agriculture and other governmental programs. This section of the Session Law is called the "Water Quality Assessment Process" (Exhibit 2). The 2005 amendment is Exhibit 3.

This legislation was promoted by the Coalition of Greater Minnesota Cities (CGMC) and others in response to rulemaking completed by the Agency in 2003 (Exhibits 8 and 17). That rulemaking added detailed assessment factors (parameters) used to interpret three longstanding narrative standards (see Sections II.F and VIII.A [all references to "Sections" refer to this SONAR]).

B. MINN. R. CH. 7050

The current Minn. R. ch. 7050 contains statewide provisions that protect Minnesota's surface and ground water resources from pollution. The major provisions in this rule include:

- A classification system of designated beneficial uses for both surface and ground waters (e.g., drinking water, aquatic life and recreation, etc.), and a listing of specifically classified waterbodies.
- Numeric and narrative water quality standards that protect the beneficial uses.
- Nondegradation provisions.
- Provisions for the protection of wetlands.
- Methods for the determination of site-specific criteria for toxic pollutants.
- Treatment requirements and effluent limits for discharges of municipal, industrial and other wastewater.

- Provisions pertaining to aquaculture and feedlot activities.
- Other provisions related to the protection of surface and ground water from point and nonpoint source pollution.

C STATEMENT OF NEED AND REASONABLENESS

The Administrative Procedures Act (Minn. Stat. ch. 14) requires the agency to address certain questions and issues in rulemaking that are discussed in this SONAR, which is Exhibit 1. The proposed additions to the rule language are shown in Exhibit 4. In this rulemaking the Agency is proposing additions to Minn. R. 7050.0150, and the addition of a new subpart, Minn. R. 7050.0405.

This SONAR contains the Agency's affirmative presentation of facts on the need for and reasonableness of the proposed rule amendments. It also addresses all the statutory requirements associated with proposed administrative rules. The proposed additions are discussed in the "Need" section and again in the "Reasonableness" sections.

Documents pertinent to the proposed amendments are cited throughout the SONAR as Exhibits 1-27, which are listed in Section XI.

This SONAR can be made available in other formats, including Braille, large print and audio tape. TTY users may call the Agency teletypewriter at 651-282-5332 or 800-657-3864. The Agency will make the *State Register* notice, the SONAR and the proposed rule available during the public comment period on the MPCA Public Notices Web site: http://www.pca.state.mn.us/news/data/index.cfm?PN=1

References to Minn. R. ch. 7050 throughout the SONAR are to the **existing**¹ rules unless noted otherwise.

II. BACKGROUND

A. BENEFICIAL USES AND WATER QUALITY STANDARDS [background]

The term "water quality standards" is commonly used in both a broad and narrow sense. Broadly speaking, water quality standards include all the legal requirements in water quality rules, including minimum wastewater treatment requirements and effluent limits for point source dischargers, as well as numeric and narrative water quality standards that apply to surface and ground waters. In the more narrow sense, water quality standards are restricted to the latter (i.e., the beneficial uses and specific numeric and narrative water quality standards that define acceptable conditions for the protection of the uses). Nondegradation provisions are included in the more narrow scope. The term "water quality standards" is used in the more narrow sense throughout this SONAR.

¹ Throughout the SONAR, some words or phrases are in **bold** for emphasis.

Water quality standards apply to all waters of the state. The term "waters of the state" is defined in Minn. Stat. § 115.01. The definition is very inclusive. Waters of the state includes ground water and all types of surface waters, both natural and man-made, such as lakes, reservoirs, rivers, streams, wetlands, ponds and ditches. The major type of waterbodies not included in the definition are man-made waterbodies created specifically as part of a treatment system. Water quality standards in the narrow sense are often called "ambient" standards, because they apply in the "surrounding" water. It is important to distinguish between ambient water quality standards and effluent limits. Effluent limits are specified in the discharger's NPDES³ or State Disposal System permit, and they define the allowable concentrations and mass (e.g., kilograms per day) of pollutants that can be discharged to the receiving stream. Additional information on water quality standards can be found at this Web site:

http://www.pca.state.mn.us/water/standards/index.html).

Water quality standards protect the uses we make of our surface and ground water resources, such as drinking and recreation. Each state and authorized Indian tribe assigns beneficial uses to their water resources and then develops water quality standards to protect those uses. In Minnesota all ground water is protected for just one use, as an actual or potential source of drinking water (Class 1). Minnesota has identified seven beneficial uses associated with surface waters. These uses are designated as Class 1 through Class 7, and they are described in Minn. R. 7050.0200. The use classes are listed below. The numbers 1 – 7 do not imply a priority rank to the use classes.

Use Class	Beneficial Use
Class 1	Drinking water
Class 2	Aquatic life and recreation
Class 3	Industrial use and cooling
Class 4A	Agricultural use, irrigation
Class 4B	Agricultural use, livestock and wildlife watering
Class 5	Aesthetics and navigation
Class 6	Other uses
Class 7	Limited resource value waters (not fully protected for aquatic life due to
	lack of water, lack of habitat or extensive physical alterations)

All surface waters are protected for aquatic life and recreation (Class 2), unless the waterbody has been individually assessed and re-classified, through rulemaking, as a limited resource value water (Class 7). Both Class 2 and Class 7 waters (i.e., all surface waters of the state) are also designated Class 3, 4A, 4B, 5 and 6, and are protected for the associated beneficial uses, as listed above (Minn. R. 7050.0400 to 7050.0470).

Minnesota R. 7050.0470 is a listing, by major watershed, of individual waters and their associated use classifications. Only waters that have some sort of "special" use classification are listed in Minn. R. 7050.0470. For example, individually listed are trout waters, surface waters

² Existing Minn. R. 7050.0130, item A.

³ NPDES means National Pollutant Discharge Elimination System

protected for drinking, outstanding resource value waters, and limited resource value waters. All waters **not listed** in Minn. R. 7050.0470 are protected for aquatic life and recreation (Class 2), and Classes 3, 4A, 4B, 5 and 6 (Minn. R. 7050.0425 and 7050.0430). The beneficial use most pertinent to this rulemaking is Class 2, aquatic life and recreation.

A numeric water quality standard is the concentration of a pollutant in water, associated with a specific beneficial use, which protects that use. Numeric standards are contained in both Minn. R. ch. 7050 and ch. 7052. The former rule applies state-wide and the latter applies only to the waters in the Lake Superior basin.

A narrative water quality standard is a descriptive statement that prohibits unacceptable conditions in or upon the water. For example, a narrative standard that states: "there shall be no material increase in undesirable slime growths or aquatic plants, including algae..." can be the basis for limiting the influx of excess nutrients into waterbodies that will cause undesirable algae growth. Both narrative and numeric water quality standards are the fundamental benchmarks used to assess the quality of all surface waters. In general, if numeric and narrative water quality standards are met, the associated beneficial uses will be protected. This fundamental association – beneficial use and standard – is an important concept in this rulemaking.

B. CLASS 2 WATER QUALITY STANDARDS [background]

1. <u>Introduction</u> [background]

As mentioned, the aquatic life and recreation (Class 2) uses and the associated narrative and numeric standards are most relevant to this rulemaking.

Protection of aquatic life means maintaining water quality conditions suitable to sustain a healthy, viable aquatic community; and maintaining fish that are safe for people and wildlife to eat. A game fishery or any fish community for that matter is not a necessary component of a healthy aquatic community. Many unpolluted Class 2 waters such as wetlands do not support fish. Recreation means all types of water-related recreation, including canoeing, boating, water skiing, and swimming. Swimming in the traditional sense may not be suitable or desirable in some Class 2 waters, but all Class 2 waters are protected for this use, where usable.

Class 2 waters are further divided into the following subclasses:

- Class 2A, cold water fisheries such as trout and salmon; also protected for drinking
- Class 2Bd, warm and cool water fisheries; also protected for drinking
- Class 2B, warm and cool water fisheries
- Class 2C, indigenous community of fish and other aquatic organisms
- Class 2D, wetlands

_

⁴ Minn. R. pt. 7050.0150, subp. 3.

2. Numeric Standards for Protection of Aquatic Life [background]

Class 2 aquatic life standards for toxic substances have three parts, as follows:

<u>Chronic standard</u> – concentration of a pollutant that will have no or very slight effects over long-term exposure.

<u>Maximum standard</u> – concentration of a pollutant that will result in the death of a few (1 to 10 percent) of the individuals in a sensitive population; used to prevent short-term spikes in concentrations.

<u>Final Acute Value</u> – concentration of a pollutant that will result in the death of about half of the individuals in a sensitive population; used to prevent acutely toxic conditions in effluents and mixing zones.

Class 2 **chronic** standards for toxic pollutants are identified by the basis for the standard, which is always one of the following:

- Toxicity-based. The standard protects the aquatic community from direct toxic effects of the substance.
- Human health-based. The standard protects humans that eat sport-caught fish, and where designated, use the same surface water as a source of drinking water.
- Wildlife-based. The standard protects wildlife that eat aquatic organisms, such as mink, otters and loons (currently the only wildlife-based standards are in Minn. R. ch. 7052).

The Agency typically calculates a toxicity-based and a human health-based chronic criterion for each pollutant, and the lower of the two becomes the applicable standard. The basis for each adopted standard is noted in Minn. R. 7050.0222 by a "Tox" or "HH" notation. Calculation of a wildlife-based criterion is not considered necessary for most pollutants. That is, the "Tox" or "HH" criteria will be protective of wildlife, except possibly when the pollutant is very bioaccumulative. In Minn. R. ch. 7050, only the lower of the Tox or HH criteria is adopted, and only that value appears in the rule. In Minn. R. ch 7052, all the calculated criteria (toxicity, human health and wildlife-based) appear in the rule, but the lowest is designated as the applicable standard (Minn. R. 7052.0100).

3. Numeric Standard for Protection of Recreation [background]

The recreation "half" of the aquatic life and **recreation** beneficial use is the counterpart for the swimmable "half" of the Clean Water Act goal of achieving "fishable/swimmable" waters where attainable (CWA, § 101(a)(2)). Just as the term "fishable" is a surrogate for protection of the entire aquatic community, not just fish, the term "swimmable" is a surrogate term for any form of swimming-like recreation.

The current fecal coliform bacteria standard is the only numeric standard directly associated with the protection of swimming. The risk of individuals getting sick when exposed to water contaminated with fecal bacteria depends on the type of recreational activity. For this purpose, recreation in or on the water is divided into two types:

- 1. <u>Primary body contact</u> any type of water recreation during which the accidental ingestion of a small amount of water is **likely**. This is often referred to as "incidental" ingestion. Examples include swimming, snorkeling, SCUBA, water skiing, kayaking and wading by young children
- 2. <u>Secondary body contact</u> any type of water recreation during which the accidental ingestion of a small amount of water is **unlikely**. Examples include boating, canoeing, fishing and wading by older children and adults.

Wading is usually considered a secondary body contact activity (i.e., there is little change of someone inadvertently ingesting small quantities of water while wading). The Agency does not disagree with this in general, except that we believe wading by children can and should be considered primary body contact. Children may spend hours wading and playing in shallow water doing the things kids do, digging in the sand or mud, splashing water, hunting for frogs or crayfish, etc. There is ample opportunity for these children to fall in, splash water on their faces or put their hands in their month. The Agency believes this activity should be considered primary body contact, and it could occur in almost any type of waterbody.

In Minnesota the vast majority of surface waters (all Class 2 waters) rivers, streams, lakes, ponds and wetlands are protected for swimming, "for which the waters are usable" (emphasis added). Thus, all Class 2 waters are protected for at least the potential, if not actual swimming use. All Class 2 waters have essentially the same bacteriological standard.

Limited resource value waters (Class 7) are protected for secondary body contact (see Sections II.C and IX).

Because Minnesota's assignment of primary body contact use is nearly universal (except for Class 7 waters), the "where usable" phrase, emphasized above, is very important. The phrase is repeated for each subclass of Class 2 waters.⁵ It gives the Agency the necessary flexibility to assess a given waterbody on a site-specific basis to determine whether swimming or any Class 2 use, is useable or attainable in that waterbody. The Agency is well aware that many Class 2 surface waters may not provide suitable opportunities for swimming for a variety of reasons (e.g., inaccessible, unsafe, too swift, too shallow, too muddy, too weedy, too much boat traffic, etc.). Some waterbodies may be suitable for swimming only part of the year. Given the huge number of lakes and wetlands and the thousands of miles of rivers and streams, and seasonal variability, the Agency can not possibly know ahead of time whether a particular waterbody might be used for primary body contact. A waterbody may appear to be unsuitable by most observers but still provide primary body contact recreation opportunities for some. It is appropriate in Minnesota, which is so rich in water resources, that primary body contact use is assumed to be attainable and the use protected, until such time that a waterbody-specific analysis is carried out which demonstrates (with reasonable assurance) that the use is not attainable. In the Agency's many years experience implementing water quality standards, problems associated with the current "universally applicable" classification system seldom arise, and if they do, current water quality rules provide the flexibility to address the issue (see Section VIII.D).

.

⁵ Minn. R. 7050.0222, subps. 2, 3, 4 and 5.

C. USE CLASSES 1 AND 3 – 7 [background]

As background information, the use classes other than Class 2 are briefly summarized here.

<u>Class 1</u> waters are protected for actual or potential use as a supply of drinking water. All ground water in Minnesota is protected for use as drinking water, and certain surface waters are also protected for drinking water. Examples include Lake Superior, Mississippi River from Fort Ripley to Minneapolis, and the Red River of the North. All Class 1 **surface** waters are specifically listed in Minn. R. 7050.0470. The drinking waters standards applicable to Class 1 waters are the U.S. Environmental Protection Agency (EPA) primary and secondary drinking water standards, which the Agency adopts by reference (Minn. R. 7050.0221).

<u>Class 3</u> standards protect surface waters for use in industrial applications such as process or cooling water. All surface waters of the state carry the Class 3 designation. The standards are intended to protect industrial equipment and piping from scaling or corrosion. Class 3 has standards for just three water quality characteristics: chlorides, total hardness and pH (Minn. R. 7050.0223).

<u>Class 4</u> standards protect surface waters for agricultural uses. All surface waters of the state carry the Class 4 designation. There are three subclasses, Class 4A, 4B and 4C. Class 4A standards protect waters for irrigation use. Class 4B standards protect water for drinking by livestock and wildlife. The Class 4C standards protect wetlands for both the Class 4A and 4B uses (Minn. R. 7050.0224).

<u>Class 5</u> standards protect surface waters for aesthetics and navigation. <u>Class 6</u> protects waters for "other" uses; there are no Class 6 standards (Minn. R. 7050.0225 and 7050.0226).

<u>Class 7</u> or limited resource value waters are surface waters able to support only a very limited aquatic community, and offer only very limited opportunities for water recreation (Minn. R. 7050.0227). Most are headwater channelized ditches and short stream segments that often have no flow in dry years. They range in length from less than a mile to about 20 miles. All Class 7 waters (about 240 total) have undergone a site-specific use attainability analysis (UAA). The UAAs assess attainable and actual uses, the resident aquatic community, flow characteristics, habitat quality, physical alterations, and input from the other agencies and the public. The Agency must have input from the Minnesota Department of Natural Resources in the assessment process.

The potential reclassification of a waterbody from Class 2 to Class 7 is usually initiated by a request from an outside party that asked to have a specific reach assessed. These parties are usually a city or industry that either currently discharges or proposes to discharge to the reach. Candidate reaches are individually assessed, and if the waterbody meets the Class 7 criteria, the Agency will propose the reclassification in rulemaking.

D. HOW WATER QUALITY STANDARDS ARE USED [background]

Numeric and narrative water quality standards are used for a variety of purposes by the Agency and outside parties. Outside parties that routinely use water quality standards include other state agencies, local governmental entities such as counties, cities and watershed districts, as well as consulting firms and environmental groups.

Primary uses of water quality standards are:

- 1. Protect beneficial uses.
- 2. Assess the quality of the state's water resources,
- 3. Identify waters that are polluted or impaired,
- 4. Help establish priorities for the allocation of treatment resources and clean up efforts, and
- 5. Set effluent limits and treatment requirements for discharge permits and cleanup activities.

The identification of waterbodies that do not meet water quality standards and support designated beneficial uses (no. 3 above) is a function of water quality standards that has received a great deal of attention in the last 10 years. The assessment process and listing of impaired waters is briefly described in the next section.

E. ASSESSMENT OF WATER QUALITY CONDITION AND TMDLS [background]

It is helpful to provide some background information on the water quality assessment process and total maximum daily load (TMDL) studies because these activities are relevant to the proposed amendments.

The Clean Water Act (CWA) requires the Agency to assess the water quality of Minnesota's rivers, streams and lakes, and to submit periodic reports on the quality of surface waters to the EPA. Water chemistry data, aquatic biological data and related information from a variety of sources is used by the Agency to make the assessments. Assessments are used to prepare the 305(b) report and the 303(d) list, both so named from the section of the CWA that requires the activity. Both must be submitted every two years.

The 305(b) report lists the condition of all assessed surface waters (i.e., all those for which we have data), including waterbodies meeting standards as well as those not meeting standards. The 305(b) reports from each state represent "self-prepared report cards" to Congress and the EPA on the progress states are making toward meeting the water quality goals of the CWA. There are no regulatory consequences for waterbodies listed in the 305(b) report.

The 303(d) list includes waterbodies that have been determined to be in violation of one or more applicable water quality standard. Such waters are considered "impaired." Placement of a waterbody on the 303(d) impaired waters list has potential regulatory consequences. A TMDL study will need to be carried out for the impaired waterbodies on the list. The TMDL implementation plan may require reductions in pollutant loading from point and nonpoint sources to bring the waterbody back into compliance with standards. At the time this SONAR

was prepared, the Agency's 2006 list was due to be submitted to EPA for approval. The most recent EPA-approved 303(d) list (2004) is Exhibit 5. The federal requirements for TMDLs are spelled out in 40 CFR, part 130, plus accompanying EPA guidance.

The basic steps in the assessment process are very straight forward:

- 1. Beneficial uses are assigned to waters of the state.
- 2. Standards are developed that protect these uses.
- 3. The water quality and biological health of lakes, rivers and streams is monitored.
- 4. The monitoring data is compared to the standards using accepted procedures.
- 5. Waters not meeting standards are identified and listed.

In practice, the determination that a numeric standard has been exceeded is often as straight forward as outlined above. In general, if available water quality or biological data of sufficient quality and quantity, show a numeric standard is not being met, the waterbody is considered impaired. In some cases, an impairment decision requires additional evaluation and review by a professional judgment committee of experts, which makes an impairment or no-impairment recommendation to Agency managers. The number of assessments that can be done is limited by the availability of monitoring data.

Because narrative standards are non-quantitative, the determination that a narrative standard has been exceeded may require an evaluation of a variety of information. This can mean a "weight of evidence" approach to data analysis. The weight of available evidence should lead most unbiased scientists to the same conclusion regarding impairment. Historically, the Agency has used a weight of evidence approach when interpreting narrative standards, and numeric standards as well, particularly in borderline situations. For the application of some frequently used narrative standards, a numeric criterion or "translator" is used as the impairment threshold. The criteria are a numeric interpretation or translation of the narrative standard. Examples are the narrative standards for fish-tissue contaminants and excess nutrients in lakes.

The methods the Agency uses to compare monitoring data to the standards and to determine an impaired condition is described in detail in the 2004 Water Quality Assessment Guidance Manual (Exhibit 25). The Guidance Manual is available at this Web site: http://www.pca.state.mn.us/publications/manuals/tmdl-guidancemanual04.pdf

F. ASSESSMENT FACTOR RULEMAKING, 2003 [background]

In November of 2000, the Minnesota Coalition of Greater Minnesota Cities, League of Minnesota Cities, Minnesota Association of Small Cities and Minnesota Farm Bureau petitioned the Agency to enter into rulemaking to adopt listing or assessment factors, specifically related to the assessment of lakes for effects of excess nutrients. The Agency agreed to do this, but expanded the proposed rulemaking to include assessment factors for impairment of the biological community and for fish tissue contaminants, to enhance the return from the rulemaking time and

expense. This rulemaking became known as the "assessment factor" rule, and it was successfully adopted on February 3, 2003 (Minn. R. 7050.0150)⁶.

The adopted assessment factors all expand upon narrative standards in Minn. R. ch. 7050, which date back to the first statewide water quality rule in 1967. They provided guidance on how the Agency will implement these standards particularly when used to assess waterbodies for potential impairment. Again, assessment factors were added for:

- Impacts of excess nutrients in lakes;
- Integrity of the fish, aquatic invertebrate and aquatic plant community; and
- Identification of contaminant in fish tissue at levels that make fish unsafe to eat.

G. TRIENNIAL REVIEW AND CLEAN WATER ACT [background]

This rulemaking, limited to the 2003 Session Law requirements, is not intended to fulfill the Agency's obligation to review and revise the state's water quality standards every three years (triennial review) as required by the Clean Water Act (Section 303(c)(1)). The larger package of proposed amendments, of which this was once part, is being promulgated in a separate rulemaking to satisfy the triennial review requirement. The most recent revisions of Minn. R. ch. 7050 that qualified as a triennial review were completed in 2000 (24 S.R. 1105, January 31, 2000). The EPA Regional Administrator must approve all changes to state water quality standards (40 CFR §131.5).

III. PUBLIC PARTICIPATION

A. INTRODUCTION [notification]

As stated, the proposed amendments discussed in this SONAR were originally part of much larger rulemaking (triennial review). As part of that larger effort, the Agency has made a genuine and committed effort to involve the public in the process. The only parties that commented directly on the requirements of the Session Law were the Coalition of Greater Minnesota Cities (CGMC), the Minnesota Environmental Science and Economic Review Board (MESERB) and their representatives, Flaherty and Hood, P.A. The response to these comments is incorporated into the reasonableness sections.

The additional notification requirements specified in Minn. Stat. § 14.131 are discussed in Section VII.J.

⁶ 27 SR 1217.

B. MEETINGS WITH INTERESTED PARTIES [notification]

Between February 2003 and April 2006 the Agency held or participated in about 30 meetings with interested parties, including presentations given at professional meetings. The proposed additions required by the Session Law rarely, if ever, came up at these meetings, except at the meetings with CGMC, MESERB and Flaherty and Hood, P.A.; the Agency met with these parties on seven occasions during this time period.

C. NOTICE TO SOLICIT OUTSIDE OPINION [notification]

The Agency published two notices in the *State Register* asking for comments and opinions on the Agency's plans for the triennial review. Both notices mentioned the amendments required by the 2003 Session Law.

The first notice was published on November 10, 2003 (28 SR 614, Exhibit 6). People were invited to comment on any aspect of Minn. R. ch. 7050. Copies of the *State Register* notice with a general cover letter were mailed to about 60 parties on the triennial review interested party list (Exhibit 7). The Agency received seven comment letters during this comment period, including one from MESERB with extensive comments related to the Session Law and its interpretation (Exhibit 8).

The second notice in the *State Register* was published on May 17, 2004 (28 SR 1464, Exhibit 9). This notice announced the Agency's plans to hold a series of informal public meetings around the state. The dates, times and locations of seven public meetings planned for June 2004 were published in this notice. Copies of the *State Register* notice with a general cover letter were mailed to the same 60 parties on the triennial review interested party list (Exhibit 10). Comment letters were received from 14 parties, none of which commented directly on requirements of the Session Law.

D. PUBLIC INFORMATIONAL MEETINGS [notification]

The Agency scheduled and hosted a series of seven public meetings in June 2004 to provide interested members of the public an opportunity to learn about the proposed triennial review, and to provide comments and ask questions. The meetings were held at the Agency's five Regional Offices and in St. Paul. The public was informed about the meetings through the notice published in the *State Register*, by the mailing associated with that notice, a posting on the Agency's water quality standards revision Web page, and by a news release. In general, these meetings were not well attended (a total of 61 members of the public attended the seven meetings). Requirements of the Session Law rarely, if ever, came up at the meetings.

E. AGENCY BOARD AND RULE ADOPTION COMMITTEE [notification]

Agency staff briefed the Rule Adoption and Variances Committee of the Agency citizen's Board about the proposed rule amendments on four occasions on the dates shown below.

- September 23, 2003
- August 24, 2004
- September 28, 2004
- January 24, 2006

Prior to each meeting a memorandum was sent to the Board members, and to the list of interested parties, which outlined the proposed amendments or selected aspects of the proposed amendments (Exhibits 11-14). In addition, the Board agenda is mailed to about 400 people before each meeting. During each meeting a PowerPoint presentation was made to the Board members. Again, these briefings focused on major elements of the larger rulemaking package, the triennial review, rather than the requirements of the Session Law. The latter was included in the list of items in the full scope of the triennial review. For this reason only the memoranda sent to the Board members and to the Agency's list of about 60-80 interested parties are included as exhibits.

F. NOTIFICATION OF GOVERNOR'S OFFICE [notification]

Under Minn. Stat. § 14.05, subd. 6, the Governor may veto adopted administrative rules. To apprise the Governor's Office of the Agency's rulemaking plans, the Agency sends information about the amendments to the Governor's Office on two occasions prior to the final request for approval. The first notification serves to alert the Governor of the Agency's intentions and the reasons behind the proposals. The second notification provides more detail on the proposed rule amendments. It is sent to the Governor's Office when the SONAR is complete but prior to proposing the amendments in the *State Register* (Exhibit 27a). The third notification asks for the Governor's approval of the final rule, and is sent to the Governor's Office after the Agency has approved the final rules.

In 2003, the Governor's Office greatly streamlined this notification process by creating three standardized forms, which the Agency completes and forwards to the Governor's Office. The first form with a short cover memorandum was sent to the Governor's Office on October 31, 2003 (Exhibit 15a and 15b). This notice announced the Agency's plans for the larger rulemaking. An e-mail was sent to the Governor's Office on April 25, 2006, to notify them of the Agency's decision to separate out the more limited rulemaking required by the Session Law (Exhibit 27b).

G. AGENCY WATER QUALITY STANDARDS REVISION WEB PAGE [notification]

The Agency created a Web page devoted to the proposed triennial review amendments in June of 2003.⁷ The first version of this page summarized the standards and other items the Agency was proposing to change or add, provided a tentative schedule, and it told the public how to send comments. The Web page encourages the public to submit comments or questions at any time.

This Web page has undergone five revisions:

Page 12

⁷ http://www.pca.state.mn.us/water/standards/rulechange.html

- December 2004.
- July 2005. This version included PDF files for the revised Minn. R. ch. 7050 containing the proposed language related to the Session Law.
- August 9, 2005
- December 27, 2005.
- January 26, 2006.

H. ADVISORY COMMITTEE NOT NEEDED [notification]

Minnesota Stat. § 14.101, subd. 2 allows the Agency to form an advisory committee to provide advice and recommendations on proposed rules. The Agency decided that for this rulemaking (and the triennial review) the formation of an advisory committee was not necessary. The Agency has targeted potentially affected and interested parties in its communications with the public, as described in this Section. Aspects of the proposed additions have been the subject of extensive discussions with some parties, and were a major topic of discussion in the previous rulemaking (Exhibit 8).

I RESPONSE TO COMMENTS [notification]

Essentially all the comments on the requirements of the Session Law came from MESERB and their representative Flaherty and Hood, P.A. MESERB provided extensive comments on the requirements of Minn. Laws 2003 ch. 128 art. 1, § 156 in a December 31, 2003 letter (Exhibit 8). MESERB's main concern expressed in this letter and in the subsequent exchange of letters and meetings with the Agency (Exhibits 16-21) is that there should be a demonstration of loss of use before a waterbody is considered impaired. This and related comments will be addressed in the reasonableness sections.

IV. AGENCY'S STATUTORY AUTHORITY

The Agency's authority to adopt the specific additions proposed in this rulemaking is derived from Minn. Laws 2003 ch. 128, art. 1, § 156 as amended in 2005 (Minn. Laws 2005 ch. 1, art. 2, § 151). The amended Session Law established a deadline of October 1, 2006, to adopt the amendments (Section V.A).

More broadly, the Agency's authority to adopt water quality standards and to classify waters of the state is found in Minn. Stat. § 115.03 (2005), particularly subdivisions 1(b) and 1(c). Subdivision 1(b) authorizes the Agency to classify waters, while subdivision 1(c) authorizes the Agency:

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;

Additional authority for adopting standards is established under Minn. Stat. § 115.44, subds. 2 and 4. Subdivision 2 authorizes the Agency to:

...group the designated waters of the state into classes, and adopt classifications and standards of purity and quality therefor. ...

Subdivision 4 authorizes the Agency to:

...adopt and design standards of quality and purity for each classification necessary for the public use or benefit contemplated by the classification. The standards shall prescribe what qualities and properties of water indicate a polluted condition of the waters of the state which is actually or potentially deleterious, harmful, detrimental, or injurious to the public health, safety, or welfare; to terrestrial or aquatic life or to its growth and propagation; or to the use of the waters for domestic, commercial and industrial, agricultural, recreational, or other reasonable purposes, with respect to the various classes established...

Finally, the Agency is authorized under Minn. Stat. § 115.03, subd. 5 to perform any and all acts minimally necessary, including the establishment and application of standards and rules, for the Agency's ongoing participation in the NPDES permitting program.

Under these statutory provisions, the Agency has the necessary statutory authority to adopt the proposed rules.

The adoption of administrative rules is regulated under Minn. Stat. ch. 14. This statute and Minn. R. ch. 1400 lay out the rulemaking process, and obligations of the Agency to, for example, involve the public, consider the impact of the rules amendments on certain subsets of Minnesotans, and assess the economic impact of the proposed amendments. They also serve to assure fairness and openness in the process.

The proposed rule will be enforced in accordance with the authority provided to the Agency by Minn. Stat. chs. 116 and 115. The Agency has general authority to enforce its rules under these statutes. If approved, the changes to the existing rule will be enforceable by the Agency.

V. NEED FOR THE PROPOSED RULE AMENDMENTS

A. INTRODUCTION [need]

Minnesota Stat. ch. 14 requires the Agency to explain the facts establishing the need for and the reasonableness of the rules as proposed. In general terms, "need" means that the Agency must present the reasons for making the proposed changes to Minn. R. ch. 7050. The need for this proposed rulemaking is quite straight forward, state law mandates that it be done. The citations to the Session Law throughout the SONAR are to the original law passed in 2003.

At the Agency's request Minn. laws 2003 ch. 128, art. 1, §156 was amended in 2005 to extend the deadline for completing this rulemaking from January 1, 2006 to October 1, 2006 (Exhibit 3). In the sections that follow under the heading "Need," the Agency discusses each of the requirements of the Session Law and the rule language proposed to comply with the requirement. Clearly, the Session Law establishes the need for the additions to Minn. R. ch. 7050 discussed in this Section, as shown in the quote below.

Sec. 156. [WATER QUALITY ASSESSMENT PROCESS.]
Subdivision 1. [RULEMAKING.]
(a) By January October 1, 2006, the pollution control agency shall adopt rules under Minnesota Statutes, chapter 14, relating to water quality assessment for the waters of the state. The adopted rules must, at a minimum, satisfy paragraphs (b) to (h).
(b) The rules must apply to the determination of impaired waters as required by Section 303(d) of the Clean Water Act of 1977, United States Code, title 33, chapter 26, section 1313(d).

B. REQUIRED DEFINTIONS

1. <u>Minn. R. 7050.0150</u>, Subp. 4, Item A, Definitions of "Altered Materially," "Material Increase," "Material Manner," "Seriously Impaired" and "Significant Increase" [need]

Minnesota Laws 2003 ch. 128, art. 1, §156 (c), specifies that the Agency must define the following terms: "altered materially," "material increase," "material manner," "seriously impaired" and "significant increase." All are existing terms associated with narrative standards that have been in Minn. R. ch. 7050 since 1967.

All these terms have the same basic meaning and can be defined together. In the narrative standard in which these terms are used, each term is associated with a different aspect of the standards. For example, "material manner" is associated with protection of aquatic habitats, "material increase" is associated with increased algal and plant growth due to excess nutrients, and so on. The original language of these narrative standards has never been changed and the Agency is not proposing to change it now. The Agency is already complying with the law in practice, and proposes to add the following definition for these terms.

[Minn. R. 7050.0150, Subp. 4] A. "Altered materially," "material increase," "material manner," "seriously impaired," and "significant increase," as used in subps. 3, 5, and 6, mean that pollution of the waters of the state has resulted in degradation of the physical, chemical, or biological qualities of the water body to the extent that attainable or previously existing beneficial uses are actually or potentially lost.

2. <u>Minn. R. 7050.0150, Subp. 4, Item I, Definition of "Normal Fishery" and "Normally Present"</u> [need]

Minnesota Laws 2003 ch. 128, art. 1, §156 (d), specifies that the Agency must define the terms: "normal fishery" and "normally present." As in the previous section, these terms are in the existing narrative standards in Minn. R. 7050.0150. The Agency proposes to add the following combined definition for these terms.

[Minn. R. 7050.0150, Subp. 4] I. "Normal fishery" and "normally present" mean the fishery and other aquatic biota expected to be present in the water body in the absence of pollution of the water, consistent with any variability due to natural hydrological, substrate, habitat, or other physical and chemical characteristics. Expected presence is based on comparing the aquatic community in the water body of interest to the aquatic community in representative reference water bodies.

The Revisor's Office suggested we change the word "part" to "chapter" in the introductory sentence to Minn. R. 7050.0150, subp. 4 "Definitions." The change will make the definitions applicable to all of Minn. R. ch. 7050. The Agency agrees that this change is needed because several of the definitions in this subpart are applicable beyond just Minn. R. 7050.0150. The change is shown below.

Subp. 4. **Definitions.** For the purposes of this part <u>chapter</u>, the following terms have the meanings given them.

C. DETERMINATION OF IMPAIRED WATERS [need]

Minnesota laws 2003 ch. 128, art. 1, §156 (e), specifies that the Agency shall adopt rules that:

"...specify that for purposes of the determination of impaired waters, the agency will make an impairment determination based only on pollution of waters of the state that has resulted in degradation of the physical, chemical, or biological qualities of the water body to the extent that attainable or previously existing beneficial uses are actually or potentially lost."

The Agency is proposing to add language to Minn. R. 7050.0150, subp. 1, that closely parallels the language in the law, which is the best way to assure compliance with the law. Minnesota. R. 7050.0150 is the logical place to put this language. The proposed added language is shown below.

7050.0150 DETERMINATION OF COMPLIANCE WITH WATER QUALITY STANDARDS AND WATER QUALITY CONDITION.

Subpart 1. **Policy and scope.** The intent of the state is to protect and maintain surface waters in a condition which allows for the maintenance of all existing beneficial uses. The condition of a surface water body is determined by its physical, chemical, and biological qualities. The agency shall determine an exceedance of water quality standards or an impaired condition based on pollution of the waters of the state from point and nonpoint sources that has resulted in degradation of the physical, chemical, or biological qualities of the water body to the extent that attainable or previously existing beneficial uses are actually or potentially lost.

The narrative water quality standards in subpart 3 prescribe the qualities or properties of surface waters that are necessary for the protection of designated public uses and benefits. If the narrative standards in this part are exceeded, it is considered indicative

of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses of the waters of the state.

The Agency is proposing to place the new language ahead of existing language that starts "*The narrative water quality standards in subpart 3*"..., and then make the latter a new paragraph. This slight rearrangement is needed to keep the language more parallel with similar language in Minn, R. 7050.0221 – 7050.0227.

D. PETITION BY OUTSIDE PARTY TO REVIEW USE ATTAINABILITY [need]

Minnesota Laws 2003 ch. 128, art. 1, §156 (f), specifies that the Agency must evaluate the existence or attainability of a beneficial use for a waterbody upon the request of an outside party. This part of the Session Law is quoted below:

[Minn. laws 2003 ch. 128, \S 156.] (f) The rules must provide that when a person presents information adequately demonstrating that a beneficial use for the water body does not exist and is not attainable due to the natural condition of the water body, the agency shall initiate an administrative process for reclassification of the water to remove the beneficial use.

The public already has the right to petition the Agency for a rule change, including a change in use classification. Any person can ask the Agency to consider adding to, deleting from, or reviewing any part of administrative rules (Minn. Stat. § 14.09, Exhibit 26). A change in use classification requires a change to Minn. R. ch. 7050. The language in the 2003 Session Law is narrower in scope than Minn. Stat. § 14.09. The latter covers any rule provision, whereas the former focuses attention on a single and important aspect of water quality standards; i.e., beneficial uses and the potential that some uses assigned to a waterbody may have never existed or are unattainable now.

The language the Agency is proposing to meet this requirement is shown below.

7050.0405. PETITION BY OUTSIDE PARTY TO CONSIDER ATTAINABILITY OF USE

Subpart 1. **Petition**. Any person may present evidence to the agency that a beneficial use assigned to a water body in this chapter does not exist or is not attainable and petition the agency to consider a reclassification of that water body under Minnesota Statutes, section 14.09. Outside parties must submit written evidence in support of the petition to the commissioner that includes:

- A. the name and address of the petitioner;
- *B.* the name, location, and description of the water body;
- C. the specific designated use or uses that do not exist or are unattainable in the water body and the reasons they do not exist or are unattainable;
- D. the reasons the current use classification is causing harm, unnecessary expense or other hardship to the petitioner; and

E. Any additional supporting evidence including, but not limited to, water quality, hydrological, and other relevant data; pictures; testimony of local residents; survey results; and resolutions or actions by local organizations or governmental entities.

Subp. 2. Disposition of petition. Upon receiving a petition, the commissioner has 60 days to reply in writing and indicate a plan for disposition of the petition. The commissioner may request additional information from the petitioner if the request is considered incomplete, in which case the commissioner has 60 days to reply after the additional information is received and the petition is complete. If the commissioner finds that the evidence submitted supports a review of the designated uses, a use attainability analysis must be commenced within six months of the commissioner's reply to the complete petition. The petition becomes part of the use attainability analysis. If the commissioner finds that the use attainability analysis supports a change in use classification, the commissioner shall propose the change through rulemaking.

E. CONSIDERATION OF TEMPERATURE AND HYDRAULIC RESIDENCE TIME [need]

Minnesota Laws 2003 ch. 128, art. 1, § 156 (g) specifies that the Agency must consider the effects of temperature and hydraulic detention time on algal populations. The provision is quoted below:

[Minn. laws 2003 ch. 128, § 156.] (g) The rules must provide that the agency, in considering impairment due to nutrients and application of nutrient objectives and effluent limitations related to riverine systems or riverine impoundments, must consider temperature and detention time effects on algal populations when the discharge of nutrients is expected to cause or contribute to algal growth that impairs exiting or attainable uses.[emphasis added]

The Agency is proposing to add the word "temperature" to Minn. R. 7050.0150, subp. 5, item D, to comply with the law. The term "hydraulic residence time" is already in the existing rule language, which is quoted below.

[Minn. R. 7050.0150, Subp. 5] Assessment of trophic status and the response of a given water body to nutrient enrichment will take into account the trophic status of reference water bodies; and all relevant factors that affect the trophic status of the given water body appropriate for its geographic region, such as the temperature, morphometry, hydraulic residence time, mixing status, watershed size, and location. The factors in this subpart apply to lakes and, where scientifically justified, to rivers, streams, and wetlands. [emphasis added]

F. CONCLUSIONS [need]

In summary, the Session Law establishes the need for the additions to Minn. R. ch. 7050 discussed in this Section.

VI. REASONABLENESS OF THE PROPOSED RULE AMENDMENTS AS A WHOLE

Minnesota Stat. ch. 14 requires the Agency to explain the facts establishing the reasonableness of the proposed rules. "Reasonableness" means: 1) that there is a rational basis for the Agency's proposed actions, 2) that the Agency's proposed amendments are appropriate and consistent with its mandate to protect Minnesota's water resources, and 3) due consideration has been given to the potential economic impacts of the proposals. The reasonableness of the proposed rule amendments is explained in the next two Sections.

VII. REASONABLENESS OF PROPOSED AMENDMENTS, REQUIRED INFORMATION

A. INTRODUCTION [reasonableness]

Minnesota Stat. § 14.131 requires that this SONAR include information about the following 11 issues.

B. CLASSES OF PERSONS AFFECTED BY THE PROPOSED RULE AMENDMENTS, INCLUDING THOSE CLASSES THAT WILL BEAR THE COSTS AND THOSE THAT WILL BENEFIT [reasonableness]

Potentially all the citizens of Minnesota could be affected by the proposed amendments because the standards impacted are applicable statewide. Also, the listing of waters as impaired, especially for impairment due to fish tissue contaminants like mercury, impact many people across Minnesota. But, even among the small subset of people that use and are familiar with water quality standards, it is unlikely that very many will be aware of the additions because they do not change the way the Agency is currently assessing waterbodies for potential impairment.

Outside parties concerned about the Agency applying standards to protect beneficial uses that do not exist may benefit from the proposed addition of the petition language in Minn. R. 7050.0405. The more specific proposed language addressing beneficial uses highlights an area of standards that is becoming much more visible, and is under much more scrutiny, than it was ten years ago. This is due to the current emphasis on impaired waters and total daily maximum load studies. The proposed language combined with this new emphasis might trigger more petitions in the future. Any future benefits or savings for parties that do not have to provide treatment, or carry out other pollution control measures to protect unattainable uses, are impossible to estimate.

The EPA has an interest in these proposed amendments. Under the Clean Water Act the EPA Regional Administrator (Region 5 in Chicago) must approve all changes to Minnesota's water quality standards (40 CFR 131.5).

C. ESTIMATE OF THE PROBABLE COSTS TO THE AGENCY AND OTHER AGENCIES OF IMPLEMENTING AND ENFORCING THE RULE AMENDMENTS, AND ANY ANTICIPATED EFFECT ON STATE REVENUES [reasonableness]

The proposed rule changes may affect Agency staff needs or work loads, but they are not anticipated to change overall Agency budgets or state revenues. Any added costs will probably be added on to normal staff work loads and current budgets (see Section IX).

The possible added costs are due to the addition of the proposed language to allow outside parties to petition the Agency to review a beneficial use. Use attainability analyses (UAA) can be time consuming and expensive, and any proposed change in use classification must go through rulemaking, which is also time consuming and expensive. There is no way of knowing how many petitions the Agency is likely to get, and how many of those will lead to a UAA and rulemaking. The petitioning party must provide enough information in the petition to allow the Agency to make an initial decision on the merits of a use classification change, and the probability of a successful change to the rule. Depending on the waterbody, the uses being questioned, the level of controversy and public participation, and the amount of information in the petition, the follow up UAA could require a few weeks to many months of staff time. Any resulting proposed change in rules would be incorporated into an ongoing triennial review, which minimizes the direct costs attributable to the petition. Potential costs are discussed in more detail in Section IX.

D. DETERMINATION OF WHETHER THERE ARE LESS COSTLY OR LESS INTRUSIVE METHODS FOR ACHIEVING THE RULE AMENDMENT'S PURPOSE [reasonableness]

The only new costs associated with the proposed amendments, which are speculative, are to the Agency, as discussed in the previous Section, because the public already has the right to petition the Agency for use classification review. The Agency believes the proposed petition language in Minn. R. 7050.0405 is a reasonable division of responsibility and potential costs between the petitioning party and the Agency; and that there is no obvious less costly or less intrusive method to achieve the purpose of this rulemaking.

E. DESCRIBE ANY ALTERNATIVE METHODS FOR ACHIEVING THE PURPOSE OF THE PROPOSED RULE AMENDMENTS THAT THE AGENCY SERIOUSLY CONSIDERED AND THE REASONS WHY THEY WERE REJECTED IN FAVOR OF THE PROPOSED AMENDMENTS [reasonableness]

The Agency has not seriously considered alternatives to the proposed rule language and none have been proposed by any outside party⁸. The Session Law that directed the Agency to conduct this rulemaking does not enable the Agency to seriously consider alternative methods.

⁸ MESERB listed critical elements the required definitions should contain (Exhibits 8 and 17).

F. ESTIMATE OF THE PROBABLE COSTS OF COMPLYING WITH THE PROPOSED RULE AMENDMENTS, INCLUDING COSTS BORNE BY CATEGORIES OF AFFECTED PARTIES [reasonableness]

The proposed amendments will not result in increased costs to any outside party over and above what they could incur now (see Section IX).

G. ESTIMATE OF THE PROBABLE COSTS OF NOT ADOPTING THE PROPOSED RULE AMENDMENTS, INCLUDING COSTS BORNE BY CATEGORIES OF AFFECTED PARTIES [reasonableness]

The proposed amendments will not result in increased costs to any outside party if **not** adopted, because:

- The Agency is already using the terms for which definitions are proposed in a manner that is consistent with the definitions;
- The Agency determines impaired conditions consistent with the Session Law;
- The public can petition the Agency now for review of beneficial uses; and
- The Agency considers temperature and hydraulic residence time now in assessing the impacts of excess nutrients.
- H. DIFFERENCES BETWEEN THE PROPOSED RULE AND EXISTING FEDERAL REGULATIONS AND THE NEED FOR AND REASONABLENESS OF EACH DIFFERENCE [reasonableness]

None of the proposed additions conflict with federal regulations or EPA water quality standards guidance. EPA clearly allows beneficial uses to be reviewed through the UAA process (Exhibits 22 and 23).

I. CONSIDERATION AND IMPLEMENTATION OF THE LEGISLATIVE POLICY UNDER MINN. STAT. §§ 14.002 and 14.131 [reasonableness]

Minnesota Stat. §§ 14.002 and 14.131 requires state agencies, whenever feasible, to develop rules that are not overly prescriptive and inflexible, and rules that emphasize achievement of the Agency's regulatory objectives while allowing maximum flexibility to regulated parties and to the Agency in meeting those goals.

The Agency is making a concerted effort, under the leadership of the current commissioner, to be flexible and open minded in the implementation of regulatory programs; and to seek solutions to problems in an atmosphere of freedom to "think outside the box." These Agency goals are certainly consistent with the spirit of this statute.

The application of these principals to the proposed additions in this limited rulemaking illustrates why the spectrum of "perscriptiveness/flexibility" in water quality rules is complex. There are strong and legitimate pressures to make rules very precise and prescriptive on one hand, and to make them flexible and open to interpretation on the other. Finding the balance in rulemaking

between the ends of the prescriptive/flexible continuum is not always easy; and the balance the Agency finds can be unsatisfactory to various outside parties, depending on their point of reference. Flexibility to some means inconsistent application of rules and the granting of too much authority to staff or to the Agency Board. Too much prescriptiveness to others means inability to deal with case-by-case variability and being forced into untenable bureaucratic positions and endless red tape. The Revisor's Office, appropriately, applies certain conventions to rules that places limits on language that is deemed too flexible or "open ended." Also, the Attorney General staff tends to prefer explicit language over language open to too much interpretation. Finally, not all rules or provisions in rules require or should have the same level of prescriptiveness or flexibility. For example, numeric standards by the fact that they are a specific value are prescriptive, whereas provisions such as the petition language in proposed Minn. R. 7050.0405 is much more flexible.

In the amendments being proposed, the Agency believes it has found a reasonable balance between detail and flexibility. The proposed definitions are appropriately "prescriptive" and the proposed petition language is appropriately flexible. The petition provision is general enough to give the Agency the leeway it needs to evaluate the merits of each petition on a case-by-case basis. The supportive information submitted by the petitioner and the follow up UAA will be very case-specific. The Agency must retain enough flexibility to make individual decisions tailored to each case while providing enough guidance in rule to inform parties of their obligations. No amount of guidance to petitioners in the rule, however, could ever capture all possible factors that might be relevant in a particular example.

The prescriptiveness/flexibility varies depending on the particular amendment. The language the Agency is proposing in these amendments represents a reasonable balance between detail and flexibility. The Agency believes that the proposed amendments are consistent with the intent of Minn. Stat. §§ 14.002 and 14.131.

J ADDITIONAL NOTIFICATION OF THE PUBLIC UNDER MINN. STAT. §§ 14.131 and 14.23 [reasonableness]

Minnesota Stat. §§ 14.131 and 14.23 requires the Agency to 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 the Agency must explain why these efforts were not made.

As explained, the proposed amendments discussed in this SONAR were originally part of much larger rulemaking. The notice of the additions required by the Session Law were included as part of the broader proposed changes, including the two notices to solicit outside opinion, the Agency Board updates, and the Agency's Web page. The Agency has gone well beyond the requirements of Minn. Stat. §§ 14.131 and 14.23 in its efforts to involve the public in this rulemaking.

The Agency intends to send a copy of the Notice of Intent to Adopt to the following people and organizations:

- All parties who have registered with the Agency for the purpose of receiving notice of rule proceedings, as required by Minn. Stat. § 14.14, subd. 1a,
- All individuals and representatives of associations the Agency has on file as interested and affected parties; and
- The chairs and ranking minority party members of the legislative policy and budget committees, with jurisdiction over the subject matter of the proposed rule amendments, will receive a copy of the proposed rule amendments, SONAR and notice, as required by Minn. Stat. § 14.116.

Minnesota Stat. § 14.116 also states that if the mailing of notice is within two years of the effective date of the law granting the Agency authority to adopt the proposed rules, the Agency must make reasonable efforts to send a copy of the notice and SONAR to all sitting House and Senate legislators who were chief authors of the bill granting the rulemaking. The Agency intends to send a copy of the notice, SONAR, and proposed rule amendments to the chief authors of the legislation that resulted in this rulemaking.

Minnesota Stat. § 115.44, subd. 7 states that notices required under sections 14.14, subd. 1a, and 14.22 must also be mailed to the governing body of each municipality bordering or through which the waters for which standards are sought to be adopted flow. To comply with Minn. Stat § 115.44, subd. 7, the Agency shall provide a copy of the notice to:

- Mayors of cities in Minnesota
- Minnesota County Commissioners Chairs
- Minnesota Township Chairs
- Solid Waste Conservation Districts
- County Water Planners
- Watershed Offices
- Water Management Organizations
- NPDES/SDS industrial permittees
- POTW permittees

Additionally, the Agency will provide notice to:

- Environmental Justice Advocates of Minnesota
- Council of Asian-Pacific Minnesotans
- Chicano-Latino Affairs Council
- Council of Black Minnesotans
- Minnesota Indian Affairs Council
- EPA Tribal Liaison, and the Indian Tribes in Minnesota:
 - o Boise Fort Band of Chippewa
 - Fond du Lac Reservation
 - o Grand Portage Reservation
 - Leech Lake Reservation
 - o Lower Sioux Indian Community
 - o Mille Lacs Band of Chippewa

- o Prairie Island Community
- o Red Lake Nation Red Lake Band of Chippewa
- o Shakopee Mdewakanton Sioux (Dakota) Community
- o Upper Sioux Community
- White Earth Reservation

The publication of the proposed amendments in the *State Register* will include the date, time and location of the public hearing, if one is needed, and information on how the public can submit comments. In addition, a copy of the notice, proposed rule amendments and SONAR will be posted on the Agency's Public Notice Web site at: http://www.pca.state.mn.us/news/index.html

Also, pursuant to Minn. Stat. § 14.14, subd. 1a, the Agency believes its regular means of notice, including publication in the *State Register* and on the Agency's Public Notice Web page, will adequately provide notice of this rulemaking to persons interested in or potentially regulated by these rules.

K. CONSULTATION WITH THE COMMISSIONER OF FINANCE REGARDING FISCAL IMPACTS ON LOCAL GOVERNMENTS [reasonableness]

Minnesota Stat. § 14.131 requires the Agency to consult with the Department of Finance to help evaluate the fiscal impact and benefits of proposed rules on local governments. In accordance with the interim process established by the Department of Finance on June 21, 2004, the Agency will provide the Department of Finance with a copy of the Proposed Rule and SONAR Form at the same time these items are sent to the Governor's Office. This timing allows the fiscal impacts and fiscal benefits of the proposed rule to be reviewed by the Department of Finance concurrent with the Governor's Office review.

L. AGENCY DETERMINATION REGARDING WHETHER COST OF COMPLYING WITH PROPOSED RULE IN THE FIRST YEAR AFTER THE RULE TAKES EFFECT WILL EXCEED \$25,000 (reasonableness)

The Administrative Procedures Act was amended in 2005 to include a section on potential first-year costs attributable to the proposed amendments (Minn. Stat. § 14.127, subds. 1 and 2). This amendment 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:

- Any one business that has less than 50 full-time employees, or
- Any one statutory or home rule charter city that has less than ten full-time employees.

The Agency has determined that the cost of complying with the proposed amendments to Minn. R. ch. 7050 in the first year after they take effect will not exceed \$25,000 for the two categories listed above. This is because the proposed additions do not fundamentally change the way the Agency assesses waterbodies for potential impairment now, and no outside party will incur any additional costs as a result of these amendments (Section IX).

VIII. REASONABLENESS OF PROPOSED AMENDMENTS

A. INTRODUCTION AND MESERB COMMENTS [reasonableness]

In this Section of the SONAR the Agency will discuss each of the four proposed additions to Minn. R. ch. 7050 to satisfy the requirements of the "Water Quality Assessment Process," Minn. Laws 2003 ch. 128 art. 1, § 156 (Exhibit 2). Subdivision 1.(b) of the Session Law says the rules the Agency adopts must apply to the determination of impaired waters as required by Section 303(d) of the Clean Water Act. This is the Agency's intent with the proposed additions.

The Minnesota Environmental Science and Economic Review Board (MESERB) provided comments on the requirements of the Session Law in a December 31, 2003 letter to the Agency (Exhibit 8). They express concern about the assessment process, the listing of waters as impaired and the resulting expense (time and money) of doing total maximum daily load studies (TMDL, see Section II.E). The Agency agrees that the TMDL process can be both time consuming and expensive. Once a water body is determined to be impaired, the causes of the impairment must be determined. Pollutant sources are most often a combination of point and nonpoint sources, and sorting out the relative contributions under a range of weather and environmental conditions can require a lot of monitoring data and sophisticated methods of analysis and modeling. Regulatory agencies including EPA, the public, and potential responsible parties demand no less than a thorough study. The pollutant load must be allocated among the sources and a strategy developed that will reduce loadings to the point where standards will be met and the waterbody can be taken off the 303(d) list. The clean-up of the nation's impaired waters will be expensive. This is why it is so important, and so much more cost-effective, to prevent waterbodies from becoming impaired in the first place, rather than waiting until they are impaired then trying to restore them to health.

In 2005 the Agency and MESERB exchanged several letters and met on several occasions to discuss MESERB's issues (Exhibits 16-21). The arguments in MESERB's letters go well beyond just the requirements of the Session Law, but the law is referenced in their letters (except in their last letter, Exhibit 21), so they are included as exhibits in this rulemaking. Also relevant is that MESERB repeats in their letters what appears to be a fundamental issue for them, which is that waters may be considered impaired without showing whether or not the beneficial uses are actually or potentially lost. As discussed further in Section VIII.C below, it is the exceedance of standards that is the basic indicator of loss or potential loss of beneficial uses and an impaired condition.

MESERB is also concerned that waterbodies will be considered impaired and listed when they are not actually impaired (Exhibit 8). The Agency assesses thousands of waterbodies for potential impairment every two years for the 303(d) list. There are about 1,890 waterbodies on the 2004 list. Experience since the 2002 list was approved has shown that the false listing of a waterbody as impaired is very uncommon. Agency tracking of listed waterbodies indicates that

Page 25

⁹ In the Agency's experience, the cost of TMDL studies ranges from about \$50,000 to \$400,000 with an average of about \$150,000. The very large regional projects like the Lake Pepin TMDL can exceed \$1,000,000.

15 have been removed from the lists since 2002, after additional data, sometimes submitted by the public, has shown that the water body was not impaired. Also, the Agency has removed a few waterbodies from draft 303(d) lists during the public comment period in response to comments. Whether these 15 delisted waterbodies are truly "false listings" depends on how one defines these terms; but the point is, that in nearly all cases follow-up monitoring confirms the impaired condition. It is far more likely that waterbodies not on the list are in fact impaired. For example, studies undertaken by the Agency in 1997-1998 on the contamination of selected watersheds by fecal coliform bacteria showed contamination to be much more prevalent than the 303(d) list indicated.

In spite of the disagreements between the Agency and MESERB on several of the broader issues (the separate rulemaking), the Agency believes the proposed additions **for this rulemaking** are in fundamental agreement with MESERB's comments in Exhibits 8, 16 and 17 (e.g. see Exhibit 18, pages 8 and 10).

B. DEFINITIONS [reasonableness]

The 2003 Session Law specifies that the Agency must define the terms listed below. The proposed definitions are quoted in "Need" Section V.B.

- 1. altered materially
- 2. material increase
- 3. material manner
- 4. seriously impaired
- 5. significant increase
- 6. normal fishery
- 7. normally present

The first five terms are associated with several narrative standards in Minn. R. 7050.0150, subp. 3. The Agency is proposing to define them together because they all have the same basic meaning. They all mean an "increase" in pollutant levels, a negative "affect," or a negative "change" that is measurable and can be quantified over and above normal variability in biological or chemical data. The proposed definition focuses on what is an important use of the narrative standards in terms of regulatory implications, which is the assessment of water quality conditions for the determination of possible impairment. The Agency's proposed definition is consistent with the context of the terms in the narrative standards and the Agency's past use of the narrative standards in water quality assessments. The Agency has had working definitions of these terms for some time, which in some cases includes a numeric interpretation (translator) of the narrative standard. For example, the narrative standard preventing harmful fish tissue contaminants: "... any significant increase in harmful pesticide or other residues in the waters, sediments and aquatic flora and fauna..." (emphasis added), is interpreted quantitatively for mercury to mean no more than 0.2 mg/kg (ppm) of total mercury in edible fish tissue. The 0.2 ppm represents the threshold for a "significant increase" in fish mercury levels such that waterbodies with fish containing more than this amount are considered to be impaired. Similarly, the narrative standard protecting lakes from a: "material increase in undesirable slime growths or aquatic plants, including algae..." (emphasis added) is measured by an exceedance of the ecoregion-based nutrient criteria (Exhibit 25).

The context of the narrative standards also provides clues to the intended meaning of the terms "normal fishery" and "normally present." These terms refer to the fish community and other aquatic organisms one would reasonably expect to find living in a waterbody in an unpolluted condition. The definition takes into account the variability in fish communities found naturally in the vast array of waterbody types throughout Minnesota that support fish. The number and type of species, and their inter-specific relationships in aquatic environments (e.g. predator/prey relationships) varies under natural conditions. It is reasonable to use biological data from "reference sites" to compare to data from the site of interest to assess what sort of community should "normally" be present. Reference sites are on waterbodies minimally impacted by human activities, located in the same geographic area and with characteristics similar to the waterbody of interest. Reference sites should support an aquatic community that would flourish in that type of waterbody in a given location relatively free from human sources of pollution. The fish community found in the reference site provides a benchmark to compare to the communities measured in similar waterbodies which may or may not be impaired. The reference water concept was adopted into Minn. R. 7050.0150 in the last rulemaking.

C. DETERMINATION OF AN IMPARIED CONDITION, BENEFICIAL USES AND WATER QUALITY STANDARDS [reasonableness]

Minnesota Laws 2003 ch. 128 art. 1, § 156, subd. 1 (e), specifies that the Agency will adopt rules that associate the determination of impaired conditions with the actual or potential loss of beneficial uses. The Agency is proposing to add language to Minn. R. 7050.0150, subp. 1, that closely parallels the language in the law (Exhibit 2). The proposed language is shown in Section V.C.

Minnesota R. 7050.0150, subpart 1 is the appropriate place for this language because this is the part of the rule that deals with the determination of compliance with standards. And it is reasonable to use the same language in the law for the proposed addition to Minn. R. ch. 7050

Language similar to what is required by the Session Law is in Minn. Stat. § 115.44, subd. 4. The statutory language is essentially repeated in Minn. R. 7050.0150, subp. 1, and in the introductory subparts to the listings of the numeric standards for the seven use classes (Minn. R. 7050.0221 – 7050.0227). The language in Minn. R. 7050.0150, subp. 1, is shown below.

The narrative water quality standards in subpart 3 prescribe the qualities or properties of surface waters that are necessary for the protection of designated public uses and benefits. If the narrative standards in this part are exceeded, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses of the waters of the state.

The relevant existing language for Class 2 waters is shown below.

Page 27

 $^{^{\}rm 10}$ Reference water body is defined in existing Minn. R. 7050.0150, subp.3, item J.

[Minn. R. 7050.0222] Subpart 1. General. The numerical numeric and narrative water quality standards in this part prescribe the qualities or properties of the waters of the state that are necessary for the aquatic life and recreation designated public uses and benefits. If the standards in this part are exceeded in waters of the state that have the Class 2 designation, it is considered indicative of a polluted condition which is actually or potentially deleterious, harmful, detrimental, or injurious with respect to the designated uses. [emphasis added]

The existing language says that when the water quality standards are exceeded that is indicative of a polluted condition¹¹. The proposed new language emphasizes the loss of beneficial uses when waters become polluted. The two provisions are complimentary and reinforce the fundamental concept of water quality standards; which is, water quality standards are: 1) the designated beneficial use, and 2) the numeric or narrative standard that protects that beneficial use. When data show that the standard is exceeded, that is "indicative" of a polluted condition, and indicative of the "actual or potential" loss of the beneficial use. The Agency recognizes that further investigation may be appropriate to document exceedances and the actual or potential loss of use. The TMDL is one process that calls for further investigation and monitoring.

The Agency believes that the addition of the language mandated by the Session Law is consistent with the Agency's current water quality assessment process for the determination of potentially impaired waters, as outlined in the Agency's Water Quality Assessment Guidance (Exhibit 25). The basic assessment process is to: 1) assemble appropriate monitoring data, including approved data from outside parties, collected over a specified time frame; 2) screen the data for the required number of exceedances of the relevant standard; and 3) review the monitoring data and all other pertinent information with a team of professionals, if necessary, to make an impairment recommendation (Section II.E).

The proposed new language will not fundamentally change the way the Agency assesses waterbodies for potential impairment now. This approach, using water quality standards as the benchmark to determine an impaired condition, is how the EPA intends standards to be used. It is consistent with the EPA regulations in 40 CFR 130.7 (Exhibit 24).

D. PETITION FOR REVIEW OF EXISTING BENEFICIAL USE [reasonableness]

Minnesota laws 2003 ch. 128, art. 1, §156 (f) requires the Agency to include in the rule an opportunity for any party to question the existence or attainability of a beneficial use for a waterbody, and to petition the Agency for a review. The proposed language is in Section V.D).

Any person has the right to petition the Agency now and request a change to the rules, including a change in use classification (Minn. Stat. § 14.09, Exhibit 26). However, it is reasonable to include language in Minn. R. ch. 7050 that goes beyond merely citing the relevant statute, not only to comply with the Session Law, but to address a more specific area of water quality standards, which is the possibility that a use assigned to a waterbody never existed or is

-

¹¹ Pollution is defined in Minn. Stat. § 115.01, subd. 13.

unattainable now. The current emphasis on impaired waters, water quality monitoring and assessments, TMDLs and the restoration of impaired waters back into compliance with standards, enhances the need for more specific use-related review language in Minn. R. ch. 7050.

As explained in Section II.A, the beneficial use classification system in Minn. R. ch. 7050 assigns multiple beneficial uses to all surface waters in Minnesota. Except for the relatively few listed limited resource value waters (about 240 state-wide), all surface waters in Minnesota are protected for aquatic life and recreation, including the potential for swimming.

While all Class 2 waters are protected broadly for aquatic life and recreation, the uses described for the five subclasses of Class 2 waters emphasize different aspects of the overall "aquatic life and recreation" use. For example, the beneficial uses assigned to wetlands (subclass 2D) appropriately emphasize non-swimming recreational uses such as boating, as well as their ecological and hydrological benefits. However, swimming in wetlands is not precluded by the rule ("...shall be suitable for boating and other forms of aquatic recreation for which the wetland may be usable," Minn. R. pt. 7050.0222, subp. 6, emphasis added). The Agency is not proposing any changes to the basic beneficial use classification system in this rulemaking.

In addition to focusing on attainable uses, the language proposed by the Agency provides guidance to the petitioners on how to make their request. The proposed language spells out five types of information the petitioner needs to include with their request for a review. Also, it establishes a time table for an Agency response. It is reasonable for the Agency to establish criteria in the rule that lays out the types and scope of information needed by the Agency to initiate a use attainability analysis and potential rulemaking. The public clearly has the right to petition for a review under the law, but it is not an unreasonable expectation to place some obligation on the petitioner. It is cost-efficient for the petitioner to supply important information the Agency will need to make an initial decision on whether or not to proceed.

The Agency is also proposing that the petitioner should explain why the current use classification is causing harm or costing the petitioner money unnecessarily, and to provide supportive evidence. This latter requirement is important in the view of the Agency. There is little question that many waterbodies in Minnesota have not and will not support one or more uses for which they are protected. For example, it is unlikely that a very small, often dry, stream could provide adequate water for crop irrigation (Class 4A); but all surface waters are protected for this potential use. Minnesota long ago decided to use an inclusive use classification system that protects individual waterbodies for multiple uses *a priori*, unless a site-specific analysis shows that that use does not exist. In other words, the decision was made long ago that it is better to protect a waterbody for a use by default, and then show that the use does not exit, rather than require the Agency to prove in each and every instance that a use does exist, before standards can be applied to protect the use. The Agency believes that this system is more protective of the state's water resources, has worked well for many years, and ultimately is more cost-effective than the alternative.

In the irrigation example above, if these assigned uses are not causing any party problems or harm, there seems to be little benefit to doing an expensive UAA on the waterbody and proposing a classification change in rulemaking. Again, the Agency feels it is reasonable to ask

the petitioner to provide evidence that the existing use is causing unnecessary harm, or that because of the classification, money is being spent for no environmental gain. The Agency must consider the possibility that a proposed rule without this requirement could generate dozens of requests for expensive UAAs with little merit. The added costs to the Agency could be substantial.

Use attainability analyses (UAA) can be very time consuming and costly undertakings. Physical, chemical and biological data may need to be collected, if data are not already available, or are inadequate. Information from local governmental entities, local organizations, environmental groups and residences may be needed. Ultimately, the change in use classification requires a change to the rules, a process with its own set of requirements and timelines. Considerable time and money may be expended with no guarantee of the final outcome through rulemaking. Interested and affected public must be given an opportunity to comment on the analysis. The rulemaking phase provides an opportunity for public involvement, but additional opportunity for public involvement may be required to be sure the public is heard, particularly if the proposed change is controversial.

The UAA, as the principal support for proposed change in use classification, must demonstrate with reasonable assurance and by weight of evidence, that the uses are indeed unattainable. This fairly strict threshold for a use class change is appropriate. A waterbody that may appear to most outsiders to be incapable of providing a particular use may still provide that use for some people. For example, a shallow and weed-choked lake may not be suitable for swimming as we normally think of swimming. But children may be attracted to that same waterbody to search for frogs and bugs, or just to play in the water. The possibility that they may get wetter than planned, fall in, or put their hands in their mouths, is real. This type of use may not be swimming in the strict sense, but it is a form of primary body contact none the less.¹²

Also, the public needs to understand that a petition for use class change is not a short-term solution to a problem; that a UAA and rulemaking may require three to six years to complete (again, with no guarantee of the outcome). There may well be simpler, faster and much less expensive solutions to the issues someone may have with the uses and standards applicable to a given waterbody. More cost-effective options include natural background provisions (Minn. R. 7050.0170), site-specific modification of standards (Minn. R. 7050.0222, subp. 7), or a variance (Minn. R. 7050.0190). Depending on the particular circumstances, the Agency may suggest one of these alternatives to the petitioner in lieu of a UAA and rule change.

The proposed language includes timelines for a response to the petition from the Agency. The Commissioner must respond to a complete petition within 60 days. The response will state how the Commissioner plans to deal with the petition. The Commissioner can reject the petition and take no further action on the petition, it can declare that the petition is incomplete and request additional information, or it can indicate its intent to carry out a UAA. If the Commissioner rejects the petition, it must provide a written explanation of the reasons for making that decision to the petitioner, which includes any data and any other relevant information, such as comments

Page 30

_

¹² Primary body contact means a type of recreational use of water during which person will inadvertently ingest small quantities of water. Swimming is a good example.

from local citizens or entities, the Commissioner used to frame its decision. The Agency may suggest alternatives to a UAA that will provide the relief the petitioner seeks but at less cost.

If the Commissioner agrees a UAA is warranted, it has six months to start the UAA process from the time it responded to the completed petition. This much time may be needed, for example, if summer monitoring is needed and the petition was received the previous fall. Once the UAA is complete and if it supports a change in the use classification, the Agency will typically propose the use classification change in the next available revision of Minn. R. ch. 7050. The Agency is reluctant, however, to put such a requirement in the rule (i.e., that the Agency **must** propose the change in the very next rulemaking). For example, it may not be possible to fit the classification change into the next rulemaking for these reasons:

- There may have been inadequate notification of the change. For example, the classification change may not have been included in the scope of changes noticed in a *State Register* request for comments, or in the required notification of the Governor's Office about the pending rulemaking;
- The public at large may not have had time to become aware of and comment on the classification change;
- Other rulemaking priorities or resource limitations may prevent including the proposed change; or
- Proposed rule changes and rulemaking deadlines mandated in statute may demand full use of available staff resources.

The timelines the Agency is proposing are reasonable given the significance of use class changes, the relative permanent nature of rulemaking changes, and the costs to the Agency of doing UAAs and rulemaking.

In conclusion, the Agency is mandated to include language in Minn. R. ch 7050 that allows any person to petition to have the beneficial uses of a waterbody reviewed. The Agency's proposed language, the criteria for minimum information the petitioner must provide, including why the current use classification is causing the petitioner hardship, and the Agency's response timelines, are reasonable.

E. CONSIDERATION OF TEMPERATURE AND HYDRUALIC RESIDENCE TIME

Minnesota Laws 2003 ch. 128 art. 1, § 156, subd. 1 (g) specifies that the Agency must consider the effects of temperature and hydraulic detention time on algal populations when assessing lakes for impairment due to excess nutrients. Temperature and hydraulic detention time are two of many factors that can influence the reaction of a waterbody to the influx of nutrients. The Agency already considers these and many other factors that are relevant when assessing the trophic status of lakes and reservoirs for an impairment determination. The Agency is proposing to add the word "temperature" to Minn. R. 7050.0150, subp. 5, item D to comply with the Session Law. The term "hydraulic residence time" is already in the existing rule language (see Section V.E). The addition of the word "temperature" to Minn. R. 7050.0150, subp. 5, item D. is reasonable.

F. CONCLUSIONS [reasonableness]

The Agency's proposed additions are consistent with the mandating Session Law, Minn. laws 2003 ch. 128, art. 1, §156. The two proposed definitions are based on the Agency's experience with implementing narrative standards and doing water quality assessments. The proposed language dealing with determination of impaired conditions is taken directly from the Session Law and is reasonable.

The petition language (proposed Minn. R. 7050.0405) properly focuses on beneficial uses, and includes the following:

- Guidance for the petitioners on information to include with the petition;
- A requirement that the petitioner show how the existing use classification is causing hardship or unnecessary expense; and
- A timeline for the Agency response.

The proposed petition language is reasonable.

IX. CONSIDERATION OF ECONOMIC FACTORS

There will be no additional cost to any outside party as a result of the proposed amendments. The public or governmental entities may incur costs if they choose to submit a petition for a review of a beneficial use. This is not a new cost or a cost that is attributable to the proposed rule additions because the public currently has the right to submit such a petition under the provisions of Minn. Stat. § 14.09.

The Agency will incur costs if petitions are submitted for review. It is difficult to estimate these costs because we do not know how many petitions might be submitted, and how many of those will result in a UAA and a proposed rule change.

The Agency has a 25-year history of responding to requests for the reclassification of waterbodies to the limited resource value waters (Class 7) water use classification. However, requests from the public for a review of beneficial uses outside the context of potential Class 7 candidates have been very rare in our experience. But, again, the more focused language proposed for Minn. R. 7050.0405 might generate more requests.

Potential costs for each petition that the Agency might incur as a result of the proposed language can be estimated from past costs incurred during Class 7 reclassifications. We estimate that the costs for staff time alone for both the UAA and rulemaking for each proposed Class 7 is approximately \$1500. This does not include other expenses associated with rulemaking (e.g., Attorney General's time, Administrative Law Judge, court reporter, etc.). We believe this to be a minimum cost estimate because:

- Nearly all Class 7 waters are headwater steam segments that are substantially altered by channelization.
- Many Class 7 waters lack water during dry periods.
- A simplified UAA process can be used for potential Class 7 waters.
- Because of the extensive alterations, the loss of habitat for aquatic life and loss of recreational opportunities means the assessment of Class 2 uses is relatively clear-cut.
- Most Class 7 reclassifications are non-controversial.
- Typically the Agency has been able to "batch" together 8-12 proposed Class 7s in one rulemaking, which saves rulemaking costs.

Depending on the waterbody and the uses being challenged, the UAA and proposed reclassification of waterbodies other than channelized ditches could be substantially more difficult, controversial and more expensive.

X. IMPACT ON AGRICULTURE AND OTHER REQUIRED INFORMATION

Minnesota Statute § 14.111 requires agencies to send a copy of any proposed rule that affect farming operations to the Commissioner of Agriculture prior to publication of the proposed rule in the *State Register*. The proposed amendments to Minn. R. ch. 7050 in this rulemaking will have no affect on farming operations. A letter will be sent to the Commissioner of Agriculture to that effect.

Minnesota Stat. § 174.05, subd. 1 requires the Agency to inform the Commissioner of Transportation of all activities which relate to the adoption, revision or repeal of any standard or rule concerning transportation. The proposed additions discussed in this rulemaking will have no affect on transportation. A letter will be sent to the Department of Transportation to that effect.

XI. LIST OF WITNESSES AND EXHIBITS

A. WITNESSES

The Agency plans to have the following staff available to testify at the public hearing, if a hearing is required.

David Maschwitz – Proposed amendments in general, history of their development, preparation of the proposed rule and SONAR.

Kevin Molloy – Rulemaking coordination and administration.

Frank Kohlasch – Proposed amendments in general.

B.	EXHIBITS		
Attach	ed.		
XII.	CONCLUSION		
Based on the foregoing, the proposed rule amendments discussed in the SONAR are both needed and reasonable.			
Dated:		Sheryl A. Corrigan Commissioner	

Greg Gross – Supervisor of Standards Unit