

Minnesota Attorney General: Administrative Rules Proceedings

Copyright Notice:

This material may be protected by copyright law (U.S. Code, Title 17). Researchers are liable for any infringement. For more information, visit www.mnhs.org/copyright.

Version 3
August 20, 2018

Our File No. 933 Resubmitted 8/22 due 9-1

RULE REVIEW CHECKLIST

DATE RULE RECEIVED 7-11-83 disapproved 7/25
DATE FOR REVIEW 7-20-83
DATE DUE 7-25-83

Adopted w/a hearing _____
Adopted w/o hearing ✓
Temporary rule _____

Approved _____ Disapproved _____ Returned to Agency _____

Resubmitted _____ Due _____
Approved _____ Disapproved _____ Returned to Agency _____

Date filed w/Secretary of State _____ Revisor approved 8/29/83 7/26/83
disapproved _____

✓ ✓ Rule as Adopted

✓ Rule as Proposed See SR.

✓ ✓ Order Adopting 6.30.83 Date Supplementary ORDER - 8/19/83

N/A Notice of Intent to Solicit Outside Opinion

✓ Order for rulemaking
N/A date of Hearing

N/A Certificate of Board's Authorizing Resolution

✓ Notice of rulemaking
✓ Sufficiency

✓ Affidavit of Mailing Notice or rulemaking
3.31.83 At least 30 days prior to ~~hearing~~/adoption

✓ Mailing list Certificate

✓ Publication in State Register
4.4.83 At least 30/~~20~~ days prior to ~~hearing~~/adoption

N/A Hearing Examiner's Report

Chief Hearing Examiner's Report(s)
_____ Approving H.E.'s Report
_____ Approving agency action

✓ Agency's Findings of Fact

N/A LCRAR Report or agency Affidavit

N/A Certificate of Board's Resolution Adopting Rules

N/A Order Approving Incorporation by Reference

✓ Statement of Need and Reasonableness

N/A Petition for Adoption of a Rule

✓ Record (includes transcript or tape, exhibits, comments received by agency, requests for a hearing, and other relevant materials)

✓ Certificate of Compliance w/Rulemaking Procedures

N/A Affidavit of Mailing Notice of Submission to Attorney General

✓ Notice of Submission to the Attorney General
See FOF

SF-00006-02

STATE OF MINNESOTA

DEPARTMENT ATTORNEY GENERAL

Office Memorandum

TO : A. W. CLAPP III
Special Assistant
Attorney General

DATE: July 27, 1983

FROM : LARRY D. STARNS
Special Assistant
Attorney General

PHONE: 297-3493

SUBJECT: In the Matter of Adopting Amendments to the Rules of the Department of Natural Resources Governing Permits for Making Changes in the Course, Current or Cross-section of Public Waters

Pursuant to my telephone conversation with Paul Faraci on Monday and with you today, the rules described above have not been approved by this office for the following reasons:

6 MCAR §§ 1.5022.C.4e (2), 1.5022.C.6.n, and 1.5023.C.3.c use the phrase "include, but is/are not limited to." Such phrasing permits the agency to impose additional requirements that are not articulated in this rule. This is impermissible for it fails to provide notice to the applicant of the additional requirements that must be met. To correct this defect, the phrase "but is not limited to" must be deleted and any additional requirements contemplated must be clearly articulated in the rule.

If you have any questions concerning the above, please do not hesitate to call me.

LDS/las

SF-00006-02

STATE OF MINNESOTA

DEPARTMENT ATTORNEY GENERAL

Office Memorandum

TO : Joseph N. Alexander, Commissioner

DATE: 9/6/83

Attn: A. W. Clapp, III
Special Assistant Attorney General

FROM : LARRY D. STARNS
Special Assistant
Attorney General

PHONE: 297-3493

SUBJECT: In the Matter of Amendments to the Rules for Changes in the Course, Current, or Cross Section of Public Waters.

Enclosed herewith are the rules you have submitted for approval. These rules have been approved by this office and filed with the Secretary of State. Please note that they have not been filed with the State Register. This must be done promptly by your agency.

Upon receipt and before transmittal to your agency, however, it is important that you recheck these rules as to:

1. Affixation of stamps of the Attorney General and Secretary of State;

2. Coverage by these stamps of all rules submitted; and

3. Inclusion of all pages to the rules in the approved set.

If you have any questions in this regard, please contact me.

Encs.
LDS/las
cc: Ms. Kathy Burek
Mr. Duane Harves

Department of Natural Resources

Waters Division

Adopted Amendments to Rules Governing Permits for Making Changes in the Course, Current, or Cross-Section of Public Waters

Rules as Adopted

STANDARDS AND CRITERIA FOR GRANTING
PERMITS TO CHANGE THE COURSE, CURRENT,
OR CROSS-SECTION OF PROTECTED WATERS

6 MCAR S 1.5020 General provisions.

A. Purpose. The purpose of 6 MCAR SS 1.5020-1.5028 is to provide for the orderly and consistent review of permit applications in order to conserve and utilize the water resources of the state in the best interest of its people. In deciding whether to issue permits, the department shall be guided by the policies and requirements declared in Minnesota Statutes, sections 104.01, 104.25, 104.32, 105.38, 105.42, 105.64, and 116D.04.

The proposed development must also be consistent with the goals and objectives of applicable federal, state, and local environmental quality programs and policies including but not limited to shoreland management, floodplain management, water surface use management, boat and water safety, wild and scenic rivers management, water quality management, recreational or wilderness management, critical areas management, scientific and natural areas management, and protected species management.

B. Scope. To achieve the purpose declared in A. these rules set forth minimum standards and criteria for the review, issuance, and denial of permits for proposed projects affecting protected waters. Permits shall be required for any activity affecting the course, current, or cross-section of protected waters unless specifically exempted within these rules.

C. Jurisdiction. These standards and criteria apply to any

and all work which will cause or result in the alteration of the course, current, or cross-section of protected waters except for the following:

1. utility crossings of protected waters which are regulated under Minnesota Statutes, section 84.415 and rules promulgated thereunder; or

2. destruction and control of aquatic vegetation which is regulated under Minnesota Statutes, section 98.48, subdivision 9 and rules promulgated thereunder.

D. Definitions. For the purposes of 6 MCAR SS 1.5020-1.5028, certain terms or words used herein shall be interpreted as follows: the word "shall" is mandatory, not permissive. All distances unless otherwise specified shall be measured horizontally.

1. "Alteration" means any activity that will change or diminish the course, current, or cross-section of protected waters.

2. "Beds of protected waters" means all portions of protected waters located below the ordinary high water mark.

3. "Breakwater" means an offshore structure intended to protect a shore area, harbor, or marina from wave and current action, erosion, or sedimentation.

4. "Commissioner" means the Commissioner of Natural Resources.

5. "Department" means the Department of Natural Resources.

6. "Dock" means a narrow platform extending waterward from the shoreline intended for ingress and egress for moored watercraft or to provide access to deeper water for swimming, fishing, or other water-oriented recreational activities.

7. "Drainage" means any method for removing or diverting waters from protected waterbasins or wetlands. Such methods shall include, but are not limited to, excavation of an open ditch, installation of subsurface drainage tile, filling, diking, or pumping.

8. "Drawdown" means a temporary lowering of water levels, for a maximum duration of two years.

9. "Excavation" means the displacement or removal of the sediment or other materials from the beds of protected waters by means of hydraulic suction or mechanical operations.

10. "Fill" means any material placed or intended to be placed on the bed or bank of any protected water.

11. "Filter" means a transitional layer of gravel, small stone, or fabric between the fine material of an embankment and riprap shore protection materials.

12. "Floating structure" means any houseboat, mooring or navigational buoy, swimming or diving platform, water ski jump, watercraft, or other structure supported entirely by its own buoyancy which is not permanently anchored by means of pilings, foundations, gabion baskets, or other materials incapable of removal by nonmechanized means.

13. "Floodplain" means the areas adjoining a watercourse which has been or hereafter may be covered by the regional flood.

14. "Floodway" means the channel of the watercourse and those portions of the adjoining floodplains which are reasonably required to carry and discharge the regional flood.

15. "Harbor" means either an inland or offshore area protected from waves which is intended for the mooring of watercraft.

16. "Inland boat slip" means an inland excavation generally having a uniform width which serves as a protective area for launching and mooring of a single watercraft.

17. "Inland excavation" means any excavation intended to extend the cross-section of protected waters landward of the natural or preexisting shoreline.

18. "Low-water ford type crossing" means a stream crossing which conforms to the natural cross-section of the stream and utilizes the placement of a suitable substrate to allow vehicular passage without confining the stream flow within culverts or other hydraulic enclosures.

19. "Marina" means either an inland or offshore structure for the concentrated mooring of five or more watercraft wherein facilities are provided for ancillary services such as boat

mooring, storage, fueling, launching, mechanical repairs, sanitary pumpout, and restaurant services.

20. "Maximum," with respect to storage capacity, refers to the most severe design condition, including surcharge (floodwater storage).

21. "Mining activity" means the construction, reconstruction, repair, relocation, expansion, or removal of any facility for the extraction, stockpiling, storage, disposal, or reclamation of metallic or nonmetallic minerals. Facilities include all mine pits, quarries, stockpiles, tailings basins, and any structures which drain or divert protected waters to allow mining. Ancillary facilities such as access roads, bridges, culverts, and water level control structures are not mining activities.

22. "Mooring" means any containment of free-floating watercraft that provides a fixed fastening for the craft.

23. "Offshore" means the area waterward of the ordinary high water mark of a protected water.

24. "Ordinary high water mark" means the boundary of protected waters as defined in Minnesota Statutes, section 105.37, subdivision 16.

25. "Permanent dock" means any dock other than seasonal docks and wharves as defined by this rule.

26. "Port" means a water transportation complex established and operated under the jurisdiction of a port authority pursuant to Minnesota Statutes, chapter 458.

27. "Port facility" means any facility useful in the maintenance and operation of a port. Facilities include, but are not limited to, transportation facilities, terminal and storage facilities, floating and handling equipment, power stations, and other facilities necessary for the maintenance and operation of a port.

28. "Principal spillway" means a spillway designed to convey water from an impoundment at release rates established for the structure.

29. "Professional engineer" means an engineer registered

to practice in Minnesota.

30. "Protected waters" means those waters of the state identified as public waters or wetlands under Minnesota Statutes, section 105.37, subdivision 14 or 15, or 105.391, subdivision 1.

31. "Reconstruction" means the rebuilding or renovation of an existing structure, where the cost of such work will exceed 50 percent of the replacement cost.

32. "Regional flood" means the flood which is representative of large floods known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 100-year recurrence interval.

33. "Retaining walls" means vertical or nearly-vertical structures constructed of mortar-rubble masonry, handlaid rock or stone, vertical timber pilings, horizontal timber planks with piling supports, sheet pilings, poured concrete, concrete blocks, or other durable materials and constructed approximately parallel to the shoreline.

34. "Riprap shore protection" means coarse stones, boulders, cobbles, artificially broken rock or concrete, or brick materials laid loosely or within gabion baskets against the slope of the existing bank of a protected water.

35. "Seasonal dock" means a dock so designed and constructed that it may be removed from the lake or stream bed on a seasonal basis. All components such as supports, decking, and footings must be capable of removal by nonmechanized means.

36. "Structure" means any building, footing, foundation, slab, roof, boathouse, deck, wall, or any other object extending over, anchored, or permanently attached to the bed or bank of a protected water.

37. "Structural height" means the vertical distance from the natural bed of the stream or watercourse measured at the downstream toe of the control structure or from the lowest elevation of the outside limit of the control structure, if it is not across a stream channel or watercourse, to the maximum

storage elevation.

38. "Swellhead" means the difference between the headwater elevation necessary to pass the regional flood through the proposed structure and the tailwater elevation below the structure.

39. "Temporary structure" means any seasonal dock or floating structure that can be removed from protected waters before winter freeze-up.

40. "Watercourse" means any channel having definable beds and banks capable of conducting generally confined runoff from adjacent lands. During floods water may leave the confining beds and banks but under low and normal flows water is confined within the channel. A watercourse may be perennial or intermittent.

41. "Water level control structure" means any structure which impounds or regulates the water surface elevation or flow of protected waters, including dams regulated under the provisions of 6 MCAR SS 1.5030-1.5034.

42. "Wharf" means a permanent structure constructed into navigable waters as a part of a port facility for berthing or mooring commercial watercraft, or for transferring cargo to and from watercraft in an industrial or commercial enterprise, or for loading or unloading passengers from commercial watercraft, or for the operation of a port facility.

6 MCAR S 1.5021 Filling into protected waters.

A. Goals. It is the goal of the department to limit the placement of any fill material into protected waters in order to:

1. minimize encroachment, change, or damage to the environment;

2. regulate the quantity and quality of fill and the purposes for which filling may be allowed based upon the capabilities of the waters to assimilate the material; and

3. maintain consistency with floodplain, shoreland, and wild and scenic rivers management standards and ordinances.

B. General standards.

1. Scope. Filling as used in this rule involves

placement of unconfined or loosely confined materials in protected waters.

2. Placement shall not be permitted in the following cases:

a. to achieve vegetation control;

b. to create upland areas, except where expressly provided herein;

c. to stabilize beds of protected waters which cannot support fill materials because of excessive depths of muck, steep bank, bed slope, or other conditions;

d. to stabilize or impound the site of active springs;

e. to dispose of rock, sand, gravel, or any other solid material resulting from activities carried out above the ordinary high water mark;

f. to construct a roadway or pathway, or create or improve land accesses from peripheral shorelands to islands, or to facilitate land transportation across the waters; however, where a project is proposed by a federal, state, or local government agency and this provision would prevent or restrict the project, or create a major conflict with other public purposes or interests, the commissioner may waive this provision provided:

(1) there is no other feasible and practical alternative to the project that would have less environmental impact; and

(2) that the public need for the project rules out the no-build alternative.

g. filling of posted fish spawning areas is prohibited.

3. No permit shall be required for the following activities unless prohibited under 2.:

a. To install a beach sand blanket provided the sand or gravel layer does not exceed six inches in thickness, 50 feet in width along the shoreline, or one-half the width of the lot, whichever is less, and does not extend more than ten feet waterward of the ordinary high water mark, provided local watershed district and local zoning officials are given at least

seven days notice by the landowner.

b. For one additional installation of a sand or gravel layer subsequent to an initial installation at the same location and not exceeding the same amounts and dimensions allowed under a.

c. To install riprap shore protection, except along the shores of Lake Superior and officially designated trout streams, provided the riprap materials consist of natural rock having an average size of 12 inches or larger in its smallest dimension, and conform with the natural alignment of the shoreline, with a minimum finished slope not steeper than 3:1 horizontal:vertical, no materials are placed more than five feet waterward of the ordinary high water mark, and the material does not obstruct the flow of water.

d. To place fill in a protected watercourse having a total drainage area, at its mouth, of five square miles or less, provided that the watercourse is not an officially designated trout stream and the placement of fill shall not result in:

(1) any diversions of water from the drainage area;

(2) any impoundment of waters by damming the watercourse;

(3) any actions which would result in erosion and cause sedimentation of downstream waters as determined by the county or local soil and water conservation district.

4. Permits shall be required for the placement of fill in protected waters, except as provided under 2. and 3., and shall meet all of the following requirements:

a. The project will involve a minimum of encroachment, change, or damage to the environment, including but not limited to fish and wildlife habitat, navigation, water supply, and storm water retention.

b. The fill consists of clean inorganic material that is free of pollutants and nutrients.

c. The existence of a stable, supporting foundation is established by appropriate means, including soil boring data where deemed necessary by the commissioner.

d. Where erosion protection is deemed necessary by the commissioner, the site conditions and fill material are capable of being stabilized by an approved erosion control method such as riprap, retaining wall, or other method which is consistent with existing land uses on the affected protected water.

e. The proposed project must represent the minimal impact solution to a specific need with respect to all other reasonable alternatives.

f. The size, shape, depths, shoreline, and bottom character and topography, and susceptibility of the beds of protected waters to actions of wind, waves, and currents are such that the fill will be stable.

g. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

h. The proposed filling must be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

i. The proposed filling must be consistent with water and related land management plans and programs of local and regional governments provided such plans and programs are consistent with state plans and programs.

C. Specific standards. In addition to compliance with the general standards in B. specific requirements for certain activities shall be met as follows:

1. Riprap shore protection. The protection of shoreline from continued erosion by placement of natural rock riprap along the shore shall be permitted provided:

a. The riprap materials are of sufficient size, quality, and thickness to withstand ice and wave action. The riprap shall be placed with a minimum amount of space between the larger materials and the space between them shall be filled with firmly seated smaller rocks or gabion baskets to procure a uniform surface.

b. The site soils are capable of supporting riprap and a filter consisting of well-graded gravel, crushed stone, or

fabric is installed to prevent undercutting of the riprap.

c. The encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of water.

2. Navigational access.

a. Filling to gain navigational access to waters shall be permitted only where access to navigable depths cannot be reasonably attained by utilizing a dock, the excavation of an offshore access channel, or other alternatives which would result in less environmental impact.

b. Fill for navigational access shall not extend beyond the edge of open water, shall not exceed side slopes greater than 2:1 horizontal:vertical, shall not exceed a maximum width of 15 feet at the base of the fill, and shall not extend to a water depth greater than four feet.

3. Shoreline lost by erosion. Applications for filling to recover shoreland lost by erosion or other natural forces shall be permitted only where:

a. The loss of shoreline is a threat to health and safety through the impending loss or damage to existing shoreline developments.

b. The loss of shoreline has occurred as a result of changes in water level or flow conditions caused by artificial manipulation of flows or levels of the waters involved within a period of not more than five years prior to the date when an application for filling is submitted.

c. The requirements of a. and b. shall not preclude the issuance of permits to place riprap materials or use other structural means for protection of the shoreline to prevent continuous erosion.

4. Filling necessary for port development or improvement shall be allowed only on those waters which are under the jurisdiction of established port authorities subject to the following:

a. no filling shall be allowed to extend beyond the limits of federally established harbor lines, or where no harbor

line has been established, beyond the maximum distance waterward which could be attained without obstructing navigational use of the waters;

b. the proposed development must be part of a comprehensive port development plan which has been approved by the commissioner; and

c. adverse effects of the proposed filling on the physical and biological character of the area shall be subject to mitigation measures approved by the commissioner.

5. Filling to restore or improve fish and wildlife habitat, except for filling in designated trout streams, shall be permitted provided:

a. plans are submitted showing the nature and degree of habitat to be benefited; and

b. the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

6. Filling in trout streams officially designated by the commissioner shall be allowed only if:

a. the amount, method of placement, and location of the fill will not result in increased water temperatures, excessive sedimentation in the stream, or destruction of fish habitat; and

b. there is no other feasible or practical alternative other than filling.

7. Filling for other purposes not specifically listed shall be subject to the general standards in B. and submission of information to show that:

a. the intended purpose of the fill is reasonable with respect to all other alternatives and there are no feasible and practical means to attain the intended purpose without filling; and

b. the proposal will adequately protect public safety and promote the public welfare.

D. Relationship to standards and criteria for other activities involving changes in course, current, or

cross-section. Unless otherwise specified in other rules, the provisions of this rule shall apply to filling proposed as part of any other activity or activities including but not limited to: Excavations 6 MCAR S 1.5022, Structures 6 MCAR S 1.5023, Water level controls 6 MCAR S 1.5024, Bridges and culverts 6 MCAR S 1.5025, Drainage of protected waters 6 MCAR S 1.5026, and Alterations of protected waters for mining 6 MCAR S 1.5027.

6 MCAR S 1.5022 Excavation of protected waters.

A. Goals. It is the goal of the department to limit the excavation of materials from the beds of protected waters in order to:

1. Preserve the natural character of protected waters and their shorelands, in order to minimize encroachment, change, or damage to the environment, particularly the ecosystem of the waters.

2. Regulate the nature, degree, and purpose of excavations so that excavations will be compatible with the capability of the waters to assimilate the excavation.

3. Control the deposition of materials excavated from protected waters and protect and preserve the waters and adjacent lands from sedimentation and other adverse physical and biological effects.

B. General standards.

1. Scope. Excavation as used in this rule includes any activity which results in the displacement or removal of bottom materials or the widening, deepening, straightening, realigning, or extending of protected waters. It may involve proposals for excavations landward or waterward from the ordinary high water mark.

2. Excavation shall not be permitted in the following cases:

a. where it is intended to gain access to navigable water depths when such access can be reasonably attained by alternative means which would result in less environmental impact;

b. where inland excavation is intended to extend

riparian rights to nonriparian lands, or to promote the subdivision and development of nonriparian lands;

c. where the proposed excavation will be detrimental to significant fish and wildlife habitat, or protected vegetation and there are no feasible, practical, or ecologically acceptable means to mitigate the effects;

d. to control or eliminate vegetation for the development of beach areas;

e. where it is intended to provide fill materials for development purposes except as provided under 6 MCAR S 1.5027;

f. where the excavation would not provide an effective solution to a problem because of recurrent sedimentation and there are feasible and practical alternative solutions which do not require excavation;

g. unless the excavation project includes provisions for acceptable disposal of excavated materials as provided in these rules; or

h. where the excavation would cause increased seepage of water which would lower the water level of protected waters and result in subsurface drainage.

3. No permit for excavation shall be required for the following activities unless prohibited in 2.

a. For excavations in a protected watercourse having a total drainage area, at its mouth, of five square miles or less, provided that the watercourse is not an officially designated trout stream and the excavation will not result in:

(1) any diversions of water from the drainage area;

(2) any impoundment of waters by damming the watercourse;

(3) any actions which would result in erosion and cause sedimentation of downstream waters as determined by the county or local soil and water conservation district.

b. To remove debris such as trees, logs, stumps, and trash provided such removal does not alter the original alignment, slope, or cross-section of the waters.

c. For repair of a public drainage system lawfully

established pursuant to Minnesota Statutes, chapters 106 and 112 consistent with the definition of "repair" set forth in Minnesota Statutes, section 106.471, subdivision 1.

4. Permits shall be required for the excavation and removal of any materials from protected waters or any excavations extending into or out of protected waters, except as provided in 2. and 3., and shall be subject to the following general criteria:

a. The project must be reasonable and practical based upon geologic and hydrologic conditions including but not limited to:

(1) quantity and quality of local drainage at the site;

(2) type of sediment/soil strata and underground formations in the vicinity;

(3) life expectancy of the excavation with respect to bedload, long-shore drift, and siltation patterns in the project vicinity; and

(4) protection of the water body from increased seepage, pollution, and other hydrologic impacts.

b. The disposal of excavated materials shall be subject to the following requirements:

(1) The disposal of any excavated materials containing pollutants shall be subject to requirements of Minnesota Statutes, chapter 115.

(2) The most acceptable means of disposing of clean materials, free from pollutants, which are excavated from protected waters listed in order of preference are:

(a) Complete removal of excavated materials from the waters and disposal or reuse for other purposes outside of the floodplain.

(b) Deposition in stable on-land disposal sites located above the ordinary high water mark and outside of floodway districts established under local ordinance. Provisions must be included for sodding, seeding, or otherwise properly stabilizing these materials.

(c) Temporary deposition along shorelines or within floodplains by stockpiling materials for subsequent removal to areas outside of any protected waters and outside of established floodplain districts provided that: any stockpile materials are removed within one year of stockpiling; and the stockpile is constructed so that any materials or waters entering or leaving the stockpile are controlled to prevent any introduction of sediment into the environment surrounding the stockpile.

(d) Redeposition of excavated materials, consisting of inorganic materials free from pollutants, into protected waters shall only be permitted when it will result in improvement of natural conditions of protected waters for the public benefit and will not result in sedimentation, obstruction of navigation, or a loss of fish or wildlife habitat. Separate permit provisions shall be required for redeposition of excavated materials subject to the standards and criteria of B.

(e) Determination of the public benefit served by redeposition of excavated materials shall be based on the value to the public of redeposited materials in order to protect shorelines from the damaging effects of erosion due to winds and waves when there are no other feasible, practical, and ecologically acceptable means to protect the shoreline; or create or improve habitat areas for fish and wildlife; or mitigate or enhance the physical and biological environment within protected waters when mitigative or enhancement measures are required as a condition of a permitted activity within the waters involved and there are no other feasible, practical, and ecologically acceptable mitigative measures.

c. The proposed project must represent the "minimal impact" solution to a specific need with respect to all other reasonable alternatives.

d. The excavation must be limited to the minimum dimensions necessary for achieving the desired purpose.

e. Where excavation is proposed in a protected water that is perched on an impervious stratum, soil borings must show

that the proposed excavation will not rupture the impervious stratum.

f. The biological character of the waters and surrounding shorelines shall be affected to the minimum degree feasible and practical.

g. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

h. The water supply, navigational, and drainage characteristics of the waters shall be protected to ensure that the interests of the public and of private riparian landowners are not adversely affected by the proposed excavation.

i. The proposed excavation shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

j. The proposed excavation shall be consistent with plans and management programs of local and regional governments provided that such plans are consistent with state plans and programs.

k. For harbors, boat slips, and other mooring facilities, the excavation shall be appropriately sized to provide a single mooring space for each riparian lot to be served. The number of mooring spaces to be provided shall generally be the amount of natural shoreline to be served divided by the lot requirements of the local land use control authority and the state shoreland management standards.

C. Specific standards. In addition to compliance with the general standards in B. specific requirements shall be met for the following activities:

1. Excavations for beach development.

a. The existing site conditions will not provide a suitable beach using a sand blanket alone.

b. When the proposal includes the installation of a beach sand blanket the area to be excavated shall be consistent with the criteria for filling under 6 MCAR S 1.5021 B.

c. The depth of excavation needed to reach a suitable

beach stratum shall be the minimum depth necessary considering anticipated site maintenance and reasonable water depths for a beach.

2. Excavations for improvement or enhancement of hydrologic and biologic conditions in all, or large portions of waterbasins.

a. A public need for the excavation has been established by local governmental resolution specifying the public interests to be improved or enhanced, except where the project is state sponsored.

b. The proposed project is intended to achieve one or more of the following public purposes:

(1) to improve navigation, swimming, and other recreational uses;

(2) to reduce winter fish-kill potential;

(3) sediment removal to eliminate a source of nutrients and/or contaminants.

c. The proposed excavation is part of an overall improvement or enhancement project based upon adequate background and field test data for which a comprehensive plan is submitted at the time of application detailing all of the following:

(1) Objectives to be accomplished, and an analysis of any alternative means considered to meet the objectives and the rationale for selecting excavation.

(2) Sufficient soil boring and bottom sampling data to evaluate sediment quality and bottom "seal" conditions. Where excavation is proposed on a waterbasin that is perched on an impervious stratum, soil borings must show that the proposed excavation will not rupture the impervious stratum.

(3) The methods, uses, and locations to be employed in excavating and disposing of excavated material consistent with the provisions of 6 MCAR S 1.5021.

(4) Existing water quality data and provision for future water quality monitoring including any water returned to the waterbasin during the removal of excavated materials.

(5) A timetable which indicates anticipated yearly excavation areas and volumes of materials to be removed, plus the selected disposal methods, uses, and deposition locations for each excavation period.

(6) A detailed description of proposed excavation and disposal equipment and facilities, including, where applicable, the length of discharge pipe purchased or available for the project and the pumping characteristics of the equipment.

3. Excavations for navigation related purposes.

a. Access channels from shorelines for recreational craft.

(1) Excavations for accesses from shorelines to reach navigable depths shall not be allowed if:

(a) access could reasonably be obtained through use of a dock to reach navigable depths; and

(b) prevalent wind, wave, and current conditions would not impair reasonable access to reach navigable depths.

(2) When shoreline conditions and wind, wave, and current conditions preclude access to navigable depths, excavations for navigational access shall be allowed provided the access channel shall not exceed four feet in depth, more than 15 feet in bottom width, and will not extend to an offshore water depth greater than four feet.

b. Other navigational channels:

(1) Excavations shall be limited to the minimum depth and width necessary to allow reasonable use of anticipated watercraft.

(2) Excavations to provide maintenance of navigational channel projects shall be limited to the length, width, and depth dimensions of the original channel.

4. Harbors and boat slips.

a. Excavations for development of offshore or inland harbors or boat slips for the mooring of more than 25 watercraft or watercraft larger than 20 feet in length shall be restricted to those waters which have the following characteristics:

(1) waterbasins having areas of 1,000 acres or more;

(2) watercourses which are used for commercial or industrial navigational purposes.

b. Excavations for development of offshore harbors serving fewer than 25 watercraft shall be limited to those water areas where the location of the proposed offshore harbor would not create unreasonable obstructions to public use and navigation on the water involved. Unreasonable obstructions include any development which would result in threats to public health, safety, or welfare.

c. Excavations for development of private inland harbors or boat slips serving fewer than 25 watercraft or watercraft less than 20 feet in length shall be limited to those waters where:

(1) Prevalent wind, wave, or current conditions along the shoreline where excavation is proposed are of a magnitude and frequency which precludes the use and maintenance of docks to moor watercraft. Determinations of magnitude and frequency which would inhibit use of docks shall be based on supporting facts including:

(a) the character of the water involved and its shoreline in relation to exposure to severe wind, wave, or current actions and the configuration and area of the water;

(b) the frequency of occurrence of storms producing severe winds and waves based on climatological data for the area; and

(c) the average number of days during each month of the navigational season when the shoreline is affected by severe winds, waves, or currents;

(2) The presence of lake bed and bank conditions would preclude the use and maintenance of docks and the conditions of the site and the number, type, or size of watercraft intended to be moored would preclude the development and use of on-land facilities, such as rollers, winch and track systems, sliderails, or other facilities which could be used to haul watercraft out of the water for on-land storage; or

(3) The proposed site is located in an area of the

water body where offshore mooring or excavations or extensive dock development would create unreasonable obstructions to public use and navigation of the water body.

d. The width and length of boat slips shall not exceed 150 percent of the width and length of the anticipated watercraft and all authorized boat slips shall be oriented to maximize the degree of wave protection.

e. Excavations for development of inland harbors shall be limited to those waters described in C.4.c. and shall meet the following additional requirements:

(1) Requirements applicable to all commercial and industrial inland harbors:

(a) The mooring area of the harbor shall be compactly shaped in order to minimize the surface area excavated in relation to the number of mooring spaces to be provided and shall be located at an adequate distance from the shoreline to provide wave protection and prevent breakthrough.

(b) No branch or connecting channels shall be permitted extending laterally outward from authorized inland excavations.

(c) If practical, a "dogleg" shall be incorporated in the approach channel located between the mooring area and the shoreline to minimize visual impact from the water body and promote wave dissipation.

(d) The excavation shall not extend more than 200 feet inland from the protected water unless evidence is provided to show that greater distances are required because of the dimensions of the watercraft to be moored.

(e) The methods, use, and deposition locations to be employed in disposing of excavated materials shall be consistent with the provisions of B.4.b.

(2) An application for a permit shall contain plans, maps, and supporting data ~~including but not limited to~~ regarding proposed excavation site soil borings, ground water levels and characteristics, water quality, topography, drainage, and vegetation which shall substantiate that the proposed project

must be reasonable and pratical based upon geologic and hydrologic conditions including:

(a) quantity and quality of stream flow and local drainage at the proposed project site;

(b) water stagnancy problems including the capability of being flushed or drained;

(c) interference with stream flow or longshore drift;

(d) type of soil strata and underground formations in the project vicinity;

(e) protection of the water body itself in terms of reduced water supply, increased seepage or drainage, pollution, increased flooding, and other adverse hydrological impacts;

(f) adequate entrance openings;

(g) ample turning radius;

(h) adequate depth and size for the anticipated watercraft usage;

(i) adequate reduction of wave heights in mooring areas;

(j) proper harbor shape to reduce wave resonance;

(k) need for and feasibility of maintenance dredging;

(l) adequate height of perimeter wall;

(m) need for wave absorbers within the harbor; and

(n) bank stabilization by appropriate erosion control measures.

(3) Additional requirements applicable to specific types of harbors.

(a) Private inland harbors serving two or more single family residential riparian lots shall, if practical, be located along the mutual boundary of properties to be served.

(b) Private inland harbors for proposed multi-family or cluster developments, residential planned unit developments, or for resorts, campgrounds, or other commercial

purposes:

(1) The development plan shall be approved by the local governmental unit;

(2) The permit shall be of the title-registration type including a provision that the individual waterfront lots in the development have priority rights to the available mooring spaces thus obviating issuance of future permits for individual harbors for these lots; and

(3) The harbor shall be appropriately sized, consistent with the number of watercraft to be served with the number of mooring spaces not to exceed one mooring space for each riparian unit served or each rental cabin or campsite unit plus consideration of use by transient watercraft.

(c) Public inland harbor projects must be justified by:

(1) a public need for the proposed inland harbor established by local governmental resolution specifying public interests to be enhanced;

(2) the harbor shall be appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served;

(3) the harbor shall be available for use by the general public; and

(4) the harbor may extend more than 200 feet inland provided the plans minimize the total length by which the protected water is proposed to be extended in keeping with the number of watercraft to be served and the topography.

5. Excavations for fish and wildlife habitat improvement.

a. Excavation to restore or improve fish and wildlife habitat require:

(1) plans showing the nature and degree of habitat to be benefited; and

(2) information showing that the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

b. Excavations in trout streams officially designated

by the commissioner shall be allowed only if:

(1) the amount, method, and location of the excavation will not result in increased water temperatures, cause excessive sedimentation in the stream, or destruction of fish habitat; and

(2) there is no other feasible or practical alternative other than excavation.

6. Excavations in protected watercourses. Except as noted in B.3., a permit shall be required for any excavation in a protected watercourse and shall be subject to the following specific requirements in addition to the general requirements of B.:

a. The watercourse capacity shall be sufficient to adequately convey normal runoff.

b. The watercourse bottom gradients shall be such that normal low flow velocities are nonerosive and the sideslopes shall be graded such that bank slumping is not a hazard. Where excavation will result in excessive bank erosion, energy dissipation structures, channel and bank protection, or other engineering measures shall be required.

c. The outlet shall be adequate in that it:

(1) sufficiently conveys the discharge waters from the area proposed for excavation;

(2) does not produce substantial increases in downstream overbank flooding; and

(3) does not produce downstream erosion hazards as a result of the watercourse excavation.

d. When projects involve widening or straightening which alters the watercourse banks, all sideslopes which contribute direct surface runoff into the authorized altered watercourse, and a strip of land along both sides of the watercourse, one rod wide or to the top of the spoil bank, whichever is the greater, shall be seeded and maintained in permanent grasses. No mowing of this grassed strip shall be allowed until after July 31 of each year.

e. The alignment and slope of the excavated channel

shall be such as to provide a smooth transition between the existing and the excavated channel.

f. Disposal of excavated material from channel excavation shall be consistent with B.4., except where the original channel is allowed to be filled as part of the project.

g. No significant increase in flood damages will be permitted. Floodwater retardance structures may be required to minimize any increase in flood damage.

h. The applicant shall submit the names and addresses of landowners located immediately upstream, downstream, and adjacent to any proposed watercourse alteration resulting from excavation. In addition, the applicant shall submit the names and addresses of other landowners and occupants that the commissioner, after reviewing the plans for the proposed excavation, believes will have a substantial interest in the channel change or will be substantially affected by the watercourse alteration.

i. The preferred alternative to widening, deepening, or straightening a watercourse for control of flood waters is the construction of water impoundment structures in upstream areas. Where impoundments are infeasible, impractical, or would result in adverse effects on health and safety or greater adverse environmental effects, the preferred alternative is the construction of flood bypass channels to convey high velocity flood flows.

(1) Excavations in protected watercourses for flood management purposes shall be allowed only where an upstream impoundment or a flood bypass channel is infeasible or impractical or excavation is the least damaging environmentally.

(2) Excavations for widening, deepening, or straightening portions of watercourses shall be based on flood management plans which provide details on the relationship of the proposed excavation to management of flood flows for the entire watercourse and shall be consistent with state standards and state approved local standards for floodplain management including maximum use of nonstructural measures where feasible

and practical.

j. Excavations shall be limited to the minimum extent necessary to facilitate construction of the road crossing and shall include provisions for adequate riprap or other bank protection measures to protect altered banks from erosion.

k. Excavations for construction of sediment traps or settling basins to control sedimentation and water quality shall be based on plans approved by the Pollution Control Agency or the local soil and water conservation ~~districts~~ district and shall be consistent with any state and local standards, regulations, and requirements.

l. Watercourse channel excavations to restore or improve fish and wildlife habitat shall require:

(1) plans showing the nature and degree of habitat to be benefited; and

(2) information showing that the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

m. Watercourse channel excavations in trout streams officially designated by the commissioner shall only be allowed if:

(1) the amount, method, and location of the channel excavation will not result in increased water temperatures, cause excessive sedimentation in the stream, or destruction of fish habitat; and

(2) there is no other feasible or practical alternative other than channel excavation.

n. The straightening or realignment of a watercourse with a total drainage area, at its mouth, greater than five square miles shall only be permitted where the project will not result in increased downstream flooding, erosion, or sedimentation. Where it is proposed to straighten or realign a watercourse with a total drainage area, at its mouth, greater than five square miles, the applicant may be required to submit appropriate hydraulic data. Such data may include~~,-but-are-not limited-to~~:

(1) contributing watershed above the project;

(2) data for the flood of record;

(3) maximum observed high water level;

(4) flow data, based on the best available technology as follows:

(a) existing and proposed time of concentration;

(b) existing and proposed stage downstream;

(c) existing and proposed mean velocity downstream;

(5) certification that the data was prepared by a registered professional engineer.

o. The alteration of watercourses by straightening or realigning channels to facilitate adjacent land use shall be allowed only if the applicant provides evidence:

(1) that the alteration is reasonable, practical, and will adequately protect public safety and welfare; and

(2) that the alteration will involve a minimum of encroachment, change, or damage to the environment, particularly to the ecological system of the waterway.

p. All other proposals for excavations in protected watercourses shall meet the general requirements of B. and the specific requirements of C.1.-5. and shall require submission of supporting evidence as provided in C.6.n. and o.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to excavations proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR S 1.5021, Structures 6 MCAR S 1.5023, Water level controls 6 MCAR S 1.5024, Bridges and culverts 6 MCAR S 1.5025, Drainage of protected waters 6 MCAR S 1.5026, and Alterations of protected waters for mining 6 MCAR S 1.5027.

6 MCAR S 1.5023 Structures in protected waters.

A. Goals. It is the goal of the department to limit the occupation of protected waters by offshore navigational

facilities, retaining walls, and other structures in order to:

1. preserve the natural character of protected waters and their shorelands;

2. provide a balance between the protection and utilization of protected waters; and

3. encourage the removal of existing structures which do not serve the public interest from the beds of protected waters at the earliest practicable date.

B. General standards.

1. Scope. This rule applies to the placement, construction, reconstruction, repair, relocation, abandonment, or removal of any structure placed on or in protected waters.

2. Placement of structures shall not be permitted where the structure:

a. Will obstruct navigation or create a water safety hazard.

b. Will be detrimental to significant fish and wildlife habitat, or protected vegetation. Construction is prohibited in posted fish spawning areas.

c. Is designed or intended to be used for human habitation or as a boathouse.

d. Is designed or intended to include walls, a roof, or sewage facilities.

3. No permit shall be required for the following activities, unless prohibited under 2.:

a. To construct, reconstruct, or install a seasonal dock or floating structure provided:

(1) the structure will not constitute a hazard to navigation or public health, safety, and welfare, as determined by the commissioner;

(2) the structure will not include fuel-handling facilities;

(3) the structure will allow the free flow of water beneath it; and

(4) the structure is not used or intended to be used as a marina.

b. To construct or reconstruct a permanent dock on wood pilings or rock filled cribs on lakes provided:

(1) the dock is a single lineal structure with no appurtenances;

(2) only one dock is installed per riparian lot;

(3) the structure shall not exceed six feet in width nor exceed 50 feet in length, or extend to a depth greater than four feet, whichever is less;

(4) the structure shall comply with the requirements of 3.a.(2), (3), and (4) above;

(5) for a permanent dock on wood pilings, the surface area of the lake is equal to or greater than 500 acres;

(6) for a permanent dock on rock filled cribs, the surface area of the lake is equal to or greater than 2,500 acres; and

(7) structures using rock filled cribs shall only be placed where the lakebed is predominantly bedrock which is incapable of supporting wood pilings and shall utilize intermittently spaced cribs which allow unrestricted circulation of water beneath the dock.

c. To construct or reconstruct a boat launching ramp provided:

(1) Privately owned ramps shall not exceed 12 feet in width, and extend more than ten feet beyond the ordinary high water mark or into water more than four feet in depth, whichever is less. Excavations five cubic yards or less, and placement of up to five cubic yards of crushed rock, gravel, clean sand, or small stone shall be allowed in order to provide a stable base or maintain use of the ramp.

(2) Publicly owned ramps shall not exceed 24 feet in width and extend more than 20 feet waterward of the shoreline or into water more than four feet in depth, whichever is less. Excavations of 60 cubic yards or less, and placement of up to 30 cubic yards of crushed rock, gravel, clean sand, or small stone shall be allowed in order to provide a stable base or maintain use of the ramp.

(3) The ramp shall be constructed of gravel, natural rock, concrete, steel matting, or other durable inorganic material not exceeding six inches in thickness.

d. Remove structures or other waterway obstructions provided:

(1) the original cross-section and bed conditions shall be restored insofar as practicable;

(2) the structure shall be completely removed including any footings or pilings which obstruct navigation;

(3) the structure is not located on an offically designated trout stream;

(4) the structure does not function as a water level control device.

4. Permits shall be required for the construction, reconstruction, repair, or relocation of any structure on or in protected waters, except as provided under B.2. and 3. above, and shall meet the following general criteria:

a. The proposed project must represent the minimal impact solution to a specific need with respect to all other reasonable alternatives.

b. The project will involve a minimum of encroachment, change, or damage to the environment, including but not limited to fish and wildlife habitat, navigation, water supply, and storm water retention.

c. The proposed structure shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

d. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

e. The proposed structure shall be consistent with water and related land management plans and programs of local and regional governments, provided these plans and programs are consistent with state plans and programs.

f. Except for docks and boat ramps, all new structures shall have a title-registered permit, unless a public agency or

local governmental unit accepts responsibility for future maintenance or removal.

C. Specific standards. In addition to compliance with the general standards in B., specific requirements shall apply to the following activities:

1. Docks. Except as provided in B.2.b., a permit shall be required for the construction or reconstruction of any dock and shall be granted provided:

a. Similarly situated docks in the vicinity have not experienced maintenance difficulty and the use of a seasonal dock is precluded because:

(1) long fetches would subject seasonal docks to damaging storm wave conditions;

(2) bottom conditions such as bedrock or an extremely gradual offshore slope would preclude the use of seasonal dock stringers; or

(3) the number of public and private users is so great the seasonal docking equipment would not provide adequate stability.

b. Piling docks shall be preferred in all cases unless the depth to bedrock is too shallow to allow the driving of piles, in which case rock crib docks may be authorized.

c. The docks shall extend waterward only to a navigable depth, generally considered to be no greater than four feet.

d. The dock shall not exceed six feet in width.

2. Wharves.

a. A permit shall be required for the construction or reconstruction of all wharves. The following order of preference for construction types shall be utilized:

(1) bulkheaded shoreline;

(2) inland slip with bulkheaded sidewalls;

(3) wharf projecting into protected waters.

b. Wharves shall be permitted provided the structure:

(1) is part of a designated port facility;

(2) is consistent with local land use plans and

ordinances;

(3) does not extend further waterward than any existing wharves in the area or beyond any established harbor line, whichever is less;

(4) size is the minimum practicable; and

(5) is not an obstruction to flood flows or longshore drift and is adequately designed to resist the natural forces of ice, wind, and wave.

3. A permit shall be required for the construction or reconstruction of all offshore breakwaters and marinas. These structures shall be permitted provided the following general conditions and the additional listed specific conditions are met:

a. Alternative dock or inland facilities are infeasible.

b. The facility shall be adequate in relation to appropriate engineering factors including but not limited to those listed in 6 MCAR S 1.5022 C.4.e.(2)(f)-~~(m)~~ (n).

c. The plan shall be adequate in relation to ~~appropriate~~ the geologic and hydrologic factors ~~including but not limited to those~~ listed in 6 MCAR S 1.5022 C.4.e.(2)(a)-(e).

d. The size and shape shall be designed in a compact fashion so as to blend in with the surrounding shoreline while minimizing the surface area occupied in relation to the number of watercraft to be served.

e. The breakwaters shall not exceed the minimum thickness necessary to withstand the anticipated forces consistent with maintenance requirements and shall be faced with an adequate layer of natural rock riprap of appropriate size and gradation.

f. The following types of offshore structures shall be permitted, subject to the listed specific conditions:

(1) Private offshore structures serving several contiguous riparian lots; provided:

(a) The site shall meet the standards of C.1. for a dock.

(b) The structure shall minimize encroachment

waterward of the ordinary high water mark.

(c) The total length of the structure shall be appropriately sized to provide a single mooring space for each riparian lot served.

(2) Private offshore structures for proposed multi-family or cluster or residential planned unit developments; provided:

(a) The structure shall minimize encroachment waterward of the ordinary high water mark and its total length shall be appropriately sized to provide a single mooring space for each riparian lot to be served. The number of mooring spaces to be provided shall generally be the amount of natural shoreline to be served divided by the lot frontage requirements of the local land use control authority.

(b) The development plan shall be approved by the local land use control authority.

(3) Private offshore structures for resorts, campgrounds, or similar enterprises; provided:

(a) The structure shall minimize encroachment waterward of the ordinary high water mark and its total length shall be appropriately sized to provide one mooring space for each rental cabin or campsite unit plus a reasonable number of mooring spaces for transient watercraft.

(b) The development plan shall be approved by the local land use control authority.

(4) Public offshore structure projects; provided:

(a) A local unit of government shall pass a resolution which specifies the public interests to be benefited by the proposal.

(b) The structure shall be appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served.

(c) The structure shall be available for use by the general public.

(d) The development plans shall minimize the waterward encroachment of the facilities.

(5) Offshore marinas; provided:

(a) The area shall be zoned for such use or local government shall grant a land use permit.

(b) The proposed marina shall minimize encroachment waterward of the ordinary high water mark.

(c) The marina shall be sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served.

4. A permit shall be required for the construction or reconstruction of all retaining walls and erosion and sedimentation control structures that do not impound water. The construction of retaining walls shall be discouraged because their appearance is generally not consistent with the natural environment and their construction and maintenance cost is generally greater than riprap.

The issuance of permits shall be contingent on the following conditions:

a. Existing or expected erosion problems shall preclude the use of riprap shore protection, or there shall be a demonstrated need for direct shoreland docking; or

b. Design shall be consistent with existing uses in the area. Examples are: riverfront commercial-industrial areas having existing structures of this nature, dense residential shoreland areas where similar retaining walls are common, resorts where floating docks may be attached to such a bulkhead, or where barges are utilized to transport equipment and supplies; and

c. Adequate engineering studies shall be performed of foundation conditions, tiebacks, internal drainage, construction materials, and protection against flanking; and

d. The facility shall not be an aesthetic intrusion upon the area and is consistent with all applicable local, state, and federal management plans and programs for the water body; and

e. Encroachment below the ordinary high water mark shall be held to the absolute minimum necessary for construction.

5. A permit shall be required for the construction or reconstruction of any boat launching ramp not covered under B.3.c., and shall be granted provided:

a. the applicant shall demonstrate a need for a launching facility;

b. the proposed ramp shall be of the minimum dimensions necessary for launching of watercraft;

c. the proposed ramp shall not obstruct flowing water; and

d. construction shall not necessitate alteration of shoreland which could result in substantial erosion and sedimentation.

6. A permit shall be required for the construction, reconstruction, relocation, removal, repair, and abandonment of all other offshore structures, cables other than utility crossings, pilings, or other facilities not covered by specific regulations:

a. Permits for structural repair, relocation, or modification, other than minor maintenance work such as reroofing, painting of structures or similar work, shall be issued provided all of the following conditions are met:

(1) the applicant demonstrates a need for the work;

(2) the cost of the work will not exceed 50 percent of the replacement cost of the structure;

(3) the degree of permanence of the structure will not be materially increased by virtue of constructing a new foundation or replacing the majority of the structure above the foundation;

(4) the structure being repaired has appropriate permits from the local land use or sanitary authority;

(5) the degree of obstruction or structure size is not increased.

b. Permits for construction, relocation, or reconstruction of publicly-owned structures shall be issued where:

(1) public need is documented and outweighs adverse

environmental impact;

(2) the site is adequately protected from the forces of ice and wave pressures; and

(3) the proposed construction is of sound design and is not necessarily obtrusive or visually incompatible with the natural surroundings.

c. The construction, relocation, or reconstruction of privately-owned structures shall be permitted only when a governmental agency or local governmental unit accepts responsibility for future maintenance of the structure or its removal.

7. Where the commissioner has determined that a structure is no longer functional, constitutes a public nuisance or a hazard to navigation, or poses a threat to public health or safety, the structure shall be removed from protected waters under the applicable provisions of these rules. Except as provided under B.3.d., a permit is required for the removal or abandonment of all existing waterway obstructions including boathouses, bridges, culverts, pilings, piers, and docks. Permits shall be issued provided:

a. the original cross-section and bed conditions will be restored insofar as practicable;

b. adequate provisions are made to mitigate any side effects resulting from removal, such as restoration of wave or current forces; and

c. no portion of the structure remains which would obstruct or impair navigation, interfere with the passage of flood waters, or contribute to erosion and sedimentation.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section.

Unless otherwise specified in other rules, the provisions of this rule shall apply to structures proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR S 1.5021, Excavations 6 MCAR S 1.5022, Water level controls 6 MCAR S 1.5024, Bridges and culverts 6 MCAR S

1.5025, Drainage of protected waters 6 MCAR S 1.5026, and Alterations of protected waters for mining 6 MCAR S 1.5027.

6 MCAR S 1.5024 Water level controls.

A. Goals. It is the goal of the department to manage protected waters in order to:

1. maintain natural flow and natural water level conditions to the maximum feasible extent;

2. encourage the construction of small upstream retarding structures for the conservation of water in natural waterbasins and watercourses, consistent with any overall plans for the affected watershed area; and

3. limit the artificial manipulation of water levels except where the balance of affected public interests clearly warrants the establishment of appropriate controls and it is not proposed solely to satisfy private interests.

B. General standards.

1. Scope. The construction, repair, reconstruction, or abandonment of any structure intended to impound, divert, or control the level or flow of protected waters shall be subject to the provisions of this rule.

2. Construction or reconstruction of water level control facilities shall not be allowed where it is intended to manipulate water levels solely to satisfy private interests.

3. No permit shall be required to construct, reconstruct, or abandon a water level control structure on protected watercourses with a contributing watershed of 300 acres or less, except on officially designated trout streams, provided the structure does not qualify as a dam under the rules for dam safety.

4. Permits shall be required for the construction, repair, reconstruction, or abandonment of any water level control structure except as provided in 2. and 3., and shall meet the following general criteria:

a. The project will involve a minimum of encroachment, change, or damage to the environment including but not limited to fish and wildlife habitat, navigation, water supply, storm

water retention, and agricultural uses.

b. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

c. The proposed project shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

d. The proposed project shall be consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs.

e. The construction or reconstruction shall comply with the requirements of 6 MCAR SS 1.5030-1.5034 with respect to dam safety for the protection of human life and property.

f. The construction or reconstruction of water level control structures or changing the level of an existing structure may be permitted to:

(1) control and store flood waters;

(2) maintain low flows for instream flow or water level protection;

(3) manage water quality, including the prevention ~~and/or~~ or control of erosion and sedimentation;

(4) improve water-based recreation;

(5) create, improve, and maintain water supplies;

(6) create, improve, or maintain aquatic habitat for fish and wildlife species;

(7) establish, improve, or maintain the generation of hydroelectric power.

~~5.--The-commissioner-shall-require-the-owner-or-operator of-any-water-level-control-structure,-reservoir,-or-waterway obstruction-within-protected-waters,-constructed-before-a-permit was-required-by-law,-to-secure-approval-from-the-commissioner-of the-manner-by-which-the-structure-is-to-be-operated-and maintained-whenever-the-commissioner-finds-that-such-operation and-maintenance-approval-is-necessary-in-the-public-interest after-there-is-either:~~

a.--verified-and-supported-complaints-by-the-public-or governmental-agencies-that-the-existing-or-proposed-operation and-maintenance-is-or-would-be-detrimental-to-public-health, safety,-and-welfare-or-environmental-protection-with-respect-to problems-of-flooding,-instream-flows,-water-quality,-fish-and wildlife,-or-violations-of-land-use-regulations,-requirements, and-standards-for-lands-abutting-the-protected-waters-involved; or

b.--notification-to-the-commissioner-by-the-owner-or operator-of-the-intent-to-make-any-of-the-following-changes-in the-operation-or-maintenance-of-the-structure:

(1)-proposed-new-uses-or-reuse-of-the-structure-for any-purpose-after-the-use-of-the-structure-has-been-discontinued for-at-least-one-year;-or

(2)-proposed-changes-or-alterations-in-the-operaton of-the-structure-which-would-affect-water-levels,-flows,-or water-quality-in-protected-waters.

6.--The-owner-or-operator-of-any-water-level-control structure,-reservoir,-or-waterway-obstruction-within-protected waters,-constructed-before-a-permit-was-required-by-law,-shall comply-with-the-following-provisions-when-notified-by-the commissioner-that-approval-is-required-for-operation-and maintenance-of-the-structure:

a.--The-owner-or-operator-shall-submit-plans, specifications,-and-information-on-the-structure-including:

(1)-An-explanation-of-the-purposes-for-which-the structure-is-operated-or-intended-to-be-operated.

(2)-Available-data-on-the-past-history-of-use-and operation-of-the-structure-and-any-evidence-of-easements-or other-rights-which-exist-or-would-be-obtained.

(3)-Engineering-details-on-the-structural-features and-characteristics-of-the-structure-which-involve-the-existing or-proposed-operation-of-the-structure-including-but-not-limited to-any-gates,-sluiceways,-penstocks,-turbines,-waterwheels,-or other-mechanical-devices-employed-or-to-be-employed-in-the operation-of-the-structure.

~~(4) Available information on the hydraulic and hydrologic characteristics of the structure and the area upstream and downstream of the structure which is affected by the structure including any available information on flows, water levels, and water quality.~~

~~(5) Available information on the physical condition of the structure including engineering data on original construction, any reconstruction or repairs and the dates of original construction and subsequent reconstruction or repairs.~~

~~(6) If the structure contains features or is intended to contain features which allow or would allow manipulations of water levels, details shall be provided on the methods, frequency, time, duration of operaton, and any existing or proposed operating plans.~~

~~(7) Such other available or attainable information on hydraulic, hydrologic, or geologic characteristics as the commissioner may deem necessary in order to assess the impacts or effects of the structure and its operation.~~

~~b. After receipt of all supporting facts and available information required by 5. and 6.a., the commissioner shall review the existing or proposed operational and maintenance aspects of the structure and shall grant approval of the operation and maintenance provided that:~~

~~(1) The operation and maintenance does not or will not result in destruction or significant impairment of the protected waters with respect to:~~

~~(a) the ecosystem of the protected waters including quantity and quality effects;~~

~~(b) potential threats to life or property due to flooding and overflow of upstream and downstream lands unless allowed by easement or other legal means including acquisition of flooded property;~~

~~(c) maintenance of adequate water flows and levels for upstream and downstream higher priority users particularly for public domestic water supplies.~~

~~(2) The existing or proposed operation and~~

~~maintenance is or will be consistent with applicable state and local land use standards, regulations, and requirements including floodplain, shoreland, and wild and scenic rivers management standards and ordinances.~~

~~(3) The existing or proposed operation and maintenance does not or will not result in significant decreased public use of the surface of the protected waters affected by the structure including existing uses for fishing, hunting, or navigation.~~

~~(4) The existing or proposed operation and maintenance will comply, when applicable, with the requirements of 6 MCAR SS 1.5030 1.5034 relating to dam safety.~~

~~c. If the commissioner determines that the existing or proposed operation and maintenance will be detrimental to public health, safety, and welfare or the ecosystem of the protected waters based on provisions of 6.b., the commissioner shall not approve the manner of operation and maintenance of the structure until the operation and maintenance is modified to meet the provisions.~~

C. Specific standards. In addition to the general standards in B., specific requirements for water level control structures shall be met as follows:

1. Permanent lake level control facilities shall be approved when the commissioner initiates proceedings for the purpose of conserving or utilizing the water resources of the state and assumes responsibility for operation and future maintenance, or when all of the following conditions are met:

a. The ordinary high water mark and runout elevation of the water body have been determined by a detailed engineering survey, or by order of the commissioner following a public hearing;

b. The proposed facilities shall be "reasonably consistent with natural conditions":

(1) Where a functioning outlet existed in a state of nature or for a long period of time following lawful creation or alteration of an outlet by the activities of man or animals, or

cataclysmic events, the proposed outlet is at essentially the same control elevation;

(2) Where no natural or artificial outlet exists and the lake is for all practical purposes "landlocked," the control elevation shall not be more than 1-1/2 feet below the ordinary high water mark;

c. The project is sponsored by a governmental unit which assumes responsibility for operation and future maintenance, except where:

(1) the majority of the riparian owners sign the permit application;

(2) appropriate easements or other property interests have been obtained from all affected owners;

(3) a title-registration type permit shall be issued to the owner or owners of the property upon which the proposed water level control structure will be located; and

(4) the structure will further public interests in navigation, propagation of fish or wildlife, or other beneficial public uses of the water;

d. Justification has been made of the need in terms of public and private interests and the available alternatives, including the impact on receiving waters and public uses thereof, through a detailed hydrologic study; and

e. A detailed plan is developed for operation and control including:

(1) manner and time of operation;

(2) frequency of maintenance;

(3) appropriate monitoring of water levels, water quality, and other factors;

(4) management of excess waters.

2. Fish and wildlife management proposals made pursuant to Minnesota Statutes, section 97.48, subdivision 11, or other appropriate authority shall be approved where:

a. The protected water has been designated for wildlife management purposes.

b. There is a specific water level management plan for

the lake basin.

c. Any drawdown of the lake is only temporary and the management plans include a permanent facility for restoration of water levels following such drawdowns.

d. Any alteration of a watercourse included in the plan follows the requirements specified in 6 MCAR S 1.5022 C.6.

e. Appropriate easements or fee title have been obtained.

f. Specified management personnel are required to establish a lake level gauge and keep a record of water levels with a specified frequency during seasons of active water level manipulation and with a lesser frequency during all other open water seasons.

3. Plans for landlocked waterbasins less than 25 acres in surface area and contained completely within the municipal boundaries of a single city shall be approved where:

a. A municipal drainage plan for the affected tributary watershed is prepared by a qualified engineer or hydrologist and is approved by the affected watershed district and the city.

b. The city has a field survey made of the waterbasin after consultation with the department including but not limited to:

(1) the elevation of the aquatic vegetation fringe;

(2) the elevation of the tree line and a description of the location, type, and size of representative trees;

(3) groundwater elevations, if appropriate;

(4) other information as requested by the department.

c. Control elevations and associated physical parameters are approved by the department and the city.

d. The city holds a public hearing on the proposal and provides a transcript of the proceedings to the department. Provision of a transcript may be waived by the department.

4. Permits for the construction, reconstruction, and abandonment of all other water level control structures shall be issued provided:

a. The need is established in terms of quantifiable benefits.

b. The structural design shall be done by a professional engineer or by a qualified engineer of the Soil Conservation Service or the Corps of Engineers and must include the following considerations:

(1) gravity forces;

(2) hydrostatic pressure;

(3) uplift forces;

(4) overturning moment;

(5) resistance to sliding;

(6) ice pressures;

(7) earthquake forces;

(8) slope stability including consolidation and pore pressures;

(9) seepage collection or prevention;

(10) foundation conditions including appropriate borings and determination of the strength of foundation materials;

(11) specifications for materials of construction and their placement or installation;

(12) adequate construction inspection to assure conformance with design assumptions; and

(13) adequacy of the cofferdam or diversion during construction, if any.

c. Adequate assurances shall be made for future maintenance of new water level control structures:

(1) For water level control structures 25 feet or more in structural height or having a maximum storage capacity of 50 acre-feet or more, permits will be issued only to governmental agencies, public utilities, or corporations having authority to construct and maintain such projects, except that a title-registration type permit may be issued to the owner or owners of the private property upon which the proposed water level control structure will be located where the provisions of C.l.c. are met.

(2) For other water level control structures, title-registration type permits may be issued to the owner or owners of the private property upon which the water level control structure will be located which shall run with the land and require breaching or removal if it ever falls into a state of disrepair or becomes unsafe.

(3) Periodic engineering inspections of authorized water level control structures may be made by the department or its designee.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to water level control structures proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR S 1.5021, Excavations 6 MCAR S 1.5022, Structures 6 MCAR S 1.5023, Bridges and culverts 6 MCAR S 1.5025, Drainage of protected waters 6 MCAR S 1.5026, and Alterations of protected waters for mining 6 MCAR S 1.5027.

6 MCAR S 1.5025 Bridges and culverts, intakes and outfalls.

A. Goals. It is the goal of the department to allow crossings of protected waters, including the construction of water intake and sewer outfall structures in protected waters, only when less detrimental alternatives are unavailable or unreasonable, and where such facilities adequately protect public health, safety, and welfare.

B. General standards.

1. Scope. The construction or reconstruction of any bridge, culvert, intake, outfall, or other crossing of protected waters shall be subject to the provisions of this rule. Abandonment or removal of all crossings and structures governed by this rule shall require a permit pursuant to 6 MCAR S 1.5023 C.7.

2. Crossings shall not be permitted where the project:

a. Will obstruct navigation or create a water safety hazard.

b. Will cause or contribute to significant increases in flood elevations and flood damages either upstream or downstream.

c. Would involve extensive channelization above and beyond minor stream channel realignments to improve hydraulic entrance or exit conditions, except where a separate permit is obtained pursuant to 6 MCAR S 1.5022 C.6.; or

d. Will be detrimental to water quality, or significant fish and wildlife habitat, or protected vegetation.

3. No permit shall be required to construct the following types of crossings on protected waters, unless prohibited in 2.:

a. To construct or reconstruct a bridge or culvert on a protected watercourse with a total drainage area, at its mouth, of five square miles or less, except on officially designated trout streams.

b. To construct or reconstruct a low-water ford type crossing provided that:

(1) the stream bed is capable of supporting the crossing without the use of pilings, culverts, dredging, or other special site preparation;

(2) the water depth does not exceed two feet under normal summer flow conditions;

(3) the crossing conforms to the natural cross-section of the stream channel and does not reduce or restrict normal low-water flows;

(4) the original stream bank at the site does not exceed four feet in height;

(5) the crossing is constructed of gravel, natural rock, concrete, steel matting, or other durable inorganic material not exceeding one foot in thickness;

(6) the approach is graded to a finished slope not steeper than 5:1 horizontal:vertical, and all graded banks are seeded or mulched to prevent erosion and sedimentation; and

(7) the crossing is not placed on an officially designated trout stream, on a wild, scenic, or recreational river or on an officially designated canoe and boating route.

c. To construct or reconstruct a temporary bridge provided that:

(1) The stream bank is capable of supporting the bridge without the use of foundations, pilings, culverts, excavation, or other special site preparation;

(2) Nothing is placed in the bed of the stream;

(3) The bridge is designed and constructed so that it can be removed for maintenance and flood damage prevention;

(4) The bridge is firmly anchored at one end and so constructed as to swing away in order to allow flood waters to pass;

(5) The lowest portion of the bridge shall be at least three feet above the ordinary high water mark on navigable streams; and

(6) The bridge is consistent with state and local rules and regulations for floodplain, shoreland, and wild, scenic, or recreational rivers management standards and ordinances.

d. To maintain the hydraulic adequacy of any storm sewer or agricultural drain tile outfall or ditch which has been functioning within the previous five years if such work does not alter the original course, current, or cross-section of the protected waters.

e. To install an agricultural drain tile outletting into protected waters provided:

(1) the bank is restored to the original cross-section or contour; and

(2) no permanent structure is placed below the ordinary high water mark, except for the drain tile.

4. Permits shall be required for the construction or reconstruction of any bridge, culvert, intake, outfall, or other crossing of protected waters except as provided in 2. and 3. above, and shall meet the following general criteria:

a. The project will involve a minimum of encroachment, change, or damage to the environment including but not limited to fish and wildlife habitat, navigation, water supply, and

storm water retention.

b. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

c. The proposed crossing shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers mangement standards and ordinances for the waters involved.

d. The proposed crossing shall be consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs.

e. Crossings of protected waterbasins or wetlands shall be allowed only where there is no feasible and practical alternative which does not require filling, excavating, or the placement of a structure in protected waters.

C. Specific standards. In addition to the general standards in B., specific requirements for bridges, culverts, intakes, outfalls, and other crossings of protected waters shall be met as follows:

1. The construction, reconstruction, or relocation of all bridges, culverts, or other crossings over protected waters shall be permitted provided all of the following criteria are met:

a. The hydraulic capacity of the structure must be established by a competent technical study. The sizing shall not be based solely on the size of existing upstream and downstream structures. If a state or federal floodplain information study exists for the area, or a U.S. Geological Survey gaging station is located nearby on the stream, the hydraulics of the proposed bridge/culvert design must be consistent with these data. The department may waive this requirement if:

(1) the department has performed a hydraulic study based upon available information and reasonable assumptions;

(2) the department has made a field investigation of the project site;

(3) the project will not cause flood-related damages or problems for upstream or downstream interests.

b. New crossings and replacements of existing crossings must comply with local floodplain management ordinances and with provisions of NR 87 (d) (1) (6 MCAR S 1.0087 (d) (1)).

(1) New crossings:

(a) No approach fill for a crossing can encroach upon a community designated floodway.

(b) Where a floodway has not been designated or where a floodplain management ordinance has not been adopted, increases in flood stage in the regional flood of up to one-half of one foot shall be permitted if they will not materially increase flood damage potential. Additional increases may be permitted if: a field investigation and other available data indicate that no significant increase in flood damage potential would occur upstream or downstream, and any increases in flood stage are reflected in the floodplain boundaries and flood protection elevation adopted in the local floodplain management ordinance.

(2) Replacement of existing crossings:

(a) If the existing crossing has a swellhead of one-half of one foot or less for the regional flood, the replacement crossing shall comply with the provisions for new crossings in C.1.b.(1).

(b) If the existing crossing has a swellhead of more than one-half of one foot for the regional flood, stage increases up to the existing swellhead may be allowed provided field investigation and other available data indicate that no significant flood damage potential exists upstream from the crossing based on analysis of data submitted by the applicant. The swellhead for the replacement crossing may exceed the existing swellhead if it complies with the provisions for new crossings found in C.1.b.(1)(b).

(3) The decks and approaches to bridges or culverts on major transportation routes and on roads that provide access

to development at urban densities shall be no lower than two feet below the flood protection elevation as defined in NR 87 (e) (6 MCAR S 1.0087 (e)) unless it can be shown that alternative routes or access can be provided during the regional flood.

c. The structure shall provide for game fish movement, unless the structure is intended to impede rough fish movement or the stream has negligible fisheries value.

d. The structure will not obstruct reasonable public navigation. For bridges over protected watercourses, three feet above the calculated 50-year flood stage will ordinarily satisfy navigational clearance requirements. For bridges over protected waterbasins or wetlands, and all culverts, three feet of clearance above the ordinary high water mark will ordinarily satisfy navigational requirements.

e. Any project proposed near an existing or proposed segment of the state trails system should be consistent therewith.

f. Footbridges and walkways:

(1) Over watercourses:

(a) Must be designed to cause negligible backwater effects during floods.

(b) Must be securely anchored or otherwise capable of withstanding the dynamic forces of flowing water, ice, and debris.

(c) Approaches must not be raised above the adjacent floodplain lands.

(2) New walkways across any portion of protected waters to provide private access to an island will be prohibited. Permits for reconstruction of existing walkways or for the construction of new walkways intended to provide public access will be issued only if:

(a) The walkway provides the only existing access to the island.

(b) There is existing development thereon.

(c) The design will provide for any public

navigational needs and is consistent with the natural surroundings.

2. The construction, reconstruction, or relocation of all water intake and sewer outfall structures placed in protected waters shall be permitted provided all of the following criteria are met:

a. Adequate attention is given to methods of screening the structure from view as much as possible from the surface of the protected water through the use of existing vegetation ~~and/or~~ or new plantings.

b. The project is not detrimental to public values including but not limited to fish and wildlife habitat, navigation, water supply, water quality, or storm water retention.

c. No site conditions will require frequent future disruption of the beds of protected waters.

d. Adequate precautions must be planned during and after construction to prevent silt, soil, and other suspended particles from being discharged into protected waters.

e. Adjacent to the intake structure, the banks and bed of the protected water must be protected from erosion and scour by placement of suitable riprap shore protection.

f. The banks must be revegetated by seeding and/or sodding.

g. The structure must be designed by a professional engineer.

h. Intake structures:

(1) Excavation must be detailed in the application and on design plans.

(2) Where necessary, a water appropriation permit must be obtained from the department prior to operation.

(3) An appropriate sized screen must be used to prevent fish intake.

i. Outfall structure design shall:

(1) Where necessary, incorporate a stilling-basin, surge-basin, energy dissipator, or other device or devices to

minimize disturbance and erosion of natural shoreline and bed resulting from peak flows.

(2) Where feasible, utilize discharge to natural wetlands, natural or artificial stilling or sedimentation basins, or other devices for entrapment of sand, silt, debris, and organic matter.

(3) Where feasible, maximize use of natural or artificial ponding areas to provide water retention and storage for the reduction of peak flows into protected waters.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to bridges and culverts proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR S 1.5021, Excavations, 6 MCAR S 1.5022, Structures 6 MCAR S 1.5023, Water level controls 6 MCAR S 1.5024, Drainage of protected waters 6 MCAR S 1.5026, and Alterations of protected waters for mining 6 MCAR S 1.5027.

6 MCAR S 1.5026 Drainage of protected waters.

A. Goals. It is the goal of the department to protect and preserve protected waterbasins and wetlands from damage or destruction by drainage.

B. General standards.

1. Scope. This rule relates to the partial drainage or temporary drawdown of protected waterbasins and wetlands for all purposes except mining of metallic or nonmetallic minerals which are subject to provisions of 6 MCAR S 1.5027.

2. Except as provided in Minnesota Statutes, section 105.391, subdivision 3, the permanent or total drainage of protected waterbasins and wetlands shall not be permitted.

3. A permit shall be required for the partial drainage or temporary drawdown of protected waterbasins and wetlands and shall be granted provided all of the following conditions are met:

a. The proposed project is intended to achieve one or more of the following purposes:

(1) improve navigational or recreational uses;

(2) improve or restore fish or wildlife habitat;

(3) expose sediment in order to remove or eliminate nutrients or contaminants;

(4) alleviate flooding of agricultural lands caused by artificial obstruction of downstream drainage or increased upstream discharge;

(5) allow the mining of iron ore, taconite, copper, copper-nickel, or nickel under the provisions of Minnesota Statutes, section 105.64.

b. The project will involve a minimum of encroachment, change, or damage to the environment including but not limited to fish and wildlife habitat, navigation, water supply, water quality, and storm water retention.

c. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

d. The proposed project shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

e. The proposed project shall be consistent with water and related land management plans and programs of local and regional governments provided such plans and programs are consistent with state plans and programs.

C. Specific standards. In addition to compliance with the general standards in B., specific requirements for drainage or drawdown activities shall be met as follows:

1. The drainage or diversion of protected waters for mining iron ore, taconite, copper, copper-nickel, or nickel shall be permitted only where all of the provisions of Minnesota Statutes, section 105.64 and 6 MCAR S 1.5027 have been met.

2. The drainage or diversion of protected waters for mining all other metallic and nonmetallic minerals shall be permitted only when the protected waters being drained are replaced by protected waters which will have equal or greater public value, subject to provisions of 6 MCAR S 1.5027.

3. All other drainage or diversion of protected waters allowed in B. shall be permitted provided all of the following specific criteria are met:

a. For protected waterbasins, permits will be issued only to governmental agencies having the authority to undertake such projects. In addition, a public need for the partial drainage or temporary drawdown shall be established by specifying the public interests to be enhanced.

b. Written consent for the partial drainage or temporary drawdown of protected waterbasins and wetlands has been obtained from all riparian owners.

c. Partial drainage or temporary drawdown of protected waterbasins and wetlands shall be permitted only where the applicant has submitted data to confirm:

(1) that the partial drainage will improve navigation or recreational uses;

(2) that the partial drainage will improve or restore fish and wildlife habitat; or

(3) that agricultural lands have been flooded due to artificial obstruction of downstream drainage or increased upstream discharge.

d. Any proposed temporary drawdown shall not exceed two years in duration under normal climatic conditions.

e. There are no feasible and practical means to attain the intended purpose without drainage.

f. The proposal will adequately protect public safety and promote the public welfare.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to drainage activities proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR S 1.5021, Excavations 6 MCAR S 1.5022, Structures 6 MCAR S 1.5023, Water level controls 6 MCAR S 1.5024, and Bridges and culverts 6 MCAR S 1.5025.

6 MCAR S 1.5027 Alterations of protected waters for mining.

A. Goals. It is the goal of the department to ensure that alterations of protected waters for mining or reclamation of mining areas will minimize adverse environmental effects, preserve water resources to the maximum extent feasible and practical, and encourage the planning of future land and water utilization while at the same time promoting the orderly development of mining and the use of sound mining practices.

B. Standards and criteria.

1. Scope. Mining activities which may involve alterations of protected waters include the mining of metallic minerals including but not limited to iron ore, taconite, copper, copper-nickel, nickel, cobalt, and gold; and the mining of nonmetallic minerals including but not limited to sand and gravel, stone, clay, marl, oil, gas, and coal; and the mining of peat.

2. Permits shall be required for any alterations of protected waters to facilitate mining of iron ore, taconite, copper, copper-nickel, or nickel minerals or reclamation of mining areas provided that:

a. Permits to mine shall be obtained when required by Minnesota Statutes, section 93.44 to 93.51.

b. Permits for alterations in protected waters shall be granted in accordance with provisons of Minnesota Statutes, section 105.64. Applications for permits for alterations in protected waters shall include an analysis showing why underground mining without drainage, diversion, or control of protected waters is not feasible or economical.

3. Permits shall be required for mining of nonmetallic minerals, peat, and other metallic minerals not regulated in Minnesota Statutes, section 105.64, or reclamation of mining areas provided that the applicant provides evidence that:

a. There is no other feasible and practical location for the proposed mining activity;

b. There is no other feasible or economical method to mine except by draining, diverting, or controlling the protected waters;

c. The proposed alteration of protected waters is necessary and no other feasible and economical method for it is reasonably available;

d. The proposed alteration of protected waters will not substantially impair the interests of the public in lands or waters or the substantial beneficial public use thereof, except as expressly authorized in the permit, and will not endanger public health or safety;

e. The proposed mining operations will be in the public interest and that the public benefits resulting from it will be sufficient to warrant the proposed alteration of protected waters;

f. The activities represent the minimal impact solution with respect to watershed modifications, watercourse diversions or changes, drainage, runoff and seepage management, and avoidance of major adverse changes in the ecosystem of protected waters having substantial public value;

g. Whenever protected watercourses must be diverted or changed to facilitate mining, the design and construction of the diversion or change shall provide for:

(1) Maintenance of adequate flows and levels in order to protect instream flows and prevent downstream flooding;

(2) Measures to prevent bank erosion and sedimentation in order to protect water quality; and

(3) Details on the location, relocation, and utilization of the watercourse after cessation of mining;

h. Whenever protected waterbasins are allowed to be drained to facilitate mining, and such drainage is justified and legally permitted, compensation for the loss of the basin must be provided for by either:

(1) Immediate replacement of the protected basin with waters of equal or greater value; or

(2) Submission of acceptable plans for the eventual replacement of the protected basin with waters of equal or greater value upon cessation of mining activities; and

i. Whenever a water impoundment is necessary and

justified to facilitate mining, the design, construction, operation, and maintenance of the impoundment structure shall:

(1) Meet the applicable requirements of 6 MCAR SS 1.5030-1.5034 pertaining to dam safety;

(2) Provide hydrologic and hydraulic measures to ensure that any protected waters downstream of the impoundment area are adequately protected with respect to maintenance of water quantity and quality and prevention of flooding; and

(3) Include plans detailing the disposition and utilization of the impoundment area after cessation of mining activities.

4. Whenever metallic, nonmetallic, and peat mining activities in the beds of protected waters will result in detrimental effects on the physical and biological character of protected waters, measures to compensate for the detrimental aspects shall be required in the permit conditions.

6 MCAR S 1.5028 General administration.

A. Application for protected waters permits. All applications pursuant to 6 MCAR SS 1.5020 -1.5027 shall be made on forms prepared by the department and submitted to the regional office for the area where the majority of the proposed project is located.

1. Who may apply: Applications shall be submitted by the riparian owner of the land on which a project is proposed, except:

a. A governmental agency, public utility, or corporation authorized by law to conduct the project may apply if the property rights acquired or to be acquired are fully described in the application.

b. A holder of appropriate property rights such as a lease or easement may apply provided that the application is countersigned by the owner and accompanied by a copy of the lease or other agreement. A permit may be issued for the term of the lease only, subject to cancellation prior to the termination date of the agreement if the agreement is cancelled.

c. A prospective lessee of state-owned lands may apply

for a permit in his own name after he has requested a lease from the departmental official responsible for the affected lands. Both the lease request and the permit application will be processed concurrently with appropriate coordination.

2. Information required: Pursuant to Minnesota Statutes, section 105.44, subdivision 4, an application shall be considered complete when:

a. It includes all of the information specified in the appropriate section or sections of these standards.

b. It is accompanied by appropriate photographs, maps, sketches, drawings, or other plans which adequately describe the proposed project.

c. It includes a brief statement regarding the following points:

(1) Anticipated changes in water and related land resources.

(2) Unavoidable anticipated detrimental effects on the natural environment.

(3) Alternatives to the proposed action.

d. Application fees have been paid. Note that final permits cannot be issued until any field inspection fees are paid.

e. Proof of service of a copy of the application and accompanying documents on the mayor of the city or the secretary of the board of the district is included with the application if the project is within or affects a city, watershed district, or soil and water conservation district.

3. Fees: All applications shall be accompanied by an application fee as required by 6 MCAR S 1.5000 E.1. An additional fee may be charged for field inspections conducted by department personnel in the course of review subject to the provisions of 6 MCAR SS 1.5000 G.1.-1.5000 G.5.

B. Permit review.

1. Field inspection: The department may conduct field investigations to determine a project's nature, scope, and impact on water and related land resources. The department

shall determine which applications must be investigated and such inspections shall be made in a timely fashion.

2. Coordination with other agencies: Nothing in these standards is intended to supersede or rescind the laws, rules, regulations, standards, and criteria of other federal, state, regional, or local governmental subdivisions with the authority to regulate work in the beds or on the shorelands of protected waters. The issuance of a permit shall not confer upon an applicant the approval of any other unit of government for the proposed project. The department shall coordinate the review with other units of government having jurisdiction in such matters.

3. Procedure upon decision: The commissioner may grant permits, with or without conditions, or deny them. In all cases, the applicant, the managers of the watershed district, the board of supervisors of the soil and water conservation district, or the mayor of the city may demand a hearing in the manner specified in Minnesota Statutes, section 105.44, subdivision 3, within 30 days after receiving mailed notice outlining the reasons for denying or modifying an application. Any hearing shall be conducted as a contested case hearing before a hearing examiner from the independent Office of Administrative Hearings in accordance with Minnesota Statutes, chapter ~~15~~ 14 and sections 105.44 and 105.45.

C. Statutory requirements. Further provisions for the administration of these rules are found in Minnesota Statutes, chapter 105, including but not limited to sections 105.44 to 105.463, 105.541, and 105.55.

APPROVED AS TO LEGALITY

August 31, 1983

HUBERT H. HUMPHREY, III
ATTORNEY GENERAL

BY _____
SPECIAL ASSISTANT ATTORNEY GENERAL

STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED
SEP 6 1983
Joan Anderson Growe
Secretary of State

10:13 AM

.5020

AG copy

RECEIVED
JUN 06 1983
Division of Waters

Department of Natural Resources

Waters Division

Adopted Amendments to Rules Governing Permits for Making Changes in the Course, Current, or Cross-Section of Public Waters

Rules as Adopted

STANDARDS AND CRITERIA FOR GRANTING
PERMITS TO CHANGE THE COURSE, CURRENT,
OR CROSS-SECTION OF PROTECTED WATERS

6 MCAR S 1.5020 General provisions.

A. Purpose. The purpose of 6 MCAR SS 1.5020-1.5028 is to provide for the orderly and consistent review of permit applications in order to conserve and utilize the water resources of the state in the best interest of its people. In deciding whether to issue permits, the department shall be guided by the policies and requirements declared in Minnesota Statutes, sections 104.01, 104.25, 104.32, 105.38, 105.42, 105.64, and 116D.04.

The proposed development must also be consistent with the goals and objectives of applicable federal, state, and local environmental quality programs and policies including but not limited to shoreland management, floodplain management, water surface use management, boat and water safety, wild and scenic rivers management, water quality management, recreational or wilderness management, critical areas management, scientific and natural areas management, and protected species management.

B. Scope. To achieve the purpose declared in A. these rules set forth minimum standards and criteria for the review, issuance, and denial of permits for proposed projects affecting protected waters. Permits shall be required for any activity affecting the course, current, or cross-section of protected waters unless specifically exempted within these rules.

C. Jurisdiction. These standards and criteria apply to any

and all work which will cause or result in the alteration of the course, current, or cross-section of protected waters except for the following:

1. utility crossings of protected waters which are regulated under Minnesota Statutes, section 84.415 and rules promulgated thereunder; or

2. destruction and control of aquatic vegetation which is regulated under Minnesota Statutes, section 98.48, subdivision 9 and rules promulgated thereunder.

D. Definitions. For the purposes of 6 MCAR SS 1.5020-1.5028, certain terms or words used herein shall be interpreted as follows: the word "shall" is mandatory, not permissive. All distances unless otherwise specified shall be measured horizontally.

1. "Alteration" means any activity that will change or diminish the course, current, or cross-section of protected waters.

2. "Beds of protected waters" means all portions of protected waters located below the ordinary high water mark.

3. "Breakwater" means an offshore structure intended to protect a shore area, harbor, or marina from wave and current action, erosion, or sedimentation.

4. "Commissioner" means the Commissioner of Natural Resources.

5. "Department" means the Department of Natural Resources.

6. "Dock" means a narrow platform extending waterward from the shoreline intended for ingress and eqress for moored watercraft or to provide access to deeper water for swimming, fishing, or other water-oriented recreational activities.

7. "Drainage" means any method for removing or diverting waters from protected waterbasins or wetlands. Such methods shall include, but are not limited to, excavation of an open ditch, installation of subsurface drainage tile, filling, diking, or pumping.

8. "Drawdown" means a temporary lowering of water levels, for a maximum duration of two years.

9. "Excavation" means the displacement or removal of the sediment or other materials from the beds of protected waters by means of hydraulic suction or mechanical operations.

10. "Fill" means any material placed or intended to be placed on the bed or bank of any protected water.

11. "Filter" means a transitional layer of gravel, small stone, or fabric between the fine material of an embankment and riprap shore protection materials.

12. "Floating structure" means any houseboat, mooring or navigational buoy, swimming or diving platform, water ski jump, watercraft, or other structure supported entirely by its own buoyancy which is not permanently anchored by means of pilings, foundations, gabion baskets, or other materials incapable of removal by nonmechanized means.

13. "Floodplain" means the areas adjoining a watercourse which has been or hereafter may be covered by the regional flood.

14. "Floodway" means the channel of the watercourse and those portions of the adjoining floodplains which are reasonably required to carry and discharge the regional flood.

15. "Harbor" means either an inland or offshore area protected from waves which is intended for the mooring of watercraft.

16. "Inland boat slip" means an inland excavation generally having a uniform width which serves as a protective area for launching and mooring of a single watercraft.

17. "Inland excavation" means any excavation intended to extend the cross-section of protected waters landward of the natural or preexisting shoreline.

18. "Low-water ford type crossing" means a stream crossing which conforms to the natural cross-section of the stream and utilizes the placement of a suitable substrate to allow vehicular passage without confining the stream flow within culverts or other hydraulic enclosures.

19. "Marina" means either an inland or offshore structure for the concentrated mooring of five or more watercraft wherein facilities are provided for ancillary services such as boat

mooring, storage, fueling, launching, mechanical repairs, sanitary pumpout, and restaurant services.

20. "Maximum," with respect to storage capacity, refers to the most severe design condition, including surcharge (floodwater storage).

21. "Mining activity" means the construction, reconstruction, repair, relocation, expansion, or removal of any facility for the extraction, stockpiling, storage, disposal, or reclamation of metallic or nonmetallic minerals. Facilities include all mine pits, quarries, stockpiles, tailings basins, and any structures which drain or divert protected waters to allow mining. Ancillary facilities such as access roads, bridges, culverts, and water level control structures are not mining activities.

22. "Mooring" means any containment of free-floating watercraft that provides a fixed fastening for the craft.

23. "Offshore" means the area waterward of the ordinary high water mark of a protected water.

24. "Ordinary high water mark" means the boundary of protected waters as defined in Minnesota Statutes, section 105.37, subdivision 16.

25. "Permanent dock" means any dock other than seasonal docks and wharves as defined by this rule.

26. "Port" means a water transportation complex established and operated under the jurisdiction of a port authority pursuant to Minnesota Statutes, chapter 458.

27. "Port facility" means any facility useful in the maintenance and operation of a port. Facilities include, but are not limited to, transportation facilities, terminal and storage facilities, floating and handling equipment, power stations, and other facilities necessary for the maintenance and operation of a port.

28. "Principal spillway" means a spillway designed to convey water from an impoundment at release rates established for the structure.

29. "Professional engineer" means an engineer registered

to practice in Minnesota.

30. "Protected waters" means those waters of the state identified as public waters or wetlands under Minnesota Statutes, section 105.37, subdivision 14 or 15, or 105.391, subdivision 1.

31. "Reconstruction" means the rebuilding or renovation of an existing structure, where the cost of such work will exceed 50 percent of the replacement cost.

32. "Regional flood" means the flood which is representative of large floods known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 100-year recurrence interval.

33. "Retaining walls" means vertical or nearly-vertical structures constructed of mortar-rubble masonry, handlaid rock or stone, vertical timber pilings, horizontal timber planks with piling supports, sheet pilings, poured concrete, concrete blocks, or other durable materials and constructed approximately parallel to the shoreline.

34. "Riprap shore protection" means coarse stones, boulders, cobbles, artificially broken rock or concrete, or brick materials laid loosely or within gabion baskets against the slope of the existing bank of a protected water.

35. "Seasonal dock" means a dock so designed and constructed that it may be removed from the lake or stream bed on a seasonal basis. All components such as supports, decking, and footings must be capable of removal by nonmechanized means.

36. "Structure" means any building, footing, foundation, slab, roof, boathouse, deck, wall, or any other object extending over, anchored, or permanently attached to the bed or bank of a protected water.

37. "Structural height" means the vertical distance from the natural bed of the stream or watercourse measured at the downstream toe of the control structure or from the lowest elevation of the outside limit of the control structure, if it is not across a stream channel or watercourse, to the maximum

(.5021

storage elevation.

38. "Swellhead" means the difference between the headwater elevation necessary to pass the regional flood through the proposed structure and the tailwater elevation below the structure.

39. "Temporary structure" means any seasonal dock or floating structure that can be removed from protected waters before winter freeze-up.

40. "Watercourse" means any channel having definable beds and banks capable of conducting generally confined runoff from adjacent lands. During floods water may leave the confining beds and banks but under low and normal flows water is confined within the channel. A watercourse may be perennial or intermittent.

41. "Water level control structure" means any structure which impounds or regulates the water surface elevation or flow of protected waters, including dams regulated under the provisions of 6 MCAR SS 1.5030-1.5034.

42. "Wharf" means a permanent structure constructed into navigable waters as a part of a port facility for berthing or mooring commercial watercraft, or for transferring cargo to and from watercraft in an industrial or commercial enterprise, or for loading or unloading passengers from commercial watercraft, or for the operation of a port facility.

6 MCAR S 1.5021 Filling into protected waters.

A. Goals. It is the goal of the department to limit the placement of any fill material into protected waters in order to:

1. minimize encroachment, change, or damage to the environment;

2. regulate the quantity and quality of fill and the purposes for which filling may be allowed based upon the capabilities of the waters to assimilate the material; and

3. maintain consistency with floodplain, shoreland, and wild and scenic rivers management standards and ordinances.

B. General standards.

1. Scope. Filling as used in this rule involves

placement of unconfined or loosely confined materials in protected waters.

2. Placement shall not be permitted in the following cases:

a. to achieve vegetation control;

b. to create upland areas, except where expressly provided herein;

c. to stabilize beds of protected waters which cannot support fill materials because of excessive depths of muck, steep bank, bed slope, or other conditions;

d. to stabilize or impound the site of active springs;

e. to dispose of rock, sand, gravel, or any other solid material resulting from activities carried out above the ordinary high water mark;

f. to construct a roadway or pathway, or create or improve land accesses from peripheral shorelands to islands, or to facilitate land transportation across the waters; however, where a project is proposed by a federal, state, or local government agency and this provision would prevent or restrict the project, or create a major conflict with other public purposes or interests, the commissioner may waive this provision provided:

(1) there is no other feasible and practical alternative to the project that would have less environmental impact; and

(2) that the public need for the project rules out the no-build alternative.

g. filling of posted fish spawning areas is prohibited.

3. No permit shall be required for the following activities unless prohibited under 2.:

a. To install a beach sand blanket provided the sand or gravel layer does not exceed six inches in thickness, 50 feet in width along the shoreline, or one-half the width of the lot, whichever is less, and does not extend more than ten feet waterward of the ordinary high water mark, provided local watershed district and local zoning officials are given at least

seven days notice by the landowner.

b. For one additional installation of a sand or gravel layer subsequent to an initial installation at the same location and not exceeding the same amounts and dimensions allowed under a.

c. To install riprap shore protection, except along the shores of Lake Superior and officially designated trout streams, provided the riprap materials consist of natural rock having an average size of 12 inches or larger in its smallest dimension, and conform with the natural alignment of the shoreline, with a minimum finished slope not steeper than 3:1 horizontal:vertical, no materials are placed more than five feet waterward of the ordinary high water mark, and the material does not obstruct the flow of water.

d. To place fill in a protected watercourse having a total drainage area, at its mouth, of five square miles or less, provided that the watercourse is not an officially designated trout stream and the placement of fill shall not result in:

(1) any diversions of water from the drainage area;

(2) any impoundment of waters by damming the watercourse;

(3) any actions which would result in erosion and cause sedimentation of downstream waters as determined by the county or local soil and water conservation district.

4. Permits shall be required for the placement of fill in protected waters, except as provided under 2. and 3., and shall meet all of the following requirements:

a. The project will involve a minimum of encroachment, change, or damage to the environment, including but not limited to fish and wildlife habitat, navigation, water supply, and storm water retention.

b. The fill consists of clean inorganic material that is free of pollutants and nutrients.

c. The existence of a stable, supporting foundation is established by appropriate means, including soil boring data where deemed necessary by the commissioner.

d. Where erosion protection is deemed necessary by the commissioner, the site conditions and fill material are capable of being stabilized by an approved erosion control method such as riprap, retaining wall, or other method which is consistent with existing land uses on the affected protected water.

e. The proposed project must represent the minimal impact solution to a specific need with respect to all other reasonable alternatives.

f. The size, shape, depths, shoreline, and bottom character and topography, and susceptibility of the beds of protected waters to actions of wind, waves, and currents are such that the fill will be stable.

g. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

h. The proposed filling must be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

i. The proposed filling must be consistent with water and related land management plans and programs of local and regional governments provided such plans and programs are consistent with state plans and programs.

C. Specific standards. In addition to compliance with the general standards in B. specific requirements for certain activities shall be met as follows:

1. Riprap shore protection. The protection of shoreline from continued erosion by placement of natural rock riprap along the shore shall be permitted provided:

a. The riprap materials are of sufficient size, quality, and thickness to withstand ice and wave action. The riprap shall be placed with a minimum amount of space between the larger materials and the space between them shall be filled with firmly seated smaller rocks or gabion baskets to procure a uniform surface.

b. The site soils are capable of supporting riprap and a filter consisting of well-graded gravel, crushed stone, or

fabric is installed to prevent undercutting of the riprap.

c. The encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of water.

2. Navigational access.

a. Filling to gain navigational access to waters shall be permitted only where access to navigable depths cannot be reasonably attained by utilizing a dock, the excavation of an offshore access channel, or other alternatives which would result in less environmental impact.

b. Fill for navigational access shall not extend beyond the edge of open water, shall not exceed side slopes greater than 2:1 horizontal:vertical, shall not exceed a maximum width of 15 feet at the base of the fill, and shall not extend to a water depth greater than four feet.

3. Shoreline lost by erosion. Applications for filling to recover shoreland lost by erosion or other natural forces shall be permitted only where:

a. The loss of shoreline is a threat to health and safety through the impending loss or damage to existing shoreline developments.

b. The loss of shoreline has occurred as a result of changes in water level or flow conditions caused by artificial manipulation of flows or levels of the waters involved within a period of not more than five years prior to the date when an application for filling is submitted.

c. The requirements of a. and b. shall not preclude the issuance of permits to place riprap materials or use other structural means for protection of the shoreline to prevent continuous erosion.

4. Filling necessary for port development or improvement shall be allowed only on those waters which are under the jurisdiction of established port authorities subject to the following:

a. no filling shall be allowed to extend beyond the limits of federally established harbor lines, or where no harbor

line has been established, beyond the maximum distance waterward which could be attained without obstructing navigational use of the waters;

b. the proposed development must be part of a comprehensive port development plan which has been approved by the commissioner; and

c. adverse effects of the proposed filling on the physical and biological character of the area shall be subject to mitigation measures approved by the commissioner.

5. Filling to restore or improve fish and wildlife habitat, except for filling in designated trout streams, shall be permitted provided:

a. plans are submitted showing the nature and degree of habitat to be benefited; and

b. the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

6. Filling in trout streams officially designated by the commissioner shall be allowed only if:

a. the amount, method of placement, and location of the fill will not result in increased water temperatures, excessive sedimentation in the stream, or destruction of fish habitat; and

b. there is no other feasible or practical alternative other than filling.

7. Filling for other purposes not specifically listed shall be subject to the general standards in B. and submission of information to show that:

a. the intended purpose of the fill is reasonable with respect to all other alternatives and there are no feasible and practical means to attain the intended purpose without filling; and

b. the proposal will adequately protect public safety and promote the public welfare.

D. Relationship to standards and criteria for other activities involving changes in course, current, or

cross-section. Unless otherwise specified in other rules, the provisions of this rule shall apply to filling proposed as part of any other activity or activities including but not limited to: Excavations 6 MCAR S 1.5022, Structures 6 MCAR S 1.5023, Water level controls 6 MCAR S 1.5024, Bridges and culverts 6 MCAR S 1.5025, Drainage of protected waters 6 MCAR S 1.5026, and Alterations of protected waters for mining 6 MCAR S 1.5027.

6 MCAR S 1.5022 Excavation of protected waters.

A. Goals. It is the goal of the department to limit the excavation of materials from the beds of protected waters in order to:

1. Preserve the natural character of protected waters and their shorelands, in order to minimize encroachment, change, or damage to the environment, particularly the ecosystem of the waters.

2. Regulate the nature, degree, and purpose of excavations so that excavations will be compatible with the capability of the waters to assimilate the excavation.

3. Control the deposition of materials excavated from protected waters and protect and preserve the waters and adjacent lands from sedimentation and other adverse physical and biological effects.

B. General standards.

1. Scope. Excavation as used in this rule includes any activity which results in the displacement or removal of bottom materials or the widening, deepening, straightening, realigning, or extending of protected waters. It may involve proposals for excavations landward or waterward from the ordinary high water mark.

2. Excavation shall not be permitted in the following cases:

a. where it is intended to gain access to navigable water depths when such access can be reasonably attained by alternative means which would result in less environmental impact;

b. where inland excavation is intended to extend

riparian rights to nonriparian lands, or to promote the subdivision and development of nonriparian lands;

c. where the proposed excavation will be detrimental to significant fish and wildlife habitat, or protected vegetation and there are no feasible, practical, or ecologically acceptable means to mitigate the effects;

d. to control or eliminate vegetation for the development of beach areas;

e. where it is intended to provide fill materials for development purposes except as provided under 6 MCAR S 1.5027;

f. where the excavation would not provide an effective solution to a problem because of recurrent sedimentation and there are feasible and practical alternative solutions which do not require excavation;

g. unless the excavation project includes provisions for acceptable disposal of excavated materials as provided in these rules; or

h. where the excavation would cause increased seepage of water which would lower the water level of protected waters and result in subsurface drainage.

3. No permit for excavation shall be required for the following activities unless prohibited in 2.

a. For excavations in a protected watercourse having a total drainage area, at its mouth, of five square miles or less, provided that the watercourse is not an officially designated trout stream and the excavation will not result in:

(1) any diversions of water from the drainage area;

(2) any impoundment of waters by damming the watercourse;

(3) any actions which would result in erosion and cause sedimentation of downstream waters as determined by the county or local soil and water conservation district.

b. To remove debris such as trees, logs, stumps, and trash provided such removal does not alter the original alignment, slope, or cross-section of the waters.

c. For repair of a public drainage system lawfully

established pursuant to Minnesota Statutes, chapters 106 and 112 consistent with the definition of "repair" set forth in Minnesota Statutes, section 106.471, subdivision 1.

4. Permits shall be required for the excavation and removal of any materials from protected waters or any excavations extending into or out of protected waters, except as provided in 2. and 3., and shall be subject to the following general criteria:

a. The project must be reasonable and practical based upon geologic and hydrologic conditions including but not limited to:

(1) quantity and quality of local drainage at the site;

(2) type of sediment/soil strata and underground formations in the vicinity;

(3) life expectancy of the excavation with respect to bedload, long-shore drift, and siltation patterns in the project vicinity; and

(4) protection of the water body from increased seepage, pollution, and other hydrologic impacts.

b. The disposal of excavated materials shall be subject to the following requirements:

(1) The disposal of any excavated materials containing pollutants shall be subject to requirements of Minnesota Statutes, chapter 115.

(2) The most acceptable means of disposing of clean materials, free from pollutants, which are excavated from protected waters listed in order of preference are:

(a) Complete removal of excavated materials from the waters and disposal or reuse for other purposes outside of the floodplain.

(b) Deposition in stable on-land disposal sites located above the ordinary high water mark and outside of floodway districts established under local ordinance. Provisions must be included for sodding, seeding, or otherwise properly stabilizing these materials.

(c) Temporary deposition along shorelines or within floodplains by stockpiling materials for subsequent removal to areas outside of any protected waters and outside of established floodplain districts provided that: any stockpile materials are removed within one year of stockpiling; and the stockpile is constructed so that any materials or waters entering or leaving the stockpile are controlled to prevent any introduction of sediment into the environment surrounding the stockpile.

(d) Redeposition of excavated materials, consisting of inorganic materials free from pollutants, into protected waters shall only be permitted when it will result in improvement of natural conditions of protected waters for the public benefit and will not result in sedimentation, obstruction of navigation, or a loss of fish or wildlife habitat. Separate permit provisions shall be required for redeposition of excavated materials subject to the standards and criteria of B.

(e) Determination of the public benefit served by redeposition of excavated materials shall be based on the value to the public of redeposited materials in order to protect shorelines from the damaging effects of erosion due to winds and waves when there are no other feasible, practical, and ecologically acceptable means to protect the shoreline; or create or improve habitat areas for fish and wildlife; or mitigate or enhance the physical and biological environment within protected waters when mitigative or enhancement measures are required as a condition of a permitted activity within the waters involved and there are no other feasible, practical, and ecologically acceptable mitigative measures.

c. The proposed project must represent the "minimal impact" solution to a specific need with respect to all other reasonable alternatives.

d. The excavation must be limited to the minimum dimensions necessary for achieving the desired purpose.

e. Where excavation is proposed in a protected water that is perched on an impervious stratum, soil borings must show

that the proposed excavation will not rupture the impervious stratum.

f. The biological character of the waters and surrounding shorelines shall be affected to the minimum degree feasible and practical.

g. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

h. The water supply, navigational, and drainage characteristics of the waters shall be protected to ensure that the interests of the public and of private riparian landowners are not adversely affected by the proposed excavation.

i. The proposed excavation shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

j. The proposed excavation shall be consistent with plans and management programs of local and regional governments provided that such plans are consistent with state plans and programs.

k. For harbors, boat slips, and other mooring facilities, the excavation shall be appropriately sized to provide a single mooring space for each riparian lot to be served. The number of mooring spaces to be provided shall generally be the amount of natural shoreline to be served divided by the lot requirements of the local land use control authority and the state shoreland management standards.

C. Specific standards. In addition to compliance with the general standards in B. specific requirements shall be met for the following activities:

1. Excavations for beach development.

a. The existing site conditions will not provide a suitable beach using a sand blanket alone.

b. When the proposal includes the installation of a beach sand blanket the area to be excavated shall be consistent with the criteria for filling under 6 MCAR S 1.5021 B.

c. The depth of excavation needed to reach a suitable

beach stratum shall be the minimum depth necessary considering anticipated site maintenance and reasonable water depths for a beach.

2. Excavations for improvement or enhancement of hydrologic and biologic conditions in all, or large portions of waterbasins.

a. A public need for the excavation has been established by local governmental resolution specifying the public interests to be improved or enhanced, except where the project is state sponsored.

b. The proposed project is intended to achieve one or more of the following public purposes:

(1) to improve navigation, swimming, and other recreational uses;

(2) to reduce winter fish-kill potential;

(3) sediment removal to eliminate a source of nutrients and/or contaminants.

c. The proposed excavation is part of an overall improvement or enhancement project based upon adequate background and field test data for which a comprehensive plan is submitted at the time of application detailing all of the following:

(1) Objectives to be accomplished, and an analysis of any alternative means considered to meet the objectives and the rationale for selecting excavation.

(2) Sufficient soil boring and bottom sampling data to evaluate sediment quality and bottom "seal" conditions. Where excavation is proposed on a waterbasin that is perched on an impervious stratum, soil borings must show that the proposed excavation will not rupture the impervious stratum.

(3) The methods, uses, and locations to be employed in excavating and disposing of excavated material consistent with the provisions of 6 MCAR S 1.5021.

(4) Existing water quality data and provision for future water quality monitoring including any water returned to the waterbasin during the removal of excavated materials.

(5) A timetable which indicates anticipated yearly excavation areas and volumes of materials to be removed, plus the selected disposal methods, uses, and deposition locations for each excavation period.

(6) A detailed description of proposed excavation and disposal equipment and facilities, including, where applicable, the length of discharge pipe purchased or available for the project and the pumping characteristics of the equipment.

3. Excavations for navigation related purposes.

a. Access channels from shorelines for recreational craft.

(1) Excavations for accesses from shorelines to reach navigable depths shall not be allowed if:

(a) access could reasonably be obtained through use of a dock to reach navigable depths; and

(b) prevalent wind, wave, and current conditions would not impair reasonable access to reach navigable depths.

(2) When shoreline conditions and wind, wave, and current conditions preclude access to navigable depths, excavations for navigational access shall be allowed provided the access channel shall not exceed four feet in depth, more than 15 feet in bottom width, and will not extend to an offshore water depth greater than four feet.

b. Other navigational channels:

(1) Excavations shall be limited to the minimum depth and width necessary to allow reasonable use of anticipated watercraft.

(2) Excavations to provide maintenance of navigational channel projects shall be limited to the length, width, and depth dimensions of the original channel.

4. Harbors and boat slips.

a. Excavations for development of offshore or inland harbors or boat slips for the mooring of more than 25 watercraft or watercraft larger than 20 feet in length shall be restricted to those waters which have the following characteristics:

(1) waterbasins having areas of 1,000 acres or more;

(2) watercourses which are used for commercial or industrial navigational purposes.

b. Excavations for development of offshore harbors serving fewer than 25 watercraft shall be limited to those water areas where the location of the proposed offshore harbor would not create unreasonable obstructions to public use and navigation on the water involved. Unreasonable obstructions include any development which would result in threats to public health, safety, or welfare.

c. Excavations for development of private inland harbors or boat slips serving fewer than 25 watercraft or watercraft less than 20 feet in length shall be limited to those waters where:

(1) Prevalent wind, wave, or current conditions along the shoreline where excavation is proposed are of a magnitude and frequency which precludes the use and maintenance of docks to moor watercraft. Determinations of magnitude and frequency which would inhibit use of docks shall be based on supporting facts including:

(a) the character of the water involved and its shoreline in relation to exposure to severe wind, wave, or current actions and the configuration and area of the water;

(b) the frequency of occurrence of storms producing severe winds and waves based on climatological data for the area; and

(c) the average number of days during each month of the navigational season when the shoreline is affected by severe winds, waves, or currents;

(2) The presence of lake bed and bank conditions would preclude the use and maintenance of docks and the conditions of the site and the number, type, or size of watercraft intended to be moored would preclude the development and use of on-land facilities, such as rollers, winch and track systems, sliderails, or other facilities which could be used to haul watercraft out of the water for on-land storage; or

(3) The proposed site is located in an area of the

water body where offshore mooring or excavations or extensive dock development would create unreasonable obstructions to public use and navigation of the water body.

d. The width and length of boat slips shall not exceed 150 percent of the width and length of the anticipated watercraft and all authorized boat slips shall be oriented to maximize the degree of wave protection.

e. Excavations for development of inland harbors shall be limited to those waters described in C.4.c. and shall meet the following additional requirements:

(1) Requirements applicable to all commercial and industrial inland harbors:

(a) The mooring area of the harbor shall be compactly shaped in order to minimize the surface area excavated in relation to the number of mooring spaces to be provided and shall be located at an adequate distance from the shoreline to provide wave protection and prevent breakthrough.

(b) No branch or connecting channels shall be permitted extending laterally outward from authorized inland excavations.

(c) If practical, a "dogleg" shall be incorporated in the approach channel located between the mooring area and the shoreline to minimize visual impact from the water body and promote wave dissipation.

(d) The excavation shall not extend more than 200 feet inland from the protected water unless evidence is provided to show that greater distances are required because of the dimensions of the watercraft to be moored.

(e) The methods, use, and deposition locations to be employed in disposing of excavated materials shall be consistent with the provisions of B.4.b.

not specific ?

(2) An application for a permit shall contain plans, maps, and supporting data including but not limited to proposed excavation site soil borings, ground water levels and characteristics, water quality, topography, drainage, and vegetation which shall substantiate that the proposed project

what else may be required

must be reasonable and pratical based upon geologic and hydrologic conditions including:

(a) quantity and quality of stream flow and local drainage at the proposed project site;

(b) water stagnancy problems including the capability of being flushed or drained;

(c) interference with stream flow or longshore drift;

(d) type of soil strata and underground formations in the project vicinity;

(e) protection of the water body itself in terms of reduced water supply, increased seepage or drainage, pollution, increased flooding, and other adverse hydrological impacts;

(f) adequate entrance openings;

(g) ample turning radius;

(h) adequate depth and size for the anticipated watercraft usage;

(i) adequate reduction of wave heights in mooring areas;

(j) proper harbor shape to reduce wave resonance;

(k) need for and feasibility of maintenance dredging;

(l) adequate height of perimeter wall;

(m) need for wave absorbers within the harbor; and

(n) bank stabilization by appropriate erosion control measures.

(3) Additional requirements applicable to specific types of harbors.

(a) Private inland harbors serving two or more single family residential riparian lots shall, if practical, be located along the mutual boundary of properties to be served.

(b) Private inland harbors for proposed multi-family or cluster developments, residential planned unit developments, or for resorts, campgrounds, or other commercial

purposes:

(1) The development plan shall be approved by the local governmental unit;

(2) The permit shall be of the title-registration type including a provision that the individual waterfront lots in the development have priority rights to the available mooring spaces thus obviating issuance of future permits for individual harbors for these lots; and

(3) The harbor shall be appropriately sized, consistent with the number of watercraft to be served with the number of mooring spaces not to exceed one mooring space for each riparian unit served or each rental cabin or campsite unit plus consideration of use by transient watercraft.

(c) Public inland harbor projects must be justified by:

(1) a public need for the proposed inland harbor established by local governmental resolution specifying public interests to be enhanced;

(2) the harbor shall be appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served;

(3) the harbor shall be available for use by the general public; and

(4) the harbor may extend more than 200 feet inland provided the plans minimize the total length by which the protected water is proposed to be extended in keeping with the number of watercraft to be served and the topography.

5. Excavations for fish and wildlife habitat improvement.

a. Excavation to restore or improve fish and wildlife habitat require:

(1) plans showing the nature and degree of habitat to be benefited; and

(2) information showing that the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

b. Excavations in trout streams officially designated

by the commissioner shall be allowed only if:

(1) the amount, method, and location of the excavation will not result in increased water temperatures, cause excessive sedimentation in the stream, or destruction of fish habitat; and

(2) there is no other feasible or practical alternative other than excavation.

6. Excavations in protected watercourses. Except as noted in B.3., a permit shall be required for any excavation in a protected watercourse and shall be subject to the following specific requirements in addition to the general requirements of B.:

a. The watercourse capacity shall be sufficient to adequately convey normal runoff.

b. The watercourse bottom gradients shall be such that normal low flow velocities are nonerosive and the sideslopes shall be graded such that bank slumping is not a hazard. Where excavation will result in excessive bank erosion, energy dissipation structures, channel and bank protection, or other engineering measures shall be required.

c. The outlet shall be adequate in that it:

(1) sufficiently conveys the discharge waters from the area proposed for excavation;

(2) does not produce substantial increases in downstream overbank flooding; and

(3) does not produce downstream erosion hazards as a result of the watercourse excavation.

d. When projects involve widening or straightening which alters the watercourse banks, all sideslopes which contribute direct surface runoff into the authorized altered watercourse, and a strip of land along both sides of the watercourse, one rod wide or to the top of the spoil bank, whichever is the greater, shall be seeded and maintained in permanent grasses. No mowing of this grassed strip shall be allowed until after July 31 of each year.

e. The alignment and slope of the excavated channel

shall be such as to provide a smooth transition between the existing and the excavated channel.

f. Disposal of excavated material from channel excavation shall be consistent with B.4., except where the original channel is allowed to be filled as part of the project.

g. No significant increase in flood damages will be permitted. Floodwater retardance structures may be required to minimize any increase in flood damage.

h. The applicant shall submit the names and addresses of landowners located immediately upstream, downstream, and adjacent to any proposed watercourse alteration resulting from excavation. In addition, the applicant shall submit the names and addresses of other landowners and occupants that the commissioner, after reviewing the plans for the proposed excavation, believes will have a substantial interest in the channel change or will be substantially affected by the watercourse alteration.

i. The preferred alternative to widening, deepening, or straightening a watercourse for control of flood waters is the construction of water impoundment structures in upstream areas. Where impoundments are infeasible, impractical, or would result in adverse effects on health and safety or greater adverse environmental effects, the preferred alternative is the construction of flood bypass channels to convey high velocity flood flows.

(1) Excavations in protected watercourses for flood management purposes shall be allowed only where an upstream impoundment or a flood bypass channel is infeasible or impractical or excavation is the least damaging environmentally.

(2) Excavations for widening, deepening, or straightening portions of watercourses shall be based on flood management plans which provide details on the relationship of the proposed excavation to management of flood flows for the entire watercourse and shall be consistent with state standards and state approved local standards for floodplain management including maximum use of nonstructural measures where feasible

and practical.

j. Excavations shall be limited to the minimum extent necessary to facilitate construction of the road crossing and shall include provisions for adequate riprap or other bank protection measures to protect altered banks from erosion.

k. Excavations for construction of sediment traps or settling basins to control sedimentation and water quality shall be based on plans approved by the Pollution Control Agency or the local soil and water conservation ~~districts~~ district and shall be consistent with any state and local standards, regulations, and requirements.

l. Watercourse channel excavations to restore or improve fish and wildlife habitat shall require:

(1) plans showing the nature and degree of habitat to be benefited; and

(2) information showing that the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

m. Watercourse channel excavations in trout streams officially designated by the commissioner shall only be allowed if:

(1) the amount, method, and location of the channel excavation will not result in increased water temperatures, cause excessive sedimentation in the stream, or destruction of fish habitat; and

(2) there is no other feasible or practical alternative other than channel excavation.

n. The straightening or realignment of a watercourse with a total drainage area, at its mouth, greater than five square miles shall only be permitted where the project will not result in increased downstream flooding, erosion, or sedimentation. Where it is proposed to straighten or realign a watercourse with a total drainage area, at its mouth, greater than five square miles, the applicant may be required to submit appropriate hydraulic data. Such data may include, but are not limited to:

? not specific

(1) contributing watershed above the project;

(2) data for the flood of record;

(3) maximum observed high water level;

(4) flow data, based on the best available technology as follows:

(a) existing and proposed time of concentration;

(b) existing and proposed stage downstream;

(c) existing and proposed mean velocity downstream;

(5) certification that the data was prepared by a registered professional engineer.

o. The alteration of watercourses by straightening or realigning channels to facilitate adjacent land use shall be allowed only if the applicant provides evidence:

(1) that the alteration is reasonable, practical, and will adequately protect public safety and welfare; and

(2) that the alteration will involve a minimum of encroachment, change, or damage to the environment, particularly to the ecological system of the waterway.

p. All other proposals for excavations in protected watercourses shall meet the general requirements of B. and the specific requirements of C.1.-5. and shall require submission of supporting evidence as provided in C.6.n. and o.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to excavations proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR S 1.5021, Structures 6 MCAR S 1.5023, Water level controls 6 MCAR S 1.5024, Bridges and culverts 6 MCAR S 1.5025, Drainage of protected waters 6 MCAR S 1.5026, and Alterations of protected waters for mining 6 MCAR S 1.5027.

6 MCAR S 1.5023 Structures in protected waters.

A. Goals. It is the goal of the department to limit the occupation of protected waters by offshore navigational

facilities, retaining walls, and other structures in order to:

1. preserve the natural character of protected waters and their shorelands;

2. provide a balance between the protection and utilization of protected waters; and

3. encourage the removal of existing structures which do not serve the public interest from the beds of protected waters at the earliest practicable date.

B. General standards.

1. Scope. This rule applies to the placement, construction, reconstruction, repair, relocation, abandonment, or removal of any structure placed on or in protected waters.

2. Placement of structures shall not be permitted where the structure:

a. Will obstruct navigation or create a water safety hazard.

b. Will be detrimental to significant fish and wildlife habitat, or protected vegetation. Construction is prohibited in posted fish spawning areas.

c. Is designed or intended to be used for human habitation or as a boathouse.

d. Is designed or intended to include walls, a roof, or sewage facilities.

3. No permit shall be required for the following activities, unless prohibited under 2.:

a. To construct, reconstruct, or install a seasonal dock or floating structure provided:

(1) the structure will not constitute a hazard to navigation or public health, safety, and welfare, as determined by the commissioner;

(2) the structure will not include fuel-handling facilities;

(3) the structure will allow the free flow of water beneath it; and

(4) the structure is not used or intended to be used as a marina.

b. To construct or reconstruct a permanent dock on wood pilings or rock filled cribs on lakes provided:

(1) the dock is a single lineal structure with no appurtenances;

(2) only one dock is installed per riparian lot;

(3) the structure shall not exceed six feet in width nor exceed 50 feet in length, or extend to a depth greater than four feet, whichever is less;

(4) the structure shall comply with the requirements of 3.a.(2), (3), and (4) above;

(5) for a permanent dock on wood pilings, the surface area of the lake is equal to or greater than 500 acres;

(6) for a permanent dock on rock filled cribs, the surface area of the lake is equal to or greater than 2,500 acres; and

(7) structures using rock filled cribs shall only be placed where the lakebed is predominantly bedrock which is incapable of supporting wood pilings and shall utilize intermittently spaced cribs which allow unrestricted circulation of water beneath the dock.

c. To construct or reconstruct a boat launching ramp provided:

(1) Privately owned ramps shall not exceed 12 feet in width, and extend more than ten feet beyond the ordinary high water mark or into water more than four feet in depth, whichever is less. Excavations five cubic yards or less, and placement of up to five cubic yards of crushed rock, gravel, clean sand, or small stone shall be allowed in order to provide a stable base or maintain use of the ramp.

(2) Publicly owned ramps shall not exceed 24 feet in width and extend more than 20 feet waterward of the shoreline or into water more than four feet in depth, whichever is less. Excavations of 60 cubic yards or less, and placement of up to 30 cubic yards of crushed rock, gravel, clean sand, or small stone shall be allowed in order to provide a stable base or maintain use of the ramp.

(3) The ramp shall be constructed of gravel, natural rock, concrete, steel matting, or other durable inorganic material not exceeding six inches in thickness.

d. Remove structures or other waterway obstructions provided:

(1) the original cross-section and bed conditions shall be restored insofar as practicable;

(2) the structure shall be completely removed including any footings or pilings which obstruct navigation;

(3) the structure is not located on an offically designated trout stream;

(4) the structure does not function as a water level control device.

4. Permits shall be required for the construction, reconstruction, repair, or relocation of any structure on or in protected waters, except as provided under B.2. and 3. above, and shall meet the following general criteria:

a. The proposed project must represent the minimal impact solution to a specific need with respect to all other reasonable alternatives.

b. The project will involve a minimum of encroachment, change, or damage to the environment, including but not limited to fish and wildlife habitat, navigation, water supply, and storm water retention.

c. The proposed structure shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

d. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

e. The proposed structure shall be consistent with water and related land management plans and programs of local and regional governments, provided these plans and programs are consistent with state plans and programs.

f. Except for docks and boat ramps, all new structures shall have a title-registered permit, unless a public agency or

local governmental unit accepts responsibility for future maintenance or removal.

C. Specific standards. In addition to compliance with the general standards in B., specific requirements shall apply to the following activities:

1. Docks. Except as provided in B.2.b., a permit shall be required for the construction or reconstruction of any dock and shall be granted provided:

a. Similarly situated docks in the vicinity have not experienced maintenance difficulty and the use of a seasonal dock is precluded because:

(1) long fetches would subject seasonal docks to damaging storm wave conditions;

(2) bottom conditions such as bedrock or an extremely gradual offshore slope would preclude the use of seasonal dock stringers; or

(3) the number of public and private users is so great the seasonal docking equipment would not provide adequate stability.

b. Piling docks shall be preferred in all cases unless the depth to bedrock is too shallow to allow the driving of piles, in which case rock crib docks may be authorized.

c. The docks shall extend waterward only to a navigable depth, generally considered to be no greater than four feet.

d. The dock shall not exceed six feet in width.

2. Wharves.

a. A permit shall be required for the construction or reconstruction of all wharves. The following order of preference for construction types shall be utilized:

(1) bulkheaded shoreline;

(2) inland slip with bulkheaded sidewalls;

(3) wharf projecting into protected waters.

b. Wharves shall be permitted provided the structure:

(1) is part of a designated port facility;

(2) is consistent with local land use plans and

ordinances;

(3) does not extend further waterward than any existing wharves in the area or beyond any established harbor line, whichever is less;

(4) size is the minimum practicable; and

(5) is not an obstruction to flood flows or longshore drift and is adequately designed to resist the natural forces of ice, wind, and wave.

3. A permit shall be required for the construction or reconstruction of all offshore breakwaters and marinas. These structures shall be permitted provided the following general conditions and the additional listed specific conditions are met:

a. Alternative dock or inland facilities are infeasible.

b. The facility shall be adequate in relation to appropriate engineering factors including but not limited to those listed in 6 MCAR S 1.5022 C.4.e.(2)(f)-~~(m)~~ (n).

c. The plan shall be adequate in relation to appropriate geologic and hydrologic factors including but not limited to those listed in 6 MCAR S 1.5022 C.4.e.(2)(a)-(e).

? not specific what other factors

d. The size and shape shall be designed in a compact fashion so as to blend in with the surrounding shoreline while minimizing the surface area occupied in relation to the number of watercraft to be served.

e. The breakwaters shall not exceed the minimum thickness necessary to withstand the anticipated forces consistent with maintenance requirements and shall be faced with an adequate layer of natural rock riprap of appropriate size and gradation.

f. The following types of offshore structures shall be permitted, subject to the listed specific conditions:

(1) Private offshore structures serving several contiguous riparian lots; provided:

(a) The site shall meet the standards of C.1. for a dock.

(b) The structure shall minimize encroachment

waterward of the ordinary high water mark.

(c) The total length of the structure shall be appropriately sized to provide a single mooring space for each riparian lot served.

(2) Private offshore structures for proposed multi-family or cluster or residential planned unit developments; provided:

(a) The structure shall minimize encroachment waterward of the ordinary high water mark and its total length shall be appropriately sized to provide a single mooring space for each riparian lot to be served. The number of mooring spaces to be provided shall generally be the amount of natural shoreline to be served divided by the lot frontage requirements of the local land use control authority.

(b) The development plan shall be approved by the local land use control authority.

(3) Private offshore structures for resorts, campgrounds, or similar enterprises; provided:

(a) The structure shall minimize encroachment waterward of the ordinary high water mark and its total length shall be appropriately sized to provide one mooring space for each rental cabin or campsite unit plus a reasonable number of mooring spaces for transient watercraft.

(b) The development plan shall be approved by the local land use control authority.

(4) Public offshore structure projects; provided:

(a) A local unit of government shall pass a resolution which specifies the public interests to be benefited by the proposal.

(b) The structure shall be appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served.

(c) The structure shall be available for use by the general public.

(d) The development plans shall minimize the waterward encroachment of the facilities.

(5) Offshore marinas; provided:

(a) The area shall be zoned for such use or local government shall grant a land use permit.

(b) The proposed marina shall minimize encroachment waterward of the ordinary high water mark.

(c) The marina shall be sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served.

4. A permit shall be required for the construction or reconstruction of all retaining walls and erosion and sedimentation control structures that do not impound water. The construction of retaining walls shall be discouraged because their appearance is generally not consistent with the natural environment and their construction and maintenance cost is generally greater than riprap.

The issuance of permits shall be contingent on the following conditions:

a. Existing or expected erosion problems shall preclude the use of riprap shore protection, or there shall be a demonstrated need for direct shoreland docking; or

b. Design shall be consistent with existing uses in the area. Examples are: riverfront commercial-industrial areas having existing structures of this nature, dense residential shoreland areas where similar retaining walls are common, resorts where floating docks may be attached to such a bulkhead, or where barges are utilized to transport equipment and supplies; and

c. Adequate engineering studies shall be performed of foundation conditions, tiebacks, internal drainage, construction materials, and protection against flanking; and

d. The facility shall not be an aesthetic intrusion upon the area and is consistent with all applicable local, state, and federal management plans and programs for the water body; and

e. Encroachment below the ordinary high water mark shall be held to the absolute minimum necessary for construction.

5. A permit shall be required for the construction or reconstruction of any boat launching ramp not covered under B.3.c., and shall be granted provided:

a. the applicant shall demonstrate a need for a launching facility;

b. the proposed ramp shall be of the minimum dimensions necessary for launching of watercraft;

c. the proposed ramp shall not obstruct flowing water; and

d. construction shall not necessitate alteration of shoreland which could result in substantial erosion and sedimentation.

6. A permit shall be required for the construction, reconstruction, relocation, removal, repair, and abandonment of all other offshore structures, cables other than utility crossings, pilings, or other facilities not covered by specific regulations:

a. Permits for structural repair, relocation, or modification, other than minor maintenance work such as reroofing, painting of structures or similar work, shall be issued provided all of the following conditions are met:

(1) the applicant demonstrates a need for the work;

(2) the cost of the work will not exceed 50 percent of the replacement cost of the structure;

(3) the degree of permanence of the structure will not be materially increased by virtue of constructing a new foundation or replacing the majority of the structure above the foundation;

(4) the structure being repaired has appropriate permits from the local land use or sanitary authority;

(5) the degree of obstruction or structure size is not increased.

b. Permits for construction, relocation, or reconstruction of publicly-owned structures shall be issued where:

(1) public need is documented and outweighs adverse

environmental impact;

(2) the site is adequately protected from the forces of ice and wave pressures; and

(3) the proposed construction is of sound design and is not necessarily obtrusive or visually incompatible with the natural surroundings.

? open to subjective interpretation

c. The construction, relocation, or reconstruction of privately-owned structures shall be permitted only when a governmental agency or local governmental unit accepts responsibility for future maintenance of the structure or its removal.

7. Where the commissioner has determined that a structure is no longer functional, constitutes a public nuisance or a hazard to navigation, or poses a threat to public health or safety, the structure shall be removed from protected waters under the applicable provisions of these rules. Except as provided under B.3.d., a permit is required for the removal or abandonment of all existing waterway obstructions including boathouses, bridges, culverts, pilings, piers, and docks. Permits shall be issued provided:

a. the original cross-section and bed conditions will be restored insofar as practicable;

b. adequate provisions are made to mitigate any side effects resulting from removal, such as restoration of wave or current forces; and

c. no portion of the structure remains which would obstruct or impair navigation, interfere with the passage of flood waters, or contribute to erosion and sedimentation.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section.

Unless otherwise specified in other rules, the provisions of this rule shall apply to structures proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR S 1.5021, Excavations 6 MCAR S 1.5022, Water level controls 6 MCAR S 1.5024, Bridges and culverts 6 MCAR S

.5024

1.5025, Drainage of protected waters 6 MCAR S 1.5026, and Alterations of protected waters for mining 6 MCAR S 1.5027.

6 MCAR S 1.5024 Water level controls.

A. Goals. It is the goal of the department to manage protected waters in order to:

1. maintain natural flow and natural water level conditions to the maximum feasible extent;

2. encourage the construction of small upstream retarding structures for the conservation of water in natural waterbasins and watercourses, consistent with any overall plans for the affected watershed area; and

3. limit the artificial manipulation of water levels except where the balance of affected public interests clearly warrants the establishment of appropriate controls and it is not proposed solely to satisfy private interests.

B. General standards.

1. Scope. The construction, repair, reconstruction, or abandonment of any structure intended to impound, divert, or control the level or flow of protected waters shall be subject to the provisions of this rule.

2. Construction or reconstruction of water level control facilities shall not be allowed where it is intended to manipulate water levels solely to satisfy private interests.

3. No permit shall be required to construct, reconstruct, or abandon a water level control structure on protected watercourses with a contributing watershed of 300 acres or less, except on officially designated trout streams, provided the structure does not qualify as a dam under the rules for dam safety.

4. Permits shall be required for the construction, repair, reconstruction, or abandonment of any water level control structure except as provided in 2. and 3., and shall meet the following general criteria:

a. The project will involve a minimum of encroachment, change, or damage to the environment including but not limited to fish and wildlife habitat, navigation, water supply, storm

water retention, and agricultural uses.

b. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

c. The proposed project shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

d. The proposed project shall be consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs.

e. The construction or reconstruction shall comply with the requirements of 6 MCAR SS 1.5030-1.5034 with respect to dam safety for the protection of human life and property.

f. The construction or reconstruction of water level control structures or changing the level of an existing structure may be permitted to:

(1) control and store flood waters;

(2) maintain low flows for instream flow or water level protection;

(3) manage water quality, including the prevention ~~and/or~~ or control of erosion and sedimentation;

(4) improve water-based recreation;

(5) create, improve, and maintain water supplies;

(6) create, improve, or maintain aquatic habitat for fish and wildlife species;

(7) establish, improve, or maintain the generation of hydroelectric power.

~~5.--The-commissioner-shall-require-the-owner-or-operator of-any-water-level-control-structure,-reservoir,-or-waterway obstruction-within-protected-waters,-constructed-before-a-permit was-required-by-law,-to-secure-approval-from-the-commissioner-of the-manner-by-which-the-structure-is-to-be-operated-and maintained-whenever-the-commissioner-finds-that-such-operation and-maintenance-approval-is-necessary-in-the-public-interest after-there-is-either:~~

withdrawn per FoF

a.--verified-and-supported-complaints-by-the-public-or governmental-agencies-that-the-existing-or-proposed-operation and-maintenance-is-or-would-be-detrimental-to-public-health, safety,-and-welfare-or-environmental-protection-with-respect-to problems-of-flooding,-instream-flows,-water-quality,-fish-and wildlife,-or-violations-of-land-use-regulations,-requirements, and-standards-for-lands-abutting-the-protected-waters-involved; or

b.--notification-to-the-commissioner-by-the-owner-or operator-of-the-intent-to-make-any-of-the-following-changes-in the-operation-or-maintenance-of-the-structure:

(1)-proposed-new-uses-or-reuse-of-the-structure-for any-purpose-after-the-use-of-the-structure-has-been-discontinued for-at-least-one-year;-or

(2)-proposed-changes-or-alterations-in-the-operaton of-the-structure-which-would-affect-water-levels,-flows,-or water-quality-in-protected-waters.

6.--The-owner-or-operator-of-any-water-level-control structure,-reservoir,-or-waterway-obstruction-within-protected waters,-constructed-before-a-permit-was-required-by-law,-shall comply-with-the-following-provisions-when-notified-by-the commissioner-that-approval-is-required-for-operation-and maintenance-of-the-structure:

a.--The-owner-or-operator-shall-submit-plans, specifications,-and-information-on-the-structure-including:

(1)-An-explanation-of-the-purposes-for-which-the structure-is-operated-or-intended-to-be-operated.

(2)-Available-data-on-the-past-history-of-use-and operation-of-the-structure-and-any-evidence-of-easements-or other-rights-which-exist-or-would-be-obtained.

(3)-Engineering-details-on-the-structural-features and-characteristics-of-the-structure-which-involve-the-existing or-proposed-operation-of-the-structure-including-but-not-limited to-any-gates,-sluiceways,-penstocks,-turbines,-waterwheels,-or other-mechanical-devices-employed-or-to-be-employed-in-the operation-of-the-structure.

withdrawn per FSF

~~(4) Available information on the hydraulic and hydrologic characteristics of the structure and the area upstream and downstream of the structure which is affected by the structure including any available information on flows, water levels, and water quality.~~

~~(5) Available information on the physical condition of the structure including engineering data on original construction, any reconstruction or repairs and the dates of original construction and subsequent reconstruction or repairs.~~

~~(6) If the structure contains features or is intended to contain features which allow or would allow manipulations of water levels, details shall be provided on the methods, frequency, time, duration of operaton, and any existing or proposed operating plans.~~

~~(7) Such other available or attainable information on hydraulic, hydrologic, or geologic characteristics as the commissioner may deem necessary in order to assess the impacts or effects of the structure and its operation.~~

~~b. After receipt of all supporting facts and available information required by 5. and 6.a., the commissioner shall review the existing or proposed operational and maintenance aspects of the structure and shall grant approval of the operation and maintenance provided that:~~

~~(1) The operation and maintenance does not or will not result in destruction or significant impairment of the protected waters with respect to:~~

~~(a) the ecosystem of the protected waters including quantity and quality effects;~~

~~(b) potential threats to life or property due to flooding and overflow of upstream and downstream lands unless allowed by easement or other legal means including acquisition of flooded property;~~

~~(c) maintenance of adequate water flows and levels for upstream and downstream higher priority users particularly for public domestic water supplies.~~

~~(2) The existing or proposed operation and~~

withdrawn DEC FSFF

~~maintenance is or will be consistent with applicable state and local land use standards, regulations, and requirements including floodplain, shoreland, and wild and scenic rivers management standards and ordinances.~~

~~(3) The existing or proposed operation and maintenance does not or will not result in significant decreased public use of the surface of the protected waters affected by the structure including existing uses for fishing, hunting, or navigation.~~

~~(4) The existing or proposed operation and maintenance will comply, when applicable, with the requirements of 6 MCAR SS 1.5030 1.5034 relating to dam safety.~~

~~c. If the commissioner determines that the existing or proposed operation and maintenance will be detrimental to public health, safety, and welfare or the ecosystem of the protected waters based on provisions of 6.b., the commissioner shall not approve the manner of operation and maintenance of the structure until the operation and maintenance is modified to meet the provisions.~~

C. Specific standards. In addition to the general standards in B., specific requirements for water level control structures shall be met as follows:

1. Permanent lake level control facilities shall be approved when the commissioner initiates proceedings for the purpose of conserving or utilizing the water resources of the state and assumes responsibility for operation and future maintenance, or when all of the following conditions are met:

a. The ordinary high water mark and runout elevation of the water body have been determined by a detailed engineering survey, or by order of the commissioner following a public hearing;

b. The proposed facilities shall be "reasonably consistent with natural conditions":

(1) Where a functioning outlet existed in a state of nature or for a long period of time following lawful creation or alteration of an outlet by the activities of man or animals, or

cataclysmic events, the proposed outlet is at essentially the same control elevation;

(2) Where no natural or artificial outlet exists and the lake is for all practical purposes "landlocked," the control elevation shall not be more than 1-1/2 feet below the ordinary high water mark;

c. The project is sponsored by a governmental unit which assumes responsibility for operation and future maintenance, except where:

(1) the majority of the riparian owners sign the permit application;

(2) appropriate easements or other property interests have been obtained from all affected owners;

(3) a title-registration type permit shall be issued to the owner or owners of the property upon which the proposed water level control structure will be located; and

(4) the structure will further public interests in navigation, propagation of fish or wildlife, or other beneficial public uses of the water;

d. Justification has been made of the need in terms of public and private interests and the available alternatives, including the impact on receiving waters and public uses thereof, through a detailed hydrologic study; and

e. A detailed plan is developed for operation and control including:

(1) manner and time of operation;

(2) frequency of maintenance;

(3) appropriate monitoring of water levels, water quality, and other factors;

(4) management of excess waters.

2. Fish and wildlife management proposals made pursuant to Minnesota Statutes, section 97.48, subdivision 11, or other appropriate authority shall be approved where:

a. The protected water has been designated for wildlife management purposes.

b. There is a specific water level management plan for

the lake basin.

c. Any drawdown of the lake is only temporary and the management plans include a permanent facility for restoration of water levels following such drawdowns.

d. Any alteration of a watercourse included in the plan follows the requirements specified in 6 MCAR S 1.5022 C.6.

e. Appropriate easements or fee title have been obtained.

f. Specified management personnel are required to establish a lake level gauge and keep a record of water levels with a specified frequency during seasons of active water level manipulation and with a lesser frequency during all other open water seasons.

3. Plans for landlocked waterbasins less than 25 acres in surface area and contained completely within the municipal boundaries of a single city shall be approved where:

a. A municipal drainage plan for the affected tributary watershed is prepared by a qualified engineer or hydrologist and is approved by the affected watershed district and the city.

b. The city has a field survey made of the waterbasin after consultation with the department including but not limited to:

(1) the elevation of the aquatic vegetation fringe;

(2) the elevation of the tree line and a description of the location, type, and size of representative trees;

(3) groundwater elevations, if appropriate;

(4) other information as requested by the department.

c. Control elevations and associated physical parameters are approved by the department and the city.

d. The city holds a public hearing on the proposal and provides a transcript of the proceedings to the department. Provision of a transcript may be waived by the department.

4. Permits for the construction, reconstruction, and abandonment of all other water level control structures shall be issued provided:

a. The need is established in terms of quantifiable benefits.

b. The structural design shall be done by a professional engineer or by a qualified engineer of the Soil Conservation Service or the Corps of Engineers and must include the following considerations:

(1) gravity forces;

(2) hydrostatic pressure;

(3) uplift forces;

(4) overturning moment;

(5) resistance to sliding;

(6) ice pressures;

(7) earthquake forces;

(8) slope stability including consolidation and pore pressures;

(9) seepage collection or prevention;

(10) foundation conditions including appropriate borings and determination of the strength of foundation materials;

(11) specifications for materials of construction and their placement or installation;

(12) adequate construction inspection to assure conformance with design assumptions; and

(13) adequacy of the cofferdam or diversion during construction, if any.

c. Adequate assurances shall be made for future maintenance of new water level control structures:

(1) For water level control structures 25 feet or more in structural height or having a maximum storage capacity of 50 acre-feet or more, permits will be issued only to governmental agencies, public utilities, or corporations having authority to construct and maintain such projects, except that a title-registration type permit may be issued to the owner or owners of the private property upon which the proposed water level control structure will be located where the provisions of C.l.c. are met.

(2) For other water level control structures, title-registration type permits may be issued to the owner or owners of the private property upon which the water level control structure will be located which shall run with the land and require breaching or removal if it ever falls into a state of disrepair or becomes unsafe.

(3) Periodic engineering inspections of authorized water level control structures may be made by the department or its designee.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to water level control structures proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR S 1.5021, Excavations 6 MCAR S 1.5022, Structures 6 MCAR S 1.5023, Bridges and culverts 6 MCAR S 1.5025, Drainage of protected waters 6 MCAR S 1.5026, and Alterations of protected waters for mining 6 MCAR S 1.5027.

6 MCAR S 1.5025 Bridges and culverts, intakes and outfalls.

A. Goals. It is the goal of the department to allow crossings of protected waters, including the construction of water intake and sewer outfall structures in protected waters, only when less detrimental alternatives are unavailable or unreasonable, and where such facilities adequately protect public health, safety, and welfare.

B. General standards.

1. Scope. The construction or reconstruction of any bridge, culvert, intake, outfall, or other crossing of protected waters shall be subject to the provisions of this rule. Abandonment or removal of all crossings and structures governed by this rule shall require a permit pursuant to 6 MCAR S 1.5023 C.7.

2. Crossings shall not be permitted where the project:

a. Will obstruct navigation or create a water safety hazard.

b. Will cause or contribute to significant increases in flood elevations and flood damages either upstream or downstream.

c. Would involve extensive channelization above and beyond minor stream channel realignments to improve hydraulic entrance or exit conditions, except where a separate permit is obtained pursuant to 6 MCAR S 1.5022 C.6.; or

d. Will be detrimental to water quality, or significant fish and wildlife habitat, or protected vegetation.

3. No permit shall be required to construct the following types of crossings on protected waters, unless prohibited in 2.:

a. To construct or reconstruct a bridge or culvert on a protected watercourse with a total drainage area, at its mouth, of five square miles or less, except on officially designated trout streams.

b. To construct or reconstruct a low-water ford type crossing provided that:

(1) the stream bed is capable of supporting the crossing without the use of pilings, culverts, dredging, or other special site preparation;

(2) the water depth does not exceed two feet under normal summer flow conditions;

(3) the crossing conforms to the natural cross-section of the stream channel and does not reduce or restrict normal low-water flows;

(4) the original stream bank at the site does not exceed four feet in height;

(5) the crossing is constructed of gravel, natural rock, concrete, steel matting, or other durable inorganic material not exceeding one foot in thickness;

(6) the approach is graded to a finished slope not steeper than 5:1 horizontal:vertical, and all graded banks are seeded or mulched to prevent erosion and sedimentation; and

(7) the crossing is not placed on an officially designated trout stream, on a wild, scenic, or recreational river or on an officially designated canoe and boating route.

c. To construct or reconstruct a temporary bridge provided that:

(1) The stream bank is capable of supporting the bridge without the use of foundations, pilings, culverts, excavation, or other special site preparation;

(2) Nothing is placed in the bed of the stream;

(3) The bridge is designed and constructed so that it can be removed for maintenance and flood damage prevention;

(4) The bridge is firmly anchored at one end and so constructed as to swing away in order to allow flood waters to pass;

(5) The lowest portion of the bridge shall be at least three feet above the ordinary high water mark on navigable streams; and

(6) The bridge is consistent with state and local rules and regulations for floodplain, shoreland, and wild, scenic, or recreational rivers management standards and ordinances.

d. To maintain the hydraulic adequacy of any storm sewer or agricultural drain tile outfall or ditch which has been functioning within the previous five years if such work does not alter the original course, current, or cross-section of the protected waters.

e. To install an agricultural drain tile outletting into protected waters provided:

(1) the bank is restored to the original cross-section or contour; and

(2) no permanent structure is placed below the ordinary high water mark, except for the drain tile.

4. Permits shall be required for the construction or reconstruction of any bridge, culvert, intake, outfall, or other crossing of protected waters except as provided in 2. and 3. above, and shall meet the following general criteria:

a. The project will involve a minimum of encroachment, change, or damage to the environment including but not limited to fish and wildlife habitat, navigation, water supply, and

storm water retention.

b. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

c. The proposed crossing shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers mangement standards and ordinances for the waters involved.

d. The proposed crossing shall be consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs.

e. Crossings of protected waterbasins or wetlands shall be allowed only where there is no feasible and practical alternative which does not require filling, excavating, or the placement of a structure in protected waters.

C. Specific standards. In addition to the general standards in B., specific requirements for bridges, culverts, intakes, outfalls, and other crossings of protected waters shall be met as follows:

1. The construction, reconstruction, or relocation of all bridges, culverts, or other crossings over protected waters shall be permitted provided all of the following criteria are met:

a. The hydraulic capacity of the structure must be established by a competent technical study. The sizing shall not be based solely on the size of existing upstream and downstream structures. If a state or federal floodplain information study exists for the area, or a U.S. Geological Survey gaging station is located nearby on the stream, the hydraulics of the proposed bridge/culvert design must be consistent with these data. The department may waive this requirement if:

(1) the department has performed a hydraulic study based upon available information and reasonable assumptions;

(2) the department has made a field investigation of the project site;

(3) the project will not cause flood-related damages or problems for upstream or downstream interests.

b. New crossings and replacements of existing crossings must comply with local floodplain management ordinances and with provisions of NR 87 (d) (1) (6 MCAR S 1.0087 (d) (1)).

(1) New crossings:

(a) No approach fill for a crossing can encroach upon a community designated floodway.

(b) Where a floodway has not been designated or where a floodplain management ordinance has not been adopted, increases in flood stage in the regional flood of up to one-half of one foot shall be permitted if they will not materially increase flood damage potential. Additional increases may be permitted if: a field investigation and other available data indicate that no significant increase in flood damage potential would occur upstream or downstream, and any increases in flood stage are reflected in the floodplain boundaries and flood protection elevation adopted in the local floodplain management ordinance.

(2) Replacement of existing crossings:

(a) If the existing crossing has a swellhead of one-half of one foot or less for the regional flood, the replacement crossing shall comply with the provisions for new crossings in C.1.b.(1).

(b) If the existing crossing has a swellhead of more than one-half of one foot for the regional flood, stage increases up to the existing swellhead may be allowed provided field investigation and other available data indicate that no significant flood damage potential exists upstream from the crossing based on analysis of data submitted by the applicant. The swellhead for the replacement crossing may exceed the existing swellhead if it complies with the provisions for new crossings found in C.1.b.(1)(b).

(3) The decks and approaches to bridges or culverts on major transportation routes and on roads that provide access

to development at urban densities shall be no lower than two feet below the flood protection elevation as defined in NR 87 (e) (6 MCAR S 1.0087 (e)) unless it can be shown that alternative routes or access can be provided during the regional flood.

c. The structure shall provide for game fish movement, unless the structure is intended to impede rough fish movement or the stream has negligible fisheries value.

d. The structure will not obstruct reasonable public navigation. For bridges over protected watercourses, three feet above the calculated 50-year flood stage will ordinarily satisfy navigational clearance requirements. For bridges over protected waterbasins or wetlands, and all culverts, three feet of clearance above the ordinary high water mark will ordinarily satisfy navigational requirements.

e. Any project proposed near an existing or proposed segment of the state trails system should be consistent therewith.

f. Footbridges and walkways:

(1) Over watercourses:

(a) Must be designed to cause negligible backwater effects during floods.

(b) Must be securely anchored or otherwise capable of withstanding the dynamic forces of flowing water, ice, and debris.

(c) Approaches must not be raised above the adjacent floodplain lands.

(2) New walkways across any portion of protected waters to provide private access to an island will be prohibited. Permits for reconstruction of existing walkways or for the construction of new walkways intended to provide public access will be issued only if:

(a) The walkway provides the only existing access to the island.

(b) There is existing development thereon.

(c) The design will provide for any public

navigational needs and is consistent with the natural surroundings.

2. The construction, reconstruction, or relocation of all water intake and sewer outfall structures placed in protected waters shall be permitted provided all of the following criteria are met:

a. Adequate attention is given to methods of screening the structure from view as much as possible from the surface of the protected water through the use of existing vegetation ~~and/or~~ or new plantings.

b. The project is not detrimental to public values including but not limited to fish and wildlife habitat, navigation, water supply, water quality, or storm water retention.

c. No site conditions will require frequent future disruption of the beds of protected waters.

d. Adequate precautions must be planned during and after construction to prevent silt, soil, and other suspended particles from being discharged into protected waters.

e. Adjacent to the intake structure, the banks and bed of the protected water must be protected from erosion and scour by placement of suitable riprap shore protection.

f. The banks must be revegetated by seeding and/or sodding.

g. The structure must be designed by a professional engineer.

h. Intake structures:

(1) Excavation must be detailed in the application and on design plans.

(2) Where necessary, a water appropriation permit must be obtained from the department prior to operation.

(3) An appropriate sized screen must be used to prevent fish intake.

i. Outfall structure design shall:

(1) Where necessary, incorporate a stilling-basin, surge-basin, energy dissipator, or other device or devices to

minimize disturbance and erosion of natural shoreline and bed resulting from peak flows.

(2) Where feasible, utilize discharge to natural wetlands, natural or artificial stilling or sedimentation basins, or other devices for entrapment of sand, silt, debris, and organic matter.

(3) Where feasible, maximize use of natural or artificial ponding areas to provide water retention and storage for the reduction of peak flows into protected waters.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to bridges and culverts proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR S 1.5021, Excavations, 6 MCAR S 1.5022, Structures 6 MCAR S 1.5023, Water level controls 6 MCAR S 1.5024, Drainage of protected waters 6 MCAR S 1.5026, and Alterations of protected waters for mining 6 MCAR S 1.5027.

6 MCAR S 1.5026 Drainage of protected waters.

A. Goals. It is the goal of the department to protect and preserve protected waterbasins and wetlands from damage or destruction by drainage.

B. General standards.

1. Scope. This rule relates to the partial drainage or temporary drawdown of protected waterbasins and wetlands for all purposes except mining of metallic or nonmetallic minerals which are subject to provisions of 6 MCAR S 1.5027.

2. Except as provided in Minnesota Statutes, section 105.391, subdivision 3, the permanent or total drainage of protected waterbasins and wetlands shall not be permitted.

3. A permit shall be required for the partial drainage or temporary drawdown of protected waterbasins and wetlands and shall be granted provided all of the following conditions are met:

a. The proposed project is intended to achieve one or more of the following purposes:

(1) improve navigational or recreational uses;

(2) improve or restore fish or wildlife habitat;

(3) expose sediment in order to remove or eliminate nutrients or contaminants;

(4) alleviate flooding of agricultural lands caused by artificial obstruction of downstream drainage or increased upstream discharge;

(5) allow the mining of iron ore, taconite, copper, copper-nickel, or nickel under the provisions of Minnesota Statutes, section 105.64.

b. The project will involve a minimum of encroachment, change, or damage to the environment including but not limited to fish and wildlife habitat, navigation, water supply, water quality, and storm water retention.

c. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

d. The proposed project shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

e. The proposed project shall be consistent with water and related land management plans and programs of local and regional governments provided such plans and programs are consistent with state plans and programs.

C. Specific standards. In addition to compliance with the general standards in B., specific requirements for drainage or drawdown activities shall be met as follows:

1. The drainage or diversion of protected waters for mining iron ore, taconite, copper, copper-nickel, or nickel shall be permitted only where all of the provisions of Minnesota Statutes, section 105.64 and 6 MCAR S 1.5027 have been met.

2. The drainage or diversion of protected waters for mining all other metallic and nonmetallic minerals shall be permitted only when the protected waters being drained are replaced by protected waters which will have equal or greater public value, subject to provisions of 6 MCAR S 1.5027.

(.5027

3. All other drainage or diversion of protected waters allowed in B. shall be permitted provided all of the following specific criteria are met:

a. For protected waterbasins, permits will be issued only to governmental agencies having the authority to undertake such projects. In addition, a public need for the partial drainage or temporary drawdown shall be established by specifying the public interests to be enhanced.

b. Written consent for the partial drainage or temporary drawdown of protected waterbasins and wetlands has been obtained from all riparian owners.

c. Partial drainage or temporary drawdown of protected waterbasins and wetlands shall be permitted only where the applicant has submitted data to confirm:

(1) that the partial drainage will improve navigation or recreational uses;

(2) that the partial drainage will improve or restore fish and wildlife habitat; or

(3) that agricultural lands have been flooded due to artificial obstruction of downstream drainage or increased upstream discharge.

d. Any proposed temporary drawdown shall not exceed two years in duration under normal climatic conditions.

e. There are no feasible and practical means to attain the intended purpose without drainage.

f. The proposal will adequately protect public safety and promote the public welfare.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to drainage activities proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR S 1.5021, Excavations 6 MCAR S 1.5022, Structures 6 MCAR S 1.5023, Water level controls 6 MCAR S 1.5024, and Bridges and culverts 6 MCAR S 1.5025.

6 MCAR S 1.5027 Alterations of protected waters for mining.

A. Goals. It is the goal of the department to ensure that alterations of protected waters for mining or reclamation of mining areas will minimize adverse environmental effects, preserve water resources to the maximum extent feasible and practical, and encourage the planning of future land and water utilization while at the same time promoting the orderly development of mining and the use of sound mining practices.

B. Standards and criteria.

1. Scope. Mining activities which may involve alterations of protected waters include the mining of metallic minerals including but not limited to iron ore, taconite, copper, copper-nickel, nickel, cobalt, and gold; and the mining of nonmetallic minerals including but not limited to sand and gravel, stone, clay, marl, oil, gas, and coal; and the mining of peat.

2. Permits shall be required for any alterations of protected waters to facilitate mining of iron ore, taconite, copper, copper-nickel, or nickel minerals or reclamation of mining areas provided that:

a. Permits to mine shall be obtained when required by Minnesota Statutes, section 93.44 to 93.51.

b. Permits for alterations in protected waters shall be granted in accordance with provisons of Minnesota Statutes, section 105.64. Applications for permits for alterations in protected waters shall include an analysis showing why underground mining without drainage, diversion, or control of protected waters is not feasible or economical.

3. Permits shall be required for mining of nonmetallic minerals, peat, and other metallic minerals not regulated in Minnesota Statutes, section 105.64, or reclamation of mining areas provided that the applicant provides evidence that:

a. There is no other feasible and practical location for the proposed mining activity;

b. There is no other feasible or economical method to mine except by draining, diverting, or controlling the protected waters;

c. The proposed alteration of protected waters is necessary and no other feasible and economical method for it is reasonably available;

d. The proposed alteration of protected waters will not substantially impair the interests of the public in lands or waters or the substantial beneficial public use thereof, except as expressly authorized in the permit, and will not endanger public health or safety;

e. The proposed mining operations will be in the public interest and that the public benefits resulting from it will be sufficient to warrant the proposed alteration of protected waters;

f. The activities represent the minimal impact solution with respect to watershed modifications, watercourse diversions or changes, drainage, runoff and seepage management, and avoidance of major adverse changes in the ecosystem of protected waters having substantial public value;

g. Whenever protected watercourses must be diverted or changed to facilitate mining, the design and construction of the diversion or change shall provide for:

(1) Maintenance of adequate flows and levels in order to protect instream flows and prevent downstream flooding;

(2) Measures to prevent bank erosion and sedimentation in order to protect water quality; and

(3) Details on the location, relocation, and utilization of the watercourse after cessation of mining;

h. Whenever protected waterbasins are allowed to be drained to facilitate mining, and such drainage is justified and legally permitted, compensation for the loss of the basin must be provided for by either:

(1) Immediate replacement of the protected basin with waters of equal or greater value; or

(2) Submission of acceptable plans for the eventual replacement of the protected basin with waters of equal or greater value upon cessation of mining activities; and

i. Whenever a water impoundment is necessary and

justified to facilitate mining, the design, construction, operation, and maintenance of the impoundment structure shall:

(1) Meet the applicable requirements of 6 MCAR SS 1.5030-1.5034 pertaining to dam safety;

(2) Provide hydrologic and hydraulic measures to ensure that any protected waters downstream of the impoundment area are adequately protected with respect to maintenance of water quantity and quality and prevention of flooding; and

(3) Include plans detailing the disposition and utilization of the impoundment area after cessation of mining activities.

4. Whenever metallic, nonmetallic, and peat mining activities in the beds of protected waters will result in detrimental effects on the physical and biological character of protected waters, measures to compensate for the detrimental aspects shall be required in the permit conditions.

6 MCAR S 1.5028 General administration.

A. Application for protected waters permits. All applications pursuant to 6 MCAR SS 1.5020 -1.5027 shall be made on forms prepared by the department and submitted to the regional office for the area where the majority of the proposed project is located.

1. Who may apply: Applications shall be submitted by the riparian owner of the land on which a project is proposed, except:

a. A governmental agency, public utility, or corporation authorized by law to conduct the project may apply if the property rights acquired or to be acquired are fully described in the application.

b. A holder of appropriate property rights such as a lease or easement may apply provided that the application is countersigned by the owner and accompanied by a copy of the lease or other agreement. A permit may be issued for the term of the lease only, subject to cancellation prior to the termination date of the agreement if the agreement is cancelled.

c. A prospective lessee of state-owned lands may apply

for a permit in his own name after he has requested a lease from the departmental official responsible for the affected lands. Both the lease request and the permit application will be processed concurrently with appropriate coordination.

2. Information required: Pursuant to Minnesota Statutes, section 105.44, subdivision 4, an application shall be considered complete when:

a. It includes all of the information specified in the appropriate section or sections of these standards.

b. It is accompanied by appropriate photographs, maps, sketches, drawings, or other plans which adequately describe the proposed project.

c. It includes a brief statement regarding the following points:

(1) Anticipated changes in water and related land resources.

(2) Unavoidable anticipated detrimental effects on the natural environment.

(3) Alternatives to the proposed action.

d. Application fees have been paid. Note that final permits cannot be issued until any field inspection fees are paid.

e. Proof of service of a copy of the application and accompanying documents on the mayor of the city or the secretary of the board of the district is included with the application if the project is within or affects a city, watershed district, or soil and water conservation district.

3. Fees: All applications shall be accompanied by an application fee as required by 6 MCAR S 1.5000 E.1. An additional fee may be charged for field inspections conducted by department personnel in the course of review subject to the provisions of 6 MCAR SS 1.5000 G.1.-1.5000 G.5.

B. Permit review.

1. Field inspection: The department may conduct field investigations to determine a project's nature, scope, and impact on water and related land resources. The department

shall determine which applications must be investigated and such inspections shall be made in a timely fashion.

2. Coordination with other agencies: Nothing in these standards is intended to supersede or rescind the laws, rules, regulations, standards, and criteria of other federal, state, regional, or local governmental subdivisions with the authority to regulate work in the beds or on the shorelands of protected waters. The issuance of a permit shall not confer upon an applicant the approval of any other unit of government for the proposed project. The department shall coordinate the review with other units of government having jurisdiction in such matters.

3. Procedure upon decision: The commissioner may grant permits, with or without conditions, or deny them. In all cases, the applicant, the managers of the watershed district, the board of supervisors of the soil and water conservation district, or the mayor of the city may demand a hearing in the manner specified in Minnesota Statutes, section 105.44, subdivision 3, within 30 days after receiving mailed notice outlining the reasons for denying or modifying an application. Any hearing shall be conducted as a contested case hearing before a hearing examiner from the independent Office of Administrative Hearings in accordance with Minnesota Statutes, chapter ~~15~~ 14 and sections 105.44 and 105.45.

C. Statutory requirements. Further provisions for the administration of these rules are found in Minnesota Statutes, chapter 105, including but not limited to sections 105.44 to 105.463, 105.541, and 105.55.

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

In the Matter of Amendments
to the Rules for Changes in the
Course, Current, or Cross Section
of Public Waters.

SUPPLEMENTARY ORDER
ADOPTING RULES

IT IS ORDERED that the rules amendments adopted by me in July 1983 are adjusted to accomodate the changes requested by the Attorney General.

The changes eliminate phrases in the nature of "include, but is/are not limited to" in 6 MCAR §§ 1.5022C.4.e(2), 1.5022C.6.n. and 1.5023C.3.c.

Dated: August 19, 1983.

JOSEPH N. ALEXANDER, Commissioner
Minnesota Department of Natural Resources

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

In the Matter of Adopting
Amendments to the Rules of the
Department of Natural Resources
Governing Permits for Making
Changes in the Course, Current
or Cross-section of Public Waters

ORDER ADOPTING RULES

Notice of the Commissioner's intent to adopt the above-entitled amendments without a public hearing was published in the State Register on Monday, April 4, 1983, and was mailed to all persons on the list maintained by the agency pursuant to Minn. Stat. § 14.14, subd. 1, on March 31, 1983.

After affording interested and affected persons an opportunity to submit comments for 30 days after notice, receiving fewer than seven written requests for a public hearing within the 30-day comment period, reviewing and considering the comments, and determining the need for and reasonableness of the above-captioned rules,

NOW THEREFORE, IT IS ORDERED that the above-captioned amendments to 6 MCAR §§ 1.5020-1.5028 are adopted pursuant to authority vested in me by Minn. Stat. § 105.415.

Dated: June 30, 1983

JOSEPH N. ALEXANDER, Commissioner
Department of Natural Resources

by Steven G. Thorne

STEVEN G. THORNE, Deputy Commissioner
Department of Natural Resources

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

In the Matter of the
Proposed Adoption of
Amendments to the Rules
for Permits for Changes
in the Course, Current, or Cross
Section of Public Waters

ORDER FOR NOTICE OF INTENT
TO ADOPT RULES WITHOUT
PUBLIC HEARING

WHEREAS it has been determined that the proposed amendments are non-controversial in nature;

NOW THEREFORE, IT IS ORDERED that notice of intent to adopt rules without public hearing, be published in the State Register and mailed to all persons who have registered their names with the Department to receive notice of rulemaking.

Dated: March 7, 1983.

JOSEPH N. ALEXANDER, Commisioner

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

In the matter of the proposed
rule amendments for Public
Waters Permits

AFFIDAVIT OF MAILING

SANDRA M. FECHT deposes and says:

That on the 31st day of March, 1983, at the City of Saint Paul, County of Ramsey, State of Minnesota, she served the attached NOTICE OF PROPOSAL TO ADOPT AMENDMENTS WITHOUT A PUBLIC HEARING by depositing in the United States Mail, at said City of Saint Paul, a true and correct copy thereof, properly enveloped, with postage prepaid, to all persons and associations at the addresses listed on the attached Certificate of the Commissioner of Natural Resources.

Sandra M. Fecht

Subscribed and sworn to before me
this 31st day of March, 1983

Annette Selditschka

ANNETTE SELDITSCHKA
NOTARY PUBLIC
RAMSEY COUNTY, MN
MY COMM. EXPIRES
SEPTEMBER 18, 1987

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATERS

Proposed Amendments to Rules Governing Permits for Making Changes in the Course, Current, or Cross-Section of Public Waters.

Notice of Intent to Adopt Rule Amendments Without a Hearing

Notice is hereby given that the State Department of Natural Resources is proposing to adopt the above entitled amendments without a public hearing. The Commissioner of Natural Resources has determined that the proposed adoption of these amendments will be noncontroversial in nature and has elected to follow procedures set forth in Minn. Stat. §§ 14.21-14.28.

Changes are proposed to sections concerning fill, excavation, structures, dams, and bridges and culverts. New material covers the mining of metallic minerals and non-metallic minerals including sand and gravel and peat.

Persons interested shall have 30 days to submit comments on the proposed amendments. The proposed amendments may be modified prior to final adoption if modifications are supported by the data and views submitted to the Department of Natural Resources and do not result in a substantial change in the proposed language.

Unless seven or more persons submit written requests for a public hearing on the proposed amendments within the 30-day comment period, a public hearing will not be held. The written request must be specific on which amendment(s) a hearing is desired. Identification of the particular objection, the suggested modifications, and the reasons or data relied upon to support the suggested modifications are desired. In the event a public hearing is required, the department will proceed according to the provisions of Minn. Stat. §§ 14.13-14.20

Persons who wish to submit comments or a written request for a public hearing, or persons who wish to receive a copy of this notice and/or a copy of the proposed amendments, should address their correspondence to:

David Milles
Natural Resources
DNR Box 32
Centennial Office Building
St. Paul, Minnesota 55155

The department's authority to adopt the rules is contained in Minn. Stat. § 105.415. A statement that describes the need for and reasonableness of each provision of the proposed amendments is available from the Department of Natural Resources upon request.

Upon adoption of the final amendments without a public hearing, the proposed amendments, this notice, the statement of need and reasonableness, all written comments received, and the final amendments as adopted will be delivered to the Attorney General for review as to form and legality, including the issue of substantial change. Persons who wish to be advised of the submission of this material to the Attorney General, or who wish to receive a copy of the final amendments as proposed for adoption, should submit a written request to the above address.

Please be advised that Minn. Stat. chapter 10A requires each lobbyist to register with the State Ethical Practices Board within five days after he or she commences lobbying. Minn. Stat. § 10A.01,

subdvision 11 defines a lobbyist as any individual: (a) engaged for pay or other consideration, or authorized by another individual or association to spend money, who spends more than five hours in any month or more than $250, not including his own travel expenses and membership dues, in any year, for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials; or (b) who spends more than $250, not including his own travel expenses and membership dues, in any year, for the purpose of attempting to influence legislative administrative action by communicating or urging others to communicate with public officials. The statute provides certain exceptions. Questions should be directed to the Ethical Practices Board, 41 State Office Building, St. Paul, Minnesota 55155, telephone (612) 296-5615.

Dated: March 7, 1983.

JOSEPH N. ALEXANDER
Commissioner of Natural Resources

DEPARTMENT OF NATURAL RESOURCES

In the matter of the proposed rule amendments for Public Waters Permits

CERTIFICATION

I hereby certify that the attached 72 labels and 0 sheets constitute the complete list of persons, associations, and other interested groups who as of 1:30 o'clock p.m., this 22nd day of March, 1983, have requested pursuant to Minnesota Statutes, 1982, Section 14.14, Subdivision 1, that their names be placed on file with the Department of Natural Resources for the purpose of receiving notice of public hearings on proposed rules on the subjects captioned above.

Joseph N. Alexander
Commissioner

By: Andy Brewer

1779E

A. M. Twitley
Env. Control & Energy Dept.
Ford Motor Company
Automotive Assembly Division
17000 Oakwood Blvd.
Allen Park, Mich. 48121

Mr. John A. Knapp
Hessian, McKasy & Soderberg
1500 Midwest Plaza Bldg.
Minneapolis, MN 55402

Peter S. Popovich
Peterson, Popovich, Knutson & Flynn
314 Minnesota Bldg.
St. Paul, MN 55101

Gordon Forbes
Minn. Railroads Association
303 Hanover Bldg.
480 Cedar St.
St. Paul, MN 55101

Kent E. Eklund
Dept. of Economic Development
480 Cedar St.
St. Paul, MN 55101

Sam Ruhle
Office of Adminis. Hearings
400 Summit Bank Building
310 South Fourth Avenue
Minneapolis, MN 55415

Robert S. Burk
4344 IDS Center
Minneapolis, MN 55402

Marylee Fithian, Exec. Director
Oden & Associates
905 Park Ave. So.
Mpls., MN 55404

Jean Dawson, Editor
The Minnesota Government Report
B-12, Press Room
StateCapitol Bldg.
INTEROFFICE

T. J. Manthey
Pickands Mather & Co.
1100 Superior Ave. NE
Cleveland, Ohio 44114

Craig Waldron

Region Nine Dev. Commission
410 So. 5th St., P.O. Box 3367

Harold H. Haugh
[illegible]nes, Haugh & Smith Inc.
515 So. Washington
Albert Lea, MN 56007

Robert A. Silvagni, Env. Eng.
U of M-Physical Plant Dept.
200 Shops Building
319 15th Ave. SE
Minneapolis, MN 55455

William G. Haddeland
Minn. Petroleum Council
300 Northern Federal Bldg.
St. Paul, MN 55102

Robert Bollant
City of Winona
City Hall
4th & Lafayette St.
Winona, MN 55987

Richard C. Buske
Dept. of Economic Development
480 Cedar St.
St. Paul, MN 55101

Bruce T. Rowe, Administrator
Community Health Services Board
325 Lake Ave. So., Suite 604
Duluth, MN 55802

Mr. Reynold S. Rahko, Mgr.
Projects Coordinating Division
United Power Association
Elk River, MN 55330

George C. Mastor
General Counsel
MN Gas Company, Legal Division
300 Peavey Bldg.
Mpls., MN 55402

G. V. Welk, Manager
Regulatory Compliance & Services
Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401

Philip D. Brick
Pickands Mather & Co.
Suite 811-200 W Superior St.
Duluth, MN 55802

Environmental Law Society
William Mitchell College of Law
875 Summit Ave.
St. Paul, MN 55105

Bonnie M. Spencer
Federal-State Reports, Inc.
5203 Leesburg Pike, #1201
Baileys Crossroads
Falls Church, VA 22041

Gertrude M. James
Anoka Co. Community Health & Social Services Dept.
Courthouse, 4th Floor
Anoka, MN 55303

Executive Director
Association of Minn. Counties
555 Park St., Suite 300
St. Paul, MN 55103

Wayne H. Olson, Esq.
Olson, Gunn & Seran, Ltd.
315 Peavey Bldg.
730 Second Ave. So.
Mpls., MN 55402

Charles Schaffer
Dept. of Economic Development
480 Cedar St.
St. Paul, MN 55101

Marylee Fithian
Director
Development Disabilities Planni
200 Capitol Square Bldg.
INTEROFFICE

G. Robert Johnson
4344 IDS Center
Minneapolis, MN 55402

Frank Mixa
Executive Director
Lake Mtka. Conservation Distric
402 E. Lake St.
Wayzata, MN 55391

General Mills, Inc.
Attn: J. W. Haun
P. O. Box 1113
Minneapolis, MN 55440

Bob Franklin, City Editor
Minneapolis Tribune
425 Portland Ave.
Minneapolis, MN 55488

Dr. Rollin Dennistoun,Dep. Comm
MN Dept. of Agriculture
90 W. Plato
St. Paul, MN 55107
INTEROFFICE

Antitrust Division
MN Attorney General's Office
2nd Floor, Ford Bldg.
117 University Ave.
St. Paul, MN 55155

Professor Robert Synder
248 Classroom-Office Bldg.
University of Minnesota
St. Paul, MN 55108

Eric W. Ingvaldson
700 Galaxy Building
330 Second Ave. South
Minneapolis, MN 55401

Thomas M. Polt
McCarthy Bldg.
Eyota, MN 55934

President
Interstate Power Co.
1000 Main St.
Dubuque, IA 52001

Harriet Lykken
4600 Emerson Ave. So.
Mpls., MN 55409

Kenneth Peterson, Exec. Director
MPIRG
2412 University Ave. SE
Mpls., MN 55414

Ann Mongoven
211½ Minnesota
Bemidji, MN 56601

Ken Kadlec
762 Holly Ave.
St. Paul, MN 55104

Nelson French
3715 E. 26th St.
Mpls., MN 55406

Broeker, Hartfeldt, Hedges & Grant
Suite 800
2850 Metro Drive
Bloomington, MN 55420

Conrad M. Fredin
811 First Nat'l. Bank Bldg.
Duluth, MN 55802

John H. Herman
Suite 930
Ten South Fifth St.
Mpls., MN 55401

Anoka Co. Community Health & Social Services Dept.
c/o Robert M. Hutchison
Courthouse-4th Floor
Anoka, MN 55303

Donald B. Crassweller
1000 Alworth Bldg.
Duluth, MN 55802

Richard Kramer
1471 Barclay
St. Paul, MN 55106

James Miller, Sr. Attorney
MPIRG
2412 University Ave. SE
Mpls., MN 55414

Steve Chadwick
2904 W. 3rd St.
Duluth, MN 55806

Badger Safe Energy Alliance
Box 68
Durand, Wis. 54736

Steve O'Neil
475 Huff St.
Winona, MN 55987

MN Izaak Walton League
111 E. Franklin Ave.
Suite 200
Minneapolis, MN 55404

Maryann S. Marino, Ph. D.
Koppers Company, Inc.
1201 Koppers Bldg.
Pittsburgh, PA 15219

R. J. Barto
Midland Glass Company, Inc.
P.O. Box 69
Shakopee, MN 55379

Phillips Legislative Service, In
459 Rice Street
St. Paul, MN 55103

J. D. Giallombardo
Buildings & Environmental
Burlington Northern, Inc.
176 E. 5th St., Room 1280
St. Paul, MN 55101

W. J. Licke, General Counsel
Blandin Paper Co.
115 1st St. SW
Grand Rapids, MN 55744

Associated Builders & Contract
Suite 109
6300 Walker St.
Mpls., MN 55416

Barbara Johnson
1636 Taylor Ave.
St. Paul, MN 55104

Public Interest Advocacy Clini
Hamline University Law School
St. Paul, MN 55104

Rodney Watkins
105 University Rd.
Cloquet, MN 55720

Loni Kemp
The Minnesota Project
618 E. 22nd St.
Mpls., MN 55404

ionn M. Broeker
:850 Metro Drive
Suite 800
Mpls., MN 55420

City of Brooklyn Center
Brad Hoffman
301 Shingle Creek Parkway
Brooklyn Center, MN 55430

Bruce Barker
Minnesota Woodlands
Boise Cascade Corporation
International Falls,MN 56649

Frundt, Frundt & Johnson
117 West 5th Street
Blue Earth, MN 56013

Joseph G. Beaton Jr. LTD
1503 Washington Av. S.
Mpls., MN 55454

Pursuant to Minn. Laws of 1980, § 15.0412, subd. 4h, an agency may propose to adopt, amend, suspend or repeal rules without first holding a public hearing, as long as the agency determines that the rules will be noncontroversial in nature. The agency must first publish a notice of intent to adopt rules without a public hearing, together with the proposed rules, in the *State Register*. The notice must advise the public:

1. that they have 30 days in which to submit comment on the proposed rules;
2. that no public hearing will be held unless seven or more persons make a written request for a hearing within the 30-day comment period;
3. of the manner in which persons shall request a hearing on the proposed rules;

and

4. that the rule may be modified if modifications are supported by the data and views submitted.

If, during the 30-day comment period, seven or more persons submit to the agency a written request for a hearing of the proposed rules, the agency must proceed under the provisions of § 15.0412, subds. 4 through 4g, which state that if an agency decides to hold a public hearing, it must publish in the *State Register* a notice of its intent to do so. This notice must appear at least 30 days prior to the date set for the hearing, along with the full text of the proposed rules. (If the agency has followed the provisions of subd. 4h and has already published the proposed rules, a citation to the prior publication may be substituted for republication.)

Pursuant to Minn. Stat. § 15.0412, subd. 5, when a statute, federal law or court order to adopt, suspend or repeal a rule does not allow time for the usual rulemaking process, temporary rules may be proposed. Proposed temporary rules are published in the *State Register*, and for at least 20 days thereafter, interested persons may submit data and views in writing to the proposing agency.

Department of Natural Resources
Waters Division

Proposed Amendments to Rules Governing Permits for Making Changes in the Course, Current, or Cross-Section of Public Waters

Notice of Intent to Adopt Rule Amendments without a Hearing

Notice is hereby given that the State Department of Natural Resources is proposing to adopt the above entitled amendments without a public hearing. The Commissioner of Natural Resources has determined that the proposed adoption of these amendments will be noncontroversial in nature and has elected to follow procedures set forth in Minn. Stat. §§ 14.21-14.28.

Changes are proposed to sections concerning fill, excavation, structures, dams, and bridges and culverts. New material covers the mining of metallic minerals and non-metallic minerals including sand and gravel and peat.

Persons interested shall have 30 days to submit comments on the proposed amendments. The proposed amendments may be modified prior to final adoption if modifications are supported by the data and views submitted to the Department of Natural Resources and do not result in a substantial change in the proposed language.

Unless seven or more persons submit written requests for a public hearing on the proposed amendments within the 30-day comment period, a public hearing will not be held. The written request must be specific on which amendment(s) a hearing is desired. Identification of the particular objection, the suggested modifications, and the reasons or data relied upon to support the suggested modifications are desired. In the event a public hearing is required, the department will proceed according to the provisions of Minn. Stat. §§ 14.13-14.20.

Persons who wish to submit comments or written request for a public hearing, or persons who wish to receive a copy of this notice and/or a copy of the proposed amendments, should address their correspondence to:

David Milles
Natural Resources
DNR Box 32
Centennial Office Building
St. Paul, Minnesota 55155

The department's authority to adopt the rules is contained in Minn. Stat. § 105.415. A statement that describes the need for and reasonableness of each provision of the proposed amendments is available from the Department of Natural Resources upon request.

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

Upon adoption of the final amendments without a public hearing, the proposed amendments, this notice, the statement of need and reasonableness, all written comments received, and the final amendments as adopted will be delivered to the Attorney General for review as to form and legality, including the issue of substantial change. Persons who wish to be advised of the submission of this material to the Attorney General, or who wish to receive a copy of the final amendments as proposed for adoption, should submit a written request to the above address.

Please be advised that Minn. Stat. chapter 10A requires each lobbyist to register with the State Ethical Practices Board within five days after he or she commences lobbying. Minn. Stat. § 10A.01, subdivision 11 defines a lobbyist as any individual: (a) engaged for pay or other consideration, or authorized by another individual or association to spend money, who spends more than five hours in any month or more than $250, not including his own travel expenses and membership dues, in any year, for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials; or (b) who spends more than $250, not including his own travel expenses and membership dues, in any year, for the purpose of attempting to influence legislative administrative action by communicating or urging others to communicate with public officials. The statute provides certain exceptions. Questions should be directed to the Ethical Practices Board, 41 State Office Building, St. Paul, Minnesota 55155, telephone (612) 296-5615.

March 7, 1983.

Joseph N. Alexander
Commissioner of Natural Resources

STANDARDS AND CRITERIA FOR GRANTING PERMITS TO CHANGE THE COURSE, CURRENT, OR CROSS-SECTION OF ~~PUBLIC~~ PROTECTED WATERS

6 MCAR § 1.5020 General provisions.

A. ~~General policy~~ Purpose. The purpose of ~~these rules~~ 6 MCAR §§ 1.5020-1.5028 is to provide for the orderly and consistent review of permit applications in order to conserve and utilize the water resources of the state in the best interest of its people. In deciding whether to issue permits, the department shall be guided by the policies and requirements declared in Minnesota Statutes, sections 104.01, 104.25, 104.32, 105.38, 105.42, 105.64, and 116d.04.

The proposed development must also be consistent with the goals and objectives of applicable federal, state, and local environmental quality programs and policies including but not limited to shoreland management, floodplain management, water surface use management, boat and water safety, wild and scenic rivers management, water quality management, recreational or wilderness management, critical areas management, scientific and natural areas management, and protected ~~vegetative~~ species management.

B. Scope. To achieve the ~~policies~~ purpose declared in ~~6 MCAR § 1.5020~~ A. these rules set forth minimum standards and criteria for the review, issuance, and denial of permits for proposed projects affecting ~~public~~ protected waters ~~as detailed in the preceding table of contents.~~ Permits shall be required for any activity affecting the course, current, or cross-section of protected waters unless specifically exempted within these rules.

C. Jurisdiction. These standards and criteria apply to any and all work which will cause or result in the alteration of the course, current, or cross-section of ~~public~~ protected waters except for the following:

1. utility crossings of ~~public~~ protected waters which are regulated under Minnesota Statutes, section 84.415 and rules promulgated thereunder~~.~~; or

2. destruction and control of aquatic vegetation which is regulated under Minnesota Statutes, section 98.48, subdivision 9 and rules promulgated thereunder.

~~3. changes in the course, current, or cross section of public waters necessary for the mining of metallic and non-metallic minerals, sand and gravel, peat, coal, and marl. See Minnesota Statutes, section 105.64.~~

D. Definitions. For the purposes of ~~these rules~~ 6 MCAR §§ 1.5020-1.5028, certain terms of words used herein shall be interpreted as follows: the word "shall" is mandatory, not permissive. All distances unless otherwise specified shall be measured horizontally.

1. "Alteration" means any activity that will change or diminish the course, current, or cross-section of ~~public~~ protected waters.

2. "Beds of ~~public~~ protected waters" means all portions of ~~public~~ protected waters located below the ordinary high water mark.

3. "Breakwater" means an offshore structure ~~protecting~~ intended to protect a shore area, harbor, or marina from ~~waves~~ wave and current action, erosion, or sedimentation.

~~"Class I public watercourse" means a natural watercourse serving as the major drainage outlet or a major tributary of such an outlet, which is capable of serving a number of beneficial public purposes. Smaller natural watercourses serving specific values such as trout streams and scenic watercourses are also included.~~

~~"Class II public watercourse" means a natural watercourse serving as a tributary of a Class I watercourse. Class II public watercourses are often perennial streams serving more than one beneficial public purpose.~~

~~"Class III public watercourse" means a smaller natural watercourse or an altered natural watercourse not constructed under Minnesota Statutes, chapter 106 (and which are tributary to other Class I, II, or III watercourses), and which may be an intermittent stream serving at least one beneficial public purpose.~~

~~"Class IV watercourse" means any artificial watercourse or altered natural watercourse constructed under the provisions of Minnesota Statutes, chapter 106 or 112 or prior laws, or as the result of private actions without any public drainage proceedings (and which are tributary to a public drainage system).~~

4. "Commissioner" means the Commissioner of Natural Resources.

~~"Dam" means any artificial barrier or appurtenant works which does or may impound or divert water.~~

5. "Department" means the Department of Natural Resources.

6. "Dock" means a narrow platform extending waterward from the shoreline intended for ingress and egress for moored watercraft or to provide access to deeper water for swimming, fishing, or other water-oriented recreational activities.

7. "Drainage" means any method for removing or diverting waters from protected waterbasins or wetlands. Such methods shall include, but are not limited to, excavation of an open ditch, installation of subsurface drainage tile, filling, diking, or pumping.

8. "Drawdown" means a temporary lowering of water levels, for a maximum duration of two years.

~~"Dredge"~~ 9. "Excavation" means the displacement or removal of the sediment or other materials from the beds of ~~public~~ protected waters by means of hydraulic suction or mechanical ~~excavation~~ operations.

~~"Emergency spillway" means a spillway designed to convey water in excess of that impounded for flood control or other beneficial purposes.~~

10. "Fill" means any material placed or intended to be placed on the bed or bank of any ~~public~~ protected water.

11. "Filter" means a transitional layer of gravel, small stone, or fabric between the fine material of an embankment and riprap shore protection materials. ~~The purposes of the filter are to (1) prevent fine embankment material from being pulled through the riprap materials, (2) distribute the weight of the overlying riprap to prevent settlement, and (3) to provide relief of hydrostatic pressures inside the embankment.~~

12. "Floating structure" means any houseboat, mooring or navigational buoy, swimming or diving platform, water ski jump, watercraft, or other structure supported entirely by its own buoyancy which is not permanently anchored by means of pilings, foundations, gabion baskets, or other materials incapable of removal by nonmechanized means.

13. "Floodplain" means the areas adjoining a watercourse which has been or hereafter may be covered by the regional flood.

14. "Floodway" means the channel of the watercourse and those portions of the adjoining flood plains which are reasonably required to carry and discharge the regional flood.

15. "Harbor" means either an inland or offshore area protected from waves which is intended for the mooring of watercraft.

16. "Inland boat slip" means an inland excavation generally having a uniform width which serves as a protective area for launching and mooring of a single watercraft.

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

17. "Inland excavation" means any excavation intended to extend the cross-section of ~~public~~ protected waters landward of the natural or preexisting shoreline.

18. "Low-water ford type crossing" means a stream crossing which conforms to the natural cross-section of the stream and utilizes the placement of a suitable substrate to allow vehicular passage without confining the stream flow within culverts or other hydraulic enclosures.

19. "Marina" means either an inland or offshore ~~area~~ structure for the concentrated mooring of five ~~(5)~~ or more watercraft wherein facilities are provided for ~~any or all of the following~~ ancillary services~~:~~ such as boat mooring, storage, fueling, launching, mechanical repairs, sanitary pumpout, and restaurant services.

20. "Maximum," with respect to storage capacity, refers to the most severe design condition, including surcharge (floodwater storage).

21. "Mining activity" means the construction, reconstruction, repair, relocation, expansion, or removal of any facility for the extraction, stockpiling, storage, disposal, or reclamation of metallic or nonmetallic minerals. Facilities include all mine pits, quarries, stockpiles, tailings basins, and any structures which drain or divert protected waters to allow mining. Ancillary facilities such as access roads, bridges, culverts, and water level control structures are not mining activities.

22. "Mooring" means any containment of free-floating watercraft that provides a fixed fastening for the craft.

~~"Natural watercourse" means any watercourse in a state provided by nature without artificial straightening, deepening, or widening. See "watercourse" as hereinafter defined.~~

23. "Offshore" means the area waterward of the ordinary high water mark of a ~~public~~ protected water.

24. "Ordinary high water mark" ~~for purposes of these regulations means an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape. The ordinary high water mark is commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the ordinary high water mark shall be considered to be the elevation of the top of the bank of the channel (Re: NR 85 (e) (6 MCAR § 1.0085 (e))). For reservoirs and flowages the ordinary high water mark shall be the operating elevation of the normal summer pool~~ means the boundary of protected waters as defined in Minnesota Statutes, section 105.37, subdivision 16.

25. "Permanent dock" means any dock other than seasonal docks and wharves as ~~hereinafter~~ defined by this rule.

26. "Port" means a water transportation complex established and operated under the jurisdiction of a port authority pursuant to Minnesota Statutes, chapter 458.

27. "Port facility" means any facility useful in the maintenance and operation of a port. Facilities include, but are not limited to, transportation facilities, terminal and storage facilities, floating and handling equipment, power stations, and other facilities necessary for the maintenance and operation of a port.

28. "Principal spillway" means a spillway designed to convey water from an impoundment at release rates established for the structure.

~~"Probable maximum flood" means the most severe flood with respect to peak flow that may be expected from a combination of the most critical meteorological and hydrological conditions that are reasonably possible in the drainage basin.~~

29. "Professional engineer" means an engineer registered to practice in Minnesota.

~~"Public~~ 30. "Protected waters" means ~~any waters of the state which serve a material beneficial public purpose as defined in Minnesota Statutes, section 105.37, subdivision 6~~ those waters of the state identified as public waters or wetlands under Minnesota Statutes, section 105.37, subdivision 14 or 15, or 105.391, subdivision 1.

31. "Reconstruction" means the rebuilding or renovation of an existing structure, where the cost of such work will exceed 50 percent of the replacement cost ~~of a dam or 50 percent of the assessed value of other structures~~.

32. "Regional flood" means the flood which is representative of large floods known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 100-year recurrence interval ~~(Re: NR 85 (e) (6 MCAR Section 1.0085 (e))).~~

33. "Retaining walls" means vertical or nearly-vertical ~~alongshore~~ structures constructed of mortar-rubble masonry, handlaid rock or stone, vertical timber pilings, horizontal timber planks with piling supports, sheet pilings, poured concrete, concrete blocks, or other durable materials and constructed approximately parallel to the shoreline.

34. "Riprap shore protection" means coarse stones, boulders, cobbles, ~~or~~ artificially broken rock ~~fragments~~ or

concrete, or brick materials~~,~~ laid loosely or within gabion baskets against the ~~basal~~ slope of the existing bank of a ~~public~~ protected water.

35. "Seasonal dock" means a dock so designed and constructed that it may be removed from the lake or stream bed on a seasonal basis. All components such as supports, decking, and footings must be capable of removal by nonmechanized means.

~~"Spillway" means a channel available to discharge excess water from a reservoir.~~

~~"Standard project flood" means the flood that may be expected from the most severe combination of meteorological and hydrological conditions that is considered reasonably characteristic of the geographical area in which the drainage basin is located, excluding extremely rare combinations. Such floods are intended as practicable expressions of the degree of protection that should be sought in the design of flood control works, the failure of which might be disastrous (Re: NR 85 (c) (6 MCAR § 1.0085 (c))).~~

36. "Structure" means any building, footing, foundation, slab, roof, boathouse, deck, wall, ~~dam,~~ or any other object extending over, anchored, or permanently attached to the bed or bank of a ~~public~~ protected water. ~~These rules shall not pertain to floating structures such as houseboats, mooring and navigation bouys, swimming and diving platforms, water ski jumps, and watercraft, provided such floating structures are not permanently anchored by means of pilings, foundations, gabion baskets, or other materials which are not capable of removal by non-mechanical means.~~

37. "Structural height" means the ~~overall~~ vertical distance from the ~~lowest point of construction to the top of the dam including the foundation or cutoff but excluding driven sheet piling primarily intended for cutoff purposes~~ natural bed of the stream or watercourse measured at the downstream toe of the control structure or from the lowest elevation of the outside limit of the control structure, if it is not across a stream channel or watercourse, to the maximum storage elevation.

38. "Swellhead" means the difference between the headwater elevation necessary to pass the regional flood through the proposed structure and the tailwater elevation below the structure.

39. "Temporary structure" means any seasonal dock or floating structure that can be removed from protected waters before winter freeze-up.

40. "Watercourse" means any channel having definable beds and banks capable of conducting generally confined runoff from adjacent lands. During floods water may leave the confining beds and banks but under low and normal flows water is confined within the channel. A watercourse may be perennial or intermittent.

41. "Water level control structure" means any structure which impounds or regulates the water surface elevation or flow of protected waters, including dams regulated under the provisions of 6 MCAR §§ 1.5030-1.5034.

~~"Watercraft" means any contrivance used or designed for navigation on water other than a duck boat during the duck hunting season, a rice boat during the harvest season, or a seaplane.~~

42. "Wharf" means a permanent structure constructed into navigable waters as a part of a port facility for ~~the sole purpose of~~ berthing or mooring commercial watercraft, or for transferring cargo to and from watercraft in an industrial or commercial enterprise, or for loading or unloading passengers from commercial watercraft, or for the operation of a port facility.

~~E. Severability. The provisions of these regulations shall be severable, and the invalidity of any paragraph, subparagraph, or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision, or any other part.~~

6 MCAR § 1.5021 Filling into ~~public~~ protected waters.

A. ~~Policy~~ Goals. It is the ~~policy~~ goal of the department to limit the placement of any fill material into ~~public~~ protected waters in order to ~~preserve the natural character of public waters and their shorelands, and maintain suitable aquatic habitat for fish and wildlife.~~

~~1. Placement in conformance with these rules shall be permitted in the following cases:~~

~~a. Development of beach areas.~~

~~b. Protection of shoreline from continued erosion by placement of riprap materials.~~

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

~~c. Recovery of shoreland lost by erosion or other natural forces which has occurred within the last five years.~~

~~c. Limited filling to allow raising of previous development constructed at too low an elevation.~~

~~c. Provide navigational access from riparian properties, where such access cannot be gained by alternative means.~~:

1. minimize encroachment, change, or damage to the environment;

2. regulate the quantity and quality of fill and the purposes for which filling may be allowed based upon the capabilities of the waters to assimilate the material; and

3. maintain consistency with floodplain, shoreland, and wild and scenic rivers management standards and ordinances.

B. General standards.

1. Scope. Filling as used in this rule involves placement of unconfined or loosely confined materials in protected waters.

2. Placement shall not be permitted in the following cases:

a. to achieve vegetation control~~.~~;

b. to create upland areas ~~for development or subdivision.~~, except where expressly provided herein;

c. to stabilize ~~lake and stream~~ beds of protected waters which cannot support fill materials ~~(e.g.~~ because of excessive depths of muck, steep bank, ~~or~~ bed slope, ~~etc.).~~ or other conditions;

d. to stabilize ~~areas~~ or impound the site of ~~flowing water,~~ active springs~~, or subject to substantial wave action, drift, sedimentation, or other disruptive forces.~~;

e. to dispose of rock, sand, gravel, or any other solid material resulting from activities carried out above the ordinary high water mark;

f. to construct a roadway or pathway, or create or improve land accesses from peripheral shorelands to islands, or to facilitate land transportation across the waters; however, where a project is proposed by a federal, state, or local government agency and this provision would prevent or restrict the project, or create a major conflict with other public purposes or interests, the commissioner may waive this provision provided:

(1) there is no other feasible and practical alternative to the project that would have less environmental impact; and

(2) that the public need for the project rules out the no-build alternative.

g. filling of posted fish spawning areas is prohibited.

3. No permit shall be required for the following activities unless prohibited under 2.:

~~B. Beach sand blankets.~~

~~1. Permitted uses: No permit shall be required~~

a. To install a beach sand blanket provided the ~~conditions of 6 MCAR § 1.5021 D. are met and the~~ sand ~~and/or~~ or gravel layer does not exceed six ~~(6)~~ inches in thickness, 50 feet in width along the shoreline, or one-half the width of the lot, whichever is less, and does not extend more than ten ~~(10)~~ feet waterward of the ordinary high water mark, provided local watershed district and ~~county~~ local zoning officials are given at least seven ~~(7)~~ days notice by the landowner.

b. For one additional installation of a sand or gravel layer subsequent to an initial installation at the same location and not exceeding the same amounts and dimensions allowed under a.

~~2. Permits: A permit shall be required for any other beach sand blanket and shall be granted provided the conditions of 6 MCAR § 1.5021 D. are met.~~

~~C. Riprap shore protection.~~

~~1. General standards: The protection of shoreline from continued erosion by placement of natural rock riprap along the shore shall be permitted provided the following general standards and the conditions of 6 MCAR § 1.5021 D. are met:~~

~~a. The riprap materials are of sufficient size, quality, and thickness to withstand ice and wave action. The riprap~~

~~shall be placed with a minimum amount of space between the larger materials and the space between them shall be filled with firmly seated smaller rocks or gabion baskets to procure a uniform surface.~~

~~b. The site soils are capable of supporting riprap and a filter consisting of well-graded gravel, crushed gravel, crushed stone, or fabric is installed to prevent undercutting of the riprap.~~

~~c. The encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of water.~~

~~2. Permitted uses:~~ c. To install riprap shore protection, except along the shores of Lake Superior and officially designated trout streams, ~~no permit shall be required where~~ provided the riprap materials consist of natural rock having an average size of 12 inches or larger in its smallest dimension, and conform with the natural alignment of the shoreline, with a minimum finished slope not steeper than 3:1 horizontal:vertical, ~~and~~ no materials are placed more than five ~~(5)~~ feet waterward of the ordinary high water mark, and the material does not obstruct the flow of water.

~~3. Permits: A permit shall be required for any other riprap shore protection and shall be granted provided the conditions of 6 MCAR § 1.5021 C.1. and 6 MCAR § 1.5021 D. are met.~~

d. To place fill in a protected watercourse having a total drainage area, at its mouth, of five square miles or less, provided that the watercourse is not an officially designated trout stream and the placement of fill shall not result in:

(1) any diversions of water from the drainage area:

(2) any impoundment of waters by damming the watercourse;

(3) any actions which would result in erosion and cause sedimentation of downstream waters as determined by the county or local soil and water conservation district.

4. Permits shall be required for the placement of fill in protected waters, except as provided under 2. and 3., and shall meet all of the following requirements:

~~D. Other filling. A permit shall be required for all other filling and shall be granted provided:~~

~~1. The project is not unduly detrimental to the public purposes listed in Minnesota Statutes, section 105.37, subdivision 6,~~ a. The project will involve a minimum of encroachment, change, or damage to the environment, including but not limited to fish and wildlife habitat, navigation, water supply, and storm water retention. ~~Filling of posted fish spawning areas is prohibited.~~

~~2.~~ b. The fill consists of clean inorganic material that is free of pollutants and nutrients.

~~3.~~ c. The existence of a stable, supporting foundation is established by appropriate means, including soil boring data where deemed necessary by the commissioner.

~~4.~~ d. Where erosion protection is deemed necessary by the commissioner, the site conditions and fill material are capable of being stabilized by an approved erosion control method ~~(~~such as riprap, retaining wall, ~~etc.)~~ or other method which is consistent with existing land uses on the affected ~~public~~ protected water.

e. The proposed project must represent the minimal impact solution to a specific need with respect to all other reasonable alternatives.

f. The size, shape, depths, shoreline, and bottom character and topography, and susceptibility of the beds of protected waters to actions of wind, waves, and currents are such that the fill will be stable.

g. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

h. The proposed filling must be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

i. The proposed filling must be consistent with water and related land management plans and programs of local and regional governments provided such plans and programs are consistent with state plans and programs.

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

C. Specific standards. In addition to compliance with the general standards in B. specific requirements for certain activities shall be met as follows:

1. Riprap shore protection. The protection of shoreline from continued erosion by placement of natural rock riprap along the shore shall be permitted provided:

a. The riprap materials are of sufficient size, quality, and thickness to withstand ice and wave action. The riprap shall be placed with a minimum amount of space between the larger materials and the space between them shall be filled with firmly seated smaller rocks or bagion baskets to procure a uniform surface.

b. The site soils are capable of supporting riprap and a filter consisting of well-graded gravel, crushed stone, or fabric is installed to prevent undercutting of the riprap.

c. The encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of water.

2. Navigational access.

a. Filling to gain navigational access to waters shall be permitted only where access to navigable depths cannot be reasonably attained by utilizing a dock, the excavation of an offshore access channel, or other alternatives which would result in less environmental impact.

b. Fill for navigational access shall not extend beyond the edge of open water, shall not exceed side slopes greater than 2:1 horizontal:vertical, shall not exceed a maximum width of 15 feet at the base of the fill, and shall not extend to a water depth greater than four feet.

3. Shoreline lost by erosion. Applications for filling to recover shoreland lost by erosion or other natural forces shall be permitted only where:

a. The loss of shoreline is a threat to health and safety through the impending loss or damage to existing shoreline developments.

b. The loss of shoreline has occurred as a result of changes in water level or flow conditions caused by artificial manipulation of flows or levels of the waters involved within a period of not more than five years prior to the date when an application for filling is submitted.

c. The requirements of a. and b. shall not preclude the issuance of permits to place riprap materials or use other structural means for protection of the shoreline to prevent continuous erosion.

4. Filling necessary for port development or improvement shall be allowed only on those waters which are under the jurisdiction of established port authorities subject to the following:

a. no filling shall be allowed to extend beyond the limits of federally established harbor lines, or where no harbor line has been established, beyond the maximum distance waterward which could be attained without obstructing navigational use of the waters;

b. the proposed development must be part of a comprehensive port development plan which has been approved by the commissioner; and

c. adverse effects of the proposed filling on the physical and biological character of the area shall be subject to mitigation measures approved by the commissioner.

5. Filling to restore or improve fish and wildlife habitat, except for filling in designated trout streams, shall be permitted provided:

a. plans are submitted showing the nature and degree of habitat to be benefited; and

b. the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

6. Filling in trout streams officially designated by the commissioner shall be allowed only if:

a. the amount, method of placement, and location of the fill will not result in increased water temperatures, excessive sedimentation in the stream, or destruction of fish habitat; and

b. there is no other feasible or practical alternative other than filling.

7. Filling for other purposes not specifically listed shall be subject to the general standards in B. and submission of information to show that:

a. the intended purpose of the fill is reasonable with respect to all other alternatives and there are no feasible and practical means to attain the intended purpose without filling; and

b. the proposal will adequately protect public safety and promote the public welfare.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules, the provisions of this rule shall apply to filling proposed as part of any other activity or activities including but not limited to: Excavations 6 MCAR § 1.5022, Structures 6 MCAR § 1.5023, Water level controls 6 MCAR § 1.5024, Bridges and culverts 6 MCAR § 1.5025, Drainage of protected waters 6 MCAR § 1.5026, and Alternations of protected waters for mining 6 MCAR § 1.5027.

6 MCAR § 1.5022 Excavation of ~~public~~ protected waters.

A. ~~Policy and general restrictions~~ Goals. It is the ~~policy~~ goal of the department to ~~discourage~~ limit the excavation of materials from the beds of ~~public~~ protected waters in order to:

1. Preserve the natural character of ~~public~~ protected waters and their shorelands, ~~and maintain suitable aquatic habitat for fish and wildlife~~ in order to minimize encroachment, change, or damage to the environment, particularly the ecosystem of the waters.

2. Regulate the nature, degree, and purpose of excavations so that excavations will be compatible with the capability of the waters to assimilate the excavation.

3. Control the deposition of materials excavated from protected waters and protect and preserve the waters and adjacent lands from sedimentation and other adverse physical and biological effects.

B. General standards.

1. Excavation as used in this rule includes any activity which results in the displacement or removal of bottom materials or the widening, deepening, straightening, realigning, or extending of protected waters. It may involve proposals for excavations landward or waterward from the ordinary high water mark.

2. Excavation shall not be permitted ~~provided the conditions of 6 MCAR § 1.5022 B., C., and D. are met, except~~ in the following cases:

~~1.~~ a. where it is intended to gain access to navigable water depths when such access can be reasonably attained by ~~utilizing a temporary or permanent dock.~~ alternative means which would result in less environmental impact;

~~2.~~ b. where inland excavation is intended ~~solely~~ to extend riparian rights to nonriparian lands, or to promote the subdivision and development of nonriparian lands~~.~~;

~~3.~~ c. where the proposed excavation will be detrimental to significant fish and wildlife habitat, or protected vegetation~~.~~ and there are no feasible, practical, or ecologically acceptable means to mitigate the effects;

d. to control or eliminate vegetation for the development of beach areas;

e. where it is intended to provide fill materials for development purposes except as provided under 6 MCAR § 1.5027;

f. where the excavation would not provide an effective solution to a problem because of recurrent sedimentation and there are feasible and practical alternative solutions which do not require excavation;

g. unless the excavation project includes provisions for acceptable disposal of excavated materials as provided in these rules; or

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

h. where the excavation would cause increased seepage of water which would lower the water level of protected waters and result in subsurface drainage.

3. No permit for excavation shall be required for the following activities unless prohibited in 2.

a. For excavations in a protected watercourse having a total drainage area, at its mouth, of five square miles or less, provided that the watercourse is not an officially designated trout stream and the excavation will not result in:

(1) any diversions of water from the drainage area;

(2) any impoundment of waters by damming the watercourse;

(3) any actions which would result in erosion and cause sedimentation of downstream waters as determined by the county or local soil and water conservation district.

b. To remove debris such as trees, logs, stumps, and trash provided such removal does not alter the original alignment, slope, or cross-section of the waters.

c. For repair of a public drainage system lawfully established pursuant to Minnesota Statutes, chapters 106 and 112 consistent with the definition of "repair" set forth in Minnesota Statutes, section 106.471, subdivision 1.

~~B. Dredging.~~

~~1. General standards: A permit~~ 4. Permits shall be required for ~~all dredging~~ the excavation and removal of any materials from protected waters or any excavations extending into or out of protected waters, except as provided in 2. and 3., and shall be subject to the following general ~~standards~~ criteria:

a. The project must be ~~adequate in relation to appropriate~~ reasonable and practical based upon geologic and hydrologic ~~factors~~ conditions including but not limited to:

(1) quantity and quality of local drainage at the site;

(2) type of sediment/soil strata and underground formations in the vicinity;

(3) life expectancy of the ~~dredging~~ excavation with respect to bedload, long-shore drift, and siltation patterns in the project vicinity; and

(4) protection of the water body from increased seepage, pollution, and other hydrologic impacts.

b. The disposal of excavated materials shall be subject to the following requirements:

(1) The disposal of any excavated materials containing pollutants shall be subject to requirements of Minnesota Statutes, chapter 115.

(2) The most acceptable means of disposing of clean materials, free from pollutants, which are excavated from protected waters listed in order of preference are:

(a) Complete removal of excavated materials from the waters and disposal or reuse for other purposes outside of the floodplain.

~~b. Adequate and~~ (b) Deposition in stable on-land ~~spoil~~ disposal sites located above the ordinary high water mark and outside of floodway districts ~~must be available for containment of dredged spoils, and project plans must include~~ established under local ordinance. Provisions must be included for sodding, seeding, or otherwise properly ~~protecting~~ stabilizing these ~~spoils. Dredge spoils may be placed below the ordinary high water mark only when the department determines that one or more beneficial public purposes will be enhanced~~ materials.

(c) Temporary deposition along shorelines or within floodplains by stockpiling materials for subsequent removal to areas outside of any protected waters and outside of established floodplain districts provided that: any stockpile materials are removed within one year of stockpiling; and the stockpile is constructed so that any materials or waters entering or leaving the stockpile are controlled to prevent any introduction of sediment into the environment surrounding the stockpile.

(d) Redeposition of excavated materials, consisting of inorganic materials free from pollutants, into protected waters shall only be permitted when it will result in improvement of natural conditions of protected waters for the public benefit and will not result in sedimentation, obstruction of navigation, or a loss of fish or wildlife habitat. Separate permit provisions shall be required for redeposition of excavated materials subject to the standards and criteria of B.

(e) Determination of the public benefit served by redeposition of excavated materials shall be based on the

value to the public of redeposited materials in order to protect shorelines from the damaging effects of erosion due to winds and waves when there are no other feasible, practical, and ecologically acceptable means to protect the shoreline; or create or improve habitat areas for fish and wildlife; or mitigate or enhance the physical and biological environment within protected waters when mitigative or enhancement measures are required as a condition of a permited activity within the waters involved and there are no other feasible, practical, and ecologically acceptable mitigative measures.

c. The proposed project must represent the "minimal impact" solution to a specific need with respect to all other reasonable alternatives ~~such as weed removal without dredging, beach sanding, excavation above the bed of public water, less extensive dredging in another area of the public water, or management of an alternate water body for the intended purpose~~.

d. The ~~dredging~~ excavation must be limited to the minimum dimensions necessary for achieving the desired purpose.

e. Where excavation is proposed ~~on~~ in a protected water ~~body~~ that is perched on an impervious stratum, soil borings must show that the proposed excavation will not rupture the impervious stratum.

~~2. Additional specific standards: The following categories of dredging projects shall be permitted, subject to the following specific restrictions.~~

f. The biological character of the waters and surrounding shorelines shall be affected to the minimum degree feasible and practical.

g. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

h. The water supply, navigational, and drainage characteristics of the waters shall be protected to ensure that the interests of the public and of private riparian landowners are not adversely affected by the proposed excavation.

i. The proposed excavation shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

j. The proposed excavation shall be consistent with plans and management programs of local and regional governments provided that such plans are consistent with state plans and programs.

k. For harbors, boat slips, and other mooring facilities, the excavation shall be appropriately sized to provide a single mooring space for each riparian lot to be served. The number of mooring spaces to be provided shall generally be the amount of natural shoreline to be served divided by the lot requirements of the local land use control authority and the state shoreland management standards.

C. Specific standards. In addition to compliance with the general standards in B. specific requirements shall be met for the following activities:

~~a.~~ 1. Excavations for beach development~~:~~.

~~(1)~~ a. The existing site conditions will not provide a suitable beach using a sand blanket alone.

~~(2)~~ b. When the proposal includes the installation of a beach sand blanket the area to be ~~dredged~~ excavated shall be consistent with the ~~general dimensions authorized~~ criteria for ~~beach sanding~~ filling under 6 MCAR § 1.5021 B.

~~(3)~~ c. The depth of ~~dredging~~ excavation needed to reach a suitable beach stratum shall ~~not~~ be ~~excessive~~ the minimum depth necessary considering anticipated site maintenance and ~~desired~~ reasonable water depths for a beach.

~~b. Public waters serving commercial or recreational navigation or access to existing boat harbors.~~

~~(1) The dredging shall be confined to the recognized nagivational channel(s) in the area or the length, width, and depth dimensions of the original boat harbor.~~

~~(2) The channel or harbor shall not be maintained to a depth or width greater than the minimum necessary to allow reasonable navigational use by the anticipated watercraft.~~

~~c. Lake improvement:~~

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

~~(1) The dredging shall be limited to the removal of accumulated sediment or rock debris where such materials constitute an impairment to the use of a common navigational corridor, impede reasonable access, or where it is intended to create open areas in aquatic vegetation to improve fish or wildlife habitat; or~~

~~(2) Large scale lake dredging shall be permitted where:~~

2. Excavations for improvement or enhancement of hydrologic and biologic conditions in all, or large portions of waterbasins.

a. A public need for the excavation has been established by local governmental resolution specifying the public interests to be improved or enhanced, except where the project is state sponsored.

~~(a)~~ b. The proposed project is intended to achieve one or more of the following public purposes:

~~(i)~~ (1) to improve navigation, swimming, and other recreational uses~~.~~;

~~(ii)~~ (2) to reduce winter fish-kill potential~~.~~;

~~(iii)~~ (3) sediment removal to eliminate a source of nutrients and/or contaminants.

~~(b) A public need for the dredging has been established by local governmental resolution specifying the public interests to be enhanced.~~

~~(c)~~ c. The proposed ~~dredging~~ excavation is part of an overall ~~lake restoration~~ improvement or enhancement project based upon adequate background and field test data for which a comprehensive ~~lake restoration~~ plan is submitted at the time of application detailing all of the following:

~~(i)~~ (1) Objectives to be accomplished, and an analysis of any alternative means considered to meet the objectives and the rationale for selecting excavation.

~~(ii)~~ (2) Sufficient soil boring and bottom sampling data to evaluate sediment quality and bottom "seal" conditions. Where excavation is proposed on a water basin that is perched on an impervious stratum, soil borings must show that the proposed excavation will not rupture the impervious stratum.

~~(iii) Location of spoil disposal sites~~

(3) The methods, uses, and locations to be employed in excavating and disposing of excavated material consistent with the provisions of 6 MCAR § 1.5021.

~~(iv)~~ (4) Existing water quality data and provision for future water quality monitoring ~~of both lake water and return~~ including any water returned to the waterbasin during the removal of excavated materials.

~~(v)~~ (5) A timetable which indicates anticipated yearly ~~dredging~~ excavation areas and volumes of materials to be removed, plus the selected ~~spoil~~ disposal ~~site(s)~~ methods, uses, and deposition locations for ~~any given dredging~~ each excavation period.

~~(vi)~~ (6) A detailed description of proposed ~~dredging~~ excavation and disposal equipment and ~~discharge~~ facilities, including, where applicable, the length of discharge pipe purchased or available for the project and the pumping characteristics of the ~~dredging~~ equipment.

~~C. Inland excavations connected to public waters.~~

~~1. General standards: A permit shall be required for all excavations which extend the cross-section of public waters lnadward of the ordinary high-water mark subject to the following restrictions:~~

~~a. The applicant must establish either of the following:~~

~~(1) Where a private inland boat slip or harbor is proposed, the applicant's entire shoreline shall be subject to wind and wave conditions of a magnitude occurring with an expected average frequency of at least once each year or possess lakebed conditions which would preclude the use of a temporary or permanent dock; or~~

~~(2) Where a commercial or public marina or harbor is proposed, there shall be adequate existing demand in the area to support an inland marina or harbor without creating user conflicts.~~

~~b. The facility shall be adequate in relation to appropriate engineering factors including but not limited to:~~

~~(1) Adequate entrance openings;~~

~~(2) Ample turning radius;~~

~~(3) Adequate depth and size for the anticipated watercraft usage;~~

~~(4) Adequate reduction of wave heights in mooring areas;~~

~~(5) Proper harbor shape to reduce wave resonance;~~

~~(6) Need for and feasibility of maintenance dredging;~~

~~(7) Adequate height of perimeter wall;~~

~~(8) Need for wave absorbers within the harbor;~~

~~(9) Bank stabilization by an appropriate erosion control measure; and~~

~~(10) Location of the mooring area of the harbor at an adequate distance from the shoreline for wave protection and to prevent breakthrough.~~

~~c. The development plan shall be adequate in relation to appropriate geologic and hydrologic factors including but not limited to:~~

~~(1) Quantity and quality of stream flow and local drainage at the proposed project site;~~

~~(2) Water stagnancy problems including the capability of being flushed or drained;~~

~~(3) Interference with stream flow or longshore drift;~~

~~(4) Type of soil strata and underground formations in the project vicinity; and~~

~~(5) Protection of the water body itself in terms of reduced water supply, increased seepage or drainage, pollution, increased flooding, and other adverse hydrologic impacts.~~

3. Excavations for navigation related purposes.

a. Access channels from shorelines for recreational craft.

(1) Excavations for accesses from shorelines to reach navigable depths shall not be allowed if:

(a) access could reasonably be obtained through use of a dock to reach navigable depths; and

(b) prevalent wind, wave, and current conditions would not impair reasonable access to reach navigable depths.

(2) When shoreline conditions and wind, wave, and current conditions preclude access to navigable depths, excavations for navigational access shall be allowed provided the access channel shall not exceed four feet in depth, more than 15 feet in botton width, and will not extend to an offshore water depth greater than four feet.

b. Other navigational channels:

(1) Excavations shall be limited to the minimum depth and width necessary to allow reasonable use of anticipated watercraft.

(2) Excavations to provide maintenance of navigational channel projects shall be limited to the length, width, and depth dimensions of the original channel.

4. Harbors and boat slips.

a. Excavations for development of offshore or inland harbors or boat slips for the mooring of more than 25 watercraft or watercraft larger than 20 feet in length shall be restricted to those waters which have the following characteristics:

(1) waterbasins having areas of 1,000 acres or more;

(2) watercourses which are used for commercial or industrial navigational purposes.

b. Excavations for development of offshore harbors serving fewer than 25 watercraft shall be limited to those water areas where the location of the proposed offshore harbor would not create unreasonable obstructions to public use and

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

navigation on the water involved. Unreasonable obstructions include any development which would result in threats to public health, safety, or welfare.

c. Excavations for development of private inland harbors or boat slips serving fewer than 25 watercraft or watercraft less than 20 feet in length shall be limited to those waters where:

(1) Prevalent wind, wave, or current conditions along the shoreline where excavation is proposed are of a magnitude and frequency which precludes the use and maintenance of docks to moor watercraft. Determinations of magnitude and frequency which would inhibit use of docks shall be based on supporting facts including:

(a) the character of the water involved and its shoreline in relation to exposure to severe wind, wave, or current actions and the configuration and area of the water;

(b) the frequency of occurrence of storms producing severe winds and waves based on climatological data for the area; and

(c) the average number of days during each month of the navigational season when the shoreline is affected by severe winds, waves, or currents;

(2) The presence of lake bed and bank conditions would preclude the use and maintenance of docks and the conditions of the site and the number, type, or size of watercraft intended to be moored would preclude the development and use of on-land facilities, such as rollers, winch and track systems, sliderails, or other facilities which could be used to haul watercraft out of the water for on-land storage; or

(3) The proposed site is located in an area of the water body where offshore mooring or excavations or extensive dock development would create unreasonable obstructions to public use and navigation of the water body.

d. The width and length of boat slips shall not exceed 150 percent of the width and length of the anticipated watercraft and all authorized boat slips shall be oriented to maximize the degree of wave protection.

e. Excavations for development of inland harbors shall be limited to those waters described in C.4.c. and shall meet the following additional requirements:

(1) Requirements applicable to all commercial and industrial inland harbors:

~~d.~~ (a) The mooring area of the harbor shall be compactly shaped in order to minimize the surface area excavated in relation to the number of mooring spaces to be provided and shall be located at an adequate distance from the shoreline to provide wave protection and prevent breakthrough.

~~e.~~ (b) No branch or connecting channels shall be permitted extending laterally outward from authorized inland excavations.

~~f.~~ (c) If practical, a "dogleg" shall be incorporated in the approach channel located between the mooring area and the shoreline to minimize visual impact from the water body and promote wave dissipation.

~~g. Suitable onland disposal shall be utilized for containment of excavated materials without erosion into public waters.~~

~~h. Unless specifically prohibited,~~ (d) The excavation shall not extend more than 200 feet inland from the ~~public~~ protected water unless evidence is provided to show that greater distances are required because of the dimensions of the watercraft to be moored.

(e) The methods, use, and deposition locations to be employed in disposing of excavated materials shall be consistent with the privisions of B.4.b.

(2) An application for a permit shall contain plans, maps, and supporting data including but not limited to proposed excavation site soil borings, ground water levels and characteristics, water quality, topography, drainage, and vegetation which shall substantiate that the proposed project must be reasonable and practical based upon geologic and hydrologic conditions including:

(a) quantity and quality of stream flow and local drainage at the proposed project site;

(b) water stagnancy problems including the capability of being flushed or drained;

(c) interference with stream flow or longshore drift;

(d) type of soil strata and underground formations in the project vicinity;

(e) protection of the water body itself in terms of reduced water supply, increased seepage or drainage, pollution, increased flooding, and other adverse hydrological impacts;

(f) adequate entrance openings;

(g) ample turning radius;

(h) adequate depth and size for the anticipated watercraft usage;

(i) adequate reduction of wave heights in mooring areas;

(j) proper harbor shape to reduce wave resonance;

(k) need for and feasibility of maintenance dredging;

(l) adequate height of perimeter wall;

(m) need for wave absorbers within the harbor; and

(n) bank stabilization by appropriate erosion control measures.

~~2. Additional specific requirements: The following types of inland excavations shall be subject to the following specific restrictions:~~

~~a. Private riparian boat slips for inland mooring purposes:~~

~~(1) Watercraft size shall be sufficiently great that a temporary dock or other seasonal mooring structure cannot reasonably be utilized along the subject shoreline for mooring of the riparian owner's watercraft.~~

~~(2) The width and length of the slip shall not exceed 150 percent of the width and length of the anticipated watercraft.~~

(3) ~~Authorized boat slips shall be oriented to maximize the degree of wave protection~~ Additional requirements applicable to specific types of harbors.

~~b.~~ (a) Private inland harbors serving ~~one~~ two or more single family residential riparian lots~~:~~

~~(1) The harbor shall be appropriately sized to provide a single mooring space for each riparian lot served; and~~

~~(2) If practical, the facility~~ shall, if practical, be located along the mutual boundary of properties to be served.

~~c.~~ (b) Private inland harbors for proposed multi-family or cluster developments, ~~or for~~ residential planned unit developments, or for resports, campgrounds, or other commercial purposes:

(1) ~~The harbor shall be appropriately sized to provide a single mooring space for each riparian lot to be served. The number of mooring spaces to be provided shall generally be the amount of natural shoreline to be served divided by the lot requirements of the local land use control authority;~~

~~(2)~~ The development plan shall be approved by the local governmental unit; ~~and~~

~~(3)~~ (2) The permit shall be of the title-registration type including a provision that the individual waterfront lots in the development have priority rights to the available mooring spaces thus obviating issuance of future permits for individual harbors for these lots~~.~~; and

~~d. Inland harbors for private resorts, campgrounds, or similar enterprises:~~

~~(1)~~ (3) The harbor shall be appropriately sized ~~to accomodate~~, consistent with the number of watercraft to be served with the number of mooring spaces not to exceed one mooring space for each riparian unit served or each rental cabin or campsite unit plus ~~a reasonable number of mooring spaces for~~ consideration of use by transient watercraft~~; and~~.

~~(2) The permit shall be of the title registration type to assure harbor maintenance and usage in the event of future property sale or subdivision.~~

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

~~e.~~ (c) Public inland harbor projects must be justified by:

(1) a public need for the proposed inland harbor ~~shall be~~ established by local governmental resolution specifying public interests to be enhanced~~.~~;

(2) the harbor shall be appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served~~.~~;

(3) the harbor shall be available for use by the general public~~.~~; and

(4) the harbor may extend more than 200 feet inland provided the plans minimize the total length by which the ~~public~~ protected water is proposed to be extended in keeping with the number of watercraft to be served and the topography.

~~f. Inland marinas:~~

~~(1) The marina may extend more than 200 feet inland from the public water, where appropriate deed covenants will preclude any future subdivision of the tract upon which the marina is located.~~

~~(2) The area shall be zoned specifically for such use or local government shall grant a land use permit.~~

~~(3) The plans shall minimize the width of the marina parallel to the shoreline consistent with the number of watercraft to be served and the site topography.~~

~~(4) The harbor shall be appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served.~~

~~(5) The permit shall be of the title registration type in the case of privately owned land to assure proper maintenance of the facility.~~

~~g. Private inland boat slips for access to on land boathouses:~~

~~(1) Under the circumstances of the proposed site, mechanical systems such as rollers, winch and track systems, sliderails, etc., which are normally used to hoist watercraft out of the water, must be impractical, and~~

~~(2) The slip shall be no more than 25 feet long and is not wider than 150 percent of the width of the anticipated watercraft.~~

~~D. Alterations of natural watercourses.~~

5. Excavations for fish and wildlife habitat improvement.

a. Excavation to restore or improve fish and wildlife habitat require:

(1) plans showing the nature and degree of habitat to be benefited; and

(2) information showing that the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

b. Excavations in trout streams officially designated by the commissioner shall be allowed only if:

(1) the amount, method, and location of the excavation will not result in increased water temperatures, cause excessive sedimentation in the stream, or destruction of fish habitat; and

(2) there is no other feasible or practical alternative other than excavation.

6. Excavations in protected watercourses.

~~1. General standards:~~ Except as noted in ~~6 MCAR § 1.5022 D.2.~~ B.3., a permit shall be required for any ~~alteration of~~ excavation in a ~~natural~~ protected watercourse and shall be subject to the following specific requirements in addition to the general requirements of B.:

a. The ~~altered~~ watercourse capacity shall be sufficient to adequately convey normal runoff.

b. The ~~altered~~ watercourse bottom gradients shall be such that normal low flow velocities are nonerosive and the sideslopes shall be graded such that bank slumping is not a hazard. Where excavation will result in excessive bank erosion, energy dissipation structures, channel and bank protection, or other engineering measures shall be required.

c. The outlet shall be adequate in that it:

(1) sufficiently conveys the discharge waters from the area proposed for ~~alterations.~~ excavation;

(2) does not produce substantial increases in downstream overbank flooding~~.~~; and

(3) does not produce downstream erosion hazards as a result of the watercourse ~~alterations~~ excavation.

d. ~~To protect the altered~~ When projects involve widening or straightening which alters the watercourse banks, all sideslopes which contribute direct surface runoff into the authorized altered watercourse, and a strip of land along both sides of the watercourse, one rod wide or to the top of the spoil bank, whichever is the greater, shall be seeded and maintained in permanent grasses. No mowing of this grassed strip shall be allowed until after July 31 of each year.

e. ~~Class I and Class II public watercourses: Alterations of Class I and Class II public watercourses may be permitted, provided the proposed project will enhance at least one of the beneficial public purposes identified in Minnesota Statutes, section 105.37, subdivision 6, and does not cause undue detriment to all other beneficial public purposes presently served by the watercourse.~~

~~f. Class III public watercourses: Where the county board of commissioners has not assumed administrative responsibility pursuant to Minnesota Statutes, section 105.42, subdivision 1a, alterations of Class III public watercourses shall be permitted upon demonstration that the project accomplishes a reasonable objective and that no feasible and prudent alternatives are available.~~

~~2. Exceptions:~~

~~a. No permit shall be required to remove debris such as trees, logs, stumps, and trash deposited by flood waters, provided such debris removal does not alter the original alignment, slope, or cross section of the channel.~~

~~b. No permit shall be required for the alteration of Class IV watercourses and of Class III watercourses where the county board of commissioners has assumed administrative responsibility pursuant to Minnesota Statutes, section 105.42, subdivision 1a, except in the following cases:~~

~~(1) Any activity which would require widening, deepening, or straightening of a Class I or II public watercourse as a result of the change in the Class IV or county administered Class III watercourse.~~

~~(2) Any diversion of water from a Class III or IV watercourse into a different watershed which is not a part of the same drainage basin.~~

~~(3) Any lowering of the streambed elevation which would result in an overfall of two feet or more in elevation of a channelization project when there is no provision for erosion control structures to prevent headward erosion.~~

~~(4) Construction of any dam 20 feet or more in structural height and/or impounding 50 acre feet or more of water at maximum storage capacity.~~

~~c. Pursuant to Minnesota Statutes, section 105.42, subdivision 1, no permit shall be required for chapter 106 drainage projects which do not substantially affect public waters.~~

The alignment and slope of the excavated channel shall be such as to provide a smooth transition between the existing and the excavated channel.

f. Disposal of excavated material from channel excavation shall be consistent with B.4., except where the original channel is allowed to be filled as part of the project.

g. No significant increase in flood damages will be permitted. Floodwater retardance structures may be required to minimize any increase in flood damage.

h. The applicant shall submit the names and addresses of landowners located immediately upstream, downstream, and adjacent to any proposed watercourse alteration resulting from excavation. In addition, the applicant shall submit the names and addresses of other landowners and occupants that the commissioner, after reviewing the plans for the proposed excavation, believes will have a substantial interest in the channel change or will be substantially affected by the watercourse alteration.

i. The preferred alternative to widening, deepening, or straightening a watercourse for control of flood waters is the construction of water impoundment structures in upstream areas. Where impoundments are infeasible, impractical, or would result in adverse effects on health and safety or greater adverse environmental effects, the preferred alternative is the construction of flood bypass channels to convey high velocity flood flows.

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

(1) Excavations in protected watercourses for flood management purposes shall be allowed only where an upstream impoundment or a flood bypass channel is infeasible or impractical or excavation is the least damaging environmentally.

(2) Excavations for widening, deepening, or straightening portions of watercourses shall be based on flood management plans which provide details on the relationship of the proposed excavation to management of flood flows for the entire watercourse and shall be consistent with state standards and state approved local standards for floodplain management including maximum use of nonstructural measures where feasible and practical.

j. Excavations shall be limited to the minimum extent necessary to facilitate construction of the road crossing and shall include provisions for adequate riprap or other bank protection measures to protect altered banks from erosion.

k. Excavations for construction of sediment traps or settling basins to control sedimentation and water quality shall be based on plans approved by the Pollution Control Agency or the local soil and water conservation districts and shall be consistent with any state and local standards, regulations, and requirements.

l. Watercourse channel excavations to restore or improve fish and wildlife habitat shall require:

(1) plans showing the nature and degree of habitat to be benefited; and

(2) information showing that the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

m. Watercourse channel excavations in trout streams officially designated by the commissioner shall only be allowed if:

(1) the amount, method, and location of the channel excavation will not result in increased water temperatures, cause excessive sedimentation in the stream, or destruction of fish habitat; and

(2) there is no other feasible or practical alternative other than channel excavation.

n. The straightening or realigment of a watercourse with a total drainage area, at its mouth, greater than five square miles shall only be permitted where the project will not result in increased downstream flooding, erosion, or sedimentation. Where it is proposed to straighten or realign a watercourse with a total drainage area, at its mouth, greater than five square miles, the applicant may be required to submit appropriate hydraulic data. Such data may include, but are not limited to:

(1) contributing watershed above the project;

(2) data for the flood of record;

(3) maximum observed high water level;

(4) flow data, based on the best available technology as follows:

(a) existing and proposed time of concentration;

(b) existing and proposed stage downstream;

(c) existing and proposed mean velocity downstream;

(5) certification that the data was prepared by a registered professional engineer.

o. The alteration of watercourses by straightening or realigning channels to facilitate adjacent land use shall be allowed only if the applicant provides evidence:

(1) that the alteration is reasonable, practical, and will adequately protect public safety and welfare; and

(2) that the alteration will involve a minimum of encroachment, change, or damage to the environment, particularly to the ecological system of the waterway.

p. All other proposals for excavations in protected watercourses shall meet the general requirements of B. and the specific requirements of C.1.-5. and shall require submission of supporting evidence as provided in C.6.n. and o.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to excavations proposed as part of any other activity or

activities including but not limited to: Filling 6 MCAR § 1.5021, Structures 6 MCAR § 1.5023, Water level controls 6 MCAR § 1.5024, Bridges and culverts 6 MCAR § 1.5025, Drainage of protected waters 6 MCAR § 1.5026, and Alterations of protected waters for mining 6 MCAR § 1.5027.

6 MCAR § 1.5023 Structures in ~~public~~ protected waters.

A. ~~Policy and general requirements~~ Goals. It is the ~~policy~~ goal of the department to ~~discourage~~ limit the ~~waterward~~ occupation of ~~the beds of public~~ protected waters by offshore navigational facilities, retaining walls, and other structures in order to:

1. preserve the natural character of ~~public~~ protected waters and their shorelands~~, and~~;

2. provide a balance between the protection and utilization of ~~public~~ protected waters; and ~~to~~

3. encourage the removal of existing ~~waterway obstructions~~ structures which do not serve the public interest from the beds of ~~public~~ protected waters at the earliest practicable date.

B. General standards.

1. This rule applies to the placement, construction, reconstruction, repair, relocation, abandonment, or removal of any structure placed on or in protected waters.

~~1.~~ ~~The~~ 2. Placement of structures ~~in public waters~~ shall not be permitted where the structure:

a. ~~Is intended to gain access to navigable water depths where such access can be reasonably attained by alternative means.~~

~~b.~~ Will obstruct navigation ~~and/or~~ or create a water safety hazard.

~~c.~~ b. Will be detrimental to significant fish and wildlife habitat, or protected vegetation. Construction is prohibited in posted fish spawning areas.

c. Is designed or intended to be used for human habitation or as a boathouse.

d. Is designed or intended to include walls, a roof, or sewage facilities.

3. No permit shall be required for the following activities, unless prohibited under 2.:

a. To construct, reconstruct, or install a seasonal dock or floating structure provided:

(1) the structure will not constitute a hazard to navigation or public health, safety, and welfare, as determined by the commissioner;

(2) the structure will not include fuel-handling facilities;

(3) the structure will allow the free flow of water beneath it; and

(4) the structure is not used or intended to be used as a marina.

~~2. Except for docks and boat ramps, all new structures shall have a title registered permit (or public agency or local governmental unit accepts responsibility for future maintenance or removal).~~

~~B. Permanent docks.~~

~~1. Permitted uses: No permit shall be required~~ b. To construct or reconstruct a permanent dock on wood pilings ~~where the site is subject to unusual physical conditions which would preclude the use of a seasonal dock, and~~ or rock filled cribs on lakes provided:

(1) the dock is a single lineal structure with no appurtenances;

(2) only one dock is installed per riparian lot;

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

(3) the ~~dock will~~ structure shall not exceed six feet in width nor exceed 50 feet in length, or extend to a depth greater than four ~~(4)~~ feet, whichever is less~~.~~;

(4) the structure shall comply with the requirements of 3.a.(2), (3), and (4) above;

(5) for a permanent dock on wood pilings, the surface area of the lake is equal to or greater than 500 acres;

(6) for a permanent dock on rock filled cribs, the surface area of the lake is equal or greater than 2,500 acres; and

(7) structures using rock filled cribs shall only be placed where the lakebed is predominantly bedrock which is incapable of supporting wood pilings and shall utilize intermittently spaced cribs which allow unrestricted circulation of water beneath the dock.

c. To construct or reconstruct a boat launching ramp provided:

(1) Privately owned ramps shall not exceed 12 feet in width, and extend more than ten feet beyond the ordinary high water mark or into water more than four feet in depth, whichever is less. Excavations five cubic yards or less, and placement of up to five cubic yards of crushed rock, gravel, clean sand, or small stone shall be allowed in order to provide a stable base or maintain use of the ramp.

(2) Publicly owned ramps shall not exceed 24 feet in width and extend more than 20 feet waterward of the shoreline or into water more than four feet in depth, whichever is less. Excavations of 60 cubic yards or less, and placement of up to 30 cubic yards or crushed rock, gravel, clean sand, or small stone shall be allowed in order to provide a stable base or maintain use of the ramp.

(3) The ramp shall be constructed of gravel, natural rock, concrete, steel matting, or other durable inorganic material not exceeding six inches in thickness.

d. Remove structures or other waterway obstructions provided:

(1) the original cross-section and bed conditions shall be restored insofar as practicable;

(2) the structure shall be completely removed including any footings or pilings which obstruct navigation;

(3) the structure is not located on an officially designated trout stream;

(4) the structure does not function as a water level control device.

4. Permits shall be required for the construction, reconstruction, repair, or relocation of any structure on or in protected waters, except as provided under B.2. and 3. above, and shall meet the following general criteria:

a. The proposed project must represent the minimal impact solution to a specific need with respect to all other reasonable alternatives.

b. The project will involve a minimum of encroachment, change, or damage to the environment, including but not limited to fish and wildlife habitat, navigation, water supply, and storm water retention.

c. The proposed structure shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

d. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

e. The proposed structure shall be consistent with water and related land management plans and programs of local and regional governments, provided these plans and programs are consistent with state plans and programs.

f. Except for docks and boat ramps, all new structures shall have a title-registered permit, unless a public agency or local governmental unit accepts responsibility for future maintenance or removal.

C. Specific standards. In addition to compliance with the general standards in B., specific requirements shall apply to the following activities:

~~2. Permit:~~ 1. Docks. Except as provided in B.2.b., a permit shall be required for the construction or reconstruction of any ~~other permanent~~ dock and shall be granted provided:

a. Similarly situated ~~permanent~~ docks in the vicinity have not experienced maintenance difficulty ~~or~~ and the use of a seasonal dock is precluded because:

(1) long fetches would subject seasonal docks to damaging storm wave conditions~~.~~;

(2) bottom conditions such as bedrock or an extremely gradual offshore slope would preclude the use of seasonal dock stringers~~.~~; or

(3) the number of public and private users ~~(private and/or public) are~~ is so great the seasonal docking equipment would not provide adequate stability.

b. Piling docks shall be ~~used~~ preferred in all cases unless the depth to bedrock is too shallow to allow the driving of piles, in which case rock crib docks may be authorized.

c. The docks shall extend ~~lakeward~~ waterward only to a navigable depth, ~~(~~generally considered to be no greater than four ~~(4)~~ feet~~)~~.

d. The dock shall not exceed six feet in width.

~~C.~~ 2. Wharves.

~~1.~~ a. A permit shall be required for the construction or reconstruction of all wharves. The following order of preference for construction types shall be utilized:

~~a.~~ (1) bulkheaded shoeline~~.~~;

~~b.~~ (2) inland slip with bulkheaded sidewalls~~.~~;

~~c.~~ (3) wharf projecting into ~~public~~ protected waters.

~~2. Permit:~~ b. Wharves shall be permitted provided the structure:

~~a.~~ (1) is ~~the only reasonable alternative for loading or unloading a specific cargo.~~ part of a designated port facility;

~~b.~~ (2) is consistent with local land use ~~controls.~~ plans and ordinances;

~~c.~~ (3) does not extend further waterward than any existing wharves in the area or beyond any established harbor line, whichever is less~~.~~;

~~d.~~ (4) size is the minimum practicable ~~and the purpose is not to increase the amount of land available for waterfront development.~~; and

~~e. Plans prohibit buildings or shelters on the deck, other than superstructures needed for cargo handling.~~

~~f.~~ (5) is not an obstruction to flood flows or longshore drift and is adequately designed to resist the natural forces of ice, wind, and wave.

~~D. Offshore breakwaters, harbors, and marinas.~~

~~1. General standards:~~ 3. A permit shall be required for the construction or reconstruction of all offshore breakwaters~~,~~ ~~harbors,~~ and marinas ~~consistent with the requirements of 6 MCAR § 1.5023 A. Such~~ These structures shall be permitted provided the following general conditions and the additional listed specific conditions are met:

a. Alternative dock or inland facilities are infeasible.

b. The facility shall be adequate in relation to appropriate engineering factors including but not limited to~~:~~ those listed in 6 MCAR § 1.5022 C.4.e.(2)(f)-(m).

~~(1) Adequate entrance openings;~~

~~(2) Ample turning radius;~~

~~(3) Adequate depth and size for the anticipated watercraft usage;~~

~~(4) Adequate reduction of wave heights in mooring areas;~~

~~(5) Proper harbor shape to reduce wave resonance;~~

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

~~(6) Necessity for and feasibility of maintenance dredging;~~

~~(7) Adequate breakwater foundation conditions;~~

~~(8) Need for wave absorbers within the harbor;~~

~~(9) Adequate structural strength to withstand the pressures of wind, wave, and ice;~~

~~(10) Proper orientation of breakwaters to achieve maximum wave attenuation, without causing additional sedimentation or erosion problems; and~~

~~(11) Proper materials selection and placement preclude transmission of wave energy into mooring areas while adequately resisting erosive forces.~~

c. The plan shall be adequate in relation to appropriate geologic and hydrologic factors including but not limited to~~:~~ those listed in 6 MCAR § 1.5022 C.4.e.(2)(a)-(e).

~~(1) Quantity and quality of streamflow and local drainage at the proposed project site;~~

~~(2) Water stagnancy problems including the capability of being flushed or drained;~~

~~(3) Interference with streamflow or longshore drift;~~

~~(4) Type of soil strata and underground formations in the project vicinity; and~~

~~(5) Protection of the water body itself in terms of reduced water supply, increased seepage or drainage, pollution, increased flooding, and other hydrologic impacts.~~

d. The size and shape shall be designed in a compact fashion so as to blend in with the surrounding shoreline while minimizing the surface area occupied in relation to the number of watercraft to be served.

e. The breakwaters shall not exceed the minimum thickness necessary to withstand the anticipated forces consistent with maintenance requirements and shall be faced with an adequate layer of natural rock riprap of appropriate size and gradation.

~~2. Additional specific conditions:~~ f. The following types of offshore structures shall be permitted, subject to the listed specific conditions:

~~a.~~ (1) Private offshore ~~harbors~~ structures serving several contiguous riparian lots; provided:

~~(1)~~ (a) The site shall meet the standards of ~~6 MCAR § 1.5023 A. and B.~~ C.1. for a ~~permanent~~ dock.

~~(2)~~ (b) The ~~breakwater~~ structure shall minimize encroachment waterward of the ordinary high water mark.

~~(3)~~ (c) The total length of the ~~breakwater~~ structure shall be appropriately sized to provide a single mooring space for each riparian lot served.

~~b.~~ (2) Private offshore ~~harbors~~ structures for proposed multi-family or cluster or residential planned unit developments; provided:

~~(1)~~ (a) The ~~breakwater~~ structure shall minimize encroachment waterward of the ordinary high water mark and its total length shall be appropriately sized to provide a single mooring space for each riparian lot to be served. The number of mooring spaces to be provided shall generally be the amount of natural shoreline to be served divided by the lot frontage requirements of the local land use control authority.

~~(2)~~ (b) The development plan shall be approved by the local land use control authority.

~~c.~~ (3) Private offshore ~~harbors~~ structures for resorts, campgrounds, or similar enterprises; provided:

~~(1)~~ (a) The ~~breakwater~~ structure shall minimize encroachment waterward of the ordinary high water mark and its total length shall be appropriately sized to provide one mooring space for each rental cabin or campsite unit plus a reasonable number of mooring spaces for transient watercraft.

~~(2)~~ (b) The development plan shall be approved by the local land use control authority.

~~d.~~ (4) Public offshore ~~harbor~~ structure projects; provided:

~~(1) The~~ (a) A local unit of government shall pass a resolution which specifies the public interests to be benefited by the proposal.

~~(2)~~ (b) The ~~harbor~~ structure shall be appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served.

~~(3)~~ (c) The ~~harbor~~ structure shall be available for use by the general public.

~~(4)~~ (d) The development plans shall minimize the waterward encroachment of the facilities.

~~e.~~ (5) Offshore marinas; provided:

~~(1)~~ (a) The area shall be zoned for such use or local government shall grant a land use permit.

~~(2)~~ (b) The proposed marina shall minimize encroachment waterward of the ordinary high water mark.

~~(3)~~ (c) The marina shall be sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served.

~~E. Retaining walls.~~

~~1. General standards:~~ 4. A permit shall be required for the construction or reconstruction of all retaining walls ~~which should~~ and erosion and sedimentation control structures that do not impound water. The construction of retaining walls shall be discouraged because their appearance is generally not consistent with the natural environment and their construction and maintenance cost is generally greater than riprap.

~~2. Permit:~~ The issuance of permits shall be contingent on ~~all of~~ the following conditions:

a. Existing or expected erosion problems shall preclude the use of riprap shore protection, or there shall be a demonstrated need for direct shoreland docking~~.~~; or

b. Design shall be consistent with existing uses in the area. Examples are: riverfront ~~commercial/industrial~~ commercial-industrial areas having existing structures of this nature, dense residential shoreland areas where similar retaining walls are common, resorts where floating docks may be attached to such a bulkhead, or where barges are utilized to transport equipment and supplies~~.~~; and

c. Adequate engineering studies shall be performed of foundation conditions, tiebacks, internal drainage, construction materials, and protection against flanking~~.~~; and

d. The facility shall not be an aesthetic intrusion upon the area and is consistent with all applicable local, state, and federal management plans and programs for the water body~~.~~; and

e. Encroachment below the ordinary high water mark shall be held to the absolute minimum necessary for construction.

~~F. Other waterway obstructions. A permit shall be required for the construction, reconstruction, relocation, removal, and abandonment of all other offshore structures, cables other than utility crossings, pilings, or other facilities not covered by specific regulations:~~

~~1. Repair: Permits for structural repair or modification (not including minor maintenance work such as reroofing, painting, etc.) of structures shall be issued provided all of the following conditions are met:~~

~~a. Applicant shall demonstrate a need for such work.~~

~~b. Cost shall not exceed 50 percent of assessed value.~~

~~c. The degree of permanence of the structure shall not be materially increased by virtue of constructing a new foundation, replacing the majority of the structure above the foundation, etc.~~

~~d. The structure being repaired shall not be in violation of local land use or sanitary regulations.~~

~~e. Degree of obstruction or structure size shall not be increased.~~

~~2. New structures: Permits for new publicly sponsored or relocation of existing structures shall be issued where:~~

~~a. Public need is documented and outweighs adverse environmental impact.~~

~~b. The site is adequately protected from the forces of ice and wave pressures.~~

~~c. The proposed construction is of sound design and is not unnecessarily obtrusive or visually incompatible with the natural surroundings.~~

~~d. A governmental agency or local governmental unit accepts responsibility for future maintenance of the structure or its removal.~~

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

~~C. Boat launching ramps.~~

~~1. Permitted uses: No permit shall be required to construct a boat launching ramp provided:~~

~~a. The site is capable of supporting a ramp without the use of pilings, dredging, or other special site preparation.~~

~~b. The ramp shall not exceed 12 feet in width, and extend more than ten (10) feet beyond the ordinary high water mark or into water more than four (4) feet in depth, whichever is less.~~

~~c. The ramp shall be constructed of gravel, natural rock, concrete, steel matting, or other durable nonorganic material not exceeding six (6) inches in thickness.~~

~~2. Permit:~~ 5. A permit shall be ~~granted~~ required for the construction or reconstruction of any ~~other~~ boat launching ramp not covered under B.3.c., and shall be granted provided:

a. the applicant shall demonstrate a need for a launching facility~~.~~;

b. the proposed ramp shall be of the minimum dimensions necessary for launching of watercraft~~.~~;

c. the proposed ramp shall not obstruct flowing water~~.~~; and

d. construction shall not necessitate alteration of shoreland which could result in substantial erosion and sedimentation.

6. A permit shall be required for the construction, reconstruction, relocation, removal, repair, and abandonment of all other offshore structures, cables other than utility crossings, pilings, or other facilities not covered by specific regulations:

a. Permits for structural repair, relocation, or modification, other than minor maintenance work such as reroofing, painting of structures or similar work, shall be issued provided all of the following conditions are met:

(1) the applicant demonstrates a need for the work;

(2) the cost of the work will not exceed 50 percent of the replacement cost of the structure;

(3) the degree of permanence of the structure will not be materially increased by virtue of constructing a new foundation or replacing the majority of the structure above the foundation;

(4) the structure being repaired has appropriate permits from the local land use or sanitary authority;

(5) the degree of obstruction or structure size is not increased.

b. Permits for construction, relocation, or reconstruction of publicly-owned structures shall be issued where:

(1) public need is documented and outweighs adverse environmental impact;

(2) the site is adequately protected from the forces of ice and wave pressures; and

(3) the proposed construction is of sound design and is not necessarily obtrusive or visually incompatible with the natural surroundings.

c. The construction, relocation, or reconstruction of privately-owned structures shall be permitted only when a governmental agency or local governmental unit accepts responsibility for future maintenance of the structure or its removal.

~~H. Removal or abandonment.~~ 7. Where the commissioner has determined that a structure is no longer functional, constitutes a public nuisance or a hazard to navigation, or poses a threat to public health or safety, the structure shall be removed from protected waters under the applicable provisions of these rules. Except as provided under B.3.d., a permit is required for the removal or abandonment of all existing waterway obstructions including boathouses, bridges, culverts, pilings, piers, and docks. ~~However, when such work is to be accomplished by simple hand tool methods, the requirement for a permit may be waived.~~ Permits shall be issued provided:

~~1.~~ a. the original cross-section and bed conditions ~~shall~~ will be restored insofar as practicable~~.~~;

~~2. The structure shall be completely removed including any footings or pilings which obstruct navigation.~~

~~3.~~ b. adequate provisions ~~shall be~~ are made to mitigate any side effects resulting from removal, such as restoration of wave or current forces~~.~~; and

c. no portion of the structure remains which would obstruct or impair navigation, interfere with the passage of flood waters, or contribute to erosion and sedimentation.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section.

Unless otherwise specified in other rules, the provisions of this rule shall apply to structures proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR § 1.5021, Excavations 6 MCAR § 1.5022, Water level controls 6 MCAR § 1.5024, Bridges and culverts 6 MCAR § 1.5025, Drainage of protected waters 6 MCAR § 1.5026, and Alterations of protected waters for mining 6 MCAR § 1.5027.

6 MCAR § 1.5024 Water level controls ~~and dam construction or reconstruction~~.

A. ~~Policy~~ Goals. It is the ~~policy~~ goal of the department to manage ~~lake resources~~ protected waters in order to:

1. maintain natural flow and natural water level conditions to the maximum feasible extent ~~and to~~;

2. encourage the construction of small upstream retarding ~~dams or~~ structures for the conservation of water in natural water basins and watercourses, consistent with any overall plans for the affected watershed area~~. The department shall oppose~~; and

3. limit the artifical manipulation of water levels except where the balance of affected public interests clearly warrants the establishment of appropriate controls and it is not proposed solely to satisfy private interests.

B. General standards.

1. Scope. The construction, repair, reconstruction, or abandonment of any structure intended to impound, divert, or control the level or flow of protected waters shall be subject to the provisions of this rule.

2. Construction or reconstruction of water level control facilities shall not be allowed where it is intended to manipulate water levels solely to satisfy private interests.

3. No permit shall be required to construct, reconstruct, or abandon a water level control structure on protected watercourses with a contributing watershed of 300 acres or less, except on officially designated trout streams, provided the structure does not qualify as a dam under the rules for dam safety.

4. Permits shall be required for the construction, repair, reconstruction, or abandonment of any water level control structure except as provided in 2. and 3., and shall meet the following general criteria:

a. The project will involve a minimum of encroachment, change, or damage to the environment including but not limited to fish and wildlife habitat, navigation, water supply, storm water retention, and agricultural uses.

b. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

c. The proposed project shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

d. The proposed project shall be consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs.

e. The construction or reconstruction shall comply with the requirements of 6 MCAR §§ 1.5030-1.5034 with respect to dam safety for the protection of human life and property.

f. The construction or reconstruction of ~~dams~~ water level control structures or changing the level of an existing structure may be permitted to:

~~1.~~ (1) control and store flood waters~~.~~;

~~2.~~ (2) maintain low flows~~.~~ for instream flow or water level protection;

~~3.~~ (3) manage water quality, including the prevention and/or control of erosion and sedimentation~~.~~;

~~4.~~ (4) improve water-based recreation~~.~~;

~~5.~~ (5) create, improve, and maintain water supplies~~.~~;

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

~~6.~~ (6) create, improve, or maintain aquatic habitat for fish and wildlife species;

(7) establish, improve, or maintain the generation of hydroelectric power.

5. The commissioner shall require the owner or operator of any water level control structure, reservoir, or waterway obstruction within protected waters, constructed before a permit was required by law, to secure approval from the commissioner of the manner by which the structure is to be operated and maintained whenever the commissioner finds that such operation and maintenance approval is necessary in the public interest after there is either:

a. verified and supported complaints by the public or governmental agencies that the existing or proposed operation and maintenance is or would be detrimental to public health, safety, and welfare or environmental protection with respect to problems of flooding, instream flows, water quality, fish and wildlife, or violations of land use regulations, requirements, and standards for lands abutting the protected waters involved; or

b. notification to the commissioner by the owner or operator of the intent to make any of the following changes in the operation or maintenance of the structure:

(1) proposed new uses or reuse of the structure for any purpose after the use of the structure has been discontinued for at least one year; or

(2) proposed changes or alterations in the operation of the structure which would affect water levels, flows, or water quality in protected waters.

6. The owner or operator of any water level control structure, reservoir, or waterway obstruction within protected waters, constructed before a permit was required by law, shall comply with the following provisions when notified by the commissioner that approval is required for operation and maintenance of the structure:

a. The owner or operator shall submit plans, specifications, and information on the structure including:

(1) An explanation of the purposes for which the structure is operated or intended to be operated.

(2) Available data on the past history of use and operation of the structure and any evidence of easements or other rights which exist or would be obtained.

(3) Engineering details on the structural features and characteristics of the structure which involve the existing or proposed operation of the structure including but not limited to any gates, sluiceways, penstocks, turbines, waterwheels, or other mechanical devices employed or to be employed in the operation of the structure.

(4) Available information on the hydraulic and hydrologic characteristics of the structure and the area upstream and downstream of the structure which is affected by the structure including any available information on flows, water levels, and water quality.

(5) Available information on the physical condition of the structure including engineering data on original construction, any reconstruction or repairs and the dates of original construction and subsequent reconstruction or repairs.

(6) If the structure contains features or is intended to contain features which allow or would allow manipulations of water levels, details shall be provided on the methods, frequency, time, duration of operation, and any existing or proposed operating plans.

(7) Such other available or attainable information on hydraulic, hydrologic, or geologic characteristics as the commissioner may deem necessary in order to assess the impacts or effects of the structure and its operation.

b. After receipt of all supporting facts and available information required by 5. and 6.a., the commissioner shall review the existing or proposed operational and maintenance aspects of the structure and shall grant approval of the operation and maintenance provided that:

(1) The operation and maintenance does not or will not result in destruction or significant impairment of the protected waters with respect to:

(a) the ecosystem of the protected waters including quantity and quality effects;

(b) potential threats to life or property due to flooding and overflow of upstream and downstream lands unless allowed by easement or other legal means including acquisition of flooded property;

(c) maintenance of adequate water flows and levels for upstream and downstream higher priority users particularly for public domestic water supplies.

(2) The existing or proposed operation and maintenance is or will be consistent with applicable state and local land use standards, regulations, and requirements including floodplain, shoreland, and wild and scenic rivers management standards and ordinances.

(3) The existing or proposed operation and maintenance does not or will not result in significant decreased public use of the surface of the protected waters affected by the structure including existing uses for fishing, hunting, or navigation.

(4) The existing or proposed operation and maintenance will comply, when applicable, with the requirements of 6 MCAR §§ 1.5030-1.5034 relating to dam safety.

c. If the commissioner determines that the existing or proposed operation and maintenance will be detrimental to public health, safety, and welfare or the ecosystem of the protected waters based on provisions of 6.b., the commissioner shall not approve the manner of operation and maintenance of the structure until the operation and maintenance is modified to meet the provisions.

C. Specific standards. In addition to the general standards in B., specific requirements for water level control structures shall be met as follows:

~~B. Permit requirements. A permit shall be required for the construction, reconstruction, and abandonment of a dam or changing the level of an existing structure for the following projects:~~

1. Permanent lake level control facilities shall be approved when the commissioner initiates proceedings for the purpose of conserving or utilizing the water resources of the state and assumes responsibility for operation and future maintenance, or ~~if~~ when all of the following conditions are met:

a. The ordinary high water mark and runout elevation of the water body have been determined by a detailed engineering survey, or by order of the commissioner following a public hearing;

b. The proposed facilities shall be "reasonably consistent with natural conditions":

(1) Where a functioning outlet existed in a state of nature or for a long period of time following lawful creation or alteration of an outlet by the activities of man or animals, or cataclysmic events, the proposed outlet is at essentially the same control elevation;

(2) Where no natural or artificial outlet exists and the lake is for all practical purposes "landlocked," the control elevation shall not be more than ~~1.5~~ 1-1/2 feet below the ordinary high water mark;

c. The project is sponsored by a ~~local~~ governmental unit which assumes responsibility for operation and future maintenance, except ~~that title registration type permits may be issued~~ where:

(1) the majority of the riparian owners sign the permit application;

(2) appropriate easements or other property interests have been obtained from all affected owners;

(3) a title-registration type permit shall be issued to the owner or owners of the property upon which the proposed water level control structure will be located; and

(4) the structure will further public interests in navigation, propagation of fish or wildlife, or other beneficial public uses of the water;

d. Justification has been made of the need in terms of public and private interests and the available alternatives, including the impact on receiving waters and public uses thereof, through a detailed hydrologic study; and

e. A detailed plan is developed for operation and control including:

(1) manner and time of operation~~.~~;

(2) frequency of maintenance~~.~~;

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

(3) appropriate monitoring ~~(~~of water levels, water quality, ~~etc.).~~ and other factors;

(4) management of excess waters.

2. Fish and wildlife management proposals made pursuant to Minnesota Statutes, section 97.48, subdivision 11, or other appropriate authority shall be approved where:

a. The ~~public~~ protected water has been designated for wildlife management purposes.

b. There is a specific water level management plan for the lake basin.

c. Any drawdown of the lake is only temporary and the management plans include a permanent facility for restoration of water levels following such drawdowns.

d. Any alteration of a ~~natural~~ watercourse included in the plan ~~is minimal and~~ follows the requirements specified in 6 MCAR § 1.5022 ~~D~~ C.6.

e. Appropriate easements or fee title have been obtained ~~for the construction area and the lakeshore~~.

f. Specified management personnel are required to establish a lake level gauge and keep a record of water levels with a specified frequency during seasons of active water level manipulation and with a lesser frequency during all other open water seasons.

3. Plans for landlocked water basins less than 25 acres in surface area and contained completely within the municipal boundaries of a single city shall be approved where:

a. A municipal drainage plan for the affected tributary watershed is prepared by a qualified engineer or hydrologist and is approved by the affected watershed district and the city.

b. The city has a field survey made of the water basin after consultation with the department including but not limited to:

(1) the elevation of the aquatic vegetation fringe~~.~~;

(2) the elevation of the tree line and a description of the location, type, and size of representative trees~~.~~;

(3) groundwater elevations, if appropriate~~.~~;

(4) other information as requested by the department.

c. Control elevations and associated physical parameters are approved by the department and the city.

d. The city holds a public hearing on the proposal and provides a transcript of the proceedings to the department. Provision of a transcript may be waived by the department.

4. ~~Other dam construction or reconstruction:~~

~~a. Permitted uses: No permit shall be required to construct, reconstruct, or abandon a dam with a contributing watershed of 300 acres or less, provided:~~

~~(1) Structural height shall not exceed 20 feet.~~

~~(2) Storage capacity shall not exceed 50 acre feet.~~

~~(3) The land(s) occupied by the dam and its associated reservoir shall be in common ownership.~~

~~b. Permit. A permit shall be required~~ Permits for the construction, reconstruction, and abandonment of all other ~~dams and~~ water level control structures shall be issued provided:

~~(1)~~ a. The need is established in terms of quantifiable benefits.

~~(2) New dams shall be adequate in relation to the following factors:~~

~~(a) The hydraulic capacity of the spillway(s) must be established by a competent technical study performed by a professional engineer or by a qualified engineer of the U.S. Soil Conservation Service or the U.S. Corps of Engineers and must be adequate:~~

~~(i) For the probable maximum flood, where failure may cause loss of human life and serious damage to homes, industrial and commercial buildings, important public utilities, main highways, or railroads;~~

~~(ii) For the standard project flood, in predominantly rural or agricultural areas where failure may damage isolated homes, main highways or minor railroads, or cause interruption of use or service of relatively important public utilities;~~

~~(iii) For the regional flood, in rural or agricultural areas where failure may damage farm buildings, agricultural land, or township or county roads;~~

~~(iv) For such other floods as may be specified in the procedures of Federal agencies such as the Corps of Engineers or the Soil Conservation Service for analysis of a structure in its risk category; and~~

~~(v) The estimation of the magnitude of the design flood must include the anticipated effects of the development of the tributary watershed area expected over the project life and the assessment of the risks involved must be based upon anticipated development in the floodplain.~~

~~(b) The department may require preparation of an inundation map of the area which would be inundated in the event of dam failure for a structure with a height of 20 feet or more, or a maximum storage capacity of more than 50 acre feet. It shall be prepared by a professional engineer showing areas where human life would be endangered and areas subject to serious damage to homes, commercial and industrial buildings, public utilities, and transportation facilities. Where failure may endanger human life, the map shall include a feasibility report on floodplain evacuation, emergency warning systems, or other techniques to eliminate this risk factor.~~

~~(c) An emergency spillway is installed unless the hydraulic capacity of the principal spillway is increased to the capacity that would be required for the combination of principal and emergency spillways.~~

~~(d) A mechanism for drawing down the water surface to facilitate repairs and maintenance work is installed.~~

~~(e) The height of all portions of the dam and associated dikes or other facilities not designed to withstand overtopping must include appropriate freeboard above the maximum storage capacity for wind and wave conditions and to provide a safety factor.~~

~~(f) Earthen emergency spillways and the upstream and downstream faces of earthen dams must be adequately riprapped, sodded, or seeded to prevent erosion.~~

~~(g) The storage pool must provide adequate space to store sediment from upstream over the project life without detracting from the public purposes served.~~

~~(h) An adequate stilling basin or other means of controlling downstream erosion is installed.~~

~~(i) A stage discharge curve must be developed for the watercourse immediately below the dam to ascertain whether or not the dam capacity is reduced due to backwater effects.~~

~~(j) Information as to the extent, configuration, and capacity of the reservoir at various pool stages is provided.~~

~~(3)~~ b. The structural design shall be done by a professional engineer or by a qualified engineer of the Soil Conservation Service or the Corps of Engineers and must include the following considerations:

~~(a)~~ (1) gravity forces;

~~(b)~~ (2) hydrostatic pressure;

~~(c)~~ (3) uplift forces;

~~(d)~~ (4) overturning moment;

~~(e)~~ (5) resistance to sliding;

~~(f)~~ (6) ice pressures;

~~(g)~~ (7) earthquake forces;

~~(h)~~ (8) slope stability including consolidation and pore pressures;

~~(i)~~ (9) seepage collection or prevention;

~~(j)~~ (10) foundation conditions including appropriate borings and determination of the strength of foundation materials;

~~(k)~~ (11) specifications for materials of construction and their placement or installation;

~~(l)~~ (12) adequate construction inspection to assure conformance with design assumptions; and

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

~~(m)~~ (13) adequacy of the cofferdam or diversion during construction, if any.

~~(4)~~ c. Adequate assurances shall be made for future maintenance of new ~~dams~~ water level control structures:

~~(a)~~ (1) For ~~dams 20~~ water level control structures 25 feet or more in structural height or having a maximum storage capacity of 50 acre-feet or more, permits will be issued only to governmental agencies, public utilities, or corporations having authority to construct and maintain such projects, except that a title-registration type permit may be issued to the owner or owners of the private property upon which the proposed ~~dam~~ water level control structure will be located ~~if an authorized governmental sponsor assumes maintenance responsibility~~ where the provisions of C.1.c. are met.

~~(b)~~ (2) For other ~~dams~~ water level control structures, title-registration permits may be issued to the owner or owners of the private property upon which the ~~dam~~ water level control structure will be located which shall run with the land and require breaching or removal if it ever falls into a state of disrepair or becomes unsafe.

~~(c)~~ (3) Periodic engineering inspections of authorized ~~dams~~ water level control structures may be made by the department or its designee.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to water level control structures proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR § 1.5021, Excavations 6 MCAR § 1.5022, Structures 6 MCAR § 1.5023, Bridges and culverts 6 MCAR § 1.5025, Drainage of protected waters 6 MCAR § 1.5026, and Alterations of protected waters for mining 6 MCAR § 1.5027.

6 MCAR § 1.5025 Bridges and culverts, ~~watermain and sewer crossings,~~ intakes and outfalls.

A. ~~Policy~~ Goals. It is the ~~policy~~ goal of the department to allow crossings of ~~public~~ protected waters, including the construction of water intake and sewer outfall structures in ~~public~~ protected waters, only when less detrimental alternatives are unavailable or unreasonable, and where such facilities adequately protect public health, safety, and welfare.

B. General standards.

1. Scope. The construction or reconstruction of any bridge, culvert, intake, outfall, or other crossing of protected waters shall be subject to the provisions of this rule. Abandonment or removal of all crossings and structures governed by this rule shall require a permit pursuant to 6 MCAR § 1.5023 C.7.

~~Such~~ 2. Crossings shall not be permitted where the project:

~~1.~~ a. Will obstruct navigation or create a water safety hazard.

~~2.~~ b. Will cause or contribute to significant increases in flood elevations and flood damages either upstream or downstream.

~~3.~~ c. Would involve extensive channelization above and beyond minor stream channel realignments to improve hydraulic ~~entrance/exit~~ entrance or exit conditions, except where a separate permit is obtained pursuant to 6 MCAR §1.5022 ~~D.~~ C.6.; or

~~4.~~ d. Will be detrimental to water quality, ~~and/or~~ or significant fish and wildlife habitat, or protected vegetation.

~~Abandonment or removal of all crossings and structures governed by this section shall require a permit pursuant to 6 MCAR § 1.5023 H.~~

~~B. Bridge and culvert installations.~~

~~1. Permitted uses:~~ 3. No permit shall be required to construct ~~a low water ford type crossing or place a temporary bridge over public~~ the following types of crossings on protected waters ~~provided all of the following conditions are met~~, unless prohibited in 2.:

a. To construct or reconstruct a bridge or culvert on a protected watercourse with a total drainage area, at its mouth, of five square miles or less, except on officially designated trout streams.

~~a.~~ b. To construct or reconstruct a low-water ford type ~~crossings~~ crossing provided that:

(1) the stream bed is capable of supporting the crossing without the use of pilings, culverts, dredging, or other special site preparation~~.~~;

(2) the water depth does not exceed ~~2~~ two feet under normal summer flow conditions;

(3) the crossing conforms to the natural cross-section of the stream channel and does not reduce or restrict normal low-water flows~~.~~;

(4) the original stream bank at the site does not exceed four ~~(4)~~ feet in height~~.~~;

(5) the crossing is constructed of gravel, natural rock, concrete, steel matting, or other durable inorganic material not exceeding one ~~(1)~~ foot in thickness~~.~~;

(6) the approach is graded to a finished slope not steeper than 5:1 horizontal:vertical, and all graded banks are seeded or mulched to prevent erosion and sedimentation~~.~~; and

(7) the crossing is not placed on an officially designated trout stream ~~or~~, on a ~~federal~~ wild, scenic, or recreational river or on an officially designated canoe and boating route.

~~b.~~ c. To construct or reconstruct a temporary ~~bridges~~ bridge provided that:

(1) The stream bank is capable of supporting the bridge without the use of foundations, pilings, culverts, excavation, or other special site preparation~~.~~;

(2) Nothing is placed in the bed of the stream~~.~~;

(3) The bridge is designed and constructed so that it can be removed for maintenance and flood damage prevention~~.~~;

(4) The bridge is firmly anchored at one end and so constructed as to swing away in order to allow flood waters to pass~~.~~;

(5) The lowest portion of the bridge shall be at least three ~~(3)~~ feet above ~~normal summer streamflow.~~ the ordinary high water mark on navigable streams; and

(6) The bridge is consistent with state and local rules and regulations for floodplain, shoreland, and wild, scenic, or recreational rivers management standards and ordinances.

d. To maintain the hydraulic adequacy of any storm sewer or agricultural drain tile outfall or ditch which has been functioning within the previous five years if such work does not alter the original course, current, or cross-section of the protected waters.

e. To install an agricultural drain tile outletting into protected waters provided:

(1) the bank is restored to original cross-section or contour; and

(2) no permanent structure is placed below the ordinary high water mark, except for the drain tile.

4. Permits shall be required for the construction or reconstruction of any bridge, culvert, intake, outfall, or other crossing of protected waters except as provided in 2. and 3. above, and shall meet the following general criteria:

a. The project will involve a minimum of encroachment, change, or damage to the environment including but not limited to fish and wildlife habitat, navigation, water supply, and storm water retention.

b. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

c. The proposed crossing shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

d. The proposed crossing shall be consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs.

e. Crossings of protected waterbasins or wetlands shall be allowed only where there is no feasible and practical alternative which does not require filling, excavating, or the placement of a structure in protected waters.

C. Specific standards. In addition to the general standards in B., specific requirements for bridges, culverts, intakes, outfalls, and other crossings of protected waters shall be met as follows:

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

~~2. Permit: A permit shall be required for~~ 1. The construction, reconstruction, or relocation of all ~~other~~ bridges, culverts, or other crossings over ~~public~~ protected waters~~.~~ ~~Except as noted below in 6 MCAR § 1.5025 relating to sewer and watermain crossings, crossings~~ shall be permitted provided all of the following criteria are met:

a. The hydraulic capacity of the structure must be established by a competent technical study. The sizing shall not be based solely on the size of existing upstream and downstream structures. If a state or federal floodplain information study exists for the area, or a U.S. Geological Survey gaging station is located nearby on the stream, the hydraulics of the proposed bridge/culvert design must be consistent with these data. ~~If acquisition of the study by the applicant would cause undue hardship and would be unreasonable under the circumstances,~~ The department may waive ~~the~~ this requirement if:

(1) ~~It~~ the department has performed a ~~rough~~ hydraulic study based upon available information and reasonable assumptions~~.~~;

(2) ~~It~~ the department has made a field investigation of the project site~~.~~;

(3) the project will not cause flood-related damages or problems for upstream or downstream interests.

b. New crossings and replacements of existing crossings must comply with local floodplain management ordinances and with provisions of NR 87 (d) (1) (6 MCAR § 1.0087 (d) (1)).

(1) New crossings:

(a) No approach fill for a crossing can encroach upon a community designated floodway.

(b) Where a floodway has not been designated or where a floodplain management ordinance has not been adopted, increases in flood stage in the regional flood of up to ~~.5~~ one-half of one foot shall be permitted if they will not materially increase flood damage potential. Additional increases may be permitted if:

(i) a field investigation and other available data indicate that no significant increase in flood damage potential would occur upstream or downstream~~.~~, and

(ii) any increases in flood stage are reflected in the floodplain boundaries and flood protection elevation adopted in the local floodplain management ordinance.

(2) Replacement of existing crossings:

(a) If the existing crossing has a swellhead of ~~0.5 feet~~ one-half of one foot or less for the regional flood, the replacement crossing shall comply with the provisions for new crossings ~~(6 MCAR § 1.5025 B.2.b.(1))~~ in C.1.b.(1).

(b) If the existing crossing has a swellhead of more than ~~0.5 feet~~ one-half of one foot for the regional flood, stage increases up to the existing swellhead may be allowed provided field investigation and other available data indicate that no significant flood damage potential exists upstream from the crossing based on analysis of data submitted by the applicant. The swellhead for the replacement crossing may exceed the existing swellhead if it complies with the provisions for new crossings found in ~~(i) and (ii) of 6 MCAR § 1.5025 B.1.b.(1)(b)~~ C.1.b.(1) (b).

(3) The decks and approaches to bridges or culverts on major transportation routes and on roads that provide access to development at urban densities shall be no lower than two feet below the flood protection elevation as defined in NR 87 (e) (6 MCAR § 1.0087 (e)) unless it can be shown that alternative routes or access can be provided during the regional flood.

c. The structure shall provide for game fish movement, unless the structure is intended to impede rough fish movement or the stream has negligible fisheries value.

d. The structure will not obstruct reasonable public navigation. For bridges over protected watercourses, three ~~(3)~~ feet above the calculated 50-year flood stage~~, in keeping with Federal Highway Administration standards,~~ will ordinarily satisfy navigational clearance requirements. For bridges over protected waterbasins or wetlands, and all culverts, three ~~(3)~~ feet of clearance above the ordinary high water mark will ordinarily satisfy navigational requirements.

e. Any project proposed near an existing or proposed segment of the state trails system should be consistent therewith.

f. Footbridges and walkways:

(1) Over watercourses:

(a) ~~Should~~ Must be designed to cause negligible backwater effects during floods.

(b) ~~Should~~ Must be securely anchored or otherwise capable of withstanding the dynamic forces of flowing water, ice, and debris.

(c) Approaches ~~should~~ must not be raised above the adjacent floodplain lands.

(2) New walkways across any portion of ~~a lakebed~~ protected waters to provide private access to an island will be prohibited. Permits for reconstruction of existing walkways or for the construction of new walkways intended to provide public access will be issued only if:

(a) The walkway provides the only existing access to the island.

(b) There is existing development thereon.

(c) The design will provide for any public navigational needs and is consistent with the natural surroundings.

~~C. Watermain and sewer crossings. A permit shall be required for the construction, reconstruction, or relocation of all watermain and sewer crossings. They shall be issued provided:~~

~~1. No site condition will cause frequent future disruption of the beds.~~

~~2. No alignment alternative is possible which would eliminate the crossing. The selection of an alignment shall consider the preservation of lakes, streams, wetlands, recreation lands, and other natural areas.~~

~~3. Minimum depth of cover is two feet.~~

~~4. Bed and banks must be restored as nearly as practicable to the original cross section, alignment, and grade.~~

~~5. Banks must be revegetated by seeding and/or sodding.~~

~~6. The project must be designed by a professional engineer.~~

~~7. Pipe and pipe bedding/support specifications for sanitary sewer and force main crossings shall be submitted to the department for approval. Construction plans and specifications shall be prepared by a professional engineer.~~

~~B. Intakes and outfalls.~~

~~1. Permitted uses: No permit shall be required to maintain the hydraulic adequacy of any storm sewer or agricultural drain tile outfall or ditch which has been functioning within the previous five (5) years if such work does not alter the original course, current, or cross section of the public waters.~~

2. ~~Permit: A permit shall be required for~~ The construction, reconstruction, or relocation of all ~~other~~ water intake and sewer outfall structures placed in ~~public~~ protected waters~~. It shall be issued where~~ shall be permitted provided all of the following criteria are met:

a. Adequate attention is given to methods of screening the structure from view as much as possible from the surface of the ~~public~~ protected water through the use of existing vegetation and/or new plantings.

b. The project is not detrimental to public values including but not limited to fish and wildlife habitat, navigation, water supply, ~~and~~ water quality, or storm water retention.

c. No site conditions will require frequent future disruption of the beds of ~~public~~ protected waters.

d. Adequate precautions must be planned during and after construction to prevent silt, soil, and other suspended particles from being discharged into ~~public~~ protected waters.

e. Adjacent to the intake structure, the banks and bed of the ~~public~~ protected water must be protected from erosion and scour by placement of suitable riprap shore protection.

f. The banks must be revegetated by seeding and/or sodding.

g. The structure must be designed by a professional engineer.

h. Intake structures:

(1) ~~Dredging or~~ Excavation must be detailed in the application and on design plans.

(2) Where necessary, a water appropriation permit must be obtained from ~~DNR~~ the department prior to operation.

(3) An appropriate sized screen must be used to prevent fish intake.

i. Outfall structure design shall:

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

(1) Where necessary, incorporate a stilling-basin, surge-basin, energy dissipator, or other ~~device(s)~~ device or devices to minimize disturbance and erosion of natural shoreline and bed resulting from peak flows.

(2) Where feasible, utilize discharge to natural wetlands, natural or artificial stilling or sedimentation basins, or other devices for entrapment ~~(and possible future removal)~~ of sand, silt, debris, and organic matter.

(3) where feasible, maximize use of natural ~~and/or~~ or artificial ponding areas to provide water retention and storage for the reduction of peak flows into ~~public~~ protected waters.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to bridges and culverts proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR § 1.5021, Excavations, 6 MCAR § 1.5022, Structures 6 MCAR § 1.5023, Water level controls 6 MCAR § 1.5024, Drainage of protected waters 6 MCAR § 1.5026, and Alterations of protected waters for mining 6 MCAR § 1.5027.

6 MCAR § 1.5026 Drainage of protected waters.

A. Goals. It is the goal of the department to protect and preserve protected waterbasins and wetlands from damage or destruction by drainage.

B. General standards.

1. Scope. This rule relates to the partial drainage or temporary drawdown of protected waterbasins and wetlands for all purposes except mining of metallic or nonmetallic minerals which are subject to provisions of 6 MCAR § 1.5027.

2. Except as provided in Minnesota Statutes, section 105.391, subdivision 3, the permanent or total drainage of protected waterbasins and wetlands shall not be permitted.

3. A permit shall be required for the partial drainage or temporary drawdown of protected waterbasins and wetlands and shall be granted provided all of the following conditions are met:

a. The proposed project is intended to achieve one or more of the following purposes:

(1) improve navigational or recreational uses;

(2) improve or restore fish or wildlife habitat;

(3) expose sediment in order to remove or eliminate nutrients or contaminants;

(4) alleviate flooding of agricultural lands caused by artificial obstruction of downstream drainage or increased upstream discharge;

(5) allow the mining of iron ore, taconite, copper, copper-nickel, or nickel under the provisions of Minnesota Statutes, section 105.64.

b. The project will involve a minimum of encroachment, change, or damage to the environment including but not limited to fish and wildlife habitat, navigation, water supply, water quality, and storm water retention.

c. Adverse effects on the physical or biological character of the waters shall be subject to feasible and practical measures to mitigate the effects.

d. The proposed project shall be consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved.

e. The proposed project shall be consistent with water and related land management plans and programs of local and regional governments provided such plans and programs are consistent with state plans and programs.

C. Specific standards. In addition to compliance with the general standards in B., specific requirements for drainage or drawdown activities shall be met as follows:

1. The drainage or diversion of protected waters for mining iron ore, taconite, copper, copper-nickel, or nickel shall be permitted only where all of the provisions of Minnesota Statutes, section 105.64 and 6 MCAR § 1.5027 have been met.

2. The drainage or diversion of protected waters for mining all other metallic and nonmetallic minerals shall be permitted only when the protected waters being drained are replaced by protected waters which will have equal or greater public value, subject to provisions of 6 MCAR § 1.5027.

3. All other drainage or diversion of protected waters allowed in B. shall be permitted provided all of the following specific criteria are met:

a. For protected waterbasins, permits will be issued only to governmental agencies having the authority to undertake such projects. In addition, a public need for the partial drainage or temporary drawdown shall be established by specifying the public interests to be enhanced.

b. Written consent for the partial drainage or temporary drawdown of protected waterbasins and wetlands has been obtained from all riparian owners.

c. Partial drainage or temporary drawdown of protected waterbasins and wetlands shall be permitted only where the applicant has submitted data to confirm:

(1) that the partial drainage will improve navigation or recreational uses;

(2) that the partial drainage will improve or restore fish and wildlife habitat; or

(3) that agricultural lands have been flooded due to artificial obstruction of downstream drainage or increased upstream discharge.

d. Any proposed temporary drawdown shall not exceed two years in duration under normal climatic conditions.

e. There are no feasible and practical means to attain the intended purpose without drainage.

f. The proposal will adequately protect public safety and promote the public welfare.

D. Relationship to standards and criteria for other activities involving changes in course, current, or cross-section. Unless otherwise specified in other rules the provisions of this rule shall apply to drainage activities proposed as part of any other activity or activities including but not limited to: Filling 6 MCAR § 1.5021, Excavations 6 MCAR § 1.5022, Structures 6 MCAR § 1.5023, Water level controls 6 MCAR § 1.5024, and Bridges and culverts 6 MCAR § 1.5025.

6 MCAR § 1.5027 Alterations of protected waters for mining.

A. Goals. It is the goal of the department to ensure that alterations of protected waters for mining or reclamation of mining areas will minimize adverse environmental effects, preserve water resources to the maximum extent feasible and practical, and encourage the planning of future land and water utilization while at the same time promoting the orderly development of mining and the use of sound mining practices.

B. Standards and criteria.

1. Scope. Mining activities which may involve alterations of protected waters include the mining of metallic minerals including but not limited to iron ore, taconite, copper, copper-nickel, nickel, cobalt, and gold; and the mining of nonmetallic minerals including but not limited to sand and gravel, stone, clay, marl, oil, gas, and coal; and the mining of peat.

2. Permits shall be required for any alterations of protected waters to facilitate mining of iron ore, taconite, copper, copper-nickel, or nickel minerals or reclamation of mining areas provided that:

a. Permits to mine shall be obtained when required by Minnesota Statutes, section 93.44 to 93.51.

b. Permits for alterations in protected waters shall be granted in accordance with provisions of Minnesota Statutes, section 105.64. Applications for permits for alterations in protected waters shall include an analysis showing why underground mining without drainage, diversion, or control of protected waters is not feasible or economical.

3. Permits shall be required for mining of nonmetallic minerals, peat, and other metallic minerals not regulated in Minnesota Statutes, section 105.64, or reclamation of mining areas provided that the applicant provides evidence that:

a. There is no other feasible and practical location for the proposed mining activity;

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

b. There is no other feasible or economical method to mine except by draining, diverting, or controlling the protected waters;

c. The proposed alteration of protected waters is necessary and no other feasible and economical method for it is reasonably available;

d. The proposed alteration of protected waters will not substantially impair the interests of the public in lands or waters or the substantial beneficial public use thereof, except as expressly authorized in the permit, and will not endanger public health or safety;

e. The proposed mining operations will be in the public interest and that the public benefits resulting from it will be sufficient to warrant the proposed alteration of protected waters;

f. The activities represent the minimal impact solution with respect to watershed modifications, watercourse diversions or changes, drainage, runoff and seepage management, and avoidance of major adverse changes in the ecosystem of protected waters having substantial public value;

g. Whenever protected watercourses must be diverted or changed to facilitate mining, the design and construction of the diversion or change shall provide for:

(1) Maintenance of adequate flows and levels in order to protect instream flows and prevent downstream flooding;

(2) Measures to prevent bank erosion and sedimentation in order to protect water quality; and

(3) Details on the location, relocation, and utilization of the watercourse after cessation of mining;

h. Whenever protected waterbasins are allowed to be drained to facilitate mining, and such drainage is justified and legally permitted, compensation for the loss of the basin must be provided for by either:

(1) Immediate replacement of the protected basin with waters of equal or greater value; or

(2) Submission of acceptable plans for the eventual replacement of the protected basin with waters of equal or greater value upon cessation of mining activities; and

i. Whenever a water impoundment is necessary and justified to facilitate mining, the design, construction, operation, and maintenance of the impoundment structure shall:

(1) Meet the applicable requirements of 6 MCAR §§ 1.5030-1.5034 pertaining to dam safety;

(2) Provide hydrologic and hydraulic measures to ensure that any protected waters downstream of the impoundment area are adequately protected with respect to maintenance of water quantity and quality and prevention of flooding; and

(3) Include plans detailing the disposition and utilization of the impoundment area after cessation of mining activities.

4. Whenever metallic, nonmetallic, and peat mining activities in the beds of protected waters will result in detrimental effects on the physical and biological character of protected waters, measures to compensate for the detrimental aspects shall be required in the permit conditions.

6 MCAR § 1.5028 General administration.

A. Application for ~~water resource~~ protected waters permits. All applications pursuant to 6 MCAR §§ 1.5020 ~~to 1.5025~~-1.5027 shall be made on forms prepared by the department and submitted to the regional office for the area where the majority of the proposed project is located.

1. Who may apply: Applications shall be submitted by the riparian owner of the ~~land(s)~~ land on which a project is proposed, except:

a. A governmental agency, public utility, or corporation authorized by law to conduct the project may apply if the property rights acquired or to be acquired are fully described in the application.

b. A holder of appropriate property rights such as a lease or easement may apply provided that the application is countersigned by the owner and accompanied by a copy of the lease or other agreement. A permit may be issued for the term of the lease only, subject to cancellation prior to the termination date of the agreement if the agreement is cancelled.

c. A prospective lessee of state-owned lands may apply for a permit in his own name after he has requested a lease from the departmental official responsible for the affected lands. Both the lease request and the permit application will be processed concurrently with appropriate coordination.

2. Information required: Pursuant to Minnesota Statutes, section 105.44, subdivision 4, an application shall be considered complete when:

a. It includes all of the information specified in the appropriate ~~section(s)~~ section or sections of these standards.

b. It is accompanied by appropriate photographs, maps, sketches, drawings, or other plans which adequately describe the proposed project.

c. It includes a brief statement regarding the following points:

(1) Anticipated changes in water and related land resources.

(2) Unavoidable anticipated detrimental effects on the natural environment.

(3) Alternatives to the proposed action.

d. Application fees have been paid. Note that final permits cannot be issued until any field inspection fees are paid.

e. Proof of service of a copy of the application and accompanying documents on the mayor of the city or the secretary of the board of the district is included with the application if the project is within or affects a city, watershed district, or soil and water conservation district.

3. Fees: All applications shall be accompanied by an application fee as required by 6 MCAR § 1.5000 E.1. An additional fee may be charged for field inspections conducted by department personnel in the course of review subject to the provisions of 6 MCAR §§ 1.5000 G.1.-1.5000 G.5.

B. Permit review.

1. Field inspection: The department may conduct field investigations to determine a project's nature, scope, and impact on water and related land resources. The department shall determine which applications must be investigated and such inspections shall be made in a timely fashion.

2. Coordination with other agencies: Nothing in these standards is intended to supersede or rescind the laws, rules, regulations, standards, and criteria of other federal, state, regional, or local governmental subdivisions with the authority to regulate work in the beds or on the shorelands of ~~public~~ protected waters. The issuance of a permit shall not confer upon an applicant the approval of any other unit of government for the proposed project. The department shall coordinate the review with other units of government having jurisdiction in such matters.

3. Procedure upon decision: The commissioner ~~is authorized to~~ may grant permits, with or without conditions, or deny them. In all cases, the applicant, the managers of the watershed district, the board of supervisors of the soil and water conservation district, or the mayor of the city may demand a hearing in the manner specified in Minnesota Statutes, section 105.44, subdivision 3, within 30 days after receiving mailed notice outlining the reasons for denying or modifying an application. Any hearing shall be conducted as a contested case hearing before a ~~referee appointed by~~ hearing examiner from the independent ~~State Hearing Examiners~~ Office of Administrative Hearings in accordance with Minnesota Statutes, chapter 15 and sections 105.44 and 105.45.

C. Statutory requirements. Further provisions for the administration of these rules are found in Minnesota Statutes, chapter 105, including but not limited to sections 105.44 ~~through~~ 10 105.463, 105.541, and 105.55.

Minnesota Public Utilities Commission

Proposed Rule Governing Schedule Changes of Common Carriers

Notice of Intent to Adopt Rule without a Public Hearing

Notice is hereby given that the Minnesota Public Utilities Commission (the commission) proposes to adopt the above-entitled

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES

In the Matter of Adopting Amendments to the Rules of the Department of Natural Resources Governing Permits for Making Changes in the Course, Current or Cross-section of Public Waters

FINDINGS OF FACT

AND CONCLUSIONS

Notice of the Commissioner's intent to adopt the above-entitled amendments without a public hearing was published in the State Register on Monday, April 4, 1983, and was mailed to all persons on the list maintained by the agency pursuant to Minn. Stat. § 14.14, subd. 1, on March 31, 1983.

The request of Northern States Power Company to withdraw the new language of 6 MCAR § 5.0224B.5 and B.6 has been honored. This material will be further reviewed, and re-noticed for adoption later if deemed necessary. ✓ OK p.37-40

There were no requests for hearing. The comments received, other than that of Northern States Power Company, were not deemed to warrant changes from amendments as proposed.

Dated: June 30, 1983

JOSEPH N. ALEXANDER, Commissioner
Department of Natural Resources

by Steven G. Thorne

STEVEN G. THORNE, Deputy Commissioner
Department of NaturaL Resources

STATEMENT OF NEED AND REASONABLENESS

The Commissioner of Natural Resources is required by statute to administer a permit system for all projects which will result in the alteration of the course, current, or cross-section of these waters of the state defined by statute as public waters. In 1978, pursuant to law, the Commissioner promulgated rules governing the issuance, review and denial of such permits. Since that time, there have been changes in the statutes and there has been considerable discussion with the legislature regarding the necessity for clarifying and expanding certain aspects of the rules established as 6 MCAR 1.5020 - 6 MCAR 1.5026.

Accordingly, the Commissioner has prepared revisions to 6 MCAR 1.5020 - 1.5026 in order to clarify and expand certain parts of the rules, provide language which meets legislative intent, reorganizes the format of the rules, and establishes, by administrative action, certain language in lieu of statutory language.

JUSTIFICATION

General Revisions -

Two of the more significant revisions of the rules relate to the use of the words "protected waters" to replace the term "public waters" throughout the rules, and the easing of controls over certain minor activities which involve changes in the course, current, or cross-section of watercourses having total drainage areas of 5 square miles or less.

Several bills were submitted to the 1981 legislature to change the term "public waters" to "protected waters". The primary reason for the proposed change was to alleviate concerns of landowners abutting the waters that the

general public would assume that "public waters" implied an absolute right of access to the waters and that the beds of the waters were owned by the public. This concern remained despite specific language in Minnesota Statutes, Section 105.391, Subd. 12 which states:

> "Subd. 12. The designation of waters as "public waters" or "wetlands" pursuant to this section shall not grant any additional or greater right of access to the public to those waters, nor is the commissioner required to acquire access to those waters under section 97.48, subdivision 15, nor is any right of ownership or usage of the beds underlying those waters diminished. Notwithstanding the designation of waters or lands as public waters or wetlands, all provisions of Minnesota law forbidding trespass upon private lands shall remain in full force and effect."

The DNR agreed that a change in nomenclature to "protected waters" would be beneficial but expressed concern that such change must be made in a manner which would not alter past case law relying on the term "public waters".

After considerable legislative discussion, the House Environment and Natural Resources Committee rejected any legislation which would alter provisions of Minnesota Statutes, Chapter 105. However, the Commissioner of Natural Resources, in a letter of March 25, 1981, to Representative Willard Munger, Chairman of the House Environment and Natural Resources Committee, agreed to make the change administratively in revised rules.

Another major concern during the legislative session related to proposals to exempt watercourses with a 10 square mile drainage area from permit requirements. This change was intended to reduce permit control over small watercourses for actions which would not cause substantial adverse effects on the watercourses.

The DNR argued that a broad permit exemption of all watercourses of 10 square miles or less drainage area would remove a significant percentage of watercourses from control and could create water level and flow problems on larger watercourses to which the 10 square mile watercourses were tributary. As noted previously, the House Environment and Natural Resources Committee did not enact any legislation providing for any changes in Minnesota Statutes, Chapter 105.

The Commissioner agreed that the existing permit authority was quite broad and that certain activities on some smaller watercourses could be allowed without permit if they did not cause significant adverse effects. The Commissioner informed Representative Munger that revised rules would provide for exemptions from permit certain activities in watercourses having drainage areas of 5 square miles or less. This action would allow, without permit, actions which would not have a significant adverse effect on small watercourses. The decision to limit the exemption to watercourses having 5 square miles or less drainage areas was based on stream inventory data showing that this deregulation would affect approximately 2900 watercourses and thus providing for deregulation of most activities on a large number of streams, as proposed in the submitted legislation.

The most significant adverse effects resulting from activities on watercourses of 5 square miles or less are as follows:

1. Diversions of water - which could result in complete elimination of the watercourse and its contributing flow into other tributary watercourses.

2. Impoundments of water - which could have the same result as diversions.

3. Activities which would cause erosion and result in sedimentation in tributary waters thus creating water quality problems as determined by the County and Soil and Water Conservation District (The County and Soil and Water Conservation District are involved since they both have authority related to soil erosion and sedimentation at the local level).

In addition, the Commissioner determined that there must be continued protection for all designated trout streams which have unique water quality and habitat characteristics and which can easily be impaired or destroyed by alteration activities. The legislature recognized this value of trout streams by declaring in M.S. 105.37, Subd. 14(i) "trout streams officially designated by the Commissioner shall be public waters regardless of the size of their drainage area." Accordingly, the exemption of watercourses of 5 square mile drainage areas from permit does not include trout streams. Any activity in any designated trout stream will require a permit.

Based on the above rationale, the revised sections of the rules relating to Filling 1.5021 B.3.d. and Excavations 1.5022 B.3.a. contain provisions which state that no permit is required (to place fill or for excavations) in a protected watercourse having a total drainage area (at its mouth) of 5 square miles or less provided that the watercourse is not an officially designated trout stream and the placement of fill or excavation shall not result in:

(1) Any diversions of water from the drainage area.

(2) Any impoundment of waters by damming the watercourse.

(3) Any actions which would result in erosion and cause sedimentation of downstream waters as determined by the County and local Soil and Water Conservation District.

Since the sections on Structures 1.5023, Water Level Controls 1.5024, Drainage 1.5026 and Mining 1.5027 all address activities which may involve diversions or impoundments, they do not contain language exempting all activities from permit on watercourses of 5 square miles or less drainage areas.

In the section on Bridges and Culverts 1.5025, subsection 1.5025 B.3.a. provides that "no permit shall be required to construct or reconstruct a bridge or culvert on a protected watercourse with a total drainage area (at its mouth) of five (5) square miles or less, except on officially designated trout streams." This provision does not include the conditional language (1) thru (3) of the sections on Filling and Excavation because existing language of 1.5025 A.4. (now renumbered as revised rules 1.5025 B.2.d.) prohibits permits for crossings of watercourses which would be detrimental to water quality or significant fish and wildlife habitat, or protected vegetation. Since no permits would be issued for such work, it is not necessary to add further qualifying language.

Other important changes provided in rule revisions include:

1. Additions to 6 MCAR 1.5021 Filling, to address filling for navigational access, to clarify language regarding recovery of shoreline lost by erosion, to address filling for post development, filling for restoration of fish and wildlife habitat, and filling in trout streams. These matters were inadequately covered in the original rules.

2. Additions and reorganization of 6 MCAR 1.5022 Excavations to address disposal of excavated materials, excavations for beach development, navigational purposes, harbors and boatslips, a new section on excavations for fish and wildlife habitat and a greatly expanded section on excavations in watercourses.

3. Changes in 6 MCAR 1.5023 Structures to clarify exemptions of certain structures from permit, especially regarding docks, ramps and removal of waterway obstructions.

4. Changes in 6 MCAR 1.5024 Water Level Controls to address maintenance and operation of water level control structures constructed before a permit was required by law.

5. Changes in 6 MCAR 1.5025 Bridges and Culverts, Intakes and Outfalls to provide general criteria for permits.

6. Addition of a new section 6 MCAR 1.5026 to address partial or temporary Drainage of Protected Waters not previously covered by the rules.

7. Addition of a new section 6 MCAR 1.5027 to address Alterations of Protected Waters for Mining not previously covered by the rules.

Revisions to 1.5020 General Provisions -

Subsection A:

"General Policy" is changed to "Purpose" as a housekeeping revision. Statutory references to sections of M.S. 104 and to M.S. 105.64 are added for the following reasons:

M.S. 104 additions are necessary to assure coordination of permit actions with the statutory policies relating to statewide flood plain management (104.01), the Lower St. Croix Wild and Scenic Rivers Act which incorporates state and federal management policies relating to the lower St. Croix River

(104.25), and the State Wild and Scenic Rivers Act which sets a policy of preservation and protection for certain designated rivers (104.32). This language is necessary to insure consistency of M.S. 105.42, Subd. 1a, paragraph 3 with M.S. 104.01.

The reference to M.S. 105.64 is necessary to incorporate the state policy relating to drainage or diversion of water to facilitate mining, a section of the laws not addressed in the 1978 rules, but dealt with in these revisions to those rules.

The word "vegetative" is stricken so that the language now reads "protected species management", rather than "protected vegetative species management". This housekeeping change is made so that there is a recognition of both protected animal and vegetative species management, as provided by law.

Revisions to 1.5020, Subsection B:

"Policies" is changed to "Purpose" as a housekeeping revision. Addition of language that permits are required for any activity affecting course, current or cross-section unless specifically exempted in the rules. This is necessary to fulfill the statutory mandate of M.S. 105.42, Subd. 2.

Revisions to 1.5020, Subsection C.

Deletion of language which stated the rules did not apply to mining. Mining is now addressed in the revised rules in 6 MCAR 1.5027.

Revisions to 1.5020, Subsection D.

The definition of "breakwater" is amended to clarify the previous language with respect to purposes for which a breakwater is constructed.

The definitions of "Class I through Class IV watercourses" are deleted since they referred to former provisions set forth in emergency rules which no longer are in effect. They are no longer applicable.

The definition of "dam" is deleted since the rules now relate to "control structures" which include dams.

The definition of "dock" is added to clarify the use of the term within these rules and to prevent confusion with other types of structures, such as decks or walkways.

The definition of "drainage" is added since it was not included in existing rules and the subject is specifically addressed in revised Sections 6 MCAR 1.5026 and 6 MCAR 1.5027.

"Drawdown" is added to the definitions since it is specifically referred to in revised Section 6 MCAR 1.5026. Because it refers to a temporary lowering of levels there is a need to set a time frame to delineate a temporary action. Two years is selected as a reasonable period of time for a temporary action. Any drawdowns greater than 2 years in duration are considered to be permanent in nature.

The original rules used the word "dredge" to denote excavation. The Section on Excavations 6 MCAR 1.5022 has been amended considerably and since "dredge" or "dredging" often is used to identify a specific form of excavation, the word excavation is utilized as a general term to cover all forms of excavation including "dredge" and "dredging".

The term "emergency spillway" is deleted since it is no longer referred to in the rules and is not needed in addressing the subject of water level control structures. Emergency spillway is defined and addressed in Dam Safety Rules 6 MCAR 1.5030.

The definition of "filter" is revised to eliminate the description of the purposes of a filter since the purpose is not needed in the definition.

The definition of "floating structure" is added to cover the subject addressed in 6 MCAR 1.5023. The structures listed as floating structures are included because they can constitute local obstructions to navigation and public use of protected waters and by doing so, create local hazards to public safety in the waters involved.

The definition of "flood plain" is included to define the area referred to in several sections of the revised rules. The original rules contain a definition of "regional flood" but did not define "flood plain".

The definition of "marina" is revised as a housekeeping measure.

The definition of "mining activity" is added since it was not included in existing rules and the subject is specifically addressed in revised Section 6 MCAR 1.5027.

The definition of "natural watercourse" is deleted since the revised rules refer only to "watercourses" and there is no longer a reference to "natural watercourse".

The definition of "ordinary high water mark" is revised to meet the definition as defined in M.S. 105.37, Subd. 16. The statutory language clearly defines the term and therefore, the deleted language from the original language is unnecessary.

The definitions of "port" and "port facilities" are added to define the words used in revisions to 6 MCAR 1.5021 and 1.5023. The references to ports and port facilities are necessary to address the issue of port development as requested by the Duluth and St. Paul Port Authorities. The existing rules do not specifically refer to port authorities.

The definition of "probable maximum flood" is deleted since it is no longer specifically addressed in the revised rules. It is addressed through reference to the dam safety rules which contain definitions and further explanations.

The rationale for the definition of "protected waters" as a replacement for "public waters" has been previously explained.

The definition of "reconstruction" is revised to delete unnecessary language. The use of assessed value is eliminated because this figure is not generally available for shoreline structures.

The revisions to the definition of "retaining walls" are provided to better define the relationship of retaining structures to shorelines. The added words "constructed approximately parallel to the shoreline" provide a more specific reference than the deleted word "alongshore".

The revision of the definition of "riprap shore protection" by eliminating the word "basal" is provided to more accurately reflect the position of riprap which may and often will, extend beyond the "basal" slope of the existing bank.

The definitions of "spillway" and "standard project flood" are deleted since they are no longer specifically referred to in the new rules. The reference in the new rules to the applicability of the dam safety rules adequately addresses these subjects.

The revisions to the definition of "structures" are provided to more accurately describe the term as used in the proposed revised rules in 6 MCAR 1.5023. The word "dam" is deleted since "dams" are covered under the term "water level controls" and the language "extending over, anchored or" is added to clarify the definition.

The language relating to "floating structures" is deleted since the revised rules now address the subject of "floating structures" and there is a new definition of "floating structures" previously discussed.

The definition of "structural height" is revised to provide a more reasonable definition which relates to the matter of a "control structure". The previous language which was deleted, had specific reference to dam safety

standards and is covered by the dam safety rules. The new language addresses "structural height" as it relates to control structures, which may or may not involve dam safety and the protection of human life and property. Where the project involves dam safety considerations, the definitions in the dam safety rules shall apply.

Since the definition of "temporary structure" is not included in the existing rules, it is added to address the subject. It specifically is limited to "seasonal docks" or "floating structures" and such structures are considered to be temporary if they are capable of removal before ice conditions occur on the water involved.

The definition of "water level control structure" is added since it is not defined in the existing rules and is needed to clarify the relationship to dam safety rules.

The definition of "wharf" is revised to specifically refer to permanent structures "as part of a port facility". Other structures which may involve berthing or mooring of commercial watercraft or industrial and commercial enterprises but are not part of a port facility, as previously defined, are covered by the definitions of "permanent docks". The addition of the language relating to loading or unloading passengers from commercial watercraft, or for the operation of a port facility is added for clarification of the intent.

6 MCAR 1.5020 E. Severability:

This section is deleted since it is no longer necessary to be addressed in rules, but is understood to apply in any rules.

Revisions in the format of existing sections 6 MCAR 1.5021 through 6 MCAR 1.5025: -

The existing rules are generally organized to address "Policy" or "Policy and general restrictions or requirements" followed by subsections relating to specific types of activities. In revising the existing rules, it was determined that a more appropriate format for Sections 1.5021 Filling - through 1.5025 Bridge and Culverts, Intakes and Outfalls would be as follows:

Subsection A relates to the Goals of each section in terms of the purposes and directives to be accomplished by that section of the rules. "Goals" is a better term than "Policy" since the statements represent an end that is strived to attain, whereas "Policies" relate to nonspecific principles, plans or courses of action. The goal sets the general framework for this particular section which is further enunciated by the specific regulations which implement the goals.

Subsection B sets forth the general standards relating to the subject covered by each section of the rules. Each discussion of general standards consists of 4 major elements:

1. Scope - the range of the activity or action involved.

2. Activities or actions not permitted - those specific types, purposes or consequences of activities which will result in no permit being granted.

3. Activities or actions for which no permit is required - those activities or actions which are of a specific type or purpose that would not have significant adverse effects and which would not require a permit. These will generally relate to specific small, routine activities or actions for which a formalized site specific permit would be unreasonable or burdensome and which would not individually or collectively create significant detrimental conditions or adverse effects on the waters involved. These include such activities as small beach sanding, small riprap, qualified

filling or excavations on small watercourses, debris removal, seasonal docks, qualified permanent docks, certain kinds of boat ramps, removal of certain structures, control structures in small watersheds, bridges and culverts in small watersheds, certain low-water ford crossings, temporary bridges, maintenance of storm sewers, drain tiles or ditches, and drain tile installation.

4. General Standards - general criteria applicable to any activity or action addressed in a particular section, unless the activity is not permitted or does not require a permit.

Subsection C - Specific Standards sets forth provisions applicable to a specific type or degree of activity or action. These standards apply in addition to the General Standards and provide additional requirements to better qualify or quantify the regulations.

Subsection D - Relationship to Other Activities provides language which ties each section together so that multipurpose proposals that include several types of activities or actions will be consistently and uniformally applied with respect to one another.

Proposed new Section 1.5026 Drainage contains a similar subsection breakdown A through D but does not contain a clause relating to permits not required since permits are required for any drainage activities.

Proposed new Section 1.5027 Mining contains only 2 subsections: A. Goals and B. Standards and Criteria. Because of the unique and complex nature of many mining activities or actions it is more appropriate to discuss general and specific standards and the relationships to other activities in a single subsection. However, this subsection does discuss the standards and relationships in a logical fashion.

The reorganization of the sections will provide prospective permit applicants with more readable and understandable regulations presented in an orderly sequence. They will allow a prospective applicant to readily determine: what the Commissioner's intentions are (Goals); the kinds of activities or actions not allowed (not permitted); the kinds of activities or actions for which no permit is required; the general standards for a particular class of activity; the specific standards for a specific type of activity or action; and the relationships between each section where multipurpose classes of activities or actions are involved.

Revisions in Section 1.5021 - Filling into Protected Waters -

A. Goals

The existing language under A. Policy is stricken and replaced with more specific language as follows:

1. Minimize encroachment, change or damage to the environment to fulfill the statutory requirement of Minn. Stat. 105.42, Subd. 1a.

2. Regulate the quantity and quality of fill and purposes based on the capabilities of the waters to assimilate the material. In order to assure that water resources will not be subject to major adverse effects caused by filling, it is necessary to regulate the amount and type of fill placed in the waters and to make sure that the filling will not result in a major loss in the character of the waters. Certain waters cannot withstand much fill without causing considerable problems with respect to depths, aquatic habitat and other changes in the ecological system which makes the water valuable to the public.

3. This section is necessary to meet the statutory requirements of Minn. Stat. 105.42, Subd. 1a and 104.32.

These 3 goals are more specific and inclusive than the original policy statement regarding preservation of natural character and maintenance of suitable aquatic habitat for fish and wildlife.

The existing language in Section 1.5021 A.1. is deleted, but is addressed in new Subsections B and C. in accord with the changes in format previously discussed.

B. General Standards

1. Scope - This statement explains the type of activity or action affected by this portion of the rules.

2.b. The words "for development or subdivision" are deleted and the words "except where expressly provided herein" are added. This change is necessary to provide a more reasonable rule which recognizes that upland areas may be created, under certain conditions, for development of port facilities or for fish and wildlife habitat improvement or restoration.

2.c. The change is a housekeeping change.

2.d. The change is necessary to clear up an inconsistency in the existing rules with respect to prohibiting placement of fill to stabilize areas of flowing water or areas subject to substantial wave action, drift, sedimentation action or other disruptive forces. The existing and revised rules both allow filling for development of beach areas, erosion protection, and shore wave protection (riprap). By removing the indicated language and changing the language to relate only to "stabilize or impound the site of active springs" the inconsistency is removed. The addition of the word "impound" helps to strengthen the statement regarding springs. The existing rule only relates to "stabilize areas of active springs." There is also a

need to protect the water quality (especially temperature) of active springs, which augment or totally supply the flows of a number of protected waters and which provide special fisheries values because of the colder and higher quality water they supply to streams.

2.e. is added to impose a prohibition against filling solely in order to dispose of unwanted materials from on-land activities. This practice has never been an allowed activity since it is unreasonable, impractical and adverse to the public interest.

2.f. is added to prohibit the construction, by fill, of roads or paths, or to improve land access from shorelands to islands in order to facilitate land transportation. It is not reasonable to allow such activity as a benefit to private parties to the detriment of the public use of the waters. However, it is recognized that this provision could, in certain extreme situations, be unreasonable with respect to justified public transportation facilities. Therefore, this subsection incorporates "exceptional circumstance" language to provide a reasonable and practical remedy to allow certain actions such as qualified and justified public transportation needs to be permitted. It is the Commissioner's position that such "exceptional circumstances" regarding necessary public projects are not commonplace and are in fact, special exceptions to the rule. There is no known good evidence to justify and support fill construction for private roads across protected waters.

B.3. This language is necessary to introduce activities for which no permit is required.

B.3.a. The installation of a beach sand blanket remains essentially unchanged except for the words "or one-half the width of the lot, whichever is less" and "by the landowner".

Regarding the added language "or one-half the width of the lot, etc.", this addition is necessary to cover the situations where large numbers of lots with small amounts of shoreline have been created under past local land use controls. It is not reasonable to allow unpermitted beach development across all of the lots simply because they are less than 50 feet in width along the shoreline. This could lead to a substantial amount of artificial shoreline alteration without any consideration of the impact on the resources. The original language allowing 50 feet of beach sand blanket without a permit was meant to apply to post - 1972 statewide minimum shoreline lot sizes of 100 feet in width or more. Thus, the beach sanding exemption would involve, for those standard sized lots, a change of 50 percent or less in the natural character of the lot without a permit. It should be noted that this provision does not prohibit beach sanding across an entire substandard lot but merely requires a permit be applied for. A permit may be granted if applicable general and specific standards are met.

The words "by the landowner" are added to clarify that the local zoning officials must be notified by the landowner. It would be unreasonable and impractical to require any other party to so notify local officials of an action that is exempt from a state permit.

The new language in B.3.b. provides a means for exempting from permit one additional beach sanding application at the same site and not exceeding the same amounts and dimensions allowed under B.3.a. Field experience has shown that, in a number of instances, the original beach sanding proved to be inadequate because of post-sanding occurrences which could not be anticipated (such as ice actions on shorelines following a period of low water levels or unforeseen current or wave conditions at certain lake stages). The allowance of an additional one time action without permit will not create a substantial adverse effect.

The existing rule language in 6 MCAR 1.5021 C. relating to riprap protection is deleted in this particular subsection but is replaced unchanged, except for small housekeeping changes, in new Section C.1. of the revised rules relating to Specific Standards.

The changes in the existing language of B.3.c. relating to installation of certain riprap shore protection not requiring a permit are essentially unchanged, except for the following:

The language requiring that riprap materials have an average size of 12 inches or more is added to clarify the rule and insure that smaller sized riprap materials, which would be more susceptible to movement and dissemination into the water, are not used.

The words "horizontal:vertical" are added to clarify the meaning of the 3:1 slope language.

The language "and does not obstruct the flow of water" is added to further clarify that the intent is that riprap protection constructed without a permit be placed as close as possible to the shoreland and not extend out into the water thereby obstructing water flows.

Existing Subsection C.3. is deleted. It is revised and expanded in subsection C.7. of the revised rules.

A new subsection B.3.d. is added regarding fill activities and conditions for which no permit will be required in watercourses having total drainage areas of 5 square miles or less as previously discussed.

Section B.4. is added to replace existing rules section 1.5021 D. and to provide general criteria relating to all fill activities except those for which no filling is allowed (see 1.5021 B.2. previously discussed) and for which no permits are required (see 1.5021 B.3. previously discussed).

Existing rules Section 1.5021 D. Other Filling is deleted. It is revised and further addressed in revised Section C.7. Specific Standards.

Subsection D.1. is revised as new Subsection B.4.a. as follows:

The reference to being "detrimental to public purposes listed in Minn. Stat. 105.37, Subd. 6" is deleted since that section of the law has been repealed. The addition of "The project will involve a minimum of encroachment, change or damage" is replacement language which conforms to the statutory directive regarding granting of permits in M.S. 105.42, Subd. 1a (1st paragraph). The existing rules language remains the same except that the language prohibiting filling in fish spawning areas is deleted since it is more appropriately discussed in revised Subsection B.2.g. along with other prohibited actions or activities.

Existing rules Subsections D.2.3. and 4. are changed to revised Subsections B.4.b., c. and d.

New subsection B.4.e. is added as a general criteria for all proposals to further stress the legislative directive regarding minimum impact and to assure that there is a reasonable evaluation of all alternative means of accomplishing a proposed activity or action with selection of the alternative with the least detrimental impact.

New subsection B.4.f. is added as a general criteria in order to assure that fill will not be placed in locations where physical conditions would be impractical, would inhibit retention of the materials for the purpose involved or result in degradation of the aquatic environment outside of the fill area.

New subsection B.4.g. is added to assure that appropriate feasible and practical mitigative measures are taken if a fill creates adverse effects.

New subsection B.4.h. is added to assure compliance with mandatory provisions of M.S. 105.42, Subd. 1a and consistency with M.S. 104.32 - 104.36.

New subsection B.4.i. is added to meet the legislative intent of M.S. 105.42, Subd. 1a regarding conformity of permits with plans.

C. Specific Standards.

The introductory language is necessary to introduce this reformatted section of the rules relating to specific standards for fills.

Subsection C.1. sets forth specific standards for permits for riprap and contains the language included in the existing rules (1.5021 C.1.) as general standards. The few changes in the existing language are housekeeping changes necessary to provide conformity with the revised rule format.

Subsection C.2. is added to provide specific standards relating to fills for navigational access to waters. This is not specifically addressed in the existing rules but was referred to in existing rules 1.5021 A.1.e. as a permitted action.

2.a. is added to provide more specific criteria for permitting navigational access based upon consideration of reasonable alternatives which would allow access without filling. These specific criteria elaborate and explain the general criteria contained in Subsection B.4.e. regarding minimal impact.

2.b. is added to set specific limitations on fills for navigational access to insure that such fills provide minimum encroachment, both laterally and waterward, in order to reduce adverse effects but still allow reasonable access. The dimensions specified represent the optimum construction deemed necessary to provide feasible and practical access through use of fills.

Subsection C.3. is added to provide specific standards relating to recovery of shoreline lost by erosion or other natural forces. It replaces the more general language in existing rules, Section 1.5021 A.1.c.

3.a. is introductory language addressing justification for such fills in permit actions. It prescribes that permits shall only be allowed under conditions of a. or b. as follows:

a. The loss of shoreline due to erosion must be a threat to health and safety because of impending loss or damage; or

b. The loss of shoreline has resulted from artificial manipulation of flows and levels of water within recent time (not more than 5 years).

Additional language in c. clarifies that the section does not preclude the issuance of permits for riprap or other means to protect shorelines from erosion.

The language is needed to prevent unreasonable use of fills to gain additional shoreland area and to ensure that fill for recovery of shoreline is only allowed where adequately justified in terms of public health and safety, and that further artificial manipulations provide a reasonable means of controlling activities in the least detrimental fashion. Where shorelines are threatened by natural occurrences, the property owner can utilize such remedies as riprap or other structural means which have lesser environmental consequences.

Subsection C.4. is necessary to provide specific standards relating to port development to allow reasonable commercial and industrial expansion. Discussions with officials of existing port authorities have indicated the need for new specific references to port development activities. The introductory language restricts port development or improvements to those areas where there are port authorities established under State laws. This is necessary to insure that there is organized planned development by local authorities. Minnesota Statutes allow the creation of new port authorities where none currently exist.

4.a. limits the extent of filling to the limit of established harbor lines or, where harbor lines are not established, to the maximum distance waterward which will not obstruct navigation in the waters. This subsection is necessary to prevent unreasonable loss of public water area, to prevent unreasonable obstruction of public use of the water surface to protect public safety and accessibility to the water area and to allow reasonable economic development without destroying the water environment.

4.b. requires that the project be a part of a development plan approved by the Commissioner. This is needed to insure sound economic, social and environmental planning for the water areas. Unplanned projects which do not anticipate future growth and development may lead to serious future water use conflicts between economic, social and environmental interests. Orderly planning for future growth must be provided through an organized local governmental structure to assure adequate local public involvement.

4.c. requiring mitigation of adverse effects of port development by filling, is necessary to comply with the legislative directives of M.S. 105.42, Subd. 1a. in order to insure that there is a reasonable balance of economic, social and environmental interests.

Subsection 5 is necessary to provide specific standards for fill used for restoration of fish and wildlife habitat, except for fill in trout streams, which is separately addressed in proposed revised subsection 6. This subject is not specifically addressed in the existing rules. The subsection allows filling for improvement or restoration of fish and wildlife habitat subject to two conditions.

5.a. - Plans must be provided to show the degree and nature of the habitat to be benefited; and

5.b. - The project must not create adverse effects such as flooding, erosion, sedimentation or navigational obstructions.

This subsection is needed to provide specific guidance where fill is used for the benefit of fish and wildlife habitat. It is intended to allow planned projects which will reasonably improve fish and wildlife habitat without creating other adverse effects in order to benefit the public's interest in the fish and wildlife resources.

Subsection 6 is added to provide specific standards relating to fill in designated trout streams. It is needed to insure the preservation and protection of the physical and water quality characteristics of designated trout streams which are a unique and irreplacable state water resource.

The subsection allows fill only if the following conditions are met:

6.a. - The fill construction must not cause increases in water temperature, excessive sedimentation or destruction of fish habitat; and

6.b. - There must be no other feasible or practical alternative other than filling.

Subsection C.7. provides specific standards to apply to any other fill activity not otherwise addressed in the revised rules. It requires that such other fill proposals include information to show:

7.a. - That the proposed use of fill is reasonable, considers all other alternatives and is the only feasible and practical means to accomplish the purpose; and

7.b. - that it will adequately protect public safety and promote public welfare.

The provisions are consistent with the legislative language of M.S. 105.42 and 105.44.

Subsection D. as previously discussed under new format provides a "tie in" with other sections of the rules to assure consistency and clarify the applicability of the fills section.

Revisions in Section 1.5022 - Excavation of Protected Waters -

A. Goals - The existing language of 1.5022 A. is amended to provide a more complete explanation of the Commissioner's intent with respect to control of excavations.

The existing policy and general restrictions section is changed as follows:

The preamble language includes substitution of "goal" for "policy", as previously discussed, and is changed by substituting "limit" for "discourage" to more adequately express the intent.

Subsection A.1. includes part of the existing rules language relating to preservation of the natural character of waters and shorelands but deletes language referring to "maintain suitable aquatic habitat for fish and wildlife" and substitutes language which is more inclusive, as prescribed in statute (re: 105.42, Subd. 1a).

Subsection A.2. is provided to assure that water resources will not be subject to major adverse effects caused by excavations. Therefore, it is necessary to regulate the amount and type of excavation so that the excavation will not result in a major loss in the character of the waters. Certain waters cannot withstand much excavation without causing considerable degradation in the environment of the waters.

Subsection A.3. is necessary to address the legislative directives of M.S. 105.42, Subd. 1a regarding "deposition of spoil materials."

B. General Standards -

Subsection B.1. Scope. explains the type of activity or action encompassed by this portion of the rules.

Subsection B.2. is a reformatted set of provisions to describe situations where no excavation shall be permitted. It revises existing language (1.5022 A.1.,2., and 3.).

In subsection 2.a. most of the existing language is retained, except that references to "a temporary or permanent dock" is deleted and more general language relating to alternatives of less environmental impact is substituted. This change provides a less prohibitive restriction of excavation to reach navigable depths by recognizing that there may be other less damaging alternatives in addition to docks.

The only change in existing language in subsection 2.b. is deletion of the word "solely" in order to clarify that any excavation project involving extension of riparian rights is prohibited, since some projects have several purposes and the intent could be misinterpreted.

Subsection 2.c. retains the existing language of 1.5022 A.3. but adds additional language to further qualify the prohibition by recognizing that feasible, practical and ecologically acceptable mitigative measures may be applied in some instances to ameliorate adverse effects.

Subsection 2.d. adds new prohibitions of excavation to provide consistency with beach sanding requirements addressed in Section 1.5021 Filling. The widespread use of excavation to control or eliminate vegetation is damaging to the environment, especially where there are other remedies for vegetative control which do not require excavation, such as pulling, cutting or chemical means.

Subsection 2.e. adds new language to prohibit excavations for development purposes, except for certain mining activities as provided in new Section 1.5027 Mining. This is necessary to prevent excavations in waters only for the purpose of furnishing materials for other on-land or in-water development needs. It is recognized that certain excavations for mining are necessary and allowable. It would be unreasonable to allow excavation for providing fill

materials for any other development purpose. Such fill can and should be obtained from on-land sources which do not generally result in serious environmental impact on waters.

Subsection 2.f. is added to prohibit excavation when there is recurrent sedimentation and there are other feasible and practical means to solve the problem without excavation. It is unreasonable to allow excavation if there is recurrent deposition of sediment in the excavated area and there are better solutions available without excavation.

Subsection 2.g. is added to ensure compliance with the legislative directive of M.S. 105.42, Subd. 1a governing disposition of spoil materials. It requires acceptable disposal of excavated materials or no permit will be granted.

Subsection 2.h. is added to protect water bodies from subsurface drainage which could result in lowering of water levels or complete drainage of the water body. The effects could also result in the contamination of ground waters.

Subsection B.3. is provided to address the types of excavation activities for which no permit will be required. It primarily involves the addition of new language, but does include language from existing rules (1.5022 D.2.).

Subsection 3.a. would allow certain excavations in watercourses having total drainage areas of 5 square miles or less, as previously discussed.

Subsection 3.b. is a revised version of language in existing rules 1.5022 D.2. relating to debris removal without a permit. The revisions are generally housekeeping in nature to eliminate unnecessary language and to clarify the rule.

Subsection 3.c. adds new language which affirms the legislative intent that no permit is required for repairs to public drainage systems which may be part of protected waters, provided the repairs meet the definition set forth in M.S. 106.471, Subd. 1. It should be further noted that none of the rules apply to lawfully established public drainage systems (M.S. 106) which do not substantially affect protected waters.

Subsection B.4. is a revision of Section 1.5022 B. (Dredging) of the existing rules, which includes considerable existing language but also provides deletions and revisions of existing language and adds new language. Throughout this section the words "dredge" or "dredging" are replaced by the new general terms "excavate" or "excavations", which are more explanative.

Subsection 4.a. contains housekeeping revisions to provide improved language more consistent with statutory requirements.

Subsection 4.b. contains expanded criteria governing the disposition of spoil materials from excavation consistent with the legislative directive of M.S. 105.42, Subd. 1a. It incorporates considerable new language with the existing provisions of 1.5022 B.1.b. Requirements for disposal of excavated materials include:

Subsection b.(1) - compliance with requirements of M.S. 115 - laws and regulations of the Pollution Control Agency in order to assure consistency between DNR and PCA regulatory functions which overlap.

Subsection b.(2)(a) through (e) prescribes a prioritized order of preference for acceptable means for disposing of spoil materials from excavation.

Subsection b.(2)(a) - The first preference is complete removal of materials from the waters since it results in no environmental effect on the water.

Subsection b.(2)(b) represents the second preference for disposal and revises existing language of 1.5022 B.1.b.. It deletes existing language relating to containment of spoils and substitutes language tying the action to local ordinances. Existing language relating to deposition of dredge spoils below the ordinary high water mark is deleted but the subject is further addressed in revised subsection 1.5022 B.4.b.(2)(d).

The new language still recognizes that on-land deposition outside of local floodway districts is a high priority, acceptable means of disposal but emphasizes the relation to local ordinances which must meet state flood plain and shoreland management standards.

Subsection b.(2)(c) adds new language which prescribes the third preferred means of disposal as temporary disposal by stockpiling materials for subsequent removal. It is contingent on compliance with stockpile removal within one year and control of stockpile materials to prevent sedimentation. These provisions are necessary to protect the environment and recognize that the action is only of a temporary nature.

Subsection b.(2)(d) adds new language which prescribes the least preferred means of disposal of excavated materials by redeposition into waters. It requires that there must be an improvement in natural conditions of the waters for the benefit of the public and that it will not cause sedimentation, obstruct navigation or a loss of fish and wildlife habitat. It includes parameters which will be used in measuring the public benefits from redeposition. These are listed in (e) and include shoreline protection where there are no other alternatives; creation or improvement of fish and wildlife habitat; or mitigation or enhancement of the physical and biological environment when mitigative measures are required for an excavation and there are no other feasible, practical and ecologically acceptable alternatives.

This provision will allow redeposition of excavated materials as a "last resort" when there are serious social and economic circumstances involved and when there are well defined public benefits which might override the environmental consequences. The major applicability will be in cases of public projects.

Subsection B.4.c. is existing language contained in existing rules 1.5022 B.1.c., except for deletion of the language which describes several examples. This language is deleted since it is superfluous and may be misconstrued or misinterpreted. A minimal impact analysis is made a part of each proposal and is subject to the particular circumstances and site characteristics involved.

Subsection B.4.d. is existing language from existing rules 1.5022 B.1.d.

Subsection B.4.e. is existing language from existing rules 1.5022 B.1.e.

Subsection B.4.f. is added new language to emphasize that excavation effects will be minimized as required by M.S. 105.42, Subd. 1a.

Subsection B.4.g. is added new language to require mitigation of adverse effects as required by M.S. 105.42, Subd. 1a.

Subsection B.4.h. is added new language to assure that public and riparian rights are protected.

Subsection B.4.i. is added new language to ensure consistency with shoreline, floodplain and wild and scenic river management as required by M.S. 105.42, Subd. 1a and M.S. 104.

Subsection B.4.j. is added new language to ensure consistency with local planning and management programs as provided by M.S. 105.42, Subd. 1a.

Subsection B.4.k. is a revision of language in existing rules 1.5022 C.2.c.(1). It is included with general criteria for excavations, although it relates only to excavations for harbors, boatslips and mooring facilities, because it has general applicabilities to that group of activities and would be cumbersome if it had to be addressed as an identified specific standard under each activity. The only non-housekeeping change in the existing language is the addition of the reference to state shoreland management standards which is necessary to cover those situations where the state has to adopt requirements for local authorities.

The existing language of 1.5022 B.2. is deleted and replaced with the new format section C. on specific standards.

Subsection C. is a major revision of subsection B.2., C and D. It includes a number of deletions, revisions in language and addition of new language which sets forth specific standards as requirements for specific types of excavation activities.

C.1.a.,b., and c. are existing language from existing rules 1.5022 B.2.a.(1)(2) and (3) with minor housekeeping revisions to relate to the new format.

C.1.a. is identical to existing B.2.a.(1).

C.1.b. contains revised language to assure consistency with the criteria for filling when beach sanding is also involved.

C.1.c. deletes the words "not" and "excessive" from existing rules and substitutes "the minimum depth necessary" which is a more specific requirement. The word "desired" from existing rules is deleted and replaced with the language "reasonable for a beach" in order to provide a more specific requirement which recognizes the goal of minimizing effects.

Existing language of existing rules 1.5022 B.2.b. and B.2.c. is deleted. Revised language addressing the subject matter of existing rules B.2.b. and B.2.c. is contained in new subsections C.2., C.3. and C.4.

Subsection C.2. is a revision of existing rules Section 1.5022 B.2.c.-lake improvement. These revisions include:

C.2. changes the title of existing rules to better explain the type of activity involved.

C.2.a. is a slight revision of existing rules B.2.c.(2)(b) by adding the words "improved" and "except where the project is state-sponsored". "Improved" is added to recognize that projects may involve improvements in addition to enhancement. The exemption of state-sponsored projects is necessary to recognize that some projects are established in the public interest by the state.

Existing rules language of 1.5022 B.2.c.(2)(a)(i) through (iii) is retained as revised rules C.2.b.(1) through (3). The only change is the addition of the word "public" to stress that the projects must serve a public purpose.

Since revised Subsection C.2.a. incorporates the existing language of 1.5022 B.2.c.(2)(b), the existing language is deleted because it has been reformatted to emphasize that public need is the first requirement.

Language from existing rules 1.5022 B.2.c.(2)(c) is revised through insertion of housekeeping language as revised subsection C.2.c. Revisions are also made to existing rules 1.5022 B.2.c.(2)(c)(i) through (vi), which are now contained in revised subsections C.2.c.(1) through (6) as follows:

C.2.c.(1) adds language to existing rules to provide justification why the excavation is necessary;

C.2.c.(2) deletes "body" and inserts "basin" since it relates only to waterbasins.

C.2.c.(3) deletes existing language and replaces it with more specific language tied to revised Section 6 MCAR 1.5021.

C.2.c.(4) contains existing language with slight deletions and replacement with more specific explanatory language.

C.2.c.(5) revises existing language to provide more specific explanation of the requirement.

C.2.c.(6) makes a minor housekeeping revision of existing language.

Existing rules, Section 1.5022 C. is deleted in its entirety. Portions of the section are reinserted, with some revisions, in new section C.4.

C.3. establishes a new retitled subsection with new language dealing with excavation for navigation.

C.3.a. addresses access channels for recreational craft.

C.3.a.(1)(a) and (b) sets specific conditions under which excavations for such access channels shall not be allowed.

C.3.a.(1)(a) provides that navigational access, through excavation of a channel, is not allowed if access can reasonably be obtained by means of a dock. C.3.a.(1)(b) provides that prevalent wind, wave and current conditions would not impair reasonable access.

These provisions are necessary to assure that the least damaging alternative (a dock) is utilized whenever wind, wave and current conditions do not preclude the use of a dock. This is a reasonable requirement in order to safeguard the environment by ensuring that no excavations are made unless they are necessary.

C.3.a.(2) is necessary to allow excavations of access channels when wind, wave and current conditions preclude access to navigable depths. The dimensions and depths are considered reasonable limits of excavation for recreational craft access.

C.3.b. addresses excavation for navigational channels other than recreational craft access.

C.3.b.(1) requires that excavations be limited to the minimum necessary to accommodate the anticipated watercraft. This language is very similar to the existing language in 1.5022 B.2.b.(1).

C.3.b.(2) requires that maintenance excavation for navigational channels be limited to the original dimensions. This language is very similar to the existing language of 1.5022 B.2.b.(2).

C.4. is a retitled subsection addressing harbors and boat slips. It includes new language and portions of language from existing rules 1.5022 B. and C. The subsection is reformatted to provide requirements for both inland and offshore harbors and for boat slips within one section of the revised rules.

C.4.a. through c. set requirements relating to certain types of waters and conditions in those waters under which inland boat harbors would be justified.

C.4.d. and C.4.e. set specific requirements relating to construction of boat slips and inland harbors.

C.4.a. deals with excavations for offshore or inland harbors or boat slips which involve the mooring of more than 25 watercraft or watercraft larger than 20 feet in length. It limits such excavations, which are considered as major projects, to specific waters including:

C.4.a.(1). Waterbasins with areas of 1,000 acres or more and

C.4.a.(2). Watercourses which are used for commercial or industrial navigational purposes.

These provisions are necessary in order to prevent large-scale developments on small-size waters, so that the public values of the smaller waters, including safety and environmental protection, are adequately safeguarded.

C.4.b. addresses excavations for smaller offshore harbors and requires that such excavations be restricted to waters where there would not be unreasonable detriment to public health, safety and welfare. This subsection is necessary to meet the legislative directives of 105.45 which guides the Commissioner's actions on permits. Offshore harbor excavations are not addressed in the existing rules.

C.4.c. addresses excavations for smaller private inland harbors serving less than 25 watercraft less than 20 feet in length. It sets limits on the types of waters and conditions which must be met for such excavations.

C.4.c.(1) requires that excavations for this purpose will only be allowed if prevalent wind, wave or current conditions preclude the use and maintenance of docks. The language is a revision of language in existing rules 1.5022 C.1.a.(1). It is expanded to provide for supporting data to judge the magnitude and frequency of conditions precluding use of docks as follows:

C.4.c.(1)(a) requires use of data regarding the character of the water and its shoreline.

C.4.c.(1)(b) requires use of data regarding the frequency of storms.

C.4.c.(1)(c) requires use of data relating to the number of days, during the open water season, when the shoreline is affected by severe wave or wind conditions.

C.4.c.(2) further provides that excavations would only be allowed if the site conditions and number of watercraft involved preclude the use of on-land facilities. This is a revision of existing rules 1.5022 C.2.a. which is expanded to include inland harbors and boat slips.

C.4.c.(3) requires that the project should be located in an area where offshore mooring, excavation or extensive dock development would create unreasonable obstructions to public use and navigation.

This entire subsection is necessary to limit inland excavations to those situations where there are no other feasible or practical alternatives. The primary rationale for this subsection is to reduce adverse eenvironmental effects, to prevent diminution of other shore-owners' riparian rights and to eliminate unreasonable inland extensions of protected waters.

C.4.d. is language from existing rules 1.5022 C.2.a. and is unchanged except for minor housekeeping language.

C.4.e. sets specific criteria for excavations for inland harbors. It is tied to the conditions of C.4.c.(2) and addresses commercial and industrial inland harbors (C.4.e.(1)), other inland harbor projects (C.4.e.(2)), private harbors (C.4.e.(2)(a) and (b)) and public harbors (C.4.e.(2)(c)).

C.4.e.(1)(a) contains unchanged language from existing rule 1.5022 C.1.d. and slightly revised language from existing rule 1.5022 C.1.b.(10) in one combined requirement.

C.4.e.(1)(b) and C.4.e.(1)(c) contain unchanged language from existing rules 1.5022 C.1.e. and f..

Existing rules 1.5022 C.1.g. is deleted since it is more specifically addressed in revised Section 1.5022 B.4.b. of these revised rules.

C.4.e.(1)(d) contains revised language from existing rules 1.5022 C.1.h. The words "Unless specifically prohibited" are deleted and new language is added which will allow consideration of commercial and industrial harbor excavations more than 200 feet inland, provided evidence is submitted to show that greater distances are required because of watercraft size. This provision is necessary to allow certain developments for economic purposes. It does not unreasonably impact environmental concerns which are still provided for under other provisions.

C.4.e.(1)(e) is new language which references new provisions B.4.b. relating to disposal of excavated material.

C.4.e.(2)(a) through (e). is a revision of existing rules 1.5022 C.2.c.(1) through (5). The only revision is the preamble language of (2), which more clearly outlines technical data needs. Language of (1) through (5) is unchanged. Also included in revised subsection (2) as subsections (f) through (n) which are the provisions of existing rules 1.5022 C.1.b.(1) through (9). The only change in the language is a minor housekeeping revision in existing rule (9).

Existing rules 1.5022 C.2. are revised as new subsection 1.5022 C.4.e.(2) by deleting portions of existing language and slightly revising other portions to clarify additional requirements relating to private and public inland harbors as follows:

Revised new section C.4.e.(3)(a) is necessary to provide a reasonable requirement for private inland harbors serving "two or more" single family, residential riparian lots. It clarifies the intent of existing rules 1.5022 C.2.b.(1) and (2) by deleting the existing reference to "one or more" residential lots, which was meant to relate to more than one single family, residential riparian lots. This subsection also deletes existing rule 1.5022 C.2.b.(1) requiring a single mooring space for each riparian lot served. That existing language is deemed unnecessary because of the way the revised rule is worded and the further provisions of (b)(iii).

Revised subsection C.4.e.(3)(b) contains essentially the same language as existing rules 1.5022 C.2.c., except that the requirement is extended to include resorts, campgrounds or other commercial purposes. By combining the requirements for multi-family or cluster developments with those for resorts, campgrounds or other commercial purposes, it is possible to avoid repetitious language and to provide a single set of requirements applicable to both major types of development. Accordingly, existing rule 1.5022 C.2.c.(1) is deleted. Language relating to appropriate sizing, is incorporated into revised subsection C.4.e.(3)(b)(3).

The language of existing rule 1.5022 C.2.c.(2) is retained unchanged as revised rule C.4.e.(3)(b)(1). Since the development plan must be approved by the local government, it is not necessary to reiterate the requirement for the number of mooring spaces' relationship to lot requirements. The language of existing rule 1.5022 C.2.c.(1). has been deleted as previously noted.

The language of existing rules 1.5022 C.2.c.(2) is retained unchanged as revised rule C.4.e.(3)(b)(2).

The language of existing rule 1.5022 C.2.c.(3) is retained unchanged as revised rule C.4.e.(3)(b)(3).

The language of existing rule 1.5022 C.2.d. is deleted since it is combined in the revised rule.

The language of existing rule 1.5022 C.2.d.(1) is retained and amended as revised rule C.4.e.(3)(b)(3). The revision includes incorporation of the intent from original language in existing rule C.2.c.(1). This change is necessary to ensure that the harbor is adequately designed to accommodate reasonable watercraft mooring and anticipate future needs without creating excessive excavation. By limiting the number of mooring spaces to one space for each riparian unit served, it is possible to reduce overcrowding and diminution of riparian rights on the waters.

The language of existing rule 1.5022 C.2.d.(2) is deleted, since it is included in revised rule C.4.e.(3)(b)(2) in order to remove repetitive language.

The language of existing rules 1.5022 C.2.e. and 1.5022 C.2.e.(1) through (4) is retained unchanged as revised rules C.4.e.(3)(c) and C.4.e.(3)(c)(1) through (4) respectively.

All of the language of existing rules 1.5022 C.2.f. and C.2.g. including C.2.f.(1) through (5) and 1.5022 C.2.g.(1) and (2) are deleted. These existing rules relate to marinas, however, the revised rules have been restructured so that marinas are covered under the section on Structures (new revised rule Section 1.5023). The criteria governing "excavation" to create marinas are contained in the rules for harbors, whereas the rules governing "structures", used as marinas, are contained in the rules for structures. In other words, marinas are considered to be those developments requiring "structures" placed in waters and harbors represent developments requiring "excavations" in waters.

Subsection 1.5022 C.5. contains all new language relating to excavations for fish and wildlife habitat. It is not addressed in existing rules. C.5.a.(1) and (2) requires that proposals for excavations for restoration or improvement of fish and wildlife habitat include plans showing the nature and degree of habitat to be benefited, as well as information to show that there will be no adverse effects such as flooding, erosion or sedimentation, and there will be no navigational obstructions. This section is necessary to allow reasonable excavations for the benefit of fish and wildlife habitat, while ensuring there are no adverse effects on the waters involved.

C.5.b.(1) and (2) provides that excavations in officially designated trout streams shall be allowed only when there will be no increase in water temperatures, no excessive sedimentation or loss of fish habitat and there is no other alternative. As previously explained, trout streams have unique cold-water characteristics and are relatively scarce with respect to warmer waters. Therefore, they need to be given a special degree of protection. The legislature recognizes the value of trout streams by providing in M.S. 105.37, Subd. 14, that any trout stream officially designated by the Commissioner is a "protected water", regardless of the size of the drainage area.

Existing rules 1.5022 D. Alterations of natural watercourses is revised as new subsection 1.5022 C.6. - Excavations in protected watercourses. The revision includes deletion of some existing language, revision of existing language and addition of new language. The existing rules relate only to natural watercourses and do not include "altered watercourses" which were affected by man's activities. The new rules in C.6. refer to excavations in any protected watercourse, whether natural or altered natural.

Changes in existing rules 1.5022 D.1. and D.1.a. and b., which are revised as new rules 1.5022 C.6. and C.6.a. and b., are minor housekeeping changes except for the addition of language in C.6.b. which indicates that certain engineering measures may be required to eliminate excessive bank erosion. This addition is necessary to ensure that consideration is given to preventing sedimentation into protected waters.

Changes in existing rules 1.5022 D.1.c.(1) through (3), which are revised as new rules 1.5022 C.6.c.(1) through (3), are only minor housekeeping changes.

Existing rule 1.5022 D.1.d. is only slightly revised as new rule C.6.d., by inserting clarifying language regarding the type of project involved. All other language remains unchanged.

Existing rules 1.5022 D.1.e. and D.1.f. are deleted since they relate to terminology and language which is no longer pertinent and has been repealed in M.S. 105.37.

Existing rule 1.5022 D.2. has been deleted for the following reasons:

1.5022 D.2.a. deals with situations where no permit is required to remove debris. This rule is now covered by language in new rule 1.5022 B.3.b. under the revised format.

1.5022 D.2.b. and subsections D.2.b.(1) through (4) have been repealed and are no longer applicable.

1.5022 D.2.c. refers to a statutory provision which states that M.S. 105.42 "does not apply to any public drainage system lawfully established under the provisions of Chapter 106 which does not substantially affect any public waters." Since this is a specific legislative requirement, it is not necessary to include it in the rules. It is an understood fact.

New rules, Subsections C.6.e through C.6.p contain all new language which is added to the requirements for excavations in protected watercourses to address a number of areas not contained in the existing rules.

C.6.e. is necessary to minimize the visual and hydraulic changes in the characteristics of watercourses resulting from excavation. Improper slope and alignment of excavated areas can result in adverse physical and water quality effects on undisturbed portions of the watercourse.

C.6.f. is necessary to provide a cross-reference to the revised rules relating to disposal of excavated materials. It also recognizes that there may be some situations where the original channel is filled as part of an overall project involving excavation and filling for special purposes.

C.6.g. requires that a project does not result in a significant increase in flood damages and indicates that certain structures may be required to minimize increases in flood damage. This requirement is necessary to ensure conformity with M.S. 105.42, Subd. 1a regarding flood plain management.

C.6.h. requires permit applicants to submit names and addresses of upstream and downstream parties who may be affected by proposed excavation activities. This language is necessary to ensure that reasonable attempts are made to identify parties who may be affected by the proposed work, and provide an opportunity for further public discussion or hearing.

C.6.i. sets forth a preferential list of structural alternatives to excavating in watercourses for flood management flood control purposes. The preferred alternative is the construction of water impoundments in upstream areas. Where impoundments are infeasible, impractical or create greater hazard or impact, the preferred alternative is construction of flood by-pass channels to convey high velocity flood flows. This provision is necessary in order to discourage widespread use of excavation in watercourses as a means of solving flood problems. In many instances, the use of upstream impoundments will effectively reduce flooding by storing water. However, such impoundment is not always feasible or practical based on topographic and hydrologic conditions. In such instances, the use of flood by-pass channels constructed to convey high velocity flood flows is the preferred alternative. This procedure allows the existing channel to remain essentially undisturbed for conveyance of low and normal flows, but provides for excavation of an artificial channel (generally parallel to the existing channel) to convey the flood flows.

C.6.i.(1) and (2) recognize that, in some situations, neither upstream impoundments or flood by-pass channels are feasible, practical or environmentally acceptable and therefore, allow excavation as the last alternative. C.6.i.(2) requires development of flood-water management plans, details on the effects of excavation for the entire watercourse and consistency with state and local flood plain management standards, including maximum use of nonstructural measures where feasible and practical. These provisions are necessary to assure comprehensive, coordinated flood management and compliance with provisions of M.S. 105.42, Subd. 1a.

C.6.j. requires that watercourse excavations for road crossings or culverts be limited to the minimum extent possible and that adequate provisions be made for bank protection to prevent erosion. A cross-reference is made to revised Section 1.5025 relating to bridges and culverts. This provision is necessary to meet the legislative directive of M.S. 105.42, Subd. 1a to minimize encroachment, change or damage to the resource.

C.6.l.(1) and (2) address requirements for excavations for fish and wildlife habitat. It requires plans and information which show the nature and degree of wildlife habitat benefited and supporting evidence that shows other adverse effects will not occur as the result of the excavation. The provision is needed to assure that such excavation actually is beneficial and will not result in damage to the environment.

C.6.m.(1) and (2) address excavation in trout streams. It restricts such excavation to situations where there are not adverse effects on water temperatures, sedimentation or habitat destruction and where there is no other feasible or practical alternative. It is needed to assure adequate protection of valuable trout streams and is consistent with M.S. 105.42, Subd. 1a.

C.6.n.(1) through (5) provide standards for excavations to straighten or align watercourses having drainage areas of more than 5 square miles. It recognizes that excavations in watercourses with total drainage areas of 5 square miles or less are exempt from permit under certain conditions, as discussed and explained in revised Section 1.5022 B.3.a. The standards state that a permit applicant may be required to provide appropriate hydraulic data and lists the type of data which may be required. Since the amount and type of data needed will vary with the degree and complexity of the proposal, the words "may be required" are used. Under some situations involving very small and straightforward proposals with only minor effects, hydraulic data may not be necessary. This provision is necessary to meet the statutory requirements of M.S. 105.42, Subd. 1a and M.S. 105.45 on issuance of permits.

C.6.o.(1) and (2) set additional requirements relating to excavations for straightening or realigning watercourses to facilitate adjacent land uses. It requires a showing that the proposal is reasonable, practical, will protect public safety and welfare and will involve minimum change and damage to the environment. It is needed to provide compliance with statutory provisions of M.S. 105.42, Subd. 1a and 105.45. Although this rule is somewhat repetitious, it is necessary to ensure that prospective applicants fully recognize and understand the requirements and conditions for permits to alter watercourses for land development purposes.

C.6.p. relates to any other excavation in watercourses not specifically addressed in the revised rules. It requires compliance with the applicable standards in 1.5022 B. and the applicable specific requirements of 1.5022 C.1. through 5. and 1.5022 C.6.n. and o. This rule is necessary to provide standards for any types of excavations not specifically listed.

Subsection 1.5022 D. explains the relationship between Section 1.5022 and other sections of the rules with respect to projects involving several types of actions. It is necessary to ensure consistency between the various sections of the rules.

Revisions in Section 1.5023 Structures -

Revised Section 1.5023 provides rules pertaining to the construction of structures in protected waters. It consists primarily of reformatted existing rules 1.5023 with some deletions of existing language, revisions to existing language and new language to clarify and expand on existing rules. Major changes relate to rules on docks, and additional general criteria.

Revised Subsection 1.5023 A. is essentially the language of existing rule 1.5023 A. with a change in format and minor housekeeping language.

Revised subsection B. addresses the general standards applying to structures.

New Subsection B.1. Scope outlines the types of projects covered by the rules relating to structures. It should be noted that this section does not include water level control structures which are separately addressed in revised Section 1.5024 Water level controls.

B.2. This is language from existing rule 1.5023 A.1. with a slight housekeeping change in language.

Existing rule 1.5023 A.1.a. is deleted. This deletion is necessary to remove a possible inconsistency in the rules regarding use of structures to gain navigational access. Throughout the rules, there is an emphasis on the use of seasonal docks, a structural measure, as the most acceptable means of providing access. The subject is addressed in detail in revised Sections 1.5021 Filling and 1.5022 Excavations. Although certain types of structures would not be an acceptable alternative, it would be inconsistent to have a provision not allowing any structures if other forms of access could be attained. The deletion will remove the inconsistency.

B.2.a. This is language from existing rule 1.5023 A.1.b. with a small housekeeping change.

B.2.b. This is unchanged language from existing rule 1.5023 A.1.c.

B.2.c. This is new language clarifying that placement of structures which are designed or intended to be used for human habitation or as boathouses is prohibited. This is a clarification of the existing rule, which contains a general prohibition on private structures not covered by specific sections of the existing rule.

B.2.d. is new language prohibiting structures designed or constructed to include walls, a roof or sewage facilities. As with B.2.c., this prohibition is a claification of a general prohibition contained in existing rule 1.5023 F.2..

B.3. is new language which establishes reformatted rules relating to activities for which no permit will be required.

B.3.a.(1) through (4) provide that no permit is needed to construct, or reconstruct a floating dock or floating structure if the structure will not be a navigational hazard, will not include fuel handling facilities, will allow free flow of water beneath it and is not used or intended to be used as a marina (as defined in revised rules 1.5020 D.). This rule is needed to provide general exemptions from permit for those activities which are routinely allowed and for which a permit requirement would be unreasonable and unnecessary, provided the conditions for exemption are met.

Existing rule 1.5023 A.2. is deleted as it relates to new revised Section B.3. However, it is reinserted in revised rule 1.5023 B.4.f.

Existing rule 1.5023 B. Permanent Docks is deleted as a housekeeping measure.

B.3.b. (1) through (7) consists of revisions to existing rule 1.5023 B.1. It includes deletion of some language as a housekeeping measure, reformatting of the rule and the addition of new language.

B.3.b. contains preamble language which is essentially the language of existing rule 1.5023 B.1., except for the addition of the words "or rock filled cribs provided:". This change provides that no permit is required to construct or reconstruct a permanent dock on wood pilings or on rock-filled cribs subject to the conditions of revised subsections (1) through (7). This change is necessary to provide an exemption from permit of rock-filled crib docks in situations where rock-filled cribs are the only reasonable means of providing a facility. It recognizes that certain rock-filled crib docks are reasonable structures which should be given the same treatment as permanent docks on wood pilings.

B.3.b.(1) is new language which requires that a dock exempt from permit be a single lineal structure with no appurtenances. This is necessary to ensure that more extensive and complex docks will be subject to permits in order to prevent elaborate dock or marina-type construction without permit and still allow use of simple structures.

B.3.b.(2) is new language which requires that only one dock exempt from permit be allowed on a single riparian lot. It does not preclude application for a permit for multiple docks.

B.3.b.(3) is a revision of part of the language in existing rule B.1. It provides that a dock exempted from permit shall not exceed 6 feet in width, 50 feet in length or extend to a depth greater than 4 feet, whichever is less. The revised language is the requirement that the dock not exceed 6 feet in width. This change is necessary to prevent the construction without permit of very wide docks or platforms which would require further justification. A six foot wide dock will generally provide a reasonable facility without constituting an unreasonable encroachment.

B.3.b.(4) is new language requiring that a dock be exempt only if it is not prohibited under revised Section 3.a.(2) through (4). This is needed to ensure consistency between rules.

B.3.b.(5) requires that permanent docks on wood pilings are exempt from permit only if they are constructed on lakes of 500 acres or more in area. This is needed to ensure that permanent structures on smaller lakes are subject to permits which may require special conditions. It does not preclude the use of a seasonal dock without a permit.

B.3.b.(6) and (7) require that permanent docks on rock-filled cribs are exempt from permit only if they are on lakes with a surface area of 2,500 acres or more and are placed where the lakebed is predominantly bedrock. In addition, the construction of the rock cribs must be such that there is unrestricted circulation beneath the dock. These provisions are necessary to ensure that permanent rock crib docks are allowed without permit only when they are used on large bodies of water and are adequately justified and constructed. This does not preclude the application for a permit for permanent rock crib docks which do not meet the conditions for exemption from

permit. That portion of existing rule 1.5023 B.1 which states "The site is subject to unusual physical conditions which would preclude the use of a seasonal dock, and" is deleted, since it is replaced by more specific minimum lake sizes. This change is needed to provide a rule which allows permanent dock construction under certain conditions without permit in the same manner as seasonal docks.

B.3.c.(1) through (3) addresses certain boat ramps which are exempt from permit. It consists primarily of revised language from existing rules 1.5023 G and includes some new language. B.3.c. provides that no permit is required to construct or reconstruct a boat launching ramp subject to three provisions.

Existing rule 1.5023 G.1.a. is deleted. This change is needed in order to eliminate existing language which provides that a boat launching ramp is exempt from permit if the site is capable of supporting a ramp without the use of pilings, dredging or other special site preparations. The deletion is made in order to provide a less restrictive rule which recognizes that most ramps do require some degree of special site preparation and therefore, the existing rule should be relaxed.

Revised Subsection B.3.c.(1) is language from existing rule 1.5023 G.1.b. which is revised to address privately owned ramps. It also includes new language which allows excavations of 5 cubic feet or less and placement of up to 5 cubic yards of crushed rock or precast concrete in order to provide a stable ramp base. The change is necessary to provide a differentiation between private ramps exempt from permit and public ramps which are exempt. This recognizes that the dimensions and conditions of private ramps should be of lesser magnitude than those for public ramps which serve greater public use. The new language regarding small excavations and fill placement is needed to provide a more flexible rule. The amounts of alteration involved are considered reasonable for most ramp construction. Private or public ramps requiring greater changes are subject to permit and specific standards listed in new Section 1.5023 C.5..

Revised Subsection B.3.c.(2) is all new language relating to publicly owned boat ramps exempt from permit. It allows such ramps to be constructed to widths not exceeding 24 feet, extending not more than 20 feet waterward or into water more than 4 feet in depth whichever is less. Excavations of 60 cubic yards or less and fills of up to 30 cubic yards are allowed to provide a stable ramp base. As explained in the discussion of revised rule B.3.c.(1), public ramps exempt from permit are afforded greater dimensions because of their greater public use and benefit. The maximum dimensions allowed are based on DNR experience with construction of public access ramps throughout the State and are considered reasonable limits for most public ramps.

Revised Subsection B.3.c.(3) is unchanged existing language from existing rule 1.5023 G.3.c.

Revised Subsection B.3.d.(1) through (4) addresses exemptions from permit for certain activities involving removal of structures and other waterway obstructions. It consists of language from existing rules 1.5023 H.1. and 2. and two new additions. Revised Subsection B.3.d. is preamble language which provides that no permit is required to remove structures or waterway obstructions subject to the conditions of B.3.d.(1) through (4).

Revised Section B.3.d.(1) is unchanged language from existing rule 1.5023 H.1.

Revised Subsection B.3.d.(2) is unchanged language from existing rule 1.5023 H.2.

Revised Subsection B.3.d.(3) is new language which provides that removal of a structure or waterway obstruction is exempt from permit only if it is not located on a designated trout stream. This rule is needed to ensure that any work in trout streams will be subject to permit in order to protect the unique values of trout streams.

Revised Subsection B.3.d.(4) is new language which requires that removal of a structure or waterway obstruction is exempt from permit only if the structure does not function as a water level control. This rule is needed to prevent unregulated removal of structures which could affect the levels of protected waters. Such removal could create adverse effects on the public and riparian interests in the waters and must be carefully considered under permit procedures.

Existing rules 1.5023 do not provide a specific exemption from permit for removal of structures or waterway obstructions except for existng language in 1.5023 H. which provides that the permit requirement may be waived when such work is accomplished by simple hand tool methods. Revised Section 1.5023 B.3.d.(1) through (4) would allow permit exemption for removal activities under certain conditions. It is reasonable to allow the removal of certain structures or obstructions without permit, provided minimal conditions are met to safeguard the waters from adverse effects. The new rule will not result in adverse effects and will eliminate overly restrictive controls.

Revised Subsection B.4. contains general standards applicable to the construction, reconstruction, repair or relocation of any structure, except those activities not allowed (B.2.) or those exempt from permit (B.3.). It consists of new language, except for revised Section B.4.f. which is existing language of existing rule 1.5023 A.2.

B.4.a. requires that the project must represent the minimum impact solution with respect to other reasonable alternatives.

B.4.b. requires that the project will involve a minimum of encroachment, change or damage to the environment.

B.4.c. requires that a project will be consistent with applicable floodplain, shoreland and wild and scenic rivers management programs.

B.4.d. requires that a project will be subject to feasible and practical meausres to mitigate adverse effects.

B.4.e. requires that a project will be consistent with water and related land use management plans and programs.

All of the above requirements are also contained in the revised general standards subsection for Filling 1.5021 B.4. and Excavation 1.5022 B.4. The explanation for their need is the same as presented in those sections.

B.4.f. consists of unchanged language in existing rule 1.5023 A.2.

Revised Section 1.5023 C. contains specific standards for permits for Docks (C.1.), Wharves (C.2.), Offshore breakwaters and marinas (C.3.), Retaining walls, and erosion and sedimentation control structures (C.4.), Boat launching ramps (C.5.), Other structures (C.6.), and Removal or abandonment of structures (C.7). Most of this section is language from existing rules 1.5023 B., C., D., E., F., G. and H. with some housekeeping revisions, some deletions and some new additions.

Revised Section C.1. is language from existing rule 1.5023 B.2. with minor housekeeping changes to conform to revised Section B.

C.1.a. is also language from existing rules 1.5023 B.2.a. with slight housekeeping changes.

C.1.a.(1) is unchanged language from existing rules 1.5023 B.2.a.(1).

C.1.a.(2) is language from existing rules 1.5023 B.2.a.(2) with the addition of the word "or". This addition is necessary to provide a tie-in between revised Sections C.1.a.(2) and C.1.a.(3), by recognizing that either conditions C.1.a.(2) or C.1.a.(3) apply. Without the word "or" the rule would be construed to mean that both conditions must exist, which was not the original intent.

C.1.b. is language from existing rule 1.5023 b., except that the word "preferred" is substituted for "used" in order to reduce the mandatory requirement. This change is necessary to provide a more reasonable application of the rules and to recognize that some conditions may require structures other than piling docks.

C.1.c. is language from existing rule 1.5023 B.2.c. with the substitution of the word "waterward" for "lakeward" to recognize that it refers to both lakes and watercourses.

C.1.d. is new language which requires docks not to exceed 6 feet in width. This is needed to ensure that docks result in a minimum encroachment as required by M.S. 105.42, Subd. 1.a. A 6 foot wide dock is a reasonable facility for recreational purposes.

Revised Section C.2. contains specific standards relating to wharves. It consists primarily of language from existing rules 1.5023 C. with some housekeeping revisions, a few deletions and some new language.

C.2.a. and C.2.a.(1) through (3) contain language from existing rule 1.5023 C.1.a. through c., except for the substitution of "protected" for "public" in existing rule C.1.c.

C.2.b. is unchanged language from existing rule 1.5023 C.2.

C.2.b.(1) is revised language from existing rule 1.5023 C.2.a. The words "the only reasonable alternative for loading or unloading a specific cargo." are deleted and replaced with "part of a designated port facility." This language is necessary to ensure consistency with revised rules 1.5027 C.4. and 1.5022 C.4., and the previously explained position that major commercial and industrial water development projects must be proposed through organized planning efforts by local authorities established specifically for those purposes. The deletion of the existing language and replacement with the new language is a reasonable requirement to assure that projects are properly planned and developed through recognized local government authorities.

C.2.b.(2) is language from existing rule 1.5023 C.2.b. except for the substitution of the words "plans and ordinances" for "controls". "Plans and ordinances" are more explanatory than "controls."

C.2.b.(3) is unchanged language from existing rule 1.5023 C.2.c.

C.2.b.(4) is revised language from existing rule 1.5023 C.2.d. The requirement that "the purpose is not to increase the amount of land available for waterfront development" is deleted because the existing statement is unreasonable with respect to port development activities which are intended to increase lands and which are allowed under case law on navigable waters. The word "and" is added at the end of the revised rule in order to tie the requirements of minimum size and new obstruction (C.2.b.(5)) together.

C.2.b.(5) is unchanged language from existing rule 1.5023 C.2.f.

C.3. is language from existing rule 1.5023 D.1. with minor housekeeping changes to conform to the new format of the revised rules.

C.3.a. is unchanged existing language from existing rule 1.5023 D.1.a.

C.3.b. is language from existing rule 1.5023 D.1.b., except that existing requirements 1.5023 D.1.b.(1) through (10) are deleted and replaced with the language "those listed in 6 MCAR 1.5022 C.4.e.(2)(f)-(n) (Excavations)". The references to the revised rule avoids the repetition of identical language.

C.3.c. is language from existing rule 1.5023 D.1.c. except that existing requirements 1.5023 D.1.c.(1) thru (5) are deleted and replaced with the language "those listed in 6 MCAR 1.5022 C.4.e.(2)(a)-(e)." As explained under revised rule C.3.b., this change eliminates repetitious language which is identical.

C.3.d. and e. are unchanged language from existing rules 1.5023 D.1.d. and e.

C.3.f. is language from existing rule 1.5023 D.2., except for a housekeeping format change.

C.3.f.(1) is language from existing rule 1.5023 D.2.a., except that the word "structures" is substituted for "harbors" as a more accurate term.

C.3.f.(1)(a) is language from existing rule 1.5023 D.2.a.(1), except for housekeeping format changes and deletion of the word "permanent", which is not needed.

C.3.f.(1)(b) and C.3.f.(1)(c) are language from existing rules 1.5023 D.2.a.(2) and D.2.a.(3), except for substitution of the word "structure" for "breakwater" since the intent is for the rule to apply to all structures.

Renumbered subsections C.3.f.(2) through C.3.f.(5). address specific standards for private offshore structures for multi-family, cluster or residential planned unit devlopments (C.3.f.(2)); private offshore structures for resorts or campgrounds (C.3.f.(3)); public offshore structure projects (C.3.f.(4)); and offshore marinas (C.3.f.(5)). All of the subsections contain language unchanged from existing rules 1.5023 D.2.b. through 1.5023 D.2.b., except for substituting the word "structure" for "harbors" or "breakwater".

Revised Subsection 1.5023 C.4.a. through e. provides specific standards for retaining walls and erosion and sedimentation control structures. All of this subsection consists of unchanged language from existing rules 1.5023 E.a. through e., except for the addition of new language in C.4. which pertains to erosion and sedimentation control structures and the insertion of the words "and" and "or" to more clearly define if a requirement stands on its own (and) or if it involves one or more requirements which set alternative conditions (or).

It should be noted that the added requirement regarding erosion and sedimentation control structures does not relate to erosion and sedimentation control measures which impound water. Such structures are addressed in revised Section 1.5025 Water level controls. The addition of the new language is reasonable since erosion and sedimentation control structures involve the same considerations as retaining wall structures.

Revised Subsection C.5. provides specific permit standards for boat launching ramps. It contains language from existing rule 1.5023 G.2.a. through d. Criteria for existing rule 1.5023 G.1.a. through b. are deleted in this revised section because they refer to boat launching ramps which are allowed without a permit. As previously discussed, the matter of boat launching ramps exempt from permit is addressed in revised rules 1.5023 B.3.c..

Revised Subsection C.5. contains language from existing rules 1.5023 G.2. with several word additions and deletions as housekeeping language changes.

C.5.a., b., c. and d. are unchanged language from existing rule 1.5023 G.2.a., 1.5023 G.2.b., 1.5023 G.2.c, and 1.5023 G.2.d., except for the addition of the word "and" at the end of existing rule 1.5023 G.2.c. to tie G.2.c. and G.2.d. together.

Revised Subsection 1.5023 C.6. addresses specific standards for other structures which are not specifically identified in the rules. It contains slightly revised language from existing rules 1.5023 F.1. and 2. as follows:

C.6. consists of language from existing rule 1.5023 F., except for the substitution of the term "structures" for "waterway obstructions" and the addition of the word "repair", which was inadvertently omitted in existing rules in this subsection, but was addressed in Subsection 1.5023 F.1. of the existing rules.

C.6.a. consists of unchanged language from existing rule 1.5023 F.1., except for the addition of the word "relocation" for the same reason noted above.

C.6.a.(1) is unchanged language from existing rule 1.5023 F.1.a.

C.6.a.(2) is revised language from existing rule 1.5023 F.1.b. which deletes the words "assessed value" and replaces them with "the replacement cost". This is more reasonable terminology, since it represents a percentage of the actual "replacement cost", whereas "assessed value" does not represent

C.7. is revised language from existing rule 1.5023 H. Changes include new language which provides that when the Commissioner determines that a structure is no longer functional, constitutes a public nuisance or is a threat to public health or safety, the structure shall be removed. This language is needed to ensure that the public interest and public health and safety are adequately protected. The new language also provides that the only exception to the permit requirement is the exemption set forth in revised rule 1.5023 B.3.d.

Existing language of 1.5023 H., which refers to possible waiver of permit requirements if hand tool methods are used, is deleted as previously explained for revised Subsection B.3.d. dealing with exemptions for permits for removal of structures.

C.7.a. is unchanged language from existing rule 1.5023 H.1.

Existing rule 1.5023 H.2. is deleted since it is redundant if the provisions of existing rule 1.5023 H.1. (unrevised rule C.7.a.) and revised rule C.7.c. are met.

C.7.b. is unchanged language from existing rule 1.5023 H.3.

C.7.c. is new language which provides that no portion of a structure shall remain if it obstructs or impairs navigation, interferes with flood flows or contributes to erosion and sedimentation. This requirement is needed to ensure that removal of structures will be adequate to prevent future problems. It incorporates the intent of deleted existing rule 1.5023 H.2.

Revised Section 1.5023 D. explains the relationship between Section 1.5023 and other sections of the rules. It is necessary to ensure consistency between various sections of the rules.

Revisions in Section 1.5024 Water Level Controls -

Revised Section 1.5024 provides rules governing "water level control structures" based on the definition contained in revised Section 1.5020 D. It includes portions of existing rules 1.5024, deletion of considerable existing language and considerable new language.

Revised Subsection 1.5024 A.1. through 3. consists of language from existing rule 1.5024 A. Policy, with minor housekeeping changes to provide a change in format. The word "limit" replaces the word "discourage" used in the existing rules to better describe the intent of the rule.

Revised Subsection B. provides general standards relating to water level controls following the revised rules format used in the other sections.

B.1. Scope is new language which outlines the areas subject to rules relating to water level control structures.

B.2. is revised language from existing rule 1.5024 A., which provides that no construction or reconstruction of water level control facilities shall be allowed on protected waters where it is intended to manipulate water levels solely to satisfy private interests. This is necessary to assure that permits issued for such work will adequately promote the public welfare as directed by M.S. 105.45.

B.3. relates to exemption from permit of certain water level control structures. It is revised language from existing rule 1.5024 A.4.a. The revisions include substitution of the words "water level control structure on protected watercourses" for the word "dam", the addition of language excepting designated trout streams from exemption and the addition of a provision that the control structure is exempt provided it does not qualify as a "dam" under the dam safety rules.

The deletion of the word "dam" and substitution of the new language is necessary to provide consistency with the revised rule definition which makes a dam one of several different water level control structures. The added language excepting trout streams from exemption is consistent with previous discussions regarding other sections of the revised rules regarding types of activities requiring permits.

The addition of the reference to rules for dam safety eliminates the need for existing rules 1.5024 A.4.a.(1) through (3) and provides a specific tie to the dam safety rules which apply to hazards to public health and safety. Therefore, existing rules 1.5024 A.4.a.(1) through (3) are deleted for the reasons stated above.

Revised Subsection B.4. contains general standards applicable to the construction, repair, reconstruction or abandonment of water level control structures, except those not allowed (B.2.) or those exempt from permit (B.3.). It generally consists of new language, except for revised Section B.4.f. which is revised language from part of existing rules 1.5024 A. and 1.5024 A.1. through 6.

B.4.a. requires that the project will involve a minimum of encroachment, change or damage to the resource. B.4.b. requires that the project will be subject to practical and feasible measures to mitigate adverse effects. B.4.c. requires consistency with applicable floodplain, shoreland and wild and scenic rivers management programs. B.4.d. requires that a project will be consistent with water and related land resource management plans. All of the above new language is also contained in the revised general standards subsections for Filling 1.5021 B.4., Excavations 1.5022 B.4., and Structures 1.5023 B.4. and the explanation for their need is the same.

B.4.e. requires that construction or reconstruction shall comply with dam safety rules 6 MCAR 1.5030 through 1.5034. This is necessary to provide consistency between the two sets of rules and to assure that public health and safety are protected.

B.4.f. is slightly revised language from the last sentence of existing rule 1.5024 A. It is preamble language which addresses types of activities for which water level control structures may be permitted. The revision is the deletion of "dam" and insertion of "water level control structures" as explained in the discussion of revised Section B.3.

B.4.f.(1) is language from existing rule A.1., with the addition of the word "store" to clarify that it may involve storage of flood waters as well as control of flood waters.

B.4.f.(2) is language from existing rule 1.5024 A.2., with added language to clarify that the maintenance of low flows is for instream flow or water level protection.

B.4.f.(3) through B.4.f.(5) are unchanged language from existing rule 1.5024 A.3. through 5.

B.4.f.(6) is language from existing rule 1.5024 A.6., with the added words "create" and "improve or" in order to qualify the intent of the existing rule and to prevent misinterpretation that the rule only relates to maintaining an existing situation. The added language provides consistency with existing language of 1.5024 A.5., which uses the same words.

All of revised Subsection B.5. is new language providing requirements for maintenance and operation of water level control structures, reservoirs or waterway obstructions constructed before a permit was required by law. The existing rules do not address this subject. It is necessary that revised rules provide such requirements in order to meet the legislative directives of M.S. 105.42, Subd. 3.

B.5. requires the owner or operator of existing structures, reservoirs or obstructions to secure approval for opeation and maintenance whenever the Commissioner finds such approval is necessary in the public interest, based on provisions of 5.a. or b.. The language is necessary to establish a reasonable procedure for requiring approvals in compliance with the law. The procedure does not require a permit, but only requires approval of the operation and maintenance under certain conditions.

B.5.a. and B.5.b.(1) and (2) provide language which sets the grounds for requiring approval of operation and maintenance. These rules provide a reasonable basis for allowing the Commissioner to determine whether or not approval is needed for continued operation and maintenance of an existing structure not under permit. They require a justified complaint of existing or potential detriment, or either notification by the owner or operator that a discontinued structure is intended to be used again after at least 1 year of discontinued use or notification that the proposed changes would affect water levels, flows or water quality. The rules do not require the owner or operator of any existing structure constructed before a permit was required to obtain a permit. They also do not require every owner or operator to obtain approval for existing operations and maintenance.

These rules are only applicable if: the operation and maintenance is causing verified problems; an operation discontinued for 1 year or more is resumed; or if proposed changes in operations would affect water levels, flows or water quality. This provides a reasonable means of regulation without creating unnecessary or burdensome requirements for existing operations which do not cause problems or do not involve changes in conditions.

Revised Section B.6 establishes requirements and conditions relating to approvals for operation and maintenance after the Commissioner determines such approval is necessary pursuant to provisions of B.5. B.6. provides that an owner or operator must comply with provisions of B.6.a. through b. when notified that approval is required for operation or maintenance.

B.6.a. requires that the owner or operator shall submit plans, specifications and information on the structure.

B.6.a.(1) requires an explanation of the purposes for operation. This is needed to provide an understanding of the type of operation involved.

B.6.a.(2) requires available data on past history of use and operation and evidence of easements or other rights. This is needed to determine the effects of past operation on levels and flows and to determine if appropriate rights have been severed or will be acquired if there are effects on other riparian properties.

B.6.a.(3) requires engineering details on structural features and characteristics of the water control structure, especially devices used to operate the structure. This is needed to allow an assessment of the mode of operation of the structure.

B.6.a.(4) requires available information on the hydraulic and hydrologic character of the structure and the upstream and downstream area. This is necessary to allow an evaluation of the influence of the structure on the water involved.

B.6.a.(5) requires available information on the physical condition of the structure including data on original construction, reconstruction or repairs. This is needed to allow an evaluation of structural reliability.

B.6.a.(6) requires information on methods, frequency, time and direction of operation and any existing or proposed operating plans. This is needed to assess the operational needs and the frequency and direction of operational effects on the waters involved.

B.6.a.(7) requires other available or attainable information on hydraulic, hydrologic or geologic characteristics as the Commissioner may deem necessary to assess the impact or effects of the structure and its operation.

All of the above data in B.6.a.(1) through (7) are reasonable requirements needed to provide supporting facts to allow the Commissioner to determine an approved operation and maintenance program for the water level control structure.

B.6.b. provides preamble language regarding conditions under which the Commissioner will approve existing or proposed operation and maintenance based on provisions of B.5. and B.6.a..

B.6.b.(1)(a) through (c) set specific requirements that the operation and maintenance does not or will not cause: destruction or significant impairment of the ecosystem of the waters; potential threats to life and property, unless allowed by easement or other legal means; and adverse effects on maintenance of adequate flows and levels for upstream and downstream higher priority users, especially public domestic water supplies. These requirements are necessary to protect public health, safety and welfare, to provide consistency with water appropriation laws and regulations and environmental protection laws and rules.

B.6.b.(2) requires that the operation and maintenance be consistent with applicable state and local floodplain, shoreland, and wild and scenic river management standards and ordinances.

B.6.b.(3) requires that the operation and maintenance will not result in significant decreased public use of the surface of protected waters in order to assure that the public use of the waters is adequately protected.

B.6.b.(4) requires that the proposed operation and maintenance will comply, when applicable, with dam safety requirements to protect public health and safety.

B.6.c. provides that if the operation or maintenance will be detrimental to public health, safety and welfare or the aquatic ecosystem, based on requirements of B.6.b., the Commissioner shall not approve the operation and maintenance until the operation and maintenance is modified to meet the provisions.

Revised Subsection 1.5024 C. contains specific standards for water control structures. It essentially consists of language from existing rules Section 1.5024 B., with a few minor housekeeping language changes, deletions of unneeded language and a small amount of new language.

Revised Subsection 1.5024 C.1. is language from existing rule 1.5024 B.1. with the addition of minor housekeeping language requiring compliance with a number of conditions.

C.1.a. is unchanged language from existing rule 1.5024 B.1.a.

C.1.b. and C.1.b.(1) and (2) are unchanged language from existing rules 1.5024 b. and 1.5024 b.(1) and (2).

C.1.c. is revised language from existing rule 1.5024 B.1.c. The word "local" is deleted in order to recognize that the project sponsor can be <u>any</u> governmental unit, federal, state or local. It is unreasonable to restrict sponsorship to only local governments. The reference to "title-registration type permits" is deleted since it is addressed in revised subsection c.(3) as one of four provisions which must be met if a project is not sponsored by a governmental unit.

C.1.c.(1) is part of the language from existing rule 1.5024 B.1.c. requiring that the majority of riparian owners sign the permit application.

C.1.c.(2) is new language which requires that appropriate easements or other property interests be obtained from affected owners. It is needed to ensure that there is adequate protection of riparian rights.

C.1.c.(3) is new language which requires a title-registration type permit be issued to the owner(s) of the property where the structure will be located. This is needed to ensure that there is a legally recorded document of ownership which can be used to assure continued responsibility for present and future landowners. It is a rewrite of language from existing rule 1.5024 B.1.c., with added clarifying language.

C.1.c.(4) is new language requiring that the project will further public interests by enhancing beneficial public uses of the water. This is needed to ensure consistency with revised rule 1.5024 B.2. which was previously discussed.

C.1.d. through C.1.e.(1),(2),(3) and (4) is unchanged language from existing rules 1.5024 B.1.d. and 1.5024 e.(1), (2), (3) and (4).

C.2.a. through f. is language from existing rule 1.5024 B.2.a. through f., with a few minor housekeeping changes which do not alter the original requirement.

C.3.a. through d. is language from existing rules 1.5024 B.3.a. through d.. The only change is the addition of the word "vegetation" in C.3.b.(1) as clarifying language.

Revised Subsection C.4.a. through c. is revised language from existing rules Section 1.5024 B.4. Revisions are as follows:

Existing rule 1.5024 B.4. and 1.5024 a.(1) through (3) are revised by deleting all of the language. This change has been previously discussed and explained under revised rule B.3. as part of the new rules format.

C.4. contains language from existing rule 1.5024 B.4.b. with a few housekeeping deletions and additions which do not change the original intent. C.4.a. is unchanged language from existing rules 1.5024 B.4.b.(1).

Existing rules 1.5024 B.4.b.(2)(a) through (j) are deleted because the provisions relate to engineering requirements applicable to structures which are subject to dam safety laws and rules. Since these rules are contingent on compliance with the dam safety rules, there is no reason to include requirements which are already contained in those rules.

C.4.b.(1) through (12) is unchanged language from existing rules 1.5024 B.4.b.(3)(a) through (l).

C.4.b.(13) is language from existing rule 1.5024 B.4.b.(3)(m), with the additions of the words "or diversion during construction" in order to include consideration of the adequacy of any water diversions which may be involved. This factor is equally as important as the coffer dam consideration. It was inadvertently omitted in the existing rule.

C.4.c. is language from existing rule 1.5024 B.4.b.(4), except for substitution of "water level control structures" for "dams" as previously explained.

C.4.c.(1) is revised language from existing rules 1.5024 B.4.b.(4)(a). Revisions include substitution of "water level control structures" for "dams", change "20" to "25" and deleting the words "if an authorized governmental sponsor assumes maintenance responsibility" and replacing it with "when the provisions of C.1.c. are met." The change from 20 to 25 feet in structural height is to obtain consistency with the applicable dimensions of the dam safety rules and thus avoid confusion between either rule. The change will create no problems because the most critical factor, which is storage capacity, remains the same for both rules. The deletion of language and

replacement with a rule reference is a housekeeping type of action to ensure consistency between revised rule sections. Revised rule C.1.c. requires government sponsorship.

C.4.c.(2) and C.4.c.(3) are language from existing rules 1.5024 B.4.b.(4)(b) and (c), except for the housekeeping language changes involving "dams".

Revised Section D. is new language which explains the relationship between Section 1.5024 and other sections of the rules. It is necessary to ensure consistency between various sections of the rules.

Revisions in Section 1.5025 Bridges and Culverts, Intakes and Outfalls -

Revised Section 1.5025 addresses rules for Bridges and culverts, intakes and outfalls. It consists primarily of language from existing rule 1,5024, with some deletions to eliminate language relating to utility crossings which are subject to provisions of M.S. 84.415 and rules promulgated thereunder. It also includes revisions in format, addition of some new language and housekeeping language changes.

Revised Section 1.5025 A. is unchanged language from existing rule 1.5025 A., except for minor housekeeping language changes previously discussed under other rule revisions.

B. General Standards is the new format heading used in all sections of the rules.

B.1. Scope consists of new language outlining the areas by rules and language from existing Section 1.5025 A.4. that is unchanged, except for deletion of "H." and replacement with "C.7." to reflect the revised rule dealing with abandonment of structures.

B.2.a. through d. is unchanged language from the last sentence of existing rule 1.5025 A., except for deletion of "such"; and existing rules 1.5025 A.1. through 4., except for deletion of "D." and replacement with "C.6." in revised rule B.2.c. and deletion of the reference to abandonment, which is now

contained esentially unchanged in revised Section B.1. discussed above. In existing rule 1.5025 B., the heading Bridges and Culvert Installations is deleted as part of the reformatting.

B.3. is revised language from existing rule 1.5025 B.1. The revisions delete specific reference to low water fords and bridges and include housekeeping changes referring to those activities involving bridges and culverts, intakes and outfalls for which no permit shall be required under revised Subsections 3.a. through d.

B.3.a. is new language which provides that no permit is required to construct or reconstruct a bridge or culvert on a watercourse with a total drainage area of 5 square miles or less, except on officially designated trout streams. This is essentially the same provision contained in revised rules Sections 1.5021 through 1.5024, which has been previously discussed and explained.

B.3.b. is revised language from existing rule 1.5025 B.1.a., with added language to clarify the intent.

B.3.b.(1) through (6) is unchanged language from existing rules 1.5025 B.1.a.(1) through (6).

B.3.b.(7) is revised language from existing rule 1.5025 B.1.a.(7). Revisions include deletion of the word "federal" and addition of "or on an officially designated canoe and boating route (Re. Minn. Stat. § 85.32)". The existing reference only to "federal" wild, scenic or recreational rivers is deleted since the requirement should apply equally to both "federal" and "state" wild and scenic rivers. The existing rules inadvertently omit the reference to state wild and scenic rivers, which are covered under M.S. 104.31 - 104.40. (1973 laws).

The addition of the language which provides that a low water ford crossing is not exempt from permit if it is constructed "on a designated canoe and boating route" is necessary to ensure that the construction will be compatible with the state and local program for cooperative management of specific watercourses that have historic and scenic values. It does not prohibit such construction, but merely requires a more careful planning and construction under permit procedures.

B.3.c. is revised language from existing rule 1.5025 B.1.b. with added language to clarify the intent.

B.3.c.(1) through (4) is unchanged language from existing rule 1.5025 1.b.(1) through (4).

B.3.c.(5) is revised language from existing rule 1.5025 1.b.(5). The revision is the deletion of "normal summer streamflow" and substitution of "the ordinary high water mark on navigable streams." This change is necessary to provide a more reasonable basis for judging if a temporary bridge crossing is exempt from permit with respect to navigational clearance. The existing rule reference to "normal summer streamflow" is difficult to determine and is ambiguous. The revision provides a more reasonable determination fitting the statutory definition (i.e. the top of the bank of the watercourse). In addition, the words "on navigable streams" relates to those streams which are navigable by normal watercraft so that very small streams, which are only navigable under extreme high water, are exempt from this requirement.

B.3.c.(6) is new language requiring consistency with state and local flood plain, shoreland, and wild and scenic standards or ordinances as required by law. This is consistent with provisions of other sections exempting certain activities from permit.

B.3.d. is unchanged language from existing rule 1.5025 D.1., which is inserted in this revised section.

B.3.e.(1)and (2) is new language providing that no permit is required to install an agricultural drain tile outletting into protected waters provided the bank is restored to the original cross-section or contour and no permanent structure, except the drain tile, is placed below the ordinary high water mark. This is necessary to provide assurance to local agricultural interests that the common practice of constructing drain tile outlets will not require a permit. It is a practice that has been exempt from permit over many years and it provides a reasonable rule which allows normal farm drainage activity.

B.4. and B.4.a. through e. is all new language which establishes general standards for construction or reconstruction of bridges, culverts, intakes, outfalls or other crossings, except for those not allowed (B.2.) or those exempt from permit (B.3.). All of the above new language is also contained in the revised general standards subsections for Filling 1.5021 B.4, Excavations 1.5022 B.4., Structures 1.5023 B.4. and Water Level Controls 1.5024 B.4. and the explanation for their need is the same.

Revised Section 1.5025 C. contains specific standards for bridges, culverts, intakes, outfalls and other crossings. It essentially consists of language from existing rules 1.5025 B.2. and 1.5025 D., with some housekeeping language changes, deletion of some language, including all of existing rule 1.5025 C., and some new language.

Revised Subsection1.5025 C.1. is revised language from existing rule 1.5025 B.2. The major revision is the deletion of the reference to sewer and watermain crossings. This change is needed since sewer and watermain crossings are no longer subject to these rules, but are subject to M.S. 84. 15 and rules promulgated thereunder.

C.1.a. is unchanged language from existing rule 1.5025 B.2.a., except for deletion of the reference to undue hardship and unreasonableness. The deletion removes unnecessary language since provisions of C.1.a.(1) through (3) provide the grounds for waiving the requirement of a technical study. The intent to provide a waiver of the requirement remains unchanged.

C.1.a.(1) through (3) is unchanged language from existing rule 1.5025 B.2.a.(1) through (3) except for two small housekeeping language changes.

C.1.b. and b.(1)(a) and (b) is unchanged language from existing rules 1.5025 B.2.b. and 1.5025 B.(1)(a) through (b)(i) and (ii).

C.1.b.(2) and b.(2)(a) is unchanged language from existing rule 1.5025 B.2.b.(2) and 1.5025 B.2.b.(2)(a) except for a change in the reference from 6 MCAR 1.5025 B.2.b.(1) to C.1.b.(1) due to reformatting of the section.

C.1.b.(2)(b) is revised language from existing rule 1.5025 B.2.b.(2)(b). Revisions include the provision "based on analysis of data submitted by the applicant" and the reference change to C.1.b.(1)(b) due to reformatting of the section. The new language is added to clarify that the data on flood damage potential is obtained by the permit applicant. This is a reasonable rule which is supported by the requirements of M.S. 105.44, Subd. 1 relating to application data submittals.

C.1.b.(3) is unchanged language from existing rules 1.5025 B.2.b.(3).

C.1.c. is unchanged language from existing rules 1.5025 B.2.c.

C.1.d. is revised language from existing rules 1.5025 B.2.d. Revisions include addition of the word "reasonable", deletion of the reference to "Federal Highway Administration Standards" and addition of reference to bridges "over protected watercourses" and bridges "over protected waterbasins or wetlands."

The word "reasonable" is added to stress that bridges which provide for reasonable public navigation are acceptable. Unreasonable navigation may include such uses as watercraft with large masts or requiring high clearances on waters which are normally not used by such craft. The reference to bridge clearances 3 feet above calculated 50 year flood stage is applicable to "protected watercourses" and thus that language is added. The specific reference to "Federal Highway Administration Standards" is deleted since not all bridges crossing protected watercourses are on roads requiring adherence to Federal Standards. Deletion of the language provides a more reasonable rule. If the bridge involves a road requiring compliance with Federal Standards, those standards would still apply.

The language relating to "bridge over protected waterbasins or wetlands and all culverts" is necessary to clarify that the requirements on these waters is less restrictive as to height. It is unreasonable to require that bridges over protected waterbasins and wetlands be 3 feet above the calculated 50 year flood stage which is applicable, on a practical basis, only to watercourses.

C.1.e. is unchanged language from existing rule 1.5025 B.2.e.

C.1.f.(1)(a) through (c) is revised language from existing rule 1.5025 B.2.f.(1)(a) through (c). The revisions consist of changing the word "should" to "must". This change is necessary to provide a more positive rule which makes the conditions mandatory. Since failure to meet the conditions would result in adverse effects, it is necessary that they not be allowed.

C.1.f.(2) is revised language from existing rule 1.5025 B.2.f.(2). Revisions include deletion of "a lakebed" and substitution of "protected waters" to clarify that the rule pertains to walkways across waterbasins (lakes), wetlands and watercourses. It is unreasonable to limit the

prohibition only to lakes, since the same adverse effects will accrue to wetlands and watercourses. The addition of the word "private" clarifies that the prohibitive rule relates to walkway accesses only to benefit private interests and recognizes that permits to provide public accesses may be allowed subject to certain conditions. This is a more reasonable rule since it recognizes that public interests may be served in some situations by allowing a public access walkway.

C.1.f.(2)(a), (b) and (c) is unchanged language from existing rules 1.5025 B.2.f.(2)(a), (b) and (c).

Existing rules Section C. Watermain and Sewer Crossings is deleted in its entirety. This change is necessary to recognize that utility crossings are subject to M.S. 84.415 and rules promulgated thereunder and therefore, not subject to these rules as previously explained.

The title in existing rule 1.5025 D. "Intakes and outfalls" is deleted as part of the reformatting of this section.

Existing rule 1.5025 D.1 which relates to conditions under which no permit is required for certain intakes or outfalls is deleted. This section, as previously discussed, was reinserted as revised rule 1.5025 B.3.d..

Revised Subsection C.2. and C.2.a. through g. is language from existing rules 1.5025 D.2.a. through g. with the exception of a few minor housekeeping changes which do not alter the substance of the existing rules.

Revised Subsection C.2.h.(1) through (2) is existing language from existing rules 1.5025 D.2.h. with the following revisions:

The word "Dredging" is replaced by "Excavation" as previously explained under Section 1.5022.

The words "where necessary" are added to clarify that a permit for water appropriation must be obtained when necessary to meet the requirements of law. (M.S. 105.41, etc.).

C.2.h.(3) is new language requiring that intake structures must contain an appropriate sized screen to prevent fish intake. This was not addressed in existing rules, but is necessary to prevent destruction of fishing resources in the public interest. Utilization of fish screens may also prevent pump problems for applicants and represent a reasonable safeguard on an economic basis (for the applicant) as well as an environmental basis.

C.2.i. is unchanged language from existing rule 1.5025 D.i., except for one minor housekeeping language change in C.2.i.(3).

Revised Section 1.5025 D. is new language which explains the relationship between Section 1.5025 and other sections of the rules. It is necessary to insure conformity between various sections of the rules.

New Section 1.5026 Drainage of Protected Waters -

Section 1.5026 "Drainage of Protected Waters" is an all new section of the rules which is necessary to provide standards and criteria governing drainage of protected waters and to meet the legislative policies of M.S. 105.391, Subd. 3 and 105.44.

A. declares that it is the goal of the Department to protect and preserve protected waterbasins and wetlands from damage and destruction by drainage.

B. is an introductory title for General Standards applying to Section 1.5026. B.1. Scope. explains that the section relates to partial drainage or temporary drawdown of protected waterbasins and wetlands for all purposes except drainage for mining of minerals, which is separately covered under revised rule 1.5027. This is needed to explain the subject matter of the new rule.

B.2. declares that the permanent or total drainage of protected waterbasins and wetlands shall not be permitted except as provided in Minn. Stat. 105.391, Subd. 3. This is necessary to meet the legislative directive of M.S. 105.391, Subd. 3, which provides that waterbasins or wetlands can only be drained if they are replaced with waters of equal or greater value or,

where wetlands are involved, they are not afforded compensation under the State Water Bank Program.

B.3. requires that a permit is required for partial drainage or temporary drawdown subject to certain conditions.

B.3.a.(1) through (5) provides that a permit may be granted if it is intended to: improve navigational or recreational uses; improve or restore fish and wildlife habitat; expose sediment in order to remove or eliminate nutrients or contaminants; alleviate flooding of agricultural lands caused by artificial obstruction or increased discharge; or allow mining of iron ore, taconite, copper, copper-nickel or nickel pursuant to M.S. 105.64.

These provisions are necessary to provide guidance regarding the types of uses and purposes for temporary drainage or drawdowns which would generally provide public benefits and which would not cause major adverse environmental effects. The reference to mining is a mandatory statutory provision.

B.3.b. through e. contains general standards which are identical to language previously explained and discussed in the revised general standards for Filling 1.5021 B.4., Excavations 1.5022 B.4., Structures 1.5023 B.4., Water Level Controls, 1.5024 B.4. and Bridges and Culverts 1.5025 B.4.

C. is an introductory title addressing "Specific Standards" for drainage in addition to requirements of B. above.

C.1. ties the requirements for drainage for mining of certain metallic minerals to the requirements of M.S. 105.64 and revised Section 1.5027 which specifically addresses drainage for mining.

C.2. ties the requirements for drainage for mining all other metallic and non-metallic minerals not addressed in M.S. 105.64 to the requirements of revised rules Section 1.5027, provided that the waters are replaced by waters of equal or greater value as required by M.S. 105.391, Subd. 3.

C.3.a. through f. sets specific criteria for any diversion or drainage allowed under B., provided that specific criteria are met.

C.3.a. requires that permits for partial drainage of protected waterbasins will only be issued to governmental agencies with authority for such projects and further requires that a public need is established by specifying the public interests. This is necessary to ensure that the public interests are adequately protected as provided by M.S. 105.42 and 105.44. Note that this refers only to protected waterbasins, not wetlands.

C.3.b. requires written consent from all riparian owners for the partial or temporary drawdown of either waterbasins or wetlands. This is necessary to protect riparian property rights based on case law.

C.3.c.(1) through (3) provides that partial drainage or temporary drawdown shall only be allowed when the applicant submits data confirming that it will improve navigation or recreational uses; improve or restore fish and wildlife habitat; that agricultural lands have been flooded due to artificial obstruction downstream or increased discharge upstream. This is necessary to ensure that there are established grounds to justify the drainage in the public interest.

C.3.d. provides that a temporary drawdown shall not exceed 2 years in duration under normal climatic conditions. This is necessary to clarify that temporary actions do not constitute a permanent action. Two years duration, under normal climatic conditions, is considered a reasonable time for a temporary action. It is recognized that under extended periods of abnormal conditions, a temporary drainage may be extended beyond 2 years.

C.3.e. provides that there shall be no other feasible or practical means to achieve the intended purpose without drainage. This is necessary to ensure that drainage, which has considerable environmental effects, is the last possible alternative utilized.

C.3.f. requires adequate protection of public safety and promotion of public welfare as required by M.S. 105.45.

D. explains the relationship between this section and all other sections of the revised rules. It is necessary to ensure conformity between various sections of the rules.

New Section 1.5027 Alterations of Protected Waters for Mining -

This is an all new section of the rules. It was previously excepted from the rules as set forth in existing rules 1.5020 C.3. This rule is proposed in recognition of the need for specific rules governing the alteration of protected waters for mining, in order to implement the provisions of M.S. 105.64 and to address mining of other metallic and non-metallic minerals and peat not covered by M.S. 105.64.

New Section 1.5027 A. Goals provides that the Department's goal is to ensure that alterations for mining will minimize environmental effects; preserve water resources to the maximum extent feasible and practical; and encourage planning of future land and water use while at the same time promoting the orderly development of mining and use of sound mining practices. The goal recognizes that mining can have major effects and requires sound planning and also recognizes the economic needs for mining.

B., entitled Standards and Criteria, explains mining activities and contains a number of requirements relating to alterations for mining. It includes both general and specific standards, unlike the other revised rules sections which contain General Standards and Specific Criteria. That format is not considered practical for this section because of the complex interrelationships between existing laws and rules pertaining to mining.

B.1. Scope outlines the kinds of mining activities which may involve alternatives of protected waters including both metallic and nonmetallic minerals and peat.

B.2. and B.2.a. through b. provide that permits shall be required for any alteration of protected waters to facilitate mining of iron-ore, taconite, copper, copper-nickel, or nickel minerals, or reclamation of lands mined for those minerals, subject to certain conditions. This is necessary to provide specific references to two statutory sections specifically dealing with mining of these minerals (M.S. 93.44 through 51 and M.S. 105.64), including a specific reference to justifying data to show why underground mining without drainage, diversion or control of waters is not feasible or economical. These provisions are necessary to ensure consistency between specific statutory requirements and these rules and to recognize the legislatively enacted requirements.

B.3. and B.3.a. through i. provide that permits shall be required for mining of nonmetallic minerals, peat and other metallic minerals not regulated by M.S. 105.64 or reclamation of mineral areas subject to a number of conditions. This is necessary to provide standards and criteria for those activities not specifically addressed in M.S. 93.44-51 and 105.64.

B.3.a. requires evidence to show there is no other feasible and practical location for the mining activity. This is needed to ensure that mining involving the alterations of protected waters is the only feasible and practical alternative so that locations where alterations are needed are avoided whenever possible to prevent environmental damage.

B.3.b. requires evidence to show that there is no feasible or economical method to mine except by draining, diverting or controlling the waters. This builds on the existing statutory language of M.S. 105.64, Subd. 3.(1) relating specifically to mining of certain metallic minerals, but generally a sound criteria for any mining activity. It contemplates, for example, consideration of underground mining which does not result in major surface alterations.

B.3.c. requires evidence to show that there is a justified need for the alterations of waters and no other feasible and economical method is reasonably available. The need for this rule is similar to that discussed under a. and b.

B.3.d. requires evidence to show that there will be no substantial impairments of public interests or public use except as expressly provided by the permit and no endangering of public health and safety. This rule is needed to provide criteria similar to that of M.S. 105.64, Subd. 3.(2) which should also be applicable to other mining which has similar effects.

B.3.e. requires evidence to show that these proposed mining operations will be in the public interest and have sufficient public benefits to warrant the proposed alteration. This rule is needed to provide criteria similar to that of M.S. 105.64, Subd. 3(3) which should also be applicable to other mining which has similar effects.

B.3.f. requires evidence to show that the activities represent the minimal impact solution with respect to watershed modifications, watercourse diversions or changes, drainage, runoff and seepage management and avoidance of major adverse changes in the ecosystem of protected waters having substantial public value. It is necessary to insure consistency with M.S. 105.42, Subd. 1.a. regarding minimizing changes and damage to the environment.

B.3.g.(1) through (3) addresses requirements whenever protected watercourses must be directed or changed to facilitate mining by requiring provisions for:

(1) Maintenance of flows and levels to protect instream flows and prevent flooding. This is needed to ensure consistency with M.S. 105.417, Subd. 2 and 105.42, Subd. 1.a.

(2) Measures to prevent erosion and sedimentation in order to protect water quality. This is needed to ensure consistency with M.S. 105.42, Subd. 1.a. and the policy of M.S. 40.02.

(3) Details on the location, relocation and utilization of the watercourse after mining. This is necessary to ensure proper planning for future water and land use and to protect the public interest in the waters.

B.3.h.(1) and (2) address requirements whenever protected waterbasins are allowed to be drained for mining and such drainage is justified and legally permitted by requiring that compensation for the loss of the basin is provided by either (1) immediate replacement with waters of equal or greater value or (2) submission of acceptable plans for the eventual replacement of the basin with waters of equal or greater value upon cessation of mining activities. This rule is necessary to meet the legislative directives of M.S. 105.391, Subd. 3 and M.S. 105.42, Subd. 1.a. It provides reasonable alternative means by which mineland owners or operators may meet legislative requirements.

B.3.i.(1) through (3) addresses requirements whenever a water impoundment is necessary and justified for mining by requiring that the design, construction, operation and maintenance of the impoundment structure will:

(1) Meet applicable dam safety requirements of 6 MCAR 1.5030 - 1.5034, the dam safety rules. This is needed to ensure consistency with dam safety rules.

(2) Provide hydrologic and hydraulic measures to ensure that any protected waters downstream of the impoundment are adequately protected with respect to water quantity, quality and prevention of flooding. This is needed to ensure consistency with M.S. 105.42, Subd. 1.a. and 105.45 regarding protection of public health and safety.

(3) Include plans detailing the disposition and use of the impoundment area after cessation of mining activities. This is needed to ensure protection of the public interests in the waters and to provide for adequate planning for future use of the area.

B.4. requires that whenever metallic, nonmetallic and peat mining activities will result in detrimental effects on the protected waters, measures to compensate for the detrimental aspects shall be required in the permit. This is needed to ensure consistency with M.S. 105.42, Subd. 1.a.

New Section 1.5028 Administration -

All of revised rule 1.5028 is unchanged language from existing rule 1.5026, except for three minor language changes using "protected waters" terminology.

2772D

STATE OF MINNESOTA

OFFICE OF ATTORNEY GENERAL

In the Matter of Adopting
Amendments to the Rules of the
Department of Natural Resources
Governing Permits for Making
Changes in the Course, Current
or Cross-section of Public Waters

STATEMENT OF COMPLIANCE

WITH RULEMAKING PROCEDURES

I, Special Assistant Attorney General A. W. Clapp III, state that I have examined the rules and all related documents and that, based on that and my personal familiarity with the applicable procedures, the Administrative Procedures Act and the rules of the Attorney General have been followed.

Dated: June 1, 1983

A. W. Clapp III

A. W. CLAPP III
Special Assistant
Attorney General