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July 6, 2016

The Honorable Eric L. Lipman
Administrative Law Judge
Office of Administrative Hearings
600 North Robert Street
P.O. Box 64620
Saint Paul, Minnesota 55164-0620

Re: In the Matter of the Proposed Rules of the Department of Natural Resources Governing Mississippi River Corridor Critical Area; Response to Comments; OAH Docket No. 8-9014-33236; Revisor's ID Number R-04240

Dear Judge Lipman:

This letter transmits the Department of Natural Resources' (DNR) responses to comments it has received on the Mississippi River Corridor Critical Area (MRCCA) rules during the pre-hearing comment period and during the public hearing.

Minnesota Statutes, section 14.14, subdivision 2, requires the DNR to "make an affirmative presentation of facts establishing the need for and reasonableness of the proposed rules . . . ." In making its affirmative presentation, the Department must show that its action has a rational basis. George Beck & Mehmet Konar-Steenberg, *Minnesota Administrative Procedure*, § 20.4.2 (3rd ed. 2014).

The DNR has outlined its rational basis for adopting the proposed MRCCA rules in its affirmative presentation at the public hearing, in its Statement of Need and Reasonableness (SONAR) (Exh. 3), in the attached response to comments, and in the attachments thereto. The DNR's evidence, taken as a whole, evidences that the DNR has met the rational basis standard and compels one to conclude that the proposed MRCCA rules of the DNR are needed and reasonable.

The proposed MRCCA rules generated a great deal of interest as shown by the attendance at the public hearings and the written submissions made during and since the hearings. The DNR sorted and summarized the comments and issues in the attached documents which include: DNR Response to Public Comments Memorandum and attachments thereto; DNR Detailed Responses to Public Comments and attachments thereto; DNR Responses to ALJ Questions and attachments thereto; DNR Comment Spreadsheet outlining detailed responses to comments received or before June 24; and Requested Revisions to District Maps and DNR Responses.

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The DNR has addressed the many concerns raised during the hearings and the comment period. The DNR has shown that the rules are needed and reasonable. We respectfully submit that the Administrative Law Judge should recommend adoption of the MRCCA rules.

Yours very truly,

Sherry A. Enzler
General Counsel

Enclosures

c: Barbara Naramore, Assistant Commissioner
Luke Skinner, Ecological and Water Resources Director
Jennifer Shillcox, Ecological and Water Resources Division
Daniel Petrik, Ecological and Water Resources Division
Beth Carlson, DNR Rules Coordinator, Operations Services Division

22.0007.Correspondence. DNR MRCCA Comments COVER 2016-07-06

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State of Minnesota
Minnesota Department of Natural Resources (DNR)

In the Matter of Proposed Rules
Minnesota Rules, Chapter 6106, Relating to
Mississippi River Corridor Critical Area (MRCCA).
OAH Docket # 8-9014-33236
Revisor ID R-04240

DNR Response to Public Comments
Memorandum

July 6, 2016

DNR Response to Public Comments Submitted During the Pre-Hearing Public Comment Period, at the Public Hearings, and During the First Full Week of the Post-Hearing Public Comment Period

I. Introduction

A. Notice & Public Hearings

The Minnesota Department of Natural Resources (DNR or Agency) noticed its intent to hold public hearings regarding the above referenced proposed rules in a Notice of Hearing published in the *State Register* on April 11, 2016 (Volume 40, Number 41, Pages 1359 and 1361). The Notice provided for the submission of prehearing comments on the proposed rules from April 11, 2016 through June 16, 2016 and as well as a 20 day extended post hearing comment period. The post-hearing comment period as extended by order of the Administrative Law Judge ended at 4:30 p.m. on July 6, 2016.

The rules are proposed by the Agency under the authority of Minn. Stat. § 116G.15. The rulemaking is limited in scope to the rules proposed in the Notice of Hearing. The scope is to establish new districts, standards, and criteria for the Mississippi River Corridor Critical Area (MRCCA), which and will replace those established by Executive Order 79-19.

The DNR set forth the need for the proposed rules through an affirmative presentation of facts at the public hearings, and in Hearing Exhibit 3, the Statement of Need and Reasonableness (SONAR) and supporting exhibits to the SONAR. *See* Minn. Stat. §§ 14.131 and 14.14, subd. 2 (requiring the agency to set forth information in the SONAR and the agency's presentation at the rulemaking hearing). The need for and reasonableness of the proposed rule was verified by the testimony of Senator Sieben, a primary author of Minn. Stat. §116G.15, and Senator Durenberger, a primary proponent of the federal legislation establishing the Mississippi National River & Recreational Area (MNRRA).

B. DNR Review of Comments and Organization of DNR's Response to Comments

This memorandum and attachments (hereinafter referred to as the "Response") contain the Agency's detailed responses to comments submitted during the pre-hearing public comment period, at the hearings, and during the first full week of the post-hearing comment period (April 11 - June 24, 2016). This Response is considered a supplement to the information in the SONAR.

The memorandum and all attachments that comprise the Response are listed as exhibits in Section V of this document. Several of the attachments are described in detail below:

Attachment 1 is the DNR's detailed responses to multiple comments on key topics. Attachment 1 identifies the rule parts relevant to each topic, as well as the SONAR pages that address the relevant rule part or topic. The SONAR references are provided because the SONAR addresses many of the comments in detail sufficient to establish the need and reasonableness of the proposed rule part on which the comment is made. The DNR does not add to or repeat information in the SONAR if the comment is adequately addressed in the SONAR.

Attachment 2 is the DNR's response to specific questions posed by Administrative Law Judge Eric Lipman in a letter to the Agency dated June 14, 2016.

Attachment 3 is a spreadsheet compilation of the written comments submitted during the comment period, and testimony and exhibits provided at the public hearings. The Agency participated in the hearings and reviewed the transcripts of the hearings. Comments submitted orally during the hearings were reflective of submitted written comments. Additionally:

- Attachment 3 either directly excerpts or paraphrases written comments received during the public comment period and at the hearings.
- A single commenter may address multiple issues or multiple parts of the proposed rule. Each distinguishable comment within a letter or the hearing transcripts has been labeled as a separate line in Attachment 3.
- Attachment 3 contains information on the rule part or parts each comment relates to, when identifiable, as noted in the column titled "Rule Part."
- During its review of comments, the Agency categorized the comments by topic as noted in the column titled "Comment Topic." Short responses by the Agency to singular comments are included in the column titled "DNR Response."
- More detailed responses to multiple comments on key topics are included in Attachment 1.

Attachment 4 is a spreadsheet compilation of proposed district map changes submitted during the comment period, and testimony and exhibits provided at the public hearing (April 11 – June 24, 2016), and the DNR's response to each proposed change in capital letters.

II. DNR's Proposed Changes to Proposed Rules as Published in Response to Comments Received

After review and careful consideration of comments, the DNR proposes a number of modifications to the rules as published in the Minnesota State Register on April 11, 2016. The need and reasonableness of the each proposed rule part is established in the SONAR. Any additional information supplementing the need and reasonableness for the proposed modifications is outlined below and is considered a supplement to the SONAR.

Pursuant to Minn. Stat. § 14.05, subd. 2, proposed agency rules may be modified where:

- the changes are within the scope of the matter announced in the notice of hearing;
- the changes are a direct and logical outgrowth of comments submitted in response to the notice of hearing;
- the notice of hearing provided fair notice to persons interested in and affected by the rule amendments that the additional changes would be part of the rule in question;

- the additional changes do not change in any way the group of persons who will be affected by the rule;
- the subject matter of the additional changes is the same as the subject matter contained in the notice of hearing; and
- the additional changes do not alter the effects of the rule proposed in the hearing notice.

Proposed modification to the rules as published	Statement of need and reasonableness	§ 14.05, subd. 2 Standard
6105.0050 Subp. 8.A. Bluff Definition **Lines 3.1 – 3.4** A. a slope that rises at least 25 feet ~~above the ordinary high water level or toe of the slope to the top of the slope~~ and the grade of the slope averages 18 percent or greater, measured over a horizontal distance of 25 feet, as follows: (1) where the slope begins above the ordinary high water level, from the toe of the slope to the top of the slope; or (2) where the slope begins below the ordinary high water level, from the ordinary high water level to the top of the slope ~~averages 18 percent or greater, measured over a horizontal distance of 25 feet~~. See Figure 1; or	This clarifies when the bottom of the slope is the "toe of the slope" or the "ordinary high water level" as suggested by the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**).	The definition of bluff is a core subject of the rule. The modification does not change the rule but clarifies how distance is to be measured when the slope begins at the water's edge. Minn. Stat. § 14.05, subd. 2 (b)(1) and (c)(3).
6105.0050 Subp. 8.B. Bluff Definition **Lines 3.5 – 3.7** B. A natural escarpment or cliff with a slope that rises at least ten feet above the ordinary high water level or toe of the slope, whichever is applicable, to the top of the slope with a~~n average~~ slope of ~~100 percent~~ 75 degrees or greater.	A slope of 100 percent is only a 45 degree slope and such a slope with a 10 foot height is likely to include many features that are not cliffs or natural escarpments. The revised definition more closely defines the cliff or escarpment feature intended (see **Attachment 3**).	This modification is a logical outgrowth of the comments received in response to the notice and the subsequent public hearings. Minn. Stat. § 14.05, subd. 2(b)-(c). The modification addresses an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(c)(2).

Proposed modification to the rules as published	Statement of need and reasonableness	§ 14.05, subd. 2 Standard
6106.0050 Subp. 39 Native Plant Community Definition **Lines 7.7 – 7.9** "Native plant community" means a plant community that has been ~~mapped~~ identified as part of the Minnesota biological survey or other scientifically based studies, such as the USGS National Vegetation Classification or the USGS-NPS Vegetation Characterization Program.	This change provides more detailed guidance and options for identification of native plant communities as suggested by commenters and the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6105.0050 Subp. 68. Shore Impact Zone Definition **Lines 11.1 – 11.4** "Shore impact zone" means land located between the ordinary high water level of public waters and a line parallel to it at a setback of 50 percent of the required structure setback or, for areas in agricultural use, 50 feet landward of the ordinary high water level ~~in areas of agricultural use~~.	This clarifies the definition of the shore impact zone in agricultural areas as suggested by the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**). This language is also consistent with the requirements of Minn. Stat. §103F.48.	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6106.0050 Subp. 72 Steep Slope Definition **Line 12.15** …greater than 50 feet, and any slopes greater than 18 percent that are not bluffs.	Because the definition of the bluff is so specific, many slopes that are greater than 18% but that don't meet the bluff definition would not be protected. This change would eliminate a potential loophole (see **Attachment 3**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6106.0060 Subp. 3 Consistent Plans & Ordinances **Lines 15.11 - 15.12** ~~Plans and o~~Ordinances that are not consistent with this chapter require approval of flexibility from the commissioner, according to part 6106.0070, subpart 6.	This clarifies the term "approval of flexibility" as suggested by the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).

Proposed modification to the rules as published	Statement of need and reasonableness	§ 14.05, subd. 2 Standard
6106.0060 Subp. 5(C) Duties of Commissioner **Line 16.1** C. ~~be the lead agency to~~ coordinate…	This clarifies that the commissioner is not "the lead agency" as suggested by the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(10-(2) and (c)(2).
6106.0070 Subp. 6(A) Flexibility **Lines 24.1 – 24.2** Delete "~~, and the purpose and scope of this chapter~~".	This eliminates redundancy with part 6160.0020 as suggested by the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6106.0070 Subp. 6(C)(1)(a) Flexibility **Lines 25.8 – 25.23** Add a new provision (1) that requires that the commissioner must "make such request publicly available."	This clarifies how persons would receive notice of local requests for flexibility as suggested by the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6106.0100 Subp. 4 River Neighborhood District **Line 32.21** …water into the river and enhancing habitat and shoreline vegetation ~~habitat~~ are priorities in this district.	This expanded statement clarifies that habitat outside of shoreline areas is not excluded (see **Attachment 3**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6106.0100 Subp. 9.C.(1)(d) District Boundaries **Line 35.7** (d) ~~be consistent with~~ identify those local comprehensive plans, regional system statements, and state park and transportation master plans, and applicable federal plans;	This narrows the submittal requirements for local governments proposing district boundary changes, which were too broad as pointed out by the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**).	The modification reduces the administrative requirements of local governments around an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6106.0120 Subp. 2.A.(4) Structure Height – Separated from River (SR) District **Lines 39.8 – 39.11** …height is determined by the local government's underling zoning requirements, provided the structure~~'s~~ height in the	Commenters were concerned that the height limit for the SR district was too ambiguous and created uncertainty around which structures would be subject to the height requirements. The proposed modification clarifies that	This modification is a logical outgrowth of the comments received in response to the notice and the subsequent public hearing. Minn. Stat. § 14.05, subd. 2(b)-(c). The modification clarifies an issue core to the rule and thus is well

Proposed modification to the rules as published	Statement of need and reasonableness	§ 14.05, subd. 2 Standard
underlying zoning is generally consistent with the height of the mature treeline, where present, and existing surrounding development, as viewed from the ordinary high water level of the opposite shore.	communities won't have to evaluate appropriate height on a case-by-case basis, but that height will be specified in the underlying zoning. The DNR will review and approve these heights as part of each community's MRCCA ordinance submittal (see **Attachment 3**).	within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6106.0130 Subp. 8(B) Public Recreational Facilities **Line 45.6** Add "to shoreline vegetation, erodible soils and slopes, and other sensitive resources."	This modification clarifies the meaning of the phrase "minimize impact" as suggested by the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6106.0130 Subp.8(E) Public Signs & Kiosks **Line 46.2** Add "must be placed and constructed to" minimize disturbance…	This modification clarifies placement and location of signs and kiosks as suggested by the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6106.0130 Subp. 8 Public Recreational Facilities **Line 46.4:** Add a new subpart F as follows: F. Public stairways, lifts, and landings must be designed as provided in part 6106.0140, subpart 6, item C.	This modification clarifies the design standards for stairways, lifts, and landings on public lands consistent with those provided in the proposed rules for private lands (see **Attachment 3**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6105.0150 Vegetation Management **Line 51.18** Add "work as determined by a~~n~~ professional engineer or resource agency;"	The proposed modification is needed align the definition of engineers so that there are not two inconsistent definitions of the term engineer in the rules. The definition in this section has been revised to be consistent with the definition of professional engineer in 6105.0050 subp. 54 (see **Attachment 3**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.052(b)(1)-(2) and (c)(2).

Proposed modification to the rules as published	Statement of need and reasonableness	§ 14.05, subd. 2 Standard
6106.0160 Subp. 4 Rock Riprap **Lines 54.8** A. Construction, repair, and replacement of rock riprap… **Line 55.6** Add a new C. that states: C. Repair of existing rock riprap retaining walls and other erosion control structures does not require a local government permit, provided it does not involve any land alteration.	This modification clarifies that the repair of riprap is allowed, and does not require a local government permit unless it involves land alteration (see **Attachment 3**). This revision does not, however, exempt the landowner from the requirements of Minn. Stat. § 103G.245, subd. 1.	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.052(b)(1)-(2) and (c)(2).
6106.0170 Subp. 4(J) Open Space **Lines 61.1 - 61.2** Delete "~~neighboring or abutting~~" (line 61.1) and add "where present on adjacent parcels" (line 61.2).	This modification clarifies what is meant by connecting open space "as much as possible" as suggested by the Administrative Law Judge in his letter to the Agency dated June 14, 2016 (see **Attachment 2**).	The modification clarifies an issue core to the rule and thus is well within the subject matter of the proposed rules as noticed. Minn. Stat. §14.05, subd. 2(b)(1)-(2) and (c)(2).
6105.0180 Exemption Table **Line 64.21** Add "Temporary storage of docks, boats and other equipment during the winter months" as an "E" in SIZ column, and "N" in all other columns.	This modification clarifies a typical use of shoreland areas for temporary storage (see **Attachment 3**).	This modification is a logical outgrowth of the comments received in response to the notice and the subsequent public hearing. Minn. Stat. § 14.05, subd. 2(b)-(c).

III. Corrections to the SONAR

The Agency discovered one minor error in the SONAR. Under "History of the MRCCA Designation and Rulemaking Efforts" on Page 2, the following correction is proposed:

> The MRCCA covers a 72-mile stretch of the Mississippi River through the Twin Cities Metropolitan Area, extending from the ~~townships~~ cities of Dayton and Ramsey in Hennepin and Anoka counties to the north and extending downstream to Ravenna Township, just south of Hastings in Dakota County (Figure 1).

IV. Conclusion

After thorough consideration of comments made on the proposed rules, and as required by Minn. Stat § § 14.131, 14.14, subd. 2, and 14.15, subd.4, and Minn. Rules § 1400.2100, the Agency has shown the

rules as proposed with the additional changes detailed in Section II of this document are needed and are reasonable as demonstrated by and affirmatively shown by facts presented by the Agency on the hearing record.

V. List of Exhibits Supporting the DNR's Response to Comments comprising the "Response"

D.0 DNR Response to Comments Memorandum

D.1 Attachment 1 - DNR Detailed Responses to Comments

D.2 Attachment 2 - DNR Response to ALJ Questions

D.3 Attachment 3 - DNR Spreadsheet of Comments (April 11 – June 24, 2016)

D.4 Attachment 4 - DNR Spreadsheet of Proposed District Map Revisions (April 11- June 24, 2016)

D.5 Attachment 5 - DNR Takings Analysis Memo

D.6 Attachment 6 - City of St. Paul Nonconformity Analysis 2015

D.7 Attachment 7 - Lakeshore Property Values and Water Quality: Evidence from Property Sales in the Mississippi Headwaters Region (Bemidji State University, May 14, 2003)

D.8 Attachment 8 - DNR Bluff Analysis for Anoka and Brooklyn Park

D.9 Attachment 9 - Summary of Local Bluff Provisions

D.10 Attachment 10 - Bluff Provisions in Executive Order 79-19

D.11 Attachment 11 - Dimensional Standards in Executive Order 79-19

D.12 Attachment 12 - Summary of Local Height Standards

D.13 Attachment 13 - Facility Provisions in Executive Order 79-19

D.14 Attachment 14 - Vegetation Provisions in Executive Order 79-19

D.15 Attachment 15 - Water Quality Provisions in Executive Order 79-19

D.16 Attachment 16 - Subdivision & PUD Provisions in Executive Order 79-19

D.17 Attachment 17 - Use Provisions in Executive Order 79-19

D.18 Attachment 18 - MMB Fiscal Analysis Response

Attachment 1: DNR Detailed Responses to Public Comments

State of Minnesota
Minnesota Department of Natural Resources (DNR)
DNR Response to Public Comments on Proposed MRCCA Rules
July 6, 2016

This document supplements information in the Statement of Need and Reasonableness (SONAR) in the matter of proposed rules for the Mississippi River Corridor Critical Area (MRCCA), Minnesota Rules, Chapter 6106.

This document contains the Minnesota Department of Natural Resources' (DNR or Agency) detailed responses to comments submitted during the pre-hearing public comment period, at the hearings, and during the first full week of the post-hearing comment period (April 11 - June 24, 2016). The Agency thoroughly reviewed public comments, participated in the hearings, and reviewed the transcripts of the hearings. This document focuses on key topics that received multiple comments. Individual responses to all substantive comments are included in **Attachment 3**.

All comments and the public hearing transcripts are posted in their entirety on the Office of Administrative Hearings webpage: https://minnesotaoah.granicusideas.com/discussions/department-of-natural-resources-proposed-rules-governing-mississippi-river-corridor-critical-area/topics/

The comment topics specifically addressed in this document are:

A. Page 1 - Comments generally in support of adopting the proposed rules.
B. Page 2 - Comments regarding the DNR's legal authority to conduct rulemaking.
C. Page 2 - Comments regarding takings and property rights.
D. Page 3 - Comments regarding less intrusive measures and complexity.
E. Page 3 - Comments regarding costs to small business and local governments.
F. Page 5 - Comments regarding bluffs (6106.0050, subps. 8-9, 6106.0120, subp. 3.B.).
G. Page 7 - Comments regarding changes to district maps (6106.0100).
H. Page 8 - Comments regarding height requirements (6106.0120).
I. Page 9 - Comments regarding public recreational facilities (6106.0130, subp. 8).
J. Page 10 - Comments regarding vegetation management (6106.0150).
K. Page 11 - Comments regarding riprap (6106.0160, subp. 4).
L. Page 11 - Comments regarding subdivisions, conservation design, and land dedication (6106.0170).

A. Comments generally in support of adopting the proposed rules.

Related Rule Parts: 6106.0010 (Policy)

SONAR Reference: Introduction – Need for the Proposed Rules (Page 2)

Summary of comments supporting the proposed rules: Many people across the MRCCA testified in support of adopting the rules at the public hearings and in written comments, including a number of state legislators. Common reasons provided in support of adopting the rules included:

- The proposed rules are balanced and fair, and represent diverse perspectives within the MRCCA.

- The proposed rules update outdated and vague provisions in Executive Order 79-19.
- The proposed rules maintain a regulatory framework between the state and local units of government that works to protect resources of state or corridor-wide importance.

Some commenters felt that the proposed rules are less protective than Executive Order 79-19, while others felt that the proposed rules aren't needed and that they are still too vague in some areas.

DNR Response: As stated in the SONAR, Executive Order 79-19 has governed local land use decisions in the MRCCA for over 35 years. Because it is vague, outdated, difficult to administer, and has no mechanisms for change, the Legislature directed the DNR to develop rules to update and replace Executive Order 79-19. The DNR conducted a highly participatory process and engaged affected parties across the MRCCA in order to understand the challenges, issues, and concerns with the existing program under Executive Order 79-19. The DNR developed proposed rules that balance the diverse perspectives and values within the corridor consistent with the guiding principles set forth in Minn. Stat. § 116G.15.

B. Comments regarding the DNR's legal authority to conduct rulemaking.

Related Rule Parts: Policy (6106.0010)

SONAR References: Statutory Authority (Page 8)

Summary of comments regarding the DNR's legal authority to conduct rulemaking: The proposed rules take away local land use control through broad-brush regulations that supersede more fine-grained and site-specific local zoning regulations. Local governments are most attuned to local conditions and should be the primary decision-makers on land use matters.

DNR Response: Local units of government are creations of the state. Minn. Const. Art. XII, § 3. The power of a local unit of government is a police power delegated to local units of government by the Minnesota Legislature. *See generally,* Minn. Const. Art. XII and Minn. Stat. Chs. 394 and 462. The Minnesota Legislature retains the authority to modify or limit local land use authority and does so to ensure consistent protection of resources that are important to the state and all of its residents. *Id., see e.g.* Minn. Stat. § 103F.201 (directing the commissioner to adopt model shoreland development zoning provisions and requiring local units of government to adopt said provisions as a part of their local zoning code). This is important because local governments may lack the perspective and/or the capabilities to adequately protect resources of statewide importance. All cities in the MRCCA have been subject to broad corridor-wide regulations for 40 years; these rules do not change the regulatory relationship with the state.

C. Comments regarding takings and property rights.

Related Rule Parts: N/A

SONAR References: N/A

Summary of comments regarding takings and property rights: DNR is restricting property owners' rights, sending a bad signal to property owners, developers and the marketplace. The proposed rules pose a financial risk to cities from inverse condemnation lawsuits (regulatory takings).

DNR Response: The U. S. Supreme Court has long recognized the power to regulate land use through zoning as an inherent police power of state and local units of government. *Village of Euclid v. Ambler Realty Co.,* 272 U.S. 365 (1926). Thus the mere fact that all businesses and properties in the MRCCA are subject to zoning regulations does not constitute a taking. As Justice Holmes recognized in *Penn. Coal v. Mahon,* 260 U.W. 393 (1922): "Government could not go on if to some extent values incident to property could not be diminished without paying for every such change in the general law. As long recognized, some values are enjoyed under an implied limitation and must yield to the police power." *Id.* at 413. The proposed rules are adopted pursuant to the government's police powers and are intended to protect the State's paramount interests in the Mississippi River and the MRCCA. These proposed rules modify current municipal zoning ordinances adopted under Executive Order 79-19. As outlined in **Attachment 5**, the proposed rules and the associated zoning regulations do not constitute a regulatory taking, since they do not meet the constitutional test for a taking laid out by the U.S. Supreme Court in *Penn. Central Transportation Co. v. New York City,* 438 U.W. 104 (1978) and its progeny or by the Minnesota Supreme Court in *Zeman v. City of Minneapolis,* 552 N.W. 2d 548 (Minn. 1996).

Additionally, the proposed rules allow nonconforming properties to continue in their present use. This is consistent with the requirements of state law. Minn. Stats. § 462.357 and Minn. Stat. §394.36. The proposed rules will increase opportunities for business expansion in some locations by increasing allowable building heights, especially in the CA-RTC and CA-UM districts.

D. Comments regarding less intrusive methods and complexity.

SONAR References: Regulatory Analysis (Questions 3-4, Pages 11-13), Performance-Based Rules (Page 17), Bluff Protection Standards (Pages 22-28)

Summary of comments regarding less intrusive methods and complexity: The DNR fails to show there are not less intrusive methods for achieving the purpose of the proposed rules. Factors include creation of nonconforming structures due to bluff setbacks and the bluff impact zone based on a 2014 analysis done by the City of St. Paul.

DNR Response: Minnesota Statute § 14.131 requires the Agency to determine whether there is a less costly or less intrusive method for achieving the purposes of the rules other than through rulemaking. In 2008, the DNR issued a Legislative report outlining a number of approaches to improve the MRCCA program and better protect the MRCCA (Hearing Attachment 3E). Several of these approaches did not involve rulemaking. The Legislature responded by specifically directing the DNR to conduct rulemaking in 2009 and again in 2013. Commenters did not identify any specific "less intrusive methods" that could achieve the purpose of the proposed rules established in statute.

Furthermore, the objections raised by many commenters have less to do with whether or not there is a non-rulemaking alternative, and more to do with concerns over the rules themselves. Specifically, commenters are concerned about the rules being too intrusive, particularly as they relate to bluff setbacks and the bluff impact zone definitions and provisions creating too many nonconformities. The comments are based on a 2014 analysis done by the City of St. Paul, which has since been superseded by a new study. *See* **Attachment 6**, City of St. Paul 2015 Nonconformity Analysis. For the DNR's full response to this issue, see Section II.F. of this document, which addresses comments regarding bluffs.

E. Comments regarding costs to local governments and businesses.

Related Rule Parts: Nonconformities (6106.0080, subp. 3), Setback Averaging (6106.0120, subp. 3.D.)

SONAR References: Regulatory Analysis (Questions 5-6, Pages 13-16), Consultation with MMB on Impacts to Local Government (Page 18), Determination About Rules Requiring Local Implementation (Page 18), Cost of Complying for Small Business or City (Pages 19-21)

Summary of comments on "costs to local governments": The DNR has underestimated the costs to local governments and failed to include nine local governments in its analysis, including St. Paul. This represents a failure to meet the fifth factor of the regulatory analysis on costs borne by identifiable categories of affected parties.

DNR Response: To estimate costs, the DNR surveyed all of the local units of government within the MRCCA. The nine local governments mentioned in the comment failed to respond to several requests for information, despite numerous efforts by the DNR to gather their estimates. All other local units of government responded and provided cost estimates to the DNR survey. The fact that nine of the 30 local units of government declined to provide the DNR with a response to the survey does not invalidate the results of the survey or the DNR's cost projections. Moreover, future costs to local governments will be mitigated by the fact that the DNR will be assisting those governments by developing model plan and ordinance language, providing mapping layers and tools, and providing training and other guidance to local governments to minimize their costs. A more detailed discussion of the costs to local governments may be found in **Attachment 2**, response to Administrative Law Judge's Question No. 8, and in the SONAR beginning on page 19.

Summary of comments on "costs to small businesses": The DNR skirts legislative requirement to analyze impacts to small businesses because the impacts will occur after the first year. DNR should analyze this factor. The SONAR notes that "small businesses already in existence would not be subject to additional restrictions, except in cases where these businesses choose to expand or redevelop." Again, Minnesota law states that development and redevelopment of industrial and commercial uses must be provided for in the MRCCA rules. The statement in the SONAR that small businesses would only be subject to additional restrictions if they choose to expand or redevelop shows a lack of attention for this component of the law.

DNR Response: The proposed rules do not prohibit economic development in the MRCCA. Consistent with Minnesota law, any nonconformity created by the application of the rules is permitted to continue in operation. Minn. Stat. § 394.36 (2015). Even where a nonconformity is created by the application of the rule, expansion or redevelopment is not precluded. In most cases, redevelopment or expansion is permitted so long as the expansion is consistent with the height and setback requirements of the individual districts. *See eg.* 6106.0080, subp. 3, regarding nonconformities, and 6106.0120, subp. 3.D., regarding setback averaging - allowing development within the ordinary high water level setback consistent with existing building lines provided there is no intrusion into the shore impact zone. Additionally, the standards set forth in these rules are not significantly different than those currently applied by local units of government across the MRCCA, except in two instances: bluff impact zone expansions and set-asides. Bluff impact zone restrictions are public safety-based. Development and redevelopment of industrial and commercial uses is one factor among many in the statute, and does not take precedence over all others. A more detailed discussion of the impact of these rules on small

businesses may be found in **Attachment 2**, response to Administrative Law Judge's Question No. 8, and in the SONAR beginning on page 19.

Summary of comments regarding "costs of not adopting rules": The DNR fails to address probable costs of not adopting the rules. In the SONAR, the DNR provides scant evidence of a positive relationship between water quality and natural landscapes and property values, in fact only stating that "there is a positive relationship" between these things. The DNR then concludes that "persons owning or developing property within the MRCCA…will benefit economically from the amenities that the proposed MRCCA rules are intended to preserve." No evidence is presented for this or for possible indirect costs to public and property owners.

DNR Response: There is a wide body of scholarly literature documenting the relationship between water quality and improved property values. See e.g. Elisabeth L. David, Lakeshore Property Values,: A Guide to Public Investment in Recreation, 4 Water Resources Research 697 (August 1968); Christoper Leggett & Nancy Bockstael, Evidence of the Effects of Water Quality on Residential Land Prices, 39 j. of. Env. Econ. and Mgmt 121 (2000); Susanna Tong & Wenli Chen, Modeling the relationship between land use and surface water quality, 66 J. of Eng. Mgmt. 377 (2002); Julia Clapper & Steven Caudil, Water quality and cottage prices in Ontario, 46 Applied Economics 1122 (2014). See also **Attachment 7**, Charles Krysel, Elizabeth Boyer, Charles Paron and Patrick Welle, Lakeshore Property Values and Water Quality: Evidence from Property Sales in the Mississippi Headwaters Region (May 14, 2003) (study prepared for the Mississippi Headwaters Board, Bemidji State University, and the Legislative Commission on Minnesota Resources).

F. Comments regarding bluffs.

Related Rule Parts: Bluff Definitions (6106.0050, subps. 8-9), Bluff Setbacks & Bluff Impact Zone (6106.0120, subp. 3.B.)

SONAR References: Bluff Protection Standards (Pages 22 – 28), Rule-by-Rule Analysis (Pages 30, 49 – 50)

Comments regarding bluffs generally fell into two categories: 1) comments regarding the bluff definition and standards; and 2) comments that the bluff definition creates too many nonconformities.

Summary of comments that the bluff definition and related standards being a one-size fits all approach: Bluff and soil conditions vary throughout the corridor. Local governments should determine bluff definitions and standards that are appropriate for the community. Bluff protection should reflect different conditions such as specific soils and risks in different areas, not broadly cover every parcel of land in such a diverse area. The riverbanks and slopes in Anoka and Brooklyn Park do not qualify as "iconic bluffs." Development on steeper slopes can be safely and appropriately designed through engineering methods.

DNR Response: The 2015 and 2016 Jennings studies (Hearing Exhibits 28 and 29) found that slope failure increases when slopes approach 20 percent. As documented in the Jennings studies and the SONAR at 22 and 23, bluff failure in the MRCCA is a significant public health and safety concern. The Jennings studies document that built infrastructure including building foundations, storm water ponds, and road construction may lead to bluff failure on slopes of a 20% grade. In developing the bluff definitions in the proposed rules, the DNR considered the technical findings of the Jennings studies,

current zoning across the MRCCA, and the number of nonconformities that would be created across the MRCCA under different definitions. SONAR at 22 - 28. The proposed rules attempt to reduce non-conformities across the corridor while addressing the serious bluff stability and public safety issues identified in the Jennings studies. The 18 percent threshold for defining slopes as bluffs in the proposed rules is a reasonable threshold for regulating development to protect public safety, property, and the aesthetic and ecological value of bluffs and riverbanks as set forth in Minn. Stat. § 116G.15. Furthermore, the proposed rules include provisions for flexibility that allow local governments to develop and propose alternative bluff definitions in their local ordinances based on detailed modeling or other resource impact studies that specifically address local conditions while protecting public safety and identified scenic and ecological resources.

There were a number of specific comments regarding bluffs in Anoka and Brooklyn Park. The DNR generated a GIS map of areas meeting the proposed bluff definition in these communities. *See* **Attachment 8**, DNR Bluff Analysis Maps for Anoka and Brooklyn Park. The DNR found that the areas in those communities meeting the proposed MRCCA bluff definition (18%) closely align with those that meet the statewide shoreland bluff definition (30%). The MRCCA definition does include some additional areas, however, most communities within the MRCCA already define and regulate slopes greater than 18% (**Attachment 9**, Summary of Local Bluff Provisions), and Executive Order 79-19 requires local governments to enact plans and ordinances to protect bluffs greater than 18% and riverbanks (**Attachment 10**, Bluff Provisions in Executive Order 79-19).

Summary of comments regarding insufficiency of bluff definition: The proposed rules eliminate the prohibition on development of 18 percent and greater slopes in Executive Order 79-19.

DNR Response: The comment mischaracterizes the requirements of Executive Order 79-19. Executive Order 79-19 does not prohibit development on 18 percent and greater slopes; it states that each local government in the corridor "shall prepare plans and regulations to protect bluffs greater than 18% and provide conditions for development of bluffs between 18% - 12% slopes" (Executive Order 79-19 at C.1.a(4)). Executive Order 79-19 also requires each local government to "prepare plans and regulations to protect and preserve aesthetic qualities of the river corridor," including a requirement that "structure site and location shall be regulated to ensure that riverbanks, bluffs, and scenic overlooks remain in the natural state, and to minimize interference with view of and from the river, except for specific uses requiring riverfront access" (Executive Order 79-19 at C.2.b.). The Interim Development Regulations in Executive Order 79-19 establish a setback from 18 percent slopes, but these interim regulations don't have the force and effect of law; they served as temporary standards until local units of government adopted their own MRCCA ordinances. The actual bluff definitions and standards adopted by local governments vary, as shown in **Attachment 9**. Some local governments, but not all, have provisions that prohibit development on slopes over a certain percentage. In developing these rules, the DNR needed to consider the wide range of existing regulations and develop a definition that could be consistently applied throughout the corridor. The proposed rules prohibit development on bluffs and in the bluff impact zone, which is a 20 foot buffer around a bluff. The proposed rules do not prohibit local governments from adopting more stringent standards.

Summary of comments regarding the bluff definition creating too many nonconformities: The City of St. Paul's 2014 analysis shows that more than 1,000 existing buildings will become legally nonconforming. This will increase complexity and be intrusive for property owners, developers, and

local governments and is inconsistent with statutory protection for the continued protection of commercial, industrial and residential resources and redevelopment of a variety of urban uses.

DNR Response: The City of St. Paul's 2014 analysis showing that more than 1,000 new nonconforming structures would be created by the rules was based on the bluff definitions in the June 2014 working draft rules, and has long since been superseded by a new analysis completed by City of St. Paul in early 2015 based on the bluff definition in the proposed rules, the results of which are provided in **Attachment 6**. That analysis shows a net reduction of nonconforming structures in St. Paul – there will be 310 fewer nonconforming structures under the proposed than under the city's current ordinance.

As explained in the SONAR, the bluff definition and associated standards in the proposed rules are the result of extensive public participation and a deliberative process. The DNR made a number of changes to protect existing and planned development, including industrial, commercial and residential resources. Based on feedback throughout the rulemaking process, the DNR incorporated protections for nonconforming structures, which parallel those required by Minn. Stat. §§ 462.357 and 394.26, as well as provisions allowing lateral expansions consistent with many local ordinances, the ability to build on the bluff face in downtown St. Paul, and clarification that nonconforming structures on bluffs can be repaired and maintained. The proposed rules do not impose any additional permitting requirements on nonconforming structures. Any structure, whether conforming or not, requires permits to expand.

Furthermore, bluff protections are needed and reasonable. The Legislature directed the DNR to adopt rules that established standards and districts for the management of the MRCCA. Minn. Stat. § 116G.15, subd. 3 and 4 (2015). In drafting the rules the DNR was guided by the legislative purpose of the MRCCA which, among other goals, includes protecting and preserving the MRCAA and adjacent lands for the "health, safety, and welfare of the citizens." Minn. Stat. § 116G.15, subd. 1 (2015). As documented in the 2015 and 2016 Jennings studies (Hearing Exhibits 28 and 29) and the SONAR at 22 and 23, bluff failure in the MRCCA is a significant public health and safety concern. The Jennings studies document that built infrastructure, including building foundations, storm water ponds, and road construction may lead to bluff failure on slopes of a 20% grade. One need only look to recent mudslides and slope failures in the metro area in 2013 and 2014 to understand the potential threat to health and safety and the significant public cost that construction on or near bluffs imposes. In developing the bluff definition in the proposed rules, the DNR considered the technical findings of the 2015 Jennings study, current zoning across the MRCCA, and the number of nonconformities that would be created across the MRCCA under different definitions. SONAR at 22 - 28. The proposed rules attempt to reduce nonconformities across the corridor while addressing the serious bluff stability and safety issues identified in the Jennings studies.

G. Comments regarding changes to district maps.

Related Rule Parts: Districts (6106.0100) and 2015 Mississippi River Corridor Critical Area District Map

SONAR References: Rule by Rule Analysis (Pages 42-44)

Summary of comments regarding changes to district maps: There were many requests for changes to district maps, all specific to one or more locations. Because of their site-specific nature, these comments are documented and addressed individually in **Attachment 4**, DNR Spreadsheet of Proposed District Map Revisions. In general, the comments fall into two categories: 1) changes allowing more intense development and taller buildings; and 2) changes limiting development and building heights.

DNR Response: The DNR worked closely with local governments and other stakeholders to define and map districts that reflect the corridor's landscape character, its unique resources, current designation under the Executive Order districts, current development patterns, and planned development as expressed in local plans and zoning ordinances. While there will inevitably be disagreement regarding which districts are most appropriate in given locations, the proposed districts are the result of a highly participatory and deliberative process designed to balance competing interests and to meet the intent of the MRCCA designation and legislation. The proposed rules also provide a method for changing district boundaries to address changing conditions, an option that is not available under Executive Order 79-19. That said, new information provided by commenters did lead to some potential district map changes, which are proposed in the "Responses" column of **Attachment 4**.

H. Comments regarding building height requirements.

Related Rule Parts: Structure Height (6106.0120, subp. 2)

SONAR References: Rule by Rule Analysis (Pages 45 - 47)

Comments regarding building height fell into several categories:

1) comments about specific locations, associated with requests for district map changes, which are addressed under Section II.G of this document (comments regarding changes to district maps);
2) comments about the requirements for Conditional Use Permit (CUP) requests to exceed maximum heights, including visual impact analysis; and
3) comments about local governments' responses to CUP requests.

Summary of comments about building height in relation to visual impacts and views: The rules limit building heights. A primary goal of the rules was to reduce visual impacts and protect views of the river and views from the river. However, the term "visual impacts" is not defined, and it is unclear how a local government will determine if a CUP is appropriate. This will lead to otherwise avoidable confusion and conflicts for businesses wanting to build or expand.

DNR Response: Height provisions in Executive Order 79-19 are not clear as shown in **Attachment 11**, Dimensional Standards in Executive Order 79-19. During the rulemaking, the DNR determined the building height requirements for each district based on a number of factors, including existing development patterns, prevalent building heights, existing height standards in local ordinances as summarized in **Attachment 12**, public river corridor views, and planned development. In most cases, a district's height standard is consistent with heights in the underlying local zoning districts. The conditional use process in the CA-RTC and CA-UM districts allows local governments to assess whether to allow buildings to exceed height limits after consideration of visual impacts.

What constitutes an adverse visual impact with the MRCCA varies by location, which is premised on current development. It makes little sense to use the same visual impact analysis in a highly industrialized area as it does in a more natural and less highly developed area. Thus, the visual impact of a building or structure is intended to be evaluated by each local government based on the views they've identified in their individual MRCCA plans, considerations set forth in the proposed rules, and through other public processes. In approaching the visual impact issue in these rules, the DNR was guided by the methods used by most local governments that manage similar provisions, such as those that apply in Heritage Preservation Districts.

Comment on inadequate CUP process: Conditional Use Permit (CUP) requests are never denied and offer little protection against inappropriately tall buildings. CUP processes are intended to include the public in decision making. However, if CUPs are always granted, the public gets frustrated and angry because the rules are not being appropriately implemented.

DNR Response: The DNR has no authority to restrict the use of conditional use permits by local governments. The process used by local governments to grant or deny CUPs is set forth in Minn. Stats. §§ 394.301 and 462.3595. However, the proposed rules do require local governments to consider potential impacts of conditional and interim uses on primary conservation areas, public river corridor views, and other resources identified in a local government's plan, and assure mitigation if those resources are negatively impacted. Proposed Rule, 6106.0080, subp. 4. The alternative to a local CUP is a local variance as provided under Minn. Stat. §§462.357, subd. 6., and 394.27, subd. 7. Variances are often easier for local governments to grant and do not require a visual impact analysis or the other considerations as required in the proposed rules. Decisions made by local governments regarding both CUPs and variances are appealable to the Minnesota district court as provided by Minn. Stat. §§ 394.27, subd. 9., and 462.361, subd. 1.

I. Comments regarding public recreational facilities.

Related Rule Parts: General Development Standards for Public Facilities (6106.0130, subp. 8)

SONAR References: Rule by Rule Analysis (Page 51)

Summary of comments regarding public recreational facilities: Public recreational use facilities are unreasonably restricted by the proposed rules, particularly by the prohibition of buildings and structures in the shore impact zone and bluff impact zone. The clearly stated recreational goals of Executive Order 79-19 appear to be minimized in the proposed rules. This is particularly problematic for Spring Lake Park Reserve in Dakota County, located in the CA-ROS district, where the topography and required setbacks would make it impossible to place restroom facilities in proposed water access areas. Public recreation facilities implemented in accordance with master plans that have been adopted and reviewed pursuant to Minn. Stat. § 473.313 should be exempt from these setback requirements.

DNR Response: Because adverse impact on both the river and bluffs do not vary depending upon whether a facility is public or private, the proposed rules apply the same standards to public recreational facilities as those applied to private facilities within the corridor. One exception in the proposed rules allows placement of open-sided picnic shelters within the shore impact zone, since these structures are typically allowed in floodplain locations. This is consistent with the Executive Order as provided in **Attachment 13**. The site in question is currently designated Rural Open Space under Executive Order 79-19, and includes many significant natural features. The standards in the Executive Order should have been applied to development in the park and in the park's master plan. The failure of the park to apply current standards is not a valid reason to apply different standards to public recreational lands than apply to private lands. Furthermore, given the potential adverse impacts of facilities on the river and on bluffs, it would not make sense to modify the rules, which apply to all public land across the entire corridor, to address the circumstances unique to this particular location. If on-site topography requires a deviation from the standards set forth in these rules, those deviations are best addressed in a request for local ordinance flexibility or a local government variance.

Summary of comments regarding stairs and lifts: The proposed rules do not allow for stairs and lifts at public recreational facilities in the bluff impact zone. However, stairs and lifts are allowed for private residential and commercial water access and use facilities within the bluff impact zone in table line 64.13. The rules should be amended to provide the same options for public recreational facilities.

DNR Response: During the rulemaking, local governments and riparian property owners in the northwest segment of the MRCCA (north of the Coon Rapids dam) requested specific standards in local ordinances to ensure access to the river on private property. The issue was not raised by public park agencies at the time. While the private standards could be applied to public facilities and included in local ordinances, we agree that clearly adding them to the proposed rule language would be an improvement. The DNR proposes to make this change as provided in **Exhibit D.0.**

J. Comments regarding vegetation management.

Related Rule Parts: Vegetation Management Standards (6106.0150)

SONAR References: Rule by Rule Analysis (Pages 54-57)

Summary of comments regarding vegetation management: The proposed local permit conditions are burdensome, vague or impossible to apply. For example, determining "equivalent biological and ecological functions" without any standard for determining what is "equivalent" is difficult. Many fully developed communities lack native plant communities that can serve as models for restoration and lack the capacity to conduct detailed mapping and analysis. The existing statewide shoreland standards address vegetation management sufficiently.

DNR Response: The vegetation provisions in Executive Order 79-19 are vague. *See* **Attachment 14**. Many local governments have stated that administering vegetation management provisions provided in Executive Order 79-19 is difficult and that clarification and restoration measures and a permit program would help to enforce standards against vegetation removal.

To clarify what types of vegetation should be used, the rules provide that "nearby" native plant communities should be used to determine a baseline for restoring vegetation of equivalent biological and ecological functions. This standard is regularly used by landscape architects and ecologists in the regular course of their work if there are no nearby communities to serve as a baseline. The DNR intends to provide assistance to local government through sharing plans, inventories, and data on native plant communities and other natural features within the MRCCA.

Reliance on the statewide shoreland standards for this purpose is inappropriate because the shoreland vegetation standards, which apply across the entire state, are more general and do not provide clarity about what can and cannot be done on properties within the MRCCA. Nor do the statewide shoreland standards include restoration requirements or mechanisms for enforcing vegetation standards.

K. Comments regarding riprap.

Related Rule Parts: Land Alteration and Storm Water Management Standards (6106.0160, Subp. 4)

Sonar References: Rule by Rule Analysis (Page 60)

Summary of comments regarding riprap: The proposed rules do not specifically allow for repair of existing riprap, retaining walls, and other erosion control structures.

DNR Response: We agree that this activity is acceptable, and propose a modification to the rules to clarify that riprap can be repaired without a local permit if it does not involve land alteration. *See* **Attachment D.0**. This modification does not, however, relieve a landowner of meeting the requirements of Minn. Stat. § 103G.245, subd. 1.

L. Comments regarding subdivisions, conservation design, and land dedication.

Related Rule Parts: Subdivision and Land Development Standards (6106.0170)

Sonar References: Rule by Rule Analysis (Pages 62-66)

Summary of comments regarding set-aside requirements for subdivisions: Set-aside requirements should apply to tracts of land smaller than 10 acres in order to adequately protect corridor resources. Alternatively, set-aside requirements will result in small fragmented parcels of open space that local governments will not be able to manage. Others felt that the set-asides constitute a takings.

DNR Response: The set-aside thresholds of 10 acres for developments abutting the Mississippi River and 20 acres for all other new development were established in consultation with local governments and other stakeholders. The set-asides were specifically designed to reduce the burden on local governments of managing small fragments of open space, which many local governments reported as a significant challenge. Additionally, set-asides do not need to be dedicated and managed by a city, but can be protected through deed restrictions and can be managed by a homeowners' association or other entity.

Courts have consistently ruled that open space requirements as a condition of development are not a taking. *See* Mathew Weiss, *The Constitutionality of Open Space Requirements and Minimum Lot Sizes,* Land Use Clinic (2007) Paper 8 *available at http://digitalcommons.law.uga.edu/landuse/* (last visited July 5, 2016). In this instance, the set-aside requirement is a requirement for conservation design, in which the allowed density on a parcel is concentrated on a portion of the site in exchange for the protection of common open space and sensitive natural features elsewhere. The requirement does not reduce overall allowable density or development potential, but rather structures the design of the density. The allowable density is not altered and the owner retains the same development potential that he or she would hold if the density was spread over the entire property. This form of development is consistent with Minn. Stat. §§ 394.25, subd. 7. and 462.358, subd. 2b. *See also* **Attachment 5**, DNR Takings Analysis Memo, and **Attachment 16**, Subdivision & PUD Provisions in Executive Order 79-19.

Attachment 2: DNR Responses to Administrative Law Judge's Questions

State of Minnesota
Minnesota Department of Natural Resources (DNR)
DNR Response to Public Comments on Proposed MRCCA Rules
July 6, 2016

This document contains the Minnesota Department of Natural Resources' (DNR or Agency) responses to specific questions posed by Administrative Law Judge Eric Lipman in a letter to the Agency dated June 14, 2016. This document lists each of the Judge's questions and related rule citations in bold, followed by the Agency's response.

1. **6106.0050, subp. 8(A) – Would the provision be clearer if subpart 8(A) set forth the requirement when one measures from the "top of the slope" to the "toe of the slope," and a new section 8(B) set forth the requirement when one measures from the "top of the slope" to the "ordinary high water mark"?**

   Yes, the DNR proposes to clarify this definition as suggested. The proposed modification is outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 3, Lines 3.1 – 3.4).

2. **6106.0050, subp. 8 – Is it clear from the rule when officials are to use the "toe of the slope" instead of the "ordinary high water mark" (and vice versa) in the required tabulation?**

   See response to Question #1 above. The DNR proposes to clarify when it is appropriate to measure bluffs from the "toe of the slope" vs. from the "ordinary high water level." This proposed modification is also outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 3, Lines 3.1 – 3.4).

3. **6106.0050, subp. 39 – Is the phrase "or other scientifically based studies" sufficiently definite to inform officials and stakeholders which items qualify as Native Plant communities?**

   The definition is intended to reference studies for use by local governments in identifying/mapping native plant communities, not to provide specifics of what "native plant communities" are. Local governments are already required to map/identify vegetation of value to the community in addition to native plant communities under Executive Order 79-19. As such, the DNR thought this phrase was sufficient, but could modify the proposed rules to include examples of the types of "other scientifically base studies", such as the USGS National Vegetation Classification or the USGS-NPS Vegetation Characterization Program. This proposed modification is also outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 4, Lines 7.7 – 7.9).

4. **6106.0050, subp. 68 – Would this provision be clearer if, following the phrase "required structure setback" it read "or, in areas of agricultural use, 50 feet landward of the ordinary high water mark"?**

   Yes, the DNR proposes to reword the definition as suggested. This proposed modification is outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 4, Lines 11.1 – 11.4).

5. **6106.0060, subp. 3 – Is "approval of flexibility" a term of art?**

"Approval of flexibility" refers to the option local governments have to request and obtain prior approval from the commissioner for "flexibility" to adopt ordinances that are not consistent with the standards in the proposed rules as provided in part 6106.0070, subp. 6. The DNR proposes to make DNR proposes to make modifications to clarify this term. The proposed modifications are also outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 4, Lines 15.11 - 15.12).

6. **6106.0060, subp. 5(C) – Mindful that the "Commissioner" is not an agency, would the provision be clearer if the phrase "be the lead agency to" were deleted?**

   Yes, the DNR proposes to delete this phrase. This proposed modification is outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 5, Line 16.1).

7. **6106.0060, subps. 6-9 – Are the delegations in Minn. Stat. § 116G.15 broad enough to include the assignment of ministerial duties to other agencies? Are regulated parties likely to appreciate that administrative rules relating to the practices of, for example, the Metropolitan Council, or Anoka County, are to be found in Part 6106?**

   Minnesota Statute § 116G.15, subd. 2(b) sets forth the obligations of the Metropolitan Council in the management of the MRCAA. The Metropolitan Council obligations set forth in § 116G.15, subd. 2(b) are virtually identical to those set forth in proposed rule 6106.0060, subp. 6. Inclusion of these statutory obligations in the rule provides no additional obligation or burden on the Metropolitan Council and is helpful to the user of the rules, who would otherwise have to look to Minnesota Statute to understand the role of the Metropolitan Council in the MRCCA plan approval process.

   Minnesota Statute Chapter 116G generally sets out the obligations of local units of government[1] in the management of critical areas across the state, including the Mississippi River Corridor Critical Area (MRCCA). The Minnesota Legislature has delegated the obligation of adopting standards and guidelines for the protection critical areas to the Minnesota Environmental Quality Board (EQB) and has provided administrative mechanisms to ensure that the plans and regulations of the local units of government are consistent with the protective standards for the critical area. Minn. Stat. § 116G.06, subd. 2(b) directs the EQB to develop boundaries; standards and guidelines for local plan or rule development; and permissible variances from adopted standards and guidelines) and Minn. Stat. §§ 116G.07 through 116G.12 sets forth the obligations of the EQB, regional government and local governments to adopt local plans consistent with the EQB standards and guidelines for protection of the critical areas. Additionally, the EQB has adopted rules directing how local units of government to prepare local plans and regulations that are protective of the critical areas within a specified time frame, directing regional governing bodies to review said plains within specified time

[1] For purposes of Minn. Stat. Ch. 116G a local unit of government is any political subdivision of the state their agencies and boards. Minn. Stat. §116G.03, subd.3 (2015).

frames and requiring that the plans be approved by the EQB. *See* Minn. R. 4410.9000 through Minn. R. 4410.9500.

In 1995, Governor Arne Carlson transferred the administration of MRCCA from the EQB to the DNR by Reorganization Order 170, and in 2009 the Minnesota Legislature took action to formalize this transfer. 2009, ch. 172, art. 2 § 27 codified at Minn. Stat. § 116G.15, subd. 2(a). Minnesota Statute § 116G.15, subd.2 (a) provides that the duties of the EQB for the MRCCA referenced in Ch. 116G , related rules, and Executive Order No. 79-19[2] "shall be the duties of the commissioner". This language has two effects:

(1) it makes clear that all of the administrative obligations of Ch. 116G apply to the MRCCA, and
(2) it makes clear that with the MRCCA the DNR assumes the obligations of the EQB imposed by Ch. 116G.

In addition, § 116G.15, subd. 2(a), provides that the rules of the EQB for critical areas, including those directing both regional governments and LGUs to prepare and submit plans for review and conformity to critical area standards and the applicable administrative processes, "shall remain in effect until amended or repealed by the DNR." The effect of proposed rule part 6106.0060, subp. 6-9, is to amend the prescriptive requirements of Minn. R. 4410.9000 through 4410.9500 to provide more clarity specific to local units of government in the MRCCA around their procedural obligations under the rules than provided by the general rules adopted by the EQB for critical areas.

8. **6106.0070, subps. 2-3 – Should the agency be required to undertake the compliance cost analysis required by Minn. Stat. § 14.127, subd. 1 from the date that revised local plans are finally "approved by the commissioner and adopted by the local government"? Wouldn't such a reading of the phrase "the first year after the rule takes effect" (in Minn. Stat. § 14.127, subd. 1), better reflect the Legislature's purpose of providing regulatory exemptions to small businesses and small cities, than counting that "first year" from the sixth working day after the rules are adopted by the Department? *Compare generally*, Minn. R. 1400.2400, subp. 3.**

Minnesota Statute § 14.127, subd. 1, requires that that the agency determine whether "the cost of complying with a proposed rule in the first year after the rule takes effect" will exceed $25,000 for either small businesses and/or a city with less than 10 full time employees. Minnesota Statute § 14.38 provides that a rule takes effect five days after notice of adoption is published in the State requester unless a different date is required by statute or rule. Under a plain reading of these statutes, in the absence of a contrary statute or rule applicable to the MRCCA rules, the rules would go into effect five days after adoption.[3]

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[2] Executive Order No. 79-19 (SONAR Exh. D) transfers to the DNR all obligations and duties of the EQB within the MRCCA.

[3] Minnesota Statute § 14.128, subd. 1 does extend the exception date for rules requiring the adoption of local ordinances, however, § 14.128, subd. 3 provides that the extension does not apply where, as here, the agency has been directed by law to adopt rules or commence rulemaking. *See* Minn. Stat. § 116G.15, subd. 3 and 4 (directing the DNR to adopt rules to establish districts and standards in the MRCCA).

As explained in the SONAR, the first step that will be undertaken after adoption of the rules will be the development of an adoption schedule by the DNR and the Metropolitan Council, the publication of the adoption schedule, and the development of model plans and ordinances. SONAR, at 19, R. 6106.0070. This work is expected to take a year. Local units of government will not be required to begin work to adopt or amend local plans and ordinances until the second year after adoption of the rules. *Id.* Each unit of government will be given at least one year under the adoption schedule to adopt the necessary rules. *Id.* Thus, no local ordinance regulating any business in the MRCCA is expected to change until well into the second year after the effective date of the rule. Thus, no small business is expected to incur ANY cost associated with this rule until, at the earliest, two years after the effective date of the rule and then only if the business anticipates a physical expansion. *See* SONAR at 20.

Because the rule will not affect businesses within the first year after the effective date of the rule the DNR did not undertake a formal fiscal analysis of potential impacts through business polling. Additionally, unless the small business proposes to expand in the immediate future there will be no impact on businesses in the MRCCA as the rules do not apply retroactively – current property uses are permitted to continue in effect. For those businesses proposing to expand after the adoption of ordinances (over a year after the effective date of the rule) the rules will likely have minimal impact as small businesses are currently regulated by the zoning ordinances that are required to comply with Executive Order No. 79-19 and those restrictions of the Executive Order were used as a baseline for the proposed rules and thus the restrictions in districts zoned for small business the modifications to zoning restrictions will not vary significantly. *See* SONAR at 20 and 21 (for a further discussion of business impacts).

Finally, because the rules, if adopted, will have no impact on land owners for at least two years beyond their effective date it would be wildly speculative to attempt to determine, some two and a half to three years in advance of the on the ground application of the proposed rules, which of the hundreds of businesses in the MRCCA might be contemplating an expansion that may or may not be be impacted by the proposed rules or to identify those business within the metropolitan area that may be contemplating a move into the MRCCA with related construction that may be impacted by the proposed rule.

The DNR did undertake an assessment of the financial impact of adoption of these rules on local units of government and concluded that the cost to local units of government is unlikely to exceed $25,000. *Id.* at 19. In reaching this conclusion the DNR undertook a survey of all local units of government within the MRCCA to determine fiscal impacts on local units of government. *See* SONAR 19 – 20. The Department of Management and Budget has reviewed the DNR's fiscal impact analysis as it pertains to local units of government and concluded that "DNR has adequately analyzed and presented the potential costs and benefits of the proposed rules on local units of government." *See* **Attachment 18**, MMB Memo to DNR.

9. **6106.0070, subp. 3(F)(1) – Is the Department obliged to conduct a meeting if one is requested by a political subdivision of the state?**

   Yes. This provision is based on Minn. Stat. § 116G.07, subd. 3.(b), which states, *"(b) Plans and regulations which are returned to the local unit of government or regional development commission for modification shall be revised consistent with the instructions of the board and resubmitted to the board within 60 days of their receipt, provided that final revision need not be made until a formal meeting has been held with the board on the plans and regulations if requested by the local unit of government or regional development commission."*

10. **6106.0070, subp. 3(J)(2)-(3) – The Department should consider whether the 60-day timeline for a decision is long enough to permit convenient receipt of a report summarizing the testimony from the administrative law judge; post-hearing comments; or hearing transcripts from a court reporter. Is it likely that the Department would request any of these items in such a circumstance?**

    The DNR chose 60 days to comply with the requirements of Minn. Stat. § 15.99, which requires state agencies to approve or deny a written request relating to zoning within sixty (60) days. The DNR may require a transcript of the public hearing in certain circumstances, but in such instances would request an expedited transcript.

11. **6106.0070, subp. 6(A) – Mindful of the text in proposed rule Part 6106.0020, would this rule be clearer if the phrase "and the purposes of and scope of this chapter" was deleted?**

    Yes, the DNR proposes to delete this phrase. This proposed modification is outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 5, Lines 24.1 – 24.2).

12. **6106.0070, subp. 6(C)(1)(a) – Mindful of the Commissioner's duty to evaluate comments from interested persons, does Part 6106.0070 (or any other rule) make clear how those persons would receive notice of a request for flexible regulatory treatment and the timetable for submitting comments?**

    Local units of government revising local plans and ordinances in conformity with these rules, including any request for flexibility, must also comply with requirements of Minn. Stat. Ch. 394 (governing county planning and zoning) and Minn. Stat. Ch. 462 (governing planning and zoning in cities and municipalities). Provisions within these chapters require both public notice and public hearing of any modification of zoning ordinances that would be required by these rules. Minn. Stat. §§ 394.26 and 462.357, subd. 3 (2015). Additionally, the DNR proposes to modify this part by adding a requirement that the DNR to make local flexibility requests "publicly available". This proposed modification is outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 5, Lines 25.8 – 25.23).

13. **6106.0100, subp. 9.C.(1)(d) – Is the phrase "local, regional, state and federal plans" sufficiently definite to inform officials which items must be compared to proposed boundary amendments?**

    The DNR proposes modifications to clarify and narrow which local, regional, state, and federal plans must be compared to proposed boundary amendments. This proposed modification is outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 5, Line 35.7).

14. **6106.0100, subp. 9(C)(2) – Would a specified minimum amount of notice contribute to the reasonableness of the proposed rule?**

    The standard amount of public notice in statutes is at least 10 days prior to the date of the hearing. Minn. Stat. §§ 394.26 and 462.357, subd. 3 (2015).

15. **6106.0130, subp. 8(B) – Does the directive to "minimize impact" clearly identify the construction standards a landowner would be required to meet? *Compare generally*, Proposed Rule 6106.0130, subp. 8(C).**

    This directive could be made clearer. The DNR proposes to modify this provision to clarify that "minimize impacts" applies to shoreline vegetation, erodible soils and slopes, and other sensitive resources. The constructions standards to be met would those determined necessary by the local government to ensure that impacts are minimized. This proposed modification is outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 6, Line 45.6).

16. **6106.0130, subp. 8(B) – Does the Department intend that public signs and kiosks operate to "minimize disturbances" to bluff impact and shore impact zones?**

    No, the DNR intends that public signs and kiosks be "placed and constructed" to minimize disturbances to bluff and shore impact zones. The DNR proposes to modify this provision to provide clarity. The proposed modification is outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 6, Line 46.2).

17. **6106.0170, subp. 4(J) – Does the directive to connect open spaces "as much as possible" clearly identify the regulatory standards that a landowner would be required to meet**

    The DNR proposes to clarify "as much as possible" by modifying this provision to delete "neighboring or abutting" and add "where present on adjacent parcels". This proposed modification is outlined in the DNR Response to Comments Memorandum (**Exhibit D.0**, Page 7, Lines 61.1 – 61.2).

Attachment 3: Summary of Comments Received and DNR Responses - April 11 to June 24, 2016

Date of Comment	Date OAH Rec'd	Commenter #	Commenter Name	Representing	How Rec'd	Comment #	Rule Part	Comment Topic	Comment	DNR Response
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1a	General	Authority	DNR is not following proper administrative process to adopt rules.	In developing these rules, the DNR followed the legislative directive provided in Minn. Stat. § 116G.15 and all required administrative processes provided in Minn. Stat. Ch. 14 and Minn. R. Ch. 1400.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1b	General	Cost	Administrative costs fall on local taxpayers. No state dollars have been allocated for implementation.	See responses on cost to SPACC and SPPA, and **Attachment 2**.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1c	General	Implementation	No established process for implementation. Rules become effective before cities have a chance to implement ordinances	Covered sufficiently in proposed rules, part 6106.0070, subp. 2 and in SONAR.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1d	Subdivision.0170	Subp. 4I Permanent protection	Conservation easements and dedications are a takings.	Courts have consistently ruled that open space requirements as a condition of development are not a taking. The set-aside requirement is essentially a requirement for conservation design, in which the allowed density on a parcel is concentrated on a portion of the site in exchange for the protection of common open space and sensitive natural features elsewhere. It does not reduce overall density or development potential. This requirement is consistent with those set forth in 394.25, subd. 7 and 462.358, subd. 2b. See **Attachment 5**.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1e	General	Documentation	Rules and associated documents are too long, which allows for deception.	Rules are as long as needed to cover the specifications by the Legislature and complexity of subject matter.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1f	DimensionalStds.0120	Subp. 2A Height - RN	Heights in areas already developed exceed 35'. Height limits should only apply to newly developed lots.	Height limits in districts are based upon consideration of existing development patterns, among other factors. Buildings exceeding those limits are protected as nonconforming structures under part 6106.0080, subp. 3.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1g	PrivateFacilityStds.0140	Subp. 5 Water access & viewing	Prohibiting structures in SIZ, but allowing accessory structures 10' from shore is contradictory and confusing.	The only structures allowed within the SIZ are all small accessory structures such as boat houses, or shoreline facilities needed for port or industrial operations.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1h	PrivateFacilityStds.0140	Subp. 5 Water access & viewing	Should allow 10' access paths to accommodate construction equipment	Construction equipment would typically only be needed for standard-width access paths and stairways or for exempt facilities such as boat ramps. In either case, construction is a temporary activity and should not require permanent access paths.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1i	Vegetation.0150	Subp. 3 General Provisions	Rule prohibits communities from enacting ordinances related to mowing height - resulting in a nuisance	The rule prohibiting local government restrictions on vegetation height applies in the SIZ, land within 50 feet of a wetland or natural drainage way, in native plant communities and other areas of significant vegetation. It is important to allow natural and deep rooted vegetation to exist in these sensitive areas to stablize soils, provide habitat and scenic character. Retaining natural vegetation is one of the most important practices for protecting water quality and the scenic character of the corridor.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1j	Vegetation.0150	Subp. 3 General Provisions	Line 51.18 should specify "professional" engineer to be consistent with definitions	Adding the word "professional" is consistent with definition and would improve clarity. This change is recommended (see **Attachment D.0**)
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1k	LandAlteration.0160	Subp. 3 Land alteration	Previous draft allowed professional engieers to certify the need for erosion control in the bluff impact zone (BIZ). Local government has no expertise to determine need for erosion control.	The working draft rules did not have provisions giving a professional engineer the ability to certify the need for erosion control in the BIZ. Determining need for and providing guidance for erosion control through erosion control permits is standard practice for local units of government.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1l	LandAlteration.0160	Subp. 4B Riprap - Local permit	The 5' height and 10' spacing of retaining walls are arbitrary numbers and should be determined on a site-specific basis by a professional engineer	Most local ordinances already require an engineer to design retaining walls that are over four to five feet to ensure they are stable and safe. The five foot height and ten foot distance between walls is already used by the City of Champlin. The rules do allow higher walls if an engineer determines that a larger structure is needed to correct erosion problems. Retaining walls, in general, are not allowed at the ordinary high water level for flood control under the public waters permit regulation. Minn. R. Ch. 6115.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1m	LandAlteration.0160	Subp. 4B Riprap - Local permit	Height of riprap shouldn't be the regulatory flood protection elevation but instead should be determined by PE	The rules specify size limits for erosion control structures in order to minimize negative impacts while allowing for necessary protection from erosion. The rules do allow higher structures if an enginer determines that a larger structure is needed to correct erosion problems.
5/10/2016	5/13/2016	1	Don Vry	Self	Letter	1n	Definitions.0050	Steep Slope	Poor definition. Too many lots fit into this definition.	The steep slope definition is unchanged from provisions in EO 79-19 describing steep slopes as they pertain to structure placement. Development on steep slopes is allowed as long as suitable conditions exist and erosion is managed appropriately.
5/18/2016	5/20/2016	2	Anoka County Parks &Community Svcs	Organization	Letter	2a	General	Support	The DNR has been very receptive to public input provided throughout the process, and "virtually all of [their] concerns were addressed by the DNR"	
5/21/2016	5/23/2016	3	Stewart Corn	Self	Letter	3a	DimensionalStds.0120	Subp. 2A Height - General	Buildings at heights greater than currently allowed would dramatically change the wild character of the river corridor, and pose a hazard to migrating birds.	All proposed heights are addressed in SONAR and were decided through a deliberative process that took into account many issues, including this one. This is a major metropolitan area; there are many tall buildings along the river and the proposed rules will not result in anything out of character with existing development.
5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4a	SONAR	Costs & Intrusiveness	The DNR Fails to Show There Are Not Less Intrusive Methods for Achieving the Purpose of the Proposed Rules One of the nine factors for a regulatory analysis that must be included in the Statement of Need and Reasonableness (SONAR) is a determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule.5 SPACC disagrees with the DNR's assessment that there are not less intrusive methods for achieving the purpose of the proposed rules.	Minn. Stat. § 14.131 requires the Agency to address whether there is a less costly or less intrusive method for achieving the purposes of the rules. The objections raised by the commenters have less to do with whether or not there is a non-rulemaking alternative, but whether the actual rules themselves - particularly as they relate to bluff setbacks and bluff impact zone - are too intrusive. The legislature directed the DNR to adopt rules that established standards and districts for the management of the MRCCA. Minn. Stat. § 116G.15, subd. 3 and 4 (2015). In drafting those rules the DNR was guided by the legislative purpose of the MRCCA which, among other goals, includes protecting and preserving the MRCAA and adjacent lands for the "health, safety, and welfare of the citizens." Minn. Stat. § 116G.15, subd. 1 (2015).

5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4b	AdministrativeProv.0080	Subp. 3 Nonconformities	Creation of nonconforming structures will increase complexity and be more intrusive for property owners, developers, and local governments. The City of Saint Paul's 2014 analysis shows that more than 1,000 existing buildings in Saint Paul will become legally nonconforming as a result of the proposed rules.7, 8 Structures that currently conform to all standards that would become legally nonconforming under the proposed rules would be allowed to conduct repairs, replacements, maintenance, and improvement. Those structures would not, however, be allowed to expand without obtaining a permit, by ordinance, from the appropriate municipality.	The City of St. Paul's 2014 analysis showing that more than 1,000 new nonconforming structures would be created by the rules has long since been superseded. This analysis was completed by the City of St. Paul and based on the bluff definitions in the June 2014 working draft rules. A newer analysis by the City of St. Paul 2015 based on the proposed bluff definition finds a net reduction of 310 structures (see **Attachment 6**).
5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4c	DimensionalStds.0120	Subp. 3B Bluff setback - General	As of the City's 2014 analysis, 440 structures would be affected by the proposed Bluff Impact Zone rules (BIZ). However, the broad definition of "bluff" in the proposed rules includes some low and gentle slopes, and the integrity of those slopes can be protected, and erosion prevented, by requiring that development be done according to best management practices specified by qualified professionals. It is possible to protect slope stability without outright prohibitions on development on or near them. Note: geology is variable across MRCCA.	See above response on nonconforming structures. The current City of St. Paul ordinance prohbits industrial and commercial development on slopes over 12%, so it is the city's ordinance standards that are more restrictive than the proposed rules. The proposed rules regulate development on slopes over 18%. The 18% slope continues the standard used in EO 79-19 and that used by most local governments in the MRCCA, including the City of St. Paul. The 2015 Jennings report found that slopes over 20%, where there is development, are associated with failure. A 20% slope is marginally steeper than the 18% slopes regulated under the rules. The DNR worked with the City of St. Paul to evaluate many bluff definitions that would protect bluff features while minimizing the creation of new nonconformities. The proposed definition eliminates many low gentle slopes that were included in the June 2014 working draft rules definition.
5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4d	SONAR	Costs to LGUs	The DNR has underestimated the costs to local governments and failed to include 9 LGUs in its analys, including St. Paul. Failure to meet fifth factor on costs borne by identifiable categories of affected parties.	The nine LGUs referenced in the comment were sent surveys but failed to submit cost estimates for consideration; all others responded. Failure to respond doesn't make the survey invalid. Moreover, future costs to local governments will be mitigated by the fact that the DNR will be assisting those governments by developing model plan and ordinance language, providing mapping layers and tools, and providing training and other guidance to local governments to minimize their costs. See **Attachment 2**, Question #8.
5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4e	SONAR	Costs to businesses and individuals - p. 20	DNR skirts legislative requirement because impact will occur after the first year. DNR should analyze this factor. The SONAR notes that "small businesses already in existence would not be subject to additional restrictions, except in cases where these businesses choose to expand or redevelop." Again, Minnesota law states that development and redevelopment of industrial and commercial uses must be provided for in the MRCCA rules. The statement in the SONAR that small businesses would only be subject to additional restrictions if they choose to expand or redevelop shows a lack of attention for this component of the law.	The DNR has analyzed this issue and continues to maintain that this provision doesn't apply to this rulemaking effort (see **Attachment 2**, Question #8). In any case, the assertion is speculative, since the impact to a business will depend on what type of expansion a business is planning to do. The proposed rules do not prohibit economic development in the MRCCA. Consistent with Minnesota Law, any nonconformity created by the application of the rules is permitted to continue in operation. Minn. Stat. § 394.36 and 462.357 (2015). Even where a nonconformity is created by the application of the rule, expansion or redevelopment is not precluded. In most cases, redevelopment or expansion is permitted so long as the expansion is consistent with the height and setback requirements of the individual districts (see e.g. 6106.0080, subp. 3 regarding nonconformities and 6106.0120, subp. 3 regarding setback averaging). Impacts won't differ much from those already in place under MRCCA ordinances, except in two instances: BIZ expansions and set-asides. BIZ restrictions are public safety-based. Set-asides will apply primarily on undeveloped sites in the ROS district, and will have minimal impact on developed sites in other districts.
5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4f	SONAR	Costs of not adopting rules - p. 15	DNR fails to address probable costs of not adopting the rules. In the SONAR, the DNR provides scant evidence of a positive relationship between water quality and natural landscapes and property values, in fact only stating that "there is a positive relationship" between these things. The DNR then concludes that "persons owning or developing property within the MRCCA…will benefit economically from the amenities that the proposed MRCCA rules are intended to preserve." No evidence presented for this or for possible indirect costs to public and property owners.	There is a wide body of scholarly literature documenting the relationship between water quality and improved property values. See e.g. Elisabeth L. David, Lakeshore Property Values,: A Guide to Public Investment in Recreation, 4 Water Resources Research 697 (August 1968); Christoper Leggett & Nancy Bockstael, Evidence of the Effects of Water Quality on Residential Land Prices, 39 j. of. Env. Econ. and Mgmt 121 (2000); Susanna Tong & Wenli Chen, Modeling the relationship between land use and surface water quality, 66 J. of Eng. Mgmt. 377 (2002); Julia Clapper & Steven Caudil, Water quality and cottage prices in Ontario, 46 Applied Economics 1122 (2014). See also **Attachment 7**, Charles Krysel, Elizabeth Boyer, Charles Paron and Parrick Welle, Lakeshore Property Values and Water Quality: Evidence from Property Sales in the Mississippi Headwaters Region (May 14, 2003) (study prepared for the Mississippi Headwaters Board, Bemidji State University, and the Legislative Commission on Minnesota Resources).
5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4g	District Maps	Ford Site	Community-based redevelopment plan for Ford site should take precedence; building heights in underlying zoning code should apply.	The Ford site is already more heavily restricted by City's existing MRCCA ordinance (40' height) than by the proposed rules, which would designate it in tiers, with greater height further back from the river.
5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4h	District Maps	West Side Flats	UM designation is inconsistent with community's vision; should be UC or allow greater height without CUP	Community vision in plan includes graduated height limits not inconsistent with UM -- 50, 65, 75 and 90 with CUP. UM's 65' with CUP is not inconsistent, but City could request flexibility to use Master Plan heights. CUP will allow public input and visual analysis. Final West Side Flates small area plan includes recognition of MRCCA and consideration of views.
5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4i	DimensionalStds.0120	Subp. 2D Exceed Height CUP	The rules limit building heights and state that this is to reduce visual impacts and protect views of the river and views from the river. The term "visual impacts" is not defined, and it is unclear how a local government will determine if a CUP is appropriate. This will lead to otherwise avoidable confusion and conflicts for businesses wanting to build or expand.	Visual impact analysis will be determined by each local government based on the views they've identified in their MRCCA plans and through other public processes. It's not DNR's role to prescribe a methodology. This requirement is consistent with many St. Paul area plans and ordinances, which include similar provisions to protect important property attributes; i.e., in Heritage Preservation Districts. See https://www.stpaul.gov/departments/planning-economic-development/heritage-preservation/historic-districts-and-individual (delineating St. Paul Historic Districts) and https://www.stpaul.gov/departments/planning-economic-development/heritage-preservation/design-review-applications (outline development standards for St. Paul's Historic Preservation Districts).
5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4j	AdministrativeProv.0080	Subp. 2 Variances; Subp. 4 CUPs	The proposed rules state that when a local government evaluates a request for a variance or CUP and identifies a "potential negative impact," the variance or CUP must require mitigation and that "Mitigation must be directly related to and must bear a rough proportionality to the impact of the project on primary conservation areas, public corridor views, and other resources identified in the local government's plan." The proposed rules are overly broad with respect to when mitigation is required, and local governments should have discretion in choosing to require mitigation even where a variance affects the defined natural resource.	Neither the rules nor their adoption by local units of government give rise to a constitutional taking. See **Attachment 5**.

5/23/2016	5/23/2016	4	Marie Ellis	SPACC	Letter	4k	General	General	Attached 2014 letter to 2016 letter	Attached comment letter from 2014 refers to previous drafts of rules. Rules have been substantially revised in response to comments received during that comment period. Without further direction or insight from commenter, we can't determine which comments haven't been adequately addressed in the proposed rules.
5/26/2016	5/31/2016	5	Captain Ken's Foods	Business	Letter	5a	General	Purpose	Indicates that the MN Legislature changed the law in 2013 to ensure that the MRCCA is "managed as a multipurpose resource in a way that: ... (3) provides for the continuation, development, and redevelopment of a variety of urban uses, including industrial and commercial uses .... "	Development and redevelopment of industrial and commercial uses is one factor among many in Minn. Stat. § 116G.15, and does not take predecence over all other factors.
5/26/2016	5/31/2016	5	Captain Ken's Foods	Business	Letter	5b	Districts.0100	General	Indicates that the MN Legislature changed the law in 2013 to require that the districts created within the MRCCA must be created with the "management of the river corridor consistent with its natural characteristics and its existing development, and in consideration of potential new commercial, industrial, and residential development .... " in mind. (Minnesota Laws Chapter 137, Article 2, sections 18-21, 2013).	DNR considered potential new commercial, industrial, and residential development in creating new districts. Explained sufficiently in SONAR.
5/26/2016	5/31/2016	5	Captain Ken's Foods	Business	Letter	5c	SONAR	Costs to businesses	The SONAR says that small businesses won't be subject to additional restrictions, "except in cases where these businesses choose to expand or redevelop." (SONAR, p. 20) This shows that the DNR is not adhering to Minnesota law, which states that development and redevelopment of industrial and commercial uses must be provided for in the MRCCA rules. (Minnesota Statute section 116G.15 Subdivision 2)	Costs to businesses discussed under SPACC and SPPA comments, and in response to ALJ question #8 (**Attachment 2**).
5/26/2016	5/31/2016	5	Captain Ken's Foods	Business	Letter	5d	DimensionalStds.0120	Subp. 3B Bluff setback - General	Bluff protection "should be done on a land-by-land basis, not by creating rules to broadly cover every parcel of land in such a diverse area"	The 2015 and 2016 Jennings reports (Hearing Exhibits 28 and 29) show that all 2014 bluff failures involved bluffs where development activity was present. The bluff definitions and related standards dealing with structure placement, vegetation management and land alteration in the bluff impact zone are intended to help prevent bluff failure and/or erosion of bluffs. Establishing standards on a lot by lot basis is not efficient or practical. The provisions in rule provide the baseline protections for the entire corridor. Variances provide an opportunity to deviate from the basic level of protection on a case by case basis, if the local government determines that practical difficulties exist.
5/26/2016	5/31/2016	5	Captain Ken's Foods	Business	Letter	5e	AdministrativeProv.0080	Subp. 3 Nonconformities	Any expansions will now require additional permitting and administrative burdens.	Building expansions always require local government permits. The rules do not require any additional permits for building expansions. If an expansion not meeting the bluff setback is required, a variance will be needed. The City of St. Paul has established a regulatory bluffline. Any expansions under current ordinances that do not meet the bluff setback would also currently require a variance.
5/26/2016	5/31/2016	5	Captain Ken's Foods	Business	Letter	5f	AdministrativeProv.0080	Subp. 3 Nonconformities	Buildings will become nonconforming, and there is no need for that classification. "Instead, buildings in the MRCCA should be subjected to engineering best practices when facilities need to be expanded or modified… The rules should lay out how any business or property owner and the local government can determine what is allowable on every parcel of land rather than terming them all as a nonconforming structure. Such a course would be more in-line with current practices."	Some buildings will become nonconforming under the proposed rules, while others in the City of St. Paul will become conforming. The City of St. Paul's analysis in late 2014/early 2015 on the bluff definition in the proposed rules showed a net reduction of 310 nonconforming structures under the proposed rules compared to the current city ordinance (**Attachment 6**). Based on feedback, many provisions have been added to the rules to add to existing statutory protections for nonconforming structures. These include allowing lateral expansions of nonconforming structures as long as they don't further encroach into required bluff setbacks and allowing the repair and maintenance of existing (nonconforming) buildings and facilities. The proposed rules do not impose any additional permitting requirements on nonconforming structures. Any structure, whether conforming or not, requires permits to expand.
5/26/2016	5/31/2016	5	Captain Ken's Foods	Business	Letter	5j	SONAR	Costs	SONAR does not explain probable costs to businesses as required by state law (MN Statute Section 14.131, #5). Does not know what additional regulatory burdens would be required by rules as proposed.	Costs to businesses discussed under SPACC and SPPA comments, and in response to ALJ question #8 (**Attachment 2**).
5/26/2016	5/31/2016	5	Captain Ken's Foods	Business	Letter	5k	SONAR	Costs	The DNR skirts the intention of the legislative requirement to "determine if the cost of complying with a proposed rule in the first year after the rule takes effect will exceed $25,000 for: (1) any one business that has less than 50 full-time employees; or (2) any one statutory or home rule charter city that has less than ten full-time employees." (Minnesota Statute section 14.127, subdivision 1). The SONAR merely states that it will take longer than a year for local governments to revise their plans and ordinances, so the proposed rules will not impact businesses within the MRCCA within a year's time. While this is true, it does not follow the intent of the statute, which is to assist the community (and this business) in understanding the values and consequences of the proposed rules, including costs to businesses and individuals. Making absolutely zero effort to determine cost of the proposed rules for businesses and individuals is unacceptable.	Costs to businesses discussed under SPACC and SPPA comments, and in response to ALJ question #8 (**Attachment 2**).
6/7/2016	6/7/2016	6	Gary Thompson	Self	e-comment	6a	District Maps/Dimensional St	Subp. 2A Height - Mississippi River Bou	"Why did the DNR propose to increase building heights from the current 40 ft. to 65 ft., over a 60% increase? ...Do we want a row of 6-7 story high rise buildings, or more with variances, along the edge of the Mississippi River Blvd. on the Ford Plant site? High buildings should be built where there are already high density population and commercial areas, not right on the edge of our beautiful river area. Some on the Ford Parkway side of the Ford site and even the Sibley Plaza site would be OK with me. The river should be a destination area for leisure and recreation, and not surrounded by high buildings and congestion."	See responses to proposed district map changes in **Attachment 4** for this area.
6/10/2016	6/10/2016	7	Thomas Romens	Self	e-comment	7a	District Maps/DimensionalSt	Subp. 2A Height - Mississippi River Bou	"The proposed rule to increase the maximum building height along the Mississippi River corridor in the Twin Cities ares should not be ratified. The building height restriction should remain at 40 feet. 40 feet is consistent with the canopy of mature trees in this area. Tall buildings like 740 Mississippi River Blvd are an eyesore that can be seen from a mile away"	The Legislature directed the DNR to develop new districts and standards and criteria for those districts, including height. The height limits determined for each district were the result of a deliberative process that is explained sufficiently in the SONAR.

6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8a	Scope.0030	General	Include new provision requiring that cities submit shoreland ordinances to the DNR for review consistent with MN Statute 103F.221 Subd. 1.	This requirement to submit ordinances to the commissioner under the State Shoreland Act (103F.221) is required under the shoreland program and applies to cities regardless of whether they are referenced in the proposed MRCCA rules -- the MRCCA rules do not change or amend rules adopted under the State Shoreland Act, which may be found in Minn. R. Ch. 6120. The Shoreland, Wild and Scenic River and the Lower St. Croix program rules do not contain provisions requiring submittal of rules for other rule programs, even though there is often overlap. Where these regulatory programs do overlap, the most restrictive provision applies. Unlike the Wild and Scenic River, Lower St. Croix and MRCCA rules, the Shoreland rules have broad applicability to all public waters in the state. The other program rules are tailored to address the conservation needs of specific resources and development patterns unique to the corridor, which includes the largest metropolitan area in the state. The designation of the Mississippi River in the Twin Cities Metropolitan area as a Critical Area was done because it had resources unique to its location – resources that are addressed through the proposed rules that specially address those unique resources. The proposed rules are the result of an extensive public involvement process that balance the protection needs of the MRCCA's unique resources with those of cities and stakeholders within+L43 the MRCCA. Adding the proposed reference to the State Shoreland Act does not increase protection.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8b	Definitions.0050	Bluff	Replace definition with one where bluff is an average slope of 18 percent or greater measured over a horizontal distance equal to or greater than 50 feet. This definition is in conformance with adopted plans and ordinances of Minneapolis and St. Paul. In some cases there will be less protection in the MRCCA than is provided everywhere in the state. The EO requires protection of slopes 18% and greater as bluffs Proposed definition reduces protection in these two cities. DNR is required to consider adopted plans and ordinances. Current local government protections protect all 18 % and greater slopes, not just bluffs.	EO 79-19 provides special protection of bluffs with a slope greater than 18 percent, but does not define the term bluff. EO 79-19 does, however, define a bluffline as "a line delineating the top of a slope connecting the points at which the slope becomes less than 18 percent." A major problem with EO 79-19 is the vague definition of bluffs. Local definitions and interpretation vary widely. Some LGUs use a rise or run paramter to better define what a slope is. The DNR considered these existing defintions and determined that vertical rise and a horizontal run paramaters would clarify what a bluff was. The proposed definition was chosen because it protected bluff features while limiting the creation of nonconforming structures. Much of the MRCCA is heavily developed and thus a defintion that recognized the existing development was needed. Other definitions, such as the one used in the state shoreland rules, were developed for areas with significanly lower density and much larger lot sizes. The proposed bluff definition eliminates the many small undulations of land in urban yards that could be defined as a bluff with a different bluff definition. The proposed definition thus reduces administrative complexity and burden for local governments and property owners.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8c	Definitions.0050	Bluff	Proposed rules eliminate prohibition on development of 18% and greater slopes in Executive Order 79-19.	EO 79-19 does not prohibit development on 18% and greater slopes; it states that each LGU in the corridor "shall prepare plans and regulations to protect bluffs greater than 18% and provide conditions for development of bluffs between 18% - 12% slopes" (C.1.a(4)), and that each LGU "shall prepare plans and regulations to protect and preserve aesthetic qualities of the river corridor", including a requirement that "structure site and location shall be regulated to ensure that riverbanks, bluffs, and scenic overlooks remainin in the natural state, and to minimize interference with view of and from the river, except for specific uses requiring riverfront access" (C.2.b.). The Interim Development Regulations in EO 79-19 establish a setback from 18% slopes, but these interim regulations don't have the force and effect of law; they served as temporary standards until LGUs adopted their own MRCCA ordinances. The bluff definitions and standards adopted by local governments vary (see **Attachment 9**). Some local governments have provisions that prohibit development on slopes over a certain percentage. The DNR needed to consider the wide range of existing regulations and develop a defintion that could be consistently applied throughout the corridor. The proposed rules prohibit development on bluffs and in the bluff impact zone, which is a 20 foot buffer around a bluff.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8d	Definitions.0050	Bluff	A 25 foot rise over a 25 foot run is a 100 percent slope.	This is true in geometry and the result would be an isosceles right triangle with a 45 degree or 100 percent slope. However, the proposed definition says that the slope must rise **at least** 25 feet to potentially qualify as a bluff. If a slope meets this initial qualification, then one determines what the slope is over a 25 foot horizontal distance. This is done by determining the elevation at the bottom of the slope and the elevation at a 25 foot horizontal distance from the toe of the slope. One then determines the elevation rise and divides that by 25 feet. If the result is 18% or greater, the slope feature is a bluff.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8e	Definitions.0050	Bluff impact zone	This is an important provision, it is an existing requirement for much of the MRCCA under the draft shoreland rules. Statute requires compliance with shoreland rules.	The bluff impact zone concept was adapted from the shoreland rules and incorporated into the proposed MRCCA rules. The bluff impact zone in both rules is 20 feet, however, in the MRCCA it is 20 feet around the entire bluff, whereas in the shoreland rules it is only 20 feet from the top of a bluff.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8f	Definitions.0050	Other	Add a definition for buffer. "Buffer - means land that is used to protect adjacent lands and waters from development and more intensive uses. The land is kept in a natural state of trees, shrubs, and low ground cover and understory of plants and functions to filter runoff, control sediment, and nutrient movement, protect and enhance fish and wildlife habitat, and provide screening to protect and enhance scenic and aesthetic values. In areas of agricultural use, the land may be used for less intensive agricultural purposes. Rip rap or hard armoring must include restoration of natural vegetation to the greatest extent practicable." This is the shoreland definition with additions including scenic and aesthetic values.	Neither the shoreland rules or 2010 draft shoreland rules include a buffer definition. The shore impact zone, included in the proposed rules, is used to provide a buffer between development and water bodies. Note that buffer is now defined in statute (103F.48 - Buffer Law).
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8g	Definitions.0050	Other	Add a definition for height. "Height of structure - means the greatest vertical distance between the *natural grade* at the structure, and the highest point of a flat roof, the highest gable of a pitched or hip roof, or the highest point of a structure." The Shoreland definition with the changes in italics is appropriate because it is designed for visual impacts on resources. Natural grade means alteration of the natural grade does not allow a taller structure.	Earlier drafts of the rules provided a "height of structure" definition, but this was removed in the proposed rules based on feedback from local governments that already had defined height in their local zoning ordinances and didn't want to change the definition city-wide (not just in the MRCCA) or have two definitions. The proposed rules allow local governements to use their existing definition of height, but specify that height must be measured from the side of the structure facing the river. This allows local governments the benefit of using one method for measuring height in their community while ensuring that the intent of limiting visual intrusion through height limits.

6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8h	Definitions.0050	Impervious surface	Include riprap or hard armoring as examples of impervious surface in the impervious surface definition. There should be a prohibition on the dumping of construction debris such as concrete and asphalt demolition in or on the shore of public waters include in the rip rap requirements.	These examples were included in an earlier rule draft, but were removed based on feedback received. The proposed rules prohibit impervious surface in the SIZ and BIZ. The rules do allow hard armoring as it is an important method for limiting erosion and providing soil stability in certain situations. Including hard armoring as an example of impervious surface would introduce a conflict into the rules.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8i	LandAlteration.0160	Subp. 3 Land alteration	There should be a prohibition on the dumping of construction debris such as concrete and asphalt demolition in or on the shore of public waters include in the rip rap requirements.	Dumping of construction debris in floodplain and shoreland is prohibited by most local ordinances. Furthermore, a local permit is required for construction of rock riprap and retaining walls and as such is subject to local review and inspection.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8j	Definitions.0050	Other	Add a defintion for native plant.	"Native plant communities" are defined and support the standards dealing with native plants in the vegetation standards.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8k	Definitions.0050	Native plant community	Revise definition to say "identified" instead of "mapped." Instead of "other scientifically based studies, state "or equivalent survey, USGS National Vegetation Classification, USGS-NPS Vegetation Characterization Program, and locally identified significant trees or plant communities including remnant prairie grasses, trees, or plant communities rare to area or of particular horticultural or landscape value, or trees with a diameter at breast height of 12 inches or larger."	Modify rules to say "identified" instead of "mapped" and to include examples of "other scientifically based studies such as the USGS National Vegetation Classification or the USGS-NPS Vegetation Characterization Program" (see **Exhibit D.0**). The definition is intended to reference studies for use in identifying/mapping native plant communities, not specifically to define what they are. LGUs already are required to map/identify vegetation of value to the community in addition to native plant communities.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8l	District Map/DimensionalStd	Subp. 2A Height - UM	Allowed height increases of 65 feet in St. Paul are too much, especially at confluence of Minnesota and Mississippi Rivers. Height in urban open space district under EO is 35 feet and St. Paul limits to 40 feet. Local plans call for no tall buildings in area. No definition of how to measure height in rules.	We propose to change the Davern/Shepard site across from the confluence from UM (65') to RTC (48'). Refer to Exhibit D.4, Attachment 4)
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8m	Definitions.0050	Primary conservation areas	Include - islands, wildlife preservation areas, and waterfalls - Retain - publicly owned parks, trails, and open space. Executive Orders 130 and 79-19 call for preservation of wildlife habitat and islands in a natural state. It only makes sense that waterfalls, trails and open space are "key resources" in a National Park	Islands vary widely in character and level of development. Wildlife habitat and waterfalls are also likely to fall into other protected categories such as bluff impact zones, shore impact zones, significant existing vegetative stands, etc. Parks also vary widely in their type and function and are located in all districts. Furthermore, adding features that are not specifically referenced in the enabling legislation introduces potential for challenges.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8n	Definitions.0050	Public river corridor views	Include - after parkland - public open space, trails, bridge crossings. Include - the same list of views in regards to views toward bluffs.	Public open space and trails are included as part of public parkland which is already included in the definition. Expanding the definition to include bridge crossings significantly expands the viewsheds that must be considered and would essentially include the entire corridor as a public river corridor view. This would be a substantial change to the rules and would affect many more property owners.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8o	Definitions.0050	Shore impact zone	Include - "but not less than 50 feet." The shore impact zone serves as all or part of the shoreline buffer. - This is the requirement contained in the draft Shoreland Rules. This requirement applies to all of the State.	The SIZ is 50% of the setback which currently varies from 0 feet in the UC district to 200 feet in the ROS district. The UC district, because of its highly urban nature and historic use with an active edge, was intended to not have a setback to allow continued use of the urban edge. The MRCCA is a unique corridor and significantly different than the vast majority of the state's public waters that are under the protection of the shoreland rules. The Legislature recognized this in statute and therefore the MRCCA standards are different than the shoreland standards. The vegetation and land alteration standards apply within 50 feet of the OWHL and provide water quality protection.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8p	Definitions.0050	Shoreline facilities	Include - **that portion of** - "Shoreline facilities" means that portion of facilities that require a location adjoining public waters for ingress and egress, loading and unloading, and public water intake and outflow. It clarifies that only that portion of a facility that requires a location adjoining public waters is exempt from the setback requirements.	Adding this qualifier would add further ambiguity to the definition. It is not clear how one can know what "portion" of a facility requires a location adjoing water and what doesn't and creates an additional administrative burden. The definition already includes examples of "types" of facilities that do not require a water location and is sufficient.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8q	Definitions.0050	Structure	Use the statutory definition contained in MN Statute 116G.03 and Executive Order 79-19 The statutory definition of structure includes movable structures, billboards, fences, swimming pools, flood walls, retaining walls and railroad tracks as structures. The rules must retain the statutory language.	The proposed rules use the shoreland definition for structures, which is widely accepted throughout the state. The proposed standards were designed with the shoreland definition in mind. Including billboards, fences, flood walls, retaining walls and railroad tracks as structures would create many nonconforming structures and would be administratively burdensome.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8r	Definitions.0050	Toe of the bluff	Replace with - measured over a horizontal distance equal to or greater than 50 feet. This is the same as steep slope Subp. 72 and current practice of slope surveying in the Critical Area as stated above in bluff. Shoreland Rules 6120.2500 Subp. 18b. requires toe of bluff measurement over a 50-foot segment.	Bluffs and related bluff definitions were designed to capture bluff features while minimizing the creation of nonconforming structures, a major concern for public acceptance and for efficient administration in the heavily developed MRCCA corridor. See further explanation above under "bluffs."
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8s	Definitions.0050	Top of the bluff	Replace with - measured over a horizontal distance equal to or greater than 50 feet. This is the same as steep slope Subp. 72 and current practice of slope surveying in the Critical Area as stated above in bluff. Shoreland Rules 6120.2500 Subp. 18c. requires Top of Bluff measurement over a 50-foot segment.	Bluffs and related bluff definitions were designed to capture bluff features while minimizing the creation of nonconforming structures, a major concern for public acceptance and for efficient administration in the heavily developed MRCCA corridor. See further explanation above under "bluffs."
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8t	Preparation.0070	Subp. 4 Contents of plans	Subp. 4. B. (6) Include - where appropriate and if applicable - provide for commercial and industrial uses that require water access - Current provision. This retains the authority with the LGU. The way it is currently written implies every community must provide for these uses.	The suggested change does not provide any clarification for LGUs and could be interpreted subjectively.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8u	Preparation.0070	Subp. 4 Contents of plans	Subp. 4.b (7) Retain - "Maximize" - instead of "provide for and encourage." Maximize is a stronger position. The Designation Order of the Mississippi River Corridor Critical Area requires us to maximize the creation of open space and recreational facilities which is also in keeping with a National Park. This is in keeping with the purpose in 116G.15.	"Maximize" was removed as it was difficult to define. Rules seek administrative clarity over EO 79-19

6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8v	AdministrativeProv.0080	Subp. 3 Nonconformities	Delete - C. - which allows increasing nonconformities. Executive Orders 130 and 79-19 allow continued use of nonconformities and expansion as long as the expansion is in conformity. Increasing nonconformity devalues the resource and treats property owners inequitably. Existing nonconformities are grandfathered. All new construction should abide by the same protections. A home that abuts the required setback but has a small entry protruding into the required setback could expand the full length of the house into the required setback. A neighbor without any existing encroachment would not be allowed expansion in the required setback. This rewards nonconformity and is not allowed under Executive Orders 130 and 79-19. Increasing nonconformities is bad policy for the Critical Area and zoning in general.	At least three cities already allow limited lateral expansion of nonconforming structures. The rules allow local governments the opportunity to do this, it does not require it. The ability to allow limited expansion of nonconformities was a major issue in this rulemaking and the proposed rules represent the outcome of extensive discussions with all affected stakeholders in the MRCCA. This provision does not apply to new construction. The rules have important safeguards for expansion of nonconformities. They can encroach no further into required setbacks and they cannot encroach into the BIZ/SIZ, even if they are already in the BIZ/SIZ. Expansions must also be consistent with the scale of the existing and surrounding structures to limit dvelopment of large structures in sensitive areas.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8w	AdministrativeProv.0080	Subp. 3 Nonconformities	Retain - A plan to remove nonconforming advertising signs in the River Corridor is required in Executive Orders 130 and 79-19. This requirement should be retained. Removal of nonconforming signs could be a condition for approving a conditional use permit. Executive Order 79-19 Pages 1693 - 1694. Nonconforming signs are allowed but local units of government are required to have a plan in place to remove nonconforming signs over time.	Consistent with Minnesota Law, any non-conformity created by the application of the rules is permitted to continue in operation. Minn. Stat. § 394.36 and 462.357 (2015). Furthermore, Minn. Stat. § 117.184 requires compensation for the removal of a legal nonconformity as a condition for a permit or any type of local government approval. This law was passed in response to local government action to remove legal nonconforming signs, but applies to all nonconformities. This law and those in Minn. Stat. § 462.357 provide significant protection for the continuation of nonconformities, and the proposed rules must be consistent with these laws.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8x	AdministrativeProv.0080	Subp. 3 Nonconformities	Delete - D setback averaging (grandfathering new structures). Setback averaging is not allowed under Executive Orders 130 and 79-19. Setback are compromises that were agreed to. All properties in the same zoning are required to meet the same setback standards. The proposal would reduce protections by expanding the concept of grand fathering to new construction. Expanding grandfathering to new structures is very bad policy for the Critical Area and zoning in general.	The concept for setback averaging was based on the shoreland rules, which allow for setback averaging. This approach was developed to allow new construction in areas that are already developed the ability to be sited in a way that is consistent with existing development patterns and allows views of the water, provided sensitive shore and bluff impact zones are not encroached upon. A structure that meets a regular setback, if it is on a lot between two lots with structures closer to the water, may have impeded views of the water. The setback averaging provision was a very important issue to older communities with mostly developed land, but with a few vacant and buildable lots.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8y	AdministrativeProv.0080	Subp. 5 Mitigation	Subp. 5B. ADD - Mitigation must be provided in the MRCCA. The requirement is to protect and enhance the MRCCA.	Both the variance and conditional use permit provisions state that mitigation must be required when impacts to the resource are caused by the variance of conditional use. This requirement is also stated in the mitigation provisons. Mitigation cannot be required in all situations, only when there is an impact, and then, only when it is related to and proportional to the impact. This has been documented in numerous Supreme Court decisions.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8z	Districts.0100	Subp. 3 ROS	B. Add - undeveloped islands.	Undeveloped islands are included in the broader statement of "undeveloped tracts of high ecological and scenic value" in the district description (Item A).
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8aa	Districts.0100	Subp. 4 RN	B. Change last line to - and enhancing shoreline and bluff habitat	We propose to modify rules to not exclude habitat outside shoreline areas (see **Exhibit D.0**).
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8bb	Districts.0100	Subp. 5 RTC	B. Change last line after riparian areas add - historic preservation, enhancing tree canopy, scenic views, shoreline habitat, bluff habitat, public access to and scenic overlooks of the river corridor are priorities. Enhanced recreational access to the river and recreation resources where appropriate are priorities.	The management purpose already includes "restoring tree canopies," providing public views and public access. Historic preservation is site specific and is up to local govenrments to implement where appropriate. The RTC is not widely used, and river access, shoreline and bluff habitat are important but not priorities for this specific district.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8cc	Districts.0100	Subp. 6 SR	B. Add after Mississippi River - enhancing tree canopy and historic preservation are priorities.	Historic preservation is site specific and is up to local governments to implement where appropriate. Protection of primary conservation areas are already included; this term includes native plant communities, significant existing vegetative stands and tree canopies.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8dd	Districts.0100	Subp. 7 UM	B. Add after urban uses in first sentence - where appropriate. Add to last sentence - tree canopy, and recreation resources including trails. Restoration of the tree canopy is a priority on the valley floor, bluff face and top of the bluff and in particular the confluence of the Minnesota and Mississippi Rivers and along the gorge in order to protect and enhance scenic and historic vistas. Shoreline restoration, and trails are a priority because of the extensive amount of shoreline in this district.	Not clear on comment to add "where appropriate" after urban uses - the term "urban uses" does not appear in either paragraph A or B. Restoring bluff and shoreline habitat as well as providing public access are already listed as management priorities. Public access and views are management objectives and may be provided through trails. Likewise, restoring habitat is a management objective which may be provided through enhancements to the tree canopy if appropriate for a particular location.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8ee	Districts.0100	Subp. 8 UC	B. Add - and enhancing - Add - shoreline habitat, and tree canopy, enhancing trails, scenic overlooks, recreational resources are priorities.	The priority for the urban core district is protecting commercial, industrial and other high intensity uses while minimizing impacts to conseration areas. Prioritizing shoreline habitat and tree canopy in an urban area with no required setback is counterproductive and conflicts with the primary objective.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8ff	Districts.0100	Subp. 9 District boundaries	Include under commissioner requirements - provide a 45 day comment period and hold a public hearing including the opportunity for the public to provide testimony that will be included in the public record. A LGU, state or regional agency may request a district boundary amendment. The public must have a DNR comment period regarding proposed boundary changes	The proposed rules require local governments to conduct a public hearing to consider boundary adjustments prior to submitting the request to the DNR. The DNR must then decide whether to advance the request. If so, rulemaking under Chapter 14 is required. The local public hearing and the procedures for public notice and comment under Chapter 14 are a sufficient level of public involvment - a 45-day comment period and public hearing are an uneccessary delay that does not enhance public involvement.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8gg	Uses.0110	Subp. 5 Nonmetallic mining	Nonmetallic mining - Replace after the second within - 100 feet of the bluffline, and toe of the bluff.	Areas where new nonmetallic or aggregate mining could take place are designated as RN or ROS, which have 100 foot and 200 foot setbacks, respectively. Changing the language does not materially change the proposed standard. Requiring a 100 foot setback from the toe of the bluff introduces a new and substantially different dimensional standard that hasn't been reviewed for unintended consequences. No rationale is presented for making this significant change.

6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8hh	Uses.0110	Subp. 5 Nonmetallic mining	Add new provision prohibiting new frac sand mines in the MRCCA	The DNR, EQB, and the MPCA are currently developing rules specific for frac (silica) sand mining that will apply statewide, including in the MRCCA. No rationale is presented for making this significant change as part of the MRCCA rulemaking, a substantially new regulation that has not been reviewed by affected stakeholders.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8ii	Uses.0110	Subp. 6 River-dependent uses	A. Add - Exemptions are for that "portion" of shoreline facilities that, for operational reasons, prohibits its location in conformance with setback, dimensional, and performance standards. Exemptions in this subpart do not apply to bluffs. The exemption should be for that portion of the facility requiring a location on the shore. The exemption should not be a blanket exemption for the whole facility or 18% and greater slopes.	The shoreline facilities definition defines such facilities as those requiring a location adjoining public waters for operational purposes. Determining the "portion" of a shoreline facility that requires a location adjoining public waters is highly dependent on a specific site and facility. The existing rules rely on local government administration to assess the relevant issues for each specific application and make a determination on whether a facility can or cannot meet the standards. Exemptions are only made for bluffs if there are no alternatives.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8jj	Uses.0110	Subp. 6 River-dependent uses	Add - The placement of dredged material must meet the requirements of fill in the MRCCA. Dredged material is not exempt from Critical Area fill requirements. Bluff, shoreline, and wetland protections also apply. Executive Order 79-19 I e, (7) Page 1705	Significant state and federal regulations and permitting requirments already apply to placement of dredged material, which generally occurS below the OHWL. The MRCCA regulations only apply to activity above the OHWL.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8kk	DimensionalStds.0120	Subp. 2A Height - RTC	Change to 40 feet, 55 feet with CUP.	Proposed heights consider existing and planned development and the protection of commercial resources, key criteria inserted by the Legislature in Minn. Stat. § 116G in authorizing the DNR to resume rulemaking. Height limits were the subject of intense public involvement and comments. The proposed height balances a wide range of interests. Limiting heights to 48 feet, with taller buildings through a CUP allows some local control to consider the needs of the community. CUP processes for taller buildings must consider additional criteria to assess the visual impact and minimize any impact.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8ll	DimensionalStds.0120	Subp. 2A Height - SR	Change to 35 feet, same as RN, which is generally consistent with existing development	The SR district includes large areas of the corridor. Due to the large expanse, determining specific height limits is difficult and not necessary because so much of the SR area is visually separate from the river. The treeline is used as a general performance standard for limiting height. The DNR will review underlying zoning as part of its review and approval of local ordinances. The DNR will review the heights allowed by underlying zoning and assess the potential visual impact of zoning districts allowing heights over the general level of the area's tree canopy. (See **Exhibit D.0.**)
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8mm	DimensionalStds.0120	Subp. 2A Height - UM	Change to 50 feet, 60 feet with CUP generally. Change to 30 feet within 300 feet of OHWL or toe of bluff and 40 feet within 500 feet of OHWL or toe of bluff.	Proposed heights consider existing and planned development and the protection of commercial resources, key criteria inserted by the Legislature in Minn. Stat. § 116G in authorizing the DNR to resume rulemaking. Height limits were the subject of intense pubic involvment and comments. The proposed height balances a wide range of interests. Limiting heights to 65 feet, with taller buildings through a CUP allow some local control to consider the needs of the community. CUP processes for taller buildings must consider additional criteria to assess the visual impact and minimize any impact.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8nn	DimensionalStds.0120	Subp. 2B Height Measurement	Height requirements. Change to - For the purposes of this subpart, Structure height is measured from lowest point of the foundation at the natural grade to the highest point on the roof. This measurement will always ensure the lowest height relative to the river side and protects all sides equally. Without a common measurement standard the height requirements are of limited value. Measurement could be from the natural grade, finished grade, top of foundation, average grade, lowest grade, or highest grade. Measurement could be to the soffit, part way up the roof, average roof height, or highest point of the roof. The Rules must define how height is measured in order to have a consistent height standard.	Local governments measure height in many different ways, however, retaining existing methods of measuring was important to local governments to minimize the administrative burden of using different methods in different parts of the community. The propsed rules do require the measurement to take place on the river side of the structure to ensure continuity on the most important variable affecting height measurement.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8oo	DimensionalStds.0120	Subp. 3A OHWL setback - General	Retain structure setbacks form the OHWL in all districts. All public waters within the Mississippi River Corridor Critical Area are subject to MN Shoreland Regulations setback requirements. These setbacks shall be included in River Corridor plans and ordinances.	In EO 79-19 there is no OHWL setback in the Urban Diversified District. The UC district, which doesn't have an OHWL setback, is used in areas designated as Urban Diversified in EO 79-19 so the proposed rules do not change the existing regulations on setbacks. This alignes with the Legislative directive in Minn. Stat. § 116G.15 to recognize existing and planned development and to protect commercial and industrial resources.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8pp	DimensionalStds.0120	Subp. 3D Setback averaging and scale	Remove - item D. - Not in conformity with Executive Order 79-19. Averaging is not in keeping with the purpose of the Mississippi River Corridor Critical Area Statute 116G.15. It will reduce protections in place for nearly 40 years. Setback averaging is not allowed in the Mississippi River Corridor Critical Area, or rivers designated, Recreational, Scenic or Wild. If protections are reduced it should be limited to what is in the Draft Shoreland Rules. The Draft Shoreland Rules (page 19) limit averaging to nonconforming lots of record that lack sufficient buildable area to meet structure setback requirements provided principal structures exist on the adjoining lots on both sides of a proposed building site and structure setbacks are altered to conform to the adjoining setbacks, provided the proposed building site is not located within a shore or bluff impact zone and mitigation is required	Setback averaging is allowed in the shoreland rules. This approach was developed to allow new construction the ability to be sited in a way that allows views of the water. A structure that meets a regular setback, if it is on a lot between two lots with structures closer to the water, may have impeded views of the water. The setback averaging provision was a very important issue to older communities with mostly developed land, but with a few vacant and buildable lots.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8qq	PublicFacilityStds.0130	Purpose and scope	Replace the last sentence with protection in 79-19 - The corridor shall not be used merely as a convenient right-of-way and new or modified transportation and utility facilities shall complement the planned land and water uses and shall not stimulate incompatible development.	The proposed language is not consistent with a purpose and scope statement, which states the intent of the performances in a particular section. The proposed language is a performance standard in that it states what is or is not a compatible use, and is also highly subjective.

6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8rr	PublicFacilityStds.0130	Subp. 3 General design standards	Add new item F. Design for public roads, rail lines, trails, and facilities must preserve and enhance vegetation and topography when reasonable and prudent to aid in screening of these areas from view from public waters, bluffs, and public parks, open space and trails.	Railroads are regulated at the federal level and have exercised their exemption from local and state controls through the courts; the state does not have authority to regulate rail roads. Public facilities are subject to the same design standards for protecting public river corridor views and specifically must minimize visibility of the facility and comply with the vegetation management and land alteration provisions and thus adequately address the issue of screening these facilities.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8ss	PublicFacilityStds.0130	Subp. 4 ROW standards	Add new item D - When vegetation is removed, the removal of invasive species including buckthorn shall be a priority. Some utilities have the current practice of removing only native species and purposely leaving the invasive buckthorn because it will choke out native species.	Commenter does not submit any evidence that utilities purposely encourage growth of invasive species at the expense of native species, or indicate evidence of this being a problem.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8tt	PublicFacilityStds.0130	Subp. 6 Public utilities	Include in B - Primary considerations must be given to underground placement in order to minimize visual impacts. When considering overhead placement, the proposers must explain the economic, technological or land characteristic factors which make underground placement infeasible. Economic considerations alone shall not justify overhead placement.	Power line design and placement are regulated by Minn. Stat. § 216E, F, and G and supersede any regulation under these proposed rules.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8uu	PrivateFacilityStds.0140	Subp. 4 Roads, driveways & parking	Add new item D. Low volume roads shall have pavement widths of 22 feet or less.	Developing criteria for "low volume" and limiting width would be problematic - road width depends on local land uses and availability/need for other modes of transportation such as bicyles. Design of roadways is best handled by local governments who can best address these issues.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8vv	Vegetation.0150	Purpose	Purpose - Add new items: D, protect and enhance wildlife habitat, E - protect and enhance areas in a natural vegetation state and native plant communities, F - protect and enhance identified remnant stands of native trees or remnant prairie grasses, trees or plant communities that are rare to the area or of particular horticultural or landscape value, or trees with a diameter at breast height of 12 inches or larger, G - preserve and enhance the natural and aesthetic values H - link habitat into regional greenways, providing continuous habitat corridors to support native plant and wildlife species	These purpose statements are all captured by the existing three purpose statements
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8ww	Vegetation.0150	Subp. 3 General Provisions	Intensive vegetatiave clearing is allowed on slopes 18% and greater and should be prohibited. This activity is prohibited in EO 79-19.	Intensive vegetation clearing is prohibited on bluffs. The defintion of bluffs has been refined through intensive public involvement. Provisions for prohibiting intensive vegetation clearing on bluffs was a significant consideration in developing the bluff defintion. EO 79-19 vaguely defined slope features of 18% and greater, consequently administration of provisions relying on this defintion, including vegetation management standards have been poorly and inconsistely enforced. The proposed definition for bluffs and standards prohibiting vegetation clearing on them are more clear and supported by local governments as being reasonable and easier to administer.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8xx	Vegetation.0150	Subp. 5 Permit conditions	Add new item - The limit of vegetation removal, without a permit, shall not be higher than 5% and 1,000 square feet. Prohibit removal of native plant communities and 12" and larger trees without a permit. Significant vegetation removal and removal of significant vegetation should be overseen with permit conditions.	It is not clear what "5%" speaks to. Percentage and square footage thresholds for applying the standards were considered in the "working draft rules" and faced significant resistance because they were difficult to communicate and administer. Removal of native plant communities requires a permit under the proposed rules.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8yy	LandAlteration.0160	Subp. 4B Riprap - Local permit	Add new provision - Only natural rock rip rap, excluding limestone and similar erosive materials, shall be used that is free of debris that may cause pollution or siltation, and cannot average less than six (6) inches or more than thirty (30) inches in diameter. A filter of crushed rock, gravel, excluding limestone or other erosive materials, or filter fabric material shall be placed underneath the rock riprap. The riprap shall conform to the natural alignment of the shore. Live cuttings and plant plugs must be planted within riprap. The site must not be a posted fish spawning area or designated trout stream. (Generally Le Sueur Co Shoreland Ordinance) This is a good list of important requirements that should be incorporated in the rules.	In general, the purposed rules do not reach this level of specificity or detail. Most local governments address this level of detail in their existing permitting requirements/procedures for land alteration. The DNR's guidance document for riprap includes some of these considerations. Early drafts of the proposed rules required bio-engineering methods in place of riprap and were widely opposed as being ineffective and costly.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8zz	LandAlteration.0160	Subp. 5 Permit process	Add new provision - Grading, filling, excavating, or otherwise changing the topography shall not be conducted without a permit. Executive Order 79-19 page 1702 requires a permit for any grading, filling, excavation or change of topography	Requiring a permit for ALL grading activities is administratively burdensome for local governments and is highly objectionable to property owners due to its over reach - it would require a permit for any landscape work. This EO 79-19 provision was never enforced by local governments.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8aaa	LandAlteration.0160	Development on steep slopes	Add new provision - The rules should the adopt the policy of Saint Paul that prohibits commercial and industrial developmen+J50t on 12% to 18% slopes, or limit development on steep slopes by limiting the development density, and impervious surfaces and require percentage minimum areas of vegetation cover, and tree canopy to provide screening, habitat and reduce runoff.	The considerations for development on slopes over 12 % provide adequate and broadly accepted conditions for development. Prohibiting development on these slopes would create thousands of nonconforming structures, would raise significant and broad based objections and would be a substantial change in the rules.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8bbb	LandAlteration.0160	Compliance with other plans and progr	Add new item - meet or exceed the shoreland protection standards under Minnesota Statutes Chapter 103F.211 and Draft Shoreland Rules - E. meet or exceed the historic protection standards under Minnesota Statutes Chapter 138 and local historic district standards - F. In case of conflicting standards the more protective provision prevails. Chapter 138 covers archaeology, historic sites, and the Saint Anthony Falls Heritage Interpretive Zone.	Development activity and permitting must always comply with other relevant plans and regulatory programs, the list of which is quite large. The plans and programs listed are those that protect resources that are similar to those that the MRCCA seeks to protect. The listed programs contain regulatory protections generally not included in the MRCCA and thus add an additional layer of protection by referencing them in this section.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8ccc	Subdivision.0170	General	Delete from A. - of the remaining large sites - Delete from B. - on large sites - Delete from C. - of large sites - Protection and enhancement of the natural and scenic values, protecting and restoring the ecological function of primary conservation areas and restoration of natural vegetation should apply to subdivision and land development throughout the River Corridor. It is every bit as important in Minneapolis and Saint Paul as it is elsewhere in the River Corridor	An important element in the purpose statements is to be clear that the subdivision regulations apply to larger tracts of land. Administering the regulations to small tracts of land is administratively difficult and does not have significant benefits. Small tracts of land often do not contain resources worth protecting due to their fragmentation.

6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8ddd	Subdivision.0170	Subp. 2 Applicability	Delete from A - involving ten or more acres for parcels that abut the Mississippi River and 20 or more acres for all other parcels - Add - A. (4). the division of any parcel of land into two or more lots, including subdivision - Delete - B. (1) and (6) - This comes from Executive Order 79-19 page 1710 - Lot standards, lot design, and parkland dedication are all tied to B. Riparian lot width requirements, adequate buildable area requirements, primary conservation area protections, and parkland dedication must apply to all subdivision and re-subdivision and not just 10 or 20 acre and larger subdivisions. Applying the regulation only to 10 acre and larger tracts does not meet the requirements of the Statute 116G.15 Purpose. Preserve and enhance the natural, aesthetic, cultural and historic values and protect and preserve the biological and ecological functions does not occur only on 10 acre and larger tracts of land. Urban areas need protection as much if not more than areas of low density development	The threshold of applying the standards to 10 acres for riparian land and 20 acres for all other parcels was carefully considered against the amount and size of available land for development an to balance the costs of complying with proposed rules. The proposed rules require that certain amount of land (primary conservation areas) be set aside for permanent protection. This is a significant strengthening of the proposed rules over EO 79-19. Managing these primary conservation areas is not without cost, however, spreading the costs over larger tracts of land helps to address concerns with administration and development costs. The Executive Order did not require the permanent protection of open space or primary conservation areas.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8eee	Subdivision.0170	Subp. 5 Land dedication	Delete - that - replace with - shall - Add - 10% of - after dedication of - Retains Executive Orders 130 and 79-19 parkland dedication requirement or equivalent in cash. Specifies 10% dedication requirement. Parkland dedication must be in the MRCCA.	The Executive Order's provisions around land dedication were vague and poorly, if ever, adminstered. The proposed rules seeks to permanently protect primary conservation areas through specific provision for identifying, preserving and managing these important resources. State statute allowing land dedication for parks requires that dedication be related to and proportional to the dedication, making a strict 10% dedication requirment for parkland a potential point of conflict with existing statutory standards. The percentage set-aside requirements only seek to protect the resource, which may continue to be held privately and used for private uses.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8fff	ExemptionTable.0180	Height exemtions	Industrial andutility structure exemption from height limits should be limited to that portion requireing greater height fo roperation reasons.	The rules exempt structures requiring greater height for operational reasons from the height requirements. Parsing out the "portion" needed for operational reasons is an additional administrative burden and is a consideration better managed at the local level.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8ggg	ExemptionTable.0180	Historic sites and districts	Historic sites and district should not be exempt from heights and setbacks	Only existing structures are exempt. Alterations to existing historic structures or new construction are not exempt
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8hhh	Subdivision.0170	Subp. 4G allowance for land dedicatior	Current regulations (EO) require dedication of land, payment in lieu of dedication should be required. Removing this in proposed rules will lead to decomissioning of parks. Set-aside of green space not same as dedication.	Addressed sufficiently in SONAR.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8iii	Subdivision.0170	Subp. 4B PCA set asides	Ford site should have some set-asides.	The portion of the Ford Site within the MRCCA trips the minimum 10-acre threshold and set-asides will apply.
6/12/2016 - 6/15/2016		8	Tom Dimond	Self	Letter, Hearing & Exhibit	8jjj	DimensionalStds.0120	Subp. 3A OHWL setback - General	Exemptions to structure setbacks for flood walls is not acceptable at river's edge.	This exemption applies to all flood control structures, which by design often have to be located at the water's edge.
6/14/2016		9	Senator David Durenberger	Self	Hearing & Exhibit	9a	General	Support	Supports the proposed rules. Approval of proposed rules is essential to affect a national policy precedent he helped to create. The proposed rules are an update to the Governor's Executive Order, not a whole new regulatory scheme. It is solid, well-thought out work which not everyone will be in unanimous agreement, but from which everyone will benefit. By statute we created a state and local compact by which Minnesota guarantees to protect the river. It must be governed at a higher level than purely the local interests that make up its parts. MRCCA designation and protection was essential to creation of the MNRRA by the NPS. Proposed rules honor the state's tradition and obligation.	
6/14/2016		10	Rory Steirler	NPS	Hearing	10a	General	Support	We need these rules. MNRRA, a unit of the NPS, shares same boundary as the MRCCA. In 1991 the state designated the MNRRA as a Critical Area. It is a "partnership park". NPS doesn't own much land but protects its resources through partnerships and management frameworks. The state agreed to protect the river and update the program upon completion of the MNRRA comprehensive management plan. Legislature directed DNR to do rules adn DNR has accomplished this. NPS asks Judge to keep the purpose of the designation in mind when considering need and reasonableness of the proposed rules.	
6/14/2016	6/16/2016	11	Sen. Katie Sieben	Self	Letter & Hearing	11a	General	Support	The 2009 Legislature recommended the DNR conduct rulemaking to revise the Executive Order, which was too vague and inconsistently interpreted and adopted. The proposed rules honor the 2009 legislation by balancing flexibility, local control, and conservation.	
6/16/2016	n/a	11	Senator Katie Sieben	Self	Hearing	11b	General	Support	Appreciates thoughtful and thorough approach to rules balancing goals of flexibility, local control and conservation - rules provide clear and consistent guidelines that are easy for stakeholders to understand. Reviewed history of Legislative review and direction for rulemaking.	

6/14/2016		12	Kathy Stack	Self	Hearing	12a	General	Support	Lives on gorge, and has traveled the entirety of the river as a houseboat resident of 10 years. Testified to the fact that visitors on the river she's spoken to are so impressed by the metro corridor being so natural and undisturbed by tall buildings. Supportive of the rules, with the exception of some concerns about height.	
6/14/2016		13	Gordon Nesvig	Self	Hearing	13a	General	Public Notice & Involvement	Testifies that public has been excluded from the process. The DNR made several previous attempts at implementing rules, which all failed.	As noted in the SONAR and Additional Notice Plan, the DNR has done extensive outreach and conducted a highly participatory process involving all affected parties, including property owners.
6/14/2016		13	Gordon Nesvig	Self	Hearing	13b	General	Takings & Costs	Owns a mile and a half of shoreline in St Paul Park. His land has been slated for development for years. Setback provisions will restrict development potential, cost him money and reduce the city's tax base.	See DNR response on takings (**Attachment 1**) and takings analysis (**Attachment 5**). This property is currently subject to setbacks and other restrictions under the City of St. Paul Park's MRCCA ordinance.
6/14/2016		14	Don Arnosti	Isaak Walton League	Hearing	14a	General	Support	The Izaak Walton League is supportive of these rules. They should be implemented and they've been a long time coming. We've had discussions about these rules with our policy folks and committees. While we wish the compromises that were made were more in favor of conservation, we do support these rules, and we think they're reasonable and reflect compromises between multiple perspectives. Upper Mississippi River Wildlife and Fish Refuge is just downstream of MRCCA and is cause for Isaak Walton League in Minnesota - by hunters and anglers concerned with protecting the river.	
6/14/2016		14	Don Arnosti	Isaak Walton League	Hearing	14b	Districts.0100	Subp. 6 SR	Areas identified in SR district should not be visible from the opposite bank (not just the opposite shore) and concerned about these areas being held to a lesser zoning standard.	Expanding the requirement for visibility of buildings and structures in the SR district from opposite shore to opposite bank would impose new height restrictions on large parts of the corridor, a substantial change that would raise significant and broad based objections.
6/15/2016	6/16/2016	15	PAS Associates, LTD	Business	Letter	15a	Districts.0100	Subp. 3 ROS	Request change in Lower Grey Cloud Island from Rural and Open Space District (CA-ROS) to Urban Mixed District (CA-UM).	Grey Cloud Island has great potential for restoration and redevelopment. However, plans are not yet in place. We suggest a future request for a change in district designation when plans are complete. see discussion in **Attachment 4**, "Requested Map Changes"
6/15/2016	6/16/2016	15	PAS Associates, LTD	Business	Letter	15b	General	General	"The amendments to Minn. Stat., §1160.15 in 2013 and one of the DNR's goals in the proposed rulemaking are the recognition of existing commercial, industrial, and residential development and the importance of redevelopment and reinvestment within the corridor."	Providing for development and redevelopment of industrial and commercial uses are a few among many priorities established by the Legislature, and do not prevail over all natural, scenic, navigational, and other considerations.
6/15/2016	6/16/2016	15	PAS Associates, LTD	Business	Letter	15c	Districts.0100	Subp. 3 ROS	"DNR has mapped Urban Mixed districts (CA-UM) for industrial areas just across river that can be clearly seen from the island and another on the river just south of it. The island's area and use has been exclusively and intensely commercial for 75 years. The surrounding area is a combination of residential, commercial and industrial."	Grey Cloud Island has great potential for restoration and redevelopment. However, plans are not yet in place. We suggest a future request for a change in district designation when plans are complete. see discussion in **Attachment 4,** "Requested Map Changes"
6/15/2016	6/16/2016	15	PAS Associates, LTD	Business	Letter	15d	Districts.0100	Subp. 7 UM	For 30 years in cooperation with the City of Cottage Grove, PAS has planned for an urban mixed use development on its property following the end of commercial nonmetallic mining. The definitions in the proposed rules, including "nonconformity," "conditional use," "nonmetallic mining," "variance," and "planned unit development," provide for PUD redevelopment. Management of an Urban Mixed district (CA-UM) provides for "future growth" and "potential transition of intensely developed areas" which do not negatively affect "corridor views". PAS's Harbor Town plans are submitted as part of the annual mine permit application.	Grey Cloud Island has great potential for restoration and redevelopment. However, plans have not yet been adopted by the City of Cottage Grove as part of its comprehensive plan. We suggest a future request for a change in district designation when plans are complete. See discussion in **Attachment 4**, "Requested Map Changes"
6/15/2016	6/16/2016	15	Associates, LTD	Business	Letter	15e	Districts.0100	General	[the rules should] "add express provisions in the rules for PUD redevelopment of a nonmetallic mine"	See response above to Comment #15d.
6/15/2016	n/a	16	Senator Jim Abeler	Self	Hearing	16a	General	Support	Commissioner/DNR committed to listen and they did. Commends Commissioner and staff on process to date -- he hasn't received any calls from constituents so far. Urges people to communicate any concerns to their elected officials.	
6/15/2016	n/a	17	Nick Tiedeken	Self	Hearing	17a	Definitions.0050	Bluff, Bluff impact zone	18% is not a steep slope. Should allow expansion into BIZ, not just the setback. Small structures should be allowed at toe of slope - in BIZ. Prefer the shoreland bluff definition and standards. Would like some wiggle room in the BIZ. The second bluff definition - bluff that rises 10 feet with a slope of 100% or greater is not a vertical feature - will bring many homes into nonconformity. Bluffs in Brooklyn Park are not iconic like bluffs in Red Wings and Winona. They have standards specific to their type of bluff, why can't we? Anfinson article states "banks" only above falls; "prairie river" character.	Modification to the escarpment definition proposed to better capture escarpment features (see **Exhibit D.0**). Bluff analysis for Brooklyn Park compares shoreland definition to proposed MRCCA definition. The MRCCA definition captures some additional small areas along ravines but is substantially the same as the shoreland definition for properties that abut the river.
6/15/2016	n/a	17	Nick Tiedeken	Self	Hearing	17b	LandAlteration.0160	Subp. 3 Land alteration	Shoreland rules allow 10 cy of disturbance in SIZ, why not in these rules?	The proposed rules allow land alteration in the water quality impact zone (WQIZ) of up to 10 CY or 1,000 SF without a permit and is thus generally consistent with the shoreland rules. The proposed rules apply this provision to the WQIZ which includes the shore impact zone or land wihtin 50 feet of the boundary of a public water, wetland or natural drainageway, whichever is greater.
6/15/2016	n/a	18	Richard Brown	Izaak Walton League	Hearing	18a	General	Support	Rules are a reasonable compromise - river belongs to all. Supports rules.	
6/15/2016	n/a	19	John Freeburg	Self	Hearing & Exhibit	19a	LandAlteration.0160	General	Erosion of river bank has been increasing over past 30 years. Has needed >500 tons of riprap to stabilize 100' riverbank in Ramsey. See City Council meeting notes. What has changed in the past 30-40 years? Points to power plants (nuclear plant at Monticello and coal plant at Becker) upstream warming temperatures. Freeze-thaw cycle and ice damage undercuts banks. DNR should investigate. Need to be clear in rules that riprap repair is allowed.	We acknowledge that these are important erosion issues for the people who live on the pool for the Coon Rapids dam, but they are outside the scope of this rulemaking. Riprap provisions in the proposed rules are sufficient to address erosion that is currently happening, but cannot address WHY it is happening.

6/15/2016	n/a	20	James Shey	Self	Hearing	20a	Definitions.0050	Bluff	No indication of flowage rights for normal pool level - not clear where bluff starts.	Flowage rights are generally related to a dam, and pertain to the right to flood another person's property necessitated by changing the natural course of the river. Flowage rights fall outside the scope of these rules. However, the ordinary high water level for the Coon Rapids Dam pool has been established, and the definition of bluff can be applied in this reach of the river based on the OHWL for the Coon Rapids Dam pool.
6/15/2016	n/a	20	James Shey	Self	Hearing	20b	General	General	Rulemaking documents are too large to be considered in three hearings, not in public library. How can can community comment when they don't know about this?	Most of the documents contained in the Hearing Exhibit Binders - including the Notice of Hearing, Proposed Rules, Proposed District Maps, and SONAR - have been on the Minnesota DNR's website since the Notice of Hearing was first published on April 11, 2016.
6/15/2016	n/a	21	Dan Dahlheimer	Self	Hearing	21a	PrivateFacilityStds.0140	General	Not clear if I can store boats, boat lifts and docks in SIZ.	Propose modification to rules to clarify that these items can be stored in the SIZ (see **Exhibit D.0**).
6/15/2016	n/a	21	Dan Dahlheimer	Self	Hearing	21b	LandAlteration.0160	Subp. 4B Riprap - Local permit	Not clear if I can repair my riprap	Propose modification to rules to clarify that riprap can be repaired without a local permit if it does not involve land alteration (see **Exhibit D.0**)
6/15/2016	n/a	22	Karen Shey	Self	Hearing	22a	General	General	Government regulation creep. Rules too general, want more specifics. DNR hasn't figured out if riprap can be repaired. How does St. Paul differ from Anoka-need more definition.	
6/15/2016	n/a	23	Richard Harris	Self	Hearing	23a	General	General	Worked on Fridley's MRCCA ordinance in the 1970s. DNR had graphics/profiles of bluffs at that time - picture worth a thousand words.	
6/15/2016	n/a	24	Richard Wonens	Self	Hearing	24a	General	General	Can you mine rocks out of the river to stabilize riverbank? Look at Corps approach on lower river -- uses wing dams to stabilize river channel and protect banks.	This topic is covered under Minn. Stat. § 103G and does not fall within the scope of these rules, which apply above the ordinary high water line.
6/15/2016	n/a	25	Doug Bains	Self	Hearing	25a	DimensionalStds.0120	Subp. 2A Height - RTC	What are structure heights in historic downtown Dayton? Will area be able to grow? (RTC)	That area is designated as RTC, in order to allow planned development.
6/15/2016	n/a	26	Jeff Weaver	City of Anoka	Hearing	26a	LandAlteration.0160	General	Something new is happening in river with freeze/thaw cycle. River doesn't freeze solid anymore, power plants are discharging warm water that is preventing freezing and freeze/thaw is damaging downstream banks.	We acknowledge that these are important issues for the people who live on the pool for the Coon Rapids dam, but they are outside the scope of this rulemaking.
6/15/2016	n/a	26	Jeff Weaver	City of Anoka	Hearing	26b	Definitions.0050	Bluff	No iconic bluffs in Anoka.	See above response to Mr. Tiedeken, Comment #17a.
6/15/2016	n/a	26	Jeff Weaver	City of Anoka	Hearing	26c	PrivateFacilityStds.0140	General	Need to clarify rules for temporary storage in SIZ.	See above response to Mr. Dahlheimer, Comment #21a.
6/15/2016	n/a	27	Jeff Bauman	Self	Hearing	27a	LandAlteration.0160	Subp. 4B Riprap - Local permit	Not clear if I can do minor repairs on riprap. Minor is anything where I don't' need to hire someone or use power equipment. Fear of penalities if I do it myself. Need to reassure homeowners they do not need to tear out prior improvments - grandfather them in. Boat wakes causing erosion.	Propose modification to rules to clarify that riprap can be repaired without a local permit if it does not involve land alteration (see **Exhibit D.0**)
6/15/2016	n/a	27	Jeff Bauman	Self	Hearing	27b	LandAlteration.0160	General	Something new is happening in river with freeze/thaw cycle. River doesn't freeze solid anymore, power plants are discharging warm water that is preventing freezing and freeze/thaw is damaging downstream banks.	We acknowledge that these are important erosion issues for the people who live on the pool for the Coon Rapids dam, but they are outside the scope of this rulemaking.
6/15/2016	n/a	28	Cindy Sherman	City of Brooklyn Park	Letter & Hearing	28a	General	General	Commends DNR on good work. City will be able to update ordinance to comply with rules.	
6/16/2016	n/a	29	Shirley Erstad	Friends of the Parks and Trails of St. Paul and Ramsey County	Hearing & Exhibit	29a	Definitions.0050	Native plant community	replace "mapped" with "identified" to allow protection of resources that may not have been mapped	Modify definition as proposed (see **Exhibit D.0**).
6/16/2016	n/a	29	Shirley Erstad	Friends of the Parks and Trails of St. Paul and Ramsey County	Hearing & Exhibit	29b	District maps	RTC	Areas near Marshall Ave and Shadow Falls (Summit Ave.) have been designated RTC with a 48 foot height limit (more with CUP). The city zoning for these areas is a 30 foot height limit and should be retained.	See **Attachment 4** for responses.
6/16/2016	n/a	29	Shirley Erstad	Friends of the Parks and Trails of St. Paul and Ramsey County	Hearing & Exhibit	29c	Districts.0100	Subp. 7 UM	UM district has been overused in St. Paul and inappropriate for broad areas of development within the Critical Area as it will change the look, feel, health and experience of the corridor - overuse of UM weakens resource protections. Much of the area now has a 40 foot height limit, with UM height can go to 65 feet, and higher with CUP. The Ford Site has been designated as both UM and RTC - this site is visible up and down the corridor, taller structures can go on part of the Ford site that is not in the corridor. The area near the confluence of the MN and Missippi Rivers has been changed to less restrictive districts (UM). The area from Lower Landing Park (Lafayette to Childs Road) and between the river and railroad tracks is disignated UM and should be ROS as it is adjacent to the Bruce Vento Nature Sanctuary and Indian Mounds Park and is public park land.The UM district along the top of the bluff on the west side of St. Paul should be RN (not UM) as 65 foot and higher buildings at the top of the bluff will detract from the view down river from downtown St. Paul. Parkland on the east shore of the Mississipp River north of Newport should be ROS, not UM.	See **Attachment 4** for responses.
6/16/2016	n/a	30	Anne Noel	Self	Hearing	30a	General	Support	Described her bike trip along river from New Orleans to MSP - continuing to Itasca. Related the importance of the river to culture, heritage and environemnt diversity and why its important to think critically about development decisions.	

6/16/2016	n/a	31	John Anfinson	NPS	Letter, Hearing & Exhibit	31a	General	Support	Designation as MNRRA in 1988 established national park unit as one of national importance and the CA designation as MN's assurance to Feds that resources would be protected. MNRRA is a partnership park. Rules offer better solution to National Park protection compared to EO which has not worked well as described on pages 6 and 7 in SONAR. Comments are based on the NPS Comprehensive Management Plan (CMP), as it is the formal agreement between the Secretary of the Interior and state of MN. Thought NPS didn't get everything they would have liked, the proposed rules are in keeping with the Act that established the MNRRA/CMP. Rules are reasonable and serve as a substitute for normal NPS regulations. Commends DNR for work involved in this process.	
6/16/2016	na	32	Nicky Leingang	Congressman Keith Ellison	Hearing	32a	General	Support	Strongly supports the rules. Discusses importance of the river and need to protect it. Recognizes the MNRRA and that the MRCCA rules support proteciton of MNRRA.	
6/15/2016	n/a	33	David Suchy	Self	Hearing	33a	General	Support	Studies environmental policy and has not seen anything like these rules - those putting together the rules did it justice.	
6/16/2016	n/a	33	David Suchy	Self	Hearing	33b	DimensionalStds.0120	Subp. 3B Bluff setback - General	The 2015 Jennings report stated that "all failed bluffs within the MRCCA had slopes modified for development and these modification contributed to bluff failure." So, we need more stringent rules to address these bluff failure problems and to protect the national park. Only issue is that the 20 foot bluff setback is insufficient in terms of protecting structures from failing bluffs.	The bluff setback is 100 feet in the ROS district and 40 feet in all other districts. Commenter was probably referring to the 20 foot buffer around all bluffs defined as the bluff impact zone.
6/16/2016	n/a	34	Representative Barbara Haake	Self	Hearing	34a	General	General	Commends DNR for work. Endorses Shirley Erstad's testimony. Would like something done on the Minnesota River as that is where the sediment is coming from that is filling in the Mississippi River.	
6/16/2016	n/a	35	Dan Brady	Great River Coalition	Hearing	35a	PublicFacilityStds.0130	Subp. 6 Public utilities	Power lines cause visual pollution. Rules lack ability to remove transmission lines, could they mitigate power line development or enhance them to imrpove views - maybe lines should be buried.	Siting and development of power lines are regulated by Minn. Stat. §§ 216E, 216F and 216G and take precedence over these rules. The proposed rules include design guidance for minimizing view and for making structures compatible with surrounding natural areas.
6/16/2016	n/a	36	Karen Bernthal	Sheridan Neighborhood Organization	Hearing	36a	District Map/Districts.0100	Subp. 7 UM	Would like neighborhood designated RN (river neighborhood) as they have 100 foot setbacks from river, so more room for bike trails and parkland. Allows more natural areas, more river access and feeling that they are closer to the river. UM allow buildings up to 65 feet tall. Current zoning is 54 feet. City allows CUPs to allow taller buildings. Don't want building height limits relaxed at pressure of developers and city. Would like transition zones	See **Attachment 4** for responses.
6/16/2016	n/a	37	Susan Vikse	Self	Hearing	37a	District Map/Districts.0100	Subp. 7 UM	Supports Karen Bernthal's comments. Supports purpose of rules to protect function and beauty of corridor. Concerned about UM designation on west side of river which allows 65-foot heights, more relaxed than current 40 foot limits. Concerned with tall monolithic structures and more surface parkin; pollution runoff into the river - deterring access to the river and parks.	See **Attachment 4** for responses.
6/16/2016	n/a	38	Lorrie Louder	St. Paul Port Authority	Letter & Hearing	38a	General	General	Commends DNR for helpful responsive professional work. Concur with St. Paul Chamber's submitted comment letter.	
6/16/2016	n/a	38	Lorrie Louder	St. Paul Port Authority	Letter & Hearing	38b	General	Authority	Rules take away local land use control through broad-brush regulations that supersede fine-grain and site specific local zoning regulations.	The state delegates its police powers for planning and zoning to local governments. The state, therefore, has the authority to limit local land use authority and does so to ensure consistent protection of resources that are important to the state and all of its residents. The proposed rules are intended to protect the state's paramount interests in the Mississippi River and the MRCCA. These proposed rules modify current municipal zoning ordinances adopted under Executive Order 79-19. All cities in the corridor have been subject to these broad corridor-wide regulations for 40 years, and these rules do not change the regulatory relationship with the state.
6/16/2016	n/a	38	Lorrie Louder	St. Paul Port Authority	Letter & Hearing	38c	Definitions.0050	Bluff	Elements of rules are inconsistent with existing development and expansion opportunties and will create over 1,000 nonconforming buildings (due to bluff definition), and are thus inconsistent with statutory guidelines for protection: continued development, protection of commercial, industrial and residential resources and redevleopment of a variety of urban uses. It is possible to maintain the integrity of slopes without these restrictions.	Through an extensive public participation process, the proposed rules are the result of many changes to protect existing and planned development, including industrial, commercial and residential resources. In fact the bluff definition and related standards for structure placement reduce the number of nonconforming structures by 310 units compared to the current city ordinance. The rules also introduce new protections for nonconforming structures including lateral expansions, the ability to build on the bluff face in downtown St. Paul, and clarification that nonconforming structures on bluffs can be repaired and maintained. Also see response to SPAAC above.
6/16/2016	n/a	38	Lorrie Louder	St. Paul Port Authority	Letter & Hearing	38d	SONAR	Intrusiveness and complexity	The rules do not reduce complexity or intrusiveness.	The proposed rules respond to the broad range of resources specifified in statute that must be protected. These include both natural resources as well as the property rights of industrial, commercial and residential landowners. Balancing so many interests is not possible without being specific. Addressing the many individual needs and interests cannot be done without some degree of complexity. In fact, a major weakness of EO 79-19 is its vague standards, which were costly and cumbersome for state and local governments to administer and created uncertainty for property owners. The rules are far more specific and thus understandable, predictable and more equitable.
6/16/2016	n/a	38	Lorrie Louder	St. Paul Port Authority	Letter & Hearing	38e	General	Takings	DNR is restricting property owner rights, sending a bad signal to property owners, developers and the marketplace. Structures cannot be expanded and will thwart business growth, job creation and tax base growth, affecting the fiscal staus of the city. This will devalue properties because businesses just can't do certain things that are normal in our society for business growth.Rules create financial risk to cities from inverse condemnation lawsuits (regulatory takings)	All businesses and properties are subject to some level of regulation, and property owners, businesses and the marketplace are already restricted by current municipal zoning adopted under the Executive Order. As outlined in **Attachment 5**, the proposed rules and the associated zoning regulations do not constitute a regulatory taking, since they do not meet the constitutional test for a taking laid out by the U.S. Supreme Court in Penn. Central Transportation Co. v. New York City, 438 U.W. 104 (1978) and its progeny or by the Minnesota Supreme Court in Zeman v. City of Minneapolis, 552 N.W. 2d 548 (Minn. 1996). Moreover, the proposed rules will increase opportunities for business expansion in some locations by increasing allowable building heights, especially in the CA-RTC and CA-UM districts.
6/16/2016	n/a	39	Bob Margl	self	Hearing	39a	District Map/Districts.0100	Subp. 7 UM	Is a resident of the St. Anthony West community. Wants to keep the RN designation for area and opposes city's interest in changing the designation to UC or UM.	See **Attachment 4** for responses.

6/16/2016	n/a	40	Jake Hamlin	CHS	Hearing & Exhibit	40a	General	Authority	CHS is a property owner. Supports the existing mixed use regulatory framework alluded to earlier from Ms Louder for local land use control.	See "local land use control" response to SPPA. Comment # 38b.
6/16/2016	n/a	40	Jake Hamlin	CHS	Hearing & Exhibit	40b	Definitions.0050	Bluff	Business would not be allowed to expand new nonconforming properties without additional permitting from local units of government, thus this becomes an additional administrative burden, lowers property value and limits the potential for expansion. The rules do not reflect the law's intent to reinforce the river as a multipurpose resoruce, specifically, the recognition and protection of redevelopment of commercial and industrial properties.	See "local land use control" response to SPPA. Comment # 38b.
6/16/2016	n/a	40	Jake Hamlin	CHS	Hearing & Exhibit	40c	General	General	The rules fail to demonstrate the need and reasonableness that there were no less intrusive means or methods identified to achieve the purpose of the proposed rules specifically regarding the creation of nonconforming properties.	The rules are less intrusive than the current St. Paul city ordinance as the rules reduce the number of nonconforming properties.
6/16/2016	n/a	40	Jake Hamlin	CHS	Hearing & Exhibit	40d	General	Cost	The SONAR does not account for the true cost of the rules. Local government administration requires time and funding, these costs will be passed on to property owners and they are not included in the SONAR.	The SONAR sufficiently covers this. See responses on cost to SPACC and SPPA, and **Attachment 2**, Question 8.
6/16/2016	n/a	41	Haila Maze	City of Mpls	Hearing	41a	General	General	Commends DNR. City is committed to general principles. We are a partner with the DNR and other stakeholder in the health of the river and adjacent areas, including a commitment to continuous riverfront parks and trails in places where they exist and places where they do not. We are committed to sustainable growth supportive of environmental health and restores areas that have been damanged by past efforts. We are also committed to minimizing the adminstrative burdern attached to enforcement. City's comments will touch on making sure that definitions are clear, concise and not confusing and consistent with other regulations. City is also present in order to listen to other folks speaking today.	
6/16/2016	n/a	42	Diane Hofstede	Great River Coalition	Hearing & Exhibit	42a	Districts.0100	Subp. 7 UM	Coalition opposes the city's recommendation that the St. Anthony area be designated as UM. Support keeping the area as RN. Appalled by the loack of outreach by the city to its residents regarding this recommendation to UM. The neighborhood has not endorsed more density in the area. RN designation would create some nonconforming buildings, but these are not serious issues when considering city development. In reading from a letter from the Audubon Chapter - High density development is inconsistent with the Migratory Bird Treaty Act and may result in liability under the Act.	See **Attachment 4** for responses.
6/16/2016	n/a	43	Meg Forney	Self	Hearing	43a	DimensionalStds.0120	Subp. 2D Exceed Height CUP	Is on the Mpls Park and Rec Board and is the Board's appointed member on the City planning commission. Max height in shoreland areas is 35 feet or 2 1/2 stories. This can be increased through a conditional use permit (CUP) through language similar to that in the MRCCA. In two years on planning commission, no project was ever denied a CUP in shoreland for height. Concerned that CUP offers little protection against inappropriately tall buildings. DNR indates that CUP processes includes the public in decision making. Yet, if CUPs are always granted, the public gets frustrated and angry because the rules are not represented and transparent. Please reconsider the use of conditional use permitting.	The DNR has no authority to restrict the use of conditional use permits by local governments. The proposed rules do require local governments to consider potential impacts of conditional and interim uses on primary conservation areas, public river corridor views, and other resources identified in a local government's plan, and to provide for mitigation if those resources are negatively impacted. (6106.0080, subp. 4).
6/16/2016	n/a	44	Edna Brazaitis	Self	Hearing	44a	District Map/DimensionalStd	Subp. 2A Height - RTC/RN - Nicollet Isla	Wants all of Nicollet Island designated as RN. The island is a state historic resource and is part of a unique park that preserves the historic resources. Park Board owns 2/3 of the island. Commercial development not possible in the area designated RTC as it is not in the small area plan nor in the regional park master plan, both adopted plans. Further, the area is zoned R1. But even if commercial is desired, it could be RN which allows commercial. I care because there is no limit to height that can be granted wiht a CUP. We need to give the city the tools to deny iinappropriate buildings or we will suffer the consequences.	See **Attachment 4** for responses.
6/16/2016	na	45	Dan Kalmon	MWMO	Hearing	45a	General	General	The river is important and the rules will affect the quality of the river. People should know when they are in the MRCCA.	
6/16/2016	n/a	46	Mary Jamin Maguire	Self	Hearing	46a	DimensionalStds.0120	Subp. 2A Height - UM/RN - Marshall Te	A resident of Marshall Terrace. Want RN designation. This is a river neighborhood. Supports comments made by others for the RN designation.	See **Attachment 4** for responses.
6/16/2016	n/a	47	Irene Jones	FMR	Letter, Hearing & Exhibit	47a	Definitions.0050	Bluff	Discussed importance of bluffs and bluff protection. The DNR report (Jennings) found that of theslopes that had damage also had development that was related to them. And in these instances the bluff failures also resulted in significant damages to built infrastructure. Reviewed images of buildings built on bluff prior to MRCCA regulations. Rules provide reasonable and needed measures for the strong bluff protection measures in the rules. The 2nd Jennings report shows that bluff failures increase at 20 percent slope - so that 18% really provides a little bit of safety and is needed. The 25 foot height is something FMR originally tried not to have, but now feel it is reasonalbe to ensure that small slope commonly found on residential lots will not cause an undue burden on cities and property owners.	DNR considered all of these factors in determining the bluff definition.

6/16/2016	n/a	47	Irene Jones	FMR	Letter, Hearing & Exhibit	47b	DimensionalStds.0120	Subp. 3A OHWL setback - General	Discusses support for bluff and shoreland setbacks.Support these as they are very similar to those in the existing regulations. These standards prevent erosion degradation of water quality and habitat and consistent with SL and FP regulations. The BIZ/SIZ provide significant improvement over current standards	DNR considered all of these factors in determining setbacks.
6/16/2016	n/a	47	Irene Jones	FMR	Letter, Hearing & Exhibit	47c	Vegetation.0150	General	Vegetation standards are also a significant improvement over existing standards. Existing standards in Executive Order are unclear and unnecessarily broad and are difficult to translate into ordinance and very difficult to enforce; recent clearing in Mendota Heights is an example.	DNR considered all of these factors in determining the vegetation standards.
6/16/2016	n/a	47	Irene Jones	FMR	Letter & Hearing	47d	District Map/Districts.0100	Several Sites	Proposes a number of site-specific changes.	See **Attachment 4** for responses.
6/16/2016	n/a	47	Irene Jones	FMR	Letter & Hearing	47e	SR District	Several Sites	Concerned that SR district allows too much uncertainty in determining whether individual structures exceed the height of the treeline or surrounding development.	Propose to revise SR district height requirement to specify that height in underlying zoning must be generally consistent with the height of mature treeline and existing surrounding development (see **Attachment D.0**)
6/16/2016	n/a	48	Alicia Uzarek	FMR	Letter & Hearing	48a	Definitions.0050	Public river corridor views	This definition provides a basic framework for all local governemnts to work with that will ensure a consistent approach to protecitng views throughout the corridor. This approach is reasonable as it allows LGUs to ID specific views to protect as opposed to the current regs that require blanket protections for large areas of the corridor.These views will be ID'd in each LGU's comp plan. This offers each community a chance to engage its residents and stakeholders to take stock of views and ID aesthetic preferences.	
6/16/2016	n/a	48	Alicia Uzarek	FMR	Letter & Hearing	48b	DimensionalStds.0120	Subp. 2A Height - General	FMR supports height limits for all districts. Support the tiering requirment to encourage buildings to tier away from the river to minimize interference with river corridor views.	
6/16/2016	n/a	48	Alicia Uzarek	FMR	Letter & Hearing	48c	DimensionalStds.0120	Subp. 2D Exceed Height CUP	Support use of CUP to exceed heights. Cities already do this, but it's currently rare for cities to consider impacts to the river. The proposed CUP process takes steps to consider these impacts and to mitigate them. While FMR supports the heights for each district, we do think changes are needed in some designations.	
6/16/2016	n/a	49	Whitney Clark	FMR	Letter & Hearing	49a	Subdivision.0170	Subp. 4B PCA set asides	FMR supports the open space requirements as they recognize the ecological value of shorelands and bluffs, as development occurs these rules have to protect a certain amount of open space, especially the undeveloped portions of the corridor. Clustering development is an excellent strategy for ensuring that wildlife habitat and other ecological functions can be preserved.	
6/16/2016	n/a	49	Whitney Clark	FMR	Letter & Hearing	49b	Subdivision.0170	Subp. 5 Land dedication	Requirement for open space designation is not new, though EO requirements are very vague compared to those in the proposed rules. The rules improve on EO requirements through the open space set aside requirement.	
6/16/2016	n/a	49	Whitney Clark	FMR	Letter & Hearing	49c	Subdivision.0170	Subp. 4B PCA set asides	Requirement for 50% open space in the ROS district is needed to protect specified scenic, geologic and ecological resources. This is reasonable because areas are already zoned for rural low-density. These areas (ROS) contains lands with the highest ecological integrity and function in the MRCCA. Open space dedication (set aside) in the ROS will preserve quality habitat and maintain the potential for public access to the river in the future. A 10% set aside requirement in the UM and RTC districts is reasonable, but for land adjacent to the river, a threshold of 10 acres is too high as most parcels in urban areas are already smaller than 10 acres. To effectively protect them, the set-aside threshold in these areas should be smaller than 10 acre; we recommend 5 acres. Some may argue that its burdensome to monitor and enforce open space requirements on small acreage (5 - 10 acres) but we believe the statute requires these resource to be protected and that benefits that will accrue in terms of property values, scenic enhancement and ecosystem health will last for generation and will be worth the effort.	We carefully considered various proposals for set-asides on properties of various sizes, and continue to support a minimum size of 10 acres below which open space set-asides are not required. Our analysis showed that most parcels within the ROS district were 10 acres or more in size.
6/16/2016	n/a	49	Whitney Clark	FMR	Letter & Hearing	49d	Preparation.0070	Subp. 6 Flexibility requests	FMR previously opposed flexibility, we are pleased that the proposed rules now have criteria to ensure that resource protection and/or mitigation will be adequate. The criteria for flexibility are strong and we think must not be weakened. We support it as long as they are not weakened. It's reasonalbe to provide cities with some provisions for adopting and approving and ordinance that are nto in strict conformance with the rules provided that cities can show that significant resources will not be impacted.	
6/16/2016	6/24/2016	50	Mayor Tim Geraghty	City of Newport	Letter	50a	General	Costs	The City is concerned about the elements of the proposed rules that will require 1) new local permits. 2) new and complicated mapping, monitoring and enforcement by local governments and 3) that these new mandates will create significant costs with no demonstrated resource benefits that will be borne by local residents, businesses and tax payers.	

6/16/2016	6/24/2016	50	Mayor Tim Geraghty	City of Newport	Letter	50b	Vegetation.0150	Subp. 5 Permit conditions	The city believes that the existing shoreland management regulations address vegetation management sufficiently. The [proposed] local permit conditions are vague or impossible to apply-- how do we determine "equivalent biological and ecological functions" without any standard for determining what is "equivalent." Also cites provision that "Vegetation species, composition, density, and diversity must be guided by nearby patches of native plant communities." In many older, fully developed communities like Newport there may be no "nearby" patches of native plant communities, and those that exist are may be very poor in quality and should not serve as models for replacement plans. The DNR should eliminate the new vegetation management permitting requirements, or provide a clear rationale regarding the need for the new permit, and why existing Shoreland Management of vegetative cutting and clearing standards are not sufficient to achieve the purposes of the rules;	The shoreland management regulations do not provide sufficient vegetation protection as they only rely on vague standards that prohibit cutting. They do not provide clarity what can and cannot be done with property , provide for restoration, and do not provide any mechanism for enforcing standards. Many local governments have stated that administering vegetation management provisions is very difficult and have stated that restoration measures and a permit program will help to enforce standards against cutting. The rules state that "nearby" native plant communities are to be used for determining a baseline for restoring vegetation of equivalent biological and ecological functions. This criteria is one that landscape architects and ecologists understand or work with if there are no nearby communities. Comparative communities could be located in similar settings within the river corridor, not only within a specific jurisdiction. See SONAR pg 55 on input from LGUs in developing this part -- many LGUs were interested in having clearer and more enforceable standards.
6/16/2016	6/24/2016	50	Mayor Tim Geraghty	City of Newport	Letter	50c	LandAlteration.0160	Subp. 4A Riprap - comply w 6115	Permits for these structures should be managed through existing permitting processes. The rules provide no justification for a new and separate permit process for such structures in the MRCCA.	Rules allow local governments to use existing permitting processes or to delegate permitting to resource agencies in order to streamline this new process and reduce administrative costs. New permitting needed in order to coordinate with and/or ensure compliance with DNR permitting requirements under Minn. R. 6115 regarding installation of rip rap below the OHWL.
6/16/2016	6/24/2016	50	Mayor Tim Geraghty	City of Newport	Letter	50d	LandAlteration.0160	Subp. 7B SW Mgmt - WQIZ	Like most communities in the corridor, Newport is an MS4 community, and has completed an approved MS4 permit and adopted a stormwater ordinance and standards that meet the MPCA's requirements. The permit standards, and process address the MPCA's requirements for the Mississippi River's status as an impaired water. The rules provide no justification for an additional stormwater permit and higher standards within the MRCCA. The proposed rule should be changed to be consistent with the MS4 Permit requirements.	The proposed rule was designed to align with existing MS4 permit requirements. Local governments apply the treatment standards approved by the MPCA in their existing MS4 permit to the new impervious surface or fully reconstructed surfaces of more than 10,000 square feet. Some LGUs already treat stormwater at this threshold level for compliance with watershed district standards. The proposed rules extend this threshold for treatment to the entire corridor within the Water Quality Impact Zone, the area where untreated runoff has the greatest impact on river water quality.
6/16/2016	6/24/2016	50	Mayor Tim Geraghty	City of Newport	Letter	50e	Subdivision.0170	Subp. 4B PCA set asides	Mapping of "primary conservation areas" will be time-consuming and costly for local governments, especially smaller LGUs without GIS capabilities. The City recommends that if inventory and mapping of additional features to identify PCA's is necessary, the State of Minnesota should provide funding to local to local governments to cover the costs of the new mandates that will require extensive field work and mapping. Some of the categories are not defined in the new rules. There is no definition for "significant existing vegetation" or "natural drainage routes"; "tree canopy", metc. The rules do not indicate if "wetlands" means jurisdictional wetlands under the Wetland Conservation Act, wetlands identified in the National Wetland Inventory maps, or something else. If local communities must define the terms and have freedom to map the PCA's based on their own definitions, the PCA's will not be consistent among communities, and permit requirements will not be consistent across the MRCCA. The PCA's should include only elements that can be clearly defined, so that the PCA's are consistent throughout the MRCCA and permit requirements are equitable.	The process of identifying and mapping primary conservation areas is an important part of the community planning process and is intended for communities to collectively identify those resources that are most important to them. The rules do allow some latitude for local governments to define these resources, whereas the rules do define wetland in the definitions. This will result in some inconsistency. DNR intends to assist communities by sharing GIS data layers that identify many of these features, and will be available to consult on specifics.
6/16/2016	6/24/2016	50	Mayor Tim Geraghty	City of Newport	Letter	50f	Subdivision.0170	Subp. 4B PCA set asides	Community's experience with similar protected areas that have been required for "conservation" or "open space" subdivisions have resulted in the protection of small, disconnected open space areas that provide no habitat or natural resource benefits, and that are compromised over the long term due to the behaviors of adjacent land owners and lack of monitoring and enforcement by homeowner's associations and organizations charged with monitoring conservation easements. This requirement will also create conflicts with the City's Park and Open Space dedication requirements. It will place a priority on dedication of the primary conservation areas as park and open space areas, and may limit the City's ability to require the dedication of park and open space areas outside the primary conservation areas that meet its long-term park and trail plans as a part of development. The City of Newport already owns and maintains a large amount of public park and open space areas. The City does not have the resources to manage additional small patches of open space and restored vegetation that do not serve the public interest or support the City's adopted park and trails plans. The Trust for Public Land is no longer interested in accepting conservation easements for small patches of open space, and Washington County and the DNR have indicated that they will not do so. Primary Conservation Areas such as wetlands. bluffs. steep slopes and floodways have protection under current rules, and do not need to be dedicated as permanent open space in order to be protected from development. The rules should be revised to indicate that the City may consider the other resources that are proposed for in the definition of PCA's for dedication, but should give the City the flexibility to determine whether these areas are already adequately protected or needed. so that open space dedication and resources can be better applied elsewhere to meet the City's adopted park, trail and open space plans.	We can't respond specifically to the City's experience with conservation subdivision. However, thresholds of 20 acres, and 10 acres abutting the Mississippi River, were established in consultation with local governments and other stakeholders specifically to avoid the problem of managing small fragments of open space. Additionally, set-asides do not need to be dedicated and managed by the City, but can be protected through a deed restriction and managed by a homeowners' association or other entity.

6/16/2016	6/24/2016	50	Mayor Tim Geraghty	City of Newport	Letter	50g	Preparation.0070	Subp. 6 Flexibility requests	The City appreciates the inclusion of Subpart 6 in the proposed rules that states that local governments may adopt standards in their ordinances that are not in strict conformity with the Rules. The City anticipates requesting flexibility from the setback requirements in light of the location of existing sewer and water infrastructure that may make it difficult to develop some parcels or replace some structures to comply with the proposed setback requirements in the rules.	
6/16/2016	6/24/2016	50	Mayor Tim Geraghty	City of Newport	Letter	50h	General	Costs	The city requests that the DNR obtain State funding for new MRCCA-mandated activities that are required for local governments before the rules are adopted. At the August 19, 2014 meeting on the proposed rules, DNR Commissioner Landwehr indicated that the DNR would make a budget request to the Legislature for funds to assist with the implementation of the proposed rules. The DNR requested that City's provide an estimate of costs to implement the rules, and the City complied with this request. The City believes that the new mandates for local governments in the rules should only be adopted if there is new funding for local governments to support implementation of the rules.	The DNR acknowledges the need for local funding for implementation.
6/19/2016	6/19/2016	51	Brian Huberty	Self	e-comment	51a	Vegetation.0150	Subp. 3 General Provisions	"Prohibiting intensive vegetation clearing is will be counterproductive in some areas give the original natural state before European immigration was prairie fires creating Oak Savannas through intensive vegetation clearing."	Clearing by fire is unlikely to be appropriate in a large urban area, while clear-cutting can have serious consequences, increasing bluff instability and erosion.
6/19/2016	6/19/2016	51	Brian Huberty	Self	e-comment	51b	AdministrativeProv.0080	General	"The entire section does not state nor account for changes in the river course and elevation over time. River systems are dynamic and to assume basing restrictions based on a set distance and elevation without stating that conditions may change will just cause more confusion to landowners. Buildings that comply today for example may in time not comply as the river erodes away at a bank. This 'temporal change' language needs to be included"	Conditions in river systems may change, but landmarks such as OHWL may be determined by DNR's Area Hydrologists and may be updated from time to time, while blufflines are expected to be determined through GIS analysis and site inspections.
6/19/2016	6/19/2016	51	Brian Huberty	Self	e-comment	51c	.0070 Preparation, Review a	Subp. 4 Contents of plans	"The proposed districts map is a very generalized map which could be substantially improved through the use of LIDAR terrain maps and further definitions of exactly ' what is meant by viewable from the river'. Where in the river is the viewing line? Center, bank to bank...and what season? WIth summer and trees, viewing distance is minimal. Winter is the opposite. The river floods and moves over time so it constantly is 'amending' the maps and the language under Subp 9 should also be just as dynamic."	This comment seems to suggest the potential for using LiDAR to identify public river corridor views. The proposed rules provide guidance to local governments to identify public river corridor views in preparing their MRCCA plans (part 6106.0070, subp. 4). A local government could use LiDAR to do this.
6/19/2016	6/19/2016	51	Brian Huberty	Self	e-comment	51d	Uses.0110	General	"The rules completely missed another transportation industry which is Seaplanes. Given the largest manufacturer of floats for floatplanes in the world for over 5 decades is in the corridor, it might be wise to include language to preserve this unique transportation system. Historically, Holman Airfield had a seaplane base on the river next to downtown St. Paul."	Rules do not prohibit or restrict existing businesses or use of the river's surface by seaplanes.
6/19/2016	6/19/2016	51	Brian Huberty	Self	e-comment	51e	Definitions.0050	Bluff impact zone	"No mention of soils. Different soil types may drive a need for shallower slopes."	Soils and geology may increase risks of slope failure in specific areas; site plan review and field inspecton will often be necessary near bluffs.
6/19/2016	6/21/2016	52	Michaelene Zawistowski	Self	Letter	52a	DimensionalStds.0120	Subp. 2A Height - General	Please preserve the river vistas in St Paul, including the unobstructed view of the river, bluffs, and domes of the capitol and cathedral, the view from the High Bridge.	See detailed response regarding heights (**Attachment 1**).
6/19/2016	6/21/2016	52	Michaelene Zawistowski	Self	Letter	52b	General	General	Develop the river for recreation and let Wabasha Street serve as a commercial link to the river	
6/21/2016	6/24/2016	53	Nancy Schouweiler	Dakota Co	Letter	53a	General	General	The proposed Rules unreasonably restrict public recreation in the MRCCA, which defeats a primary purpose of the MRCCA - the preservation of the area for public use.	The purpose statement in rules and SONAR adequately explains the need for standards for public recreational facilities with some flexibility to provide the public greater access to the river consistent with Minn. Stat. §116G.15 and EO 79-19.
6/21/2016	6/24/2016	53	Nancy Schouweiler	Dakota Co	Letter	53b	General	General	In 1975, Dakota County Parks System Plan established the boundaries of Spring Lake Park Reserve (SLPR). More recently, between 2002 and 2003, Dakota County updated the Spring Lake Park Reserve master plan. The establishment, planning and development of SLPR are consistent with the directives of Executive Order 79-19. SLPR and its Master Plan exist to provide the general public natural resource based recreational opportunities along the river.	
6/21/2016	6/24/2016	53	Nancy Schouweiler	Dakota Co	Letter	53c	Policy.0010	General	Dakota County is concerned that the clearly stated recreational goals of Executive Order 79-19 appear to be minimized in the proposed Rules. Further, the implementation of public recreational opportunities is inhibited by the proposed Rules, while private residential and commercial users have more leeway to enjoy the use of land along the river.	See responses below (Comments # 53d - 53i)
6/21/2016	6/24/2016	53	Nancy Schouweiler	Dakota Co	Letter	53d	Definitions.0050	Shoreline facilities	Public recreational use facilities in the MRCCA are river-dependent, but are not included in the definition of "Shoreline Facilities." These facilities are unreasonably restricted by the proposed rules. Add to definition.	Definition of shoreline facilities is intended to apply to industrial and navigational structures such as barge and port facilities, as well as to water access ramps and docking/mooring facilities. Other recreational facilities such as restrooms and parking areas do not require a location adjoining public waters.

6/21/2016	6/24/2016	53	Nancy Schouweiler	Dakota Co	Letter	53e	Districts.0100	Subp. 3 ROS	The proposed Rules place SLPR in the rural and open space district (CA-ROS). This is the most restrictive district, so SLPR is treated differently from many, if not all, other parks established along the river. Due to the shore impact zone and bluff impact zone setbacks, facilities such as bathrooms and any other structures with walls, are prohibited by the proposed Rules.	Other parks fall into the ROS district in addition to SLPR, including Fort Snelling State Park, Hidden Falls Park, and many parks within the Mississippi Gorge. The standards for public recreational facilities are designed to apply to all facilities within the corridor. SLPR does have unique topography that could warrant a determination of flexibility. However Dakota County has not adopted a MRCCA ordinance. Nininger Township's ordinance could be revised as part of a flexibility request, but it would probably be more effective for the County to adopt its own ordinance. ROS is the appropriate district -- this area is currently designated Rural Open Space and those standards should have been applied in development of park master plan. Property has many of the significant natural features, such as vegetation and bluffs, that remain in the MRCCA.
6/21/2016	6/24/2016	53	Nancy Schouweiler	Dakota Co	Letter	53f	ExemptionTable.0180	General	Provide an exemption for public recreational facilities implemented in accordance with master plans that have been adopted and reviewed pursuant to Minnesota Statutes Section 473.313.	A flexibility request for the local applicable ordinance or local variance may be best for these situations. Minn. Stat. § 473.313 doesn't address special considerations within the MRCCA.
6/21/2016	6/24/2016	53	Nancy Schouweiler	Dakota Co	Letter	53g	PublicFacilityStds.0130	Subp. 7C Trails & viewing areas	The proposed Rules prohibit hard surface trails where slopes are greater than 30%. SLPR has a near continuous 30% slope bluffline that separates park upland areas from riverfront public use areas. In order to provide ADA accessibility to these riverfront public use areas, the County requests that the prohibition of hard surface trails on 30% slopes language be removed from the proposed Rules.	Rules don't violate any ADA standards. Refer to Jennings reports (Hearing Exhibits 28 and 29); although a person with certain disabilities may not be able to use every access point to the river, the rules ensure that there are numerous access points to the river and this important resource across the MRCCA. Furthermore, there are other ways to comply with ADA, such as road ROWs. According to "Accessiblity Standards for Federal Outdoor Developed Areas," 2014, an exception may be made for trails where compliance is not practicable due to terrain. "The phrase "not practicable" means not reasonably doable. For example, where a trail is constructed in a steeply sloped area, compliance with the running slope provision may not be practicable on parts of the trail where it would require extensive cuts or fills that are difficult to construct and maintain, cause drainage and erosion problems, significantly lengthen the trail, and create other adverse environmental impacts." See https://www.access-board.gov/attachments/article/1637/outdoor-guide.pdf Notwithstanding this fact, there are other means by which a person with disability could access the river short of using those trails that are not paved or have steep grades.
6/21/2016	6/24/2016	53	Nancy Schouweiler	Dakota Co	Letter	53h	PublicFacilityStds.0130	Subp. 7A Buildings	Dakota County requests that small structures for riverfront use and support structures such as bathrooms be permitted in Shore Impact Zone at planned or existing public use areas where the Bluff Impact Zone abuts the Shore Impact Zone. There will be use areas along the river, such as picnic shelters, regardless of whether bathroom facilities are present. The absence of conveniently located bathrooms will not prevent nature from running its course in those areas. The river and wooded areas will become the bathrooms, creating sanitary and other issues.	See discussion under Districts above regarding the County's options for ordinance flexibility (comment # 53e)
6/21/2016	6/24/2016	53	Nancy Schouweiler	Dakota Co	Letter	53i	PublicFacilityStds.0130	Subp. 7C Trails & viewing areas	Stairs and Lifts. The proposed Rules do not allow for stairs and lifts at public recreational facilities in the Bluff Impact Zone. However, stairs and lifts are allowed for private residential and commercial water access and use facilities within the Bluff Impact Zone in table line 64.13. In discussions with DNR staff we understand that language that allows stairs and lifts was inadvertently left out of the public facilities section in the proposed Rules. Dakota County requests that the Rules be amended to allow stairs and lifts in Bluff Impact Zones for public recreational facilities.	During the rulemaking, local governments and riparian property owners in the northwest segment of the MRCCA (north of the Coon Rapids dam) requested specific standards in local ordinances to ensure access to the river on private property. The issue was not raised by public park agencies at the time. While the private standards could be applied to public facilities and included in local ordinances, we agree that clearly adding them to the proposed rule language would be an improvement. The DNR proposes to make this change as provided in **Exhibit D.0**.

Attachment 4: Requested Revisions to District Maps and DNR Responses

State of Minnesota
Minnesota Department of Natural Resources (DNR)
DNR Response to Public Comments on Proposed MRCCA Rules
July 6, 2016

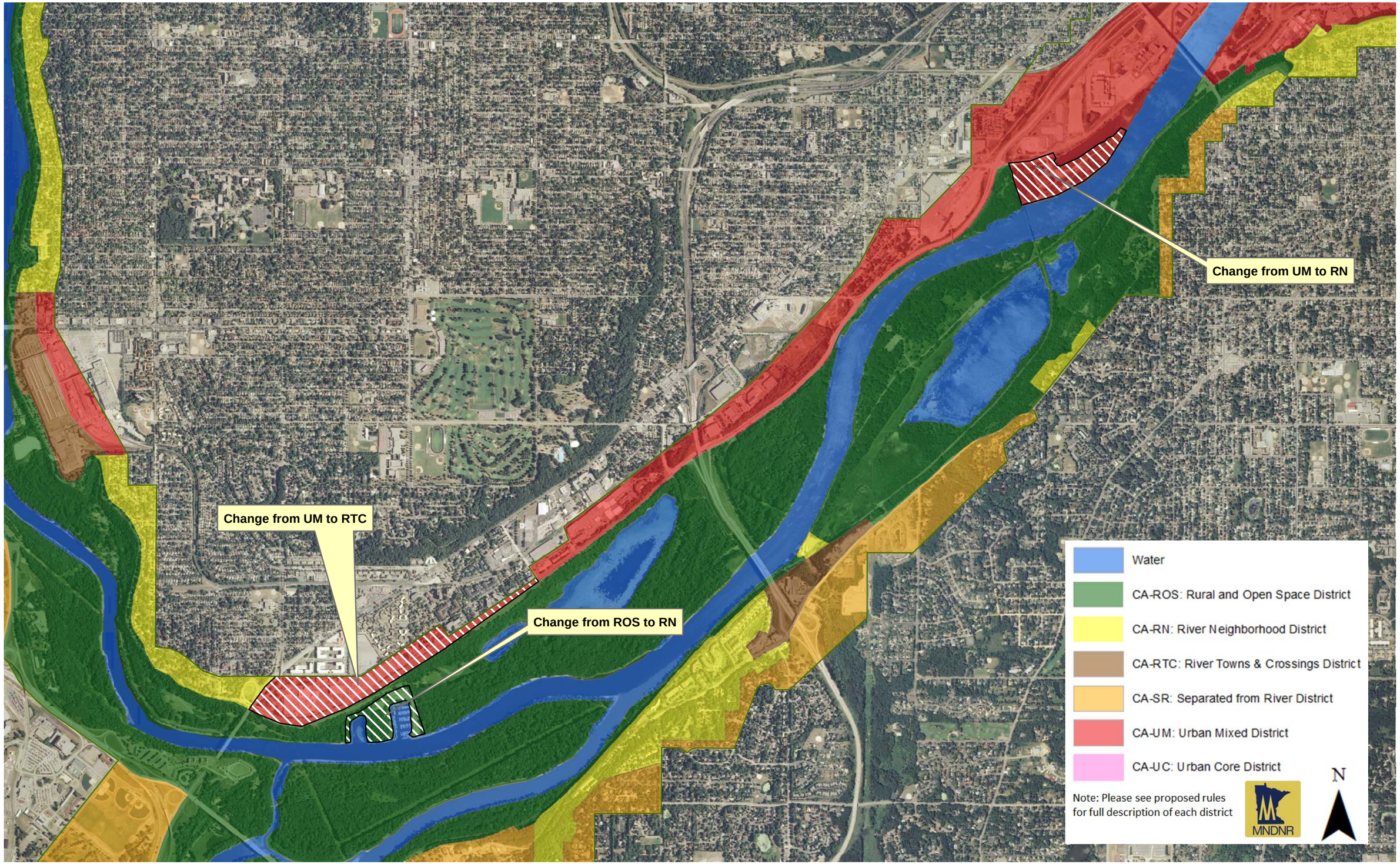
Map Panel – Comm.	Location	Map Comment Number	Change Requested		Requested by	Purpose of Request	Local zoning/Area plans reviewed	Decision/Why
			from	to				
1 - Anoka	Kings Island	1	RN	ROS	FMR	Kings Island not residential; critical habitat	City park plans	DNR reviewed this request in November 2014. Site is mostly floodplain, owned by city, and being developed as parkland. A change would severely limit planned development & redevelopment adjacent to Hwy 10 and would not affect resource protection in floodplain. Bluffs around edge also limit development. **NO CHANGE**
4 – Minneapolis	West Bank, North, Upper Harbor	2	UM	RN?	Susan Vikse (homeowner)	Equity issues; access to river	Above The Falls (ATF) 2013 adopted plan	ATF plan places whole riverfront in parkland, with inland areas remaining industrial. All districts, including UM, contain parks. The riverfront area in this part of Minneapolis is in industrial use and/or transitional in nature – consistent with the UM district description. **NO CHANGE**
4 – Minneapolis	Marshall Terrace (Lowry Ave. to St. Anthony Pkway)	3	UM	RN	Mary Jamin Maguire	Historic neighborhood; ref. Above the Falls plan, in transition from industrial	Above The Falls (ATF) 2013 adopted plan (Ind land use in plan; zoning mainly "I")	ATF shows largely industrial use. Character of the MRCCA portion of the neighborhood is still largely industrial with designated open space; little housing. All districts, including UM, contain parks. The riverfront area in this part of Minneapolis is in industrial use and/or transitional in nature – consistent with the UM district description. **NO CHANGE**
4 – Minneapolis	East Bank, Northeast, Sheridan Neighborhood	4	UM	RN	Karen Bernthal, Sheridan N'hood Org (Bway to 18th Ave.)	Recognize neighborhood concerns and new small area plan; equity; concern over blanket CUP approvals by City	Above The Falls (ATF) 2013 adopted plan , Sheridan Neighbor-hood Small Area Plan, 2014 Zoning is I1, I2, R6	Small area plan identifies Mixed Use, as does ATF plan, with parks and "urban neighborhood" to the north. Plans are not specific as to height. All districts, including UM, contain parks. The riverfront area in this part of Minneapolis is in industrial use and/or transitional in nature – consistent with the UM district description. **NO CHANGE**
4 – Minneapolis	St. Anthony West Neighborhood	5	RN – see above	Keep as RN	Diane Hofstede, Bob Margl,	Opposes City comments re St. Anthony West –	See above	See above comment.

Map Panel – Comm.	Location	Map Comment Number	Change Requested		Requested by	Purpose of Request	Local zoning/Area plans reviewed	Decision/Why
			from	to				
						critiques lack of outreach to neighborhoods		
4 – Minneapolis	Nicollet Island	6	RTC	RN	Edna Brazaitis (homeowner, Great River Coalition) (FMR OK with RTC – ref Regional Park Master Plan)	Fear of higher density development; no RTC-height buildings currently exist on island; concern over blanket CUP approvals by City	Nicollet Island/East Bank Small Area Plan, 2014; Central Miss. Riverfront Regional Park Master Plan, 2015 Zoning R3, north end, R4, central, R1A, central and south	Designation was changed from UM to RN/RTC in 11/14, following discussions with City and MPRB. The Small Area Plan guides Nicollet Island for Parks and Open Space (MPRB land) and low density residential in central portion. As both an island and historic district, Nicollet Island has special significance. The Regional Park Plan calls for preservation of island's existing character. The RTC district recognizes existing institutional and commercial uses and will allow some intensification where taller buildings currently exist. **NO CHANGE**
4 – Mpls	Hennepin Ave to 35W	7	UC	UM/ROS on river side of Main St. SE	FMR	Recognize Father Hennepin Bluffs Park and other parkland	Central Miss. Riverfront Regional Park Master Plan, 2015	All districts, including UM, contain parks. Existing district designation is Urban Diversified (unlike Mississippi gorge). **NO CHANGE**
5-St. Paul	Marshall Ave and River Road	8	RTC	RN	Friends of Parks & Trails of Ramsey County and St. Paul	Retain height limits of 30 feet – consistent with current zoning	Zoning is R3 north of Marshall, RM2 and T2 south – heights 30' to 50'	The RTC district was created to recognize nodal areas with historic mixed used development such as at river crossings and institutional uses. The RTC district allows these areas to continue this type of land use and to redevelop consistent with that use. Structures in these areas already exceed the underlying zoning height limits. **NO CHANGE**
5 – St. Paul	Shadow Falls (Summit Ave – St. Thomas Campus)	9	RTC	RN	Friends of Parks & Trails of Ramsey County and St. Paul	Retain height limits of 30 feet – consistent with current zoning	Zoning is R2, 30', but campus buildings are 4-5 stories	The RTC district was created to recognize nodal areas with historic mixed used development such as at river crossings and institutional uses. The RTC district allows these areas to continue this type of land use and to redevelop consistent with that use. Structures in these areas already exceed the underlying zoning height limits. **NO CHANGE**
5-St. Paul	Mississippi River Blvd from Mpls border to Otto Ave	10	RTC/UM/RN	ROS/RN	Tom Dimond	Part of river gorge; current district designation is Urban Open Space (40')	Shepard-Davern Small Area Plan, 2015	Many perspectives have been heard for changes on this stretch. Four districts are used in this area to reflect and protect the variety of land uses and resources and to anticipate planned future development. **PARTIAL CHANGE TO RTC for W. 7th to Rankin discussed under [12] below. NO OTHER CHANGE**

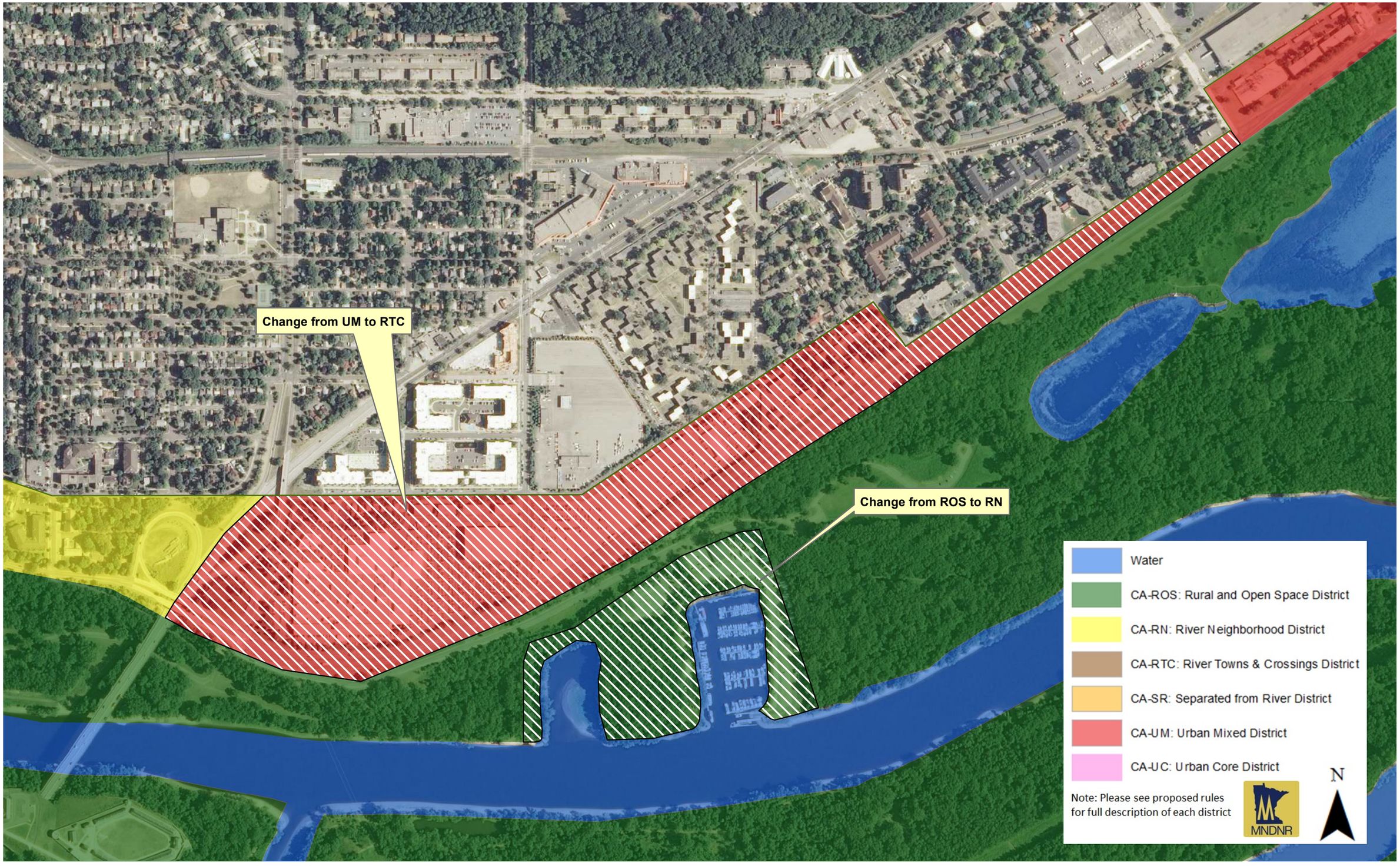
Map Panel – Comm.	Location	Map Comment Number	Change Requested		Requested by	Purpose of Request	Local zoning/Area plans reviewed	Decision/Why
			from	to				
5 – St. Paul	Ford Site	11	RTC/UM	RN	Friends of Parks & Trails of Ramsey County and St. Paul	Retain height limits of 40 feet – consistent with current River Corridor zoning	Planning underway, but plans to date have recognized 40' height limit	The Ford site is carefully designated in tiers to address sightlines up and down the corridor, with ROS, RTC and UM designations moving away from the river. **NO CHANGE**
5 – St. Paul	Confluence of Minn. & Miss. Rivers, blufftops, W 7th St. to Rankin Ave.	12	UM	RTC	FMR Friends of Parks & Trails of Ramsey County and St. Paul	Visibility from shoreline	Shepard-Davern Small Area Plan, 2015, mentions 3-5 story buildings. Now rezoned to T2 and T3 SE of W 7th – heights 45 – 55' with CUP for addl. ht.	Area is visible from opposite riverbank, per NPS documentation/review of proposed Johnson proposal. (Noted that US Bank site is also difficult to develop due to shallow bedrock and groundwater, making subsurface parking infeasible.) New plan and zoning now identify heights close to RTC height limit. **CHANGE TO RTC from W. 7th St. east to Rankin (T2 zoning district boundary)**
5 - St. Paul	Watergate Marina	13	ROS	RN	City of St. Paul	To be consistent with how all other marinas are designated		This was a change we had intended to make to assure that all marinas throughout the MRCCA are treated in a similar manner (either RN or UM). This change will be made. **CHANGE TO RN**
5-St. Paul	Island Station site	14	UM	ROS	Tom Dimond	Part of river gorge	Zoned T2 – heights of 35' or 45' with CUP.	This was site of tall Island Station power plant 'tower,' now demolished, and a development proposal with similar height. No development proposals at present, but a difficult site to develop due to floodplain. City perspective is development is unlikely with RN designation due to site conditions. **CHANGE TO RN**, which would facilitate marina development, and suggest the city consider pursuing flexibility in its MRCCA ordinance.
5 – St. Paul	Lower Landing Park (Lafayette-Hwy 52 to Childs Road) between RR and river	15	UM	ROS	Friends of Parks & Trails of Ramsey County and St. Paul Tom Dimond	It's adjacent to Vento Nature area and Indian Mounds Park which are both ROS	Trout Brook – Lower Phalen Greenway Plan, 2001, Greater Lowertown Master Plan, 2012	All districts, including UM, contain parks. The riverfront area in this part of St. Paul is in parkland, industrial/RR use and/or transitional in nature – consistent with the UM district description. **NO CHANGE**
5 – St. Paul	Bluff top above West Side Flats	16	UM	RN	Friends of Parks & Trails of Ramsey County and St. Paul	Will detract from views from river and downtown St. Paul	District del Sol Plan, 2013	UM recognizes existing development of bluff face; consistent with current zoning and development. (NPS made this request in Nov 2014) **NO CHANGE**
5 – St. Paul	Parkland on east shore of river north of Newport	17	UM	ROS	Friends of Parks & Trails of Ramsey County and St. Paul Tom Dimond	It's parkland and therefore should be ROS		NPS made this request in Nov 2014. All districts, including UM, contain parks. The riverfront in this area is in industrial/RR use and/or transitional, consistent with the UM district description. Revised previously based on parcel lines; much is undeveloped floodplain, and is Urban Diversified under EO79-19 **NO CHANGE**

Map Panel – Comm.	Location	Map Comment Number	Change Requested		Requested by	Purpose of Request	Local zoning/Area plans reviewed	Decision/Why
			from	to				
6 – St. Paul to Nininger	Miss. Dunes Golf Course	18	SR	ROS or RN	FMR	Visible from river	Cottage Grove Future Land Use Map in Comprehensive Plan, 2030 – guided "Golf Course" and zoned R1	DNR considered this request in 2014. City has not yet submitted comments to OAH on this proposed district change. New photos submitted by FMR show that a portion of the site is visible from the river, but it appears that the visible portion is within the RN district. Furthermore, DNR is proposing to modify the height requirements for the SR district to clarify that that DNR will review and approve heights in underlying zoning as part of a local government's ordinance submittal (**Exhibit D.0.,** Lines 39.8 – 39.11), which will alleviate some concerns with this district. **NO CHANGE**
6 – St. Paul to Nininger	Grey Cloud Island in Cottage Grove	19	ROS	UM	PAS	Recognize city and PUD plans	Cottage Grove Future Land Use Map in Comprehensive Plan, 2030 – guided "transition planning area" and Rural Residential	The area is currently in the Rural Open Space (ROS) district under Executive Order 79-19 and a blanket UM district on the entire island would not be appropriate. The site is currently being mined and has great development and restoration potential. The city has not yet submitted comments to OAH on this proposed district change. To our knowledge, the master planning process for the island has not been completed. A district change made now without a master plan to support it does not make sense. Once planning has been completed for the island, the City can request a district change or request ordinance flexibility based on the resulting plan. For now, ROS best reflects restoration potential and ecological significance of the island. **NO CHANGE**
6 – St. Paul to Nininger	Spring Lake Park Bike trail	20	SR	ROS or RN	FMR	Visible from river		Actual visibility from river diminishes gradually so it's difficult to divide these areas. Possible change in SR District standards to specify that underlying zoning must recognize height of mature treeline or surrounding development. **NO CHANGE**
6 – St. Paul to Nininger	Broad swath of SR in IGH	21	SR	RN	FMR	Visible from river		See above comment #20. **NO CHANGE**
6 – St. Paul to Nininger	Broad swath of SR in Cottage Grove	22	SR	RN	FMR	Visible from river		See above comment #20. **NO CHANGE**

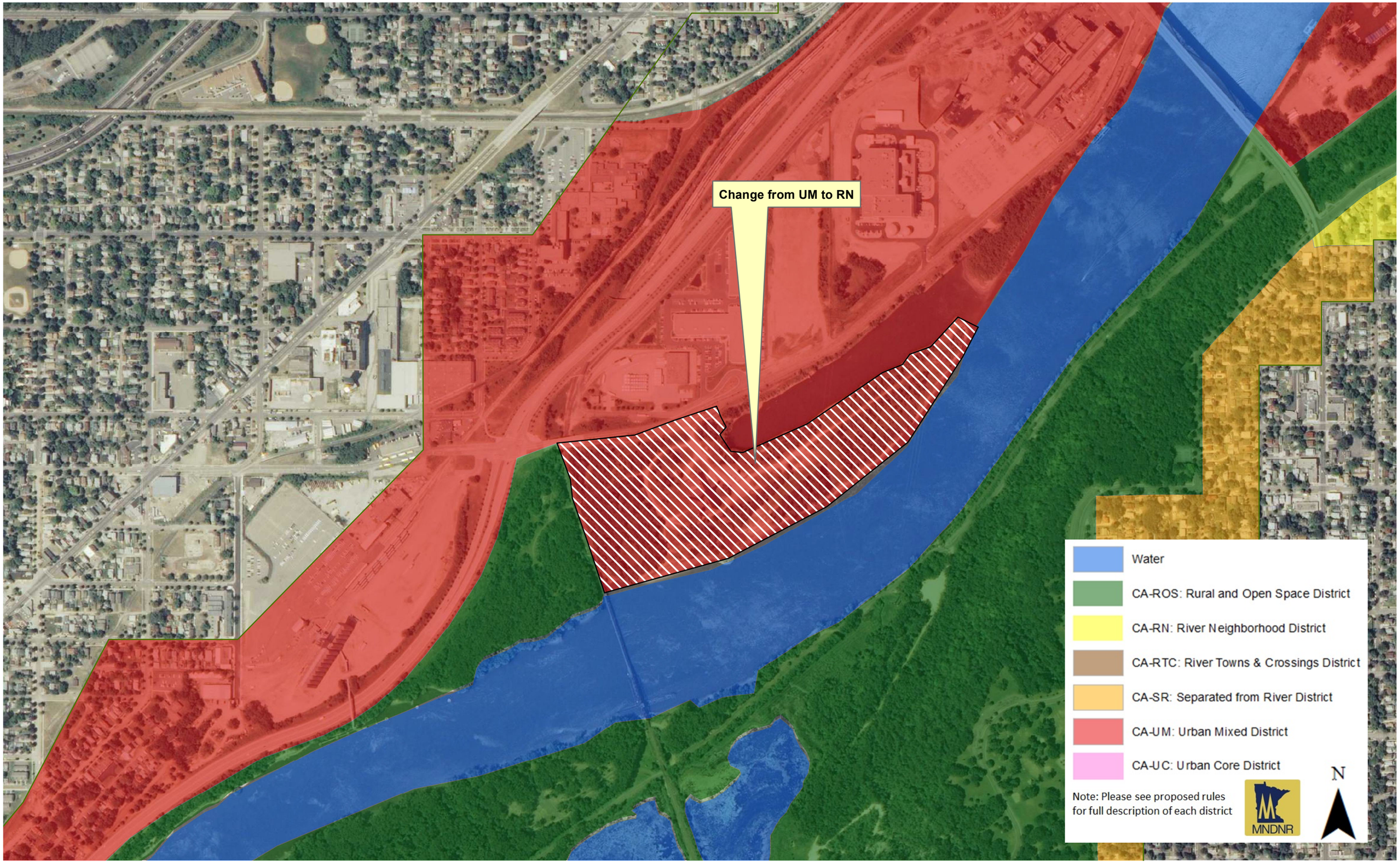
MRCCA Proposed District Changes
July 6, 2016



MRCCA Proposed District Changes
W 7th to Rankin & Watergate Marina



MRCCA Proposed District Changes
Island Station



Attachment 5: DNR Takings Analysis Memo

Department of Natural Resources

COMMISSIONER'S OFFICE

STATE OF MINNESOTA

Office Memorandum

DATE: June 30, 2016

TO: Jennifer Shillcox, Supervisor, Land Use Unit

FROM: Sherry A. Enzler, General Counsel

PHONE: 651-259-5066

SUBJECT: Zoning and Takings

QUESTION

Do the land use restrictions imposed by the Mississippi River Corridor Critical Area (MRCCA) rules constitute a taking?

ANSWER

As discussed below, in the vast majority of instances zoning does not constitute a taking. The draft rules, as presently constructed, are consistent with other zoning restrictions to protect public resources such as historic properties, flood plains, and are unlikely to give rise to a constitutional taking.

Constitutional Requirement

The Fifth Amendment of the Federal Constitution prohibits the taking of private property for a public use without the payment of just compensation. U.S. Const. Amend. V. This prohibition is not a prohibition against the taking of property provided the taking is for a public purpose. Rather the prohibition prohibits taking private property without paying the landowner for the property. The Fourteenth Amendment to the Constitution makes the Fifth Amendment takings provision applicable to the individual states. Additionally, the Minnesota Constitution provides that private property shall not be taken, destroyed or damaged for public use without payment of just compensation. Minn. Const. Art. I, § 13.

Minnesota and Federal Courts generally recognize two types of takings cases: (1) physical invasion cases (*per se* takings) and (2) regulatory takings.

Per se takings

Physical invasion/trespass cases are often referred to as per se takings. These instances generally involve situations where government compels a private land owner to let members of the general public access private property for a public purpose. *See generally Antl v. State,* 19 N.W. 2d 77 (Minn. 1945) (discussing process for condemning

lands for highway purposes). These cases are almost always viewed by the Court as a compensable taking. *Id.* The proposed MRCCA rules do not involve a physical invasion of property and therefore do not give rise to a per se taking.

Regulatory Takings

The assertion by landowners that a statute, rule, or ordinance is a taking of private property occurs on a fairly regular basis. Extremely few government regulations are determined to constitute a taking because of the governments "police power".

Ownership of property is subject to the authority of the state and delegated local units of government to regulate the use of land for the public health and welfare. As a general rule one's right to use private property is *always* limited by the government's police power to regulate the use of land for the general welfare. *Village of Euclid v. Ambler Realty Co.,* 272 U.S. 365 (1926), *Pennsylvania Coal Co Mahon,* 260 U.S. 93, 413 (1922)("Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change"), and *Hubbard Broadcasting, Inc. v. City of Afton,* 323 N.W. 2d 757, 761 (Minn. 1982). In this interest the Minnesota Legislature has determined that it is in the public interest to protect the MRCCA for the health, safety and welfare of its citizens. Minn. Stat. § 116G.15, subd. 1 (2015).

This does not mean, however, that there are not instances when a government regulation does not give rise to a compensable taking. Outlined below the test applied by the Minnesota Courts in regulatory takings cases.

The takings analysis applies to the total property. The regulatory taking analysis applies to the total property not just that portion of the property encumbered by the zoning restriction. In most instances the rules and resulting zoning ordinances do not affect the total property but affect only portions of the property, e.g. that portion of the property within the bluff impact zone where development is restricted or the maximum height of the buildings within certain districts. While there is a tendency to focus on only those portions of a property restricted by the regulation, the court will undertake its analysis looking at the property as a whole. *Woodbury Place Partners v. City of Woodbury,* 492 N.W. 2d 258, 261 (Minn. Ct. App. 1992) *review denied* (Minn. Jan. 15. 1993) *citing Penn. Central Transportation Co. v. New York City,* 438 U.S. 104, 130-31 (1978)(one cannot divide a "single parcel of property into discrete segments and attempt to determine whether rights in a particular segment have been entirely abrogated).

Regulatory Takings – Three Part Penn Central Test

The Minnesota Supreme Court has adopted the U.S. Supreme Court *Penn. Central* test in regulatory takings cases regardless of whether the Court is analyzing the takings claim under the Minnesota Constitution of the U.S. Constitution. While there are some nuances in the application of the *Penn Central* standard in Minnesota these nuances do not impact the MRCCA rules.[1]

[1] The Minnesota Supreme Court has applied a slightly different regulatory taking standard in airport zoning cases arguing that in those instances the government is engaged in an enterprise and the burdens

The *Penn Central* analysis is a fact based analysis and requires **balancing three factors**: (1) the economic impact of the regulation on the property; (2) the extent to which the regulation interferes with distinct investment backed expectations; and (3) the character of the government action and the burden imposed by the government action. *Zeman v. City of Minneapolis,* 552 N.W. 2d 548, 552 (MInn. 1996)(citing *Penn Central,* 438 U.S. at 124 and *Connolly v. Pension Benefit Guaranty Corp,* 475 U.S. 211, 225 (1986)). **No one factor is controlling** but you should carefully think about each factor when analyzing the constitutionality of the buffer legislative proposal. The property owner has the burden of proving that the regulation constitutes a taking. *Id.*

1. The economic impact of the proposed MRCCA on the property.

   Under this prong of the *Penn Central* test Minnesota Courts and the U.S. Supreme Court requires the owner to demonstrate that the regulation has resulted in a severe economic loss to the property. *Zeman,* 552 N.W. 2d at 553. The Minnesota Supreme Court has elaborated on this standard concluding, so long as the regulation "'afford[s] an owner some reasonably beneficial and economically viable use of his land"' the court will not find a taking. *Wensmann Realty, Inc v. City of Eagan,* 734 N.W. 2d 623, 635 (Minn. 2007). When conducting this analysis, the court will look at how the entire property is currently being used. So long as the entire property has some reasonably beneficial and economically viable use after adoption of the buffer law a court will not likely find the economic impact to be so severe that a taking has occurred. *Id.* at 634-35.

   County of Pine v. DNR, 280 N.W. 2d 625 (Minn. 1979) is a good example of this principle. In that case the County adopted a setback ordinance and limited development along the bluff line on the Kettle River wild and scenic river. The set-back affected development on only a portion of the landowner's property – a buffer adjacent to the river. The landowners claimed the ordinance gave rise to a regulatory taking. The Minnesota Supreme Court rejected the claim noting that the landowners could continue to use the property as a whole for the purposes for which they had acquired the property. The owners still had reasonable beneficial and economically viable use of the parcel as a whole thus there was no taking. *Id.* at 630-31.

   Thus under this first prong of the *Penn Central* test so long as the landowner can continue to use the parcel as a whole after adoption of the MRCCA rule a court would be unlikely to find that the owner has suffered the kind of economic loss that constitutes a taking.

2. The extent to which the regulation interferes with distinct investment backed expectations

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of the regulation are not widely spread across the community. *DeCook v. Rochester International Airport Joint Zoning Board,* 796 N.W. 2d 299 (2011) and *McShane v. City of Faribault,* 292 N.W. 2d 253 (Minn. 1980).

Here the court looks to the owner's "legitimate" expectations of a return on investment. *Penn Central,* 438 U.S. at 124, *Wensmann Realty,* 734 N.W. 2d at 637. The majority of cases that deal with this prong of the *Penn Central* test pertain to an owner's request to convert his or her land use to a use prohibited by the zoning regulation. This is because as long as the property continues in its present use it is difficult to make an argument that the property owner is not realizing a return on investment. Where an owner claims lost investment backed expectations the court looks at the circumstances at the time of the use modification. The court will look at whether the restriction applies to all or a portion of the property, if the restriction applies to a portion of the property the court is less likely to find an interference with the owner's investment backed expectations as the owner is still able to use the remainder of the property to advance investment backed expectations. *Thompson v. City of Red Wing,* 455 N.W. 2d 512 (Minn. Ct. Ap. 1990) (no taking where burial mounds prohibited use of property as gravel mine where property could still be used for residential development and agriculture). In the case of the MRCCA rules owners are not prohibited from expanding, they are merely prohibited from extending development into the shore impact zone, bluff impact zone, or in terms of height requirements. Additionally, the local unit of government does have discretion to modify certain constraints in some zones to permit variance e.g. height restrictions.

The court will also look to determine what the owner knew or should have known about the government regulation at the time the property was acquired and whether the purchase price reflected a use that acknowledged the restriction. *Wensmann Realty,* 734 N.W. 2d at 639 ("'generally, when an owner buys property with knowledge of restrictions upon the development of that property he assumes the risk of economic loss). In most instances in the MRCCA the zoning restrictions imposed by the MRCCA rule are consistent with present zoning requirements. Finally, the court will look to wither the owner actually invested money in connection with his or her expectation of a return on investment. *Id.*

The MRCCA rules were design to permit property owners to continue their current use and to develop their properties. The MRCCA rules do not ban any use, they simply restrict the method and design of development on portions the property footprint requiring protection though use of such mechanisms as setback requirements, vegetation management schemes, and height restrictions.

3. The character of the government action

The last prong of the *Penn. Central* balancing test focuses on the character of the government action. Here there are a number of factors that should be considered including clearly articulating the purpose of the legislation.

<u>Legitimate government purpose and substantial relationship test</u>. The interest sought to be advanced by the government must but a legitimate government interest and the regulation must be designed to advance that interest. There

must be an essential nexus between the legitimate government interest advanced by the regulation and the burden imposed by the regulation. *Dolan v. City of Tigard,* 512 U.S. 374, 386-87 (1994)(flood protection was a legitimate government purpose. Limiting development in flood plain to reduce flooding met the essential nexus requirement but requiring landowner to develop bike path for public access was not related to the underlying purpose of the regulation and did not meet the substantial nexus requirement). Courts have recognized regulations designed to advance a broad array public purposes analogous to those that might be advanced in the buffer legislation including: historic preservation; preservation of wild and scenic rivers; flood plain management; wetland preservation; protection of water table; protection of apple crops and protection of burial mounds. *Id., Penn Central,* 438 U.S.104 (1978)(protection of historic properties), *Goldblatt v. Hempstead,* 369 U.S. 590 (1962)(prohibiting gravel mining below designated grade to protect water table) *Miller v. Schoene,* 276 U.S. 272 (1928) (requiring landowners to remove red cedar trees to prevent cedar rust fatal to apple trees), *Pine County,* 280 N.W. 2d 625 (Minn. 1979)(regulations protecting Kettle River Wild and Scenic River), and *Thompson,* 455 N.W. 2d 512 (Minn. Ct. App. 1990)(prohibiting disturbance of tribal burial mounds). The MRCCA rules were designed to address a legitimate government purpose identified by the legislature in Minn. Stat. § 116G.15, subd. 1: the protection and preservation of the Mississippi river and adjacent lands for the benefit of the health, safety, and welfare of Minnesotans; to prevent and mitigate irreversible damages to natural resources within the MRCA; to preserve and enhance our natural, aesthetic, cultural and historical heritage in the river and adjacent lands, to protect and preserve the river as a transportation water and recreation system; and to protect and preserve the biological and ecological functions in the MRCCA.

<u>Distribution of Benefit and Burdens.</u> This prong of the *Penn Central* analysis also requires the court to examine how the burden of the regulation is allocated – does the burden of the regulation fall on a few land owners or many land owners. *Wensmann Realty,* 734 N.W. 2d at 739. This does not mean that the regulation has to impact all landowners, but the regulation may to impact more than a handful of landowners as illustrated by the *Penn Central* case. That case involved a historic preservation ordinance adopted by the City of New York prohibiting alteration of designated historic landmarks. The purpose of the regulation was to preserve the New York's cultural heritage. Penn Central wanted to place a sky scraper on top of the historic Pent Central Station. The City denied a variance application and Penn Central sued alleging the City had taken its property. The U.S. Supreme Court found that no taking had occurred. In assessing the burden imposed on the owners of Penn Central the Court noted that while New York was not brimming with historic building such that the burden of the regulation was shared by every property owner in New York the class of historic building owners was sufficiently large that the burden imposed on Penn Central was not a disproportionate burden. *See generally, Penn Central,* 438 U.S. at 132. The MRCCA rules are substantially similar to the historic preservation restrictions in the *Penn Central* case in that the burden of the rules

is wide spread across every property owner, owning property within the 72 mile MRCCA for the protection of the MRCCA corridor.

Additionally, the constraints on property use imposed by the MRCCA are roughly proportional to the need or public purpose of the regulation. *Dolan v. City of Tigard,* 512 U.S. 374 (1994)(holding requiring property owner to dedicate a bike path across his property for public use did not have a close nexus to the purpose of the regulation – protection of the flood plain and reduction of traffic congestion). The MRCCA rules were narrowly designed to accomplish the purpose of protecting the MRCCA. Restrictions on development in bluff impact zones, for example, were developed to restrict development in those area with a higher potential for bluff failure, vegetation requirements are imposed to increase stability of bluffs and to prevent shoreland run off, conserve water quality within the MRCCA and to protect the MRCCA while maintaining existing development and allowing new development to occur in a manner protective of the MRCCA and its values.

Attachment 2: 2015 City of St. Paul Results of Nonconformity Analysis – Bluffs

State of Minnesota
Minnesota Department of Natural Resources (DNR)
DNR Response to Public Comments on Proposed MRCCA Rules
July 6, 2016

	In Bluff Setback	**On 18% slope/BIZ**
Nonconforming Structures Under Current City Definition	180	1015
Nonconforming Structures Under Definition in DNR's Pre-Revisors Draft	392	493
Net Change	-212	522
Total Net Reduction		310

"LAKESHORE PROPERTY VALUES AND WATER QUALITY: EVIDENCE FROM PROPERTY SALES IN THE MISSISSIPPI HEADWATERS REGION."

Submitted to the Legislative Commission on Minnesota Resources

By the Mississippi Headwaters Board

and Bemidji State University

(May14, 2003)

BY

Charles Krysel

Elizabeth Marsh Boyer

Charles Parson, Ph D.

And

Patrick Welle, Ph. D

Forward Forward

The Legislative Commission of Minnesota Resources (LCMR) provides grants on a competitive basis to proposals that best protect the State's natural resources. The Mississippi Headwaters Board (MHB), a joint powers board of eight counties, joined in the mission under Minnesota Statute 103F. 361-377 in 1980. The mission is to protect and enhance the values of the first 400 miles of the River. This pristine stretch of River runs through eight rural counties from the Headwaters at Lake Itasca in Clearwater County to the southern border at Royalton in Morrison County. MHB is responsible for the initiation of this project

The First City on the Mississippi River is Bemidji, located on beautiful Lake Bemidji. The location, scholarly reputation of the researchers and cooperation of the lake associations made Bemidji State University (BSU) the best choice to implement MHB's proposal to the LCMR. The River runs through many lakes and is the sink into which other lakes contribute runoff. As the contributing watershed to the Mississippi River, the lakes data were included in creating this tool for wise decision-making that may aid in preserving the integrity of the Upper Mississippi River basin for posterity. "We do not own our land (or water), we borrow it from our children".

For the first time, this study defines the dollar value of water quality to the northern Minnesota economy. The State of Minnesota consists of a well-educated population, aware of the value of the State's most valuable resource, clean water. In today's political/budgetary climate, support of the environment that maintains water quality has been viewed as frivolous, anti-business, or an unnecessary expense. Through objective scientific method and hedonic modeling, this study attaches tremendous economic value to investing in a clean environment. Thank you for using the information to the best advantage for all people.

In Public Service,
Jane E. Van Hunnik-Ekholm, MS
MHB Executive Director
May 15, 2003

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EXECUTIVE SUMMARY

PURPOSE OF STUDY

The purpose of this study was to conduct research (similar in design and format to the above mentioned Maine studies) to determine if water quality of Minnesota lakes located in the Mississippi Headwaters Board jurisdiction affects lakeshore property prices. The hypothesis is that it does.

Like most environmental amenities, water quality is a non-market good that is not bought and sold outright as its own product on the marketplace. Instead, water quality is exchanged in the market, albeit implicitly, as an inherently attached characteristic or feature of some differentiated product. Differentiated products are those that consist of different or varying characteristics and exchanged on the market as a packaged good. Residential lakeshore properties are these kind of differentiated products because each one is unique in the quantity and quality of characteristics attached to it---the property, structural, locational and environmental quality variables that make it distinct.

METHOD

The price contribution of an attached environmental amenity must be determined indirectly. In the case of lakeshore property, the value of water quality is capitalized in the value of the land (Boyle et al 1998; Steinnes 1992) and its share of a property's price can be determined "through the price differentials between properties on lakes with differing levels of water quality, while controlling for other property characteristics"

(Michael et al 1996). Hedonic regression analysis is used to determine the implicit price of environmental amenities for differentiated products.

Available water quality data were obtained from the Minnesota Pollution Control Agency and data on lakeshore properties were collected from county assessors. A property site-quality rating inventory was also included. From these data, explanatory variables were selected for use in hedonic models. Lakes were assigned into groups, as a proxy for real estate market areas. From these lakes, 1205 residential lakeshore property sales that occurred in 1996 through 2001 were used. A hedonic equation was determined for each of the lake groups with a water quality variable used to explain variation in sales prices. Using these equations, the implicit prices of water quality---the effects on lakeshore property prices---are estimated for lake groups and for individual lakes. Combined data from the lake groups were then used to calculate the marginal amounts that people are willing to pay for lake water quality.

FINDINGS AND IMPLICATIONS

Water quality was shown to be a significant explanatory variable of lakeshore property prices in all lake groups in both versions of the model. Water quality has a positive relationship with property prices. Site quality, the other environmental variable used in the MN model, was found to be significant in four of the six lake groups with a positive relationship with property prices in one lake group and negative in three.

Using the estimated hedonic equations from the MN model, the implicit prices of water quality was determined and calculations were made to illustrate the changes in property prices on the study lakes if a one-meter change in water clarity would occur. Expected property price changes for these lakes are in the magnitude of tens of

thousands to millions of dollars. The evidence shows that management of the quality of lakes is important to maintaining the natural and economic assets of this region.

SECTION 1

INTRODUCTION AND PURPOSE OF STUDY

Minnesota's lakes are essential to the ecological, economic and cultural health and well being of the State of Minnesota. The more than 10,000 freshwater lakes that the State is known for provide essential benefits that must be wisely managed if they are to be sustained. Aside from their ecological importance, Minnesota's lakes are extremely important to the state's recreation and tourism industry, as well as to many local economies. According to the Minnesota Department of Natural Resources (MNDNR hereafter): "High-quality water is essential for a healthy state economy" (1998). Clearly, Minnesota lakes are an extremely valuable resource, assets worthy of protection if their benefits are to continue.

The challenge to maintain and protect lake water quality will become increasingly difficult if population and development trends continue at the present rate. In the last 50 years, lakeshore development on Minnesota's lakes has increased dramatically (Minnesota Planning 1998) and during the 1990s---in much of the area where the Mississippi Headwaters Board has jurisdiction---"growth has exploded…as demand for lakefront property has increased" (Minnesota PCA 2000). Lakeshore property is in demand because of the amenities or benefits they provide its owners, such as water-

based recreation possibilities, an aesthetic setting for a home, tranquility away from urban and commercial life, and perhaps the privilege or esteem of owning an increasingly scarce and valuable resource.

While the overall quality of Minnesota lakes may be good, lakeshore development has and continues to degrade lake quality. In a recent MNDNR study, it was found that “developed shorelines have two-thirds less aquatic vegetation than undeveloped shorelines” (MNDNR 2001). From an ecological and water quality perspective, this finding is startling and is even more alarming when we consider that about two-thirds of Minnesota’s lakeshore is privately owned and not all of it is developed---yet.

Lakeshore development---in combination with other land-use activities and surface-water recreation---increases sediment, nutrient and other pollutant inputs. These inputs lead to unnatural eutrophication and reduce water quality. Other undesirable effects include the loss of native plants and animals, loss of littoral habitat and increases in invasive species, including exotics. The manifestation of reduced water quality results in a reduction of a lake’s aesthetic values, decreased recreation benefits, and a lowering of the price of properties around the lake (Boyle, Lawson, Michael, Bouchard 1998).

Public policy and the activities of lakeshore property owners directly affect water quality. Protecting water quality through prudent policy and precautionary treatment of lakeshore property is more effective and less expensive than restoration of a degraded ecosystem. For these reasons, economic analysis of the benefits of protecting lake-

water quality could be valuable to policy makers, lakeshore property owners and the general public. This type information could enhance our understanding of the economic arguments for protecting water quality and help in determining the optimal level of protection.

In the State of Maine, studies have shown that water clarity---an observable water quality measure---significantly affects lakeshore property prices and that there is a significant demand for it (Boyle, Lawson, Michael, Bouchard 1998; Michael, Boyle, Bouchard 1996). If a similar relationship proves true for Minnesota Lakes, lakeshore property owners, state and local governments might regard enhanced property values as a common-sense incentive for protecting water quality and most importantly, take appropriate measures.

Like most environmental amenities, water quality is a non-market good that is not bought and sold outright as its own product on the marketplace. Instead, water quality is exchanged in the market, albeit implicitly, as an inherently attached characteristic or feature of some differentiated product. Differentiated products are those that consist of different or varying characteristics and exchanged on the market as a packaged good, whereby “consumers consider them all to be members of the same product class” (Palmquist 1999). Residential lakeshore properties are these kind of differentiated products because each one is unique in the quantity and quality of characteristics attached to it---the property, structural, locational and environmental quality variables that make it different and unique from others. Each one of these variables contributes to

the package price and differences in price between differentiated products are attributed to the quantities and quality of variables unique to each. The share of the package price for some of the characteristics of the differentiated product---market goods that are routinely traded, like commodities such as buildings and land---can be determined rather easily. However, the price contribution of an attached environmental amenity must be determined indirectly. In the case of lakeshore property, the value of water quality is capitalized in the value of the land (Boyle et al 1998; Steinnes 1992) and its share of a property's price can be determined "through the price differentials between properties on lakes with differing levels of water quality, while controlling for other property characteristics" (Michael et al 1996). Hedonic regression analysis is used to determine the implicit price of environmental amenities for differentiated products.

The hedonic pricing method is an economic valuation technique used to estimate implicit prices for individual characteristics of differentiated consumer products---those that vary in amount and quality of characteristics they contain (i.e., residential property)---and then used to infer the underlying demand for the characteristics. Data used in a hedonic study are analyzed using regression analysis, which relates the product price to its characteristics---making it possible to estimate the effects, the value that different characteristics have on product price (Palmquist 1991, 1999). "The main promise of hedonic methods is that it becomes theoretically possible to infer demand for non-marketed commodities from markets for related commodities" (Braden & Kolstad 1991). Some non-market environmental amenities (or disamenities if the case may be) influence the price for which a commodity sells by virtue of their inherent attachment

with the commodity. For example, a residential property with a desirable environmental quality attached to it (like a scenic setting or unpolluted air or water quality) and a comparable property without it would normally sell for different amounts. Most environmental amenities are not traded on markets, yet we know people reveal their preference for them by paying more to enjoy them. “Part of the variation in property prices is due to differences in these [kind of] amenities” (Braden, Kolstad, Miltz 1991).

PURPOSE OF STUDY

The purpose of this study was to conduct research (similar in design and format to the above mentioned Maine studies) to determine if water quality of Minnesota lakes located within the Mississippi Headwaters Board jurisdiction affects lakeshore property prices. The hypothesis is that it does. A steering committee for the Mississippi Headwaters Board recommended the sample of lakes that are investigated. Available water quality data was obtained from the Minnesota Pollution Control Agency and data on lakeshore properties sold between 1996-2001 was collected from county assessors. A property site-quality rating inventory was also included. From these data, explanatory variables were selected for use in hedonic models. Lakes were assigned into groups, as a proxy for real estate market areas. A hedonic equation was determined for each of the lake groups with a water quality variable used to explain variation in sales prices. Using these equations, the implicit prices of water quality---the effects on lakeshore property prices---are estimated for lake groups and for individual lakes. Combined data from the lake groups were then used to calculate the marginal amounts that people are willing to pay for water quality.

In summary, water quality of lakes is important for Minnesota's ecological, cultural and economic sustainability. Evidence from Maine indicates that water quality affects lakeshore property prices and that there is significant demand for it. If a similar relationship exists for Minnesota lakes, lakeshore property owners and policy makers should regard enhanced property values as important enough reason to protect water quality. This study seeks to test this hypothesis.

SECTION 2

LITERATURE REVIEW

This section provides a brief overview of literature relevant to the research purposes of this project. Hedonic studies are performed to determine if non-market environmental amenities affect the prices paid for some market goods and to estimate the implicit prices embedded therein. Estimating and knowing the value of these amenities is important information to consider for informed policy and wise benefit–cost decisions regarding their use. Others have investigated the affect that water quality has on prices paid for residential lakeshore properties. This body of work---studies that have used the hedonic pricing method for determining the affect that water quality has on prices paid for residential lakeshore properties---is briefly highlighted to inform and guide the research design and analysis for this study.

The hedonic pricing method or model is commonly used to estimate the implicit prices of environmental quality amenities that property owners pay as a portion of the overall prices of properties. Hedonic models have been used in a wide array of applications, including for example: the effect of open spaces in Portland, Oregon (Bolitzer & Netusil 2000); the effect of proximity to Lake Superior shoreline in Michigan (Orr et al 2001); urban forest amenities effect in Salo, Finland (Tyrvainen & Miettinen 2000); the effect of an ocean view in Bellingham, Washington (Benson et al 1998); and also in studies of lake-water quality.

David (1968) published a hedonic study that looked at how water quality might affect lakeshore property values on artificial lakes in Wisconsin. She found that property prices were significantly correlated with a measure of water quality that represented levels of lake pollution (an “expert opinion” rating of poor, moderate or good assigned to each lake). Although statistically significant, the “expert opinion” based rating used was subjective and it is difficult to specify how the three ratings were different.

Instead of using a subjective measure to represent water quality, Brashares (1985) used 39 objective measures of water quality. Of these he found two---fecal coliform bacteria and turbidity (visual clarity)---to be significantly correlated with property prices in his study of 78 lakes in southeast Michigan. His results also indicated that it is likely that only water quality measures that are perceivable to property owners are those capitalized in property prices. This would seem to be a reasonable assumption since few property owners would be aware of or act on water quality factors not readily recognized or known through the senses.

Steinnes (1992) also suggests that it might only be a perception (or even misperception) of water quality to which property owners implicitly apply value, rather than actual water quality. He cites the examples of acid rain and naturally stained dark water lakes; potential conditions found in the region of Minnesota where he studied 53 lakes.
The effects of acid rain will improve clarity in certain lakes (usually a visual indicator of good water quality), but in actuality will degrade water quality with its polluting effects.

Likewise, a perception of low water quality due to tannin staining might lead to a misjudgment when water quality can actually be good. In his study, Steinnes used water clarity (secchi disc readings), the percentage of littoral (shallow water), and a measure based on amount of suspended organic material in water as his objective measures of water quality.

Michael, Boyle and Bouchard (1996) surveyed purchasers of lakeshore property to determine if their perceptions of water clarity would be correlated with the actual water clarity in the lake where they purchased. Survey results indicated that purchasers were familiar with current water clarity and that water clarity history also influenced their purchase decisions. Perceptions turned out to be significantly correlated with measures of water clarity that secchi disc readings indicated. As a result, the researchers used the minimum secchi disc reading for the lake for the year the property was sold and a historical trend variable as measures of water clarity. The historical trend variable was the difference between a ten-year average of minimum secchi disc reading and the minimum reading for the lake the year the sale took place. They also chose clarity as the measure of water quality because it is the most observable manifestation of eutrophication, which was the main concern of the study: the degradation of water quality in Maine lakes resulting from cultural eutrophication. They assumed that other indicators of cultural eutrophication such as chlorophyll levels, dissolved oxygen, fish habitat, and swimmability were correlated with water clarity. Over 500 lakeshore properties on 34 Maine lakes were grouped into four separate markets to test if the estimated implicit prices for water clarity for each lake group would vary across markets

and thus might minimize the effects of geographical characteristics. Limitations of the study results were reported to be: that the estimates were based on a very small percentage of Maine lakes so might not be accurate predictors for lakes outside the real estate markets used; and that the estimated implicit prices for water quality are based on all things being equal, i.e., the supply of properties would not increase due to water quality improvements in most lakes through improvement efforts.

Boyle, Lawson, Michael and Bouchard (1998) updated the Michael study to refine its estimates by adding an additional year and a half of sales data, adding a seventh lake group and two lakes, and treated the missing water clarity observations more systematically. This study went further than Michael's by combining data from lake groups to estimate a demand equation that infers the marginal amounts that people are willing to pay for improved water clarity. As did Michael's, the results of this study also showed that water clarity significantly affects property prices around Maine lakes and the same limitations apply. In addition, they showed there is a significant economic demand for water clarity by lakeshore property owners.

The preceding two studies of Maine Lakes led to further investigation of issues relevant to hedonic models and the measurement of environmental quality. The issue that lakeshore property owners might perceive water quality differently than the empirical measures used in hedonic studies was investigated by Michael, Boyle and Bouchard (2000). Purchasers of lakeshore property on twenty-two Maine lakes (that had been separated into three market groups) were surveyed to correlate perceptions of water

clarity to actual measurements. Respondents rated their lakes for minimum water clarity on a scale approximating secchi disk readings for Maine Lakes. The results of the survey found respondents' perceived ratings were significantly correlated with the actual minimum water clarity conditions on the lakes. Nine different water-clarity variables were then constructed using secchi disk data and based on survey results to use in hedonic models. Results revealed that estimated implicit prices for nearly all of the water quality variables proved significant, yet, implicit prices varied between markets when the nine models were estimated for the three market groups. However, within each of the market groups, they found large enough price differences (overlapping confidence intervals) between perceived and objective water clarity variables. A concern was expressed that different conclusions, and ultimately policy recommendations could result depending on the selected variable entered into a hedonic equation. The authors recommend that the measure of the environmental variable be selected with caution to reflect the public's perceptions of environmental quality, and also be based on conceptually and theoretically sound logic.

Poor, Boyle, Taylor and Bouchard (2001) investigated the issue of using objective or subjective measures of water clarity in hedonic models. They studied four market groups in Maine, where each group contained between 4 and 13 lakes. Minimum secchi disk readings for each lake for the year of sale for each lakeshore property were used as the objective measure of water quality. Subjective measures were obtained by surveying lakeshore property purchasers for their perceived water clarity judgments that compared to the objective measures by design. Both the objective and subjective

measures proved to be significant variables in the models. An interesting finding was that most respondents tended to systematically under-estimate water clarity when compared to the actual measure. This resulted in larger implicit price estimates than those estimated from the objective variable. Therefore, the authors concluded that the objective measure (data usually readily available) was superior to the subjective measure (based on perceptions obtained from surveys) and should more accurately estimate the implicit price of water clarity in hedonic models.

Boyle and Taylor (2001) were concerned that the estimated implicit price for an environmental amenity could be biased if property-characteristic data is a source of substantial error (errors-in-variables-problem). They investigated the effect of using data provided by tax assessors versus data received from a survey of lakeshore property purchasers to estimate the implicit price of lake-water clarity. Lakeshore properties sold between 1990 and 1995 on 34 Maine lakes that had been segmented into four market groups were used in the study. Convergent validity testing was performed and the authors reported that from a statistical perspective, both sources of property-characteristic data performed equally well. Results of the hedonic-price functions indicated that the water quality variable is a significant predictor of property prices for both data sources. Convergent validity testing showed that coefficient estimates for the water quality variable did not vary significantly when estimated with either source of data. However, differences in implicit prices were shown to be substantial and it was noted that in terms of the effects of property characteristic measures, the magnitudes of some of the implicit prices could affect decision-making policy outcomes. The authors

conclude that their results are encouraging for the continued use of tax assessor data in hedonic studies.

Although not a study of fresh-water lakes, Leggett and Bockstael (2000) did show that water quality has a significant effect on residential property values along the Chesapeake Bay. The water quality measure used was fecal coliform bacteria levels, information that had been made widely available to market participants.

The literature reviewed here is quite relevant and closely correlated with the purposes of this study. The studies reviewed clearly provide a background for the importance, justification and methods of this study. The hedonic pricing technique, appropriately applied, using pertinent data should provide the evidence to either prove or disprove the hypothesis that water quality of Minnesota lakes located in the Mississippi Headwaters Board jurisdiction affects residential lakeshore property prices.

SECTION 3

METHODS

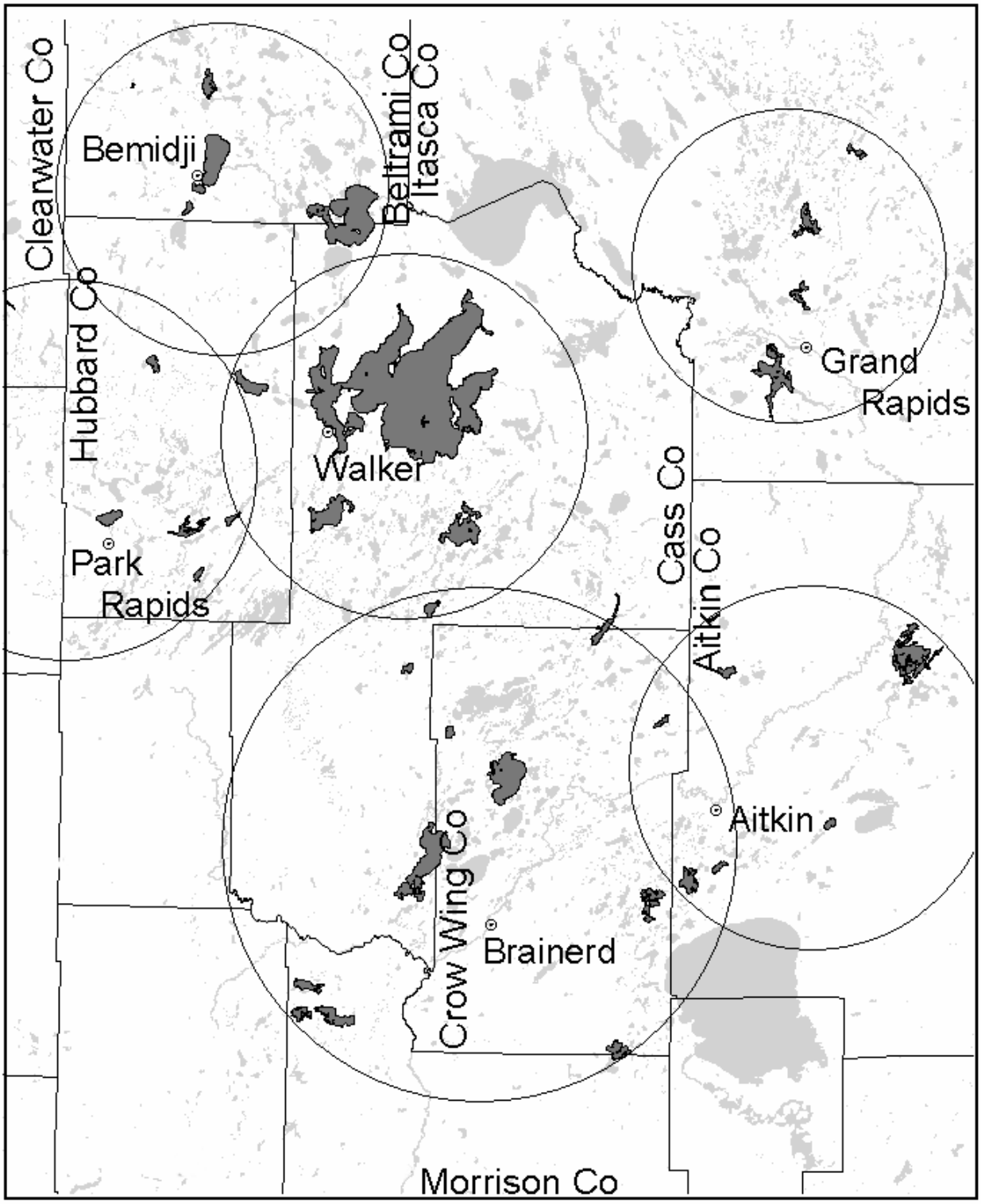
The purpose of this study is to test the hypothesis of whether or not water quality of Minnesota lakes located in the Mississippi Headwaters Board jurisdiction affects prices paid for residential lakeshore properties. As was done in the studies of Maine lakes, the implicit prices of water quality---the share of a lakeshore property's price attributed to water quality---will be identified through the price differentials between properties on lakes with differing levels of water quality, while controlling for other property characteristics. This study replicates that research that showed water clarity, a water quality measure, significantly affects property prices around Maine lakes (Boyle, Lawson, Michael, Bouchard 1998; Michael, Boyle, Bouchard 1996).

Study Sample and Data Used

Lakes

Thirty-seven lakes were selected from a pool generated by a steering committee of the Mississippi Headwaters Board. Lakes were chosen that provided a diversity of size, spatial and political representation in the jurisdiction and having water quality monitoring data available from the Minnesota Pollution Control Agency. Lakes were assigned to one of six groups that approximated real estate market areas and the nearest major community (Figure 1).

Figure 1. Location of study lakes[1] and lake groups (market areas)[2].



[1] Study lakes identified by darker shading.
[2] Lake groups identified by circle lines.

Two lakes, Cass and Leech, were included as dummy variables for lakes with special features for being situated within the Leech Lake Indian Reservation and the Chippewa National Forest. In addition, both these lakes have considerable lakeshore frontage that is publicly owned.

Lakeshore Properties

Residential lakeshore properties sold on the lakes in the years 1996 through 2001 are included in the study. A total of 1205 property sales are used. On lakes that exceeded 50 property sales (10 of the 37 lakes), 50 properties were randomly selected from each and included in the study. This limitation was applied to prevent any overwhelming influence that any one lake might have on the study results. It was also necessary to limit the sample size to meet project time and budget criteria.

Property Data

Property sales data were obtained from county assessor records. Only fair market sales were used in order to exclude relative, gift or other below market transactions that may have occurred. Only single-family residential type properties that are less than 20 acres in size were used to avoid resorts, multi-family rental units or other commercial enterprise type property sales. Lake-lot properties without dwellings as well as ones with year-round or seasonal dwellings are included to reflect the range of development stages of lakeshore properties. Of the 1205 properties included, 162 or 13.2% had been purchased without dwellings.

Data obtained for each property were its purchase price (PP), assessed values for land and structures at time of purchase, feet of frontage on the lake (FF), lot size (LOTSIZE), tax rate (TAXRATE), square footage of living area (LVAREA), if dwelling had more than one story (STORY), a fireplace (FIRE), central heating (HEAT), a full bathroom to indicate a well or municipal water source (PLUMB), septic or sewer service (SEPTIC), a garage (GARAGE), the number of adjacent properties within 1000 feet of frontage (DNSTY), and if the property access road is publicly maintained (RDPUB).

Environmental Quality Data

The water quality measure (WQ) used was the mean secchi disk reading for the lake for the year a property sold. Boyle et al (1998) used the minimum reading for the year the sale closed as its best proxy for buyer/seller perceptions of water quality at the time of sale. It was the authors' opinion that it was not possible to know the correlation between when a buyer perceives a lake's water quality and his or her purchase date without buyer provided information, which this study did not have. Therefore, it was thought that the mean reading should deliver a more conservative telling. When readings were not available for a particular year in which a property sold (7% of cases), the mean for readings for 1990-2001 was used.

As in the Boyle et al study, secchi disk readings, a measure of water clarity, was used as the all encompassing water quality variable because of the correlation it has with other lake water quality and health characteristics such as a quality fisheries, a lake's

swimmability, etc. According to Boyle et al, other water quality characteristics may affect property prices in their own right, but are related and so are included in the implicit price of the WQ measure used here.

Properties were site-visited and rated for lakeshore property environmental quality features and an average rating was computed for each lake. The ratings (SQ) provided a subjective environmental quality measure to the study.

River Properties

Data were also collected in selected counties pertaining to sales of riparian property on the Mississippi River. Purchase price was recorded as well as the other variables contained in the lake data. Preliminary analysis, including multivariate statistics on the relation between purchase price and property characteristics, provided compelling evidence that the model used for lakeshore analysis would apply very differently to river property. The variability of purchase price is far less predictable among riparian property sales in the MHB region based on the data collected. Even the collection of water quality measures is different. The data available from the State as well as from the River Watch Program does not contain secchi disc readings. The closest indicator of clarity that is available is turbidity. In consultation with MHB staff and the Steering Committee, it was deemed appropriate to summarize the results of this preliminary analysis on riparian property sales. But it would not be worthwhile to pursue further application of the hedonic model to river property. While techniques exist to transform

turbidity data to serve as a proxy for water clarity, the Steering Committee determined that the hedonic analysis would be so different as to not merit the additional effort. Summary results on river data are provided in Appendix E.

Method of Analysis

Hedonic pricing is a ‘revealed preference’ method commonly applied for valuing environmental amenities---such as environmental quality---that is actually being traded in residential property markets. Another economic technique used to value non-market environmental amenities is the contingent valuation ‘stated preference’ method. Unlike the hedonic pricing method that has the advantage of using actual market transaction evidence for its calculations, contingent valuation is used where market transactions are not available and must resort to hypothetical, willingness-to-pay estimates obtained from surveys. Like hedonic pricing, there is another revealed preference method used to value non-market environmental amenities; the travel cost method. It however, is designed specifically to estimate the value of benefits or costs for recreation sites or activities.

The hedonic pricing method (also referred to as hedonic property value model or hedonic model) is an econometric valuation technique used to reveal the portion of purchase price that is attributed to environmental amenities, such as water quality. The hedonic model is a devised relationship between market goods and the characteristics, including complimentary environmental characteristics that contribute to its product price (Freeman 1993), for the purpose of estimating the value of the implicit, non-market

environmental characteristic (amenity) contained. Data used in a hedonic model are analyzed using regression analysis, which relates the product price to its characteristics---making it possible to estimate the effects, the value that different characteristics have on product price (Palmquist 1991, 1999). In addition, “the main promise of hedonic methods is that it becomes theoretically possible to infer demand for non-marketed commodities from markets for related commodities” (Braden & Kolstad 1991). Some non-market environmental amenities (or disamenities if the case may be) influence the price for which a commodity sells by virtue of their inherent attachment with the commodity. For example, a residential property with a desirable environmental quality attached to it (like a scenic setting, unpolluted air or lake water quality) and a comparable property without it would normally sell for different amounts in a market where they co-reside. Most environmental amenities are not traded on markets, yet we know people reveal their preference for them by paying more to enjoy them. “Part of the variation in property prices is due to differences in these [kind of] amenities” (Braden, Kolstad, Miltz 1991). “The share of a property’s price that is attributable to water quality is identified through the price differentials between properties on lakes with differing levels of water quality, while controlling for other property characteristics” (Michael, Boyle & Bouchard 1996).

To determine if water quality has an effect on the prices paid for lakeshore properties, hedonic models were devised for this study to estimate the value of water quality capitalized in the sales---the implicit price of water quality. The value of an environmental amenity such as the quality of lake water is capitalized in the value of the

land and not in the value of structures or other improvements (Boyle et al 1998). Hedonic price equations were used to net out the structure and other improvement influences in property prices to isolate environmental amenity values. The equations represent the sales prices of properties as a function of the characteristics of the property for a real estate market.

Procedure

A separate equation is estimated for each of the six lake groups used in the study. The importance of using different groups of lakes representing separate markets is to minimize the effects of geographical differences and to see if the estimated implicit prices for water quality differ across markets.

The hedonic model used by Boyle et al and also in this study:

$$PP = f\,(P, S, L, \ln WATERC*SA$$

expresses its dependent variable, purchase price (PP), as a function of property characteristics (P), characteristics of structures (S), locational characteristics L), and the natural log of water clarity (WATERC) multiplied by the size of the lake (SA).

Because the assessed values for land and structures were available for this study, it was thought that a different dependent variable could be constructed to enhance understanding. Therefore, this study uses a hedonic model in parallel (MN model hereafter) that expresses the portion of the purchase price attributed to the land

(PPLand) as a function of structural characteristics (S), land characteristics (L), and the natural log of water quality (WQ), multiplied by the size of the lake (LA):

PPLand = *f* (S, L, lnWQ*LA).

The dependent variable PPLand is used to make easier the extrapolation of estimated implicit prices for changes in property prices for an entire lake. PPLand was derived for each property by dividing the assessed valve for land (AVL) by the sum of the assessed values of land and structures (AVL + AVS), multiplied by PP:

(AVL / AVL + AVS)*PP.

In Minnesota, both developed and undeveloped lake-lot properties are often priced in terms of lake frontage, a common unit used for comparison and assessing values. The structural characteristics describe the improvements that exist on the property and land characteristics describe site condition---including the neighborhood or other locational---influences on purchase price. The natural log of water quality, again, is used to reflect the anticipated nonlinear relationship between water quality and purchase price due to the effect of diminishing returns. Multiplying WQ by size of the lake is done to recognize the assumption Boyle made that lake size may be more important than WQ to buyers who prefer smaller, less congested lakes.

Another reason that a MN model is used in this study was to utilize additional, available explanatory variables and for comparison purposes between models. The Boyle et al

model was adapted to fit common explanatory variables. Explanatory variables used in the models are shown in Table 1 and Table 2.

Table 1. Explanatory variables used in the Boyle (adapted) model.

Variable Type	Name	Description
Property:	FF	feet of frontage on the lake
Structural:	LVAREA	square feet of living area
	PLUMB	1 = having a full bathroom, 0 otherwise
	HEAT	1 = having a central heating system, 0 otherwise
Locational:	DNSTY	number of lots/1000 ft of frontage adjacent to property
	DIST	distance to lake group community (miles)
Environmental:	WQ	mean secchi disk readings for the lake for the year property was sold (feet)*LKAREA

Table 2. Explanatory variables used in the MN model.

Variable Type	*Name*	*Description*
Structural:	LVAREA	square feet of living area
	STORY	1 = more than one story, 0 otherwise
	FIRE	1 = having a fireplace, 0 otherwise
	HEAT	1 = having a central heating system, 0 otherwise
	BSMNT	1 = having a basement, 0 otherwise
	DECK	1 = having a deck, 0 otherwise
	PLUMB	1 = having a full bathroom, 0 otherwise
	SEPTIC	1 = having septic or sewer service, 0 otherwise
	GARAGE	1 = having a garage, 0 otherwise
Land-Locational:	LOTSIZE	in acres
	FF	feet of frontage on the lake
	DNSTY	number of lots/1000 ft of frontage adjacent to property
	RDPUB	1 = access road publicly maintained, 0 otherwise
	TAXRT	local tax rate for the year property sold
	DIST	distance to lake group community (miles)
Environmental:	WQ	mean secchi disk readings for the lake for the year property was sold (feet)*LKAREA
	SQ	site quality rating of property

Unlike the Boyle et al study that had gathered socioeconomic attributes of the lakeshore property consumers through a survey that had been conducted, this research did not do so. Therefore estimated demand for lake water quality is not performed, by use of what

is known as a second-stage demand equation, as was done in the Boyle et al study. However, “the hedonic equation yields information on the *marginal* willingness to pay for the environmental improvement because the consumers optimize by equating their marginal rate of substitution between the characteristic and the numeraire to the marginal rate which is estimated by the hedonic price equation” (Palmquist 1999).

As was done in Boyle et al study, the hedonic price equations estimated for each lake group is used to derive what Boyle et al refers to as “reduced equations that include a grand constant (a) and the water quality effect (b):

$$PP = \alpha + \beta \ \ln(WATERC)*LKAREA$$

for calculating implicit prices for individual lakes. This approach is described in Boyle et al (1998). The data calculated from the reduced equations will be useful for a making a number of estimates for any lake in the study using the appropriate equation. A set of estimates is provided to illustrate the kinds of questions that the information can answer.

Summary

Thirty-seven lakes located in the Mississippi Headwaters Board jurisdiction were placed into one of six lake groups, approximating real estate market areas and having a main community at their centers. Data obtained from county assessor offices for lakeshore properties sold on the lakes in 1996 through 2001 were collected and used along with Minnesota Pollution Control Agency lake water quality data and with a site quality variable for use in hedonic models. Hedonic pricing equations were estimated for each of the six lake groups Two sets were estimated: one that used an adapted Boyle et al

model and another that used the MN model as described above. Water quality and site quality were two of the explanatory variables used to identify the effects of water quality and site quality---while controlling for other property characteristics---and the implicit prices of water quality and site quality embedded in the prices paid for lakeshore properties will be revealed.

CHAPTER 4

RESULTS

Introduction to Findings

Water quality was shown to be a significant explanatory variable of lakeshore property prices in all lake groups in both the Boyle et al and MN models. Site quality, the other environmental variable used in the MN model, was found to be significant in four of the six lake groups. Water quality had a positive relationship with property prices and site quality's relationship with property prices was positive in one lake group and negative in three.

Using the estimated hedonic equations from the MN model, the implicit prices of water quality were determined and calculations were made to illustrate the changes in property prices on the study lakes if a one-meter change in water clarity would occur. Expected property price changes for these lakes are in the magnitude of tens of thousands to millions of dollars.

Analysis of Findings

Summary Statistics

Mean values for variables by lake group and for each study lake are reported in Appendix A.

Mean lakeshore property sales prices in 1996-2001 were highest in the Walker Lake Group ($179,621) and lowest in the Aitkin Lake Group ($100,313). The highest mean value per frontage foot (PPLAND/FF) was in the Brainerd Lake Group at $959 and lowest in the Grand Rapids Lake Group at $434. The mean water clarity was highest in the Walker Lake Group and lowest in the Aitkin Lake Group, 4.29 and 2.78 meters respectively.

Hedonic Model Results

Hedonic equations were estimated for each of the six lake groups and for each of the models used. The coefficients are reported in Appendices B and C.

The Boyle et al model used property purchase price (land and structures) as its dependent variable, whereas, the MN model used the purchase price of the land only (structure values having been netted out). The MN model included more explanatory variables, including one that described a subjective site quality characteristic.

Water Quality Variable

Both models revealed that the coefficients for water quality (WQ) were significant in each of the lake groups and that its relationship with property prices is positive.

Site Quality Variable

The coefficients for site quality (SQ) were significant in four of the six lake groups. For the Aitkin Lake Group the sign was positive and negative signs occurred in the Brainerd,

Walker and Bemidji Lake Groups. See Appendix E for further description of the development of this index.

Other Significant Variables

Other significant variables are as shown in Appendices B and C for each model, and will not be reported here.

Expected Property Prices for Changes in Water Clarity

The table shown in appendix D shows the input used for calculating the implicit prices of water clarity for the study lakes. (Note: The table includes the estimated coefficients for WQ from the MN model regression results only.) The implicit prices of water quality were computed to determine the change in property prices for the lakes if water clarity were to improve or decrease by a one-meter increment.

Table 3 shows the results for changes in price for a lake's frontage foot and the total change in property prices for each lake. In addition, Table 4 shows the implicit prices of water clarity for each lake by frontage foot (WQ/FF), by mean property on the lake (WQ/Lot), and the expected purchase price for a mean sized lot on the lake without structures (PPLAND).

Table 3. Changes in property prices on study lakes for a one-meter (1m) change in water clarity.

Lake	Mean clarity (m)	Price change/FF for 1m		Total Lake FF	Total change in property prices for lake[3] for 1m	
		Increase	Decrease		Increase	Decrease
Big Sandy	1.38	$218.00	$516.23	324057	$63,579,983	$150,560,122
Dam	3.56	$6.32	$8.41	19196	$109,104	$145,347
Esquagamah	1.39	$17.60	$41.26	28313	$448,369	$1,051,391
Farm Island	4.22	$24.95	$31.72	63660	$1,429,485	$1,817,365
Ross	1.43	$12.29	$27.87	26575	$294,062	$666,581
Spirit	4.28	$7.01	$8.89	24390	$153,846	$195,099
Alexander	4.89	$8.99	$11.06	78055	$631,660	$776,842
Bay	4.14	$10.46	$13.36	106969	$1,006,845	$1,286,636
Fish Trap	3.74	$5.55	$7.29	57319	$286,117	$375,917
Gull	3.42	$39.23	$52.91	185179	$6,538,349	$8,817,887
Norway	2.83	$3.36	$4.85	19433	$58,829	$84,864
Pelican	4.95	$30.37	$37.25	115165	$3,147,922	$3,860,639
Platte	2.01	$6.48	$11.05	57652	$336,493	$573,580
Roosevelt	3.88	$38.80	$50.43	82052	$2,865,342	$3,724,297
Shamineau	5.11	$6.69	$8.16	49413	$297,500	$362,930
Upper Hay	2.62	$3.40	$5.06	18232	$55,820	$83,117
Balsam	3.60	$1.08	$1.43	6500	$35,478	$46,975
Pokegama	4.90	$29.53	$36.29	184460	$4,902,393	$6,024,648
Prairie	1.79	$4.20	$7.75	64774	$244,845	$451,798
Wabana	4.70	$3.73	$4.62	104751	$351,649	$435,554
Ada	4.34	$3.14	$3.97	8117	$79,458	$100,462
Kabekona	3.86	$6.00	$7.82	48238	$260,485	$339,499
Leech	3.04	$423.58	$594.16	882248	$93,425,651	$131,049,117
Ten Mile	6.61	$9.32	$10.85	108720	$911,943	$1,061,650
Woman	4.12	$13.59	$17.39	144781	$1,770,816	$2,265,967
4th CrowWing	2.80	$15.84	$22.92	20725	$295,455	$427,515
8th CrowWing	2.76	$18.73	$27.26	23900	$402,882	$586,362
Belle Taine	6.38	$28.91	$33.85	108594	$2,825,507	$3,308,316
Fish Hook	3.36	$61.02	$82.75	34282	$1,882,698	$2,553,152
George	2.71	$26.60	$38.99	26550	$635,607	$931,666
Long	5.80	$2.26	$2.69	14979	$30,467	$36,264
Bemidji	2.85	$193.48	$278.00	69399	$10,070,488	$14,469,691
Cass	4.02	$326.36	$420.20	195396	$15,942,278	$20,526,244
Irving	1.51	$34.02	$72.67	21966	$672,555	$1,436,642
Marquette	3.01	$9.97	$14.03	21384	$191,878	$270,015
Big Turtle	3.00	$20.70	$29.17	53394	$994,730	$1,401,752
Big Wolf	3.13	$17.16	$23.83	35511	$548,431	$761,604

[3] Assuming 90 percent of the total lake frontage is developed or developable with three exceptions: 25 percent was used for Leech and Cass Lakes due to large public land holdings and 75% was used for Lake Bemidji.

Table 4. Equations for calculating implicit prices for study lakes.

Lake	Implicit Price WQ/FF	Implicit Price of WQ/Lot	α	Est. PPLAND	β	Mean FF	Mean WQ	Lake Size (ac.)
Big Sandy	$129	$15,471	56,099	$71,570	7.31	120	1.38	6571
Dam	$32	$5,959	53,569	$59,528	7.31	184	3.56	642
Esquagamah	$11	$2,010	33,708	$35,718	7.31	188	1.39	835
Farm Island	$576	$21,619	52,124	$73,743	7.31	128	4.22	2054
Ross	$8	$1,294	20,055	$21,349	7.31	156	1.43	495
Spirit	$52	$6,077	43,451	$49,528	7.31	116	4.28	530
Alexander	*$77*	$9,207	73,511	$82,718	1.94	120	4.89	2990
Bay	$69	$6,593	130,640	$137,233	1.94	96	4.14	2392
Fish Trap	$31	$3,334	46,545	$49,879	1.94	108	3.74	1303
Gull	$188	$22,760	159,614	$182,374	1.94	121	3.42	9541
Norway	$12	$1019	36,570	$37,589	1.94	88	2.83	505
Pelican	$264	$25,607	97,668	$123,275	1.94	97	4.95	8253
Platte	$11	$2,266	113,902	$116,168	1.94	202	2.01	1673
Roosevelt	$229	$39,231	32,694	$71,925	1.94	171	3.88	14915
Shamineau	$61	$5,320	49,096	$54,416	1.94	87	5.11	1681
Upper Hay	$10	$1,086	77,804	$78,890	1.94	107	2.62	581
Balsam	$6	$1,449	49,436	$50,885	1.73	257	3.60	654
Pokegama	$253	$43,715	51,769	$95,484	1.73	173	4.90	15900
Prairie	$6	$998	51,382	$52,380	1.73	181	1.79	991
Wabana	$30	$5,711	64,997	$70,708	1.73	191	4.70	2133
Ada	*$22*	$2,756	68,196	$70,952	1.91	124	4.34	983
Kabekona	$35	$5,810	83,275	$89,085	1.91	165	3.86	2252
Leech	$1656	$231,849	-122,023	$109,826	1.91	140	3.04	109175
Ten Mile	$125	$16,737	88,446	$105,183	1.91	134	6.61	4640
Woman	$89	$12,932	83,404	$96,336	1.91	146	4.12	4782
4th CrowWing	*$53*	$12,016	65,857	$77,873	19.95	225	2.80	585
8th CrowWing	$62	$9,965	53,082	$63,047	19.95	162	2.76	492
Belle Taine	$368	$53,718	39,341	$93,059	19.9	146	6.38	1453

					5			
Fish Hook	$284	$39,459	36,445	$75,904	19.9	139	3.36	1632
					5			
George	$84	$15,872	57,131	$73,003	19.9	188	2.71	798
					5			
Long	$35	$5,050	51,430	$56,480	19.9	202	5.80	144
					5			
Bemidji	$674	$65,355	23,670	$89,025	9.72	97		
							2.85	6420
Cass	$2044	$402,65	-360,060	$42,595	9.72	197	4.02	29775
		5						
Irving	$28	$2,455	28,673	$31,128	9.72	89	1.51	613
Marquette	$38	$5,398	32,719	$38,117	9.72	141	3.01	504
Big Turtle	$79	$15,334	23,007	$38,341	9.72	194	3.00	1436
Big Wolf	$71	$11,656	40,719	$52,375	9.72	165	3.13	1051

CHAPTER 5

DISCUSSION, CONCLUSION, and RECOMMENDATIONS

Statement of the Problem

Sustaining and improving the water quality in Minnesota's lakes is important to the State's ecological, economic and cultural future. The purpose of this study was to conduct research to determine if the water quality in Minnesota lakes---located within the Mississippi Headwaters Board jurisdiction---affects lakeshore property prices.

Evidence from Maine indicates that water quality affects lakeshore property prices and that there is significant demand for it. If a similar relationship exists for Minnesota lakes, lakeshore property owners and policy makers should regard enhanced property values

as important enough reason to protect water quality. This study tested a hypothesis that lake water quality affects lakeshore property prices of Minnesota lakes, and that it would be a positive relationship---like was found in the State of Maine.

Discussion of Findings

Thirty-seven lakes of various sizes, water clarity, and geographical location in the eight county Mississippi Headwaters Board jurisdiction were studied. Lakes were assigned to one of six lake groups that represented realistic market areas having a main economic and social community center, mainly the county seats.

From these lakes, 1205 residential lakeshore property sales that occurred in 1996 through 2001 were used. Property sales information was collected from county assessor records and water clarity data were obtained from the Minnesota Pollution Control Agency. A site quality variable was also included that ranked properties based on site characteristics from pristine and natural to manipulated and developed. The site quality information was provided to this study by the Geography Department at Bemidji State University, which had ranked the properties following on-site analyses.
Hedonic models were constructed and performed; one that followed the model Boyle et al used in their study of Maine lakes and one developed for this study, the MN model.

The major finding of the analysis was that lake water clarity---the water quality variable used---proved a significant explanatory variable of lakeshore property prices in all lake

groups and in both models. The relationship between water clarity and property prices is positive, that is, all else being equal, property prices paid are higher on lakes having higher water clarity. In other words, buyers of lakeshore properties prefer and will pay more for properties on lakes with better water quality. Therefore, sustaining and/or improving lake water quality will protect and/or improve lakeshore property values. On the other hand, if water quality is degraded, lower property values will result, which in turn will increase demand and development pressures on remaining lakes with the better water quality and ultimately lowering their water quality as well.

Another finding from the MN model was that site quality was a significant explanatory variable in four of the six lake groups. In the Aitkin Lake Group, site quality was shown to have a positive relationship with property prices, whereas in the Brainerd, Walker and Bemidji Lake Groups, the relationship was negative. An inference that can be made---for the three lake groups having a negative site quality to property price relationship---is that buyers of lakeshore properties prefer and pay more for the more developed and urbanized properties. This tendency seems to reveal that buyers prefer a condition that has and can contribute to degrading lake water quality---a contradiction of their preference for locating on lakes with higher water quality. The value of educating lakeshore property buyers and owners to understand this contradiction---changing their thinking and ultimately their behavior---is clearly evidenced here if water quality is to be protected. Ideally, as was seen in the Aitkin Lake Group, preference for site quality conditions that are more ecologically healthy is the wisest mindset to promote and establish in consumers of Minnesota’s lakeshore properties.

The estimated changes in property prices calculated in this study provide a rationale for appealing to economic incentives to bolster educational messages on lakeshore-water quality. Perhaps as important---from the perspective of state and local governmental concerns for protecting property values for tax base---additional and more progressive lakeshore property regulations will be important. In addition to improved lake water clarity, a future measure of success of education efforts will be a change in consumer demand for less developed site quality conditions and evidenced by higher prices paid for it.

The results shown in Table 3 illustrate that millions of dollars in lakeshore property values on Minnesota's lakes could be lost or gained upon a one-meter change in water clarity. Property owners, as will local and state property tax recipients, either gain or lose dollars as water clarity improves or degrades.

The changes in lakeshore property prices for a one-meter change in water clarity varies from lake to lake. Price variations between lakes are due to different water clarity levels, lake size, mean lake purchase prices and the different effects of water quality in the lake groups. The effect across lake groups is due to the different water quality coefficients estimated for each lake group. The Park Rapids Lake Group had the highest estimated water quality effect on property prices and the lowest effect was found in the Walker Lake group. Due to the nonlinear relationship between water clarity and property prices, the effect of a one-meter decline or improvement on lakes is not identical. The

price effect for improved water clarity is always smaller than for a reduction in water clarity.

The two lakes showing the greatest effects were Leech and Cass lakes. These lakes were also used as dummy variables in the models due to their unique situation of being located in the Leech Lake Indian Reservation and the Chippewa National Forest, and due to having considerable publicly-owned lakeshore property. Because of this situation, other variables not accounted for in the modeling may have caused the higher price effects. The results for Leech and Cass Lakes might be best considered higher than what is likely a more probable lower effect. However, Leech and Cass Lake results could possibly be accurate for the unique situation they present.

The next two lakes with the highest effects were Big Sandy and Bemidji. Although not treated as dummy variables, they appear to be somewhat different from the remaining lakes. Big Sandy is a large and very popular lake that is relatively isolated from other lakes in the Aitkin and other lake groups. Lake Bemidji is partially located within the City of Bemidji and likely influenced by an urban real estate market situation. In addition, Lake Bemidji State Park is located on Lake Bemidji. The high effects that Big Sandy and Bemidji Lakes achieve seem reasonable when their individual situations are considered.

Conclusions

The major finding of this research shows that water clarity---the environmental quality variable used---significantly affects prices paid for lakeshore properties located on Minnesota Lakes within the Mississippi Headwaters Board jurisdiction, and that the relationship is positive. This finding supports the hypothesis explored in this study and the similar results found in the Michael et al and Boyle et al studies of Maine Lakes.

The implicit prices of water clarity estimated in this study were based on a sample of lakeshore property transactions that took place on only 37 lakes--a mere fraction of Minnesota's lakes. However, the hedonic equations may be used to estimate changes in lakeshore property prices for other lakes---having similar characteristics as the 37 lakes studied---located within the study area's six lake groups. In order to do the calculations it would be necessary to have mean values for the variables on these other lakes to be plugged into the equations. For lakes located outside the area of study, new hedonic equations will have to be made.

Recommendations

For lakes located in the Mississippi Headwaters Region, the relationship between lakeshore property values and lake water quality is demonstrated by this research. Collectively, changes in lake water clarity will result in millions of dollars in property values---lost or gained---in this lake region of Minnesota. Clearly, for economic reasons alone---not to mention the ecological health and social benefits at stake---it is important to protect the water quality of all Minnesota's lakes. The relationship between lake water

quality and lakeshore property values is likely for other lakes outside the area of study, but additional research could be done to verify, as well as to further support this study's findings.

Enlightened citizens and progressive regulatory policy are the key to protecting Minnesota's valuable lakes from further degradation. Education to the importance of sustaining and/or improving the quality of Minnesota's lakes is critical and must occur if current detrimental practices affecting water quality is to be averted. The results of this study provide compelling evidence for an educational initiative.

Appendix A. Mean Values for Variables by Lake Group and Study Lake.

AITKIN LAKE GROUP

LAKE	N	WQ	SQ	PP	AVL	AVS	pplandff	FF
Big Sandy	50	1.38	260.02	117,073	44,546	40,285	612	120
Dam	15	3.56	228.73	88,607	27,067	38,587	276	184
Esquagamah	29	1.39		81,990	23,652	23,549	230	188
Farm Island	39	4.22	268.72	129,195	50,204	43,792	613	128
Ross	7	1.43	278.00	53,571	23,600	28,200	165	156
Spirit	34	4.28	273.59	72,954	29,612	26,209	360	116
Group Total	174	2.78	263.24	100,313	37,064	34,899	452	139

	LOTSZ	TAXRT	LVAREA	STORY	FIRE	HEAT	BSMNT	DECK
Big Sandy	0.95	127.82	782.06	0.18	0.24	0.26	0.28	0.66
Dam	1.54	123.81	705.67	0.13	0.33	0.13	0.07	0.47
Esquagamah	2.22	118.49	588.21	0.14	0.14	0.28	0.10	0.45
Farm Island	0.83	119.25	804.38	0.13	0.21	0.44	0.33	0.49
Ross	1.36	89.67	528.00	0.00	0.43	0.14	0.43	0.43
Spirit	1.03	115.66	601.24	0.00	0.06	0.24	0.15	0.47
Group Total	1.22	120.09	702.61	0.11	0.20	0.28	0.22	0.52

	PLUMB	SEPTIC	GARAGE	RDPUB	DNSTY	DIST
Big Sandy	0.50	0.68	0.50	0.98	10.34	32.98

Dam	0.53	0.53	0.47	1.00	7.93	13.51
Esquagamah	0.62	0.59	0.34	1.00	7.21	14.00
Farm Island	0.69	0.69	0.49	1.00	11.00	9.92
Ross	0.43	0.43	0.29	0.57	6.43	15.26
Spirit	0.38	0.38	0.35	1.00	10.65	7.68
Group Total	0.54	0.59	0.43	0.98	9.66	17.31

Appendix A (cont). Mean Values for Variables by Lake Group and Study Lake.

BRAINERD LAKE GROUP

LAKE	N	WQ	SQ	PP	AVL	AVS	ppland/ff	FF
Alexander	50	4.89	207.87	163,622	64,778	60,048	794	120
Bay	39	4.14	220.26	228,859	110,654	73,431	1,545	96
Fish Trap	50	3.74	213.95	154,169	55,138	59,282	833	108
Gull	50	3.42	247.24	326,789	167,312	113,341	1,681	121
Norway	29	2.83	259.15	86,452	24,898	40,998	398	88
Pelican	50	4.95	250.03	217,324	98,560	65,270	1,406	97
Platte	26	2.01	234.91	105,358	34,777	62,346	377	202
Roosevelt	24	3.88	290.67	130,879	34,650	57,508	334	171
Shamineau	50	5.11	217.89	112,390	35,260	43,563	663	87
Upper Hay	19	2.62	235.36	119,089	56,158	36,958	669	107
Group Total	387	3.99	235.26	176,461	74,658	64,164	959	115

	LOTSZ	TAXRT	LVAREA	STORY	FIRE	HEAT	BSMNT	DECK
Alexander	0.83	135.44	1085.28	0.20	0.44	0.60	0.44	0.66
Bay	0.58	90.57	968.61	0.15	0.58	0.61	0.24	0.85
Fish Trap	1.21	119.09	1046.30	0.20	0.46	0.68	0.36	0.70
Gull	1.11	103.13	1324.62	0.54	0.66	0.28	0.34	0.78
Norway	0.45	98.49	922.41	0.00	0.38	0.14	0.10	0.45
Pelican	0.88	92.74	791.50	0.14	0.49	0.51	0.29	0.51

Platte	1.11	116.81	975.12	0.13	0.33	0.54	0.25	0.58
Roosevelt	1.87	90.98	909.33	0.04	0.38	0.04	0.25	0.54
Shamineau	0.50	117.73	892.48	0.14	0.34	0.48	0.46	0.66
Upper Hay	1.02	106.06	645.58	0.05	0.26	0.32	0.16	0.47
Group Total	0.92	108.61	985.76	0.19	0.45	0.45	0.32	0.64

	PLUMB	SEPTIC	GARAGE	RDPUB	DNSTY	DIST
Alexander	0.88	0.88	0.64	1.00	10.06	26.47
Bay	1.00	0.97	0.73	1.00	10.87	16.30
Fish Trap	0.96	0.96	0.68	1.00	9.74	30.02
Gull	0.94	0.94	0.86	1.00	9.16	14.77
Norway	0.83	0.83	0.62	1.00	9.14	28.67
Pelican	0.61	0.61	0.57	0.98	12.40	18.35
Platte	0.67	0.75	0.54	1.00	9.96	22.21
Roosevelt	0.75	0.75	0.50	0.96	7.17	33.00
Shamineau	0.98	0.98	0.64	1.00	14.46	26.99
Upper Hay	0.74	0.74	0.61	1.00	7.16	24.74
Group Total	0.85	0.86	0.66	0.99	10.46	23.61

Appendix A (cont). Mean Values for Variables by Lake Group and Study Lake.

GRAND RAPIDS LAKE GROUP

LAKE	N	WQ	SQ	PP	AVL	AVS	ppland/ff	FF
Balsam	21	3.60	252.80	72,444	29,024	23,710	221	257
Pokegama	50	4.90	259.79	182,156	62,368	71,392	583	173
Prairie	36	1.79	295.34	100,286	33,967	45,036	267	181
Wabana	27	4.70	279.04	147,104	74,426	38,215	547	191
Group Total	134	3.82	272.33	135,905	51,942	50,154	434	192

	LOTSZ	TAXRT	LVAREA	STORY	FIRE	HEAT	BSMNT	DECK
Balsam	2.16	117.16	561.19	0.00	0.05	0.05	0.14	0.19
Pokegama	1.48	120.28	1005.84	0.06	0.52	0.68	0.42	0.62
Prairie	1.87	111.31	873.94	0.06	0.14	0.22	0.22	0.39
Wabana	2.15	113.22	765.33	0.04	0.26	0.37	0.15	0.48
Group Total	1.82	115.96	852.26	0.04	0.29	0.40	0.27	0.46

	PLUMB	SEPTIC	GARAGE	RDPUB	DNSTY	DIST
Balsam	0.76	0.76	0.19	1.00	9.33	28.67
Pokegama	0.76	0.74	0.56	0.96	11.42	7.22
Prairie	0.86	0.86	0.69	0.81	8.31	6.91
Wabana	0.63	0.63	0.52	0.63	6.22	15.31

Group Total	0.76	0.75	0.53	0.86	9.21	12.13

Appendix A (cont). Mean Values for Variables by Lake Group and Study Lake.

WALKER LAKE GROUP

LAKE	N	WQ	SQ	PP	AVL	AVS	ppland/ff	FF
Ada	33	4.34	240.88	151,929	60,566	58,013	658	124
Kabekona	45	3.86	286.22	153,858	60,129	67,001	482	165
Leech	50	3.04	270.74	203,416	88,423	89,259	793	140
Ten Mile	38	6.61	249.65	214,635	89,481	69,332	1,000	134
Woman	50	4.12	249.04	170,680	67,096	60,208	688	146
Group Total	216	4.29	260.33	179,621	73,522	69,618	720	143

	LOTSZ	TAXRT	LVAREA	STORY	FIRE	HEAT	BSMNT	DECK
Ada	1.27	96.62	959.18	0.09	0.33	0.06	0.64	0.70
Kabekona	1.82	99.25	971.00	0.18	0.33	0.67	0.47	0.53
Leech	1.32	100.54	1157.47	0.27	0.55	0.10	0.39	0.69
Ten Mile	0.99	92.02	1119.45	0.11	0.82	0.08	0.21	0.55
Woman	1.09	90.53	944.96	0.00	0.44	0.10	0.28	0.64
Group Total	1.31	95.86	1031.87	0.13	0.49	0.21	0.39	0.62

	PLUMB	SEPTIC	GARAGE	RDPUB	DNSTY	DIST
Ada	0.82	0.82	0.55	1.00	8.70	29.29
Kabekona	0.76	0.76	0.56	1.00	7.36	10.00
Leech	0.86	0.86	0.80	0.94	7.36	14.83

Ten Mile	0.87	0.87	0.63	1.00	7.58	12.79
Woman	0.88	0.90	0.66	1.00	7.50	24.48
Group Total	0.84	0.84	0.65	0.99	7.63	17.91

Appendix A (cont). Mean Values for Variables by Lake Group and Study Lake.

PARK RAPIDS LAKE GROUP

LAKE	N	WQ	SQ	PP	AVL	AVS	ppland/ff	FF
4thCrowWing	18	2.80	359.39	52,729	25,572	13,355	189	225
8thCrowWing	25	2.76	294.16	77,604	39,745	19,930	330	162
Belle Taine	50	6.38	232.57	162,769	66,678	56,649	663	146
Fish Hook	49	3.36	225.35	164,859	55,989	81,225	560	139
George	19	2.71	351.63	87,147	35,334	31,175	281	188
Long	12	5.80	293.75	63,163	17,233	23,367	137	202
Group Total	173	4.19	270.87	124,390	48,609	48,693	458	163

	LOTSZ	TAXRT	LVAREA	STORY	FIRE	HEAT	BSMNT	DECK
4thCrowWing	3.43	105.93	268.11	0.06	0.22	0.22	0.06	0.17
8thCrowWing	1.83	115.93	521.76	0.04	0.12	0.04	0.20	0.44
Belle Taine	1.19	109.74	1166.72	0.08	0.48	0.24	0.52	0.52
Fish Hook	1.42	95.99	1212.78	0.08	0.57	0.65	0.59	0.65
George	1.83	108.56	537.26	0.00	0.05	0.05	0.11	0.37
Long	5.71	141.09	575.33	0.00	0.17	0.00	0.08	0.25
Group Total	1.97	108.39	882.91	0.06	0.36	0.29	0.37	0.47

	PLUMB	SEPTIC	GARAGE	RDPUB	DNSTY	DIST
4thCrowWing	0.17	0.33	0.06	1.00	6.78	9.84

8thCrowWing	0.04	0.60	0.32	0.96	6.68	13.04
Belle Taine	0.50	0.90	0.80	1.00	7.80	8.19
Fish Hook	0.59	0.84	0.78	1.00	8.76	2.37
George	0.21	0.37	0.32	0.95	7.21	19.19
Long	0.50	0.50	0.25	1.00	5.00	26.61
Group Total	0.39	0.69	0.55	0.99	7.54	9.90

Appendix A (cont). Mean Values for Variables by Lake Group and Study Lake.

BEMIDJI LAKE GROUP

LAKE	N	WQ	SQ	PP	AVL	AVS	ppland/ff	FF
Bemidji	44	2.85	224.02	181,172	63,964	64,993	1,156	97
Cass	12	4.02	320.50	110,850	42,867	32,592	315	197
Irving	16	1.51	220.20	135,847	25,694	87,806	377	89
Marquette	6	3.01	214.40	178,967	33,617	105,750	329	141
Big Turtle	38	3.00	312.32	114,267	41,618	52,432	308	194
Big Wolf	5	3.13	285.00	78,200	27,020	32,320	239	165
Group Total	121	2.85	263.55	142,829	46,762	61,522	624	141

	LOTSZ	TAXRT	LVAREA	STORY	FIRE	HEAT	BSMNT	DECK
Bemidji	0.65	144.56	1345.83	0.29	0.43	0.64	0.19	0.48
Cass	1.86	131.02	329.00	0.00	0.00	0.10	0.00	0.20
Irving	0.44	161.63	1257.00	0.94	0.50	0.88	0.50	0.56
Marquette	0.87	139.86	1381.17	0.67	0.50	1.00	0.50	0.67
Big Turtle	1.56	146.59	905.61	0.19	0.42	0.56	0.47	0.44
Big Wolf	1.13	162.83	1171.20	0.00	0.20	0.00	0.40	0.20
Group Total	1.06	146.63	1101.50	0.33	0.39	0.59	0.33	0.45

	PLUMB	SEPTIC	GARAGE	RDPUB	DNSTY	DIST
Bemidji	0.76	0.76	0.81	1.00	10.64	4.50

Cass	0.36	0.36	0.09	0.92	5.33	17.97
Irving	0.94	0.87	0.94	1.00	10.44	2.08
Marquette	1.00	1.00	1.00	1.00	8.33	5.65
Big Turtle	0.61	0.61	0.58	0.98	6.66	11.01
Big Wolf	0.20	0.20	0.80	1.00	5.60	11.84
Group Total	0.69	0.68	0.70	0.99	8.51	7.92

Appendix B. Estimated Hedonic Coefficients Obtained Following the Boyle et al Model.

LAKE GROUP

	Aitkin	Brainerd	Grand Rapids	Walker	Park Rapids
intercept	-17805.70	210441.10***	6363.65	-22281.91	14095.43
	(17450.91)	(29040.65)	(28417.15)	(40815.95)	(36588.82)
ln(lvarea)	8503.51***	7575.37**	12003.94**	10926.32***	10920.16***
	(1630.76)	(3272.42)	(6795.93)	(4271.00)	(2189.03)
heat	45788.22***	11853.95	68644.89***	25022.71*	12844.98
	(9328.30)	(9746.27)	(19413.80)	(16153.82)	(14698.62)
plumb	6124.27	68961.78***	-44064.00	41475.59**	44448.52***
	(9249.74)	(19681.07)	(44869.46)	(21724.31)	(13807.53)
ff	239.16***	403.46***	148.38***	430.50***	207.95***
	(44.80)	(72.21)	(44.56)	(87.82)	(67.94)
dist	742.67**	-8407.21***	-913.84	-1250.36**	-1311.49
	(354.68)	(739.37)	(1014.07)	(700.62)	(1143.91)
dnsty	-1115.87	-2062.68**	4554.88**	4605.34*	-2728.13
	(1258.90)	(1145.62)	(2026.98)	(3377.01)	(2631.28)
Leech	---	---	---	-219206.07	---
				(189121.25)	
Cass	---	---	---	---	---

ln(watrq)	13.23***	4.72***	1.10*	2.15*	21.75***
*lkarea	(3.49)	(.82)	(.82)	(1.63)	(8.24)
R-Square	.52	.47	.40	.29	.51
F-Statistic	25.61***	47.53***	11.84***	10.68***	24.76***
d.f.	173	376	133	214	172

Significance levels: ***= 1%, **= 5%, *=10%. Standard errors are shown in parentheses.

Appendix C. Estimated Hedonic Coefficients Using the MN Model by Lake Group.

	Aitkin	Brainerd	Grand Rapids	Walker	Park Rapids	Bemidji
intercept	-116081.55***	277726.42***	175360.99**	89827.83*	-18158.82	-9307.08
	(32414.78)	(56107.57)	(84480.04)	(63055.74)	(39773.51)	(67352.50)
lnlvarea	-772.84	-3954.41*	-320.16	-588.59	8772.74***	-4919.31*
	(1179.99)	(2790.25)	(3861.00)	(2641.16)	(2573.05)	(3214.14)
story	4744.45	6300.58	-15746.63	6254.47	-1644.43	-1380.76
	(7141.76)	(9145.46)	(20197.61)	(11573.49)	(9595.76)	(10723.34)
fire	1858.54	9150.41	11880.85	7546.39	2555.65	3846.22
	(6059.04)	(7554.15)	(11445.07)	(8116.01)	(6213.37)	(9334.61)
heat	10212.07**	-19519.52**	19477.47**	3109.56	-1630.57	-30442.83**
	(5540.04)	(8054.20)	(11335.93)	(10048.20)	(6502.01)	(14725.99)
bsmnt	6932.40	-8754.55	-16011.77*	-8191.00	-1906.43	-10365.19
	(5644.31)	(8351.59)	(10893.68)	(8101.09)	(6456.23)	(9997.41)
deck	2503.22	-4005.63	6035.95	-9625.27	-3802.47	7805.03
	(5375.39)	(8335.36)	(10575.96)	(8559.83)	(5894.04)	(9344.14)
fullbath	5137.57	39087.93	-22561.95	-3402.37	-9038.31*	13054.10
	(9692.63)	(34822.74)	(47462.55)	(49623.70)	(6749.67)	(43520.48)
septic	-3269.96	-12261.90	7494.83	5577.83	-32606.25**	24890.76
	(10584.13)	(35881.90)	(45092.18)	(50638.55)	(17316.24)	(39461.04)
garage	11901.01**	22895.21***	-5297.35	3817.09	-5376.87	33363.43*
	(5101.94)	(8759.68)	(11092.77)	(8242.17)	(7059.53)	(21004.45)
rdpub	-8133.28	-14725.64	-17397.75*	37149.96	-27738.75*	-4974.65
	(15865.51)	(42594.11)	(11957.54)	(30943.77)	(20341.03)	(30701.33)
dnsty	-650.35	-1523.83**	-401.52	1921.28	-1067.51	-1864.95*
	(769.06)	(904.81)	(1132.50)	(2042.61)	(1070.07)	(1408.44)
dist	-193.74	-6974.22***	4.34	-480.66	-959.68*	1089.55
	(247.11)	(602.72)	(616.88)	(446.11)	(624.96)	(1463.02)
lotsz	5482.74**	7752.56**	-510.03	-4158.03**	-2456.50**	-5115.03
	(2646.84)	(3424.39)	(1649.37)	(2331.93)	(1258.13)	(6097.99)
taxrt	1178.55***	177.70	-973.84*	-461.26	421.33**	432.60
	(302.59)	(251.92)	(709.37)	(391.06)	(253.01)	(361.72)
ff	-11.90	311.38***	86.89***	420.62***	204.87***	80.03*
	(34.87)	(62.04)	(25.92)	(61.61)	(34.08)	(58.53)
leech lk	---	---	---	-196017.72*	---	-379506.65***
cass lk				(126349.88)		(74678.72)
sq	76.34**	-264.61***	7.03	-228.51***	28.85	-80.76*
	(44.22)	(69.00)	(77.20)	(65.66)	(40.40)	(63.08)
wq	7.31***	1.94***	1.73***	1.91**	19.95***	9.72***
	(2.08)	(.66)	(.55)	(1.09)	(3.66)	(1.79)
Rsquare	.45	.53	.33	.33	.53	.43
Fstatistic	5.86***	19.00***	3.14***	5.14***	9.88***	3.82***
d.f.	141	307	127	205	168	110

Significance levels: ***= 1%, **= 5%, *= 10%. Standard errors are in parentheses.

Appendix D. Equations Used for Calculating Implicit Prices.

Lake Group	*Lake*	α	β	*Mean WATERQ*	*Lake Size (acres)*	*Total FF/Lake*
Aitkin	Big Sandy	56,099	7.31	1.38	6571	324057
	Dam	53,569	7.31	3.56	642	19196
	Esquagamah	33,708	7.31	1.39	835	28313
	Farm Island	52,124	7.31	4.22	2054	63660
	Ross	20,055	7.31	1.43	495	26575
	Spirit	43,451	7.31	4.28	530	24390
Brainerd	Alexander	73,511	1.94	4.89	2990	78055
	Bay	130,640	1.94	4.14	2392	106969
	Fish Trap	46,545	1.94	3.74	1303	57319
	Gull	159,614	1.94	3.42	9541	185179
	Norway	36,570	1.94	2.83	505	19433
	Pelican	97,668	1.94	4.95	8253	115165
	Platte	113,902	1.94	2.01	1673	57652
	Roosevelt	32,694	1.94	3.88	14915	82052
	Shamineau	49,096	1.94	5.11	1681	49413
	Upper Hay	77,804	1.94	2.62	581	18232
G. Rapids	Balsam	49,436	1.73	3.60	654	36500
	Pokegama	51,769	1.73	4.90	15900	184460
	Prairie	51,382	1.73	1.79	991	64774
	Wabana	64,997	1.73	4.70	2133	104751
Walker	Ada	68,196	1.91	4.34	983	28117
	Kabekona	83,275	1.91	3.86	2252	48238
	Leech	-122,023	1.91	3.04	109175	882248
	Ten Mile	88,446	1.91	6.61	4640	108720
	Woman	83,404	1.91	4.12	4782	144781
P. Rapids	4thCrowWing	65,857	19.95	2.80	585	20725
	8thCrowWing	53,082	19.95	2.76	492	23900
	Belle Taine	39,341	19.95	6.38	1453	108594
	Fish Hook	36,445	19.95	3.36	1632	34282
	George	57,131	19.95	2.71	798	26550
	Long	51,430	19.95	5.80	144	14979
Bemidji	Bemidji	23,670	9.72	2.85	6420	69399
	Cass	-360,060	9.72	4.02	29775	195395
	Irving	28,673	9.72	1.51	613	21966
	Marquette	32,719	9.72	3.01	504	21384
	Big Turtle	23,007	9.72	3.00	1436	53394
	Big Wolf	40,719	9.72	3.13	1051	35511

Appendix E. Description of Method on Site Quality Index

Shoreland Parcel Site Visitation

In order to verify our data and to collect additional information that might also impact shoreline values, we determined to visit up to seventy parcels on each lake. If the number was under seventy, we wanted to visit all of them and if the number on a given lake was greater than that, we would select a stratified sample of at least fifty parcels.

Locating the parcels with assurance from the water was made possible in most cases by recent advances in parcel mapping at the county level. The counties that had such mapping done or in progress were willing to share their parcel data by simply removing the personal data. Other counties had challenges for us to find the precise point on the lakeshore. In Clearwater County, we had to rectify an assessor's map to fit the lakeshore. Fortunately there was only one lake in that county and it had a sufficiently distinct shoreline that we could feel confident in our positions. In Beltrami, our lakes outside Bemidji were all parcel mapped, however within the city, the parcel data had been lost, so again we had to work from an assessor's map. In Morrison County, only E911 locations were available. In most cases, we were confident that the point, which was on the parcel's driveway, was perpendicular to the shore and when we were at our minimum distance from the point, we were in front of the parcel. On a few peninsulas, it was difficult to be sure which parcel matched the point and we asked residents when we could, to verify which parcel had been sold recently.

Of perhaps 30 cases where someone was present on shore when we pulled up to do our assessment, only one time were we on the wrong lot, and that one was very narrow. We are quite confident, therefore, that our site visits are very nearly precisely on the correct parcel in every case. The GPS equipment that we used generally gave us locations to within less than ten feet using the newly installed beacon at Pine River for our Differential Corrections. All parcels and locations were plotted into Universal Transverse Mercator Coordinates using North American Datum 1983. In a few cases this required us to convert from Minnesota County Coordinates.

Shoreland Quality Indicators

To arrive at data on shoreland management in a timely manner, we created a data set which could be completed quickly during our site visit to each parcel while on the boat. The following attributes were assessed, each with an ordinal value that we connected with better or poorer shoreland management in terms of impacts on lake water quality.
View (Pristine 3, Some Development 2, Heavily Developed 1)
Shore Landscaping (Deep Indigenous Buffer 4,Deep Buffer>15' 3, Thin Buffer 2, Mowed to Water 1)
Texture of Riparian Bank (Naturally Rocky 4, Sand 3, Mud 2, RipRap 1)
Vegetation in Riparian Zone (Wooded 5, Emergent 4, Submergent 3, Nothing 2, Artificially Cleared 1)
Parcel Ground Cover (Brush 3, Grassland 2, Mowed Lawn 1)
Tree Cover (Coniferous 4, Deciduous 3, Mixed 2, Nothing 1)
Tree Frequency (Many 3, Several 2, Few 1)

Built Shore Structures (None 4, Dock 3, Boat Lift(s) 2, Boat House etc. 1)

- Admittedly, these are crude measures, but overall they tend to reflect whether a parcel is likely to impact a lake, with the “view” variable giving a sense of the lake overall. We adjusted the ordinal values so that each measure had the potential to score sixty points. Adding them together gave us an index with values ranging from 420 to 117. We arbitrarily grouped the lakes based on the score thusly:
- 117-218 poor
- 219-320 medium – 219-252 low medium
  253-286 medium
  287-320 high medium
- 321-420 best

As examples, Big Sandy came in at 261,
We summarized them for each lake and combined them for each county and combined them all for an overall average.

Appendix F. Summary Results on River Properties.

Data were collected for riparian property sales on 155 properties during the study period, 1996-2001. Preliminary data analysis indicated that these data were far less suitable for application of the hedonic pricing technique. Mean values for selected variables are shown below in Table E on the five counties that were included before the evidence was sufficient to determine that no further analysis on riparian property sales was warranted for this study.

Table E. Mean Values for Variables from Riparian Properties in Five Counties

RIPARIAN PROPERTIES

AREA	N	PP	AVL	AVS	pplandff	FF
Aitkin	46	45,983	10,161	15,589	67	521
Beltrami	33	44,173	32,222	6,940	284	212
Cass	6	97,267	35,350	39,083	207	669
Itasca	17	64,878	16,971	48,788	33	696
Morrison	53	119,142	30,121	67,762	235	207
5 County Total	155	74,670	23,405	36,520	171	373

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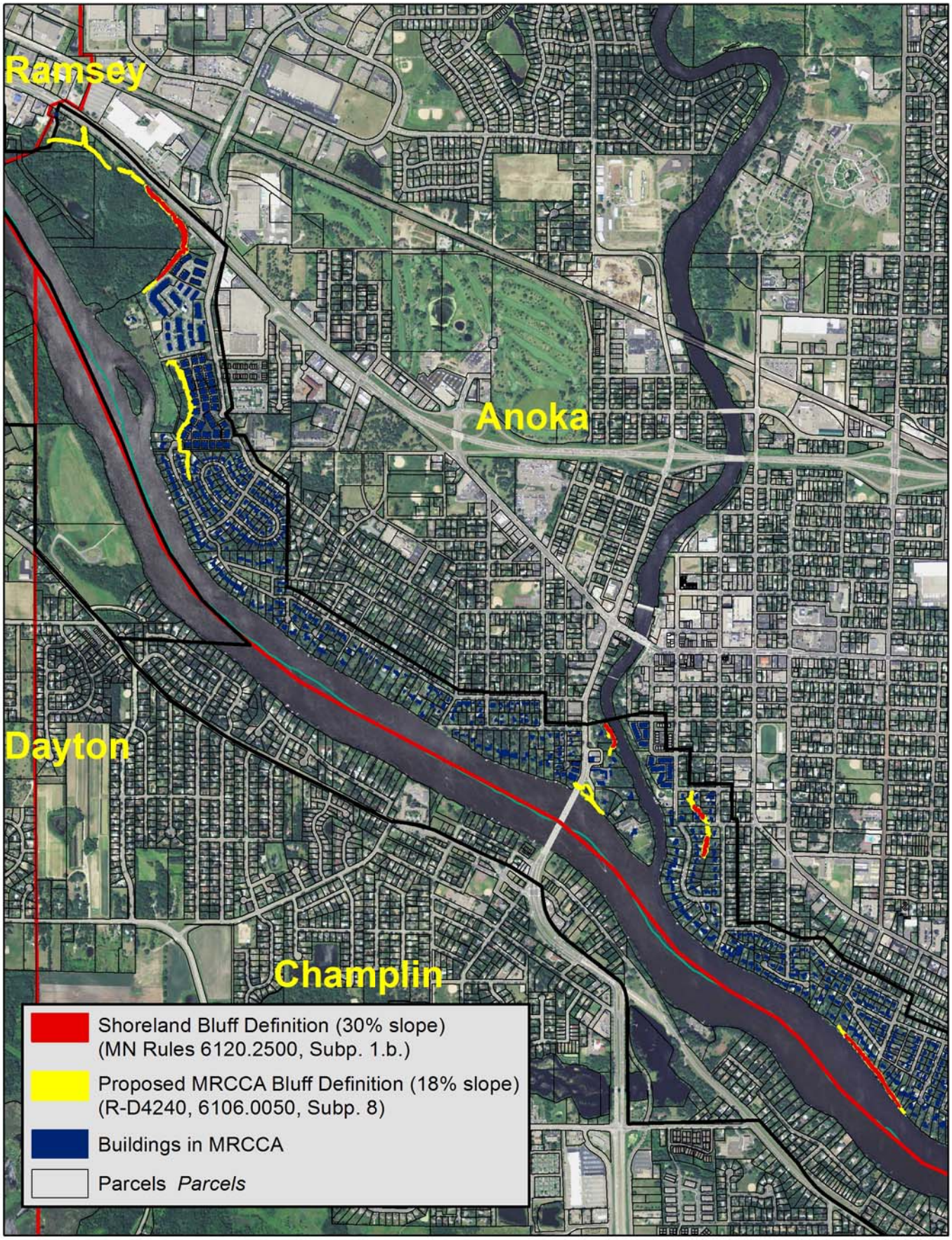
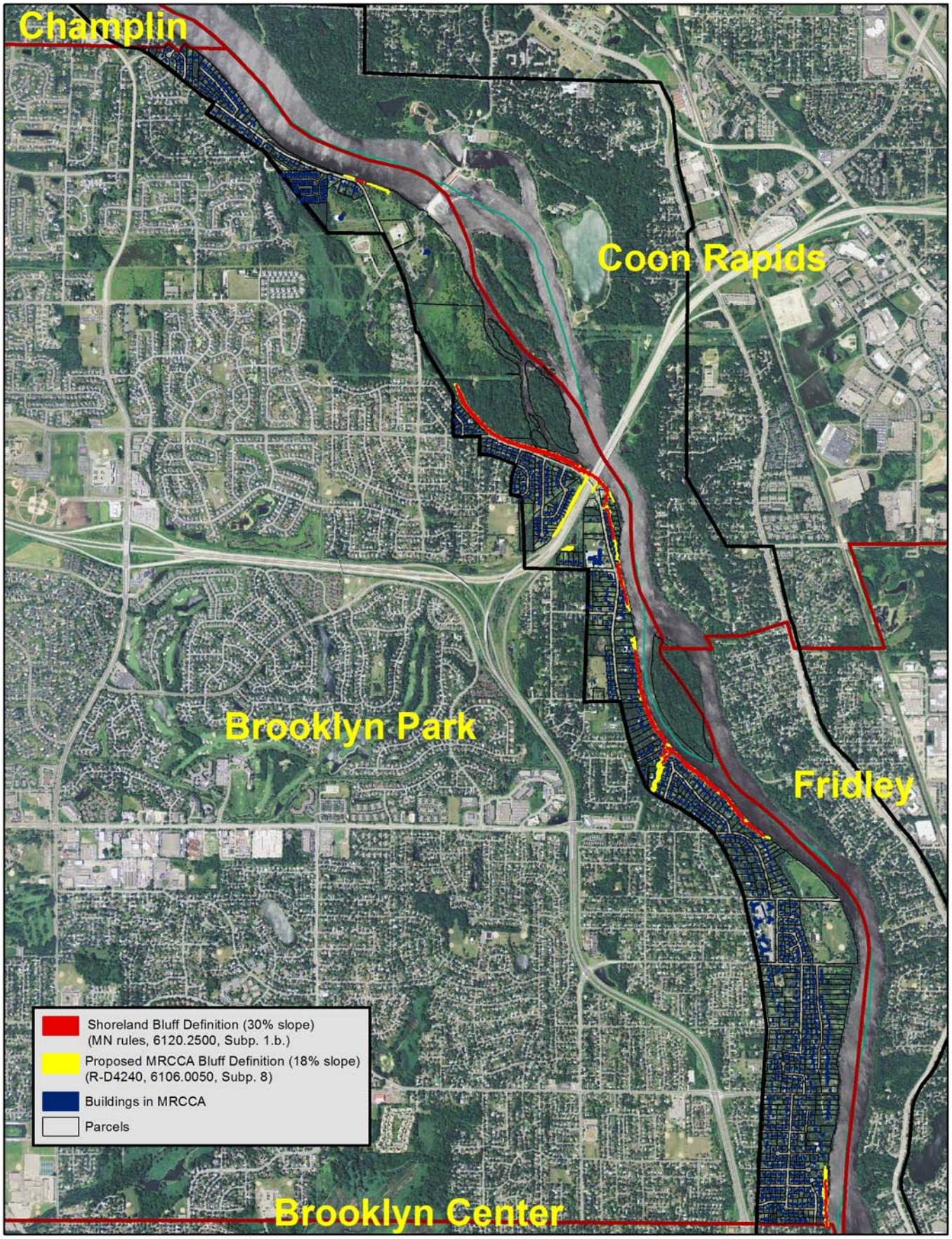
Bluffs with Buildings and Parcel Lines-Anoka



Bluff Areas with Buildings and Parcels-Brooklyn Park



MRCCA Rulemaking - LGU Meeting Summary - BLUFFS

Disclaimer: This document is based on a survey of local zoning and meetings with local governments in 2010. Local government plans and policies may have changed since that time, but the information on bluff definitions in local MRCCA ordinances is still considered accurate.

Overview of Existing Bluff Definitions

- 56% (14 of 25) of LGUs provided us a definition of **bluff**. Of these:
  - 11 define bluff as any slope ≥18% (2 LGUs also stipulate a 50' rise, 1 LGU stipulates a 25' rise)
  - 3 define bluff as any slope ≥12%
- 36% (9 of 25) of LGUs provided us a definition of **bluffline**. Of these:
  - 4 define bluffline as the line along the top of 18% slopes (1 LGU also defines bluff: slopes ≥18%)
  - 3 define bluffline as the line along the top of 12% slopes
    (2 LGUs also define bluff: one as slopes ≥12%, the other as slopes ≥18% with 25' rise)
  - 1 defines bluffline as the line along the top of 40% slopes
  - 1 defines bluffline as the high elevation of a steep bank adjacent to a body of water
- 1 LGU defines **bluff impact zone** as land within 40' of the bluffline (Mendota Heights)
- 1 LGU defines **steep slopes** as slopes ≥18%, > 50' horizontal distance, 10' rise (Minneapolis)
- 2 LGUs are subject to Interim Development Regulations in EO 79-19 (Brooklyn Center & Hastings)

Overview of Existing Bluff Standards

- Most LGUs require bluff setbacks consistent with the Interim Development Regulations in EO 79-10 (40' in the urban districts/100' in the rural districts), except:
  - 1 LGU requires a 35' bluff setback in un-sewered areas, 20' bluff setback in sewered (Ramsey)
  - 1 LGU didn't specify a bluff setback (Newport)
- Most LGUs prohibit development on bluffs and steep slopes:
  - 48% (11 of 25) prohibit development consistent with the Interim Development Regulations in EO 79-19 (prohibit development on slopes ≥18%, allow certain development on 12-18% slopes with conditions)
  - 16% (4 of 25) prohibit development on slopes ≥12%
  - 2 are subject to Interim Development Regulations in EO 79-19 (Brooklyn Center & Hastings)
  - 1 prohibits development on slopes ≥40%, except by CUP for nonconformities (Mendota Heights)
  - 1 prohibits development on slopes ≥20%, and allows certain development on 12-20% slopes with conditions (Coon Rapids)
  - 1 prohibits industrial/commercial development on slopes ≥12%, and prohibits residential development on slopes ≥18% (St. Paul)
  - 1 does not regulate bluffs (Brooklyn Park)
  - 1 didn't specify bluff standards (Newport)
- 36% (9 of 25) of LGUs have exceptions to bluff development restrictions, many for public utilities and roads
- Many LGUs use other means to protect bluffs/steep slopes, like excluding them from buildable area of lots

Overview of Suggestions on Future Bluff Definitions & Standards

- 72% (18 of 25) of LGUs asked for clear definitions and standards for bluffs. Some suggestions include:
  - Address multiple blufflines in the definitions and provide separate standards for 2nd tier bluffs
  - Address ravines and man-made/altered slopes in the definitions and standards
  - Provide clear standards (including setbacks) for top of bluff, bluff face, and toe of bluff
  - Provide flexibility for nonconformities to allow for expansion, redevelopment, and access
  - Establish a minimum area in the definition
  - The definition should make it easy to locate the bluffline on individual sites (use map for regulation)
- Of the LGUs listed above, 6 LGUs requested specific definitions/standards:
  - 2 propose keeping the bluff standards in the Interim Development Regulations in EO 79-19

- 2 propose prohibiting all development on ≥12% slopes
- 1 proposes defining bluffs as ≥18% slopes with a 25' rise
- 1 proposes definitions and standards consistent with the Shoreland rules

Specific LGU Comments & Suggestions (Color-coded by Geographic Area)

LGU	Current Bluff Definition(s)	Current Bluff/Steep Slope Standards	Bluff/Steep Slope Notes
Anoka	None	No development on slopes >18% (before alteration).	Bluff setback should be consistent with Shoreland Rules (30').
Brooklyn Center	IDR	IDR	Provide clear definitions and standards for bluffs.
Brooklyn Park	**Bluff** = slopes ≥ 12% leading from river's edge.	None	Clearly define bluffs and steep slopes and provide specific standards for bluffs directly on the water, second-tier bluffs further back, and ravines. Provide guidance on how to deal with existing walk-outs where it is unclear if the slope is natural or man-made.
Champlin	**Bluffline** = high elevation of a steep bank adjacent to a body of water.	No development on slopes >12%.	Bluff is fairly well-defined in Champlin. Steep, vertical drop.
Coon Rapids	**Bluff** = steep slopes >12% between river and MRCCA boundary proceeding landward from river.	No structures on 20% slopes (before alteration). Development allowed on 12-20% subject to conditions.	Clearly address, "Where is the bluff on my property?"
Dayton	**Bluff** = ≥ 18%. **Bluff Impact Zone** = land within 40' of the bluffline. **Bluff Line** = the line delineating the top of a slope connecting the points at which the slope becomes less than 18%. More than one bluff line may be encountered proceeding landward from the water. Setbacks apply to each bluff line.	No development on slopes ≥18%, development allowed on 12-18% slopes with city approval and subject to conditions. Bluff impact zone must be maintained in a nautral state.	Better address multiple blufflines on one property. Provide clarity on ravines.
Fridley	**Bluff** = > 12%. **Bluffline** = top of 12 % slopes.	No development on ≥ 18% slopes. Development may be allowed on 12-18 % slopes subject to conditions.	
Ramsey	**Bluff** = topographic features with ≥18% slopes, 25' rise. **Bluffline** = top of 12% slopes.	Development prohibited on slopes >12%, including the riverfront bluff face.	Staff supports prohibition of development on 12% slopes.

LGU	Current Bluff Definition(s)	Current Bluff/Steep Slope Standards	Bluff/Steep Slope Notes
Minneapolis	**Bluff** = ≥18%, > 50' horizontal distance, at least 25' rise. **Steep slope** = ≥18%, > 50' horizontal distance, at least 10' rise.	Structures restricted unless existing or CUP. Includes top or toe of bluff.	Provide exceptions for existing development. City staff noted that bluffs that drain away from the river or are a 'second set' of bluffs should have different standards than river bluffs.
Lilydale	**Bluffline** = the top of a slope which has a fall greater than 18%. More than one bluffline may be encountered landward from the water.	Structures prohibited on 18% slopes, allowed on 12% slopes with a CUP (subject to conditions). No vegetation clearing on bluffs.	City supports bluff setbacks, since many existing structures are hanging over the bluff and causing severe erosion. However, many parcels have no building envelope due to overlapping ROW and bluff setbacks. Provide flexibility for driveways/ access and redevelopment.
Mendota	**Bluffline** = a line along the top of a slope connecting the points at which the slope becomes less than 18%. This applies to those slopes within the land use district which are beyond the OHWL setback.	Development prohibited on slopes >18%, development allowed on 12-18% slopes with erosion control plan.	Don't severely restrict bluff development. Do not regulate man-made slopes (railroad embankments, ditches, excavated areas) as bluffs.
Mendota Heights	**Bluffline** = top of 40% slopes.	Development prohibited on 40% slopes. Development prohibited on 18-40% slopes, but allowed with CUP on nonconforming lots/lots with nonconforming structures. Development allowed on 12-18% slopes with erosion and runoff control, buffering, stability (nonstructural), etc.	Bluff setbacks are the biggest issue - a setback from 18% slopes would result in too many nonconformities. City wants flexibility to continue to allow construction on steep slopes for nonconforming lots and structures with a CUP rather than variance. Provide performance standards in rule.
St. Paul	**Bluffline** = a line along the top of certain steep slopes facing the Mississippi River Valley as shown on the River Corridor Zoning Maps. The bluffline shall mean a line drawn along the top of the bluff such that the slope below the line is >18% and the slope above ≤18%.	Bluff development shall take place at least 40' landward of blufflines. Commercial/ industrial development prohibited on slopes >12%, residential development prohibited on slopes >18%.	Define **bluff** as >18% slopes, 25' rise. (Bluffs are "a major topographic feature you can fall off of".) Prohibit structures/land alteration within bluff face, 40' of bluffline, and 15' of bluff toe. Define **very steep slopes** as >18%, 9' rise. Require a setback equal to height of slope (not to exceed 40') and prohibit residential development. Define **steep slopes** as >12%, 6' rise and prohibit commercial and industrial development.

LGU	Current Bluff Definition(s)	Current Bluff/Steep Slope Standards	Bluff/Steep Slope Notes
Cottage Grove	**Bluff** = ≥18%	Prohibit development on slopes >18%. Development permitted on slopes 12%-18% with required performance standards.	Exceptions for utilities with various conditions. Have had issues with setbacks (primary & accessory structures). Bluff standards for off-river bluffs should be different than for those along the river. Setback standards could be less since E & S control standards are improved.
Denmark Township		Prohibit development on slopes ≥18%. Development permitted on slopes 12%-18% with required performance standards.	"100' bluff setback is acceptable"
Grey Cloud Island Township		Protect slopes ≥18% and provide performance standards for development on slopes 12%-18%.	"100' bluff setback acceptable." Twp. has sometimes bent the rules and allowed 75'
Hastings	**Bluff** = ≥18%	IDR	
Inver Grove Heights	**Bluff** = ≥18%	No development on bluffs (18% slopes).	Bluff definition should include a minimum area.
Maplewood	**Bluff** = ≥18%	No development on slopes as flat as 12% with exceptions, conditions and performance measures applied.	Exceptions for slopes previously altered, > 200' length, 500' width. Earth-sheltered homes - a recent development was proposed for this site & there was uncertainty regarding issues related to bluffs, steep slopes & setbacks. City staff noted the bluff definition, setback & associated exceptions in ordinance may need refinement.
Newport	**Bluff** = ≥18%, 50' high		"Bluff metrics work fine"
Nininger Township		Development/structures on slopes > 12% prohibited.	Exceptions for authorized public services such as roads and utilities
Ravenna Township	**Bluffline** = top of slope where grade becomes < 12%.	Development/structures on > slopes 12% prohibited.	Exceptions for authorized public services such as roads and utilities.
Rosemount	**Bluff** = ≥18%	No development or vegetation clearing allowed (18% slopes)	
South St. Paul	**Bluff** = ≥18%	No development or clearcutting on the bluff face allowed (18% slopes)	Rules should acknowledge that some of city is built on a bluff & roads & structures will continue.
St. Paul Park	**Bluff** = ≥18%?	No development or clearcutting on 18% slopes.	Steep slopes >=12%.

Attachment 10: Bluff & Steep Slope Standards in Executive Order 79-19

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
Bluffs and Bluff Impact Zone (BIZ)	C.1. Each LGU within the river corridor shall prepare plans and regulations to protect environmentally sensitive areas in accordance with the following guidelines: a. Each LGU shall, with assistance of the Metropolitan Council and state agencies: (4) Prepare plans and regulations to protect bluffs greater than 18% and to provide conditions for the development of bluffs between 18%-12% slopes. (7) Prepare plans and regulations for management of vegetative cutting. C.2. Each LGU and state agency shall prepare plans and regulations to protect and preserve the aesthetic qualities of the river corridor, which provide for the following considerations: b. **Structures.** Structure site and location shall be regulated to ensure that riverbanks, bluffs, and scenic overlooks remain in their natural state, and to minimize interference with views of and from the river, except for specific uses requiring river access.	**F. Dimensional standards and criteria** 6. Placement of structures. a. The following shall apply in any district: (1) No new structures shall be placed on slopes which are 18% or greater. **E. Earthwork and vegetation** 2. Vegetation management. a. Rural Open Space, Urban Developed, & Urban Open Space districts: (1) On developed islands, public recreation lands, the slope or face of bluffs within 200' of the NHWM of the river, and within 40' landward of blufflines, clear cutting shall not be permitted. (3) The selective cutting of trees greater than 4" in diameter may be permitted by LGUs when the cutting is appropriately spaced and staged so that continuous natural cover is maintained. b. Urban Diversified district: (1) On the slope or face of bluffs and within areas 40' landward from established blufflines, clear cutting shall not be permitted; (2) The selective cutting of trees greater than 4" in diameter may be permitted by LGUs when the cutting is appropriately spaced and staged so that continuous natural cover is maintained. c. These vegetative management standards shall not prevent the pruning and cutting of vegetation to the minimum amount necessary for the construction of bridges and roadways and for the safe installation, maintenance and operation of essential services and utility transmission services that are permitted uses.

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
Steep Slopes – Conditions for Development	*Same as C.1 and C.2, previous page*	**F. Dimensional standards and criteria** 6. Placement of structures. a. The following shall apply in any district: (2) structures may be permitted on slopes which are greater than 12%, but less than 18%, when the following conditions are met: a) the developer can prove that the development on the slope can be accomplished without increasing erosion; b) the soil types and geology are suitable for slope development; c) there is proper management of vegetation to control runoff.

Attachment 11: Dimensional Standards in Executive Order 79-19

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
Height	C.2. Each LGU and state agency shall prepare plans and regulations to protect and preserve the aesthetic qualities of the river corridor, which provide for the following considerations: b. **Structures.** Structure site and location shall be regulated to ensure that riverbanks, bluffs, and scenic overlooks remain in their natural state, and to minimize interference with views of and from the river, except for specific uses requiring river access.	**F. Dimensional standards and criteria*** 5. Height of structures. a. Rural Open Space, Urban Developed, & Urban Open Space districts: (1) new structures and additions to existing structures shall be limited to a maximum of 35'; (2) the following exceptions to height limits shall be permitted: a) expansion of existing industrial complexes, such as refineries and storage areas; b) barns, silos, and similar farm structures; c) essential service distribution systems; d) bridges, bridge approach roadways, and transmission services; e) restoration or construction of historical structures and sites on the inventory of the State Historical Society or the National Register of Historical Places. b. Urban Diversified district: **no restrictions on the height of structures.**
Lot Size, Density and Width	C.3. LGUs shall develop plans and regulations to ensure that development shall not be undertaken prior to the provision of the Metropolitan public facilities in adopted Metropolitan plans, in accordance with the following guidelines: b. The density of development outside the Metropolitan Urban Service Area shall be limited to ensure that there is no need for the premature provision of local and metropolitan urban services and facilities.	**F. Dimensional standards and criteria** 3. Lot size. a. In the Rural Open Space and Urban Developed districts, the following minimum lot sizes shall be required: (1) in unsewered areas, the minimum lot size shall be **5 acres/single family unit;** (2) in sewered areas, the minimum lot size shall be consistent with the local zoning ordinance. b. In the Urban Open Space and Urban Diversified districts, the minimum lot size shall be consistent with the local zoning ordinance.

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
Structure Setbacks & Exemptions (River, Tributaries, Bluffs & Impervious Coverage	C.2. Each LGU and state agency shall prepare plans and regulations to protect and preserve the aesthetic qualities of the river corridor, which provide for the following considerations: b. **Structures.** Structure site and location shall be regulated to ensure that riverbanks, bluffs, and scenic overlooks remain in their natural state, and to minimize interference with views of and from the river, except for specific uses requiring river access.	**F. Dimensional standards and criteria** 4. Structure setbacks. b. All new structures and roads shall meet the following minimum setbacks: (1) Rural Open Space district: no structure or road shall be placed <u>less than 200' from the normal high water mark, and no less than 100' from blufflines.</u> (2) Urban Developed and Urban Open Space districts: the structure or road shall be placed <u>no less than 100' from the normal high water mark of the river, and no less than 40' from blufflines</u>. (3) Urban Diversified district: the structure or road shall be placed <u>no less than 40' from the bluffline</u>. c. Exceptions to setback provisions shall be: (1) public safety facilities, public bridges and their roadway approaches, railroad sidings, minor public and private roadways serving water-related uses on the riverfront; (2) public recreation facilities, scenic overlooks, public observation platforms, the regional trail system, docks, boat launching facilities; (3) approved river crossing of essential service, essential services distribution systems which are primarily underground except for terminal and metering devices not exceeding 6' in height, supporting structures for transmission crossing spans; (4) construction of above-ground pumping stations for sewer lines which shall be screened from view of river; (5) reconstruction or restoration of historical structures or sites on the Inventory of the State Historical Society or National Register of Historic Places.

* *The objectives of the dimensional standards and criteria in section F of the Interim Development Regulations are to: maintain the aesthetic integrity and natural environment of certain districts, reduce the effects of poorly planned shoreline and bluffline development, provide sufficient setback for sanitary facilities, prevent pollution of surface and groundwater, minimize flood damage, prevent soil erosion, and implement metropolitan plans and standards **(IDR, F.1.)**.*

MRCCA Rulemaking - LGU Meeting Summary - HEIGHT

Disclaimer: This document is based on a survey of local zoning and meetings with local governments in 2010. Local government plans and some underlying zoning may have changed since that time, but the information on local MRCCA ordinances is still considered accurate.

Overview of Existing & Suggested Height Standards

- 74% (17 of 25) of LGUs currently limit height to 35'. Of these:
  - 10 generally support limiting height to 35' in the rules, with the following exceptions:
    - Downtowns
    - Sites slated for future expansion or redevelopment
    - Industrial, agricultural, mining, utility structures
  - 7 support limiting height to 35' or less in the rules
- 16% (5 of 25) of the LGUs currently refer to underlying zoning (including Brooklyn Center, which is subject to the IDR in EO 79-19). Of these:
  - 2 propose a sliding scale based on location and relationship to bluffs/river
  - 1 generally supports limiting height to 35', except in the downtown area
- 2 LGUs currently limit height to 35', but allow increases as follows (no changes proposed):
  - Increase up to 50' with CUP or rezoning to PUD (Lilydale)
  - Increase in central riverfront district or by CUP (Minneapolis)
- 1 LGU limits height to 50', but allows 75' height for industrial smokestacks with a CUP (South St. Paul)

Overview by Geographic Work Area

Northwest

- Approximately half of the LGUs currently limit height to 35', the other half varies by underlying zoning.
- Tallest height allowed in underlying zoning is generally 35-40' (or 3.5 stories), except:
  - Brooklyn Center's tallest allowed height is 50' (even though it is subject to IDR in EO 79-19)
  - Anoka and Brooklyn Park allow taller heights with CUP or City Council approval

Urban West

- Minneapolis currently limits height to 35', except in the central riverfront district or by CUP.
- Minneapolis considers access to light and air, shadowing, scale and character of surrounding uses, and preservation of views of landmark buildings, open space or water bodies. Tall structures/towers do not have separate standards, but are reviewed as a part of an administrative process.
- Minneapolis proposes that wind and cell towers be discouraged.

Urban East

- Mendota and Mendota Heights currently limit height to 35'. Lilydale allows 50' with a CUP or rezoning to PUD.
- St. Paul currently refers to underlying zoning, with the tallest residential height limited to 50', and taller heights allowed downtown and in T districts.

Southeast

- All LGUs currently limit height to 35', except South St. Paul, which limits height to 50', 75' for industrial smoke stacks with a CUP.
- Most LGUs support the existing 35' height limit, with some exceptions for industry, agriculture, and mining.
- 2 LGUs (Ravenna and Nininger Townships) currently prohibit communication facilities.

Attachment 9: Summary of Bluff Definitions and Provisions in Local MRCCA Ordinance

Specific LGU Comments & Suggestions

LGU	Current Height Standards	Height Notes
Anoka	Varies by underlying zoning. (30' in SF and MD-R, 35' in C and HD-R, >35' with a CUP and increased sideyard setbacks.)	Allow taller buildings along Ferry Street.
Brooklyn Center	IDR (varies by underlying zoning - 5 stories highest allowed)	
Brooklyn Park	Varies by underlying zoning. (Tallest height allowed is 35'- 40'. Town homes and nonresidential structures may exceed height limit by 150% at City Council discretion, and business districts adjacent to residential districts can have increased height with increased setbacks.)	
Champlin	35'	Provide flexibility in Gateway Redevelopment Site. City would like to allow 4-6 story buildings through a PUD process.
Coon Rapids	35'	35' works, but Anoka - Ramsey Community College and Mercy Hospital, both of which currently comply, may want to increase heights in the future.
Dayton	35'	There could be a need for higher buildings on land south of River Road guided for future mixed use, including a senior high rise and neighborhood commercial/ institutional uses.
Fridley	Varies by underlying zoning. (Tallest height allowed is 3.5 stories in Georgetown.)	Allow taller buildings based on location (a sliding scale with greater heights further from the river) and clustering (greater heights in specified locations where high density is appropriate/desired). Allow taller buildings in exchange for additional screening, providing public views, etc.
Ramsey	35'	Height could be an issue in land slated for future "Office Park," which will allow 45' heights.
Minneapolis	35' unless in central riverfront district or by CUP	Height standards include; access to light & air of surrounding properties, shadowing, scale & character of surrounding uses, & preservation of views of landmark buildings, open space or water bodies. Tall structure/tower do not have separate standards, but would be reviewed as a part of an overall administrative process. Wind & cell towers would be discouraged.

Attachment 9: Summary of Bluff Definitions and Provisions in Local MRCCA Ordinance

LGU	Current Height Standards	Height Notes
Lilydale	35', 50' with CUP or rezoning to PUD	35', 50' with CUP - current standards are working.
Mendota	35'	Don't reduce to < 35'. Allow taller building heights downtown to accommodate first-floor parking, particularly south of Hwy 13.
Mendota Heights	35'	Provide exceptions for existing industrial uses and transmission facilities.
St. Paul	Urban Open Space = 40'. Urban Diversified varies by underlying zoning (50' is highest in res. districts, higher in T districts - West Side Flats, Upper Landing, Victoria Park).	Proposed Rural & Urban Open Space Districts = 30'. Urban Developed & Diversified Districts = 36' w/in 200' of OHWL, 48' between 200'-500' of OHWL, 36' w/in 100' of bluffline & on bluff face, 48' w/in 300' riverward of bluff toe, 48' in remainder of Urban Developed, 60' in remainder of Urban Diversified. Exceptions for specific locations and types of structures.
Cottage Grove	35'	Various utility, ag. and mining exceptions.
Denmark Township	35'	35'
Grey Cloud Island Township	35'	35'
Hastings	35'	Should not restrict to 35' downtown
Inver Grove Heights	35'	Variance was granted for grain elevator.
Maplewood	35'	35' or less is acceptable. Heights and their effects on view & aesthetics should be considered in the rulemaking.
Newport	35'	35' "keep the same"
Nininger Township	35'	35' - communication towers/antennae prohibited.
Ravenna Township	35'	35' - communication towers/antennae prohibited.
Rosemount	35'	Can be varied in UDD if shown that structure cannot be seen from river at the opposite bank.
South St. Paul	50', 75' for industry smokestack with CUP	Concern with standards for smokestacks & other industrial structures
St. Paul Park	35'	30' in ROS/35' in UDD

Attachment 13: Facility Standards in Executive Order 79-19

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
Private Roads, Driveways & Parking Areas	C.2. Each LGU and state agency shall prepare plans and regulations to protect and preserve the aesthetic qualities of the river corridor, which provide for the following considerations: a. **Site Plans.** Site plans shall meet the following guidelines: (1) New development and expansion shall be permitted only after the approval of site plans which adequately assess and minimize adverse effects and maximize beneficial effects. (2) Site plans shall be required for all developments for which a development permit is required, except for the modification of an existing single-family residential structure or the construction of one single-family residence. (3) Site plans shall include, but not be limited to, the submission of an adequate and detailed description of the project, including activities undertaken to ensure consistency with the objectives of the Designation Order; maps which specify soil types, topography, and the expected physical changes in the site as the result of the development; the measures which address adverse environmental effects. (4) Site plans shall include standards to ensure that structure, road, screening, landscaping, construction placement, maintenance, and storm water runoff are compatible with the character and use of the river corridor in that district. (5) Site plans shall provide opportunities for open	**F. Dimensional standards and criteria.** 7. Line of Sight In Rural Open Space, Urban Developed, and Urban Open Space districts, the development of new and expansion of existing industrial and commercial uses and development shall be permitted, if it cannot be seen from the NHWM on the opposite side of the river. Water-related commercial and industrial uses shall not be subject to this requirement.

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
	space establishment and for public viewing of the river corridor whenever applicable, and shall contain specific conditions with regard to buffering, landscaping, and re-vegetation. b. **Structures.** Structure site and location shall be regulated to ensure that riverbanks, bluffs and scenic overlooks remain in their natural state, and to minimize interference with views of and from the river, except for specific uses requiring river access. d. **Access Routes.** Commercial and industrial developments adjacent to roadways shall be required to provide off-street parking, service roads and limited controlled access points to highways. (Except in cases of extreme hardship, highway access for any development within 250' of a bridge or bridge ramp shall be prohibited.)	
Public Transportation Facilities	*See C.2.a., b., and d. listed on the first page of this handout.* C.7. LGUs and state agencies shall develop plans and regulations for transportation and public utilities developments in accordance with the following guidelines: a. Existing and potential utility and transportation facility crossings shall be identified and river crossings shall be minimized and concentrated at existing crossings where possible. b. The Corridor shall not be used merely as a convenient right-of-way and new or modified transportation and utility facilities shall complement the planned land and water uses and shall not stimulate incompatible development. c. In planning and designing the construction or re-	**D. Permitted public facilities.** 4. Transportation facilities. The construction or reconstruction of all transportation facilities shall be permitted in all the districts, subject to the following standards and criteria: a. The following guidelines shall be applied whenever practicable in selecting routes for transportation facilities: (1) careful consideration should be given to the provision of scenic overlooks for motorists, safe pedestrian crossing and safe pedestrian pathways along the river; (2) if possible, provide access to the riverfront in public ownership, and allow reasonable public use of the land between the river and the transportation facility; (3) steep slopes shall be avoided; (4) scenic intrusion into stream, valley and open exposures of water shall be avoided; (5) scenic intrusion into areas such as ridge crests and high points shall be avoided (6) wetlands shall be avoided;

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	construction of all public transportation facilities which occur within the river corridor, consideration shall be given to the provision of scenic overlooks for motorists, safe pedestrian crossings and facilities along the River Corridor, access to the riverfront in public ownership and reasonable use of the land between the river and the transportation facility. C.8. LGUs and regional and state agencies shall develop capital improvement programs which are consistent with the following guidelines: a. A five year capital improvement program or public facilities program shall be developed which covers all public projects to be sited in the corridor. b. The capital improvement program or public facilities program shall specify the sequence of actions to be undertaken by each public agency and shall be consistent with the standards and guidelines in Section B and C.	(7) run along fringes of forests rather than through them. But if it is necessary to route through forests, then utilize open areas in order to minimize destruction of commercial forest; (8) soils whose high susceptibility to erosion would create sedimentation and pollution problems during & after construction shall be avoided; (9) areas of unstable soils which would be subject to extensive slippage shall be avoided; (10) areas with high water tables, especially if construction requires excavation, shall be avoided; (11) locate new roads to avoid cuts and fills so as to blend into the natural terrain so it appears to be a part of the natural landscape; (12) open space recreation areas shall be avoided. b. Transportation facilities shall be subject to the dimensional standards and criteria in section F, except at crossing points.' c. The following guidelines shall be applied when practicable in constructing transportation facilities: (1) reconstruction of an existing public road or railroad should be performed in a manner that would minimize any adverse effect on the natural beauty and environment of the river; (2) effective erosion and sedimentation control programs shall be conducted during all clearing, construction or reconstruction operations in order to prevent the degradation of the river and its adjacent lands; (3) construction across wetlands shall take place in a manner which minimizes damage to vegetation, and in a manner preventing erosion and sedimentation; (4) construct at times when local fish and wildlife are not spawning or nesting. d. Safety considerations. Developers must adhere to applicable Federal and State safety regulations with regard to new road construction or reconstruction of an existing road.
Public Recreational Facilities	*See C.2.a., b., and d. listed on the first page of this handout.* C. 6. LGUs and regional and state agencies shall develop plans and regulations to maximize the creation and maintenance of open space and recreational	**C. Permitted uses.** 7. Recreational uses a. In all districts, recreational uses and structures and accessory uses or appurtenances shall be permitted and shall be subject to the Dimensional standards and criteria in section F. Water-related commercial recreation uses shall not be subject to the dimensional standards and criteria in section

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
	potential of the Corridor in accordance with the following guidelines: a. Existing and potential sites for the following uses shall be identified and inventoried. (1) Neighborhood, municipal, county and regional parks; (2) Scenic overlooks, scenic views, and public observation platforms; (3) Protected open space areas, including islands, gorges, wildlife preservation areas, and natural areas; (4) Beaches and undeveloped river frontage on backwaters, which are suitable for recreation purposes; (5) Commercial marinas and boat launching facilities; (6) Public access points to the river; (7) Historic sites and districts. b. The Metropolitan Council shall prepare a general trailway plan for the entire length of the River Corridor which links regional parks. c. Local units of government shall identify the potential location of trails within their jurisdictions, including related problems and proposed solutions. d. Plans and programs to acquire sites for public access to the river and to protect open space areas shall be developed. e. Programs to acquire and manage undeveloped islands in their natural state and to encourage the restoration of other islands for recreation open space uses shall be adopted.	F. b. Within Urban Open Space Districts, recreation uses on islands and lands between the river and blufflines shall be only for public recreation uses, historic preservation, and wildlife preserves.
Public Transportation & Utilities	*No standards or guidelines in EO 79-19.*	**D. Permitted public facilities.** 1.h. and 4.e. Right-of-way maintenance (1) If possible, natural vegetation of value to fish or wildlife, which does not pose a hazard to or restrict reasonable use of the utility, shall be allowed to grow

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		in the right-of-way; (2) Where vegetation has been removed, new vegetation consisting of native grasses, herbs, shrubs, and low growing trees, shall be planted and maintained on the right-of-way; (3) Chemical control of vegetation should be avoided when practicable, but where such methods are necessary, chemicals used and the manner of their use must be in accordance with rules, regulations, and other requirements of all state & federal agencies with authority over the use.

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Public Utilities	*See C.2.a., b., and d. listed on the first page of this handout.* C.7. LGUs and state agencies shall develop plans and regulations for transportation and public utilities developments in accordance with the following guidelines: a. Existing and potential utility and transportation facility crossings shall be identified and river crossings shall be minimized and concentrated at existing crossings where possible. b. The Corridor shall not be used merely as a convenient right-of-way and new or modified transportation and utility facilities shall complement the planned land and water uses and shall not stimulate incompatible development. c. In planning and designing the construction or re-construction of all public transportation facilities which occur within the river corridor, consideration shall be given to the provision of scenic overlooks for motorists, safe pedestrian crossings and facilities along the River Corridor, access to the riverfront in public ownership and reasonable use of the land between the river and the transportation facility. C.8. LGUs and regional and state agencies shall develop capital improvement programs which are consistent with the following guidelines: a. A five year capital improvement program or public facilities program shall be developed which covers all public projects to be sited in the corridor. b. The capital improvement program or public facilities program shall specify the sequence of	**D. Permitted public facilities.** 1. Transmission Services In all the districts, the construction of new and reconstruction of existing transmission services shall meet the following standards. a. The Department of Natural Resources (DNR) in reviewing permit applications for all transmission service crossings on the Mississippi River, Minnesota River, or of State lands requiring a permit from the DNR pursuant to Minn. Stat. §§ 84.415 or 105.42 shall give primary consideration to crossings that are proposed to be located within or adjacent to existing right-of-ways for public facilities, such as railroads, roadways, bridges, and existing transmission services. b. Transmission services of under 200 kilovolts, which cross lands within the River corridor shall require a special use permit from the local unit of government. Local units of government shall apply the standards set forth in sections D.l.c. through h when processing applications for a special use permit. c. When routing transmission services of under 200 kilovolts, the following shall be avoided where practicable: (1) steep slopes; (2) scenic intrusions into streams, valleys, and open exposures of water; (3) scenic intrusions into areas such as ridge crests and high points; (4) creating tunnel vistas [such as building deflections into the route]; (5) wetlands; (6) forests by running along fringe rather than through them. If necessary to route through forests, utilize open areas in order to minimize cutting; (7) soils susceptible to erosion, which would create sedimentation and pollution problems; (8) areas of unstable soils which would be subject to extensive slippages; (9) areas with high water tables, especially if construction requires excavation; (10) open space recreation areas. d. Transmission services shall be subject to the dimensional standards and criteria in section F, except at crossing points. e. Structure design of transmission services. With regard to locating the utility, overhead or underground: (1) primary considerations shall be given to underground placement to

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
	actions to be undertaken by each public agency and shall be consistent with the standards and guidelines in Section B and C.	minimize visual impact. When considering overhead placement, proposers shall explain the economic, technological or land characteristic factors which make underground placement infeasible. Economic considerations alone shall not justify overhead placement. (2) if overhead placement is necessary, the crossing should be hidden from view as much as practicable; (3) with regard to the appearance of the structures, they shall be made as compatible as practicable with the natural area with regard to: height and width, materials used, and color; (4) with regard to the width of the right-of-way, the cleared portion of the right-of-way should be kept to a minimum. f. In the construction of transmission services, the following guidelines shall be applied whenever practicable: (1) construction in wetlands shall minimize damage to vegetation, prevent erosion and sedimentation; (2) construction shall be undertaken at times when local fish and wildlife are not spawning or nesting; (3) effective erosion and sedimentation control programs shall be conducted during all clearing, construction, or reconstruction operations in order to prevent the degradation of the river and adjacent lands. g. Safety considerations Developers must adhere to applicable Federal and State safety regulations, both with regard to prevention (such as safety valves and circuit breakers) and with regard to emergency procedures in the event of failure (fire suppression, oil spill clean-up). 3. Essential services and public safety facilities. Essential services and public safety facilities are permitted in all the districts. They are subject to D(l) Regulation.

Attachment 14: Vegetation Management in Executive Order 79-19

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
Vegetation Management	C. 1. Each LGU within the river corridor shall prepare plans and regulations to protect environmentally sensitive areas in accordance with the following guidelines: a. Each LGU shall, with assistance of the Metropolitan Council and state agencies: (7) Prepare plans and regulations to minimize site alteration and for beach and riverbank erosion control. (8) Prepare plans and regulations for management of vegetative cutting. C.2. Each LGU and state agency shall prepare plans and regulations to protect and preserve the aesthetic qualities of the river corridor, which provide for the following considerations: a. **Site Plans.** Site plans shall be required to meet the following guidelines: (4) Site plans shall include standards to ensure that structure, road, screening, landscaping, construction placement, maintenance, and storm water runoff are compatible with the character and use of the river corridor in that district. (5) Site plans shall….contain specific conditions with regard to buffering, landscaping, and revegetation. b. **Structures.** Structure site and location shall be regulated to ensure that riverbanks, bluffs, and scenic overlooks remain in their natural state, and to minimize interference with views of and from the river, except	**E. Earthwork and vegetation** 2. Vegetation management. a. In Rural Open Space, Urban Developed, and Urban Open Space districts, the following standards shall apply: (1) On developed islands, public recreation lands, the slope or face of bluffs within 200' of the NHWM of the river, and within the area 40' landward of blufflines, clear cutting shall not be permitted. (2) On all other lands within these districts, clear cutting shall be guided by the following provisions: a. clear cutting shall not be used where soil, slope, or other watershed conditions are fragile and subject to injury; b. clear cutting shall be conducted only where clear cut blocks, patches, or strips are, in all cases, shaped and blended with the natural terrain; c. the size of clear cut blocks, patches, or strips shall be kept at the minimum necessary; d. where feasible all clear cuts shall be conducted between September 15 and May 15. If natural regeneration will not result in adequate vegetative cover, areas in which clear cutting is conducted shall be replanted to prevent erosion and to maintain the aesthetic quality of the area; where feasible, replanting shall be performed in the same spring, or the following spring. (3) The selective cutting of trees greater than 4" in diameter may be permitted by LGUs when the cutting is appropriately spaced and staged so that continuous natural cover is maintained. b. In the Urban Diversified district: (1) On the slope or face of bluffs and within areas 40' landward from

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
	for specific uses requiring river access. e. **Existing Development.** Local plans and regulations shall include provisions to: (1) Retain existing vegetation and landscaping. (4) Provide for the screening of existing development which constitutes visual intrusion, wherever appropriate.	established blufflines, clear cutting shall not be permitted; (2) The selective cutting of trees greater than 4" in diameter may be permitted by LGUs when the cutting is appropriately spaced and staged so that continuous natural cover is maintained. c. These vegetative management standards shall not prevent the pruning and cutting of vegetation to the minimum amount necessary for the construction of bridges and roadways and for the safe installation, maintenance and operation of essential services and utility transmission services which are permitted uses. **F. Dimensional standards and criteria.** 7. Line of Sight. In Rural Open Space, Urban Developed, and Urban Open Space districts, the development of new and expansion of existing industrial and commercial uses and development shall be permitted, if it cannot be seen from the NHWM on the opposite side of the river. Water-related commercial and industrial uses shall not be subject to this requirement.

Attachment 15: Water Quality in Executive Order 79-19

Standard Type		Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
Wetland, Floodplain, and Stormwater Management		**C.1.** Each local unit of government within the river corridor shall prepare plans and regulations to protect environmentally sensitive areas in accordance with the following guidelines. a. Each local unit of government shall, with the assistance of the Metropolitan Council and state agencies: 1) Identify and prepare an inventory of: (a) floodplains, (b) wetlands…. 2) Prepare a floodplain ordinance if it does not have a floodplain ordinance in effect; 3) Prepare plans and regulations to protect wetlands. 5) Prepare plans and regulations to minimize direct overland runoff and improve the quality of runoff onto adjoining streets and watercourses.	**F. Dimensional standards and criteria** 1. Objectives The objectives of dimensional standards and criteria are: to maintain the aesthetic integrity and natural environment of certain districts, to reduce the effects of poorly planned shoreline and bluffline development, to provide sufficient setback for sanitary facilities, to prevent pollution of surface and groundwater, to minimize flood damage, to prevent soil erosion, and to implement metropolitan plans, guides and standards. 3. 3. Lot size. a. In the rural open space and urban developed districts, the following minimum lot sizes shall be required: (1) in unsewered areas, the minimum lot size shall be five acres per single family unit; (2) in sewered areas, the minimum lot size shall be consistent with the local zoning ordinance. b. In the urban open space and urban diversified districts, the minimum lot size shall be consistent with the local zoning ordinance.
Grading, Filling, & Erosion Control	**Shore Impact, Bluff Impact, & Slope Preservation Zones (SIZ, BIZ, & SPZ's)**	**C.1.** Each local unit of government within the river corridor shall prepare plans and regulations to protect environmentally sensitive areas in accordance with the following guidelines. a. Each local unit of government shall, with the assistance of the Metropolitan Council and state agencies: (6) Prepare plans and regulations to minimize site alteration and for beach and riverbank erosion control; **C.2. a. Site Plans**. Site plans shall be required to meet the following guidelines: (1) New development and expansion shall be permitted only after the approval of site plans which adequately assess and minimize adverse effects and maximize beneficial effects.	**E. Earthwork and Vegetation** 1. In all districts, the following provisions shall apply to grading and filling: a. Grading, filling, excavating, or otherwise changing the topography landward of the ordinary high water mark shall not be conducted without a permit from the local authority. A permit may be issued only if: (1) earthmoving, erosion, vegetative cutting, and the destruction of natural amenities is minimized; (2) the smallest amount of ground is exposed for as short a time as feasible; (3) temporary ground cover, such as mulch, is used and

Standard Type		Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
		(3) Site plans shall include, but not be limited to, the submission of an adequate and detailed description of the project, including activities undertaken to ensure consistency with the objectives of the Designation Order; maps which specify soil types, topography, and the expected physical changes in the site as the result of the development; the measures which address adverse environmental effects. (4) Site plans shall include standards to ensure that structure, road, screening, landscaping, construction placement, maintenance, and storm water runoff are compatible with the character and use of the river corridor in that district.	permanent ground cover, such as sod is planted; (4) methods to prevent erosion and trap sediment are employed; and (5) fill is established to accepted engineering standards. b. A separate grading and filling permit is not required for grading, filling, or excavating the minimum area necessary for a building site, essential services, sewage disposal systems, and private road and parking areas undertaken pursuant to a validly issued building permit.
Grading, Filling, & Erosion Control	**Erosion, Sediment Control, Riprap, & Retaining Walls**	**C.2. b. Structure** site and location shall be regulated to ensure that riverbanks, bluffs and scenic overlooks remain in their natural state, and to minimize interference with views of and from the river, except for specific uses requiring river access. **e. Existing Development.** Local plans and regulations shall include provisions to retain existing vegetation and landscaping.	**I. Administration** 1. Local units of government and regional and state agencies shall notify the Council of the following types of proposed development within the Mississippi River Corridor: e. Any development on or involving the alteration of: (4) a slope of greater than 12 percent; (5) the removal of 5 contiguous acres or more of vegetative cover; (6) the grading or filling of 20 contiguous acres of land; (7) the deposit of dredge spoil; (8) more than 50 linear feet of a riverbank. h. Any development which would result in the discharge of water into or withdrawal of water from the Mississippi River which would require a state permit.

Attachment 16: Subdivisions and Planned Unit Developments in Executive Order 79-19

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
Subdivisions, PUDs, and Redevelopment	C.2. Each LGU and state agency shall prepare plans and regulations to protect and preserve the aesthetic qualities of the river corridor, which provide for the following considerations: a. **Site Plans.** Site plans shall be required to meet the following guidelines: (1) New development and expansion shall be permitted only after the approval of site plans which adequately assess and minimize adverse effects and maximize beneficial effects. (2) Site plans shall be required for all developments for which a development permit is required, except for the modification of an existing single-family residential structure or the construction of one single-family residence. (3) Site plans shall include, but not be limited to, the submission of an adequate and detailed description of the project, including activities undertaken to ensure consistency with the objectives of the Designation Order; maps which specify soil types, topography, and the expected physical changes in the site as the result of the development; the measures which address adverse environmental effects. (4) Site plans shall include standards to ensure that structure, road, screening, landscaping, construction placement, maintenance, and storm water runoff are compatible with the character and use of the river corridor in that district. (5) Site plans shall provide opportunities for open space establishment and for public viewing of the river corridor whenever applicable, and shall contain specific conditions with regard to buffering, landscaping, and re-vegetation. c. **Clustering**. The clustering of structures and the use of designs which will reduce public facility costs and improve scenic quality shall be encouraged. The location of clustered high-rise structures may be proposed where public services are available and adequate and compatible with adjacent land uses.	**F. Dimensional standards and criteria** 1. Objectives The objectives of dimensional standards and criteria are: to maintain the aesthetic integrity and natural environment of certain districts, to reduce the effects of poorly planned shoreline and bluffline development, to provide sufficient setback for sanitary facilities, to prevent pollution of surface and groundwater, to minimize flood damage, to prevent soil erosion, and to implement metropolitan plans, guides and standards. 3. 3. Lot size. a. In the rural open space and urban developed districts, the following minimum lot sizes shall be required: (1) in unsewered areas, the minimum lot size shall be five acres per single family unit; (2) in sewered areas, the minimum lot size shall be consistent with the local zoning ordinance. b. In the urban open space and urban diversified districts, the minimum lot size shall be consistent with the local zoning ordinance.
Natural Area Protection and/or Restoration	C.6. Local units of government and regional and state agencies shall develop plans and regulations to maximize the creation and maintenance of open space and recreational potential of the Corridor in accordance with the following guidelines:	*No standards in the IDR.*

Standard Type	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
	a. Existing and potential sites for the following uses shall be identified and inventoried. (1) Neighborhood, municipal, county and regional parks; (2) Scenic overlooks, scenic views, and public observation platforms; (3) Protected open space areas, including islands, gorges, wildlife preservation areas, and natural areas; (4) Beaches and undeveloped river frontage on backwaters, which are suitable for recreation purposes; (5) Commercial marinas and boat launching facilities; (6) Public access points to the river; (7) Historic sites and districts. b. The Metropolitan Council shall prepare a general trailway plan for the entire length of the River Corridor which links regional parks. c. Local units of government shall identify the potential location of trails within their jurisdictions, including related problems and proposed solutions. d. Plans and programs to acquire sites for public access to the river and to protect open space areas shall be developed. e. Programs to acquire and manage undeveloped islands in their natural state and to encourage the restoration of other islands for recreation open space uses shall be adopted.	
Land Dedication	C.6.f**.** In the development of residential, commercial and industrial subdivisions, and planned development, a developer shall be required to dedicate to the public reasonable portions of appropriate riverfront access land or other lands in interest therein. In the event of practical difficulties or physical impossibility, the developer shall be required to contribute an equivalent amount of cash to be used only for the acquisition of land for parks, open space, storm water drainage areas or other public services within the River Corridor.	*No standards in the IDR.*

Attachment 17: Uses in Executive Order 79-19

Use	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
All Uses	*No general standards or guidelines in EO 79-19.*	**C. Permitted uses.** 1. Any land or water development which is in conformance with the standards and guidelines of the Interim Development Regulations shall be permitted. 3. Residential Development. Residential development shall be permitted in all the districts. All structures and accessory uses or appurtenances of residential development shall be subject to the dimensional standards and criteria in section F of these Interim Development Regulations.
Buffer Requirements	C.1.a. Each LGU shall, with assistance of the Metropolitan Council and state agencies: (6) Prepare plans and regulations to minimize site alteration and for beach and riverbank erosion control. (7) Prepare plans and regulations for management **of** vegetative cutting.	*See **Attachment 14 – Vegetation***
Feedlots	*No standards or guidelines in EO 79-19.*	**C. Permitted uses.** 5. Agricultural Uses. All agricultural uses except new feedlots may be permitted in all the districts.
Forestry	*See **Attachment 14 – Vegetation***	*See **Attachment 14 – Vegetation***
Signs	C.2. Each LGU and state agency shall prepare plans and regulations to protect and preserve the aesthetic qualities of the river corridor, which provide for the following considerations: f. **Signs.** Local units of government shall adopt ordinances for the amortization and removal of non-conforming general advertising signs, and to prohibit the visibility of advertising signs from the river, except in the Urban Diversified district:	**C. Permitted uses.** 8. Signs a. In Rural Open Space, Urban Developed, and Urban Open Space districts: (1) general advertising signs not visible from the river are permitted; (2) all other general advertising signs shall be prohibited. b. In Urban Diversified districts, general advertising signs are permitted.
Aggregate Mining & Excavation	C.5. Local units of government shall develop plans and regulations for industrial and commercial developments in the River Corridor in accordance with the following guidelines: d. The impact of potential mining and extraction sites or other	**C. Permitted uses.** 6. Mining and Extraction. a. In Rural Open Space, Urban Developed, and Urban Diversified districts:

Use	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
	incompatible uses shall be minimized. e. Land reclamation and reforestation of the mining site shall be regulated.	i. new mining and extraction may be permitted and shall be subject to the dimensional standards and criteria in section F (Dimensional Standards & Criteria); ii. new and, where practicable, existing extraction uses shall be appropriately screened from view of the river by establishing and maintaining natural screening devices; iii. the unscreened boundaries of mining and extraction areas shall be limited to only the loading area; iv. existing and future extractive uses shall be required to submit land reclamation and reforestation plans compatible with these Interim Development Regulations, and v. only one barge loading area which shall be limited to the minimum size practicable shall be permitted for each mining or extraction operation. b. In Urban Open Space districts, new mining and extraction operation shall not be permitted.
River-Dependent Commercial & Industrial Uses, Water Supply, Wastewater Treatment, Stormwater Facilities, Hydropower	C.4. Local units of government shall develop plans and provide guidance to ensure that the surface uses of the river is compatible with the characteristics and use of the districts in accordance with the following guidelines: a. The present 9' navigation channel shall be maintained. b. Provision shall be made for the use of the river for water transportation which is consistent with adopted state and regional policies and regulations and applicable federal laws and to minimize any adverse effects associated with such facilities. c. Local plans shall identify areas physically suitable for barge slips and barge fleeting, based on such considerations as safety, maneuverability, operational convenience, amount of construction and/or excavation required, and environmental impacts; and d. Local plans shall specify which of those areas found physically suitable may be used for barge slips and barge fleeting areas in the future. Preference should be given to those areas where new barge slips and associated facilities can be clustered, where required metropolitan services are already available, and where use of the riverfront for barge slips and fleeting areas, and access to them, is compatible with adjacent land use and public facilities. e. Local plans shall identify, whenever practicable, locations where river	**C. Permitted uses.** 4. Commercial and Industrial Uses a. In rural open space districts and urban developed districts, the development of new and expansion of existing industrial and commercial uses and development shall be permitted if: (1) it does not require expansion or upgrading of Metropolitan Systems prior to the schedule set forth in adopted Metropolitan Plans; (2) it meets the dimensional standards and criteria in section F; (3) it will not encroach upon future local or regional parks and recreation open space identified in the Metropolitan Council's development guide/policy plan for recreation open space or in the local plans and programs. b. In urban open space districts, the development of new and expansion of existing commercial and industrial uses and development shall be permitted on lands which are on the landward side of all blufflines, if it meets the dimensional standards and criteria in section F. c. In urban diversified districts, new and expansion of existing industrial and commercial developments shall be allowed, if it

Use	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
	dredge spoil can be utilized consistent with natural geological appearances or processes and adjacent land uses. f. Where there is potential conflict of surface use, state and local governments shall enact appropriate water surface use regulation. g. The Minnesota Energy Agency shall be responsible for recommending to the EQC a strategy for the development of a coal transportation plan for the metropolitan area. C.5. Local units of government shall develop plans and regulations for industrial and commercial developments in the River Corridor in accordance with the following guidelines: a. Areas for new or expanded industrial and commercial developments, where urban services are available, and the premature expansion or upgrading of the Metropolitan systems will not be required, shall be identified. b. The existing industrial waste discharge points, sanitary, and storm water discharge points shall be identified. c. Local plans should give consideration to providing for future industrial and commercial uses that require water access including, but not limited to such uses as, transportation, water supply & waste discharge. This does not preclude the locating of non-water related uses within the Corridor. C.10. LGUs and regional and state agencies shall prepare plans and regulations in accordance with the natural characteristics and the character of existing development in the River Corridor in accordance with the following guidelines: b. The City of St. Paul shall prepare plans and regulations to balance open space use and industrial and commercial developments in the Pig's Eye Lake area.	meets the dimensional standards and criteria in section F. d. In Rosemount and Inver Grove Heights urban diversified district, new and expansion of existing industrial and commercial development shall be permitted, if it does not require premature expansion of Metropolitan public services. **D. Permitted public facilities.** 2. Sewage treatment plants – sewage outfalls, water intake facilities a. In Rural Open Space, Urban Developed, and Urban Diversified districts, the provision of sewage treatment plants, sewage outfalls and water intake facilities: (1) wherever practicable, shall conform with the dimensional standards and criteria in section F; (2) shall dedicate the unused river frontage after construction, for public access or recreation open space use; (3) shall not include new combined storm and sanitary sewer outfalls. b. In Urban Open Space district: (1) no new sewage treatment plans shall be permitted in this district. However, the Metropolitan Waste Control Commission may expand the Metropolitan Wastewater Treatment Plant at the Pig's Eye Lake area, if the expansion plans are approved by the Metropolitan Council and they are consistent with the City of St. Paul's riverfront plan approved by the Council under section D of the standards and guidelines for preparing plans and regulations; (2) no new water intake facilities shall be permitted; (3) no new combined storm water and sanitary outfalls shall be permitted. 5. Barge Facilities a. In Rural Open Space and Urban Developed districts, the following standards shall apply: (1) the expansion of existing barge slips shall be permitted; (2) no new barge slips shall be permitted until the local riverfront plans and regulations have been reviewed by the Metropolitan Council and approved by the Council according to the procedures in MN Regs. MEQC 55(c).

Use	Executive Order 79-19 Current Standards & Guidelines *(Currently in effect; all local plans and ordinances must be consistent with these standards and guidelines.)*	Interim Development Regulations (IDR) *(EO 79-19 provided the IDRs as **temporary standards** until local MRCCA ordinances were approved by the EQB. Hastings, Brooklyn Center, and a small area in Hennepin County are still subject to the IDRs because they do not have approved MRCCA ordinances. The DNR used some of the IDRs in drafting new MRCCA rules, and some LGUs have used portions of the IDRs in their current ordinances. The IDRs are provided here for reference. Local ordinances, which vary widely, will contain the current effective standards in any given community.)*
		b. In Urban Open Space districts, the following standards shall apply: (1) no new barge slips shall be permitted; (2) no barge fleeting areas shall be permitted until the local riverfront plans and regulations have been reviewed by the Metropolitan Council and approved by the Council according to the procedures in MN Regs. MEQC 55(c). c. In Urban Diversified districts, all barge facilities are permitted. **F. Dimensional standards and criteria.** 7. Line of Sight. In Rural Open Space, Urban Developed, and Urban Open Space districts, the development of new and expansion of existing industrial and commercial uses and development shall be permitted, if it cannot be seen from the NHWM on the opposite side of the river. Water-related commercial and industrial uses shall not be subject to this requirement.

MINNESOTA Management & Budget

Office Memorandum

Date: February 23, 2016

To: Beth Carlson, Rules Coordinator
Minnesota Department of Natural Resources

From: Ify Onyiah
Executive Budget Officer

Phone: 651-201-8020

Subject: M.S. 14.131 Review of Proposed Rules relating to the Mississippi River Corridor Critical Area (MRCCA)

The Minnesota Department of Natural Resources (DNR) proposes new, permanent Minnesota Rules, Chapter 6106 governing the Mississippi River Corridor Critical Area (MRCCA). The proposed rules will replace Executive Order 79-19 which has guided land use, districting, and local plans and ordinances in MRCCA since the 1970s. Pursuant to M.S. 14.131, DNR has asked the Commissioner of Minnesota Management and Budget (MMB) to help evaluate the fiscal impact and fiscal benefit of the proposed rule changes on local units of government.

Evaluation

On behalf of the Commissioner of MMB, I reviewed the proposed rule changes and the related Statement of Need and Reasonableness (SONAR) and consulted with agency staff to determine the fiscal impact and benefit of the proposed rules on local units of government.

The proposed rules provide standards and criteria for land use in the MRCCA, administration of the MRCCA program, and establish districts within the MRCCA. The rules are intended to improve and codify standards and procedures to protect bluffs, vegetation, public river corridor views, water, and other conditions in the MRCCA, originally included in Executive Order 79-19.

As identified in the SONAR, these rules will have a fiscal impact on local units of government. There are 30 local units of government: cities, counties, and townships, in the MRCCA. The proposed rules require most of these units of government to update MRCCA plans and ordinances to conform and comply with the new rules. DNR completed a survey of the units of the local governments to assess the cost of these updates and based on that survey estimates a cost under $20,000 per local government with costs in excess of $100,000 for two large cities. DNR has requested comments from local government representatives at several points during the rulemaking process, to assess the impact and value of the rules, and has modified the rules to address some of the concerns raised. Several of the rules codify current practice and are not expected to increase costs to local governments. The rules may also require some additional permitting work, for instance for vegetation, but this work is not expected to vary significantly from current permitting programs. The rules are also intended to provide fiscal benefit through clearer standards and reduced complexity.

Additionally, costs will be incurred by DNR to implement these rules. DNR staff will review, assess, and local government plans and ordinances for compliance with these rules over the coming years and will conduct trainings for local governments on the new rules. DNR has completed a preliminary assessment of these costs. Finally, the Metropolitan Council is also required to review local plans and ordinances and other state agencies may be required to comply with these rules resulting in incremental costs.

Based on this information, I believe that DNR has adequately analyzed and presented the potential costs and benefits of the proposed rules on local units of government.

cc: Barb Juelich, Chief Financial Officer, Minnesota Department of Natural Resources
Jennifer Shillcox, Ecological and Water Resources Division, Minnesota Department of Natural Resources
Michelle Weber, Team Lead, Minnesota Management and Budget