

STATEMENT OF NEED AND REASONABLENESS

1981 ?

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 uniformly 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 irreplaceable 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 environmental 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 clarification 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

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

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 existing 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 measures 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 developments (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 operation 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 any 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 (1).

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 essentially 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 Subsection 1.5025 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.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.