

STATE OF MINNESOTA DEPARTMENT OF NATURAL RESOURCES DIVISION OF ECOLOGICAL AND WATER RESOURCES

IN THE MATTER OF PROPOSED RULES RELATING TO THE MISSISSIPPI RIVER CORRIDOR CRITICAL AREA (MRCCA)

STATEMENT OF NEED AND REASONABLENESS (SONAR)

Page left blank intentionally.

TABLE OF CONTENTS

		Page
Introductio	n	1
Ove	erview	1
Hist	tory of MRCCA Designation & Rulemaking Efforts	2
Nee	ed for the Proposed Rules	6
Alternative	Format	7
Statutory A	uthority	8
Regulatory	Analysis	9
Performand	e-Based Rules	17
Additional	Notice	17
Consultatio	n With MMB on Local Government Impact	18
Determinat	ion About Rules Requiring Local Implementation	18
Cost of Con	nplying for Small Business or City	19
List of Witn	esses	21
Bluff Protec	ction Standards	22
Rule by Rul	e Analysis	29
6106.0010	POLICY	29
6106.0020	PURPOSE	29
6106.0030	SCOPE	29
6106.0050	DEFINITIONS	29
6106.0060	ADMINISTRATION OF PROGRAM	35
6106.0070	PREPARATION, REVIEW AND APPROVAL OF PLANS AND ORDINANCES	37
6106.0080	ADMINISTRATIVE PROVISIONS FOR ORDINANCES	40
6106.0090	INCORPORATIONS BY REFERENCE	42
6106.0100	DISTRICTS	42
6106.0110	USES	44
6106.0120	DIMENSIONAL STANDARDS	45
6106.0130	GENERAL DEVELOPMENT STANDARDS FOR PUBLIC FACILITIES	51
6106.0140	GENERAL DEVELOPMENT STANDARDS FOR PRIVATE FACILITIES	52
6106.0150	VEGETATION MANAGEMENT STANDARDS	54
6106.0160	LAND ALTERATION AND STORMWATER MANAGEMENT STANDARDS	58
6106.0170	SUBDIVISION AND LAND DEVELOPMENT STANDARDS	62
6106.0180	EXEMPTIONS FROM SETBACKS, HEIGHT LIMITS, AND OTHER REQUIREMENTS	66
Conclusion		60

Exhibits	. 73
Exhibit A: Executive Order 130 and Amendments	
Exhibit B: Executive Order 79-19	
Exhibit C: Metropolitan Council Resolution 79-84	
Exhibit D: Reorganization Order 170	
Exhibit E: 2008 DNR Report to Legislature	
Exhibit F: 2014 DNR Report to Legislature	
Exhibit G: Proposed MRCCA District Maps	
List of Figures	
Figure 1: MRCCA boundary and current districts	2
Figure 2: Photo of "weeping wall"/bluff seepage	22
Figure 3: Photo of bluff failure on Highway 13	
Figure 4: Comparison of bluff definitions	24
Figure 5: Photo of property on 18% slope with 10 foot rise	25
Figure 6: Photo of property on 18% slope with 10 foot rise	25
Figure 7: Photo of existing structure near top of bluff (under proposed definition)	26
Figure 8: Photo of existing structure near bottom of bluff (under proposed definition)	26
Figure 9: Bluff and bluff impact zone diagram	28
Figure 10: Conventional subdivision compared to conservation subdivision design	31
Figure 11: Shore impact zone diagram	34
Figure 12: Photo of rip rap installation	59
List of Tables	
Table 1: Cost estimates for local governments to amend MRCCA plans and ordinances	14
Table 2: Percentage of open space required by district	64

Introduction

Overview

This document explains the need and reasonableness of proposed rules governing the Mississippi River Corridor Critical Area (MRCCA), and summarizes the evidence and arguments that the Minnesota Department of Natural Resources (DNR) is relying upon to justify the proposed rules. It has been prepared to satisfy the requirements of Minn. Stat. § 14.131 (2015) and Minn. R. 1400.2070 (2015).

The purpose of the proposed rules is to establish districts and minimum standards and criteria to guide land use and development within the MRCCA, consistent with the purpose of Minn. Stat. § 116G.15 (2015). Upon adoption, the proposed rules will replace Executive Order 79-19, which has guided land use and development within the MRCCA for the past 35 years.

The proposed rules cover a variety of topics including:

- the administration of the MRCCA program
- the establishment of districts within the MRCCA, taking into account:
 - o the appropriate number of districts within the MRCCA in each local government unit
 - o existing local plans and policies
 - existing local ordinances and conditions
 - key identified resources and features to be protected or enhanced within the MRCCA
- the establishment of minimum development guidelines and standards, taking into account:
 - o the intent of each district
 - existing local plans and policies
 - existing local ordinances and conditions
 - o key identified resources and features to be protected or enhanced
 - select uses
 - o structure height and setbacks
 - o private and public infrastructure
 - protection of bluffs and very steep slopes
 - o vegetation management
 - o land alteration and stormwater management
 - lot size, subdivision, and design standards

Many of these topics are currently covered by Executive Order 79-19 and are included in existing local MRCCA plans and ordinances.

The DNR has made extensive efforts to obtain input and information to develop the districts, standards, and criteria in the proposed rules. Since 2009, the DNR has met numerous times with local governments in the MRCCA (both individually and in groups), convened geographically-based multi-interest work groups, held numerous public informational meetings, published two Requests for Comments with

extended comment periods beyond the minimum required, and met with other federal and state agencies and interest groups to gain feedback on early drafts of these rules. The DNR also engaged local governments and other agencies in conducting analysis necessary to develop the rules; for example, the DNR worked with the City of St. Paul and National Park Service to develop and test a bluff mapping tool to inform the definition of bluffs, as discussed later under "Bluff Protection Standards."

History of the MRCCA Designation and Rulemaking Efforts

The MRCCA encompasses many of the Twin Cities metropolitan area's most significant natural and cultural resources, including: water, navigational capabilities, scenic views, geology and soils, vegetation, minerals, flora and fauna, cultural and historic resources and land and water-based recreational resources. The MRCCA is home to a full range of residential neighborhoods, as well as river-related commerce, industry, and transportation. Though the river corridor has been extensively developed, many intact and remnant natural areas remain, including geomorphological features such as bluffs, islands, floodplains, wetlands, riparian zones, and native aquatic and terrestrial flora and fauna.¹

To manage and protect these vital resources, Governor Wendell Anderson designated the MRCCA in 1976 by Executive Order 130, attached hereto as Exhibit A, under authority of the Critical Areas Act of 1973.²

The designation was renewed by Governor Albert Quie in 1979 by Executive Order 79-19, and made permanent that same year by resolution of the Metropolitan Council.

The MRCCA covers a 72-mile stretch of the Mississippi River through the Twin Cities Metropolitan Area, extending from the townships 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). The legal boundary of the MRCCA is established in Executive Order 79-19, attached hereto as Exhibit B. A copy is also on file at the Legislative Reference Library. The MRCCA varies in width and includes 54,000 acres of water and public and private lands. A total of 30 communities have land within the MRCCA, including 21 cities, five counties, and four townships.

Land use in the MRCCA is currently regulated by local governments through local MRCCA plans and ordinances as directed by Executive Order 79-19. Executive Order 79-19 established four land use districts within the MRCCA and set standards and guidelines to be used by local



Figure 1. MRCCA boundary and current districts.

¹ Lafrancois, B. M., D. L. Vana-Miller, and S. P. Johnson. 2007; Anfinson, J. 2003a, 2003b.

² 1973, ch.752, 1973 Minn. Laws 2258-2265 (codified at §§ 116.01 – 116G.14).

governments when preparing plans and regulations to guide development within those districts. By the early 1980s, all local governments within the MRCCA had adopted MRCCA plans, and all but a few had adopted MRCCA ordinances. Cities and townships without adopted MRCCA ordinances are subject to the Interim Development Regulations contained in Executive Order 79-19.

In 1988, Congress established the Mississippi National River and Recreation Area (MNRRA), a unit of the National Park System. MNRRA shares the same boundaries as the MRCCA. In establishing MNRRA Congress found that "the Mississippi River Corridor within the Saint Paul-Minneapolis Metropolitan Area represents a nationally significant historical, recreational, scenic, cultural, natural, economic, and scientific resource" and that there was a national interest in the "preservation, protection and enhancement of those resources for the benefit of the people of the United States." (16 U.S.C. §460 zz (a) (emphasis added)). The National Park Service, in its 1995 Comprehensive Management Plan for the MNRRA, determined it would not acquire significant land holdings or establish land use regulations for the MNRRA but would instead rely on state and local administration of Executive Order 79-19 to protect the resources.

In 1991, the Minnesota Legislature reaffirmed its commitment to a permanent MRCCA designation by recognizing the MNRRA as a state-designated critical area. Minn. Stat. § 116G.06 (1985) 1991, ch. 303, § 8, 1991 Minn. Laws (page 63) codified at Minn. Stat. § 116G.15 (1991).

In 1995, Governor Arne Carlson issued Reorganization Order 170 transferring administrative responsibility for the MRCCA from the Environmental Quality Board (EQB) to the DNR. This order transfers rulemaking authority for the management of the MRCCA to the DNR, and provides that all rules adopted by EQB remain in effect until they are amended or repealed by the DNR.

More recently, citizens and interest groups have raised concerns around the adequacy of the MRCCA program regulatory framework, perceptions of inconsistent regulation of development in the MRCCA, and the belief that key resources within the MRCCA are not always protected.

Report to Legislature, 2008

Based on the concerns noted above, in 2007 the Legislature directed the DNR to prepare a report on the status of the MRCCA. The report summarized the status of local governments' MRCCA plans and ordinances and their experiences with the program, and identified several approaches to accomplish the preservation and protection goals for the MRCCA as set forth by the Legislature in Minn. Stat. § 116G.15 (1995). The DNR delivered the report to the Legislature in 2008.

Rulemaking Project, 2009-2011

In 2009, the Legislature amended Minn. Stat. § 116G.15 and directed the DNR to establish rules for the MRCCA. 2009, ch. 172, art. 2, §27, subd. 4, 2009 Minn. Laws (pages 2484 - 2485). The DNR launched the rulemaking process by creating a project website and notifying local government within the MRCCA by letter of the rulemaking and requesting their assistance with outreach. In December 2009, the DNR published a Request for Comments on the scope of the proposed MRCCA rules. The DNR accepted public comments through March 22, 2010.

During the comment period, DNR staff met with local governments and other stakeholders within the MRCCA to learn how MRCCA plans and ordinances had been administered and to identify local stakeholders to participate in work groups.

In February 2010, the DNR formed four geographically-focused work groups consisting of stakeholders representing the diverse interests in the MRCCA, including:

- local governments
- builders and developers
- property owners
- economic development authorities
- commercial and industrial businesses
- recreational and environmental protection interests
- other local, regional, and national interests

Each committee met four times and was tasked with identifying issues and ideas, providing expert input, and providing feedback on draft districts and standards. In late 2010, the DNR held two public open houses to receive input on preliminary draft districts and standards.

Based on the input throughout the entire public involvement process, the DNR completed draft rules in 2011. However, the rulemaking process was put on hold that same year before a notice of intent to adopt rules was issued. The DNR was unable to publish a notice of intent to adopt rules or notice of hearing within 18 months of the date of the legislative directive authorizing DNR to adopt the MRCCA rules, and its authority to complete the rulemaking lapsed. Minn. Stat. § 14.125 (2015).

Rulemaking Project, 2013 - Present

In 2013, the Legislature again revised Minn. Stat. § 116G.15 and directed the DNR to resume rulemaking, with the following key changes to the rulemaking process:

- required DNR to consult with local governments before adopting rules;
- added "redevelopment" of a variety of urban and recreational uses to the existing list of multiple resources for which the corridor is to be managed;
- modified the considerations for creating new districts by removing the consideration of those
 river features in existence in 1979 and the intent of the districts in Executive Order 79-19 and
 adding consideration of both the natural character and the existing development of the river
 corridor, as well as the potential for new commercial, industrial, and residential development;
- added commercial, industrial, and residential resources to the existing list of resources that must be protected or enhanced through guidelines and standards;
- eliminated the 2009 requirement to establish regulatory bluff maps, while continuing to insure that bluff protection remains a priority; and
- required the DNR to submit a status report to the Legislature by January 2014.

The Legislature also waived the 18 month time constraint imposed by Minn. Stat § 14.125 to publish a notice of intent to adopt rules or a notice of hearing within 18 months after the effective date of the law authorizing the new rulemaking effort.

The DNR launched this new rulemaking effort in 2013 shortly after the close of the legislative session. The DNR again met with local governments (individually and in groups), other agencies, and interest groups to discuss the draft rules created in 2011 and to obtain input on the new draft rules. A status report on the rulemaking process was provided to the Legislature in January 2014.

After consultation with local government, other agencies, and interest groups, the DNR extensively revised the 2011 draft rules, creating "working draft rules." In June 2014, the DNR published a second Request for Comments, asking for input on these working draft rules. During this comment period the DNR held three public information meetings and met with numerous local governments and interest groups to receive input on the working draft rules. The informal comment period closed in September 2014. Based on input received during this period, the DNR made additional revisions to the working draft rules and produced a final draft of the proposed MRCCA rules.

Summary of MRCCA Designation & Rulemaking

- 1973 Minnesota passes Critical Areas Act of 1973. Minn. Stat. §§ <u>116G.01 116G.14 (1973)</u> EQB adopts rules to implement Act. Minn. R. <u>4410.8100 4410.9910</u>.
- 1976 Governor Wendell Anderson designates 72-mile stretch of the Mississippi River through the metro area and its adjacent corridor a Critical Area. Executive Order 130. (Exhibit A)
- 1979 Governor Albert Quie continues the designation. <u>Executive Order 79-19</u>. (Exhibit B)
 Metropolitan Council acts to make designation permanent. <u>Metropolitan Council Resolution 79-48</u>. (Exhibit C)
- 1988 Congress establishes the Mississippi National River and Recreational Area (MNRRA) as unit of NPS (MNRRA shares same boundary as MRCCA). 16 U.S.C. §460 zz (a).
- 1991 MNRRA designated a state critical area per Critical Areas Act. Minn. Stat. § 116G.15 (1991).
- 1995 Governor Arne Carlson shifts administrative responsibility for the MRCCA from EQB to DNR.

 Reorganization Order 170. (Exhibit D)
- 2007 Legislature directs DNR to prepare report on the MRCCA. <u>DNR Report to Legislature, January 2008</u>. (Exhibit E)
- 2009 Legislature amends MN Statutes, § 116G.15 and directs DNR to conduct rulemaking for the MRCCA. 2009, ch. 172, art. 2, §27, subd. 4, 2009 Minn. Laws (pages 2484 2485) codified at Minn. Stat. § 116G.15 (2009).
- **2011** DNR develops draft rule after participatory stakeholder process, but rulemaking authority lapses pursuant to Minn. Stat. § 14.125.
- 2013 Legislature directs DNR to resume rulemaking process in consultation with local governments. 2013, ch. 137, art. 2, § 18-21, 2013 Minn. Laws (pages 2327-2329), codified at Minn. Stat. § 116G. 15 (2015).
- DNR prepares report to Legislature on goals and status of rulemaking. DNR Report to
 Legislature, January 2014. (Exhibit F)

Need for the Proposed Rules

The MRCCA program has been administered under Executive Order 79-19 for over 35 years. The executive order brings with it a variety of issues that this rulemaking effort seeks to resolve:

- Executive Order 79-19 cannot be readily changed or updated. There is no mechanism for revising an executive order, short of issuing a new executive order. Executive orders are not a desirable method for regulating or managing state programs that affect local land use. State rulemaking offers a more transparent process for developing a state program that affects local land use because it includes opportunities for public participation and provides an appropriate foundation for local land use regulation.
- Executive Order 79-19 provides insufficient guidance to local governmental units for developing local plans and ordinances, and to the DNR for reviewing and approving them. The Standards and Guidelines in Executive Order 79-19 are written as "performance standards" that describe a goal or desired end state. Performance standards lack specificity and, therefore, provide insufficient guidance for local plans and ordinances. This has led to the application of a broad range of standards and approaches across the MRCCA, as well as uncertainty in the approval process over time. This rulemaking effort has provided an open and transparent process for developing more specific and consistent standards across the MRCCA, and more specific and consistent criteria for the review and approval of local plans and ordinances.
- Executive Order 79-19 limits redevelopment and reinvestment. Executive Order 79-19
 categorizes all land in the corridor into four districts based on general land use characteristics.
 Land use regulations specific to each district are the primary means for achieving protection
 goals within the MRCCA. These districts were defined based on land uses in 1976 and are legally
 described in the State Register. Because executive orders are not regularly updated, the
 districts and associated land use restrictions put in place in 1976 still govern development
 activity today.

These 1976 land use districts have limited the ability of communities to redevelop and encourage reinvestment. For example, the City of Champlin plans to redevelop the area at the Highway 169 bridge crossing as a walkable mixed-use development with both housing and new commercial buildings. Some of these buildings will be up to five stories in height and have reduced river setbacks. This plan deviates considerably from the 35' height limit that currently applies to the Urban Developed District, and from the current management purpose of the district as set forth in the Executive Order, which is "to maintain the largely residential character, and to limit expansion of commercial use" within the land use district.

It is difficult for local governments and the DNR to equitably evaluate development proposals like the Champlin proposal, which conflicts with the outdated management purposes and associated standards developed in 1976. This leaves local governments uncertain about what they can or cannot do within the MRCCA, and limits their ability to achieve more sustainable development patterns and a stronger tax base.

- The MRCCA is costly and complex to administer. Unlike the state's other shoreland protection programs (Shoreland, Wild and Scenic River, and Lower St. Croix River), which are governed by Minn. Stat. Ch. 103F, the MRCCA program requires local governments to adopt a <u>plan</u> in addition to a zoning ordinance, and it requires the administration and oversight of <u>two</u> state agencies the DNR and Metropolitan Council. The exact contents and submittal requirements for plans and ordinances are not clearly laid out, which has led to confusion by local governments. Furthermore, the Metropolitan Council has an established process and timeline for updating comprehensive land use plans, but it is unclear how local MRCCA plans relate to comprehensive land use plans or whether comprehensive land use plans need to be updated regularly to reflect identified land use changes within the MRCCA.
- Poor resource protection due to vague and outdated language. Many natural resources are
 not adequately protected by Executive Order 79-19 because the Standards and Guidelines are
 too vague to implement effectively. Examples of words or phrases that are not defined, too
 vague to interpret and implement, or outdated include the following italicized phrases:
 - o Provision C. 2.a (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 effect*" (emphasis added).
 - o Provision C.2.e (2). This standard dealing with existing development requires that "local plans and regulations shall include provisions to *amortize non-conforming use*" (emphasis added). Amortization of most nonconforming uses was prohibited by statute in 1999. See Minn. Stat. §§ 462.357, subd. 1c and 394.21, subd. 1a.
 - Provision C. 2.e (4). "Local plans and ordinances shall include provisions to provide for the screening of existing development which constitutes visual intrusion, wherever appropriate" (emphasis added).
 - o Provision 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" (emphasis added).
- No resource protection priority. Neither Minn. Stat. § 116G.15 nor Executive Order 79-19 prioritizes resources for protection. Both call for the equal protection of a list of natural, cultural, historical, scenic, recreational, and economic resources in the corridor. Priorities are important for guiding rulemaking that achieves meaningful resource protection, and to help resolve conflicts in ongoing program administration.

Alternative Format

Upon request, this SONAR can be made available in an alternative format, such as large print, braille, or audio. To make such a request, contact Jennifer Shillcox at the Department of Natural Resources, 500 Lafayette Road, St. Paul, MN 55155-4025, phone 651-259-5727 and fax 651-296-0445, or mrcca.rulemaking@state.mn.us. TTY users may call the Department of Natural Resources at 651-296-5484 or 1-800-657-3929.

Statutory Authority

The statutory authority for all critical areas for the state of Minnesota is set out in Minn. Stat. Ch. 116G. Minn. Stat. §§ 116G.01 – 116G.14 comprise the "Critical Areas Act of 1973." These sections establish the general procedures for designating and administering Critical Areas. Section 116G.15 was added to Ch. 116G in 1991 to designate the MNRRA as a Minnesota State Critical Area. 1991, Ch. 303, §8, Minn. Laws (page 210) codified at Minn. Stat. § 116G.15, and *supra* at page 2 (for a discussion of the history of the MRCCA).

Section 116G.15 sets out the parameters of the MRCCA program, including the scope and purpose of the MRCCA and the obligation of the commissioner to work cooperatively with the U.S. Army Corps of Engineers, the National Park Service, the Metropolitan Council, local governments and other agencies to assure that the MRCCA is managed as a multipurpose resource. Minn. Stat. § 116G.15, subd.3 (2015). The statute further provides for the establishment of districts within the MRCCA to protect natural, recreational and interpretive improvements; to protect the resources identified in the MNRRA Comprehensive Management Plan; to protect the use of the Mississippi River as a source of drinking water; to assure management of the river corridor consistent with its natural characteristics, its existing development and its consideration for new development; and to protect identified scenic, geologic, and ecological resources. Minn. Stat. § 116G.15, subd. 3 (2015). The statute directs the commissioner to adopt standards and guidelines for the management of each district that enhance and protect key enumerated statutorily identified resources and features. Minn. Stat. § 116G.15, subd. 4 (2015).

Section <u>116G.15</u>, <u>subd. 7</u> authorizes the DNR to adopt rules for the MRCCA and to commence the rulemaking process on or before January 15, 2010.³ Minn. Stat. § 116G.15, subd. 7 (2015). Specifically, the statute provides that:

- The DNR, after consultation with affected local governments within the MRCCA, may adopt rules under chapter 14 as necessary for the administration of the MRCCA program, any duties of the EQB referenced in the chapter, rules, and Executive Order 79-19 within the MRCCA are transferred to the commissioner. Minn. Stat. § 116G.15, subd.2;
- The DNR shall establish, by rule, districts within the MRCCA. Minn. Stat. § 116G.15, subd. 3; and
- The DNR shall establish, by rule, minimum guidelines and standards for the districts to protect key resources and features, including commercial, industrial, and residential resources within the MRCCA. Minn. Stat. § 116.15, subd. 4.

8

³ This rule making requirement is specifically exempted from the requirements of Minn. Stat. § 14.125 (2015).

Regulatory Analysis

Minn. Stat., § 14.131, sets out nine factors for a regulatory analysis that must be included in the SONAR. These factors are addressed as follows:

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

The rules will likely affect the following persons and organizations within the MRCCA: private and public property owners, developers, businesses, real estate interests, recreational users, environmental interests, navigation interests on the Mississippi River, utility providers, all local governmental units (cities, towns, and counties), and agencies and institutions with facilities or property interests (such as the Metropolitan Council, Minnesota Department of Natural Resources, Minnesota Department of Transportation, Metropolitan Airports Commission, University of Minnesota, Saint Paul Port Authority, Minnesota Historical Society, and federal agencies such as the National Park Service and U.S. Army Corps of Engineers).

The proposed rules will directly affect all local governments having jurisdiction over or owning and managing land within the MRCCA including:

- the counties of Anoka, Dakota, Hennepin, Ramsey, and Washington
- the townships of Grey Cloud, Denmark, Nininger, and Ravenna
- the cities of Dayton, Ramsey, Anoka, Champlin, Coon Rapids, Brooklyn Park, Brooklyn Center, Fridley, Minneapolis, St. Paul, Lilydale, Mendota, Mendota Heights, Maplewood, South St. Paul, Newport, St. Paul Park, Inver Grove Heights, Rosemount, Cottage Grove, and Hastings

Specifically, local governments within the MRCCA must update their local plans and ordinances to incorporate the new districts and standards in these rules. Local governments must establish a permit program for vegetation management and land alterations in specific environmentally sensitive areas. Local governments will bear these initial costs, particularly if they need to make substantial changes to their existing plans and ordinances. Local governments may benefit in the long run, however, from the establishment of districts that are more consistent with community character and planned future development, and the flexibility to meet multiple community objectives. The proposed rules will support local governments already working to address Mississippi River conservation issues and provide improved guidance to those local governments not yet addressing these issues.

The proposed rules establish standards to guide new development and redevelopment in the corridor, which may change how property is developed. Thus, all persons who own, manage, or develop lands within the MRCCA could experience potential costs and benefits associated with the proposed rules.

These persons, as well as members of the public, will benefit because the MRCCA rules will require management of the MRCCA as a multi-purpose resource, providing for:

- conservation of the scenic, environmental, recreational, mineral, economic, cultural, and historic resources and functions of the river corridor;
- maintenance of the river channel for transportation by providing and maintaining barging and fleeting areas in appropriate locations consistent with the character of the Mississippi River and riverfront;
- the continuation and development of a variety of urban areas, including industrial, commercial, and residential uses, where appropriate, within the MRCCA;
- use of certain reaches of the river for water supply and as a receiving water for properly treated sewage, stormwater, and industrial waste effluents; and
- protection and preservation of the biological and ecological functions of the MRCCA.

Additionally, the proposed rules clarify the standards imposed by Executive Order 79-19, which will benefit all persons with a property interest in the corridor as well as members of the public. Most aspects of the rules will not result in substantive changes and are not expected to have an effect on persons with property interests within the MRCCA. The rules are designed to ease implementation, increase efficiency, eliminate ambiguity, and simplify administrative procedures for local governments and agencies to administer. Substantive changes in the proposed rules compared to the standards in Executive Order 79-19 are identified in the rule-by-rule analysis.

2. The probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues.

Both the DNR and certain state and regional agencies will incur costs to implement and enforce the proposed rules.

DNR administrative costs for the MRCCA program currently include the cost of: providing technical assistance to local governments, reviewing discretionary actions, and reviewing and approving amendments to local plans and ordinances. These costs are presently incurred by the DNR as part of its operating budget and would continue after rule adoption. These costs vary depending on the number of local plan and ordinance amendments submitted to the DNR for review, the number of projects requiring discretionary actions by local governments and review by the DNR, and the number of DNR appeals of local decisions. This regular work undertaken by the DNR to administer the program is anticipated to be no greater under the proposed rules than under the Executive Order and, therefore, does not require an increase in DNR costs, except to the extent that local plans and ordinances will need to be brought into compliance with the proposed rules as described below.

The DNR will have additional costs as the 30 local governments in the MRCCA prepare or amend plans and ordinances to comply with the proposed rules. DNR review and approval of these plans and ordinances will require a substantial commitment of staff time. To moderate the impact of these costs, adoption will be spread out over a number of years. The DNR also intends to facilitate the transition to the new rules by:

- developing model plans and ordinances, model mitigation measures, maps, and other tools to aid local implementation;
- working with the Metropolitan Council and local government staff to develop a notification/adoption schedule;
- working with the Metropolitan Council to provide guidance, training and resources to local governments;
- developing a review and tracking system to monitor progress;
- assisting local governments with preparing and submitting updated plans and ordinances;
- coordinating with Metropolitan Council staff to review and approve local plans and ordinances; and
- assisting with local education and outreach efforts once ordinances are adopted.

There will be costs to develop these materials. These costs would be covered either with additional funding or by reassigning staff.

The Metropolitan Council is currently charged with reviewing plans and ordinances. The proposed rules would not change or add new responsibilities to the Metropolitan Council. As such, the costs for the Metropolitan Council are anticipated to continue at current levels and are a part of the agency's budget. Metropolitan Council costs largely depend on the number of local plan and ordinance amendments, which will increase when local plans and ordinances are brought into compliance with the proposed rules as described above.

Aside from the requirements noted above, the proposed rules should not result in significant additional costs to other state or regional agencies, since these agencies are not required to submit plans to the DNR for properties they own or manage within the MRCCA. However, state and regional agencies such as the Minnesota Department of Transportation and the Metropolitan Airports Commission may incur nominal costs to ensure that their site plans and projects comply with these rules.

The proposed rules would not be expected to have a positive or negative impact on state revenues.

3. A determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule.

The Legislature, in 2009 and again in 2013, directed the DNR to develop rules to protect and preserve the MRCCA and adjacent lands that the legislature believed to be unique and a significant resource to the state while recognizing the historical, cultural, transportation, economic and resource values of the MRCCA to the state and the nation. Minn. Stat. § 116G. 15, subd. 1 (2015). Meeting the purpose and objectives of the statute requires a mechanism for assuring a certain degree of uniformity in land use across a 72- mile river corridor encompassing five counties and 25 cities and townships. Accomplishing the necessary uniformity across this landscape without engaging in rulemaking would be virtually impossible as demonstrated by the inability of Executive Order 79-19 to adequately address the objectives of the MRCCA.

The framework for rule development for the MRCCA is set forth in Minn. Stat. § 116G.15. In developing the rules, the DNR:

- looked at those provisions in the Executive Order 79-19 that have historically worked well in protecting the MRCCA;
- looked at other land use rules and regulations in other programs that have historically been successful at protecting similar resources as those sought to be protected in the MRCCA;
- identified those provisions in Executive Order 79-19 that have not historically worked well and modified them to make them functional; and
- identified key issues not addressed in Executive Order 79-19 but identified in Minn. Stat. § 116G.15 as requiring protection and developed rules to provide the required protection.

This approach enabled the DNR to determine less costly or less intrusive methods for achieving the purpose of the proposed rules as identified by the Legislature.

Using those provisions of Executive Order 79-19 that have historically worked well as a baseline for the rules will reduce the scope and cost of the changes imposed on communities within the MRCCA and is less intrusive than imposing completely new standards. Thus the proposed rules are based on the existing administrative framework established by Executive Order 79-19 that is already familiar to local governments.

Many of the proposed rules are clarifications or refinements of Executive Order 79-19 or are based on existing local, regional, and state regulations that also apply within the MRCCA. Those provisions of Executive Order 79-19 that were retained were reviewed to insure that they addressed current conditions within the MRCCA. The proposed rules include modernized standards, clearer provisions, and flexibility within districts that achieve the regulatory purpose of Minn. Stat. § 116G.15.

A primary goal of the rules is to reduce complexity and be less intrusive for property owners, developers, and local governments wherever possible by focusing on the specific development impacts on those key resources and features identified in Minn. Stat. § 116G.15. The proposed rules recognize the diversity of development across the MRCCA by establishing districts that better reflect existing and planned future development, while deferring to local governments' underlying zoning where local zoning meets the purposes of the rules, and by providing flexibility to local governments to address special circumstances where it is possible to do so and still meet the underlying the purpose of the MRCCA. This approach is a less intrusive method for achieving the purposes of the MRCCA.

For those issues not adequately addressed by Executive Order 79-19 or that were inadequately addressed by other existing regulations, new standards were developed. In these cases, it was necessary to establish new provisions to address these issues that meet the requirements in Minn. Stat. § 116G.15. DNR was mindful of costs and potential intrusion on local control and property rights when developing these necessary provisions.

Specific standards and evaluation of other methods considered are described in greater detail in the rule-by-rule analysis.

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

The 2008 DNR report to the Legislature identified several non-rulemaking approaches to accomplish the preservation and protection goals for the MRCCA set forth by the Legislature in Minn. Stat. § 116G.15. Those approaches included:

- moving MRCCA administration to other DNR programs/units or to other state or local agencies;
- enhancing the existing program structure and authorities;
- modifying the current program or process;
- increasing oversight of local decisions;
- educating local governments about the importance of protecting properties within the MRCCA;
- providing financial incentives to encourage adoption of land use practices to protect critical areas within the MRCCA;
- acquiring easements and property of particularly critical natural, aesthetic, cultural, historic or other resources within the MRCCA; and/or
- providing voluntary standards for local governments to adopt.

The 2009 and 2013 Minnesota Legislatures determined that these mechanisms would not adequately protect the state's broad interests across the MRCCA and determined that the best and most equitable mechanism to protect the MRCCA was through a uniform rule applied across the MRCCA. The Legislatures, therefore, directed the DNR to develop rules establishing new districts within the MRCCA, standards and guidelines for development within each district, and rules for administration of the MRCCA program. Minn. Stat. § 116G.15, subds. 2-4 (2015).

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

The DNR has conducted an analysis to assess the potential cost of complying with the proposed rules. Local governmental units and other agencies already expend resources to comply with the requirements of Executive Order 79-19, therefore, it is anticipated that these governmental units will only incur modest changes in the direct or indirect costs of complying with the proposed rule. Changes that may require additional effort on the part of these governmental units include:

- new permit requirements proposed for management of vegetation and land alteration/ stormwater in specified areas, ADA-compliant facilities, aggregate mining and extraction, and wireless communication facilities;
- notification of the National Park Service and adjoining local governments of certain discretionary actions, such as variances and conditional uses; and
- likely updates to local government MRCCA plans and ordinances as a result of district and standard changes. However, DNR intends to assist local governments by developing model

ordinances, providing educational materials and training, and assisting local governments directly in development of plans and ordinances.

In October 2014, the DNR sent a cost survey to all local governments within the MRCCA asking them to estimate the cost to update their MRCCA plan and ordinance. With a few exceptions, total costs per local government were under \$20,000. (See Table 1.)

Table 1: Cost Estimates for Local Governments to Amend MRCCA Plans and Ordinances

Critical Area						
	Critical Area Plan	Ordinance				
Local Government	Amendment Cost	Amendment Cost	Total	Small City (<10 FTE)		
City of Anoka	\$3,925	\$26,775	\$30,700	N		
Anoka County	NA	NA	NA	N		
Brooklyn Center	\$6,750	\$10,000	\$16,750	N		
Brooklyn Park	\$50,000	\$50,000	\$100,000	N		
Champlin	\$7,250	\$2,850	\$10,100	N		
Coon Rapids	\$2,650	\$2,650	\$5,300	N		
Cottage Grove	\$2,960	\$5,920	\$8,880	N		
Dakota County	NA	NA	NA	N		
Dayton	\$2,370	\$1,360	\$3,730	N		
Denmark Township	\$5,440	\$8,100	\$13,540	Υ		
Fridley	\$3,750	\$4,500	\$8,250	N		
Grey Cloud Island						
Township	\$30,000	\$25,000	\$55,000	Υ		
Hastings	\$1,060	\$1,860	\$2,920	N		
Hennepin County	NA	NA	NA	N		
Inver Grove Heights	\$4,375	\$5,515	\$9,890	N		
Lilydale	\$5,000	\$15,000	\$20,000	Υ		
Maplewood	\$4,500	\$4,500	\$9,000	N		
Mendota	\$6,850	\$3,500	\$10,350	Υ		
Mendota Heights	\$3,350	\$4,650	\$8,000	N		
Minneapolis	\$190,896	\$19,184	\$210,080	N		
Newport	\$7,190	\$9,990	\$14,990	N		

Nininger Township	TBD	TBD	TBD	Υ
City of Ramsey	TBD	TBD	TBD	N
Ramsey County	NA	NA	NA	N
Ravenna Township	TBD	TBD	TBD	Υ
Rosemount	\$19,470	\$8,470	\$27,940	N
St. Paul	TBD	TBD	TBD	N
St. Paul Park	\$5,430	\$6,690	\$12,120	N
South St. Paul	\$10,450	\$8,600	\$19,050	N
Washington County	NA	NA	NA	

6. The probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals.

A body of literature entitled *Lakeshore Property Values and Water Quality: Evidence from Property Sales in the Mississippi Headwaters Region* establishes that there is a positive relationship between water quality and natural landscapes and property values.⁴ Thus it is anticipated that persons owning or developing property within the MRCCA (all affected parties identified in question #1) will benefit economically from the amenities that the proposed MRCCA rules are intended to preserve. The failure to adopt the proposed standards and the protections they afford to the resources within the MRCCA could result in damage to those resources and an associated economic loss in benefits presently existing within the MRCCA.

The public would also bear the consequences of insufficient protection of, and access to, the river and surrounding corridor should these rules not be adopted. These consequences may include poor water quality, erosion and sedimentation from improperly managed shorelines, less resilient fish and wildlife populations, alteration of scenic resources, limited recreational resources, and the loss of natural shorelines, bluffs, and native plant communities. These consequences, in many cases, translate to economic costs including increased costs of water purification for drinking water, invasive species control, and increased dredging costs to maintain transportation channels.

There may also be indirect costs to the public and property owners if the proposed rules are not adopted, including restoration and remediation expenses for degraded resources, fewer tourism and recreational dollars spent in local communities, and decreased economic development potential.

_

⁴ Krysel, C., E. Marsh Boyer, C. Parson, and P. Welle. 2003. Trust for Public Land, 2007.

Additional consequences of not adopting the proposed rule are:

- the DNR may need to assess the current oversight and/or enforcement of MRCCA plans and ordinances adopted under Executive Order 79-19, and take action to compel compliance with the MRCCA program;
- the application of outdated and ambiguous development standards in the MRCCA;
- the application of inconsistent local ordinances across communities in the MRCCA;
- inflexible and outdated districts in the MRCCA that do not reflect changing land uses;
- reduced water quality protection from nonpoint sources in the MRCCA;
- weakened protection of shorelines and bluffs;
- lack of open space protection during the subdivision process;
- uncertainty for businesses, developers, and stakeholders of rule standards; and
- an uneven playing field for regulators and regulated parties.

7. An assessment of any differences between the proposed rule and existing federal regulations and a specific analysis of the need for and reasonableness of each difference.

The proposed rules do not conflict with federal regulations. Other regulations that apply within the MRCCA that are subject to federal standards, such as floodplain regulations, would not be affected by the proposed rules. The proposed rules do not regulate facilities or properties owned or managed by the federal government.

8. An assessment of the cumulative effect of the rule with other state regulations related to the specific purpose of the rule.

A "cumulative effect" assessment requires the assessment of the incremental impact of the proposed rule in conjunction with other rules, regardless of the state or federal agency that adopted the other rules. Minn. R. 14.131. Cumulative effects can result from individually minor but collectively significant rules adopted over a period of time. Generally, the proposed rules refer to, rather than add to, other federal and state regulations (i.e. feedlots, stormwater, etc.) to minimize conflict and cumulative effects. In the event that there is a conflict, the proposed rules clarify that the more restrictive regulation applies. The sole exception is the state's shoreland management rules.

The MRCCA rules will overlap with the state shoreland management rules set forth in Minn. R. Ch. 6120, which are implemented by communities through local shoreland management ordinances. The boundary of the shoreland district in the shoreland rules is 300 feet from the ordinary high water level of rivers or the outer extent of any existing floodplain, whichever is greater. Minn. R. 6120.2500, subp. 15 (2015). The boundary of the MRCCA varies throughout the corridor but is almost always greater than the shoreland district established in the shoreland rules. On land covered by both the MRCCA and shoreland districts, both sets of standards will apply, with the more restrictive standards taking precedence.

For example, in some instances the proposed MRCCA rules have more restrictive standards for structure and bluff setbacks, subdivisions, vegetation removal, and land alteration than the shoreland management program. Thus in the MRCCA these standards would take precedence over

the shoreland requirements. On the other hand, both rules regulate stormwater management but do not have overlapping regulations. The shoreland rules limit impervious surface to 25% of a lot area, whereas the proposed MRCCA rules do not limit impervious surface coverage as a percentage of lot area. However, the proposed MRCCA rules prohibit impervious surfaces in certain areas and require stormwater treatment for new or fully reconstructed impervious surface of more than 10,000 square feet in near shore areas. Thus it is possible in this case to fully comply with both rules on a single property.

Finally, in a number of areas there is no overlap between the proposed MRCCA rules and the statewide shoreland rules. For example, the shoreland management program regulates lot area and width while, with one exception, the proposed MRCCA rules do not. Thus, there may be no issue in applying both sets of regulations to a single property.

Performance-Based Rules

To best achieve the goals of the MRCCA, the DNR incorporated numerous performance-based standards, including:

- standards designed to prevent negative impacts of development on MRCCA resources;
- a visual impact standard ("readily visible") that is intended to assess the visibility of a proposed structure from the river from specified areas;
- requirements for on-site mitigation for variances and conditional use permits that are
 proportionate to the environmental impacts associated with the activities permitted by the
 variance or conditional use permit;
- regulations for nonconformities that are consistent with current land use statutes and provide additional flexibility for local governments and property owners;
- stormwater runoff reduction standards that are performance-based, providing flexibility in the means to achieve the standards; and
- incentives to create conservation subdivisions and developments that protect or enhance key features and resources.

Additional Notice Plan

Additional notice of the proposed rules will be provided to individuals or groups who could be affected by the rules, using the following methods:

- Emailing the Notice of Intent to the same individuals and groups who were sent the Request for Comments in June 2014, and to additional individuals and groups, including the following:
 - o GovDelivery subscribers to the DNR MRCCA Rulemaking Project
 - o property owners who signed up to receive notifications via U.S. mail
 - o local governments within the MRCCA
 - o agencies listed in Minn. Stat. § 103F.211
 - U.S. Army Corps of Engineers

- o U.S. Department of Interior, National Park Service
- o Metropolitan Council
- persons who submitted comments or participated in work groups, public open houses, or other meetings
- o persons who have previously expressed an interest in or who are known to likely be interested in the rule amendments
- Distributing a news release to newspapers of major circulation within the MRCCA announcing the notice, hearing schedule, and proposed rules; and
- Using the DNR website to inform the public of the hearing schedule and provide access to related documents.

The Additional Notice Plan also includes giving the following statutory notices:

- Mailing the rules and Notice of Intent to all persons registered on DNR's rulemaking mailing list established pursuant to Minn. Stat. § 14.14, subd. 1a.
- Mailing the draft rules to all persons who request a copy of the draft rules.
- Providing notice to the Legislature as required by Minn. Stat. § 14.116.
- The MRCCA has the potential to impact farming operations, thus a copy of the proposed rules will be provided to the Commissioner of Agriculture at least 30 days prior to publication of the rules in the State Register pursuant to Minn. Stat. § 14.111.

The Additional Notice Plan does not include notifying the state Council on Affairs of Chicano/Latino People because the MRCCA rules do not have a primary effect on Chicano/Latino persons (Minn. Stat. § 3.922).

Consultation With MMB on Impacts to Local Government

The department will consult with Minnesota Management and Budget (MMB) as required by Minn. Stat. § 14.131. Prior to publishing the Notice of Intent, the DNR submitted the MRCCA rule package to MMB simultaneously with submission of the MRCCA rule package to the Governor's Office for review and approval. The documents included in the MRCCA rule package are: the Governor's Office Proposed Rule and SONAR Form; the proposed rules; and the SONAR. The final submission to the Office of Administrative Hearing (OAH) shall include the MRCCA rule package and all correspondence between DNR and Management and Budget pertaining to the proposed MRCCA rule.

Determination About Rules Requiring Local Implementation

The proposed rules require local governments to prepare or amend their MRCCA plans and ordinances, implement new districts, and meet or exceed the proposed MRCCA standards. The DNR, in consultation with the Metropolitan Council, will notify local governments to prepare or amend plans and ordinances, subject to the timeframes in the proposed rules.

Cost of Complying for Small Business or City

Minn. Stat. § 14.127, subd. 1, provides⁵ that:

An agency must 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. For purposes of this section, "business" means a business entity organized for profit or as a nonprofit, and includes an individual, partnership, corporation, joint venture, association, or cooperative.

The timing of a rule's effect is set forth in Minn. Stat. § 14.38, which provides that a rule is effective five working days after the publication of the notice of adoption in the State Register.⁶

Proposed rule 6106.0070 requires the commissioner, in consultation with the Metropolitan Council, to develop an adoption schedule to be used for amending local plans and ordinances consistent with these rules. The schedule will align as closely as possible to the local governments' comprehensive plan update schedule set from in Min. Stat. § 473.858 (2015). The commissioner must then notify local governments across the MRCCA of the schedule for adopting the provisions required by these rules. Zoning changes are not required to be made prior to publication of the adoption schedule.

It will take the commissioner time to develop the adoption schedule, prepare model plan and ordinance language, and provide training and other resources to aid local governments in updating their plans and ordinances to comply with the rules. As such, local governments across the MRCCA will not be required to begin work to amend and adopt MRCCA plans and ordinances to meet or exceed the standards set forth in these proposed MRCCA rules until the second year after adoption of these rules, at the earliest. According to the proposed rules, each local unit of government will be given at least one year to adopt their amended plans and ordinances after being notified by the commissioner to do so.

To establish the cost to local governments to implement the proposed MRCCA rules, the DNR surveyed local governments across the MRCCA to estimate implementation costs. The results of that survey are set out in in Table 1 and indicate that the costs incurred by the individual local governments to accomplish this work may exceed \$25,000 depending on the complexity of their existing ordinances and the scope of changes needed to establish the new districts and applicable standards within their jurisdiction. Of those communities surveyed, only five small cities in the MRCCA are statutory or home rule cities as defined by Minn. Stat. § 14.127. Of these cities, Lilydale and Mendota indicated that the

Stat. § 116.15, subd. 3 and 4 (directing the commissioner to establish, by rule, districts and standards for districts

within the MRCCA).

⁶ Generally rules like these proposed rules, which require adoption or amendment of an ordinance, do not take effect upon publication in the State Register but require the agency to comply with a statutory waiting period set forth in Minn. Stat. § 14.128, subd. 1 and 2. In this instance, however, the rules are exempted from the statutory waiting period because the DNR was directed by law to adopt the rule. Minn. Stat. § 14.128, subd. 3 and Minn.

estimated costs of complying with the proposed MRCCA rule do not exceed \$25,000. Grey Cloud Island Township estimates that its costs will exceed the \$25,000 limit. Neither Nininger nor Ravenna townships provided cost estimates; however, the DNR does not anticipate that the costs of these townships to implement the rules will exceed \$25,000. Based on a comparison of existing to proposed zoning provisions such as height and setbacks in both townships, it appears that although the proposed MRCCA rules will add one new district in Nininger Township and two new districts in Ravenna Township, the proposed standards in those districts will not result in much change from current standards since the new proposed districts match current standards or refer to underlying zoning.

Because local governments will not be revising their local plans and ordinances one year after adoption of these rules, the proposed rules will not impact businesses within the MRCCA until, at the earliest, the second year after adoption of these rules. Therefore, Minn. Stat. § 14.127, subd. 1 is not applicable to the MRCAA rules as it pertains to small businesses. Notwithstanding the fact that the proposed MRCCA rules will not impact small businesses in the first year after the rules become effective, the DNR considered ways to minimize impacts to small businesses. Small businesses in the MRCCA are currently subject to local MRCCA plans and ordinances under Executive Order 79-19. In undertaking this analysis, the DNR used as a baseline those local plans and ordinances currently in effect within the MRCCA. While there is some variability among MRCCA communities, most ordinances include setbacks from shoreline and blufflines, and restrictions on placement of structures on bluffs consistent with the guidelines in Executive Order 79-19. Small businesses are already subject to zoning restrictions within the MRCCA, thus the proposed rules will not significantly change the regulations faced by small businesses, in most instances.

The DNR considered the following factors to minimize the impacts of the proposed rules on small businesses and other landowners within the MRCCA:

- MRCCA districts are designed to recognize current and planned land uses. Districts such as the
 Urban Mixed (CA-UM), Urban Core (CA-UC), and the River Towns and Crossings (CA-RTC)
 districts are designed to provide flexibility in height and structure placement in highly
 developed, redeveloping, or transitional areas where most commercial and industrial uses are
 located. Proposed Minn. R. 6106.0100.
- The proposed rules include numerous exemptions from height and setback requirements for river-dependent uses, including businesses such as marinas and barge operations. Proposed Minn. R. 6106.0110, subp. 6 and 6106.0180.
- At the request of business interests, the proposed rules allow for the maintenance and repair of existing buildings in the bluff impact zone. Proposed Minn. R. 6106.0160, subp. 3.A.(3)
- Limitations on development and expansion in the bluff impact zone will provide increased protection for businesses with structures close to the bluffline against slope failure, a demonstrated hazard within the MRCCA, as discussed below under "Bluff Protection Standards." Proposed Minn. R. 6106.0120, subp. 3. These protections will result in a decrease in property damage and may result in a decrease in insurance premiums.

Finally, small businesses already in existence would not be subject to additional restrictions, except in cases where these businesses choose to expand or redevelop. In cases where these businesses include

nonconforming structures, those structures are already protected under Minn. Stat. §§ 394.36 and 462.357, subd. 1e (2015). In addition, the proposed rules provide local governments with the option of allowing nonconforming principal structures to expand laterally into required setbacks, consistent with many local MRCCA ordinances. Proposed Minn. R. 6106.0080, subp. 3.C. Expansion of structures, driveways and parking areas would also be subject to the vegetation management standards in proposed Minn. R. 6106.0150, and to land alteration and storm water management standards in proposed Minn. R. 6106.0160. Costs associated with these activities are not expected to differ significantly from costs already incurred in applying for local permits.

Some impacts to businesses, including small development firms and builders, could occur in conjunction with subdivision of land for residential development. The requirements for open space set-asides in most MRCCA districts could result in additional costs for management of the open space and design and construction of trails or other common amenities. However, these additional costs are typically offset by lower costs for development of roads and installation of utilities, since more compact development patterns equate to shorter roads and utility runs. Under most conservation design ordinances, density is the same, or even higher, than under conventional development, so the development value of a parcel is not diminished. Moreover, the presence of common open space, trails and other amenities can result in increased property values over time.

List of Witnesses

If these rules go to a public hearing, as proposed, the department anticipates having the following personnel involved in representing the DNR at the administrative hearing on the need for and reasonableness of the rules:

Legal Counsel: Sherry A. Enzler

DNR General Counsel

Witnesses: Julie Ekman Jennifer Shillcox

Manager, Conservation Supervisor

Assistance & Regulation Section Land Use Programs Unit

Dan Petrik Suzanne Rhees

Land Use Specialist Water Policy Consultant

Bluff Protection Standards

Purpose

Protection of bluffs in the MRCCA was a major focus of this rulemaking, and the subject of much debate, input, and analysis. Protection of bluffs is important to reduce erosion and slope failure within the MRCCA, as well as to maintain habitat and the MRCCA's iconic scenic character. The proposed bluff protection standards in these rules prohibit structures, impervious surfaces, vegetation removal, and land alteration on bluffs and in the bluff impact zone, with some exceptions. The proposed standards also require structures to be set back from the top of bluffs. Standards implementing these protections are described in the rule-by-rule analysis. This section establishes the need for these standards and consolidates the key bluff-related definitions and the underlying technical parameters used to develop the standards.

Bluff Erosion and Failure Concerns

The geology across the MRCCA is variable, with both glacial sediments and bedrock at the surface. These geological features are prone to erosion and natural instability. The northern portion of the MRCCA has more glacial deposits, including outwash, alluvium, colluviums, and terraces. These unconsolidated materials are sensitive to disturbance and susceptible to erosion. Downstream in the gorge area between Minneapolis and St. Paul, bedrock deposits are more prevalent. In the southern portion of the MRCCA, limestone, shale and sandstones form cliffs and outcroppings. These rocks are susceptible to fracturing, sliding, and other stressors. These glacial and bedrock materials can be unstable and are subject to slumping, sliding, creep, and erosion when exposed to stresses such as construction activities, stormwater runoff, structure placement, vegetation removal, and land alteration.

Springs and seeps are the natural outlets of ground water in bluff environments, and are common in these bedrock outcroppings and cliff areas, where they contribute to slope creep, erosion and failure. (Figure 2 illustrates a bluff face with seeps.)

Slope erosion is a concern throughout the MRCCA. In August 2008, the Mississippi Water Management Organization (MWMO) conducted an inventory of toe, bank, and upland erosion along the east and west banks of the Mississippi River from I-694 south to the Ford Dam. A number of the inventoried riverbank sub-reaches showed signs of erosion and were identified as highly susceptible to future erosion⁷.

Figure 2. These icicles form at "the weeping wall" and emerge from beds within the Platteville Limestone. This photo was taken just down-river from the 2014 Fairview Hospital landslide in Minneapolis. Photo by Carrie Jennings.

22

⁷ Mississippi Watershed Management Organization, 2010.

Actively eroding and/or failing bluffs have also been identified as problems by citizens and government officials in the Lilydale, Mendota, and Mendota Heights area. Heavy rains over the past decade - including those in June 2014 - led to significant erosion and the failure of some bluffs within the MRCCA, including failures off Highway 13 in Mendota Heights (see Figure 3) and below Fairview University

Hospital in Minneapolis. With FEMA funding, the DNR conducted an investigation⁸ of these and other bluff failures associated with the June 2014 rain events in the Mississippi and Minnesota River valleys⁹. The structural geologist conducting this evaluation found that all failed bluffs within the MRCCA had slopes had been modified for building foundations, stormwater management facilities, or road construction, and that these modifications contributed to bluff failure. In these particular instances the bluff failures also resulted in significant damages to built infrastructure.



Figure 3. Highway 13, Great Rivers Trail failure in Mendota Heights. Photo from http://www.myfoxtwincities.com/ story/25740202/mudslide-closes-highway-13-in-mendota.

Bluffs also need protection because they provide wildlife habitat and support native plant communities. As illustrated by Minnesota's Land Cover Classifications System (MLCCS), a GIS-based classification system, there is a greater occurrence of native flora and fauna along bluffs and steep slopes ¹⁰.

Better corridor-wide management practices addressing structure placement and vegetation, land alteration, and stormwater management can reduce the risk of soil erosion and bluff failure as well as economic loss and human injury.

Current Regulatory Status

Executive Order 79-19 does provide special protection of "bluffs with a slope greater than 18 percent," but does not define the term "bluff." Executive Order 79-19 does, however, define a bluff<u>line</u> as "a line delineating the top of a slope connecting the points at which the slope becomes less than 18 percent" and establishes a 40 foot structure setback from the bluffline. Executive Order 79-19 also limits certain vegetation and land alteration activities within the bluffline setback and prohibits new structures on slopes 18 percent or greater.

An examination of local ordinances within the MRCCA indicates that currently bluff definitions and standards vary widely across communities, as does administration of those requirements in local zoning ordinances. Many communities simply define a bluff as any slope greater than 18 percent, while others define them as slopes ranging from 12 percent to 40 percent. Some communities have specified the spatial extent of bluffs through use of minimum horizontal and/or vertical distances over which the

⁹ <u>http://www.dnr.state.mn.us/mlccs/index</u>.html

⁸ Jennings, C. 2015.

¹⁰ http://www.dnr.state.mn.us/mlccs/index.html

defined slope percentage is measured. Many local government definitions do not address the difference between natural and man-made slopes. Because of vague definitions and variations in the administration of local ordinances, the placement of buildings along bluffs, land alterations on bluffs, and vegetation management practices on bluffs are all inconsistent across the MRCCA. These inconsistencies coupled with the potential catastrophic impacts of unsafe bluff development support the need to redefine and reestablish development guidelines for those areas of the MRCCA with bluffs.

Determining New Bluff Definitions

The development of the bluff definition in the proposed MRCCA rules was premised on the dual goal of protecting sensitive bluff features while minimizing the creation of new nonconforming structures within areas of significant existing development. In an effort to achieve the latter goal, the 18 percent slope parameter was retained from Executive Order 79-19 because it was a standard widely adopted by local governments and accepted by environmental organizations. The DNR in consultation with local governments and other stakeholders then used GIS imaging to evaluate six combinations of bluff height and width parameters within the MRCCA. The purpose of this analysis was to determine which height and width parameters would meet the dual goals of minimizing nonconformities while protecting bluff systems.

The analysis began with a preliminary bluff map that had been prepared by the DNR in 2009 in response to a legislative directive that defined bluffs as having a slope of 18 percent or greater with a vertical rise of at least 10 feet. Minn. Laws 2009, ch. 172, art. 2, § 27, subd. 4 (pages 2484 - 2485) codified at Minn. Stat. § 116G.15 (2010). During the 2009/2010 rulemaking process local governments pointed out that this definition would create many nonconforming structures. While the 2013 Legislature repealed this

bluff definition, the 2009 map was used as baseline for comparing other alternatives. *Cf. Id.* and Minn. Stat. § 116G.15 (2015).

Figure 4 compares the 2009 baseline definition and the proposed bluff definition. It shows that many existing structures (building footprints outlined in red) are captured by the 2009 bluff definition (shown in purple) and would thus be nonconforming structures under that definition, creating problems for property owners and local governments.

Alternatively, significantly fewer structures were captured by the proposed bluff definition (shown in green), but the definition still

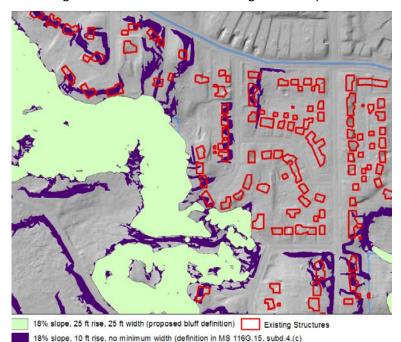


Figure 4: Comparison of bluff definitions. The areas shown in purple would be covered under the 2009 (baseline) definition; the areas in green are covered by the proposed definition.

protects the major bluff systems. Figure 4 shows the analysis for a portion of the Highwood neighborhood in St. Paul. Similar results were found when analyzing other sites in six other local governments across the MRCCA.

After many analytical iterations and field verification, it was determined that a bluff defined as a feature with an 18% slope rising 25 feet over a 25 foot width would provide the best balance between resource protection and minimizing the creation of new nonconforming structures. This definition (as shown in green in Figure 4) eliminated most minor topographic variations such as grading for driveways, yet encompassed the iconic bluffs that characterize the river corridor, as well as natural vegetation and habitat systems.

Before advancing this definition for inclusion in the MRCCA rules, DNR staff conducted field visits to understand how different bluff definitions might affect topographic, ecological, and scenic resources. Examples of structures located on 18% slopes with a vertical rise of at least 10 feet (indicated by the red outlined structures overlapping the purple shaded area in Figure 4) are shown below in Figures 5 and 6.



Figure 5: Example of property on 18% slope rising at least 10 feet.



Figure 6: Example of property on 18% slope rising at least 10 feet.

These properties are in established urban neighborhoods, on isolated 18% slopes with little natural vegetation. These properties have very similar topography and vegetation to other nearby properties that are not in the MRCCA. The DNR did not find any significant erosion risks in these areas or ecological or scenic resources to protect. Most of these properties are not visible from the river; however, some are located within 40 feet of bluffs as defined by the proposed definition, and would need to meet the bluff setback requirements set forth in proposed Minn. R. 6106.0120 or would be considered nonconforming.

Figures 7 and 8 show examples of properties that are in the bluff impact zone (BIZ) and would thus be regulated under the proposed rules. Figure 7 shows structures built on the top of the bluff overlooking the river corridor. Figure 8 shows structures built into the toe of the bluff. In these areas, bluffward expansion and future vegetation and land alteration activities would need to conform to the proposed rules.



Figure 7: Existing structures near top of bluff under proposed bluff definition.



Figure 8: Existing structures near bottom of bluff under proposed bluff definition.

Rule Proposal

The proposed rules provide a uniform set of specific bluff and bluff related definitions to insure consistent and equitable treatment of development across the MRCCA. The definitions also allow bluff features to be easily mapped by local governments using widely available mapping software. The DNR has developed a bluff mapping tool that can be used by local governments with ArcMap, a GIS mapping software, to map defined bluff features within their communities.

The proposed bluff definition retains the 18 percent slope criterion established in Executive Order 79-19, but adds additional parameters to ensure that bluff complexes, rather than isolated slopes, are protected:

Proposed Minn. R. 6106.0050, subp. 10 defines a *bluff* as a natural topographic feature having either of the following characteristics:

- 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 from the ordinary high water level or toe of the slope to the top of the slope averages 18 percent or greater, measured over a horizontal distance of 25 feet; or
- B. a natural escarpment or cliff with a slope that rises at least 10 feet above the ordinary high water level or toe of the slope to the top of the slope with an average slope of 100% or greater.

Subpart 10.B. was added to ensure that isolated cliffs and rock outcrops such as Robinson's Rocks in Gray Cloud Island Township are protected. These features, which are often nearly vertical, would otherwise not be captured by the bluff definition.

The proposed definition also clarifies that a *bluff* is a "natural topographic feature" to differentiate natural features, which the rules seek to protect, from man-made features. The various bluff protection standards do not apply to man-made features such as highway and railroad embankments, road ditches, and reclaimed slopes.

A variety of bluff-related definitions are used to define the specific spatial extent of a *bluff*, the scope of required bluff protections, and to improve the ability of local governments to administer the rules. When determining the limits of a *bluff* it is important to clearly define where the *bluff* begins and ends. The following definitions were developed to aid in this determination. These definitions will be used to map bluff features when reviewing development proposals and for accurate delineation by surveyors "in the field":

- A *bluffline*, which is a line delineating the top of the bluff. Proposed Minn. R. 6106.0050, subp. 10. More than one bluffline may be encountered proceeding landward from the river. *Id.*
- The toe of the bluff is a line along the bottom of a bluff, requiring field verification, such that the slope above the line exceeds 18 percent and the slope below the line is 18 percent or less, measured over a horizontal distance of 25 feet. Proposed Minn. R. 6105.0050, subp.77.
- The *top of the bluff* is a line along the top of a bluff, requiring field verification, such that the slope below the line exceeds 18 percent and the slope above the line is 18 percent or less, measured over a horizontal distance of 25 feet. Proposed Minn. R. 6105.0050, subp. 78.

While bluff mapping software can estimate the general location of *bluffs*, field verification by a land surveyor is needed to identify *blufflines*. The location of the *bluffline* is particularly important in determining the placement of a structure on a lot and determining the height of a structure. *See e.g.* Proposed Minn. R. 6106.0120, subps. 2 and 3B (regarding the height of structures in relation to the *bluffline* and *bluffline* setback requirements).

The *toe of bluff* and *top of bluff* definitions are derived from the state shoreland rules. Minn. R. 6120.2500, subps. 1b and 1c (2015). However, the proposed MRCCA rule uses a 25-foot horizontal segment instead of the 50-foot horizontal segment used in the statewide shoreland rules. *Cf.* Minn. R.6120.2500, subp. 1b (2015) and Proposed Minn. R. 6105.0050, subp. 11. The 25-foot horizontal segment was used to provide a finer resolution of these features systems within the MRCCA, which is more heavily developed than the typical shoreland district.

The concept of the *bluff impact zone* is the bluff and area around the bluff that will be protected by the proposed MRCCA rules. As illustrated in Figure 9, the *bluff impact zone* includes the bluff and land within 20 feet (from the top, sides, and toe) of the bluff. Proposed Minn. R. 6105.0050, subp. 9. The *bluff impact zone* is based on the definition used in the shoreland rules but includes the sides and toe of the bluff as protected areas. *Cf.* Minn. R. 6120.2500, subp. 1c (2015) and Proposed Minn. R. 6106.0050, subp. 9.

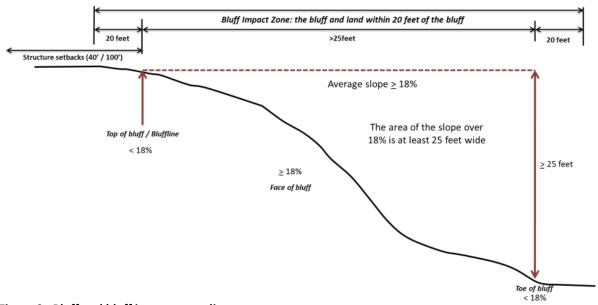


Figure 9. Bluff and bluff impact zone diagram.

The development and land use standards tied to the *bluff impact zone* in the proposed MRCCA rules are more restrictive than those in the shoreland rules. Minn. R. 6120.3300, subp. 4 (2015), Proposed Minn. R. 6106.0120, subp. 3 and 6106.0150. The proposed MRCCA rules prohibit the placement of structures, land alteration, vegetation clearing, stormwater management facilities, and most construction activities in the bluff impact zone. The proposed MRCCA rules do, however, allow some limited exceptions to these restrictions such as for public utilities and recreational access to the river. This greater degree of protection is necessitated by development pressures on bluffs throughout the river corridor, and the susceptibility of these features to erosion and slope failure.

Rule-By-Rule Analysis

6106.0010 Policy

The policy statement for the proposed MRCCA rules is derived from and consistent with Executive Order 79-19 and the original Executive Order 130 (1976), which established the MRCCA within the Twin Cities Metropolitan area. The MRCCA rules are intended to use coordinated planning to "achieve development [within the MRCCA] as a multipurpose resource, resolve the conflicts of use of land and water, preserve and enhance its natural, aesthetic, cultural, and historical value for the public use, and protect its environmentally sensitive areas."

6106.0020 Purpose

The five statements of purpose for the MRCCA rules are drawn from Minn. Stat. § 116G.15, Subd. 1 (2015) and reflect the purposes of the MRCCA designation as set forth in Executive Order 79-19 (Section A, 3 S.R. 1692, Standards and Guidelines for Preparing Plans and Regulations).

6106.0030 Scope

This part lays out the jurisdiction and scope of the rules, the general roles and responsibilities of governmental entities with jurisdiction or property within the MRCCA in furthering the purposes of the rules, and the applicability of conflicting rules, ordinances and regulations to the MRCCA:

Subpart 1: Applicability. The proposed MRCCA rules are applicable to all lands and public waters within the jurisdictional boundaries of the MRCCA.

Subparts 2 and 3: Government actions and state land. These subparts specify the general responsibilities of all governmental units with jurisdiction or property within the MRCCA for furthering the purposes of the proposed MRCCA rules as provided by Minn. Stat. § 116G.15, subd. 5 (2015). These rules are applicable to state and local units of government.

Subpart 4: Conflicting standards. This subpart addresses the issue of conflicts between the proposed MRCCA rules and local ordinances, state rules, or any other regulation. Where such a conflict exists, the most protective provisions apply. This is consistent with similar provisions in many other state rules.

Subpart 5: Superseding standards. This subpart clarifies that the proposed MRCCA rules supersede the Environmental Quality Board (EQB) rules with respect to management of the MRCCA. The EQB rules, Minn. R. 4410.8100 to 4410.9910 (2015), will remain, however, as they are applicable to the designation and administration of other critical areas in general. The MRCCA is the only critical area in existence at the time that these rules are being proposed.

6106.0050 Definitions

In the course of developing the proposed MRCCA rules, 86 terms were identified as requiring definitions. It was important to define these particular terms because many will be incorporated into local zoning ordinances, and consistency in terminology across the MRCCA is essential. Many of the definitions borrowed heavily from definitions already used by local government in existing ordinances. Of these terms and definitions:

- Fifteen of the terms and their associated definitions refer to or are derived from Minn. Stat. § 116G.15 (2015) or Executive Order 79-19. These include the definitions for: adjacent; barge fleeting; bluffline; developer; development; discretionary action; essential services; local government; off-premise advertising signs; parcel; public transportation facilities; setback; steep slope; transmission services; and treeline. Because Minn. Stat. § 116G.15 (2015) and Executive Order 79-19 are the guiding documents for this rulemaking, using existing definitions from these documents provides consistency across rules and statutes and continuity over time.
- Twenty-one of the terms and their associated definitions were derived from existing terms and definitions in other state statutes or rules, including: agricultural use; conditional use; dock; electric power facilities; feedlot; floodplain; interim use; lot; marina; mooring facility; nonconformity; ordinary high water level; plat; port; public waters; storm water; subdivision; subsurface sewage treatment system; variance; wetlands; and wharf.
- The remaining terms and definitions are new. Many of these new terms and definitions are
 derived from current terms and definitions in other state statutes or rules and have been
 modified to achieve the purposes of the MRCCA rules.

Proposed definitions that are central to the proposed MRCCA rules and that differ from existing definitions in Minnesota Statutes, Minnesota Rules, or Executive Order 79-19 (beyond minor grammatical changes or technical updates) or that require an explanation are described in more detail below.

Bluffs and Related Terms

Bluff protection was one of the most closely analyzed issues in the rule development process. The proposed rules provide a uniform set of specific bluff and bluff related terms and definitions - including bluff, bluff impact zone, bluffline, toe of bluff and top of bluff - to ensure consistent and equitable treatment of development across the MRCCA. As defined, bluffs and bluff features can be easily mapped by local governments using widely available mapping software, including a bluff mapping tool the DNR has developed for use with ArcMap, a GIS mapping software.

The proposed terms, definitions, and associated protection standards for bluffs and bluff features are described in detail in the "Bluff Protection Standards" section of this SONAR. *See Supra* at 29-31 discussing the need for bluff protection, proposed terms and definitions, and the rationale for specific bluff standards within the MRCCA.

Buildable Area

This term identifies areas that are available for development on a lot or parcel within the MRCCA as provided in the proposed MRCCA rules. *Buildable area* does not include the resources and features identified for protection in Minn. Stat. § 116G.15, subd. 4 (2015), and does not include setback areas and other areas specified for protection by the MRCCA rules. This term is used in proposed dimensional standards in 6106.0120, subp. 4.B. to ensure that newly created lots have adequate room for development without needing a variance. Local governments requested that this definition be provided to minimize confusion and disputes over whether certain areas are suitable for development.

Conservation Design and Conventional Subdivision

Both conservation design and conventional subdivisions are allowed under the proposed rules. Conservation design is a pattern of subdivision that is characterized by grouping lots within a portion of the parcel to permit the remaining portions of the parcel to be protected as open space. Proposed Minn. R. 6106.0050, subp. 16. Conventional subdivision is a traditional lot and block type of development that was the primary method of development when the MRCCA was designated. Conservation design provides local government with the option of allowing smaller lot sizes within the MRCCA in exchange for increased protection of primary conservation areas within the MRCCA as open space, and replaces the outdated term "clustering" used in Executive Order 79-19 (see Figure 10). Proposed Minn. R. 6106.0050, subp. 17. This term is used the proposed subdivision and land development standards in proposed Minn. R. 6106.0170, subp. 4, which require local governments to provide incentives for alternative design standards such as conservation design in local ordinances.

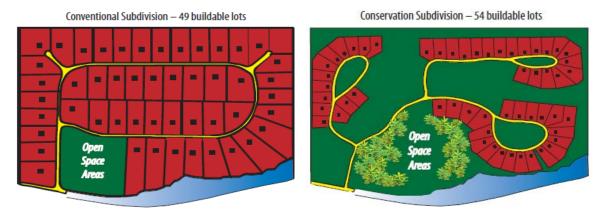


Figure 10. Conventional subdivision compared to conservation design subdivision.

Impervious Surface

The term *impervious surface* refers to constructed or hard surfaces that impede the infiltration of water into soils and increase runoff into surface waters. Proposed Minn. R. 6106.0050, subp. 29. This definition is consistent with that used in the Pollution Control Agency's Application for General Stormwater Permit for Construction Activity, and is used in the proposed setback and storm water standards in proposed Minn. R. 6106.0120, subp. 3.B. and 6106.0160.

Intensive Vegetation Clearing

Intensive vegetation clearing replaces the term "clear cutting" as used in Executive Order 79-19. The term clear cutting is a forest management term. Intensive vegetation clearing expands on the concept of clear cutting to include the type of vegetative clearing that is typically conducted on developed lots including those in the MRCCA. The concept includes activities such as extending lawns, landscaping, or opening views. Proposed Minn. R. 6106.0050, subp. 30. This term is used in the proposed vegetation management standards in proposed Minn. R. 6106.0150.

Hard Surface Trail/Natural Surface Trail

The terms *hard surface trail* and *natural surface trail* are proposed to differentiate between trails that are suitable in sensitive bluff areas (natural surface) and trails that are not (hard surface). *Cf.* Proposed

Minn. R. 6106.0050, subp. 27 and subp. 40. These definitions were developed to address concerns raised about the negative impacts of intensive (hard surface) trail development due to extensive grading and clearing of vegetation in sensitive bluff areas. The definitions are derived from the DNR's Trail Planning, Design, and Development Guidelines referenced in proposed Minn. R. 6106.0090, D. These terms are used in the proposed design standards for public recreational facilities in proposed Minn. R. 6106.0130, subp. 8.

Land Alteration

Land alteration refers to changing the contours of or disturbing the earth surface. It includes earth-moving activities such as filling and grading that leave soil exposed and susceptible to erosion but excludes gardening and other minor disturbances. Proposed Minn. R. 6106.0050, subp. 32. The term is used in the proposed standards for land alterations in proposed Minn. R. 6106.0160, subps. 3 and 4.

Lot Width

The term *lot width* is provided to ensure sufficient river frontage to protect riparian areas for new lots that abut the Mississippi River in the proposed Rural and Open Space (CA-ROS) district, and to add clarity to the lot width measurement proposed in proposed Minn. R. 6106.0170, subp. 4. Proposed Minn. R. 6106.0050, subp. 36. The definition is derived from the state shoreland rules. Minn. R. 6120.2500, subp. 9 (2015).

Natural Vegetation

Natural vegetation refers to the types of plant growth within the MRCCA that stabilize soils, retain and filter run off, provide habitat and recharge ground water. Proposed Minn. R. 6106.0050, subp. 41. This term is intended to address the biological and ecological functions provided by natural vegetation, even though the vegetation may have been altered by human activity. The definition provides the basis for the proposed standards encouraging the retention and restoration of natural vegetation found throughout the proposed MRCCA rules.

Planned Unit Development

The proposed definition for *Planned Unit Development* is based on that found in the state shoreland rules. Minn. R. 6120.2500, subp. 11 (2015). However, the definition proposed for the MRCCA rules is broader and does not distinguish between residential and commercial planned unit developments or distinguish between the types of structures. Proposed Minn. R. 6106.0050, subp. 50. Given the frequent use of this type of development in the MRCCA, it is reasonable to have an inclusive and consistent definition of the term that is applicable across the MRCCA.

Primary Conservation Areas

The term *primary conservation areas* defines the key natural and cultural resources and features that are addressed by the MRCCA proposed rules. Proposed Minn. R. 6106.0050, subp. 53. The resources and features listed in the definition are derived from Minn. Stat. § 116.15, subd. 4(b)(2015). This definition consolidates natural and cultural resources and features listed in the statute into a single definition to shorten the rules. The term is used in several parts of the rules to ensure that key resources and features are given priority consideration for protection, including contents of local plans proposed in proposed Minn. R. 6106.0070, subp. 4, project submittal information proposed in proposed

Minn. R. 6106.0080, subp. 6, and the proposed subdivision and land development standards in proposed Minn. R. 6106.0170, subp. 4.

Public River Corridor Views

The term *public river corridor views* was developed to assist local governments and other stakeholders to identify and protect scenic resources through their planning processes. It recognizes that many of the most highly valued views within the river corridor are "views toward the river from public parkland, historic properties, and public overlooks," as well as views towards bluffs from the opposite shore (a subset of the "readily visible" definition below). Proposed Minn. R. 6106.0050, subp. 56. The term is used throughout the proposed MRCCA rules. The definition is intended to provide local governments with an opportunity to identify specific views deemed important to that community, and to protect such views through the development review process.

Readily Visible

The term *readily visible* was developed to create a performance based standard to clarify visual standards and replace the outdated and vague term "visual intrusion" from Executive Order 79-19. This clarification was requested by local governments and other stakeholders. The term refers to development that is easily seen from the ordinary high water level at the opposite shore of the Mississippi River. Proposed Minn. R. 6106.0050, subp. 60. This term is used throughout the proposed MRCCA rules, and the definition describes an appropriate level of visibility for structures from a specified vantage point and during specified conditions. The definition is not used to prohibit development, but to ensure that visual resources are considered in development review by local governments.

River-dependent Uses

The term *river-dependent uses* clarifies those types of commercial, industrial and utility land uses that require a riverfront location and shoreline facilities in order to conduct business. Proposed Minn. R. 6106.0050, subp. 65. This term is consistent with the goal of preservation and enhancement of economic, recreational, cultural, and historical resources within the river corridor to meet the purposes set forth in Minn. Stat. § 116G.15, subd. 1 (2015). Specific standards apply to these uses as provided by proposed Minn. R. 6106.0110, subp. 6, and 6106.0180.

Selective Vegetation Removal

The proposed MRCCA rules specifically allow *selective vegetation removal* without a permit while requiring a permit for *intensive vegetation clearing*. *See* Proposed Minn. R. 6106.0150, subp. 3. *Selective vegetation removal* is vegetation removal that does not substantially reduce tree canopy or understory cover. Proposed Minn. R. 6106.0050, subp. 66. The definition is based on that found in Executive Order 79-19 and modified with input from local governments, most of whom already regulate removal of vegetation using similar definitions.

Shore Impact Zone

The land along the water's edge is environmentally sensitive and needs special protection from development and vegetation removal. The shore impact zone is a "buffer" area between the water's edge and the area where development is permitted (see Figure 11). Proposed Minn. R. 6106.0050, subp. 68. The shore impact zone is the focus of many of the MRCCA rule standards for land alteration and vegetation management. This definition establishes defined boundaries for the shore impact zone, which are derived from the state shoreland rules. Minn. R. 6120.2500, subp. 14.c. (2015). The term is used in the proposed structure location standards, vegetation management standards, and land alteration standards in proposed Minn. R. 6106.0120, subp. 3, 6106.0150, subp. 2, and 6106.0160, subp. 2.C., respectively.

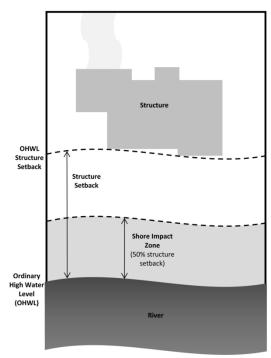


Figure 11. Shore impact zone diagram.

Shoreline Facilities

The term *shoreline facilities* is used to clarify what types of facilities are river-dependent and require a riverfront location, consistent with the economic purposes of the river corridor as described in Minnesota Statutes, § 116G.15 (2015). The term is used in several parts of the draft rules, including the proposed design standards for river-dependent uses in proposed Minn. R. 6106.0110, subp. 6, and the proposed list of exceptions to the ordinary high water level (OHWL) setbacks in proposed Minn. R. 6106.0180.

Steep Slope

A *steep slope* is a natural topographic feature with an average slope of 12 -18 percent measured over 50 feet or more. Proposed Minn. R. 6106.0050, subp. 72. This term has a specific definition because protections afforded steep slopes differ from those established for bluffs. Executive Order 79-19 includes performance standards that govern development on slopes between 12-18 percent, and similar standards are proposed in proposed Minn. R. 6106.0160, subp. 8. The 50-foot horizontal measurement is a commonly used standard and ensures that minor undulations in the landscape are not regulated as steep slopes. The use of the term "natural" also ensures man-made features such as road embankments are not treated as steep slopes for regulatory purposes under the proposed MRCCA rules.

Structure

The definition of *structure* is derived from the state wild and scenic river management rules. Minn. R. 6105.0040, subp. 23 (2015). A structure includes buildings, signs, and appurtenances with some limited exceptions. Proposed Minn. R. 6106.0050, subp. 74. This definition is used to define buildings, signs and appurtenances that will be subject to the proposed dimensional standards in proposed Minn. R. 6105.0120.

Water Oriented Accessory Structure

A water oriented accessory structure refers to recreational amenities that are commonly constructed closer to the shoreline than a typical structure. Proposed Minn. R. 6106.0050, subp. 84. Under the proposed rules, these structures are allowed on riparian lots within the required setback from the ordinary high water level subject to specific standards in proposed Minn. R. 6106.0140, subp. 5.D. It is reasonable to clarify the types of structures that are allowed closer to the water, and to place limits on the dimensions of these structures to minimize negative impacts to sensitive shoreline areas. The dimensions chosen are consistent with the sizes of many existing structures within the MRCCA.

6106.0060 Administration of Program

Part 6106.0060 of the proposed MRCCA rules lay out the specific roles, responsibilities, and authorities for administering the proposed rules. Many provisions are drawn directly from Minn. Stat. § 116.15, subd. 2 (2015), Executive Order 79-19, and/or the state environmental review rules set out in Minn. R. Ch. 4410. Below, by subpart, is a brief description of the pertinent requirements for the administration of the MRCCA program with special emphasis on new or revised provisions.

Subpart 1. Purpose, terms, and timeframes. This subpart clarifies that the "plan[s] and ordinance[s]" specified in the MRCCA rules only pertain to those plans and ordinances prepared by local governments to implement the rules in the MRCCA. It is not the intent of the MRCCA rules that the provisions in the rules should apply to any other local plans or ordinances. The subpart also clarifies that all time frames referenced in the MRCCA rules are measured in calendar days.

Subpart 2. Responsibilities and authorities. This subpart establishes the roles and responsibilities of the governmental authorities involved in implementing the MRCCA program, including the commissioner of natural resource; the Metropolitan Council; local governments; and state or regional agencies, local park agencies, and special purpose units of government. Proposed Minn. R. 6106.0060, subp. 2. Most local governments currently have MRCCA plans and ordinances in place. This is consistent with Executive Order 79-19 and the MRCCA program's administration.

Subpart 3. Consistent plans and ordinances. Consistency is a fundamental element of the MRCCA program thus, under this subpart, local governments must adopt, administer, and enforce plans and ordinances within the MRCCA that are consistent with the MRCCA rules. For purposes of the MRCCA rules, "consistency," means that local plans and ordinances must meet the purpose, scope, and the numeric thresholds set forth in the MRCCA rules, but may vary in structure or wording. To deviate from this consistency standard the local government must request flexibility, as provided in proposed Minn. R. 6106.0070, subp. 6.B. This provision is necessary in order to provide local governments with the explicit standards that DNR will use when it reviews local plans and ordinances. Local governments expressly requested this provision. The concept of consistency is a reasonable expectation for local plans and ordinances.

Subpart 4. Greater restrictions. Although the MRCCA rules require consistency with minimum standards, local governments are allowed to adopt and enforce plans and ordinances that are more restrictive than the standards in the MRCCA rules. The MRCCA rules are intended as minimum standards. It is reasonable to allow local governments to adopt and enforce more restrictive standards

to achieve a higher level of protection of the resources within the MRCCA consistent with other local goals. This clarification and permission was sought by local governments and other stakeholders during the rule development process.

Subpart 5. Duties of the commissioner. The duties of the commissioner (hereinafter referred to as the DNR) set forth in proposed Minn. R. 6106.0060, subp. 5 are largely unchanged from current statute, Minn. R. 4410.8100 – 4410.9910, and Executive Order 79-19. Those duties include:

- Consultation. Both this subpart and Minn. Stat. § 116G.15, subd. 2 (2015) require that the DNR consult with the named agencies and others that have a significant role in the MRCCA to ensure the corridor is managed in a manner consistent with the purposes of the statute. This subpart also requires that the DNR play a special consultative role with those units of government that manage land within the MRCCA to ensure that they administer public lands in a manner consistent with the MRCCA program.
- Technical assistance and advice. Local governments requested that the DNR provide them with technical assistance and advice in the development, administration, and enforcement of the plans and ordinances necessary to implement the MRCCA program. This subpart reflects DNR's commitment to provide that requested advice and assistance as an important mechanism to foster coordination and cooperation between the DNR and local governments.
- Review and approval of local plans and ordinances. Finally, this subpart specifies that the DNR will coordinate the preparation, submittal, review and approval of all local plans and ordinances submitted by local governments as specified in Minn. Stat. § 116G.15, subd. 5(30 and (4) (2015). This is an essential responsibility of the DNR under the current MRCCA program.

Subpart 6. Duties of Metropolitan Council. The duties of the Metropolitan Council remain largely unchanged from statute and Executive Order 79-19. In addition to its responsibilities in the MRCCA program administration, the Metropolitan Council is charged with the oversight of local government comprehensive plans in the Metropolitan area to assure consistency with metropolitan system plans. Minn. Stat. §473.175, subd. 1 (2015). The review process set out in proposed Minn. R. 6106.0060, subp. 6 is designed to ensure that the MRCCA review process outlined herein is incorporated into the Metropolitan Council's planning process for efficient planning. The process is also designed to integrate comments from the Metropolitan Council into the final plans and ordinances approved by the DNR.

Subpart 7. Duties of cities. The duties of cities too are substantially unchanged from statute and Executive Order 79-19. This subpart continues these duties for the 25 cities in the MRCCA, including:

- preparing, amending, and adopting plans and ordinances that meet or exceed the minimum standards of the MRCCA rules;
- submitting plans and ordinances to the Metropolitan Council for review and comment, and to the DNR for review and approval; and
- informing the DNR about discretionary actions taken under an approved plan or ordinance so that the DNR can provide technical assistance to the local government, comment on proposed actions, and monitor compliance with the MRCCA rules.

A new requirement provided in this subpart requires cities to notify the National Park Service and adjoining local governments, including those with overlapping jurisdiction and those across the river, of public hearings on discretionary actions and plan and ordinance amendments. The National Park Service must be notified of all discretionary actions taken by a city, while adjoining local governments only need be notified in cases where buildings are proposed to exceed the height limits established in the rules. The National Park Service and neighboring local governments have a vested interest in the MRCCA and the local decisions that can affect the MRCCA resources and features. The height and resulting visibility of buildings is of particular concern to many local governments. Unlike the prescribed format for notice to the DNR, the rule allows cities discretion regarding the method of notice given to the National Park Service and adjoining local governments.

Subpart 8. Duties of counties and townships. There are five counties and four townships in the MRCCA that have unique obligations under this subpart. Both counties and townships must prepare plans; however, whether a county adopts an ordinance is discretionary, while townships are required to adopt ordinances. All four townships in the MRCCA currently exercise zoning authority and it is appropriate that they adopt and enforce plans and ordinances in the same manner as cities. It is a requirement of Minn. Stat. § 394.33, subd. 1 (2015) that a township's plans and ordinances must be consistent with and at least as restrictive as those of the county in which it is located.

Subpart 9. Duties of state and regional agencies and other government entities. There are a number of state and regional agencies, local park agencies and special purpose units of government that own and manage land within the MRCCA. This subpart sets out their responsibilities under the MRCCA program. The obligations of these entities are relatively unchanged from Executive Order 79-19. To assure that the resources in the MRCCA are protected and to assure consistence across the MRCCA it is reasonable and necessary that state or regional agencies, local park and recreation agencies, and special purpose units of government such as watershed districts that own or manage lands within the MRCCA be required to manage their lands consistent with the MRCCA rules. In addition, agencies through their actions have the potential to influence other MRCCA stakeholders.

6106.0070 Preparation, Review, and Approval of Plans and Ordinances

Subpart 1. Purpose. Local governments with land in the MRCCA are required to adopt local plans and ordinances pursuant to Minn. Stat. § 116G.07 (2015), Minn. R. 4410.9000 (2015), and Executive Order 79-19. The purpose for this part is to clearly lay out the processes, responsibilities, and other requirements for the preparation, review, and approval of plans and ordinances to assure consistency with the proposed MRCCA rules. The MRCCA program has been in effect for over 35 years and the DNR has managed the MRCCA program since 1995. Historically, problems with administration of the MRCCA program largely stem from the vague or outdated language in Executive Order 79-19 or from a lack of program clarity or flexibility for local governments. Therefore, while many provisions in this part are identical to those set forth in statute, rule, and Executive Order 79-19, some procedures and criteria are clarified to better assist local governments to implement the MRCCA program.

Subpart 2. Adoption of plans and ordinances. The procedures for the adoption of local plans and ordinances required to implement the MRCCA rules are set forth in this subpart. Local governments' incorporation of the requirements of the MRCCA rules into local plans and ordinances will be

undertaken according to an implementation adoption schedule developed by the DNR in consultation with the Metropolitan Council. The provisions proposed under this subpart address the adoption schedule, program implementation prior to plan and ordinance adoption, and the impact of the adoption schedule on pending development projects:

- Adoption schedule. The DNR will, in consultation with the Metropolitan Council, develop an adoption schedule for the development and adoption of plans and ordinances under the MRCCA rules by local governments. The schedule shall align "as closely as possible," with the local governments' comprehensive plan update schedule set forth in Minn. Stat. § 473.858 (2015). The DNR will notify local governments of the schedule for updating their MRCCA plans and ordinances. Consultation with the Metropolitan Council is necessary to ensure that the schedule is workable for all parties and aligns with Metropolitan Council planning requirements. The flow of plans and ordinances needs to be staggered so that both the DNR and the Metropolitan Council are able to provide a timely and thorough review of local plans and ordinances.
- Program implementation prior to plan and ordinance adoption. To ensure seamless regulatory coverage prior to plan and ordinance adoption, existing plans and ordinances will remain in effect until new ones are adopted. Those local governments that have not previously adopted ordinances under Executive Order 79-19 must comply with the requirements of the newly adopted MRCCA rules until the local government adopts plans and ordinances consistent with the MRCCA rules and approved by the DNR. This latter requirement affects three communities within the MRCCA, all of which are currently subject to the Interim Development Regulations in Executive Order 79-19. Since these rules replace the Interim Development Regulations in Executive Order 79-19, it is reasonable to apply the standards in these rules rather than in Executive Order 79-19.
- Impact of the adoption schedule on pending development. It is not the intent of the MRCCA rules to halt development within the MRCCA pending the adoption of revised plans and ordinances. Development projects that conform to a local government's existing plans and ordinances for the MRCCA and that were authorized under those plans and ordinances can continue, as provided in Minn. Stat. § 116G.13 (2015). This is a standard land use practice and is necessary to provide developers with certainty during the MRCCA program implementation phase, and also to limit exposure to takings claims.

Subpart 3. Plan and ordinance review. The procedures for the preparation, review, approval, and adoption of plans and ordinances are set out in this subpart. With the exception of minor modifications to address legislative changes made since establishment of the MRCCA, these procedures are largely unchanged from those in statute, EQB rules, and Executive Order 79-19.

• Plan and ordinances adoption, review, and approval. The requirements for plan and ordinance adoption, review, and approval align with the general critical area plan and ordinance review process in Minn. Stat. §§ 116G.04 – 116G.10 (2015) and adopted by the EQB in Minn. R. 4410.9000 through 4410.9400 (2015). As requested by local governments, this subpart does, however, provide greater detail and clarification of the process. Once notified by the DNR under

- proposed Minn. R. 6106.0070, subp. 2, local governments will have one year to prepare or amend plans and ordinances for consistency with the MRCCA rules, and will be able to request extensions if needed. Local governments generally felt that this was a reasonable amount of time to complete their plans and ordinances.
- Underlying ordinances. Because both the MRCCA ordinance and the underlying standards upon
 which the ordinance relies must be consistent with each other and the requirements of the
 MRCCA rules, where a proposed plan or ordinance references underlying zoning standards,
 those underlying zoning documents must be submitted for review during the plan and
 ordinance review process.
- Role of National Park Service in the review process. The National Park Service was added to
 the review list for plans and ordinances. The MRCCA became a unit of the National Park System,
 known as the MNRRA, in 1988, 12 years after the original executive order. Thus, the
 perspectives of the National Park Service may be relevant to the review process.
- Failure to adopt a plan and ordinance. This subpart also establishes provisions for local governments that fail to adopt a plan and ordinance as required by the proposed MRCCA rules, consistent with Minn. Stat. § 116G.09 (2015), Minn. R. 4410.9300 (2015), and Executive Order 79-19. Specifically where a local government fails to adopt a plan and ordinance in conformance with the MRCCA rules, the DNR is authorized to use the procedures set forth in proposed Minn. R. 6106.0070, subp.3.J. to adopt rules on behalf of the local government. This authorization is intended to assure that all portions of the MRCCA are protected in accordance with the proposed MRCCA rules.

Subpart 4. Contents of plans. This subpart is intended to provide guidance to local governments in the preparation and revision of local plans necessary to implement the proposed MRCCA rules.

- Component of local comprehensive plan. This subpart requires that the MRCCA plan adopted
 by the local government be a component of the local government's comprehensive plan. This
 requirement is intended to ensure coordination between the MRCCA plan and other elements
 of the local comprehensive plan. Since plans guide local ordinance development and
 administration, this requirements is also intended to ensure consistency between the local
 MRCCA ordinance and other local ordinances.
- Plan contents. This subpart contains the required contents of local plans necessary to implement the proposed MRCCA rules. These include maps, policies, and implementation provisions to: identify and protect primary conservation areas and public river corridor views, restore sensitive natural areas, minimize conflicts in water surface use, provide for barge facilities and recreational marinas, provide for commercial and industrial water uses and access, provide for recreational facilities and open space, identify potential public access points and trails, and provide for transportation and utility development within the MRCCA.

Subpart 5. Contents of ordinances. The requirements of this subpart are intended to provide guidance to local governments in the preparation and revision of local ordinances necessary to implement the proposed MRCCA rules. As set forth in this subpart, local ordinances are required to be consistent with the requirements of the proposed MRCCA rules, including definitions, administrative provisions,

districts, and minimum standards and criteria. Because existing MRCCA ordinances, as well as shoreland and floodplain ordinances, are generally treated by local governments within the MRCCA as overlay districts, this subpart requires that updated MRCCA ordinances also be structured as overlay districts. The MRCCA ordinance adopted by the local units of government must reference any underlying zoning standards that govern development in a MRCCA district, such as building height.

Subpart 6. Flexibility requests for ordinances. A number of commenters and interest groups requested that the proposed rules include detailed criteria that would allow local governments, under special circumstances, to adopt standards that meet the intent or purpose of the proposed MRCCA rules but that are not necessarily "consistent" with the proposed MRCCA rules as defined in proposed Minn. R. 6106.0060, subp. 3. This so called flexibility provision is based on the flexibility process used effectively for many years in the state shoreland rules. This subpart sets out the special circumstances in which the flexibility provision may be used, lays out the process that a local government must follow to obtain flexibility, and establishes criteria that the DNR will use to evaluate the request.

Subpart 7. Plans and projects for parks and other public lands. While state and regional agencies and other governmental entities owning or managing property within the MRCCA are not required to adopt either plans or ordinances for these properties under the proposed MRCCA rules, they are required to manage their properties in accordance with the proposed rules. This subpart establishes the standards for plans and projects of state and regional agencies and other government entities.

6106.0080 Administrative Provisions for Ordinances

This part consolidates the administrative provisions for local zoning ordinances to ensure their consistency with these rules. As with proposed Minn. R. 6106.0070, many of these provisions are unchanged from Executive Order 79-19, but are spelled out in greater detail in the proposed MRCCA rules. The ordinance provisions were revised to be consistent with other applicable state and federal laws such as those governing local planning set forth in Minn. Stat. Chs. 394 and 462, the Americans with Disabilities Act 42 U.S.C. §§ 12111 et seq., and the Fair Housing Act 42 U.S.C. §§ 3601 et. seq.

Subpart 1. Purpose. The purpose of this part is to clearly identify the administrative provisions required to be included in local ordinances adopted pursuant to the proposed MRCCA rules.

Subpart 2. Variances. While the proposed MRCCA rules are designed to assure that the plans and ordinances adopted by local governments are consistent with the requirements in the rules and protect the key resources and features within the MRCCA, requests for variances from local ordinance requirements are a common component of ordinance administration. They are particularly necessary in those instances where development activities cannot be conducted without varying from state and local standards. This subpart is designed to assure that variances addressing such instances are issued in conformance with the requirements of Minn. Stat. §§ 394.27, subd. 7 and 462.357, subd. 6(2) (2015) and address through mitigation the potential impacts of a proposed variance on MRCCA key resources and features. To insure consistent protection of resources and features across the MRCCA, it is reasonable to require mitigation of impacts to these resources in those situations where a variance is granted. Thus, this subpart requires that mitigation is proportional to and bears a relationship to the impact on the affected resource where a variance is granted that adversely impacts an MRCCA resource.

Many local governments currently use similar mitigation systems or place conditions on development to address the consequences of granting variances to developers.

Subpart 3. Nonconformities. This subpart addresses how local governments are to address nonconformities. Nonconformities were a significant concern to local governments, interest groups, and property owners during the rule development process, especially the concern that the proposed rules would create new nonconforming structures, uses, or lots. Throughout the district mapping process and analysis of bluff definition alternatives, the DNR worked closely with local governments to minimize the creation of nonconforming structures, and in some cases to reduce the number of existing nonconformities.

Although the proposed MRCCA rules were drafted to avoid creating legal nonconformities, it is inevitable that the adoption and implementation of these rules will create some legal nonconformities in the MRCCA, primarily nonconforming structures. Minn. Stat. § 116G.15, subd. 2(c) (2015) expressly permits the continuation of legally established nonconformities to the extent they are consistent with Minn. Stat. §§ 394.36 and 462.357, subd. 1e (2015). Where nonconforming principal structures do exist within the MRCCA, this subpart gives local governments the option of allowing limited lateral expansion of the nonconforming principal structure into required setbacks, consistent with defined criteria.

This subpart also clarifies that new structures built in accordance with the setback averaging provisions in proposed Minn. R. 6106.0120, subp. 3, or site alterations such as landscaping, erosion control, and stormwater control structures legally made prior to adoption of these rules, are considered conforming structures and site features.

Subpart 4. Conditional and interim use permits. A conditional use permit is a discretionary permit granted by a zoning authority that allows certain uses in a particular zoning district only after a public hearing and with specified conditions. An interim use permit is similar but zoning authorities can impose time limits on the use. This subpart allows local governments to issue conditional or interim use permits within the MRCCA provided the local government evaluates, assesses, and applies appropriate mitigation for potential impacts on key resources and features that may arise as a result of issuing the permit. Specific mitigation standards are set forth in subpart 5 of this part. This subpart pertains only to those conditional and interim uses specified in the proposed MRCCA rules.

Subpart 5. Mitigation. This subpart establishes mitigation measures intended to offset adverse impacts associated with the issuance of a variance under subpart 3 or an interim or conditional use permit under subpart 4 of this part. Local governments are responsible for determining mitigation measures that are related and proportional to the negative impact of the action allowed by the variance, conditional use, or interim use. Rather than mandating specific mitigation measures, this provision allows local governments to determine the appropriate measures that meet the intent of these rules, provided that the mitigation proportionally compensates for the adverse impact of the approved activity.

Subpart 6. Project information. This subpart contains a list of materials an applicant is expected to submit to apply for a discretionary action or permit required under the proposed MRCCA rules. A discretionary action, as defined in proposed Minn. R. 6106.0050, subp. 21, includes actions that require a hearing under local ordinance or statute.

The applicant must provide the local government with all relevant information that may be needed by the local government to evaluate compliance with the local MRCCA ordinance and the potential impact of the request to determine appropriate mitigation as provided in subpart 5 of this part. The list is not intended to be exhaustive; the designated local government official may determine which of the listed information is necessary for project review or if additional information is necessary to properly evaluate the impact of the requested action.

Subpart 7. Accommodating disabilities. Facilities to accommodate persons with disabilities consistent with state and federal law are permitted within the MRCCA even if inconsistent with the requirements of the proposed MRCCA rules. This subpart recognizes that development within the MRCCA must comply with the Americans with Disabilities Act 42 U.S.C. §§ 12111 et seq., and the Fair Housing Act 42 U.S.C. §§ 3601 et. seq. This subpart allows local governments to regulate compliance with these federal requirements by administrative permit, thereby minimizing administrative burdens. This subpart also requires removal of accommodating facilities once the disabled person is no longer using the property.

6106.0090 Incorporations by Reference

The proposed MRCCA rules rely on standards set in a number of guidance documents developed by the DNR, the Minnesota Board of Water and Soil Resources (BWSR) and the Minnesota Pollution Control Agency (MPCA). This section adopts these guidance documents and the standards set in those documents. Rather than repeating the content of these guidance documents in the proposed MRCCA rules, they are included by reference. These documents are readily available through inter-library loan.

6106.0100 Districts

Subpart 1. Establishment of districts. Minn. Stat. § 116G.15, subd. 3, requires establishment of new land use districts within the MRCCA.

Subpart 2. Purpose. Executive Order 79-19 established four land use districts based on generalized land use patterns and natural resources within the corridor 35 years ago:

- Rural Open Space
- Urban Open Space
- Urban Developed
- Urban Diversified

Over time, these four districts have become less consistent with actual development within their boundaries as the region has evolved, and they no longer reflect the diversity of development patterns and resources within the MRCCA.

For example, the "Rural Open Space District" was intended to restrict density in rural areas. However, expansion of urban services such as the metropolitan wastewater system has occurred over the past 30 years in many of these areas, or is currently planned to occur under the Metropolitan Council's metropolitan regional plan, Thrive MSP 2040 (2014). The "Urban Developed District" was designed for suburban densities, with a 35-foot height limit, which now conflicts with the goals of many suburban communities to create new, high-density town center development that takes advantage of river amenities.

The broad-brush nature of these districts and the inability to update them to reflect changing conditions identified in local land use plans has been challenging for local governments interested in redevelopment and enhancements to their riverfront districts.

As such, the 2009 and 2013 Legislatures directed the DNR to establish new districts within the MRCCA. Minn. Stat. § 116.15, subd. 3 (2015). The DNR is authorized to determine the appropriate number of districts within any one municipality, taking into account municipal plans and policies, existing ordinances, and existing conditions. In establishing the districts the DNR is required to consider: the protection of public recreational and interpretive resources; drinking water supply functions of the Mississippi River; the protection of resources identified in the MNRRA plan and local comprehensive plans; management of the corridor consistent with natural characteristics, existing development and the potential for new development; and protection of scenic, geologic and ecological resources. Minn. Stat. § 116G.15, subd. 3 (2015).

Subparts 3-8. Proposed districts. An important focus of implementing this directive through the rule making process has been to design land use districts that are more responsive to unique resource conditions within the MRCCA and existing and proposed land uses identified in local plans. The DNR began the process of developing district types by examining the landscape character within the corridor including, but not limited to, an evaluation of topography, existing vegetation cover, and existing development patterns. This led to the identification of more than twenty different land types over the 72-mile corridor. Similar land types were then grouped together, reducing the number from twenty to ten. These ten land types formed the basis for the creation of ten draft districts which were developed further for public presentation at multiple venues. After receiving input from work groups, local governments, and other interests, the original ten districts were revised and ultimately consolidated into the six districts described in the proposed MRCCA rules. As outlined in subparts 3 - 8, these six districts include:

- Rural and Open Space (CA-ROS)
- River Neighborhood (CA-RN)
- River Towns and Crossings (CA-RTC)
- Separated from River (CA-SR)
- Urban Mixed (CA-UM)
- Urban Core (CA-UC)

The intent and level of protection for each of the six districts is based on the natural resource values within the district, with the greatest levels of protection in those areas that abut the river and still retain natural features. Greater flexibility is provided in those districts that contain areas with more limited resource values, areas that are separated from the river, and fully developed areas of the two major cities – downtown Minneapolis and downtown St. Paul. This array of districts more accurately reflects the different land uses existing within the MRCCA, current development patterns, and proposed future development. The diversity of the districts supports the different dimensional standards needed to enhance the corridor's character and to protect the resources and features identified for special protection in Minn. Stat. § 116G.15, subd. 1 (2015). For a more detailed description of the district, their boundaries, and their location within the MRCCA see the proposed MRCCA district maps (Exhibit G).

Subpart 9. District boundaries. One shortcoming of Executive Order 79-19 is the static nature of the original four districts. The districts established in Executive Order 79-19 cannot be modified to reflect changes in the MRCCA over the last 35 years. This subpart establishes a process to amend district boundaries. A request to amend the boundaries of a district must meet the amendment criteria to ensure local and state review and to assure that an amendment decision balances resource protection and local control. During rule development, local governments strongly supported the creation of an administrative process to amend district boundaries. Because the physical boundaries of the districts are part of this rule, amendments to district boundaries would need to be made through rulemaking. Since this can be a cumbersome process for boundary adjustments, particularly minor boundary adjustments, the DNR intends to seek statutory changes to Minn. Stat. § 116G.15, to give it the authority to change boundaries by written order of the commissioner, or for expedited rulemaking pursuant to Minn. Stat. § 14.389.

6106.0110 Uses

Subpart 1. Underlying zoning. This subpart provides that uses will generally be guided by a local government's underlying zoning, except for select land uses considered to have potential negative impacts on the MRCCA's resources. The Interim Development Regulations adopted under Executive Order 79-19, which were intended to guide local governments in creating their MRCCA ordinances, restricted a limited number of land uses considered to have potential negative resource impacts. For example, mining and extractive uses were allowed in most districts with screening, and commercial and industrial uses were allowed in all districts with some limitations (i.e., on the landward side of blufflines in urban open space districts).

This subpart updates this list of uses to include: agricultural use, feedlots, forestry, aggregate mining and extraction, river-dependent uses, and wireless communication facilities. For these uses the proposed MRCCA rules provide specific standards and requirements to mitigate negative impacts.

Subparts 2 and 3. Agricultural uses and feedlots. Agricultural uses have a significant potential to impact water quality. There are several areas of agricultural land use within the MRCCA, particularly in the northern and southern stretches of the corridor. Many studies have documented the value of perennial vegetation adjacent to water bodies in protecting water quality. It is also well documented that steeper slopes have a higher potential for erosion, and perennial vegetation can mitigate this erosion potential. (USDA Agricultural Handbook No. 703). To restrict agricultural runoff from moving into the river, this subpart requires perennial vegetation within the highly sensitive shore impact zone and bluff impact zone. The proposed rule is consistent with the state shoreland rules. Minn. R. 6120.3300, subp. 7 (2015). To protect water quality, the proposed rules prohibit new feedlots and manure storage areas within the MRCCA. Existing feedlots must conform to the permitting and design requirements of MPCA's feedlot program as set forth in Minn. R. Ch. 7020 (2015).

Subpart 4. Forestry. Forestry activities, where permitted by underlying zoning, must follow current best management practices set forth in the DNR publication Conserving Wooded Areas in Developing Communities, incorporated by reference in proposed Minn. R. 6106.0090. This manual was developed by DNR and other stakeholders to encourage best management practices to conserve the ecological integrity and function of wooded areas, including habitat preservation, within communities as they are

developed. Application of these best management practices for forestry activities is intended to insure protection of the floodplains, significant existing vegetative stands, tree canopies, native plant communities, and scenic views and vistas.

Subpart 5. Nonmetallic mining. This subpart prohibits new nonmetallic mining within the shore impact zone, bluff impact zone, and required setback areas. There are a number of aggregate mining and extraction operations in the southern portion of the MRCCA. Local units of government had requested the ability to continue to allow some nonmetallic mining through conditional or interim use permits. Consistent with these requests, the standards allow local regulation of nonmetallic mining while minimizing the impact of potential mining and extraction activities within the MRCCA. Both existing mines and any new nonmetallic mines must, however, meet established standards for location, site management, and reclamation. These restrictions are consistent with the Interim Development Regulations adopted under Executive Order 79-19 and existing local government requirements.

Subpart 6. River dependent uses. The MRCCA governing statute presumes that the MRCCA will continues to be used for multiple purposes, including use as a transportation corridor, an economic resource, for water supply, and for storm water and wastewater treatment facilities. Minn. Stat. § 116G.15, subd. 2 (2015). For this reason, river access within certain districts must be maintained and shoreline facilities, private roads, and conveyances serving these uses are exempt from structure setbacks, subject to the provisions of proposed Minn. R. 6106.0180. The standards set out in this subpart apply to these facilities as well as to other parking areas and structures, and the placement of dredged material within the MRCCA. The subpart also makes clear that dredging and placement of dredged material within the MRCCA requires a DNR permit for work in public waters. Additionally, activities in the immediate riverfront area are solely limited to those that must be placed near the river for operational reasons.

Subpart 7. Wireless communication facilities. Local governments currently regulate the placement of wireless communication facilities, including towers. This subpart ensures that these regulations minimize the visual impacts of towers and restricts their placement in sensitive natural areas. Additionally, new facilities must demonstrate that functional coverage cannot be provided through colocation, a lower tower, or a tower located outside the MRCCA.

6106.0120 Dimensional Standards

Subpart 1. Purpose. To protect primary conservation areas from development impacts, this part establishes dimensional standards for structures within the MRCCA.

Subpart 2. Structure height. The height restrictions set out in this subpart are designed to allow development within the MRCCA while protecting "views of and from the river" as directed in Executive Order 79-19 and as set forth in the National Park Service's MNRRA Comprehensive Management Plan. Structure height is one of the factors that varies the most by district, and has been the subject of considerable discussion and public input. In establishing the proposed structure height limitations, the DNR considered a variety of factors, including existing regulations, natural and scenic resources, existing and planned land uses, and standards already in place in local government ordinances.

Heights by district. The proposed rules use a graduated scale for structure height that varies by district depending on the district's character and values intended to be protected:

- CA-ROS: The "rural and open space" district has the lowest level of development of all of the proposed districts within the MRCCA. To preserve the rural and open space characteristics of this district and its unique recreational value, a structure height of 35' is proposed for this district. This district includes agricultural and rural residential areas, parkland and natural areas adjacent to the river. This height is intended to keep structures at or below the level of the treeline and is consistent with height restrictions in most of the local zoning standards that apply in these areas.
- CA-RN: A 35-foot height limit is proposed for the predominantly residential "river neighborhood" district. The height limit is intended to allow a two-story single-family dwelling without breaking the top of the treeline. This height restriction is consistent with existing structure heights in residentially zoned neighborhoods and height restrictions in most of the local zoning standards that apply in these areas.
- CA-RTC: The "river towns and crossings" district includes existing historic commercial areas, commercial nodes at bridge crossings, and existing institutional campuses that predate the establishment of the MRCCA. In this district, a maximum 48-foot height limit is proposed, with tiering of structures away from the river and blufflines to protect public river corridor views. Taller buildings may be allowed by conditional use permit, using the criteria set out in this subpart. The use of conditional use permits to deviate from established height requirements in this district provides an additional level of flexibility for local governments as well as opportunities for public review.

The height limit was chosen for consistency with existing structures within the proposed districts in order to prevent or minimize nonconformities. This height would allow a three-to-four story commercial, mixed use or residential building. This standard is generally consistent with local plans and ordinances

- CA-SR: The "separated from river" district includes non-riparian land that is separated from
 the Mississippi River by distance, development, or transportation infrastructure. Because of
 this separation, underlying zoning standards govern height, with the stipulation that
 structure height must be compatible with the existing treeline, where present, and
 surrounding development.
- CA-UM: The "urban mixed" district includes many industrial, commercial, and mixed use areas, as well as areas in transition to a more urbanized and mixed use character. Structures of up to 65 feet in height are proposed in this district, compatible with existing and planned development. As with the "river towns and crossings" district, tiering of structures away from the river and blufflines is required to minimize interference with public river corridor views, and taller buildings may be allowed by conditional use permit provided they meet the criteria set out in this subpart.

• **CA-UC:** The urban cores of both Minneapolis and St. Paul are highly developed, with redevelopment planned in the future. In the "urban core" district that applies to these areas, height is governed by underlying zoning standards, with consideration given to building placement to minimize visual impacts of new development.

Measurement methods. To assure consistency across the MRCCA, this subpart establishes a protocol for measuring structure heights across the MRCCA. Height is measured relative to the Mississippi River. Since managing the impact of development on river views is a high priority for the MRCCA program, structure height is measured from the side of the structure facing the river.

Exempt structures. The DNR is allowed by statute to provide exceptions to guidelines and standards governing individual districts. Minn. Stat. § 116G.15, subd. 4 (2015). Subpart 2 recognizes the need to exempt certain properties from the height requirements for individual districts. Part 6106.0180 of the proposed MRCCA rules lists the types of structures that would be exempt from the height requirements of this subpart. These exemptions are based on exceptions that already exist in local MRCCA ordinances, and on stakeholder input during the rulemaking process.

Conditional use permit criteria. A conditional use permit is a discretionary permit granted by a zoning authority that allows certain uses in a particular zoning district only as permitted by the zoning authority and with specified conditions. In two of the districts (CA-RTC and CA-UM) structures with heights exceeding the building height requirements of the district may be allowed by conditional use permit. This subpart sets out the criteria that should be used by local governments when determining whether to grant a conditional use permit allowing deviation from these height requirements. The criteria are designed to assure that the visual impact of buildings that are proposed to exceed the height limits are minimized to the greatest extent possible, and provide examples of techniques that can be used to minimize the visual impacts of the proposed buildings. These provisions are designed to inform and guide local governments in their consideration of conditional use applications.

Subpart 3. **Location of structures.** Structure setbacks from the river and from bluffs are essential to protect the natural resource values of primary conservation areas and to protect public safety across the MRCCA. The proposed setback requirements will result in minimal changes to zoning requirements already in place in local MRCCA ordinances. Specific setback requirements imposed by the rule include:

OHWL setbacks and the shore impact zone. A near shore area is a sensitive and complex natural system that sustains fish and wildlife and protects the water body from erosion and non-point pollution. This subpart establishes setback requirements from the Ordinary High Water Level (OHWL) and prohibits structures and impervious surfaces in the particularly sensitive shore impact zone (the area located halfway between the OHWL and required OHWL setback as defined in proposed Minn. R. 6106.0050, subp. 68) to protect these vital resources.

Setbacks from the OHWL were originally set out in Executive Order 79-19. These setbacks were the subject of much discussion and concern during the rulemaking process. One of the primary concerns was the possible creation of nonconforming structures. The DNR evaluated a variety of potential setback standards, including the Interim Development Regulations in Executive Order 79-

19, standards currently contained in local ordinances, statewide shoreland rules, community plans, park plans, natural resource inventory data, and existing development patterns. The DNR also considered the existing character and development pattern within each proposed district.

OHWL setbacks by district. Setbacks from the OHWL vary by district:

- **CA-ROS:** The "rural and open space" district contains the greatest concentration of native plant communities and other riparian habitat to be protected, and is the least developed of all districts. The proposed setback is 200 feet from the OHWL. This setback is the same as river setbacks for the "rural open space" district in the Interim Development Regulations in Executive Order 79-19 and is consistent with many existing local ordinances. The shore impact zone for this district is 100 feet from the OHWL.
- **CA-RN:** The proposed setback for the "river neighborhood" district, which is primarily residential in character, is 100 feet from the OHWL, with a shore impact zone of 50 feet from the OHWL. This standard was based on river setbacks for the "urban developed" and "urban open space" districts in the Interim Development Regulations in Executive Order 79-19. This standard is also consistent with many existing local ordinances in these areas and the standards for urban rivers in the statewide shoreland rules.
- **CA-RTC:** The proposed setback for the "river towns and crossings" district is 75 feet from the OHWL, with a shore impact zone of 37.5 feet from the OHWL. This standard is consistent with existing development patterns and planned redevelopment within the district. The standard is also consistent with standards set in the state shoreland rules for unsewered general development and sewered recreational development waters.
- CA-SR: There is no land in this district with riparian frontage on the Mississippi River and thus setbacks are governed by underlying zoning. A few properties in this district are located on a backwater of the Vermillion River, a key tributary of the Mississippi River, with a required setback of 75 feet and a shore impact zone of 37.5 feet. Setbacks from key tributaries are discussed below.
- CA-UM: In districts classified as "urban mixed," which feature largely developed or redeveloping urban areas, the proposed setback is 50 feet from the OHWL, with a shore impact zone of 25 feet. This setback is consistent with the standards in the statewide shoreland rules for sewered urban rivers.
- **CA-UC:** In the intensively-developed "urban core" district, setbacks are governed by underlying zoning. The intent is to allow these areas to develop and redevelop riverfront uses consistent with historical patterns of riverfront use. This standard was adopted to protect the character of these urban riverfronts and to respond to interest expressed by the cities of Minneapolis and Saint Paul to bring activity to the riverfront through recreational and river-oriented commercial development that improves public access to the river.

Setbacks for key tributaries: Areas of confluence between key tributaries and the Mississippi River are identified as key resources in the MRCCA enabling legislation. Minn. Stat. § 116G.15,

subd. 5 (2015). While the statute does not name specific tributaries, the DNR, with input from local governments and interest groups, identified the Crow, Minnesota, Rum and Vermillion rivers as the key tributaries with confluences with the Mississippi River within the MRCCA. These four watercourses are the only major rivers with a confluence with the Mississippi River within the MRCCA. Because not all communities have enacted shoreland protection as required by statute for those tributary rivers, it is important to provide comparable protection for those portions of these tributaries that lie within the boundaries of the MRCCA.

The proposed setbacks for these tributaries are consistent with the state shoreland and scenic river standards, and with setbacks currently in place in local zoning ordinances. The setbacks for these tributaries are controlled by the MRCCA district in which they lie. The 150-foot setback in the "rural and open space" district (CA-ROS) is consistent with the Wild and Scenic River setback for scenic rivers. *See* Minn. R. 6105.0110, subp. 3.B. (2015). The 75-foot setback in the "river neighborhood" (CA-RN), "river towns and crossings" (CA-RTC), and "separated from river" (CA-SR) districts is consistent with the state shoreland rules setbacks for unsewered general development and sewered recreational development river segments. Minn. R. 6120.3300, subp. 3 (2015).

Bluff setbacks and the bluff impact zone. The MRCCA contains major geological bluff features that are prone to erosion and natural instability. Bluff failure and erosion are significant concerns in the MRCCA, as evidenced by slope failures in recent years in Mendota Heights, Mendota, Lilydale, and Minneapolis. Bluff setback requirements are necessary to protect steep, unstable slopes, to limit the visual impact of structures on scenic resources, to protect property investments, and for the health, safety and welfare of the public. Setbacks can prevent severe environmental consequences such as slope failures and ongoing problems such as erosion.

The prohibition of structures within a certain distance from the top edge of a bluff (the bluffline) promotes bluff stability by minimizing disturbance, maintaining natural vegetation, and preventing excessive runoff. Setbacks are commonly used to address runoff from the top of a bluff and land alteration that can exacerbate instability, while protecting structures from dangers of slope failure. This rule also assures uniform bluff setback requirements across the MRCCA corridor, a concern raised by local units of government. Subpart 3 establishes both a bluff impact zone and a bluff setback within the MRCCA corridor. The bluff impact zone includes the bluff and an area within 20 feet of all sides of the bluff as defined in proposed Minn. R. 6106.0050, subp. 9. The construction or expansion of structures within this highly sensitive area is prohibited. The bluff setback area extends back from the bluffline. Development between the bluff impact zone and the bluff setback line is restricted but is not necessarily prohibited (see Exemptions below).

Bluff setbacks by district. The width of the bluff setback varies across the districts:

CA-ROS: The greatest bluff setback, 100 feet, is proposed in the" rural and open space" district, an area characterized by public parklands and rural residential development. This standard is derived from the standards for the rural open space district in the Interim Development Regulations in Executive Order 79-19, and is also consistent with setback standards in many local ordinances in these areas.

All Other Districts: A 40-foot bluff setback is proposed for all other districts in the MRCCA. The
40-foot setback was designed to accommodate disturbances that commonly occur during
construction while, at the same time, protecting an undisturbed area at the top of the bluff.
This 40-foot setback requirement is derived from the standards for the "urban open space",
"urban developed", and "urban diversified districts" in the Interim Development Regulations in
Executive Order 79-19. This standard is also consistent with the bluffline setback in Minn. R.
6105.0110, subp. 3 (2015) for wild rivers and with standards set by many local ordinances.

Exemptions. The DNR is allowed by statute to establish exceptions to guidelines and standards governing individual districts. Minn. Stat. § 116G.15, subd. 4 (2015). Subpart 3 recognizes the need to exempt certain uses and activities from the bluff setback requirements for individual districts. These uses and activities are listed in proposed Minn. R. 6106.0180. These exceptions are designed to address uses, structures, and activities that cannot meet the river or bluff setback requirements and serve their intended purpose.

Setback averaging. In developed areas there are multiple structures in place that predate these proposed rules and that may be inconsistent with the proposed OHWL and bluff setback requirements. This subpart allows local governments to use setback averaging where principal structures exist on adjoining lots on both sides of a proposed building site. In these cases the minimum setback can be altered to equal the average of the setbacks of the adjoining lots provided no impervious surface or structure is allowed in the shore impact zone or bluff impact zone. This allows equitable treatment for the new development and helps maintain a consistent community character. This averaging mechanism was derived from a similar standard in the state shoreland rules and is needed to provide flexibility and to minimize concern over nonconformities.

Subsurface sewage treatment systems. A river setback standard for subsurface sewage treatment systems is necessary to protect water quality. Consistent with standards in the state shoreland rules, this section adopts a 75-foot setback standard for subsurface sewage treatment systems.

Subpart 4. Standards for new lots. With the exception of the "rural and open space" district (CA-ROS), new lots in conventional subdivisions are subject to underlying zoning requirements for both lot area and width. In the CA-ROS district, however, new lots abutting the Mississippi River must be at least 200 feet in width, unless alternative design methods are used (i.e., conservation subdivision or similar methods). The 200-foot width standard is similar to (and in some cases less than) the standards currently in place in townships in rural areas in the southern stretch of the MRCCA. Undeveloped land in this district, if developed at a large scale with small riparian lots, could threaten habitat, ecosystem functions, water quality, and the scenic and rural character that defines this district.

In all cases, new lots must have adequate buildable area to comply with the setback requirements in subpart 3 so as not to require a variance in the future. The term "buildable area" for any given lot does not include sensitive natural areas, lands below the OHWL, rights-of-way, and other areas typically restricted from development by local ordinance as defined in proposed Minn. R. 6106.0050, subp. 11. This is a common requirement in most local zoning ordinances.

6106.0130 General Development Standards for Public Facilities

There are a number of unique public facilities within the MRCCA corridor, many of which are owned or managed by state or regional agencies and are not subject to local zoning requirements. This part provides detailed standards for specific types of public development within the MRCCA.

Subparts 1-2. Purpose and scope and definition of "public facilities". These subparts establish the purpose of providing differing standards for public facilities and clarify which public facilities are covered by the standards. Public facilities include public infrastructure, transportation, and recreational facilities. The rule is designed to provide some degree of flexibility for such facilities given the services, amenities, and community benefits they provide, but still require best management practices to protect the MRCCA's key features and resources.

Subpart 3. General design standards. This subpart sets forth general design standards applicable to all public facilities. As a matter of equity, to preserve the character of the MRCCA, and to protect the identified resources, many of the standards that local governments are expected to incorporate in their local zoning ordinances are also expressly made applicable to these public facilities. Public facilities are also required to comply with Best Practices for Meeting DNR General Public Waters Work Permit GP-001. These entities are exempted from obtaining local permits but are required to comply with the standards that such permits would impose.

Subparts 4 - 7. Standards for select public utility and transportation facilities. Design and development standards for transportation facilities and utilities are set out in subparts 4 through 7. These standards apply to public road right-of-way maintenance standards, crossings of public water or public land, public utility placement, roads and railroads. These facilities are for the public benefit and are likely to receive high levels of use. Therefore, where these facilities abut more than one district, the rules apply the standards of the less restrictive district. These standards are largely consistent with those in the Interim Development Regulations in Executive Order 79-19.

Subpart 8. Standards for public recreational facilities. Public recreational facilities must also comply with the proposed development standards within the MRCCA in order to avoid or minimize negative impacts to the resources that the MRCCA designation is intended to protect. Negative impacts may include erosion, increased bluff instability, and damage to near shore habitat.

- Buildings and parking lots. Public recreational facilities, such as parks, within the MRCCA are uniquely positioned to serve a public benefit within the corridor by providing public access to MRCCA resources. Allowing the construction of buildings and parking lots in areas that have the potential to affect scenic and natural values runs counter to the public interest. There is no public need to allow public buildings and parking lots to be located closer to the river and bluffs than private facilities. Therefore, these buildings and parking facilities must meet the dimensional standards for private development in proposed Minn. R. 6106.0120 unless the facility has been granted an exception to those standards in proposed Minn. R. 6106.0180.
- Roads and driveways. While public access to the natural and undeveloped areas within the MRCCA provides an important public benefit, access points such as roads and driveways should be designed to minimize runoff and negative impacts to vegetation. Therefore, roads and

driveways providing access public recreational facilities are prohibited in the bluff impact zone and shore impact zone, except in cases where no alternative placement is available to provide access to the site.

- Trails, access paths, and viewing areas. Trails, access paths, and viewing areas are key features providing public access to and views of the river and bluffs. To permit public enjoyment of the MRCCA resource, these facilities must frequently be placed within the bluff impact or shore impact zones. The best management practices in *Trail Planning Design and Development Guidelines*, incorporated by reference under proposed Minn. R. 6106.0090, must be used when designing and constructing these facilities within the MRCCA. These guidelines are designed to mitigate adverse impacts from these types of facilities on natural and scenic resources. Because of the high potential for erosion and associated slope failures that can result from construction of hard surface trails, this subpart prohibits the placement of hard surface trails on bluff faces with a slope exceeding 30% -- the steepest slopes in the MRCCA.
- Water access facilities. Water access facilities, including boat ramps, carry-in sites, and fishing piers, are key features providing public access to the river. To allow public enjoyment of the MRCCA resource, these facilities must be placed within the shore impact zone. The best management practices in the *Design Handbook for Recreational Boating and Fishing Facilities*, incorporated by reference in proposed Minn. R. 6106.0090, must be used when designing and constructing these facilities. The guidelines in this handbook are designed to mitigate adverse impacts from these types of facilities on natural and scenic resources. Additionally, water access ramps must be constructed to comply with Minn. R. 6115.0210 and Minn. R. 6280.0250 (2015).
- Public wayfinding and interpretation devices. Public wayfinding and interpretive devices are
 designed to facilitate the public's use and enjoyment of recreational facilities within the MRCCA.
 The proposed MRCCA rules allow public interpretive or directional signs and kiosks in the bluff
 and shore impact zones to assist in wayfinding and interpretation, provided visual impacts and
 disturbances are minimized.

6106.0140 General Development Standards for Private Facilities

Subparts 1-3. Purpose, definition of "private facilities", and general design standards. "Private facilities," including private roads, driveways, parking areas, water access, viewing facilities, decks and patios, and signs, all have the potential to negatively impact the resources intended to be protected by the MRCCA designation. Many of these facilities are constructed with impervious materials that increase runoff and, therefore, have the potential to adversely impact water quality and decrease bluff stability. Additionally, constructing these facilities can adversely affect adjacent vegetation, which in turn can impact both bluff stability and scenic vistas within the corridor. Conversely, these types of facilities provide residents and businesses with needed access to the river and other amenities. This section sets out standards for the private development of roads, driveways, parking areas, water access and viewing facilities, decks and patios, and signs within the MRCCA. The standards proposed for these facilities are similar to those proposed for public facilities in proposed Minn. R. 6106.0130, but are adjusted to address the particular needs of residents and businesses. The proposed rule also attempts to

balance those needs with the need to protect the corridor's natural, scenic, and recreational values. These standards are intended to serve as minimum standards.

Subp. 4. Private roads, driveways, and parking areas. Private facilities are required to meet the land alteration, vegetation, and stormwater management requirements set forth in proposed Minn. R. 6106.0150 and 6106.0160. Additionally private roads, driveways, and parking are required to meet structure setback requirements set forth in proposed rule 6106.0120 and may not be placed in either the bluff impact zone or the shore impact zone, except where necessary for access to shoreline facilities, river-dependent uses, and subdivisions, as specified in proposed rule 6106.0180. These facilities are also required to use natural vegetation and topography to reduce their visibility.

Subpart 5. Private water access and viewing facilities. The proposed MRCCA rules recognize the need for riparian property owners to have facilities such as access paths, water access ramps, stairways, lifts and landings to access the river, and also recognize the need to regulate the construction and design of these facilities to reduce their negative impacts on the public resources the MRCCA designation is intended to protect. Additionally, many local governments, particularly in the northern part of the MRCCA, requested that DNR provide clear design standards for these facilities.

- Access paths, staircases, lifts and landings. This subpart establishes design criteria for access
 paths, staircases, lifts and landings to ensure that riparian property owners are able to access
 the river with minimal disruption to sensitive bluffs and shoreline areas. The standards for these
 facilities are consistent with those found in the state shoreland rules. See Minn. R. 6120.3300,
 subp. 4 (2015).
- Water access ramps. The standards proposed for private water access ramps are similar to those proposed for public access ramps. The best management practices in the *Design Handbook for Recreational Boating and Fishing Facilities,* incorporated by reference in proposed Minn. R. 6106.0090, must be used when designing and constructing these facilities. The guidelines in this handbook are designed to mitigate adverse impacts from these types of facilities on natural and scenic resources. Additionally, water access ramps must be constructed to comply with Minn. R. 6115.0210 and Minn. R. 6280.0250 (2015).
- Water-oriented accessory structures. The standards proposed for water-oriented accessory
 structures are similar to, but more restrictive than the standards in the state shoreland rules,
 since these standards are based on evaluation of typical lot and structure sizes in the river
 corridor which show a higher density or more intensive development pattern than that in most
 shoreland areas.

Subpart 6. Decks and patios in setback areas. Decks and patios were an important issue for many riparian property owners who have purchased property on the river with the intent to be able to view and enjoy the river from their deck and/or patio. These rules are intended to permit decks and patios to be placed to permit enjoyment of the MRCCA attributes while minimizing their impact on the MRCCA resources and the public's enjoyment of those public resources. The standards proposed in this subpart give local governments the flexibility to allow minimal encroachment into the required setbacks from the OHWL and from blufflines without a variance, provided the encroachment is limited to 15 percent of the required setback and is limited in size based on a formula that takes into account the lot width.

Because of safety concerns, encroachment is prohibited into the bluff impact zone. The proposed rule is a modification of Minn. R. 6120.3300, subp. 3.J (2015), adapted to recognize the more intensive development patterns and the typical placement and size of existing decks and patios on residential lots within the MRCCA.

Subpart 7. Private signs. There are a number of businesses that use off-premise advertising signs or directional signs for patrons accessing their business by watercraft. It is widely recognized that these types of signs, if unregulated, may adversely impact scenic views within the MRCCA. Throughout the rulemaking process, stakeholders expressed concerns about signs and billboards in the MRCCA. Stakeholders were particularly concerned that the proposed standards should not weaken existing protections.

- Off-premise advertising signs. The standards set forth in Executive Order 79-19 currently provide that signs "must not be visible" from the river. This subpart modifies the Executive Order 79-19 standard by requiring that off-premise signs must meet setback standards and height limits and must not be "readily visible" from the river as defined in proposed Minn. R. 6106.0050, subp. 60. This modification was made because many local governments have struggled with determining how the "must not be visible" standard can be met. Some stakeholders have contended "must not be visible" means that the sign should not be visible from anywhere in the corridor at any time of the year. This standard is impossible to meet and is not reasonable in those portions of the MRCCA where there is already intensive development. For this reason the standard was modified to prohibit signs that are "readily visible". This standard ensures that signs are not so visible that they are dominant or readily noticed features of the river vista.
- **Directional signs for patrons arriving at a business by watercraft.** This subpart also recognizes that directional signs for watercraft, such as marina signs, are important for directing river traffic. These signs are, therefore, permitted within the MRCCA but limited in size and lighting to avoid dominating the river view. The standards for wayfinding signs was derived from the state shoreland rules, Minn. R. 6120.3300, subp. 10.C (2015), and are largely performance-based.

6106.0150 Vegetation Management

Vegetation in the MRCCA plays an important role in slowing storm water runoff, preventing erosion, filtering nonpoint source pollution, preventing establishment of invasive species, protecting habitat, maintaining stability of bluffs and steep slopes, and maintaining corridor character consistent with each management district.

Executive Order 79-19 relied on this principal to protect the important resource values of the MRCCA. Executive Order 79-19 prohibits clearcutting on the slope or face of bluffs and areas within 40 feet landward from blufflines, as well as on islands and public recreation areas. In other sensitive areas, Executive Order 79-19 regulates clearcutting through a variety of performance standards. Clear cutting is a forest management term and is adopted in Executive Order 79-19 to prohibit the removal of an entire stand of trees or shrubs. Under Executive Order 79-19 selective cutting of trees greater than 4 inches in diameter is permitted if continuous cover is maintained. Selective cutting, another forest

management term, is used in Executive Order 79-19 to establish the management practice of removing single scattered trees or shrubs throughout a stand of trees or vegetated area. Executive Order 79-19 has no provision for protecting riparian vegetation, an important element for both water quality and ecosystem health.

The use of these forest management concepts has not served the MRCCA particularly well, especially in developed areas, which are different from traditional forestry settings. Also, vegetation management standards across the MRCCA are inconsistent and do not adequately protect important MRCCA resources or public safety. Most local MRCCA ordinances currently include provisions prohibiting clearcutting as required by Executive Order 79-19; beyond this, they vary considerably. In many local MRCCA ordinances it is not clear what vegetation management activities are allowed where and what vegetation management practices are restricted. As a result, expectations for administration and enforcement of vegetation management across the MRCCA are unclear.

Additionally, the removal of riparian vegetation is not specifically addressed, either in the executive order or in most local MRCCA ordinances. These deficiencies become especially problematic when property owners clear vegetation on riverbanks or in areas that are highly visible from adjacent property or property across the river. Not only does this adversely impact views in the MRCCA, but removal of riparian vegetation adversely impacts water quality, increases the likelihood of shoreline erosion, decreases habitat, and adversely impacts aquatic ecosystems.

From an ecological perspective, maintaining shoreline vegetation is very important, as riparian zones are the interfaces between terrestrial and aquatic ecosystems and support many ecological processes and plant communities. ¹¹ The nearshore areas adjacent to lakes and rivers are considered among the richest zones for aquatic organisms, mammals, and birds. ¹² Maintaining riparian vegetative is also beneficial to water quality because it filters and reduces nutrient and sediment pollution and mitigates temperature increases. ¹³ It is also well documented that steeper slopes have a higher potential for erosion, and perennial vegetation can mitigate this erosion potential by stabilizing soils. ¹⁴

Local government staff regularly receive complaints about the removal of riparian vegetation but have a limited ability to address the problems because of vague ordinance language and the lack of enforcement mechanisms.

The proposed vegetation management standards were developed in close collaboration with local governments, resource professionals, and other interests, including private property owners. These standards seek to correct current regulatory deficiencies and improve vegetation protection by designating specific areas on the landscape for protection and adopting stronger performance

¹¹ Gregory et al. 1991

¹² Castelle et al. 1992

¹³ Castelle et al. 1994

¹⁴ U.S. Department of Agriculture. 1997

standards. The rules establish a vegetation permit system and restoration requirements for vegetation removed in violation of the permit. The rules also eliminate the concept of "clearcutting" by relying instead on the concept of "intensive vegetation clearing." The concept of "selective vegetation removal" replaces the concept of "selective cutting."

Subparts 1 and 2. Purpose and applicability. These subparts clarify the purpose of the proposed vegetation management standards and where they apply. Because of its forestry-based framework, Executive Order 79-19, and most local ordinances adopted in accordance with the executive order, do not adequately protect vegetation in riparian areas. While the proposed vegetation standards continue the practice established in Executive Order 79-10 of prohibiting intensive vegetation clearing in the bluff impact zone, the standards also prohibit intensive vegetation clearing in shore impact zones, land within 50 feet of a wetland or natural drainageway, areas of native plant communities, and other areas of significant vegetation identified by local governments in their MRCCA plans. Maintaining vegetation in these sensitive areas provides habitat for fish and wildlife and protects against erosion and subsequent runoff related water pollution, including sediment and nutrients, and maintains the scenic qualities of the corridor.

Subpart 3. General provisions. Specific standards and permitting requirements for vegetation clearing across the MRCCA are set forth in this subpart.

- Limits on intensive vegetation clearing; activities that are prohibited and activities that require a permit. Intensive clearing, regardless of the purpose, disrupts soil stability and increases the risk of soil erosion, sedimentation, and nutrient loading into drainage systems and surface waters. While activities such as removal of diseased, dying or hazardous vegetation, or restoration and erosion control projects are usually beneficial, the manner in which these activities are conducted may increase the risk of soil erosion and sedimentation. For this reason, intensive vegetation clearing is generally prohibited across the MRCCA, while some intensive vegetation clearing is allowed by local permit, to be issued by a local government or resource agency, such as a soil and water conservation district. Requiring a permit for these activities ensures guidance by qualified professionals and use of appropriate management practices to reduce the risk of erosion and water pollution.
- Vegetation removal without a permit. The proposed MRCCA rules do, however, allow some types of limited vegetation removal without a local permit. These limited exemptions were requested by local governments and property owners, and are intended to clarify the scope of the regulations and to reduce administrative burdens to local governments. Thus, activities that are considered a part of routine property management are permitted without a permit, including: selective removal of diseased, dying or hazardous vegetation, maintenance of existing yards, and gardening. Agricultural and forestry activities that meet the standards in proposed Minn. R. 6106.0110, subp. 2 through 4 are also allowed without a permit
- **Vegetation height**. Local governments are prohibited from restricting the height of groundcover vegetation in the shore impact zone, on land within 50 feet of a wetland or natural drainage way, in native plant communities, and in other areas of significant vegetation identified by local governments in their MRCCA plans. The intent of this provision is to prevent application

of local "weed" ordinances in areas where natural vegetation is desirable for achieving the purposes of these rules.

Subparts 4 and 5. Permit process and conditions. The vegetation management permit is a new concept in the MRCCA. The permit concept was adopted to more closely manage vegetation and vegetation removal across the MRCCA, to assure the process of removal does not further damage sensitive resources, and to provide flexibility to local governments to design and permit vegetation removal on a site specific basis. Local governments have the option of adopting and managing the permit program themselves or of delegating the management of the permit program to an existing process or to a resource agency or other qualified agent. To assure non-degradation across the MRCCA, intensive vegetation clearing is only allowed by permit and is only allowed under limited specified conditions. Performance standards or best management practices for vegetation management permits are set out in subpart 5. These standards include erosion and sediment control practices. These standards are required to be included as conditions in the permit. Other performance standards include measures to:

- Minimize disturbance to or removal of natural vegetation.
- Assure that an engineer or resource agency determines that site conditions are suitable for the
 proposed clearing activity. This is particularly important for work in bluff areas and areas near
 water or with a high water table.
- Minimize the visual impact of clearing by blending clearing with surrounding terrain.
- Given the limited number of remaining native plant communities in the corridor, assure that any native plant communities removed are replaced with vegetation of equivalent quality and establish priority locations for restoration of native plant communities.
- Require replacement of other removed vegetation with natural vegetation to the greatest extent practicable, particularly on bluffs, steep slopes, areas requiring soil stabilization, shorelines, and where natural vegetation provides some ecological services and enhances the scenic character of the corridor.

Subpart 6. **Vegetation restoration plan requirements.** Because of the importance of vegetation to the preservation of the MRCCA and its ecological and natural systems and to public health, vegetation restoration is required in all instances where vegetation has been removed without a permit where one is required, or upon failure to comply with an existing permit condition. Restoration is required to be conducted according to an approved restoration plan designed by a qualified individual. The plan must include vegetation that provides suitable habitat and effective soil stability, runoff retention and infiltration; and includes a maintenance plan. This provision, along with the permit program, provides local governments with a mechanism to require and enforce restoration activities.

6106.0160 Land Alteration and Storm Water Management Standards

Uncontrolled land disturbance near water increases the probability of sediment and phosphorus pollution to surface waters. ¹⁵ Small construction sites are a large source of sediment erosion, yielding up to 10 times the typical loads from rural and urban land uses. ¹⁶ Executive Order 79-19 requires that <u>all</u> land alteration activities be regulated by local governments according to best management practices that were typical in the 1970s. Executive Order 79-19 does not regulate storm water runoff, storm water management structures, or erosion control structures such as retaining walls and riprap. Regulations adopted pursuant to Executive Order 79-19 for land alterations are overly broad and apply the same management practices across the MRCCA, regardless of the proximity of the alteration to sensitive natural resources. The erosion control practices of the 1970s era do not provide adequate resource protection consistent with contemporary development and, in most cases, are less protective than current local government regulations.

Most local governments have adopted land alteration and storm water management regulations consistent with standards developed by the relevant watershed management authority and/or the National Pollution Discharge Elimination System (NPDES)/State Disposal System (SDS) permits for construction activities. The minimum land disturbance threshold triggering a local land alteration permit varies considerably across the MRCCA. The majority of communities in the MRCCA do not require a land alteration permit until at least 10,000 square feet of soil are disturbed. No community requires a permit for <u>all</u> land alteration activity, as required by Executive Order 79-19. The minimum impervious surface threshold triggering a local storm water permit also varies considerably. One acre is the most common threshold, as this is consistent with the NPDES/SDS permit for construction-related activities. Most communities do not vary their land alteration or storm water requirements based on proximity to sensitive natural resources.

While most local regulations include contemporary best management practices, they do not regulate small to medium size land disturbance activities (i.e. disturbing less than 10,000 square feet), which can occur in sensitive bluff and near shore areas. Thus, there is often no permitting oversight in the most sensitive areas in the MRCCA.

In response to identified erosion problems, especially in the northern reaches of the corridor, erosion control structures have been used to stabilize riverbanks and reduce erosion. The Anoka Conservation District, for example, found that most of the erosion problems along the Coon Rapids Dam Pool occur on public land containing few erosion control structures, while few erosion problems are found on private shores protected by manmade features such as rip rap and retaining walls. ¹⁷ In the Coon Rapids Dam pool, riprap has been shown to be effective in controlling erosion at the toe of the slope. Riprap can also be effective in reducing sediment loading to the river. However, many of these features were

¹⁵ Walsh. 2005.

¹⁶ Owens. 2000.

¹⁷ Anoka Conservation District. 2012.

constructed without DNR approval or a work in public waters permit as required by Minn. Stat. § 103G.245, subd. 1 (2015). The work in public waters permit is intended to ensure that work or alterations to a public water below the OHWL do not obstruct navigation or water flow or negatively impact aquatic and near shore habitat. There are many instances where retaining walls and riprap have been installed at a scale significantly larger than that needed to correct erosion problems. The overuse of these mechanisms negatively impacts both riparian vegetation and habitat. (See Figure 12.)



Figure 12. Example of riprap installation extent greater than needed to control erosion, with significant impacts on riparian vegetation and habitat.

Management of activities located further from the shoreline can also significantly reduce storm water runoff. It is well documented that increases in impervious surfaces on the landscape affect both water quantity and quality. Negative impacts to the water quality of a river or stream typically occur when the impervious coverage of the watershed approaches 10 to 15%. ¹⁸ Increased storm water runoff can affect the stability of slopes and bluffs and give rise to significant safety concerns.

The improper placement of storm water facilities can also increase the risk of slope failure. When placed on or near the tops of slopes, infiltration of storm water can saturate the soil around and below the facility, which can increase slope instability. High intensity rainfall events may load slopes, filling soil pores and reducing the capacity of soil to infiltrate water. Geologic factors are important factors in slope stability but the presence of saturated soils that receive additional, intense precipitation increases the risk of instability and failure.¹⁹

Subpart 1. Purpose. This part establishes standards to protect sensitive resource areas from disturbance and adopts a permitting process to regulate both land disturbance and storm water runoff in sensitive bluff and shore areas to prevent the negative impacts associated with these types of disturbances, including degradation of water quality and bluff instability.

Subpart 2. Definitions. This part rule relies on the following terms:

- "Water quality impact zone" is used to identify areas at risk of erosion and of transmitting sediment into a public water. It includes the shore impact zone.
- "Fully reconstructs" refers to the reconstruction of existing impervious surface. The definition is consistent with the definition used by MPCA's Minimal Impact Development Standards (MIDS)

59

¹⁸ Schueler et al. 1994.

¹⁹ Jennings. 2015.

- program, a voluntary program that encourages local governments to adopt higher development standards for storm water management.
- "Storm water management facility" is any facility that collects, conveys, treats or disposes of storm water. This definition is consistent with the Minnesota Stormwater Manual.

Subpart 3. **Land alteration.** Because of the importance and sensitivity of both the bluff impact zone and the water quality impact zone, this subpart establishes standards for their ongoing protection.

Bluff Impact Zones. Bluffs are especially susceptible to erosion and potential failure (see pages 22 to 28 on bluffs). Prohibiting land alteration activities that could destabilize bluffs reduces erosion risks and helps protects public bluffs from slumping or failure. Thus, Supb. 3.A. prohibits all land alteration activity in the bluff impact zone except as authorized by local permit. Permissible exceptions are limited to those activities, approved by local government or the appropriate resource agency, necessary for erosion control management or for the repair and maintenance of existing structures.

Water Quality Impact Zones. Land alterations, as defined, particularly within the water quality impact zone, have the potential to increase sedimentation and nutrient pollution in adjacent water bodies. This subpart is intended to prevent or decrease sediment and nutrient pollution within the MRCCA due to land alteration by using a permitting process and best management practices. Subpart 3.B. requires a local permit for activities in the water quality impact zone involving the alteration of more than 10 cubic yards of materials or an alteration of an area greater than 1,000 square feet. Activities in the water quality impact zone within the MRCCA are not currently regulated by most local governments. This permit requirement gives local government oversight over alteration activities, requires the use of best management practices, and thus reduces risks of erosion and water pollution. The 1,000 square foot threshold adopted in the rule is consistent with standards applied by the Capitol Region Watershed District.

Subpart 4. Rock riprap, retaining walls, and other erosion control structures. In-stream and streambank erosion control structures such as riprap and retaining walls can positively reduce the impacts of erosion, but these structures may also negatively impact stream and bank habitat in certain situations. Therefore, subpart 4 allows these structures in the bluff impact and water quality impact zones only with a permit issued by a local government and with DNR approval for work in public waters as set forth in Minn. R. 6115.0190 through 6115.0255 (2015). This subpart further specifies that these structures may only be used to correct an existing erosion problem and limits the size of the structures to the minimum needed to correct the problem. Structures larger than the specified dimensional limits are allowed only if an engineer determines that a larger structure is needed to correct the erosion problem. This issue drew extensive public comments, especially in the Coon Rapids Pool area. These standards acknowledge a need for riprap to address erosion in this area but places limits on the size of structures.

Subpart 5. Permit process. This subpart sets out procedures for obtaining a local permit for erosion control structures that local governments are required to adopt. The process parallels the process for obtaining a vegetation management permit set forth in proposed Minn. R. 6106.0150, subp. 4.

Subpart 6. Permit conditions. To assure the protection of those resources intended to be protected through the establishment of the MRCCA, land alteration permits are designed to meet minimum performance standards. These standards are best management practices, typical of contemporary erosion control practices, and include:

- temporary and permanent erosion and sediment control;
- maximizing natural site topography, soil and vegetation to minimize runoff and reduce erosion and sedimentation;
- phasing of construction; and
- placement of controls prior to land disturbance, and other BMPs identified in Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-001.

Subpart 7. Storm water management. Because of the adverse impact of runoff on bluff and slope stability, this subpart requires that, except as described below, storm water throughout the MRCCA must be directed away from bluff impact zones and other unstable areas.

- Storm water management facilities in the bluff impact zone. A contributing factor to slope failure and slumping and the associated economic, ecological and human costs is the poor construction and placement of storm water management facilities, such as pipes, outfalls, and treatment facilities. For this reason, the placement of storm water management facilities in the bluff impact zone is prohibited except in rare circumstances as permitted by local government, including where there are no alternatives, the facility is designed to reduce runoff in the bluff impact zone to the greatest extent practicable, the facility does not affect slope stability, and mitigation measures are incorporated into the permit to eliminate or minimize the risk of slope failure.
- Impervious surfaces in the water quality impact zone. Because of the potential adverse water quality impacts attributed to impervious surfaces, proposed Minn. R. 6106.0120, subp. 3 prohibits the placement of impervious coverage in the shore impact zone or bluff impact zone except as expressly provided in proposed Minn. R. 6106.0180, the exceptions. For these exceptions that create new impervious coverage, or for projects that fully reconstruct more than 10,000 square feet of existing impervious coverage, this subpart requires a local government to permit these projects according to the treatment standards in the local government's MPCA-approved Municipal Separate Storm Sewer System Permit (MS4) NPDES permit. If the local government does not have a MS4 NPDES permit, then the treatment standards in the applicable NPDES Construction Storm Water General permit apply. Alternatively, local governments may apply other MPCA-approved treatment standards such as those in the MPCA's voluntary Minimal Impacts Design Standards (MIDS)²⁰ program.

_

²⁰ http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/stormwater-minimal-impact-design-standards-mids.html

These treatment standards ensure that runoff from impervious surfaces in the water quality impact zone will meet current standards. The 10,000 square foot threshold is consistent with standards used by the Capitol Region Watershed District. The area of this threshold is roughly equivalent to a 30-space parking lot.

Subpart 8. Development on steep slopes. To address the impact of land alterations on steep slopes (i.e. slopes between 12 and 18%) this subpart retains the best management practices for development set forth in Executive Order 79-19. Most local governments in the MRCCA have adopted ordinances that include these provisions.

Subpart 9. Compliance with other plans and programs. Many watershed management organizations and watershed districts exist within the MRCCA, and each prepares its own water plan to comprehensively address water quality within its watershed. Most local governments also participate in the National Flood Insurance Program (NFIP) and have local floodplain ordinances to reduce the risk of flood damage and loss. Finally, most local governments also have local wetland ordinances under the Wetland Conservation Act to protect wetlands within their jurisdiction. This subpart requires all development in the MRCCA to comply with these local water plans and floodplain and wetland standards, which focus on protecting these key features and resources in the MRCCA.

6106.0170 Subdivision and Land Development Standards

Conventional subdivisions, with their uniform lots and blocks, are inadequate to achieve the purposes of the MRCCA. The division of a tract of land into individual lots without regard to the corridor's natural or cultural resources often leads to fragmentation and degradation of natural vegetation and habitat.

Land development patterns within the MRCCA over the past 35 years have historically been guided by the general performance standards and guidelines set forth in Executive Order 79-19. These standards and guidelines encouraged "the clustering of structures and the use of designs which will reduce public facility costs and improve scenic quality." In addition, local governments and regional and state agencies were directed by Executive Order 79-19 to "develop plans and regulations to maximize the creation and maintenance of open space." Additionally, developers were required to dedicate a reasonable portion of "appropriate" riverfront access land or other lands for public use when developing residential, commercial or industrial subdivisions within the MRCCA. Executive Order 79-19 also permitted contribution of cash in lieu of land as an alternative to land dedication.

Executive Order 79-19's general performance standards and guidelines for subdivision and development within the MRCCA were advisory and have not consistently resulted in the intended preservation of open space. Proposed Minn. R. 6106.0170 seeks to correct this shortcoming by requiring either conservation design or other alternative design standards within the MRCCA.

The inclusion of alternative design standards such as conservation design in the MRCCA rules is intended to protect the multiple resource values of the MRCCA while providing a framework for future development of those large private landholdings that remain within the MRCCA.

Conservation design is a valuable tool for protecting water quality and wildlife habitat when appropriately applied, and also provide amenities to residents. An evaluation of 50 matched pairs of

conservation and conventional developments across the United States found that alternative development practices (e.g., conservation design and low impact development practices) were more likely to protect sensitive areas and restore degraded stream environments than the conventional developments. Conservation design can also protect important wildlife habitat in shoreland areas, if designed to minimize land disturbance in those sensitive areas.²¹ Finally, if planned in unison with neighboring developments or in the context of a comprehensive plan, conservation design helps preserve wildlife corridors between areas of high quality habitat.²²

There are additional benefits of conservation design, including creating a greater sense of community, increased connections to the natural environment, and more pleasing aesthetics ²³. Conservation design has been shown to reduce both development costs and long-term maintenance costs of infrastructure, since the land area given over to infrastructure (such as shorter sewer and water connections and arterial roads) is reduced.

Subpart 1. Purpose. This rule establishes minimum standards for the subdivision and development of land to protect and enhance the natural and scenic values of the MRCCA, protect and restore biological and ecological functions of primary conservation areas within the MRCCA from the impact of development and redevelopment, and encourage restoration of natural vegetation particularly in those areas within the corridor yet to be developed or subject to redevelopment.

Subpart 2. Applicability. This subpart establishes thresholds above which the requirements of this rule apply. The development restrictions applied by this rule were of significant concern to local governments and other interests because of perceived challenges in managing protected open space on small parcels. After consultation with these interests, and after analyzing actual parcel sizes within each district to assess the potential impacts of the rule, the DNR proposes to limit the application of this rule to large scale developments. As such, the requirements for open space protection and restoration are limited to those developments of twenty or more acres, unless the proposed project abuts the Mississippi River, in which case a ten acre threshold applies. The decision to focus only on large parcels was made because most of the remaining developable parcels within the MRCCA are above these size thresholds, and because managing development on those parcels will yield the greatest benefits for the protection of resources within the MRCCA. This approach also limits the administrative burden of administering numerous small, unconnected parcels for both landowners and local governments.

The standards apply to subdivisions, planned unit development, and other large-scale master-planned developments. Developments involving three or fewer lots and minor adjustments are exempted from the requirements established by this rule. The three-lot threshold is consistent with the definition of "development" contained in Minn. Stat. § 116G.03, Subd. 7 (2015), which defines development as the

²¹ Milder. 2007.

²² Arendt. 1996.

²³ Nassauer et al. 2004

"dividing of land into three or more parcels." This is also the typical threshold for a major subdivision in most local ordinances.

Likewise, developments or improvements involving river-dependent commercial and industrial uses are also exempt from the provisions of this rule, as these types of development typically take place on large sites that are unsuitable for open space preservation or public access.

Subpart 3. Project information. In order to assure an adequate evaluation of the impacts of proposed development or redevelopment within the MRCCA on the natural resource assets of the corridor, the local government will be required to obtain adequate data from the project developer. This subpart specifies that this information must be provided and reviewed by the local government prior to project authorization. The specifics of these requirements are provided in proposed Minn. R. 6106.0080, subpart 6.

Subpart 4. Design standards. Local ordinances are required to include design standards and other tools that are intended to achieve or heighten protection or restoration of primary conservation areas – those areas containing key resources and featuring important to the character of the MRCCA. These design standards and tools include incentives for alternative design standards such as conservation design. Incentives are intended to encourage developers to employ conservation design or other innovative development methods, such as transfer of development rights from sensitive to less sensitive lands, which will afford greater protection to the public assets within the MRCCA.

• Protection of primary conservation areas during development and redevelopment. Because of the importance of the remaining primary conservation areas within the MRCCA, local governments are required to protect those areas as open space. The proposed rule recognizes, however, that in some circumstances protection of a primary conservation area may unduly burden a developer, particularly where the primary conservation area encompasses the majority of the parcel. This subpart, therefore, sets protection thresholds or a maximum percentage of land in a parcel that must be protected as open space to conserve primary conservation areas. The percentage of land that must be conserved as open space is tied to the conditions in and nature of each district. (See Table 2.)

Table 2: Percentage of Open Space by District

Corridor District	Maximum % of Open Space Required	Rationale for Maximum
Rural and Open Space (CA-ROS)	50%	District includes the majority of remaining primary conservation areas and potentially developable land.
River Neighborhood (CA-RN)	20%	District is largely developed; open space percentage is similar to existing open space patterns.
River Towns and Crossings (RTC)	10%	District is largely developed or already preserved as public parkland.
Separated from River (SR)	10%*	District is largely developed or already preserved as public parkland; fewer

Corridor District	Maximum % of Open Space Required	Rationale for Maximum
		opportunities for protection exist, and this district could be a "receiving area" for density transferred from other districts (see footnote).
Urban Mixed (CA-UM)	10%	District is largely developed or already preserved as public parkland; few primary conservation areas exist, but some potential for restoration.
Urban Core (CA-UC)	10%	District is largely developed or already preserved as public parkland.

^{*} Only required if parcel includes native plant communities or provides feasible connections to a regional park or trail system.

If the primary conservation areas on any given parcel proposed for development or redevelopment exceed the maximum percentages established for the district, the local government has the flexibility to determine which resources on the parcel shall be protected. The proposed rules allow land used for storm water treatment, green infrastructure, land dedicated to public access, and public facilities to be included in any open space requirements imposed by this rule. Proposed Minn. R. 6106.0170, subp. 4.F. and G.

If a primary conservation area where development is proposed lacks natural vegetation, it must be evaluated for potential restoration of natural vegetation. If there are no primary conservation areas on a site proposed for development or redevelopment that meets the minimum size threshold in proposed Minn. R. 6106.0170, subp. 3, the local government must determine whether the site was identified for potential restoration in the local plan and, if so, apply the guidelines for restoration of vegetation set out in proposed Minn. R. 6106.0150, subp. 6.

• Protection mechanisms. Primary conservation areas set aside under the proposed rules must be protected using a legal mechanism that assures their long term protection. Those mechanisms are: public acquisition, a conservation easement, a deed restriction, or other arrangements that achieve the same degree of protection as the three legal mechanisms. Proposed Minn. R. 6106.0170, subp. 4 H. This approach is consistent with many local ordinances that already employ conservation design, and gives local governments and developers the flexibility to determine which mechanism will best suit the needs of the local community. This approach was recommended by local governments and other stakeholders who opposed previous draft rule proposals that primary conservation areas be dedicated to the public by a fee simple conveyance or easement.

While local governments retain the ability to select the mechanism they will employ to protect primary conservation areas, the rules makes it clear that, regardless of the method selected, a long-term vegetation management must be provided to assure that the set-aside area continues to meet the biological and ecological functions that resulted in its designation as a primary conservation area. Proposed Minn. R. 6106.0170, subp. 4(I). This includes a preference for connecting open

space and natural areas to create interconnected patches of habitat and corridors for both wildlife movement and recreational use.

• **Connecting protected open space.** The rules identify a preference for a connecting open space and natural areas to create interconnected patches of habitat and corridors for both wildlife movement and recreational use. Contiguous open space and habitat has been demonstrated to result in improved native flora and fauna and associated habitat²⁴.

Subpart 5. Land dedication. Minnesota statute authorizes local governments to require developers to dedicate a "reasonable portion of buildable lands" as public amenities, including land for parks, recreational facilities, trails, wetlands and open space. Minn. Stat. § 462.358, subd. 2b(a) (2015) and Minn. Stat. § 394.25, subd. 7 (2015). The establishment of the MRCCA predates these statutory requirements; however, Executive Order 79-19 did include a requirement for dedication of riverfront access land, or cash in lieu of such land, to the public. This provision was included in proposed Minn. R 6106.0170 to be consistent with the current statutory requirements. This subpart only applies to those local governments that require land dedication under Minn. Stat. §§ 394.25, subd. 7 and 462.358, subd. 2b(a) (2015).

6106.0180 Exemptions from Setbacks, Height Limits, and Other Requirements

The MRCCA authorizing statute authorizes the DNR to "provide certain exceptions and criteria for standards, including, but not limited to, exceptions for river access facilities, water supply facilities, storm water facilities, and wastewater treatment facilities, and hydropower facilities." Minn. Stat. § 116 G.15, subd. 4 (2015). This rule sets forth the exemptions from the proposed MRCCA rules, including the exemptions of certain structures and uses from the setback requirements, structure height standards, and restrictions imposed within the shore impact and bluff impact zones.

The Interim Development Regulations in Executive Order 79-19 include many similar exemptions, including: water-related commercial recreational uses, public facilities such as transmission services, transportation facilities, and water and wastewater facilities. These exemptions have been updated and carried forward to the proposed MRCCA rules. Other factors used in creating new exemptions included: consistency with exemptions in current local government ordinances, stakeholder comments, the potential impact of the activity proposed for exemption on MRCCA resources, the current character of land use within the various districts, the public purpose of the activity proposed for exemption, and the needs of property owners and river-dependent uses.

The exemptions are listed in table format in order to assist readers in locating specific structures and uses. The table also cross-references other parts of the proposed MRCCA rules that provide additional standards for these structures and uses.

	and proposed mineral management
standards for these structures and uses.	
Details of specific exemptions include:	

_

²⁴ Milder, 2007.

- **Historic properties.** Historic properties and properties that contribute to historic districts may be located in areas where other structures would be restricted or prohibited. In most instances the presence of these properties predates the MRCCA and there is a significant public interest in maintain these properties particularly as they pertain to the development of the state and the history of development within the MRCCA.
- Buildings and structures on the face of the St. Paul downtown bluff in the Urban Core district. There is currently extensive development on the face of the St. Paul downtown bluff, and the City is planning to add a major public amenity, a "river balcony" along the bluffline. The bluff itself has been structurally reinforced to support development. For this reason these facilities have been exempted from certain standards imposed by these rules.
- **Public recreational facilities.** Some but not all improvements within public recreational facilities are exempted from certain standards imposed by these rules. In the case of public recreational facilities these exemptions were permitted either because their impact was negligible or the exemption was necessary to permit public access to the MRCCA.
 - Monuments and flagpoles. Accessory structures such as monuments, flagpoles and similar park features have a negligible impact on resources within the MRCCA. These accessory structures are permitted within the shore impact zone and bluff impact zone (restricted to slopes averaging less than 30% to minimize the threat of erosion). According to local and regional park managers, these accessories are typically placed in proximity to the river for interpretive or commemorative purposes.
 - Picnic shelters and related visitor structures. These structures are often sought after by public visitors to a park or recreational facility and are strategically placed to permit views of the river and other MRCCA protected resources. These structures are generally open-sided and do not present a barrier to floodwaters.
 - Parking areas and roads. Road access and parking are necessary amenities in public parks and at recreational facilities and water access sites. There are instances where it is necessary, because of site size or layout, that roads and parking areas be placed within the shore impact zone or close to the toe of the bluff.
 - Trails and viewing areas. Trails and viewing areas enhance the public enjoyment of the resources within the MRCCA. These typical park features that are often located close to the shoreline or on bluff faces to maximize public enjoyment and are exempted from a number of the provisions of the proposed MRCCA rules. Because of concerns about impacts of construction on vegetation and slope stability, hard surface trails are generally not permitted on the steepest slopes within the MRCCA.
- River-dependent uses: Where a business or property is connected to the river or dependent on
 the river, those shoreline facilities necessary for the operation of the businesses or use are
 exempt from shore and bluff impact zone restrictions. This exemption does not extend to
 buildings, structures, and parking that do not require a shoreline location for their operations.
 Private roads and conveyance structures serving these facilities may also be placed in the bluff
 impact zone or shore impact zone if there is no alternative location.

- Private residential and commercial water access and use facilities: There are limited exceptions for private residential and commercial activities.
 - Private roads. Private roads serving three or more lots may be constructed in the bluff impact zone if doing so is the only means of accessing level land on a terrace or at the foot of the bluff. This exemption, however, applies only to roads serving three or more lots i.e., subdivisions not individual parcels.
 - Access paths. Access paths, stairways, lifts, and landings are permitted within the shore impact zone and bluff impact zone as necessary to permit private land owners to enjoy the amenities of their property. This exemption is consistent with the access exemptions permitted by Minn. R. 6120.3300, subp. 3 I (2015), which permits shoreland property owners to construct access paths, stairs, lifts and landings within the shore impact zone.
 - Water-oriented accessory structures. Water oriented accessory structures such as gazebos, decks, patios, fish houses, screen houses and pump houses are often used by private land owners to enjoy the amenities of the MRCAA corridor and are exempted from certain requirements of the proposed MRCCA rules. These exemptions are consistent with the requirements in the state shoreland rules, chapter 6120.3300, subp.3.H. (2015).

Conclusion

Based on the foregoing, the proposed rules are both needed and reasonable.

Date: December 9, 2015 /s/Tom Landwehr
Commissioner

References

Anfinson, J.O. 2003a. The River We Have Wrought. A History of the Upper Mississippi. University of Minnesota Press. Minneapolis, MN.

Anfinson, J.O. 2003b. River of History. A historic resources study of the Mississippi National River and Recreation Area. U.S. Army Corp of Engineers St. Paul District.

Anoka Conservation District. 2012. Coon Rapids Dam Pool Shoreline Inventory.

Arendt, R.G. 1996. Conservation design for subdivisions: a practical guide to creating open space networks. Island Press, Washington, D.C.

Castelle, A. J., C. Conolly, M. Emers, E.D. Metz, S. Meyer, M. Witter, S. Mauerman, T. Erickson, and S. Cooke. 1992. Wetland buffers: use and effectiveness. Washington State Department of Ecology, Olympia, Washington.

Castelle, A. J., A.W. Johnson, and C. Conolly, 1994. Wetland and stream buffer size requirements – a review. Journal of Environmental Quality 23: 878-882.

Gregory S. V., F. J. Swanson, W. A. McKee, K. W.Cummins 1991. An ecosystem perspective of riparian zones. BioScience, 41 (8): 540-551.

Jennings, C. 2015. A limited inventory of the location and style of June 2014 slope failures; towards better prediction and management. Minnesota DNR, Division of Ecological and Water Resources.

Krysel, C., E. Marsh Boyer, C. Parson, and P. Welle. 2003. Lakeshore property values and water quality: evidence from property sales in the Mississippi Headwaters Region. Mississippi Headwater Board and Bemidji State University.

Lafrancois, B. M., D. L. Vana-Miller, and S. P. Johnson. 2007. Water resources information and issues overview, Mississippi National River and Recreation Area. Natural Resource Technical Report NPS/NRWRD/NRTR—2007/364. National Park Service, Water Resources Division, Fort Collins, Colorado.

Milder, J.C. 2007. A framework for understanding conservation development and its ecological implications. Bioscience 57(9): 757-768.

Mississippi Watershed Management Organization. 2010. A Guide to Bank Restoration Options for Large River Systems: Part II Bioengineering Installation Manual MWMO Watershed Bulletin 2010-3. 95 pp

Nassauer, J.I., J.D. Allan, T. Johengen, S.E. Kosek, and D. Infante. 2004. Exurban residential subdivision development: effects on water quality and public perception. Urban Ecosystems 7: 267-281.

Owens, D.W., P. Jopke, D.W. Hall, J. Balousek, and A. Roa. 2000. Soil erosion from two small construction sites, Dane County, Wisconsin. U.S. Geological Survey, Water-Resources FS-109-00.

Schueler, T. 1994. The importance of imperviousness. Watershed Protection Techniques 1(3): 100-111. Center for Watershed Protection, Ellicott City, MD.

Trust for Public Land. 2007. The Economic Benefits of Land Conservation. De Brun, C., ed.

U.S. Department of Agriculture. 1997. Agricultural Handbook No. 703. Predicting soil erosion by water: A guide to conservation planning with the Revised Universal Soil Loss Equation.

Walsh, C. J. A. H. Roy, J. W. Feminella, P. D. Cottingham, P. M. Groffman, & R. P. Morgan II. 2005. The urban stream syndrome: current knowledge and the search for a cure. Journal of the North American Benthological Society, 24(3):706-723.

MRCCA SONAR

Exhibits