

**FINDINGS FOR THE
MINNESOTA COASTAL NONPOINT PROGRAM**

FOREWORD

This document contains the findings for the coastal nonpoint pollution control program submitted by the State of Minnesota pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA). The findings are based on a review of Minnesota's Lake Superior Coastal Nonpoint Pollution Control Program (July 2001) and supplemental material provided by Minnesota subsequent to the program submittal. The National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) reviewed this information and evaluated the extent to which it conforms to the requirements of CZARA.

NOAA and EPA commend Minnesota on the substantial amount of time and effort put into developing your program and we appreciate the commitment you have shown to complete an ambitious task with limited resources. We will continue to work with Minnesota to ensure that these findings represent an accurate assessment of current State abilities and efforts to address coastal nonpoint source pollution.

APPROVAL DECISION

NOAA and EPA approve the coastal nonpoint pollution control program submitted by the State of Minnesota pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990, subject to certain conditions.

This document provides the specific findings used by NOAA and EPA as the basis for the decision to approve Minnesota's program. It also provides the rationale for the findings and includes conditions that will need to be met for Minnesota to receive final approval of its program. The timeframes associated with conditions become effective on the date of the approval letter for these findings. We recognize that Minnesota may be working on changes to its program that would, if finalized, ensure implementation of the management measures in conformity with the Section 6217(g) guidance. We also recognize that further discussions of State efforts, programs, and coordination may result in satisfaction of the conditions stated below.

INTRODUCTION

This document is organized by the major nonpoint source categories and subcategories identified in the Section 6217(g) guidance and the administrative elements identified in the program guidance (including the boundary for the 6217 management area). Where appropriate, NOAA and EPA have grouped categories and subcategories of management measures into a single finding. The structure of each finding follows a standard format. Generally, the finding is that the state program includes or does not include management measures in conformity with the (g) guidance and includes or does not include enforceable policies and mechanisms to ensure implementation. In some cases, the finding reflects that the state has identified a back-up enforceable policy, but has not yet demonstrated the ability of the authority to ensure implementation. In other cases, the enforceable policies and mechanisms requirement has been

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met by a legal opinion provided by Minnesota, in accordance with the Administrative Changes cited below. For further understanding of terms in this document, the reader is referred to the following:

Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (EPA, January 1993)

Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance (NOAA and EPA, January 1993)

Flexibility for State Coastal Nonpoint Programs (NOAA and EPA, March 1995)

Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) (NOAA and EPA, October 1998)

The references in this document refer to Minnesota's Lake Superior Coastal Nonpoint Pollution Control Program (July 2001). NOAA and EPA have written this document as succinctly as possible. We have relied upon, but do not repeat here, the extensive information that the State has included in its program submittal. Further information and analysis, including material provided by Minnesota subsequent to the program submittal, are contained in the administrative record for this approval decision and may be reviewed by interested parties at the following locations:

EPA/Office of Wetlands, Oceans and Watersheds
Assessment & Watershed Protection Division
Nonpoint Source Control Branch (MC 4503T)
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001
Contact: Dov Weitman (202/566-1207)

NOAA/Office of Ocean and Coastal Resource Management
Coastal Programs Division
SSMC-4, N/ORM3
1305 East-West Highway
Silver Spring, MD 20910
Contact: John Kuriawa (301/563-7202)

U.S. EPA Region V
Watersheds and Wetlands Branch
77 West Jackson Boulevard (WW-16J)
Chicago, IL 60604
Contact: Thomas Davenport (312/886-0209)

I. BOUNDARY

FINDING: Minnesota’s proposed boundary is sufficient to control the land and water uses that have or are reasonably expected to have a significant impact on the coastal waters of Minnesota.

RATIONALE: Minnesota’s proposed Coastal Nonpoint Program is the same as the NOAA 6217 boundary recommendation (contained in the “Coastal Zone Boundary Review, Amended Draft, National Summary: State Characterization Reports”, October, 1992). The Minnesota boundary encompasses the coastal watersheds within the State’s portion of the Lake Superior Basin. This coastal nonpoint program management area will allow for adequate control of sources of nonpoint pollution that have or are reasonably expected to have a significant impact on the State’s coastal waters.

II. AGRICULTURE

FINDING: Minnesota’s agricultural programs include management measures in conformity with the Section 6217(g) guidance. Minnesota has provided a legal opinion concluding that the State has authority to prevent nonpoint source pollution and require implementation of management measures, as necessary; a description of the voluntary or incentive-based programs the State will use to encourage implementation of the agricultural management measures; a description of the mechanism or process linking the implementing agency with the enforcement agency; and a commitment to use the enforcement authority where necessary.

Minnesota has presented sufficient justification for exclusion of the irrigation water management measure for irrigated agricultural lands.

RATIONALE: Northeast Minnesota is not an intensive agricultural area; only three percent of the total acreage in the Lake Superior Basin is agricultural cropland. However, the State implements a broad array of incentive-based agricultural Best Management Practices (BMPs), permitting programs, and educational programs to address potential nonpoint pollution. A combination of federal, state, and local financial incentives facilitate the implementation of management measures, including use of State Revolving Loan funds for erosion and sediment control projects. Minnesota has adopted permitting programs to manage confined animal facility management operations, fertilizer distributors and storage facilities, and pesticide applicators. Minnesota also employs a variety of educational programs to ensure that farmers are aware of the technical assistance available and their responsibilities as stewards of the land.

In the erosion and sediment control (E&S) and confined animal facility management measures, the Minnesota standards listed are for technological designs. These designs are based on Natural Resources Conservation Service (NRCS) standards. They are in conformity with the Section 6217(g) management measures.

To implement the erosion and sediment control measures, the State uses cost-sharing available from county Farm Service Agency offices through such federal programs as the Environmental Quality Incentives Program (EQIP) and Section 319 of the Clean Water Act. Local zoning requires local government units to implement agricultural use standards (MN Rules 6120.3300). In addition, the Board of Soil and Water Resources (BWSR) oversees a “soil loss limits” program that enables counties and municipalities to adopt soil-loss ordinances.

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Minnesota has adopted management measures in conformity with the Section 6217(g) guidance for small and large confined animal facilities and has direct statutory requirements to manage these facilities. MN Rules 7020 govern feedlots statewide in Minnesota. Counties adopt standards with state oversight. Environment Assessment Worksheets (EAWs) are required for feedlot expansion in sensitive areas, and Carlton County, the Basin's most intensive agricultural area, has a feedlot officer. MN Rules 7050.0215 set discharge limits as a result of a storm event equal to or less than the 25-year, 24-hour rainfall event for all facilities not subject to NPDES permitting.

Nutrient and pesticide management measures are met through a combination of financial and technical assistance, licensing programs, direct statutory requirements, and monitoring programs. Minnesota requires persons who sell, distribute, apply or store fertilizers to obtain an MDA license. The State provides low interest loans for the development of nutrient management plans and for manure management. MDA has adopted BMPs for nitrogen fertilizers for corn and turf in conformity with the (g) guidance. Pesticide applicators are subject to licensing (commercial) or certification (private). The State uses two primary statutes to protect water quality from detrimental effects caused by nutrients and pesticides; (1) the State Groundwater Protection Law (M.S. 103H) and (2) the State Pesticide Control Law (M.S. 18B-D). M.S. 103H promotes BMP use and requires regulatory actions (called Water Resource Protection Requirements [WRPRs]) if BMP implementation is proven to be ineffective. M.S. 18 gives MDA the authority to regulate pesticides in the State, including provisions for the protection of the environment. Pursuant to M.S. 18B.045, Minnesota has developed a Pesticide Management Plan designed to "protect ground and surface water from nonpoint source pollution pesticide contamination."

Minnesota's grazing management practices focus on the protection of sensitive riparian zones through regulating cattle access to streams and monitoring the health and extent of riparian vegetation. The Shoreland Management Act serves as the primary enforceable policy to implement grazing management measures, supplemented by County ordinances (such as St. Louis County's Ordinance 46, Section 15).

Given the insignificant portion of Minnesota's 6217 management area subject to agricultural irrigation, NOAA and EPA approve the State's exclusion request for this management measure. It should be noted, however, that Minnesota's statewide agricultural program includes irrigation practices in conformity with the Section 6217(g) guidance.

Minnesota indicates that groundwater supplies almost 100 percent of the State's drinking water and that nitrate and pesticide issues exist in some supply systems. NOAA and EPA thus recommend a focus on fertilizer and pesticide applications in the coastal management area as a means to ascertain the effectiveness of agricultural management measures and to provide valuable information to the overall environmental management decision-making process for Minnesota. To the extent necessary, the State should utilize the authorities outlined in the State Groundwater Protection Law (M.S. 103H) to implement Water Resource Protection Requirements (WRPRs) for impaired coastal watersheds as a means of addressing the additional management measure requirements in CZARA.

III. FORESTRY

FINDING: Minnesota's program includes management measures in conformity with the Section 6217(g) guidance. These measures are primarily implemented through voluntary or

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incentive-based mechanisms. Minnesota has identified back-up enforceable authorities to ensure implementation throughout the 6217 management area. These authorities include rules administered by the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources (MDNR). In addition, Minnesota has provided a legal opinion concluding that the State has authority to prevent nonpoint source pollution and require implementation of management measures, as necessary; a description of the voluntary or incentive-based programs the State will use to encourage implementation of the forestry management measures; a description of the mechanism or process linking the implementing agency with the enforcement agency; and a commitment to use the enforcement authority where necessary.

RATIONALE: Approximately 84 percent of the land in Minnesota's coastal counties is forested. Of this, approximately 79 percent is classified as timberland. This timberland represents about 4.5 million acres of forestland that is productive and available for active forestry operations. These operations have the potential to contribute to nonpoint source (NPS) pollution, especially those activities related to road development, timber harvesting, and site preparation.

Minnesota has addressed nonpoint source pollution from forestry by actively promoting a voluntary approach to good forest management practices. The keystone of the State's voluntary program is contained in the Minnesota Sustainable Forest Resources Act of 1995 (M.S. 89A). Beginning in the early 1990's, Minnesota pioneered the development of guidelines, documents and policies aimed at encouraging proper forest management through the use of BMPs.

Minnesota has a comprehensive set of Forestry BMPs and an active program to encourage their use, accompanied by compliance audits and a process to respond to water quality complaints. The BMPs found in the Minnesota "Sustaining Minnesota Forest Resources: Voluntary Site-level Forest Management Guidelines for Landowners, Loggers and Resource Professionals," conform to the Section 6217(g) guidance. Specifically, BMPs have been adopted for: preharvest planning; streamside management areas, road construction; road management; timber harvesting; site preparation and forest regeneration; fire management; re-vegetation of disturbed areas; forest chemical management; and wetland forest management.

Minnesota has not only adopted practices that conform to the Section 6217(g) measures, but in many cases added specificity, resulting in more stringent measures than those in the Section 6217(g) guidance. For instance, Minnesota forestry BMPs promote the use of temporary stream crossing structures designed to withstand more frequent high water events than those recommended for permanent structures. Minnesota recommends generously sized Streamside Management Areas (SMAs) based upon topography, hydrology, and vegetation. Also, Minnesota includes references to skid trails and suggests that practices for forest roads are appropriate for skid trails. Although Minnesota's "Sustaining Minnesota Forest Resources: Voluntary Site-level Forest Management Guidelines" does not specifically address chemical control other than pesticides, the "Pesticide Use" section in this document does describe a suite of practices applicable to reduce NPS impacts from all chemicals moving off-site during and after application as required by the Section 6217(g) measures. The State also points out that fertilizer use in silviculture in the Lake Superior Watershed is not known to occur at a level to warrant a special management practice.

The use of BMPs on the 2.9 million acres of *publicly* owned timberland in the coastal counties, which corresponds to roughly three-quarters of the total timberland acreage, is mandatory. On

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federal lands, Minnesota's forest management BMPs serve as the minimum standard for operation. Timber sale contracts on state lands specify that Minnesota's forestry BMPs are to be followed. On county lands, Minnesota's forest management guidelines are either incorporated by reference into the timber sale contract, or the timber sale contract identifies the specific practices that are needed to protect water quality. Encouraging the use of BMP on Non-industrial Private Forest (NIPF) lands relies upon an emphasis on voluntary programs promoted by economic incentives and public information and technical assistance.

Compliance audits have been performed periodically since 1991, utilizing multi-stakeholder teams with a broad range of expertise and interests. Results from these audits indicated a high level of BMP compliance averaging 87 percent across all forest land owners during the period of 1991-1997. Monitoring results were used to focus training and technical assistance efforts to problem areas. Weaknesses of this approach to compliance monitoring include: the lack of information on NIPF lands, where 80 percent of NIPF activities were not audited; lack of sufficient resources to adequately train audit teams; and a bias toward self-selected sites for auditing. For these reasons, changes were made during the year 2000 and the auditing process was changed to a statistically valid system of randomly selected sites assessed by a private contractor utilizing a quality-control process.

In addition to work being done at the site level, landscape-level forest management work is underway. This scale of planning makes explicit the cumulative effects from landscape-level alterations and may be useful in developing watershed-based BMPs that reduce long-term impacts.

Minnesota has a process for responding to water quality complaints in the form of a toll-free "Public Concerns Registration Line." In response to such complaints, the Minnesota Forest Resources Council (MFRC) makes a determination indicating whether any forest management rules were not followed appropriately, and recommends actions for mitigating problems. In addition, Minnesota's legal opinion concludes that the State has authority that can be used to prevent nonpoint pollution and require management measure implementation, as necessary, across all management measures. Primary authorities are the Water Pollution Law (M.S. 115) and the Minnesota Water Law (M.S. 103G) and implementing regulations.

Whenever a silviculture activity affects or could potentially affect a public watercourse, MDNR Waters is typically consulted. Site visits occur during the field auditing program administered by MDNR Forestry. Problems are reported to MDNR Waters or MPCA staff as a result of the audit or if complaints are lodged via the MFRC system. Complaints can also be reported directly to the agencies. The State has indicated that MNDNR's authority to require restoration of public waters has been upheld in Minnesota court, as has the DNR's authority to require permits for public water crossings.

NOAA and EPA commend Minnesota's holistic approach to forestry management. Given the extensive nature of the program, including its educational components, we recommend that state agencies actively respond to violations of accepted forestry practices as necessary to mitigate and prevent coastal nonpoint source pollution. We also recommend the development of a tracking system to report the results of forestry management measure implementation.

IV. URBAN

A. NEW DEVELOPMENT

FINDING: Minnesota's program includes management measures in conformity with the Section 6217(g) guidance in the portion of the Lake Superior Basin subject to the requirements of the Shoreland Management Act, but not throughout the 6217 management area. However, the State has not demonstrated that post-development total suspended solid (TSS) loadings will be designed to at a level no greater than pre-development loadings. Minnesota's program includes enforceable policies and mechanisms to ensure implementation of the measure. Minnesota is not required to include the New Development Management Measure for any new development, redevelopment, and new and relocated roads, highways, and bridges occurring in urbanized areas subject to National Pollutant Discharge Elimination System (NPDES) Phase I or Phase II municipal separate storm sewer system (MS4) permits.

CONDITION: Within two years Minnesota will demonstrate that all areas within the Lake Superior Basin not subject to the State Shoreland Management Act (M.S. 103F) or subject to NPDES Phase I or II of the MS4 program will implement the Section 6217(g) new development management measure via water plans or some other mechanism. Within two years the State will also demonstrate through a pilot project or further data/information sharing with NOAA/EPA that its management practices taken in combination provide for 80 percent TSS reduction by design or performance.

RATIONALE: Minnesota has indicated that all counties and the Twin Cities metropolitan area have water plans in force that may require implementation of the new development management measure; however, the State has not yet demonstrated that these plans currently cover the entire coastal management area or provide alternative programs or authorities that will ensure management measure implementation throughout the 6217 management area. Minnesota is actively funding wetlands conservation, shoreland protection activities, implementation of ISTS, and feedlot programs using the County water plans. Minnesota has also indicated that new programs (e.g., Source Water Assessments) are also implemented through the county water plans. The Minnesota Board of Soil and Water Resources (BWSR) manages the update schedule of these water plans (typically 5-10 years effective duration). Stormwater management is a specific priority item when water plans are updated. Given the increasing coastal population in the Lake Superior Basin, NOAA and EPA are requesting further review of county and local water plans and implementation mechanisms to ensure consistency with the new development management measure throughout the coastal management area.

Although M.S. 103B.311 and 103B.325 only encourage counties to develop sound water plans, each county has completed a plan and keeps it current. It is, however, unclear how the State will ensure implementation of the local water plans if a Local Governmental Unit (LGU) does not implement the plan as written. References regarding the role or responsibility of the State to develop and implement these plans in cases where counties do not develop and implement them were not identified. NOAA and EPA request that Minnesota develop a strategy to implement management measures in accordance with the Section 6217(g) measures where local or county jurisdictions do not amend their existing water and related land resource plans to ensure implementation of the management measures. Under 103B.155 the State is required to prepare a

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“state water and related land resource plan.” If the State is compelled to prepare a water and related land resource plan on behalf of a county, NOAA and EPA request further description of how and whether such a plan will ensure the implementation of new development controls consistent with the new development management measure.

According to Minnesota’s Coastal Nonpoint Program (CNP) document, “LGUs are required to incorporate BMPs for new development to: (1) minimize off-site runoff, (2) maximize overland flow in vegetated regions, (3) replicate pre-development hydrologic conditions, (4) minimize off-site discharge of pollutants to ground or surface water, and (5) replicate natural filtration to the degree possible.” Specific references to the above requirements were not identified in the Minnesota statutes, rules or guidance. The State also cites several reference books including, “MN Construction Site Erosion Control Planning Handbook,” “Protecting Water Runoff from Urban, Suburban and Developing Areas of MN,” and “Protecting Water Quality in Urban Areas: A Manual.” However, it is unclear whether these documents have been incorporated by reference in state requirements or guidance.

B. WATERSHED PROTECTION AND SITE DEVELOPMENT

FINDING: Minnesota’s program includes management measures in conformity with the Section 6217(g) guidance and enforceable policies and mechanisms to implement the watershed protection and site development measures in all areas that have adopted the M.S. 103F requirements, but not throughout the remainder of the 6217 management area. Minnesota has provided a legal opinion concluding that the State has authority to prevent nonpoint source pollution and require implementation of management measures, as necessary. Minnesota has included descriptions of the voluntary or incentive-based programs the State will use to encourage implementation of the measures. The State has not, however, provided an acceptable description of the mechanism or process linking the implementing agency with the enforcement agency nor demonstrated a commitment to use the existing enforcement authorities where necessary.

CONDITION: Within two years, Minnesota will demonstrate how the State ensures implementation of the watershed protection and site development measures throughout the entire 6217 management area when the LGU does not implement the management measures. Particular emphasis should be provided for those elements of the measures designed to be preventive.

RATIONALE: Minnesota employs watershed planning at many different levels throughout the Lake Superior Basin. NOAA and EPA find that the regulatory programs, coordination mechanisms, and education and outreach taken collectively may satisfy the requirements of the watershed protection and site development management measures, but additional information is needed to explain how the State ensures implementation of preventive management measures.

While the legal opinion states that Minnesota has the authority to prevent nonpoint source pollution and compel the implementation of the measures, there is not adequate information on how this authority is applied, i.e., what are the links between the voluntary or incentive-based watershed protection programs and the underlying enforcement authorities cited in the opinion? Also, how has the state used (or how does the state plan to use) this enforcement authority as necessary in the absence of voluntary watershed protection programs? EPA and NOAA do not find adequate assurance that the management measures will be implemented through a back-up

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authority if LGUs fail to adopt the measures. The State needs to describe how its programs and processes ensure implementation of preventive management measures before complaints or problems occur.

Per the program submittal, the State Shoreland Management Act (M.S. 103F) requires LGUs to adopt and implement ordinances that control development density, limit development on steep slopes, limit impervious surfaces, and encourage open space. The site development management measures are thus met in all areas that have adopted the M.S. 103F requirements. M.S. 103 applies to all Shorelands. “Shorelands” are defined in MN Rules, Part 6120.2500 as “land located within the following distances from public waters: 1,000 feet from the ordinary high water level of a lake, pond, or flowage; and 300 feet from a river or stream, or the landward extent of a flood plain designated by ordinance on a river or stream, whichever is greater.”

At the site level, the North Shore Management Plan (NSMP) is implemented along Lake Superior by LGUs. Site development must minimize soil erosion and maintain natural vegetation. Soil and Water Conservation Districts are used to provide guidance on site development and comment on state and local permits. Minn. Rules 6120 requires, in shorelands of public waters of the State, the LGUs to adopt shore land management controls conforming to the North Shore Management Plan. Clustering, site fingerprinting, preserving natural drainage feature and depressions, and minimizing imperviousness are specifically required in planned unit development and site planning. These practices also meet the requirements of the management measures.

Much of the development occurs in the coastal zone area along Lake Superior within the NSMP boundary. Nearly 90 percent of the land along Lake Superior within the NSMP is in private ownership. Outside the NSMP boundary, approximately 90 percent of the land is in public ownership. While the cover type throughout the State is approximately 37 percent forested, the cover type in the Lake Superior Basin is nearly 95 percent forested (MN CNPCP, Chapter IV 2-144). The population, which is relatively low compared to other coastal states, is centered along the coast and within the shoreland zone. Therefore, a large percentage of land use is managed as shoreland under M.S. 103F.

The St. Louis River Management Plan, like the NSMP, is a Critical Coastal Area management plan that was developed in 1994. The management measures in the plan apply to all lands within river classification areas. The river plan areas range from ½ mile wide on each side of the river for Primitive Areas to 300 feet wide in Urban Areas. The plan encompasses more than 350 miles of the St. Louis, Whiteface, and Cloquet rivers. The management plan covers approximately 62 percent of the Lake Superior Watershed. (Chapter IV 3-228, MN CNPCP, July 2001)

In those areas of the State not subject to the State Shorelands Act (M.S. 103F) or the North Shore Management Plan, Minnesota uses its Clean Water Partnership (CWP) Program to fund local watershed planning efforts and related development activities. The focus of CWP is on “the control of nonpoint sources of pollution through watershed management to protect and improve surface and groundwater in Minnesota.” Projects often begin with an investigation of nonpoint sources and the need for BMPs. Later phases focus on implementing the BMPs to restore or maintain water quality. Since May of 1999, over 30 major projects have been funded in sub-basins of the coastal management area. NOAA and EPA are unable to determine based on Minnesota’s Program submission whether the CWP projects are implementing watershed protection and site development management measures.

Minnesota has also indicated that the State can ensure implementation of the watershed protection and site development management measures when LGU implementation is not complete. The State, through MDNR Waters, oversees the administration of local zoning in all shorelands and floodplains in Minnesota. LGUs are required (MN Rules 6120.3900, subpart 6) to notify MDNR Waters of all public hearings to consider variances, amendments, or conditional uses under local shoreland controls at least ten days prior to the hearing. MDNR Waters reviews and then can send comments or testify at hearings. Notices of decisions must also be sent to MDNR Waters ten days after the hearing decision. Decisions that do not comply with the statewide Minimum Shoreland Standards can be appealed by MDNR to district court. Only in rare instances does MDNR Waters use litigation to ensure implementation. As a result of regular (monthly) coordination between the MDNR Waters Area Hydrologist and the LGU Zoning Administrator, most if not all compliance issues are resolved in a timely manner, according to the State. NOAA and EPA applaud the oversight process in use by MDNR Waters, but request that Minnesota provide information on how this review process will ensure implementation of the watershed protection and site development management measures in the absence of action by the LGU.

D. CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL AND CONSTRUCTION SITE CHEMICAL CONTROL

FINDING: Minnesota is not required to include the Construction Site Erosion and Sediment Control and Construction Site Chemical Control Management Measures because the NPDES storm water regulations for industrial activities on construction sites of one acre or greater apply nationwide and therefore throughout the Minnesota Coastal Nonpoint Program management area.

RATIONALE: Although Minnesota is not required to include these management measures in its Coastal Nonpoint Program, EPA and NOAA applaud the use of the Soil and Water Conservation Districts to review erosion and sediment control plans prior to issuance and the practice of using DNR hydrologists to provide technical assistance to local units of government, especially when this assistance involves changes in the hydro-geomorphology of receiving streams as a result of construction and new development.

E. EXISTING DEVELOPMENT

FINDING: Minnesota's program does not include management measures in conformity with the Section 6217(g) guidance and enforceable policies and mechanisms to implement the existing development measures. The State's statutes and local zoning and land use ordinances are in conformity with elements three (3) and four (4) of the management measure; however, Minnesota has not explicitly described how the existing development measure will be met throughout the entire 6217 management area, nor has it submitted a priority list and schedule for conducting retrofits. Minnesota is not required to include the Existing Development Management Measure for any existing development within urbanized areas subject to NPDES Phase I or Phase II MS4 permits.

CONDITION: Within two years, Minnesota will include in its program management measures in conformity with the Section 6217(g) guidance for existing development and demonstrate how the program includes enforceable policies and mechanisms to ensure implementation throughout

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the 6217 management area. NOAA and EPA request that Minnesota provide, within two years, a list of retrofit opportunities in the 6217 management area and a schedule for implementing retrofits. Minnesota should also provide examples of how watershed management programs are addressing the priorities identified in the 6217 management area (through implementation of the existing development management measures).

RATIONALE: The State has both a conservation easement program and the Reinvest in Minnesota program that serve to meet elements (3) and (4) of this management measure. In addition, the descriptions of the Miller Creek Watershed practices and the City of Duluth's Miller Hill Corridor Plan meet all four elements of the management measure in these areas. The State has referred to activities in Knife, Midway, Nemadji, and Flute Reed watersheds that address nonpoint issues, but no detail was provided. Minnesota has indicated that state and local units of government are forming partnerships to develop comprehensive watershed plans that will address (nonpoint) water quality priorities. The status and accomplishments of these partnerships are only beginning to be tracked; however, the goals of the Clean Water Partnership are consistent with the existing development management measure. NOAA and EPA ask that the State describe the overarching priorities (across all watersheds) in the coastal management area and provide examples of how individual watershed plans are implementing the existing development management measure to meet the goals.

Minnesota has described watershed management programs and communications mechanisms designed to reduce runoff pollutant loadings and volumes from existing development. Minnesota's legal opinion will probably serve as back up authority after the State has identified priority local and/or regional watershed pollutant reduction opportunities and produced a schedule for implementing appropriate controls.

F. NEW AND OPERATING ONSITE DISPOSAL SYSTEMS (OSDS)

FINDING: Minnesota's program includes management measures in conformity with the Section 6217(g) guidance and enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.

RATIONALE: Minnesota Rules Chapter 7080 establishes minimum standards and enforceable requirements for siting, installation, design, operation, and maintenance that meet the OSDS management measures. Also, county and local governments are enabled to incorporate this rule by reference and use it in enforcement activities.

Minnesota has adequate enforceable policies and mechanisms to ensure implementation of the OSDS (or Individual Sewage Treatment Systems - ISTS) requirements. All LGUs implement an enforceable permit program for ISTS. In addition, Lake, Cook and Carlton counties have similar enforceable programs. Counties (except for those with local governments that have conforming ordinances) must adopt ordinances that are reviewed at the state level and comply with the state rule (7080). These include:

Requirements for new construction include protective setbacks, site evaluations, additional soil treatment areas, installation, alteration, repair, maintenance, pumping, and inspections by licensed businesses or registered personnel. Population densities must be considered under certain conditions. Inspections are required to enforce requirements and include frequency, time,

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requirements, and certification. These requirements are in conformity with the management measure.

Requirements for operating systems include provisions for the upgrade, replacement, repair, or discontinued use of any system that represents an imminent threat to public health or safety within ten months of owner notification, and any other type of failing system within a specified time period determined by the county or local government can be found in the ordinance. Inspections are required at intervals of three years or less, and local governments are required to provide certificates or inspections of compliance.

Low phosphate detergents are known to be of use in Great Lake states, and nitrogen has not been identified as significant for enrichment of Minnesota waters.

Minnesota indicates in its program submittal that implementation of the urban management measures will be a focus of the CNP given the expected growth in the Lake Superior Basin. NOAA and EPA agree with this emphasis, and especially encourage increased efforts to remedy failing ISTS in the coastal zone. The State has provided information estimating a majority (60 percent) of septic systems may “fail to provide basic sewage treatment and disposal.” NOAA/EPA recommend enhanced efforts to identify failing systems and improved technical and financial assistance programs to enable property owners to replace, upgrade, and maintain OSDS in the coastal management area.

F. POLLUTION PREVENTION

FINDING: Minnesota’s program includes management measures in conformity with the Section 6217(g) guidance, including fact sheets, technical guidance by state and local governments, household hazardous waste disposal guidance, and guidance on recycling within counties.

RATIONALE: NOAA and EPA acknowledge that Minnesota’s Toxic Pollution Prevention Act (M.S. 115.07) provides a sound basis for the management of toxic chemicals at plants and other facilities. To address the more ubiquitous use of chemicals, such as fertilizers and pesticides, by individual property owners, NOAA and EPA recommend increasing efforts to educate citizens in the Lake Superior watershed.

G. ROADS, HIGHWAYS, AND BRIDGES

Construction Projects and Construction Site Chemical Control

FINDING AND RATIONALE: Minnesota is not required to include the Roads, Highways, and Bridges Construction Projects and Construction Site Chemical Control Management Measures because the NPDES storm water regulations for industrial activities on construction sites of one acre or greater apply nationwide and therefore throughout the Minnesota Coastal Nonpoint Program management area.

Planning, Siting, and Developing Roads, Highways and Bridges

FINDING: Minnesota’s program includes management measures in conformity with the Section 6217(g) guidance and enforceable policies and mechanisms to ensure implementation

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throughout the 6217 management area of the two Roads, Highways, and Bridges management measures (A-B).

RATIONALE: Minnesota's Environmental Quality Board has a guide to rules regulating Environmental Assessment, with reviews coordinated by the Minnesota Department of Transportation (MnDOT) and county highway departments and FHWA for impacts to flood plains, wetlands, and other sensitive resources.

Under M.S. 103F local zoning controls manage the placement and design of local public and private roads, driveways, and parking areas. Roads must meet structure setbacks and not be placed in bluff and shoreline impact zones when other reasonable and feasible placement exists.

Minnesota DOT has also developed rules for Natural Preservation Routes based on scenic, environmental, and other characteristics. M.S.162.021 gives counties authority to adopt rules establishing minimum construction and reconstruction standards for these routes.

NOAA and EPA support the practice of not using scupper drains on short bridges with landside retention ponds considered for runoff.

Operation and Maintenance

FINDING: Minnesota's program includes management measures in conformity with the Section 6217(g) guidance and enforceable policies and mechanisms to ensure implementation for MnDOT maintained roads, but not for local roads. Minnesota is not required to include the Road, Highway, and Bridge Operation and Maintenance Management Measure for any road, highway and bridge operation and maintenance in urbanized areas subject to Phase I or Phase II NPDES MS4 permits.

CONDITION: Within two years, Minnesota will demonstrate how the MDNR Protected Waters Permit Program, or another State program, ensures implementation of the practices contained within this Section 6217(g) management measure for all local roads, highways, and bridges, including roads and highways that do not cross waterbodies outside of designated MS4 areas.

RATIONALE: All of the state road authorities in the Lake Superior Watershed implement the many practices identified in operation and maintenance programs to reduce loading to surface waters. St. Louis County and MnDOT are highlighted in the program submittal as examples of two road authorities that administer these practices. The State has also indicated that MDNR Waters administers a Protected Waters Permit Program for all new and maintained road crossings of protected waters. The MDNR Waters General Permit for road, bridge and culvert crossings of Protected Waters requires compliance with 12 practices. The practices include activities such as exclusion dates to avoid sensitive species, hydraulic assessments, runoff systems, erosion and sediment control, site stabilization, and annual reporting of all projects. MnDOT's de-icing practices are exemplary. In addition, MDNR Waters Area Hydrologists coordinate annual meetings with all road authorities within the coastal area to discuss long-range road projects and to address water quality and habitat concerns. It is not clear to NOAA and EPA how the Protected Waters Permit Program is applied in cases where roads are created or maintained adjacent to waters without crossings.

Runoff Systems

FINDING: Minnesota's program includes management measures in conformity with the Section 6217(g) guidance and enforceable policies and mechanisms to ensure implementation of the measure throughout the 6217 management area. Minnesota is not required to include the Road, Highway and Bridge Runoff System Management Measure for any road, highway and bridge runoff systems in urbanized areas subject to Phase I or Phase II MS4 permits.

RATIONALE: Minnesota describes its stormwater control and runoff program for new highways and bridges, and coordination mechanisms in place to prioritize how these policies are applied to existing roads and bridges. The practices described by the State conform to the management measure.

As indicated in the State of Minnesota 2001-2005 Nonpoint Source Management Program Plan (Chapter 11-16 through 11-29), the Minnesota Department of Transportation (MnDOT) acts as the lead authority for the state in management of NPS from transportation systems. MnDOT's primary responsibilities are:

- Design, build, and maintain storm water conveyance and treatment systems for transportation projects.
- Coordinate transportation projects with local government units, state and federal agencies.
- Provide standards and specifications for materials and techniques used in BMPs.
- Provide continuous research and development of appropriate seed mixes reflecting Minnesota's ecological regions for vegetative establishment associated with transportation projects.
- Provide systematic life-cycling approaches for the use of new products, BMPs, and designs for reducing impacts of storm water.

The "Protecting Water Quality in Urban Areas" manual lists over 71 BMPs that are commonly used to reduce nonpoint source pollution from urban areas, including runoff systems. These BMPs are used alone or in combination by all road authorities to address runoff concerns. Retrofitting projects are typically done in combination with other road maintenance activities like reconstruction, new pavement, bridge or culvert repair, and drainage repair. DNR Waters and road authorities have an opportunity to address nonpoint source pollution issues, including retrofits at the annual general permit meetings coordinated by DNR Area Hydrologists. These meetings provide forums for discussing long range planning, runoff system concerns, and past performance of projects.

NOAA and EPA recommend a more formal prioritization of those existing roads, highways, and bridges that are having detrimental impacts on coastal water quality as currently designed. Thus, NOAA/EPA suggest the development of a process or program to identify opportunities within the existing infrastructure of road, highway, and bridge runoff controls to increase infiltration, reduce erosion, retain/detain runoff, etc., prioritize the projects based on condition of receiving waters, and schedule their completion based on available funding. Since Minnesota staff have indicated that annual infrastructure planning meetings are used for discussion of such issues, these meetings may be the appropriate forums for such a process.

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Minnesota could begin with a practice identified in its operation and maintenance management measure where state and local (should be defined in terms of the 6217 management area) inspection programs identify litter control practices, pollution control facilities, energy dissipaters and velocity controls to reduce pollution. Some additional examples of practices the State could identify are dry ponds that could be turned into wet retention ponds, terracing/biostabilization/turf reinforcement mats for side eroding slopes, diversions of runoff to prevent erosion, and check dams. A procedure and schedule to identify water quality improvement goals and implement the priority projects is also recommended.

The State of Minnesota Nonpoint Source Pollution Control Plan, developed by MPCA for compliance with Section 319 of the Clean Water Act, has identified an action plan for needs, priorities and milestones for 2001 – 2005. The seven goals and 43 milestones (action items) identify MnDOT as one of the lead agencies for 34 of the action items. Some of the action items include:

- Develop urban BMP auditing (observing, monitoring, and observation analysis) process to establish where BMPs are being implemented, if they are being installed correctly and whether or not they are effective.
- Improve public information for litter control with watersheds of the State.
- Evaluate, identify or develop BMPs oriented toward retrofitting controls in developed areas and planning efforts in developing areas.
- Evaluate, identify or develop hydrologic modification BMPs addressing the impacts of new impervious surfaces, ditching, channels, drainage, and effects on wetland habitats.
- Evaluate, identify, or develop BMPs to mitigate artificial extended “bankfull” flow in developed areas.
- Develop and evaluate BMPs for trash prevention and removal from storm sewers and natural urban waterways.
- Assess the impacts of freezing, snow, and snowmelt on the operation and effectiveness of existing and potential BMPs.
- Implement a demonstration project to show the integration of water quality BMPs into existing storm water management requirements at the local level and use as a statewide educational model.

Within the Lake Superior Watershed, the South St. Louis County SWCD prepared a Miller Creek Diagnostic Study and Implementation Plan. The plan identifies short term goals (2001 – 2004) and long-term (within 10 years) goals for restoring water quality standards. Working with a wide group of partners, which includes state and local road authorities, the Miller Creek Task Force will lead the implementation of several BMP’s to reduce pollutant loadings from existing road runoff systems.

NOAA and EPA strongly encourage the continued use of the Minnesota Nonpoint Source Pollution Control Plan for addressing runoff systems for roads, highways and bridges.

V. MARINAS AND RECREATIONAL BOATING

FINDING: Minnesota’s program includes management measures in conformity with the Section 6217(g) guidance and enforceable policies and mechanisms to ensure implementation of the measures throughout the 6217 management area.

RATIONALE: The Minnesota Lake Superior Coastal Nonpoint Program for Marinas and Recreational Boating is well organized and complete. Each management measure is supported by a specific state statute or state rule that is clearly identified. State agencies and boards have both the programmatic and enforceable authority to ensure implementation. Any construction, excavation, filling, or placement of any structure requires a state-issued permit. Each of State's regulatory agencies is notified of any proposed water or wetland project to determine jurisdictional authority over the proposed project and can exercise its own judicial review for project approval. State agencies have review responsibilities with regulatory or non-regulatory authority for each of the operation and maintenance management measures.

NOAA and EPA encourage Minnesota to actively pursue the development of a comprehensive marina guidebook for distribution to marina operators throughout the State.

VI. HYDROMODIFICATION

Channelization and Channel Modification

FINDING: Minnesota's program includes management measures in conformity with the Section 6217(g) guidance and the State has enforceable policies and mechanisms to ensure implementation of the management measures throughout the 6217 management area.

RATIONALE: Minnesota has identified direct state statutory authorities, such as M.S. 103(E-G) and state permits and licenses, such as DNR Protected Waters Permits, that address portions of the channelization management measures. The State has also indicated that the Environmental Review Environmental Assessment Worksheet (EAW) thresholds described in the introduction of Chapter IV (5-335 through 337) of the program submittal are not the minimum thresholds for permits required by DNR Waters under M.S.103 G. Any activities below the top of the bank (ordinary high water level) of any DNR Protected Water or watercourse must comply with DNR Protected Waters Permit Rules (MN Rules, Part 6115). Thus all channelization and channel modification management measures are implemented through MDNR Waters Permit Rules for new projects, improvements, and maintenance projects. Minnesota has also provided a legal opinion that the State has authority to prevent nonpoint source pollution and require implementation of management measures, as necessary; a description of the voluntary or incentive-based programs the State will use to encourage implementation of the hydromodification management measures; a description of the mechanism or process linking the implementing agency with the enforcement agency; and a commitment to use the enforcement authority where necessary.

NOAA and EPA recommend that the State develop and share a prioritization scheme for stream restoration projects that implement the Section 6217(g) management measures for existing modified channels where no work requiring a permit is or has been proposed for permit review. For example, the State should have an organized process for identifying opportunities to comprehensively implement the third element of the Instream and Riparian Habitat Restoration management measure for operation and maintenance in existing modified channels. MDNR might consider implementing and tracking an operation and maintenance program where easements have been acquired by the State.

Dams

FINDING: Minnesota’s program includes management measures in conformity with the Section 6217(g) guidance and the State has enforceable policies and mechanisms to ensure implementation of the management measures throughout the 6217 management area. In addition to rules administered by MDNR, Minnesota has also provided a legal opinion that the State has authority to prevent nonpoint source pollution and require implementation of management measures, as necessary; a description of the voluntary or incentive-based programs the State will use to encourage implementation of the dam management measures; a description of the mechanism or process linking the implementing agency with the enforcement agency; and a commitment to use the enforcement authority where necessary. Minnesota is not required to include the Erosion and Sediment Control and Chemical and Pollutant Control at Dams Management Measures because the NPDES storm water regulations for industrial activities on construction sites apply nationwide and therefore throughout the Minnesota Coastal Nonpoint Program management area.

RATIONALE: Although Minnesota’s descriptions of authorities and programs tend to focus on safety aspects of dam design, building, operation, and removal, detailed information about the existing activities and authorities to manage the operation of dams for their effects on water quality and habitat in Minnesota was also included in the CNPCP document, Chapter IV (5-362-368).

Although Minnesota is not required to include the management measure for chemical and pollutant control at dams in its Coastal Nonpoint Program, the State administers a number of relevant enforceable and non-enforceable practices. M.S. 115.061 requires “every person to notify the agency (MPCA) immediately of the discharge, accidental or otherwise, of any substance or material under its control which, if not recovered, may cause pollution of waters of the State, and the responsible person shall recover as rapidly and as thoroughly as possible such substance or material and take immediately such other action as may be reasonably possible to minimize or abate pollution of waters of the State caused thereby.” Notification is not required for a discharge of five (5) gallons or less of petroleum only. The non-reporting of petroleum spills less than five gallons is meant to eliminate the chance that the statewide reporting system would become overwhelmed by calls of small petroleum spills, like gas overfills, auto repair, hose breaks, maintenance spills, etc. The Minnesota State Legislature established this threshold. Spills that are not cleaned up as prescribed are considered a violation of State law and are punishable.

Minnesota has indicated that the management measure for protection of surface water quality and instream and riparian habitat is being met through various practices and opportunities as identified in the program document. For example, DNR Waters Dam Removal Program provides funds to restore and remove dams when they no longer function and are a public health hazard and impact water quality and habitat. Dams regulated by MDNR Waters require operation plans. The operation plans are required to have management measures that protect habitat and water quality. NOAA/EPA accept that these management measures are being implemented based on discussions with the State; however, the State’s submittal would benefit if there were more information about the existing activities and authorities to manage the operation of dams for their effects on water quality and habitat as per the management measure, and less discussion of how the enforceable mechanisms ensure safety and structural integrity.

Shoreline and Streambank Erosion

FINDING: Minnesota program includes management measures in conformity with the Section 6217(g) guidance and includes enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.

RATIONALE: State programs (including M.S. 103F,G and M.S. 462, 394 as described in the program submittal) are actively and positively focusing on shoreline and streambank erosion that is causing a nonpoint source pollution problem (element (1) of the management measure). Minnesota's programs taken together also provide adequate protection to streambank and shoreline features subject to erosion and the protection of streambank and shoreline features with the potential to reduce NPS pollution satisfying elements (2) and (3) of the management measure. M.S. 103G.705, as an example, establishes a stream protection and improvement loan program, whereby a political subdivision may apply for a loan of up to 90 percent of the total local cost to protect or improve a stream.

VII. WETLANDS, RIPARIAN AREAS AND VEGETATED TREATMENT SYSTEMS

FINDING: Minnesota's program includes wetlands management measures in conformity with the Section 6217(g) guidance and includes enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.

RATIONALE: The Minnesota program includes management measures for wetlands, riparian areas and vegetated treatment systems (VTSs) that are in conformity with the Section 6217(g) guidance.

Minnesota implements the management measures for protection of wetlands and riparian areas through, among other mechanisms, the State's "Public Waters Program" (M.S. 103G), its "Wetland Conservation Act" (WCA) (Rule 8420), and its delegated authority to perform water quality certifications under Section 401 of the Clean Water Act. Where used, Section 401 certifications meet the NOAA and EPA requirements outlined in the Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) (NOAA and EPA, October 1998).

Wetlands that are 10 or more acres in size in unincorporated areas, or 2.5 acres in size in incorporated areas are considered "public waters wetlands." Projects affecting the "course, current or cross-section" of these wetlands are regulated by the DNR. The WCA extends protection to wetlands not covered under the "public waters" statute and requires that wetlands not be drained or filled without replacement by wetlands of equal public value. The WCA, along with the Section 404 program provides for no wetland loss without first sequencing, then mitigating.

For the management measure governing restoration of wetland and riparian areas, WCA approval for wetland replacement plans requires that the activity impacting a wetland has complied with the sequencing principles in Rule 8420. Rectifying the impact by repairing, rehabilitating, or restoring the affected wetland to ensure that all pre-project functions (including the NPS pollution abatement function) and values are restored is a high priority.

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A key feature of the WCA is that LGUs have the primary responsibility for implementing the WCA. The LGUs have the option of incorporating the WCA or adopting the WCA by reference. If LGUs do not adopt the WCA, there is a moratorium on wetland activities.

LGUs are required by the WCA to monitor replacement wetland sites for five years. Wetland mitigation sites are also protected from future alteration by a conservation easement. The Minnesota Board of Water and Soil Resources (BWSR) monitors the LGUs' implementation of the WCA and requires annual reporting on implementation. The BWSR Board has adopted an oversight policy for use when LGUs have deficiencies in implementing the WCA.

Contractors have responsibility under the law to obtain a signed statement from the landowner indicating that the wetland replacement plan requirement has been satisfied. The DNR and LGU handle enforcement actions. DNR has developed administrative guidelines for complying with wetland regulations that include internal and external coordination, as well as consultation and dispute resolution.

Most Minnesota wetland conservation is triggered by new projects. However, the purpose of Minnesota's WCA (8420.011) is to "achieve no net loss in the quantity, quality, and biological diversity of Minnesota's wetlands" and to "avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality, and biological diversity of wetlands." Also, under Enforcement (8420.0290) Cease and Desist Orders can be issued when the enforcement authority (typically MDNR Conservation Officers) has probable cause that a drain, excavation, or fill activity is being or has been conducted" without appropriate approval. This implies a broad regulatory scope to the WCA. Activities upstream from a wetland that cause draining or filling in a wetland can also be ordered to cease and desist. Water quality issues can be addressed under the broad authority of Minnesota's conservation officers. The conservation officers may use an MPCA statute instead of WCA or the MPCA may become directly involved.

While Minnesota does meet the goals of this management measure, vegetated treatment systems VTS are not widely used in Minnesota's Lake Superior Basin. MDNR permits for activities that affect the course, current or cross-section of "Public Waters Wetlands" require erosion control management measures. The establishment of vegetation adjacent to surface water systems is one of many methods allowed for removing sediment and other pollutants from runoff. At least one LGU, Lake County, has adopted an ordinance requiring that land use permits must include measures such as constructed wetlands or engineered buffer strips (VTS) to control runoff.

XIII. ADMINISTRATIVE COORDINATION

FINDING: Minnesota's program contains mechanisms to improve coordination among state agencies and between state and local officials, and thus meets the requirements of this management measure.

RATIONALE: Statewide, basinwide and local efforts, including the development of Memorandums of Understanding (MOUs) when necessary, serve to ensure that appropriate parties understand and can help implement Minnesota's coastal nonpoint program. Coordination between Minnesota's natural resources programs has improved as a result of the basin planning process. There also appears to be a high level of grassroots participation in basin planning (for Lake Superior and the smaller sub-watersheds). Minnesota has indicated that the CNP

development process improved state agency coordination by convening experts from across state agencies to write management measure language.

XIV. PUBLIC PARTICIPATION

FINDING: Minnesota's program provides for public participation in the development and implementation of its CNP.

RATIONALE: Minnesota has extensive public involvement processes centered on public hearings and listening sessions. State citizens appear to be actively engaged in the decision making process for the coastal management program including locally-driven watershed planning efforts.

X. TECHNICAL ASSISTANCE

FINDING: Minnesota's CNP describes extensive efforts to provide technical assistance across all management measures that are acceptable to NOAA and EPA. The State, however, does not specify how technical assistance will be directed toward the implementation of additional management measures.

CONDITION: Within two years, Minnesota will include methods in its CNP that demonstrate how technical assistance will be provided to local governments and the public for the implementation of additional management measures.

RATIONALE: In areas of the Lake Superior watershed where additional management measures are deemed necessary in the future, NOAA/EPA would like to be informed of the methods or process the State will use to develop the additional management measures and provide the requisite assistance for the implementation of such measures. Where additional management measures are necessary, Section 6217 Program Guidance suggests directing technical and financial assistance to identified impaired waterbodies.

XI. ADDITIONAL MANAGEMENT MEASURES

FINDING: Minnesota's description of monitoring and assessment information is adequate; however, NOAA and EPA need more detail regarding the process by which additional management measures will be developed and implemented.

CONDITION: Within two years, Minnesota's CNP will provide for the identification of additional management measures and the continuing revision of management measures applicable to critical coastal areas in cases where Section 6217(g) measures are fully implemented but water quality threats or impairments persist.

RATIONALE: Minnesota plans to focus the CNP on implementing the baseline management measures for the first five years after program approval. The State recognized the need to develop additional management measures in those areas where baseline measure implementation fails to achieve water quality standards. NOAA and EPA recommend that Minnesota use existing impaired waterbodies, such as those contained in the State 303(d) list of impaired waters, as the basis for targeting areas in need of additional management measures.

XII. CRITICAL COASTAL AREAS

FINDING: Minnesota's program identifies and includes a process for the continuing identification of critical coastal areas adjacent to impaired and threatened coastal waters.

RATIONALE: Minnesota considers riparian areas along Lake Superior and streams feeding the lake the most critical coastal areas in need of protection. The State uses the North Shore Management Plan (NSMP) and the Shoreland Management Act to set zoning restrictions for riparian zones that specify setbacks, lot sizes and development standards.

BWSR was funded by the Great Lakes Commission to produce a "GIS Database for Minnesota's Lake Superior Shoreline." Initial layers combined for this project are erosion potential, fisheries habitat, and surface geology. Local Technical Advisory committees use this document to prioritize allocation of resources in the nearshore areas. The document can also be used for planning purposes. Minnesota's suggested actions to identify critical coastal areas, especially highly susceptible erosion areas, should be pursued.

XIII. MONITORING

FINDING: Minnesota's program includes a plan to assess over time the success of management measures in reducing pollution loads and improving water quality.

RATIONALE: Minnesota has an extensive (ambient) water quality reporting capability in the Lake Superior Basin and is formulating mechanisms to track the success of management measure implementation for the CZARA program. The State employs a Local Government Annual Reporting System (LARS) in which counties and SWCDs are asked to document BMP installation. BWSR has a commitment to assist counties and SWCDs to use electronic reporting. An on-line LARS system of recording BMP's is planned for 2003. NOAA and EPA encourage the use of LARS and other existing tracking tools to assess Section 6217(g) management measure implementation across all NPS pollution categories.

Recently, the State drafted a report entitled, "Environmental Ordinance Implementation Study" funded by the Coastal Program. The report documents the local ordinances (primarily erosion control) in the coastal area of Minnesota. The State found the erosion ordinances to be enforceable and logical. Specific recommendations have been drafted for each county and the major cities in the coastal area. The report highlights the need for more on-site inspections during construction.

Minnesota's monitoring program describes activities that will assess the success of CZARA management measures in reducing nonpoint pollution loadings and determine the connections of the CNP to improvements in water quality.

XIV. LEGAL OPINION (EVALUATION OF BACKUP AUTHORITIES)

FINDING: Minnesota has provided a legal opinion to NOAA/EPA that concludes that the State has authority to prevent nonpoint source pollution and require implementation of the Section 6217(g) management measures, as necessary.

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RATIONALE: The State of Minnesota, Office of the Attorney General, has provided a legal opinion regarding the enforceable policies and mechanisms that the State has at its disposal to ensure implementation of the Lake Superior Coastal Nonpoint Source Program. This opinion states that Minnesota has authorities to prevent nonpoint pollution and require Section 6217(g) management measure implementation, as necessary. For all management measures except Watershed Protection and Site Development, the State has also provided a description of the voluntary or incentive-based programs the State will use to encourage implementation of the management measures; a description of the mechanism or process that links the implementing agency with the enforcement agency; and a commitment to use the existing enforcement authorities where necessary. (See Watershed Protection and Site Development condition for further details.)

Minnesota's legal opinion includes citations from several state laws and regulations, including those that allow the State to implement appropriate management measures, i.e., the Section 6217(g) measures. The State's primary authority, the Water Pollution Control Act (WPCA), provides Minnesota with broad authority to abate water pollution from all sources, including nonpoint source pollution. The Minnesota Pollution Control Agency (MPCA) is also authorized to issue administrative orders and institute legal proceedings to enforce the WPCA and other authorities. MPCA rules prohibit nonpoint source discharges into state waters "so as to cause any nuisance conditions" and the Minnesota Water Law (a separate authority from the WPCA) authorizes regulation of activities in or outside of water bodies that change the course, current or cross-section of public waters of the State.