PROPOSED RULES IMPLEMENTING THE WETLAND CONSERVATION ACT OF 1991

STATEMENT OF NEED AND REASONABLENESS

INTRODUCTION

These rules were developed to implement Laws of Minnesota 1991, Chapter 354, the Wetland Conservation Act of 1991. The central provision of the Act is that all wetlands of all sizes and types that are not already regulated by the Commissioner of Natural Resources, cannot be drained or filled, except in certain circumstances spelled out in the Act, without the lost wetland being replaced. Chapter 354 directed the Minnesota Board of Water and Soil Resources (board) to adopt rules concerning three areas:

1. establishing criteria to determine the public values of wetlands [Minn. Stat. section 103B.3355];
2. establishing conditions for landowner use of a wetland preservation area [Minn. Stat. section 103F.612, Subd. 2(b)(4)]; and
3. criteria for approving a wetland replacement plan [Minn. Stat. section 103B.2242, Subd.1].

Criteria for approving replacement plans must also include the administrative, monitoring, and enforcement procedures to be used; the procedures for the review and appeal of decisions; and the criteria, procedure, timing, and location of acceptable replacement of wetland values. The rules also address the state establishment and administration of a wetland banking program for public and private projects.

In addition, the board has general rule making authority for implementing all its programs pursuant to Minn. Stat. section 103B.101, Subd. 7.

This statement is prepared under Minn. Stat. section 14.131. It describes and explains the reason for each part of the rule. It also discusses the fiscal impact of the law and rule on local governments; it analyzes the impact on small businesses; and it discusses the relationship of the rule to the legislature's agricultural land preservation and conservation policy.

The board published a "solicitation of outside opinion" in the **State Register** on March 9, 1992. Three comments were received. Those comments were considered in the drafting process. The board staff developed draft rule language in consultation with staff of the Commissioner of Natural Resources. This draft language was reviewed and revised with the assistance of two advisory groups, the Wetland Heritage Advisory Committee (Minn. Stat. section 103G.2242, Subd. 11) and a 23 member rule working group. The

groups operated concurrently and exchanged comments. The Wetland Heritage Advisory Committee met 10 times from January to September, 1992 when they considered the report of the rule working group and forwarded a recommendation to the board. The rule working group was established by the board and heritage committee to complement and expand participation to include a more diverse group of private and public entities. The rule working group was led in a consensus process by a professional facilitator, hired by the board. The working group included representatives of conservation organizations, local governments, farm organizations, land development organizations, public utilities, industry, and state agencies. A number of the representatives are employed in small business. The rule working group met 11 times from March to September, 1992 and spent over 100 hours in deliberation. The group reached consensus on most items. However, in areas for which no consensus was reached, the rule working group presented the heritage committee with a number of alternatives. The heritage committee adopted one of the alternatives for each of the unresolved areas. The heritage committee then recommended a proposed rule to the board. The board accepted the rule approved by the Wetland Heritage Advisory Committee on October 1st. The board considers the rule development process and the consequent proposed rule to be necessary and reasonable.

The rules deal with local government administration of a statewide wetland protection act. Wetland resources and local government regulatory experience and staffing vary considerably. Consequently, the rule was drafted to accommodate local discretion- to the extent allowed by law- and be understandable to local administrators with diverse backgrounds. Although the rules will affect all local units of government, the greatest impact will be to those units without established programs of land use regulation.

PURPOSE AND SCOPE

The Purpose and Scope parts of the proposed rule introduce the reader to the rule, and say a few things about what the rule is and is not about. The intent is to make these rules a self-contained document, understandable to the reader without forcing frequent reference either to the Act or to a supporting explanatory manual.

The Purpose part quotes the four goals of the Act, which are listed in Minn. Stat. sect. 103A.201 subdivision 2(b).

The Scope part answers some frequently asked questions about what the Act and the rules do and do not regulate. It explains first that the rule applies to draining and filling wetlands. This is a narrower focus than the Purpose statement would indicate, but is dictated by Minn. Stat. section 103G.222, which requires

replacement only when there has been draining or filling, and does not address other forms of wetland degradation such as excavation and liquid pollutant discharges.

The second paragraph of the Scope section lists some farming activities that the Act and the rules do not apply to, as listed in Minn. Stat. section 103G.231, subds. 1 and 2.

The first sentence of the third paragraph explains that the rules do not apply to the waterbodies regulated by the DNR. This is based in part on Minn. Stat. section 103G.005, Subd. 19(b), and in part on the obvious legislative intent not to overlap DNR jurisdiction, but rather to cover the wetlands which DNR does not regulate under Minn. Stat. sections 103G.211 and .245.

The second sentence of the third paragraph explains that the rules do not preempt or supersede any other federal, state, or local regulations. The Act neither expresses nor implies any legislative intent to override local rules or ordinances which are more restrictive than the Act and these rules.

The paragraph regarding peat mining reflects Minn. Stat. section 103G.231, Subd. 3, which appears in the Act at the end of Article 8, the peat article. It is further explained in the Mining section of these rules.

The applicability of the Act and the rules to state agencies is addressed by Minn. Stat. section 645.27: "The state is not bound by the passage of a law unless named therein, or unless the words of the Act are so plain, clear, and unmistakable as to leave no doubt as to the intention of the legislature." The Act neither names the state nor leaves an unmistakable message of intent. However, by executive order the governor has told the state agencies to apply the practice of no-net-loss to their activities. Thus the statement in the Scope section goes no further than making it clear that state agencies do not follow the local procedure requirements of the Act and rules. The agencies are applying the substantive provisions of the law to themselves, acting as their own LGUs.

The last paragraph reminds LGUs and landowners that their decisions regarding draining and filling and replacements are guided by the state's Environmental Policy and Environmental Rights Acts, in addition to the Act and these rules. Without this reminder, there would be a tendency to forget that even with the Wetlands Act in place, the state's basic environmental laws still apply.

DEFINITIONS

ACTIVITY. This word appears throughout the exemptions section

of the Act. There it clearly refers to the acts of draining or filling. The rule adopts the same meaning of the word where it makes use of it.

AGRICULTURAL LAND. Exemption 7 (type 1 wetlands) and exemption 8 (type 2 wetlands less than two acres) apply only to wetlands which are "on agricultural land". And although the Act generally requires a replacement wetland to have twice the acreage of the impacted wetland, the replacement acreage ratio is just 1:1 for wetlands "on agricultural land". Minn. Stat. section 103G.222(f) and (g). This very important term is not defined by the Act. The rule work group was not able to reach consensus on a definition, the heart of the debate being whether native hayland and native pastureland should be included in the definition of the term. A review of the statutes showed there were a number of definitions available, no two alike, each being tailored to the particular context in which it was used. One of the alternatives which the rule work group considered was known as the split-definition alternative; it represented a compromise using a narrower definition for the exemptions and a broad definition for the replacement ratios. It is the alternative which the Wetland Heritage Advisory Committee adopted by a majority vote, but with changes.

The definition of agricultural land for exemptions 7 and 8 responds to those who believe the type 1 and type 2 exemptions were intended to allow farmers to get rid of "nuisance" wetlands, namely those which interfere with the operation of planting, cultivation, and harvesting machinery. Thus pasture and hayland are included in the definition only if they are in a rotation with cultivated crops or have been interseeded - meaning machinery is operated on them. The compromise adopts a broad meaning of "agricultural land" for the use of the term in the replacement acreage ratio part of the Act. It includes all pasture and hayland.

The more restricted definition used for the exemptions contains the terms INTRODUCED PASTURE and INTRODUCED HAYLAND. These definitions are taken from the RIM rules, part 8400.3030, subparts 28 and 29, but were modified by the Heritage Advisory Committee to make them less restrictive. The RIM rule requires that the cultivation or interseeding must have occurred at least twice within the 1976 to 1985. The Committee relaxed this to once within the last twenty years. This is a compromise between those trying to minimize loss of wetlands in keeping with the overall policy of the Act, and those seeking application of exemptions 7 and 8 to all who are engaged in farming.

The broader definition of agricultural land enables all farmers to replace at a 1:1 ratio rather than the 2:1 ratio required of everyone else. The broader definition can be applied in this context because in this context it does not breach the

Act's goal of no-net-loss of wetlands. It is reasonable to have two definitions of the same term in the rule. The two contexts - exemptions and replacement acreage - are very different, so a rationally-based distinction is appropriate. The difference in contexts also minimizes the possibility of confusion which might otherwise arise from having two.

The board recognizes that the compromise adopted by the Wetland Heritage Advisory Committee is controversial, and wants public input on the issue and the benefit of the Administrative Law Judge's (ALJ's) analysis. One view put forward in the rule work group is that farmers who have in the past kept land in pasture or hayland without rotating it with crops or interseeding it, should not be penalized for that past choice should they now or in the future want to drain the wetlands on those fields in order to convert the land to cropland. Requiring replacement of the wetlands drained as part of the conversion might make the option of conversion economically inviable, and leave them caught in an operation which is itself inviable. Contrarily, those supporting limiting exemptions 7 and 8 to wetlands interfering with efficient use of machinery, believe the Heritage Advisory Committee largely defeated the compromise position by requiring crop rotation or interseeding only once in the last 20 years rather than twice in the last 10 years.

AQUACULTURE. This term is used in exemption 20. The definition is a direct quote from Minn. Stat. section 17.492 (1989). This section of the statutes is now repealed, but is being used in the rule nevertheless because it includes plant as well as animal life. Since exemption 21 does not reach water-grown plants other than wild rice, it is reasonable to leave exemption 20 open for such other activities, such as cranberry growing, that might come to Minnesota in the future.

BEST MANAGEMENT PRACTICES. The term is used in two places in the exemptions section of the Act: exemption 22, and at the end of the exemptions section where standards for how to conduct draining or filling under an exemption are set out. The rule additionally uses the term in exemptions 11 and 12. The definition requires the use of Best Management Practices (BMPs) on the draining or filling activity, not on the project as a whole (the latter would be beyond the scope of the Act). The definition uses the term "state approved" advisedly, in order to provide consistency to those operating in multiple jurisdictions, forestry and utility operators in particular.

CREATION. There are two kinds of replacement wetlands: those made by restoring a previously existing wetland, and those made as explained in this definition. The definition of RESTORATION explains the alternative. The distinction between the two definitions is self-explanatory.

DAY. The Procedures section of the rule has some time requirements for how many days an act must be taken by. This definition explains how to count the days.

DRAINAGE OR DRAIN. The definition lists some of ways by which a wetland can be deprived of water. Basically they are two: withdrawing water from it; or preventing water from entering it.

DRAINAGE SYSTEM. This term is used in exemption 3. The definition is taken from the county ditch law, Minn. Stat. section 103E.005, Subd. 12.

EXCAVATION. This term appears in the rule in exemption 10 and in paragraph D.3 of Replacement Plan Components. The definition is self-explanatory.

FILL. The definition corresponds with what the Corps of engineers is currently using for section 404 permits. The word "solid" is included so that the rule will not reach liquid discharges which are subject to Pollution Control Agency regulation, and will not apply to raising the water level of a wetland. All the material after the first sentence reflects the solution the Corps has developed to deal with posts and pilings. As the legislature saw fit to align the state law with the section 404 law by adopting the federal exemptions and the nationwide permits through exemptions 4 and 5, so it is reasonable to align the federal and state definitions of fill. The last sentence of the definition has been included at the request of the forest industry; it makes explicit an exemption that is necessarily implied in the Corps of Engineers rules that explain the section 1344f exemptions that are incorporated in the Wetland Act by exemption 4.

FLOOD PLAIN WETLAND, FLOW-THROUGH WETLAND, ISOLATED WETLAND, RIVERINE WETLAND, TRIBUTARY WETLAND. These terms are used in that part of the replacement plan rules which provide a replacement acreage ratio adjustment where the replacement wetland will have different inlet/outlet characteristics than the impacted wetland. The definitions, when read together, are self-explanatory as to the distinctions between each of the five types.

HYDRIC SOILS, HYDROPHYTIC VEGETATION. These two terms, are taken from the wetland delineation manual, January 1989 edition. They are associated with the term "wetland".

IMPACT. This term is used in a number of places in the Act and the rule. Its meaning is taken from the basic policy statement in the Act, Minn. Stat. section 103A.210, Subd. 2.

IMPACTED WETLAND. Self-explanatory. The term is used in the rule to distinguish the wetland being drained or filled from the

wetland which will be the replacement.

INFRASTRUCTURE. The term is used in exemption 24, the grandfathering exemption. The definition is intended to encompass what developers and zoning authorities understand the term to mean.

LANDOWNER. This term is used in the rule as shorthand for the person or entity who is draining or filling, or seeking an exemption or no-loss determination, or applying for approval of a replacement plan, or hosting a replacement wetland, or engaging in wetland banking. The definition is broad enough to reach beyond fee title owners to anyone who has the rights necessary to satisfy the provisions of the rule where the term is used.

LOCAL GOVERNMENT UNIT. This term is used throughout the rule. The definition is provided by Minn. Stat. section 103G.005, Subd. 10a. The rule adds a reminder that on state land, the state agencies apply the Act to themselves the same thought conveyed by the second to last paragraph of the Scope section of the rules.

MINING. The definition is as given in Minn. Stat. section 103G.222(a).

NON-DEGRADED WETLAND. This term appears in the replacement plan section under Replacement Plan Criteria, Type of Replacement. It is a wetland in its natural state.

PASTURE. The definition is self-evident. The term is used in the definitions of agricultural land.

PEACE OFFICER. Self-explanatory. The term is used in the enforcement part of the Act and the rule.

PROJECT. The rule uses this term most frequently in the Sequencing part of the Replacement Plan section. It is a short-cut way of referring to the overall action, such as building a house, of which the draining or filling activity may be only a part.

PROJECT-SPECIFIC. The definition is self-explanatory.

PUBLIC TRANSPORTATION PROJECT. The term is used in Minn. Stat. section 103G.222(e), and in the rule, to identify those projects which have the privilege of replacing their wetland impacts anywhere in the state. It is defined to include the public elements of the transportation system described in Minn. Stat. section 174.01 - which is the closest thing in the statutes to an actual definition of the term.

PUBLIC WATERS WETLANDS. The term means what the statute says it means. Because the term is used in the definition of wetlands

to explain what wetlands the rule does not apply to, the rule includes the inventory requirement. Thus a type 3, 4, or 5 which could have been inventoried but was not, is subject to this rule rather than the public waters law. See also the definition of "Wetlands".

RESTORATION. A replacement wetland can be made by restoration or by creation. This definition, together with the definition of "creation", distinguish the one from the other.

SET ASIDE. The term is used in exemptions 1 and 2. It is self-explanatory.

SILVICULTURE. The term is used in exemption 14, the logging exemption. The definition was supplied by the forest industry, and occasioned no debate. Basically, it covers the planting, growing, and harvesting of trees.

UTILITY. The term is used in exemptions 11 and 12. The definition meets the common understanding of the term.

WATERSHED. The definition is from the Act, Minn. Stat. section 103G.005, Subd. 17a.

WATERSHED MANAGEMENT ORGANIZATION. The definition comes from Minn. Stat. section 103B.205, Subd. 13.

WETLANDS, A WETLAND, THE WETLAND, WETLAND AREA. Part a) of the definition comes straight from the Act, Minn. Stat. section 103G.005, Subd. 19. Part c) does also, but with additions. The rule adds the clarification that public waters as well as public waters wetlands are excluded from the coverage of the Act. The rule also adds that the exclusion is for those public waters and public waters wetlands that were inventoried, so that those not inventoried will be reached by the Wetlands Act. There were some that were missed, and it could not have been legislative intent that these be left in limbo.

Paragraph b) of the definition explains how the rule distinguishes between references to a wetland in its entirety, and a part of a wetland. The National Wetland Inventory maps often show a wetland broken into two or more Cowardin types; this definition makes those types areas within a wetland, rather than separate wetlands. This distinction is necessary in order to rule out any possible confusion. For example, an 8 acre type 3 wetland may well have type 2 and type 1 fringe areas, but those are not separate wetlands.

WETLANDS IN A CULTIVATED FIELD. This term is used in Minn. Stat. section 103G.222(c). The definition incorporates any wetland 51 percent of more of whose boundary abuts such land. The number seems more reasonable than any greater or lesser number. The time

requirements for qualification as cultivated are taken from exemptions 1 and 2.

WETLANDS LOCATED ON AGRICULTURAL LAND. This is for exemptions 7 and 8, and simply applies the same 50 percent rule used for the cultivated-field provision.

INCORPORATION BY REFERENCE

This part is needed to satisfy Minn. Stat. section 14.07, Subd.4. It lists in one place all the documents which the rule incorporates by reference, and tells where they are available.

EXEMPTIONS

The purpose of these two parts of the rule is to interpret and explain the twenty four exemptions to the replacement plan requirements of the Act.

Although the Act does not expressly say so, it is not reasonable to think that the legislature intended the exemptions to apply to calcareous fens. To conclude otherwise would contradict the very high level of care specified for these unique ecological units by Minn. Stat. section 103G.223.

The rules disallow the application of exemptions to replacement wetlands, because otherwise replacements would be lost without replacement, and therefore there would be a net loss of wetlands.

The fifth paragraph plugs a loophole by preventing a sequence in which a landowner would first partially drain or fill with replacement, reducing the wetland to a size or type which was exempt and then eliminate that remainder without replacement.

The rule reminds those who drain or fill under an exemption that they thereby undertake certain obligations as to how they carry out the work. The language is direct from Minn. Stat. section 103G.2241, Subd. 1(b).

In order to make this rule user-friendly, the provision for each exemption begins with the exact language from Minn. Stat. section 103G.2241. After the quote comes any interpretation needed, and a description of the evidence a landowner needs to demonstrate qualification for the exemption.

For exemptions 1 and 2, the kinds of evidence needed are obvious and readily attainable. The rule limits eligible set-aside wetlands to types 1 and 2 as defined by Circular 39. The reason

for the limit is that Agricultural Stabilization and Conservation Service allows land, including wetlands to be set aside that are farmed only two out of five years, which means they are farmed less than six out of ten years. By limiting the set-aside to types 1 and 2 - the driest types - the rule minimizes the likelihood that the set-aside was applied to a wetland that was farmed less often than six of ten years.

Exemptions 1, 2, 4, 7, 8, and 23 are all farm exemptions. Therefore the rule for each requires that the use to which the drained or filled wetland is put, be agricultural. Otherwise, an exemption intended for farming could be subverted to non-farm purposes. The rule for each requires that if the area drained or filled under the exemption is put to a non-farm use, that the former wetland must then be replaced. However, a ten year limit is put on this exception to the exemption, in keeping with the ten-year limit on non-ag use of cultivated fields converted without sequencing screening under Minn. Stat. section 103G.222(c).

Notice to future owners of this use limitation on the property is desirable, and the original rule draft required recording of notice under all circumstances. However, the Heritage Advisory committee concluded that it was unrealistic to expect landowners draining or filling under one of these exemptions without LGU certification, to record notice of the use limitation on the drained area. Some argued that the recording burden should not be imposed on farmers at all. Finally the matter was compromised as set out in the rule. This focuses the recording requirement on those former wetlands which are in cities, because they are the ones most likely to be converted to a non-ag use in the near term. The board recognizes that there is a range of opinions on this recording issue, and would like public input and the ALJ's analysis. The rule work group achieved consensus that recording should be required under all circumstances, in order to provide protection to buyers who would otherwise have no way of knowing that an apparent piece of upland in fact could not be put to a non-farm use without first providing a replacement wetland twice the size of the one that had been there. The opposite view point is that any recording requirement is a financial burden, and creates title issues at time of sale. An argument raised against the middle ground taken by the Heritage Committee is that cities expand their boundaries, making it difficult for a buyer of farm property in a city to rely on the absence of recorded notice, because the farm wetland might have been drained before it was brought within the city, and the notice therefore not recorded. An argument for recording is that it reduces the burden on the LGU to try to keep track of where the ag exemption drainages have occurred. An argument for recording is that to not require it would leave a cloud of doubt on all farm titles.

Exemption 3 is straightforward, except for its exception. Where a wetland exists because ditch maintenance has been de facto

abandoned for over twenty years, the statute requires that maintenance must be done in such a way as not to drain or fill the wetland - otherwise it must be replaced. In some cases, the old wetland may never have been completely drained by the ditch, so the rule provides that it may be drawn down to its old level by the maintenance, but not below that. The evidence requirements are self-explanatory, as is the tile lowering provision. A separate paragraph allows the maintenance to drain or fill wetlands which are more than twenty years old when they are confined to the ditch limits. These are wetlands that were formed unintentionally by the ditch. This exception to the exception to the exemption is derived from exemption 10(iii): "Activities in a wetland created solely as a result of .... actions by public entities that were taken for a purpose other than creating the wetland". These accidental wetlands are going to be types 1 and 2, caused to be formed by variations in the ditch grade and by water accumulating on or next to the spoil.

Exemption 4 seems self-explanatory. It logically should have been placed next to exemption 23, because 4, like 23, is a Swampbuster exemption. The ten-year ag use provision has been previously explained.

Exemption 5 is simple on its face, but difficult for field interpretation because the section 1344(f) (aka 404(f)) exemption is not easy to understand, not least of all because of its so-called "recapture" provision (33 USC section 1344(f)(2)). The exemption takes up a full page in the United States Code, and three pages of rule explanation by the Corps (33 CFR 323.4). Therefore, the only meaningful documentation the landowner can provide is a letter from the Corps stating that the particular drain or fill activity proposed by the landowner is exempt.

Exemption 6, like exemption 5, applies federal section 404 exemptions to state wetlands. Exemption 5 is for 404 statutory exemptions, while exemption 6 is for 404 nationwide permits. The rule refers to the nationwide permits as they presently exist in the Corps rules, except that it omits substantive amendments and additions to the nationwides made after the Act was passed, because courts have held that our legislature's incorporation by reference do not include automatic incorporation of subsequent changes to such laws. Not included in the listed nationwide permits are: those which apply only to section 10 (Rivers and Harbor Act) permits; numbers 27 and higher, all of which were adopted by the Corps after the Act was enacted; number 26, which was excluded by the Act;, number 14 for new roads, which was excluded by the Act;, and number 18, which was substantially changed after the Act was passed. The rule points out that a nationwide permit includes not only the nationwides per se, but also the regional conditions attached by the Corps district office, and the conditions imposed by the 401 (MPCA) certification of the nationwides.

Exemptions 7 and 8 both apply to wetlands on agricultural land, for the meaning of which see the definitions of "agricultural land" and "wetlands on agricultural land". Each exemption provides a cross-reference from the Circular 39 type to the equivalent Cowardin classification, in order to facilitate use of the National Wetland Inventory maps which show only the Cowardin type. For the purposes of determining the size of a type 2, the boundary of the wetland is not the "ordinary high water level" as defined in Minn. Stat. section 103G.005. Instead, the boundary is as determined from application of the 1989 federal manual, because Minn. Stat. section 103G.2242, Subd. 2 says the manual is to be used to delineate wetlands subject to the Act. Each exemption has the same 10 year ag use provision that has been previously explained. The last paragraph of the rules for the two exemptions allows the drainage of all of a wetland which is entirely type 1 and type 2, when the type 2 part is less than two acres.

Exemption 9 recognizes certain public and private conservation program contracts that allow wetlands voluntarily restored to be subsequently drained. The rule also provides that landowners who have restored or created wetlands for conservation purposes on their own volition may have what amounts to a contract with themselves to undo what they have done if the need arises; thus a well-intended voluntary action is not converted by the law into an involuntary requirement.

Exemption 10 was thought by a number of people in the advisory groups to need the addition by rule of the same twenty year exception that the legislature provided for the ditch maintenance exemption. However, it was concluded that the legislature probably acted purposely in not putting a time limit on this exemption, so that adding one by rule could well be going beyond legislative authority. The rule includes in the reach of provision (iii) those publicly constructed, funded, or approved projects that created wetlands for the listed public purposes, which are for other than wetland conservation per se.

Exemption 11 specifies that the one-half acre limit on the project's wetland impact is cumulative, rather than per wetland. The alternate interpretation would have allowed a linear project of any length to cause considerable wetland loss without replacement, which would not have been in keeping with the purpose of the Act.

Exemptions 11 and 12 both provide the opportunity to the utility companies to seek seasonal or year-long certificates of exemption from the LGU, a reasonable provision considering the continuous and on-going nature of such work. Swift repair of utility failures being in the public interest, the rule allows utilities to act first in emergencies, and work out the replacement requirements later.

Exemption 12 is substantially limited in scope by its

proscription of "additional intrusion". The rule states the obvious in saying that the exemption does not apply to spill remediation; it would be unjust to allow a spill to result in loss of wetland without replacement.

Exemption 13 is perhaps academic, since the state generally does not have authority to regulate the construction of interstate pipelines.

Exemptions 14 and 15 are the forestry exemptions. They do not exempt anything that is not exempted by exemption 5, and so evidence a legislative intent to make sure that it had the subject covered.

Exemptions 16 through 20 need little or no elaboration by the rule. Exemptions 16, 17, 18, and 20 are limited to activities that "do not result in the draining or filling, wholly or partially, of a wetland". This severely constrains their scope. To allay the concerns of the Association of Minnesota Townships, the rule for exemption 16 explains that it does not apply to typical maintenance activities that do not impinge on wetlands in ways not allowed by the rule.

Exemption 21 is the paddy rice exemption.

Exemption 22 being for normal practices to control pests and noxious weeds, the rule specifies that diking, ditching, tiling, and filling to achieve such control are not such normal approaches to such problems.

Exemption 23 is the so-called Swampbuster exemption. Basically, the federal farm program denies benefits to participants who convert a wetland. However, there is a narrow band of drain and fill activities that <u>are</u> allowed under the swampbuster law, and the rule provides for them. Since landowners sometimes withdraw from the program, the rule plugs the loophole that would otherwise allow the landowner who intends to withdraw, to drain under cover of the exemption. This being an exemption for farmers, the same 10 year ag use provision is included that is part of the other ag use exemptions and has been previously explained.

Exemption 24 is the grandfathering provision. By the time the rules go into effect, most of the exemption's applicability should have been used up. For those projects that are still ongoing, the rule points out that if a wetland drain or fill was not expressly or necessarily authorized by the approval, the wetland impact must be avoided. For example, the subdivision approval may not have addressed where on each lot the house is to be located. Therefore, if the lot size and shape allow, the house must be built outside of the wetland. The same logic applies to driveways. The rule also requires that to be grandfathered in, a ditch project must have had final approval during the specified time period; for plats, the

preliminary approval is the main governmental act, but for ditches, under chapters 103D or 103E, it is the final approval which is the main event.

PROCEDURES

This section of the rule sets out the procedures to be followed in carrying out the substantive provisions of the rule.

Determining the local government unit. Local control is a centerpiece of the Wetlands Conservation Act of 1991. A wetland can be drained or filled only if approved by the "local government unit". Minn. Stat. section 103G.2242, Subd. 1(b). This statement of need and reasonableness abbreviates the term to LGU.

The term is defined at Minn. Stat. section 103G.005, subd. 10a, and in the definitions section of these rules. Outside the seven county metro area, there is no jurisdictional overlap; if the activity is in a city, the city is the LGU; if outside the city, it is the county. Within the metro area, however, there is jurisdictional overlap - not between cities and towns, but rather between one of those and a water management organization (WMO). Every city and town is in one or more of the 46 Watershed Management Organizations (WMOs) into which the metro area has been divided. See generally Minn. Stat. sections 103B.201-.251. Thus a choice has to be made between a city or town on the one hand, and a WMO on the other, as to which will be the LGU responsible for carrying out the Act. The rule selects whichever entity carries out water-protective regulation; for those WMOs which have proper water management plans under Minn. Stat. section 103B.231 and the board's rules, that entity is identified in the plan, Minn. Stat. section 103B.231, Subd. 6(b)(4). Lacking an indication, the rule says the city or town will be the LGU, because that is where the general zoning authority lies; since almost any project other than agricultural drainage will require zoning approvals, the wetland protection authority is most efficiently located in the same hands.

The rule, by using the phrase "or its delegate", allows an LGU to enter into a joint powers agreement with another entity to carry out the LGU functions under this rule. The 1992 legislature gave Soil and Water Conservation Districts (SWCDs) specific authority to enter into such agreements with counties and cities (Minn Laws 1992 c. 450), and it is expected that quite a few such agreements will be made. Those towns in the metro area that do not zone could seek a joint powers agreement with either the county or the SWCD.

The rule provides guidance on which LGU has jurisdiction when an activity is on the boundary between two. The board will resolve such questions, and all other LGU jurisdictional conflicts. This is an appropriate function for the board, given its oversight and appellate roles under the Act.

The reference to DNR's authority acts as a reminder to rule users of the provision in Minn. Stat. section 103G.222(a).

Exemption determinations. Those who were involved with the three year drafting effort that culminated in the Wetland Conservation Act of 1991, know that working out the exemptions was a big part of the exercise. There is nothing in the Act, however, about procedures to be followed by landowners or LGUs or enforcement authorities regarding exemptions. The proposed rules, by design, provide no more than minimum process in this area.

First, a landowner is free to make his or her own calculation about the applicability of the exemptions to a planned activity. Concluding that an exemption applies, the landowner may proceed to drain or fill, but thereby assumes the risk that an enforcement person may stop the project with a cease and desist order; even if the landowner's analysis is thereafter confirmed, the landowner will have undergone delay costs. If the landowner's calculation was wrong, there will be the costs of restoration or replacement. Therefore the rule allows a landowner to seek an official predetermination of whether or not the claimed exemption in fact applies. The rule identifies the LGU as the proper entity to make such determination, because a central tenet of the Act is that it be LGU driven. The rule requires an LGU to respond to such a request, in spite of the great concern on the part of LGUs that they could receive a high volume of such questions and they have been given no money by the legislature to handle their new role under the Act; it would be unreasonable for a governmental unit to refuse to rule on its own jurisdiction when asked to. The rule gives the LGU complete freedom to structure its exemption determination process any way it sees fit. The rule puts the burden on the landowner to provide the proofs required by the exemption section of these rules to demonstrate eligibility for the benefit of the exemption. The rule recommends to the LGU that it use the technical skills of the technical panel for decisions involving wetland size and type. The rule directs the LGU to keep a file on its decision, so that there will be a record in case of appeal. Finally, the exemption procedures reiterate the statutory provision regarding how an exempt drain or fill is to be carried out.

No-loss determinations. This piece of the procedures was founded on two initial ideas: one, that it is not always easy to tell whether the area where the proposed activity will take place is in fact within the bounds of a wetland; and two, there is some amount of impact that is so small as not to warrant replacement. For the de minimis amount, 100 square feet was selected. It is the consensus of the rule working group that the amount is small enough not to conflict with the legislature's decision to put no minimum size in the Act, and yet not so small as to be meaningless. The rule also contains provisions to prevent both abuse of the

provision, and significant cumulative impact over time.

During the course of the rule's development, other no-loss situations were identified. Public entities manipulate water levels for flood control purposes, habitat improvement, waste storage, and the like, without causing permanent loss of wetlands. Fill in wetlands to restore wetlands results in gain, not loss. All these are reasonably listed as not resulting in loss of wetlands.

Replacement plan procedures. This part of the procedures section is largely a recitation of the statute, which for replacement plans is procedurally quite specific. Minn. Stat. section 103G.2242, Subd. 10 says the rules shall allow the LGUs to use their own procedures so long as the statute is satisfied, which is why the rules do not go substantially beyond the statute. The rule adds the Commissioner of Natural Resources to the list of those required to receive notice - the name was inadvertently dropped from the Act during conference committee drafting. The rule requires that the mailing of the decision to the applicant be by registered mail, to make sure there is no confusion as to the starting date of the appeal period; and requires notice to the applicant of the thirty day appeal period, the delayed effective date (so work will not be begun prematurely), and the stay of the decision if appealed.

The paragraph explaining the technical panel's input to the decision comes from Minn. Stat. section 103G.2242, Subd. 2.

The last two paragraphs of the replacement procedures recognize that a replacement may be in a different jurisdiction than that of the LGU of the impacted wetland. In that case, the impacted-wetland LGU evaluates all of the plan, and the replacement-wetland LGU evaluates the replacement. This gives the "receiving" LGU the authority to make sure the replacement fits these rules and any more specific replacement requirements adopted by the receiving LGU to implement these rules. The rule assigns the replacement-plan monitoring function to the LGU where the replacement is located, but at the same time enables it to make arrangements to avoid or defray its costs.

Technical panel procedures. The rule adds five elements to the statute (Minn. Stat. section 103G.2242, Subd. 2). First, at least two members of the panel must be knowledgeable in the federal delineation manual, and the panel may ask the help of other experts. Intensive training sessions have been and will be provided to the appropriate people throughout the state, so this provision should not be a problem to meet. Second, a panel decision must be backed up by a site visit by at least one of the members. Photos and maps provide good information, but nothing beats a close-up look. Third, the usual quorum and majority vote rules apply. Fourth, the technical panel can make

predeterminations by reviewing and approving wetland location, size, and type when they are included in a board-approved management plan and incorporated into local ordinance. This will mainly be of advantage in the metro area where there are cities and WMOs with the staff and expertise to make these determinations by themselves. Fifth, the panel's role in matters other than replacement plans being voluntary, the panel may delegate such functions to individual members, in order to split up the work load.

The first sentence of the second paragraph of Technical Panel Procedures conflicts with the Evaluation paragraph of the Procedures part of the Replacement Plan section of the rules. The technical panel procedures require technical panel determinations of public value, location, size and type for all replacement plan applications. The replacement plan rule language necessitates involvement of the technical panel only when there are questions concerning value, location, size, and type. The Wetland Heritage Advisory Committee elected to adopt the language in the technical panel procedures paragraph after considering the alternatives which the rule work group had considered but had been unable to select from because of lack of consensus. When it made this decision, the Advisory committee did not notice that it therefore also needed to adjust the language in the Replacement plan rule to match it (the adjustment would have been to strike the first two sentences in the Evaluation paragraph). The board is aware of the differences of opinion on how this conflict should be resolved, and asks for public testimony and an ALJ recommendation. The Heritage Advisory Committee believes that these are scientific technical determinations, and that the LGU should always have the benefit of the panel's expertise. Supporting this position is the emphasis the legislature placed on the technical panel's role in these technical decisions by calling the panel's findings on public value, location, size, and type "determinations", in contrast to the panel's findings on the replacement plan, which the legislature gives the lesser status of "recommend". Those who support the view of the Heritage Advisory Committee are concerned that an LGU which does not seek the input of the technical panel may be doing so because the LGU wants to make a political decision as to public values, location, size, or type that the scientific facts would not support. The contrary argument is that the statute (Minn. Stat. section 103G.2242, Subd. 2) involves the technical panel in "Questions concerning the public value . . .", so that when the LGU has no questions, it need not involve the panel. To use the panel when there is no need puts an unnecessary delay in the decision process and makes improvident use of scarce public resources. Those who support this position believe the rules should trust local governments to exercise proper judgement as to when to call in the technical panel, and note that the appeal process is always there to correct an LGU which has acted on its will rather than on the facts.

Other LGU wetland rules and ordinances. This brief part communicates the fact that the Act and these rules do not preempt local ordinances and regulations which are more protective of wetlands.

Appeal of LGU decisions. This part of the rule is based on Minn. Stat. section 103G.2242, Subd. 9, which establishes the Board of Water and Soil Resources as the first appellate body, the court of appeals coming next.

There was debate as to whether appeals of exemption and no-loss determinations should go to the board, or be left for review by district court, an issue not addressed by the Act. Going to the board is less expensive because it can be done without a lawyer, but it could be a severe workload for the board. It was decided that the board was the better place for the appeals to go because that is where the legislature sent the replacement plan appeals. But in order to make sure that the board is not hearing matters that could have been resolved locally, the rule requires that the matter has been ruled on by the local board of adjustment, or if there is not one, has had full consideration by the governing body of the LGU.

Those who may appeal are as specified by the statute.

The rule requires a copy of the appeal to go to the LGU, so that the LGU - which has the mailing list - can notify the other statutorily-identified interested parties, and forward the record to the board. These provisions echo the state's Administrative Procedures Act, Minn. Stat. section 14.64, third paragraph.

The rule's provision for the board's handling of the appeal, and its decision standards, are modeled on those which have been established by case law for the district court handling of appeals of local zoning decisions. Accordingly, the board will not provide a de novo hearing, and will not substitute its judgement for that of the LGU so long as the LGU has properly applied the Act and these rules to facts supported by the record.

Penalty for LGU failure to apply the law. This part of the rule implements Minn. Stat. section 103G.2242, Subd. 1(c). Although the statute asks for a board-operated penalty system, it gives no clue as to its nature, so this part of the rules has received particular thought and discussion.

There are two ways that an LGU may fail to apply the rules. The first is that it may refuse to act at all. Since January 1, 1992 when the Act went into effect, a few LGUs have said they will not implement the law because of the burden of taking on a new function without any new money being provided. (See fiscal note at the end of this statement.) The first paragraph of this part of the rule anticipates that that reluctance may carry forward into the

post-rule-adoption period. The second paragraph is directed to the second potential kind of LGU failure, which will be to apply the Act and these rules incorrectly.

For the first kind of breakdown, the board's first action is to declare a 60 day moratorium in the LGU's jurisdiction for governmental decisions required by the Act. This period has two purposes: it will generate pressure on the LGU from constituents frustrated by their inability to go forward with projects impacting wetlands; and it provides an opportunity for communication between the board and the LGU. No board hearing is provided for LGUs that are just plain refusing to carry out the law, because they have no choice in the matter. For those that the board feels are applying the law incorrectly, a hearing can help frame the issues and clear the air.

The 60 day periods provide due process to the LGU. If things don't get worked out, then it is time for further action. The Wetland Heritage Advisory Committee considered at some length, but finally rejected, both the idea of transferring the LGU's wetland authority to another jurisdiction such as a watershed district or a referee appointed by the board, and the idea of imposing a fine on the LGU until it corrects its deficiencies. The former was finally rejected as being awkward, and the latter as ultimately constituting a penalty on the taxpayer. Thus it was concluded that the best approach was the traditional one, namely to ask the court to direct the LGU to follow the law.

Compensation. This part of the rule lays out how the board will handle applications for compensation under Minn. Stat. section 103G.272. The rule augments the statutes as follows:

The rule adds to the statute a requirement that in exchange for compensation the landowner must convey to the state the same conservation easement on the wetland as is entailed in a voluntary easement sale to the state under Minn. Stat. section 103F.516. The Act's administrative process for forcing compensation to be made available to the landowner, is much like the inverse condemnation process made available to landowners by the courts when the constitution requires compensation. Since in inverse condemnation the state acquires an interest in land in exchange for its payment, the same quid pro quo makes sense in this non-constitutional administrative setting. Note too that the compensation rate required here is the same rate that Minn. Stat. section 103F.516 requires for most wetlands (non-ag metro wetlands get a lower rate in Minn. Stat. section 103F.516).

The rule tells the landowner what is needed to show that the proposed project is otherwise lawful under other federal, state, and local laws as required by the statute. The requirement of writings from the most probable sources of regulation is not a hard

one for the landowner to fulfill; anything less would be less than adequate evidence.

The rule requires that the drain or fill project be feasible and prudent, and that the replacement plan submitted reflect a good faith effort on the part of the landowner to satisfy the law. Otherwise, landowners could get compensation for impractical projects, or submit token replacement plans that had no chance of being approved. The state's good faith in offering compensation should be reserved for those who respond to the offer in good faith.

The statute makes compensation available when the replacement plan has been rejected, or has been so modified by the LGU or the board as to make it "unworkable or not feasible". The rule describes two conditions that would satisfy the quoted phrase. One is where there seems to be no way to accomplish replacement. The other is where the plan has been modified in such a way as to make it mechanically impossible to carry out, which is how the courts interpret "feasible" as used in the Minnesota Environmental Policy Act, Minn. Stat. section 116D.04, Subd.6.

As required by the statute, the landowner must show that the blocking of his or her project both damages the landowner and enhances the value of the wetland.

The rule requires that the compensation application be in writing, so that the board can study it. Certified mail is specified so that there can be no claim by a landowner that the statutory 90-day time limit has run on an application which in fact the board never received. Oral argument will occur if either the applicant or the board asks for it.

Appeal from board decisions. This repeats the last sentence of Minn. Stat. section 103G.2242, Subd. 9, and is included for information purposes.

Enforcement procedures. This part of the rule is based on Minn. Stat. section 103G.2372.

It is anticipated that the front line for enforcement will be conservation officers of the department of natural resources, but it must be noted that the Act also empowers LGU peace officers, and speaks to enforcement of all laws preserving and protecting wetlands, not just the Act and these rules.

When an enforcement person finds a wetland being drained or filled without an approved replacement plan, the rule provides that the cease and desist order may issue if there is "probable cause" to do so. Probable cause is the standard used for arrest in criminal law, and fits equally well in this civil context. Peace officers are trained in the meaning of the term. It will prevent

unwarranted halts of projects in process. Subpart 2 explains more fully how an enforcement person will proceed when encountering a drain or fill activity. If the landowner can show a valid exemption certificate or no-loss determination from the LGU, the enforcement person will not issue the order. Neither will the order be issued if the landowner has the evidence on hand required by the rules to support a claimed exemption. If the landowner has no reasonable defense to the activity under the Act and these rules, the cease and desist order will be issued. Or if the landowner has a reasonable claim but lacks the required proof, the enforcement person may allow time for the evidence to be obtained. In a marginal case - for example if a wetland delineation is needed - a delayed cease and desist order may be issued to provide time for the landowner to obtain an LGU ruling on the claim of exemption or no loss. The provision for the delayed action order represents a compromise between those who feel that when there is doubt the work should be stopped for the sake of the resource (hence the no irreparable harm language), and those concerned about imposing delay costs on the landowner before it has been established that the activity is not allowed.

A landowner can, of course, avoid the risk of being delayed by a cease desist order, by getting a predetermination from the LGU of exemption or no-loss. Nevertheless, the rule makes available to the landowner a fast turnaround time on applications for exemption and no-loss determinations when they are triggered by a cease and desist order. If the LGU has trouble meeting such a schedule, the rule enables the technical panel to make the decision. When the stopped landowner is the LGU, the decision is transferred to a disinterested party, namely, the Board of Water and Soil Resources.

Subpart 3 explains that a restoration or replacement order is issued either after the cease and desist order and subsequent failure to obtain an exemption or no-loss determination, or when no cease and desist is issued because the Act of draining or filling is already complete when discovered. As the statute requires, the SWCD decides whether restoration is possible, and if so, specifies how restoration is to be accomplished. If restoration is not feasible - perhaps at the time of discovery the former wetland is occupied by a building in use - the SWCD will state that replacement is required. In that case, it is up to the landowner to develop the replacement plan and go through the same process that should have been followed in the first place. Restoration orders, like cease and desist orders, will explain to landowners their obligations and their rights.

The last paragraph of the enforcement part explains the role the SWCD may be called on to play in connection with misdemeanor proceedings, per Minn. Stat. section 103G.2372, Subd. 3. Otherwise, the rule has nothing to add to the criminal aspect of enforcement. Note that the act of draining or filling a wetland is

not a misdemeanor; no crime occurs until a cease and desist or restoration or replacement order has been violated.

MINING

In accordance with Minn. Stat. section 103G.222, the Commissioner of Natural Resources, through permits to mine issued pursuant to Minn. Stat. section 93.481, shall ensure that wetlands are not drained or filled, wholly or partially, unless replaced by restoring or creating wetland areas of at least equal public value. These proposed rules, require that mining reclamation plans incorporate the same principles and standards for wetland replacement as are contained in the Replacement section of the rules.

The proposed rules recognize that at locations where mining has already drained or filled wetlands, and where additional mining will not add to further wetland loss, such areas need not be replaced.

At locations where new wetland losses may occur as a result of draining or filling, such losses must be addressed through plans that incorporate avoidance, mitigation, and finally, if necessary, the replacement of the lost wetland. Plans for wetland avoidance, mitigation, and replacement, must be submitted throughout the life of the mining operation, whenever specific areas must be drained or filled and the necessary replacement activities are identified and proposed.

In accordance with Minn. Stat. section 103G.231, peat mining operations that are in compliance with the Peatland Reclamation Rules, Chapter 6131, need not comply with the requirements of the proposed wetland rules. The rationale for this provision is that although the mining area is drastically disturbed during the peat extraction process, the underlying peat soils generally remain saturated, thus never completely leaving wetland status. In addition, the Peatland Reclamation Rules provide for the return of the mining area to a natural wetland condition when mining ceases, by requiring the area to be reintegrated into the natural watershed and to be revegetated with natural wetland vegetation.

Item B explains that all mining activity which is not subject to DNR permit and reclamation requirements (e.g. gravel mining) is subject to these rules when wetlands are drained or filled.

HIGH PRIORITY REGIONS AND AREAS

Article 2 of the Wetland Conservation Act of 1991 provides for the establishment of high priority regions and areas. The board is

to provide criteria for identifying high priority regions, and the LGUs are to identify high priority areas in their comprehensive local water plans. See Minn. Stat. sections 103B.3355(b), 103B.155(17), and 103B.231 Subd. 6(6).

High priority regions and areas play three roles in the law. LGUs can use them to direct their analysis of replacement plans; for example, they could play a role in establishing the "local public value ratio" provided for in part 8420. 0540, subp. 10, item D., subitem (4). Second, Article 5 of the Act (Minn. Stat. section 103F.901 et seq.) applies only in high priority regions and areas. Third, and most importantly in terms of immediate impact, the property tax relief provided by Article 4 of the Act (Minn. Stat. section 103F.6112 et seq.) is available only for wetlands which are in high priority regions and areas.

The rule provides two criteria for high priority regions. The first includes all those counties which have lost 50 percent or more of their pre-settlement wetlands. Since the Act gives these counties a special status as sites for replacement wetlands, it would be unreasonable not to call them high priority regions. Studies show that there are 59 counties which have undergone that amount of wetland loss; since the counties are known, they are identified directly in the rule.

The second criterion for high priority regions applies to the 29 other counties. The criterion is that they have been identified as high priority areas in board-approved local water plans in conformance with the guidelines provided in subpart 2, items B and C of this rule. This reflects the board's belief that within the framework of the board's guidelines, these counties are in a better position than the board to determine where in their jurisdictions it is most important to save wetlands and to locate replacement wetlands.

Subpart 2, item B. identifies the kinds of areas where protection and restoration are particularly important. Because it is reasonable to defer to the detailed knowledge available to local authorities, the standards are not mandatory, but "should" is used rather than "may" because the listed kinds of areas are such obvious candidates. Since the extent of drainage may be unevenly distributed through a county, the individual watersheds which have lost over half their wetlands should be targeted. Additionally, wetlands which still exist, and former wetlands that are restorable are of first importance. Among the extant wetlands, the types 1 and 2 are the easiest to drain and fill, and are particularly vulnerable in farm country because of the agricultural exemptions. Therefore, it is particularly important that the owners of such wetlands be encouraged to leave them alone by making the property tax exemption option available to them. The upland referred to in the rule is the same upland referred to in the tax exemption statute.

Item C. of subpart 2 provides guidelines to local governments for identifying those watersheds within their jurisdictions most likely to contain the wetlands that provide the benefits ascribed to wetlands in general by the legislature in Minn. Stat. section 103B.3355(a). It is preferable to think in terms of watersheds because it is the watershed that provides a wetland its hydrology. The 11 landscape characteristics set out in the rule contain their own explanations of why they are reasonable.

Item D. provides that if the board concludes that the water plan does a reasonable job of identifying high priority areas, then the board will recognize those areas as high priority regions if they are not in one of the 59 counties all of which are high priority regions. This implements the board's desire to bring to bear local knowledge and judgement.

WETLAND PRESERVATION AREAS

This part of the rule implements Article 4 of the Act, Minn. Stat. sections 103F.6112 et seq.

The statute directs the board to establish the use restrictions that will apply in exchange for the tax exemption. The rule identifies the restrictions as the same ones which are already in effect for restored wetlands enrolled in the RIM program. There is no reason to use any different ones here, and the RIM ones have had the test of actual use.

The statute gives a county no choice but to place a wetland in tax exempt status if the application is proper. As to upland acres beyond the mandatory 16.5 foot buffer strip that the owner may choose to include in the application, the statute is silent as to whether the county must accept them. The rule takes the approach that it would be an absurd interpretation of the statute to let the landowner unilaterally dictate the upland acres to be included. Particularly in areas of high property values, the county should have the right to reject upland acres that are not necessary to the wetland's providing its public values. Otherwise the taxpayers (the state general fund) will be supporting a tax exemption that has no connection to the reasons for preserving wetlands. Accordingly, the rule gives counties a free hand to set standards for qualifying upland.

Otherwise, the rule echoes the statute, and does not address those parts of the statute which are self-implementing.

STANDARDS AND PROCEDURES FOR EVALUATING WETLAND REPLACEMENT PLANS

This part of the rule establishes the procedures and criteria for avoiding and minimizing wetland impacts, for preparing wetland replacement plans to replace lost public values and for evaluating the adequacy of those plans. Part 8420.0505 provides two full building seasons to implement replacements approved in the interim. Phased projects can have even longer.

Procedures

This part reiterates the requirement of the Act that a wetland may not be drained or filled without an approved wetland replacement plan and it establishes the role of the technical panel in determining the public value, location, size and type of the wetland. This part of the rule concerning the role of the technical panel conflicts with the rule language in the "Technical Panel Procedures" part of the Procedures section and is discussed in the portion of this statement which addresses that part.

In accordance with the Act, subpart 3 stipulates that wetland boundaries be delineated using the *January 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands*. The rule requires that wetlands be classified according to both Circular 39[1] and Cowardin, et al.[2] The latter classification system is used because it is required by the replacement plan evaluation criteria. Circular 39 is prescribed because it is more familiar to many and because certain of the exemptions are based on identification under Circular 39. Subpart 2 also recommends a preapplication conference and site visit so that the applicant is fully aware of the requirements of the law and the procedures to be followed.

Sequencing

This part of the rule provides the criteria and guidance for determining compliance with Minn. Stat. section 103G.222(b), which establishes a priority order for replacement of wetland values that ranges from avoidance of impacts to compensatory replacement. The rule establishes a rigorous test for avoidance and minimization of impacts, consistent with Minn. Stat. section 103G.222(b) and section 103A.201, Subd. 2(b)(3). An analysis of alternative sites or project configurations is required for

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[1] Shaw, S.P. and C.G. Fredine, 1971. Wetlands of the United States. Circular 39, U.S. Fish and Wildlife Service. 47pp.

[2] Cowardin, L.M., V. Carter, F.C. Golet and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31. 103pp.

determining whether impacts can be avoided. A wetlands dependence test is included as part of the avoidance determination. Projects that are obviously wetland-dependent, such as rice farming or a wetland interpretive trail are exempt from the alternatives analysis. For activities involving wetlands located in cultivated fields, sequencing is not required provided the wetland is replaced through restoration only and a deed restriction is placed on the land prohibiting nonagricultural use for a period of ten years (Minn. Stat. section 103G.222(c)). All other projects must demonstrate that there are no feasible and prudent alternatives that would avoid impacts to the wetland. The rule provides guidance for determining whether alternatives are feasible and prudent. This guidance draws from the Minnesota Environmental Policy Act , the Minnesota Environmental Rights Act, and pertinent court cases. The rule guidance on minimizing impacts assumes that impacts cannot be totally avoided and lists several criteria to be considered in scaling and configuring the project to reduce wetland impacts to a practical minimum. There is a provision for considering both the individual and cumulative impacts of projects to a wetland. This is reasonable because the cumulative impact of several separate projects on a wetland may be considerable, even though they may have minimal impact when considered individually.

The rule states that if wetland impacts are rectified and the wetland is restored to its pre-project condition within six months of the start of the activity, the project may qualify for a no-loss determination. This provision is designed for temporary impacts, such as short-term detours around construction sites. The time limit is set at six months because that should span most of the construction season yet limit the loss of wetland benefits to only one growing season. A performance bond is required, which is reasonable to prevent abuse of this provision.

The provision requiring impacts to be reduced or eliminated over time is based on the assumption that certain projects can be operated or managed in a manner that avoids on-going wetland impacts. For example, a gravel mining operation that partially fills a wetland must manage the discharge of its wash-water to avoid sedimentation of the remaining wetland.

Finally, the rule specifies that for all wetland impacts that remain after following the sequencing steps, compensation must be provided in the form of a replacement wetland.

The sequencing part of the rule is intended to be consistent with federal sequencing requirements under Minn. Stat. section 404 of the Clean Water Act. This should simplify the regulatory process for applicants whose projects fall under the jurisdiction

of both the Wetland Conservation Act and section 404.

This part of the rule also contains a reminder that identified calcareous fens are subject to stricter protection than other wetlands - they may not be altered unless the Commissioner of Natural Resources determines that some alteration is necessary and a management plan is prepared (Minn. Stat. section 103G.223).

Replacement Plan Components

This part of the rule identifies the information required in a wetland replacement plan. A replacement plan must contain information identifying the applicant, describing the proposed project, identifying and characterizing both the impacted wetland and proposed replacement wetland, and describing a monitoring plan. Information must also be supplied concerning special features or uses that may be present at the impact and replacement sites. The rule attempts to minimize the information burden on applicants. However, enough information must be provided to determine whether the sequencing criteria are met, and the impacted and proposed replacement wetlands must be described well enough to allow application of the evaluation methodology and to otherwise allow the LGU to determine whether the proposed replacement is adequate to replace lost wetland values.

The submission of an affidavit confirming that replacement of wetland values will occur prior to or concurrent with the draining or filling or providing an irrevocable bank letter of credit or other security is required by Minn. Stat. section 103G.2242, Subd. 3.

Universal Transverse Mercatur (UTM) coordinates for the impacted and replacement wetland locations are required to facilitate entry into computerized geographic information systems, which will be maintained by state agencies, and possibly LGU's. UTM coordinates are provided on all U.S. Geological Survey topographic quad maps which are readilly available.

Wetlands must be classified using both Cowardin et al. and Circular 39. Classification under Circular 39 is needed because certain exemptions are based on that system. Classification using Cowardin et al. is required to apply the replacement evaluation methodology.

Information on the size of the contributing watershed and surrounding land use is required because it is useful in evaluating a wetland's role in water quality improvement and flood retention.

A notice must be recorded and attached to the deed for properties containing a replacement wetland so that subsequent

owners are aware that a replacement wetland is present on the property along with the attendant restrictions and responsibilities.

A statement that the replacement wetland was not previously restored or created under an approved replacement plan is required to prevent the same replacement acreage from being used for multiple impacts.

A statement that the replacement wetland was not drained or filled under an exemption within the last 10 years is needed to ensure compliance with the part of the rule prohibiting the use of such wetlands for replacement for a period of 10 years after they are drained or filled. This issue is discussed in the part of this statement entitled "Type of Replacement."

Items 10 and 11 of the part are required to ensure compliance with Minn. Stat. section 103G.2242, Subd.12. The rule does not provide for repayment of publicly funded restorations because those programs are intended to add to the state's wetland base and generally do not have any mechanism for repayment.

The rule does not impose a significant responsibility on applicants to gather information pertaining to the special considerations listed in part 8420.0540, subd 9. If an applicant is aware of such features, they should be reported. In practice, it is expected that in most instances, information concerning the special considerations will be provided to LGU's by state agencies or other entities with expertise in a particular area.

Replacement Plan Evaluation Criteria

This part of the rule establishes the criteria to be used by LGU's to evaluate whether proposed replacement wetlands will adequately compensate for the public benefits lost from a wetland that will be drained or filled. Minn. Stat. section 103G.222(a) states that wetlands may not be drained or filled, wholly or partially unless replaced by restoring or creating wetland areas of at least equal public value.

Type of Replacement. Minn. Stat. section 103G.222 states that wetlands must not be drained or filled unless replaced by restoring or creating wetland areas of at least equal public value. Enhancement (improving one or more functions of an existing, non-degraded wetland) is not included as a method of replacement. Restoration is preferred over creation because it has the best chance of success. Wetland banking is generally least preferred because it tends to result in replacement located far away from the impact site and it tends to concentrate the replacement of wetland values in a few, large wetland sites rather than smaller, well distributed replacement wetlands.

The rule contains a provision that wetlands drained or filled under an exemption may not be used for replacement purposes for 10 years after the draining or filling. This is to reduce the incentive for a person to drain an exempt wetland just to have a replacement site available for a non-exempt wetland that the person wishes to drain or fill. There is debate on whether the 10 year period is sufficient; an alternative would be an absolute prohibition on allowing the use of wetlands eliminated under exemption to be restored for replacement purposes. Those who advocate this position maintain that allowing the use of drained exempt wetlands for replacement, even 10 years later, in effect transfers the exemption to the non-exempt wetland that is ultimately lost. In other words, a person could freely drain a non-exempt wetland because that person could "manufacture" a convenient replacement opportunity by draining the exempt wetland (two wetlands are drained, only one is restored). Even with the 10 year waiting period, it may create an incentive to drain exempt wetlands and curtail the restoration of the large base of wetlands that have already been drained or filled. There is also concern over enforcement. Under the statute, all replacement wetlands are subject to replacement if they are drained or filled. However, if an exempt wetland (for example, a Type 2 wetland less than 2 acres on agricultural land) is drained, then restored for replacement credit and subsequently drained again, it is unlikely that an enforcement officer would recognize the violation because it appears to meet the criteria for exemption. Those who favor the existing rule language allowing the use of exempt wetlands for replacement believe that there should be an incentive to restore wetlands legitimately drained or filled under an exemption and that the 10 year waiting period is sufficient to prevent abuse. This is a point on which the board has specifically requested public input and ALJ analysis.

Timing of Replacement. Minn. Stat. section 103G.2242, Subd. 3 requires that wetland values be replaced prior to or concurrent with the draining or filling or that an irrevocable bank letter of credit or other security be provided. Designation of restored or created wetlands for replacement purposes prior to the actual restoration or creation is required to comply with Minn. Stat. section 103G.2242, Subd. 12.

Location of Replacement Wetlands. This subpart of the rule implements Minn. Stat. section 103G.222(e). The rule identifies counties having 80% or more of their pre-settlement wetland acreage intact and those having 50% or less of their pre-settlement wetland acreage. These determinations were based on the following study:

Anderson, Jeffrey P. and William J. Craig. 1984. Growing energy crops on Minnesota's wetlands: the land use perspective. University of Minnesota, Center for Urban and Regional Affairs, Minneapolis. 95p.

This study focused on lands best suited for energy crop production--wetlands. The wetlands, peat and poorly drained mineral soils, originally amounted to nearly 1/3 of Minnesota's total acreage. No other detailed inventory exists. The state's soil types were examined and a wetland inventory was prepared based upon soil landscape units that represent peat and poorly drained mineral soils.

"Wetlands", for the WCA rules analysis, were considered to be a summation of peat and wet mineral soils for a given county and the state as a whole. "Open water" was not included with "wetlands".

Data were differentiated between "pre-settlement wetlands" and "current wetlands" assuming that time for wetland soil formation processes (up to 10,000 years) exceeds the time of Minnesota's "settlement". Thus, "pre-settlement wetlands" represent Minnesota's peat and wet mineral soils in their natural state. This acreage totalled 18.4 million acres of wet soils (wetlands) with approximately 5.9 million in the northern and 12.5 million in the south-central/northwestern areas. From this acreage, current agricultural, urban, mining, and other land uses were subtracted to generate "current wetlands" acreage.

The rule provides general guidance that replacement wetlands should be located as close as possible to the impacted wetland, preferably in the same watershed. Many wetland benefits, especially those related to water quality and floodwater retention, are a function of the watershed and the wetland's location within the watershed. Locating replacement wetlands as close as possible to the impact wetland helps ensure that the wetland benefits are adequately replaced.

Statewide Replacement for Public Transportation Projects. This subpart is a restatement of Minn. Stat. section 103G.222(e). Some members of the rule work group believed that this part of the Act was intended to apply only to Minnesota Department of Transportation (MNDOT) highway projects. At the time of the passage of the Act, MNDOT was the only entity having an established banking system approved by the Commissioner of Natural Resources. Others have interpreted this part of the Act to apply to any public transportation project, including those conducted by local agencies and including projects such as airports. As written, the rule does not establish any limitations on the language of the Act and therefore follows the broader interpretation.

Size of Replacement Wetlands. Minn. Stat. section 103G.222(f) requires a 1:1 acreage replacement for wetlands located on agricultural land and Minn. Stat. section 103G.222(g) requires a 2:1 acreage replacement for non-agricultural land. However, Minn. Stat. section 103G.222(a) states that

"...wetlands must not be drained or filled ... unless replaced by restoring or creating wetland areas of at least equal public value". This means that replacement must be at a minimum of 1:1 for agricultural land wetlands and 2:1 for non-agricultural wetlands, but in a ratio necessary to provide at least equal public value, which may be greater than these minimums. The methodology for determining whether additional replacement acreage is required is described in subpart 10 of this part.

Carbon Balance. This part of the rule implements the requirements of Minn. Stat. section 103G.2242, Subd. 1(a).

Ecological Consistency. This subpart implements the requirements of Minn. Stat. section 103G.222(d). In practice, it would be very difficult and expensive to construct a wetland that is not in accordance with the ecology of the landscape area in which it occurs.

Special Considerations. This subpart identifies several features or uses that may be associated with a wetland that impart special values. In general, these features are not adequately accounted for in the evaluation of wetland functions and values in subpart 10. The rule establishes a strict avoidance requirement for some of the features, which is reasonable because the values they provide are significant and cannot be replaced. Some of the factors reference or overlap other laws and regulations and the rule reminds applicants and LGU's that those laws may apply. In practice, it is likely that information pertaining to the special features will be provided to LGU's by individuals or agencies with special expertise through the notice and comment procedures. For example, information on endangered species or special fish and wildlife resources would most likely be provided by the Department of Natural Resources.

Evaluation of Wetland Functions and Values. The primary purpose of this subpart is to provide a method for assessing the extent to which a replacement wetland adequately replaces the mix of values and benefits provided by a wetland that is drained or filled. There are essentially two options for approaching this requirement. One option is to conduct an extensive evaluation of each wetland proposed to be drained or filled to identify and, where possible, quantify the values that are provided. Drawbacks to this approach are that it is time-consuming and often expensive, and all of the wetland evaluation methods available have certain limitations on their ability to adequately evaluate functions and values. Part of the reason for this is that many wetland functions and processes are not well understood. The other option is to develop a standardized approach, based on certain assumptions, that can be rapidly applied to most situations with a minimum of field work and at minimum expense. The disadvantage to this approach is that the generalized

assumptions may not hold true for each case, leading to inadequate replacement in some instances and overcompensation in others. For the purposes of this rule, the main emphasis was placed on the latter, standardized approach. The main reasons being that it will foster statewide consistency in the evaluation of replacement plans, will minimize the overall expense of the program, both for applicants and LGU's, and on average, should achieve adequate replacement of lost wetland benefits. However, for those who desire a more intensive approach or for complex or controversial cases, the rule also specifies that the Minnesota Wetland Evaluation Methodology [3] (MWEM) may be used. This method is discussed in more detail in a later part of this statement.

The standardized evaluation methodology emphasized in the rule was developed by wetland experts from most of the state and federal agencies involved in wetland regulation and management in Minnesota. It is generally consistent with a system developed by the Corps of Engineers and the U.S. Environmental Protection Agency[4]. Thus, it should foster regulatory consistency between state and federal programs. The fundamental assumption underlying the method is that the best way to replace the functions and values of a drained or filled wetland is to replace it with the same type of wetland at the same site; that is, in-kind and on-site. If the replacement wetland deviates from these goals, adequate replacement of the lost functions and values becomes less certain. To compensate for this uncertainty, additional acreage is required to assure that the values are replaced. Since the minimum replacement ratios (1:1 on agricultural land and 2:1 otherwise) apply when replacement is in-kind and on-site, the method establishes an incentive for that type of replacement.

The wetland type index system in the rule uses the Cowardin system for classifying types of wetlands. The Cowardin system is used for two reasons. One, it provides a substantial amount of information on the physical characteristics of a wetland, including its position in the landscape, the type of vegetation it contains, and the hydrologic regime. Two, it is readily available from National Wetland Inventory maps which all Soil and Water Conservation District's will have (however, the map designation should be verified on-site). Item B combines certain Cowardin designations to achieve a manageable number of categories for use in the type index system.

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[3] U.S. Army Corps of Engineers, St. Paul District. 1988. The Minnesota Wetland Evaluation Methodology for the North Central United States. 97pp. plus appendices.

[4] U.S. Environmental Protection Agency, Region V and U.S. Army Corps of Engineers, St. Paul District. 1991. Generic mitigation banking program under section 404. Unpublished.

Item B contains some prescriptions for allowing stormwater management basins to be used for replacement purposes. In general, basins constructed strictly for stormwater management purposes do not provide a full range of wetland benefits, especially fish and wildlife habitat, even though they may technically be called wetlands. This is because they often exhibit extreme water level fluctuations or "bounce", they are usually not shaped or contoured to encourage the growth of aquatic vegetation, and they typically have degraded water quality. However, if they are adequately designed and are part of a stormwater management system, they may provide a mix of benefits sufficient to be used for replacement.

Much of the remainder of this section of the rule describes the wetland type index system and how it is applied. The methodology relies on three wetland descriptors that are easily observed yet can adequately describe characteristics needed to evaluate public values: wetland type (according to Cowardin, et al.), the location relative to watershed units, and the inlet/outlet characteristics. These three descriptors, which are described below, are used to determine whether the proposed replacement is "in-kind" or "out-of-kind". If the proposed replacement wetland is of the same type, is in the same watershed, and has the same inlet/outlet characteristics as the impacted wetland, the replacement is considered to be in-kind and the statutory minimum replacement ratios are required. If the proposed replacement differs from the impacted wetland with respect to any of the three descriptors, the replacement is considered to be out-of-kind and additional replacement acreage may be required, depending on the degree of deviation.

Wetland Type Ratio. Table 1 lists the replacement ratios to be applied when the replacement wetland is of a different type than the impacted wetland. To develop the table, wetland experts from a variety of state and federal agencies were asked to rate the wetland types relative to each other for each of the four public values listed in the Act (Minn. Stat. section 103B.3355): water quality, floodwater retention, public recreation and commercial use. These ratings were then compiled into one table that provides a generalized, relative evaluation of the overall values of the wetland types. If the replacement and impact wetland types have similar value, the replacement is considered a trade-off and the replacement ratio is 1:1. If a low value wetland is proposed to replace a high value wetland, the replacement ratio can be as high as 3:1. Under no circumstance does the replacement ratio fall below 1:1, consistent with the statute. As discussed previously, the disadvantage to this generalized approach is that the relative values may not be applicable in all situations. In some instances, a generally low rated wetland type may be exceedingly valuable. On the average however, Table 1, in conjunction with the other wetland descriptor ratios, should lead to adequate replacement of lost

wetland values and avoid the time and expense of intensive wetland evaluations.

Although applicable statewide, the standardized wetland type ratio would benefit from modification on a regional or more localized basis. As local governments establish high priority areas and evaluate replacement plans, specific data on wetland functions and values will become available. These data will be used by the Board of Water and Soil Resources in developing revised evaluation methodologies.

Hydrologic Unit Ratio. The benefits of a particular wetland are mostly realized within the watershed where the wetland is located. As an incentive to retain those benefits within the watershed when a wetland is drained or filled, the hydrologic unit ratio adds to the overall replacement ratio when the replacement wetland is moved farther away. Even though a wetland's contribution within a watershed are never recovered when the replacement wetland is located elsewhere, the increased replacement acreage required by the hydrologic unit ratio should contribute toward those values on a larger geographic scale. The hydrologic units are adapted from the U.S. Geological Survey. Because the statute specifically allows wetlands drained or filled in counties having 80% or more of their pre-settlement acreage intact to be replaced in counties having 50% or less of their pre-settlement acreage, the hydrologic unit ratio does not apply to those situations.

Inlet/Outlet Characteristics. The relationship of a wetland to surface water hydrology has a significant bearing on the functions and values it provides. The inlet/outlet characteristics of a wetland is an easily observable indicator of this relationship. For example, an isolated wetland near the head of a watershed is likely to provide different benefits than a flowing, riverine wetland. Even a wetland of the same type classification (PEC or Type 3) located in different parts of the watershed are likely to have differing values. In keeping with the basic assumption that the best way to replace the values lost from a particular wetland is to replace it with a similar wetland, Table 2 in the rule establishes an incentive to do so by adding increasingly higher replacement requirements as a replacement wetland deviates from the impacted wetland with respect to the inlet/outlet characteristics.

Local Public Value Ratio. In addition to the three main wetland descriptors used in the type index system, the rule provides an opportunity for LGUs to exert additional control over wetland replacement through the local public value ratio. This ratio can be used to create additional incentives to accomplish certain types of replacement, consistent with local water management objectives. The minimum value of the local public

value ratio is set at 0 so that it cannot be used to reduce replacement requirements below that which the type index system would otherwise require. To illustrate its potential use, assume that a county determines that it wants to concentrate wetland replacement within the immediate watershed of a highly degraded stream. The county could then use the local public value ratio to add an additional acreage requirement onto the replacement ratio for all proposed wetland replacements that are not located within that watershed. To ensure that local public value ratios are subject to public review, they must be consistent with objectives established through local water planning processes.

Application of replacement ratios. The wetland type index system is applied by adding the replacement ratios of the three main wetland descriptors, plus the local public value ratio, if any. The resultant sum is the acreage replacement ratio to be applied. If the resultant replacement ratio is less than the statutory minimums of 1:1 on agricultural land and 2:1 elsewhere, then those minimum ratios apply. Some examples of the use of this system are provided in Appendix A.

Determining Impacts of Partial Drainage. Item E recognizes that in cases of incomplete drainage, some wetland values will remain and therefore complete replacement is not required. The formula stipulates that the amount of wetland to be replaced (in acres) is the amount of wetland completely drained (to non-wetland) plus a certain percentage of the amount of wetland that remains, but that has been converted to a different type. The percentage applied to the remaining wetland acreage is derived from the wetland type ratio table (Table 1 in Item D) and reflects the lost benefits that result from the type conversion. Another way to portray this process is to assume that the original wetland has been completely drained and to further assume that the remaining wetland is a replacement wetland. Application of the formula yields the amount of original wetland that still needs to be replaced.

Determining Credit for Restoration of Partially Drained Wetlands. Instances where drainage of wetlands has been only partially successful, leaving a diminished and altered wetland, are common throughout the state. Item F allows these wetlands to be restored to their former state for replacement purposes and dictates how replacement credit is to be calculated. Full credit cannot be granted in these cases because the remaining wetland, although diminished, still provides wetland benefits. The formula denotes that the amount of replacement credit to be awarded is the amount of wetland completely restored (from non-wetland) plus a percentage of the amount of existing wetland that is restored to its former type. The percentage applied to the existing wetland is derived from the wetland type ratio table (Table 1 in Item D) and reflects the gain in benefits resulting from restoration to its original type.

In some circumstances, the restoration of partially drained basins and the use of public value credit for replacement could result in a net loss of wetland acreage. For example, using the formula, a 15 acre, partially drained PEA (Type 1) basin could be restored to its original PEC (Type 3) condition and fulfill the replacement requirements for draining a 10 acre PEC wetland. However, if this was the only replacement that occurred, there would still be a net loss of 10 acres of wetland:

Pre-Project Acreage	Post-Project Acreage
10 acre PEC (to be drained)	0 acres
15 acre, part. drained PEA (to be restored)	15 acre PEC
25 acres total	15 acres total

Therefore, the rule stipulates that public value credit can only be applied to any replacement needed beyond the 1:1 minimum replacement ratio needed to accomplish no-net-loss. Some have argued that public value credit must only be used for replacement requirements beyond 1:1 for impacts on agricultural land and beyond 2:1 for impacts on non-agricultural land, since these are the statutory minimum replacement ratios. They interpret the statutory language to mean that if a 2 acre wetland on non-agricultural land is drained, it must be replaced by 4 "new" acres of wetland obtained either by complete restoration or creation. Others maintain, and the rule reflects their view, that the public value credit resulting from restoration of partially drained basins does count as "replacement", even though it doesn't result in any "new" wetland acreage, and that the 2:1 requirement can be met by a combination of complete restoration or creation (to achieve 1:1 or no-net-loss) and public value credit. They also maintain that allowing the use of public value credits only for replacement requirements beyond 2:1 (for impacts on non-agricultural land) would significantly reduce the incentive to restore partially drained basins because the type index system will not often result in replacement ratios higher than 2:1. The board believes that the present rule is reasonable; however, there is some question as to whether it is strictly consistent with statutory requirements.

Special Cases or Appeals. As discussed previously, an alternative to the standardized wetland type index system is a more intensive evaluation and quantification of wetland function. For cases where such an approach is deemed necessary, the rule provides the option of using the Minnesota Wetland Evaluation Methodology (MWEM) or another scientifically accepted method. MWEM was developed by an interagency task force of wetland experts in Minnesota. It involves fairly intensive evaluation of a variety of wetland functions, including flood flow characteristics, water quality, and fish and wildlife habitat. The evaluations of each function can be synthesized together to provide an overall rating of a particular wetland. The method

has not been widely tested, but the fact that it was developed for application in Minnesota makes it reasonable to specify it in the rule as an alternative to the type index system.

Wetland Replacement Standards

This part provides standards and guidelines to be followed in restoring and creating wetlands. They are generally accepted practices developed through the experience of the board, U.S. Fish and Wildlife Service, and U.S. Soil Conservation Service in restoring and creating wetlands. They are needed to promote consistency in replacement efforts and to increase the chances for successful replacement of lost wetland values. Table 3 provides general guidance concerning the physical characteristics of the various types of wetlands.

Monitoring

Many aspects of how wetlands function are not well-understood. Thus, the science of replacing lost wetland function and values is inexact. The ability to create viable, functioning wetlands from non-wetland areas is especially problematic. Therefore, effective monitoring of replacement wetlands is essential to ensure that the values lost from drained or filled wetlands are adequately replaced. This part of the rule specifies how monitoring of replacement wetlands is to be accomplished and the actions that may be taken if the replacement goals are not met. Considering that most existing wetlands are the result of approximately 12,000 years of post-glacial development, the requirement to monitor replacement wetlands for a period of 5 years is reasonable. The rule attempts to minimize the reporting burden on landowners; the content of the annual report is the minimum necessary for an LGU to determine the success of a replacement wetland. Hydrology measurements are required because the establishment of wetland hydrology is fundamental to successful wetland restoration or creation. Similarly, the type, quantity and distribution of vegetation are basic indicators of wetland dynamics. The requirement to furnish color photographs eliminates the need for other detailed reporting (a picture <u>is</u> worth a thousand words).

The actions that may be taken by an LGU if the replacement plan goals are not met are directed solely toward fulfilling the statutory requirement that lost wetland values be replaced. In light of that directive, they are needed and reasonable measures.

WETLAND BANKING

Purpose

Minn. Stat. section 103G.2242 stipulates that the rule for the Wetland Conservation Act may address the establishment of a wetland banking program. The board has elected to establish a state wetland bank and this part of the rule addresses the administration and procedures for the bank.

The state wetland bank is designed to be an alternative procedure for replacing lost wetland values when project-specific replacement is impossible or impractical. The overall concept of the bank is to establish a base of restored wetlands specifically designated for replacement purposes. Applicants needing replacement wetlands as a result of proposed filling or draining activities may "withdraw" replacement credits from the bank, either from their own pre-existing account or by purchasing the credits from another account holder. Bank accounts must always have a positive balance. In other words, replacement wetlands must always be established prior to an impact that would draw against the account. As indicated previously, the wetland bank is an alternative procedure for replacing lost wetland values. Replacement through the bank must meet all of the requirements established elsewhere in the rule.

Definitions

A definitions section is included within the banking part of the rule for terms that are used only in this part. Most of the definitions are self-explanatory. Wetland credits must be catalogued by wetland type, inlet/outlet characteristic, and whether they are partial value credits or new wetland credits because these attributes are needed to determine the correct replacement ratio for a particular impact.

Principles of Wetland Banking

This part of the rule identifies several of the overriding principles that govern the banking system. It affirms the requirement that the banking system comply with the goals of the Act. It contains provisions to ensure that the bank is used appropriately - that the ready availability of replacement wetlands in the bank does not lead to short-cuts through the avoidance/minimization sequence and inadequate consideration of project-specific replacement.

There is a provision limiting the use of the bank to projects having less than five acres of impact if the project is located in a county having less than 80% of its pre-settlement

wetland acreage intact. This is included because the bank is generally intended for small impacts that are impractical to replace on a project-specific basis. Banking may be used for all projects in counties that retain 80% or more of their pre-settlement acreage because of the potential difficulty in finding replacement opportunities.

The rule stipulates that only restored wetlands, not created ones, are eligible to be deposited into the bank. Although this is more restrictive than what the statute allows for project-specific replacement, it is included for several reasons. One of primary goals of the Act is to "increase the quantity, quality, and biological diversity of Minnesota's wetlands by *restoring or enhancing diminished or drained wetlands;*" (Minn. Stat. section 103A.201, Subd. 2, emphasis added). Since banking is an optional program under the statute, it is reasonable to use it as an incentive to further the stated aim of the Act to restore drained wetlands. There are approximately 9 million acres of drained wetlands in the state, thus there should be no shortage of opportunities for restoration.

There is considerable skepticism among the scientific community over the ability to create a truly functioning wetland where no wetland previously occurred. Many wetland functions and processes are not well understood, making the creation of wetlands that provide a full range of benefits a chancy proposition. There are cases of apparently successful wetland creations, however there are also many failures. Long-term studies of created wetlands are lacking.

A method frequently used to create wetlands is to impound a watercourse using a dike or other structure. Without periodic maintenance, such structures may fail, leading to the loss of the wetland. Restored depressional wetlands, on the other hand, require little or no maintenance. Impounded wetlands also tend to be very large, which typifies one of the disadvantages of wetland banking - the tendency to replace many small, well-distributed wetlands with a few large ones.

Alternative rule language that would include created wetlands in the banking system was discussed during the drafting of the rule. Advocates of this alternative contend that since the Act specifies creation as an acceptable form of replacement, and since banking is simply an alternate process for achieving replacement, creation should not be excluded from the bank. They maintain that the review process for replacement plans will help ensure that wetland creations are done properly. Some have proposed an increased monitoring period before a created wetland can be deposited in the bank. For the reasons listed previously, the board has asked for special attention to this issue during the public hearings and in the ALJ analysis of the draft rule.

Subpart 5 prohibits wetlands that have been drained or filled under an exemption and subsequently restored from being deposited in the bank. In part 8420.0540, subp. 2, such wetlands may be used for replacement after a waiting period of 10 years.

The rule here entirely excludes such wetlands from the bank because it is believed that allowing them would create too much of an incentive to drain exempt wetlands for subsequent use as replacement. The extra incentive present in banking that is not necessarily present in project-specific replacement is that the restored wetland credits can be sold for profit.

Subpart 7 stipulates that a wetland account holder is responsible for the success of a banked wetland until completion of the monitoring period, and thereafter the landowner or assignee is responsible. This is to ensure that someone is always responsible for maintaining a replacement wetland, which is necessary because it is supposed to replace lost wetland benefits in perpetuity. In the long-term, the best person to assume responsibility is the landowner. This is reasonable for three main reasons: 1) there will always be a landowner who can be readily identified, 2) the landowner will frequently be the account holder and will have profited from the sale of the replacement credits, and 3) for most wetland restorations, no maintenance will be required, thus there will be no significant burden on the landowner. Prospective buyers of land having banked wetlands will be notified of their responsibility as a result of the deed covenant that must be recorded.

Administration and Management Authority

The administration and management of the bank is assigned to the board because it allows for a single bank with centralized accounting, helps ensure statewide consistency, and facilitates oversight of banking activities. Also, since some banking activity will occur across LGU jurisdictions (trading between >80%/<50% counties), centralized administration is required.

Local governmental units are assigned the responsibility of reviewing and certifying restored wetlands that are deposited in the bank. A certification process is necessary to ensure that the wetlands in the bank are in fact functioning restored wetlands that will adequately replace the lost public benefits from drained or filled wetlands. The certification process is also needed in order to classify deposited wetlands according to wetland type, size, and inlet/outlet characteristics. The technical evaluation panel of each LGU is well suited for this task.

The rules state that in order to be deposited in the bank, a restored wetland must be certified by the LGU having jurisdiction over that geographic area. However, LGU's are not obligated to

provide certification services. Thus, LGU's have control over the extent of wetland banking within their jurisdiction. An LGU may limit banking to selected areas or an LGU may elect not to do any certification of wetlands for banking purposes, which would eliminate wetland banking within that LGU's jurisdiction. This deference to local control is consistent with the Act's emphasis on local management of the No- Net- Loss system. This does not prevent applicants needing replacement wetlands for drain or fill activities in counties having 80% or more of their pre-settlement wetland acreage intact from using the wetland bank by seeking replacement credits in counties having less than 50% of their pre-settlement acreage intact and that have certified wetlands for deposit in the bank.

Procedures

Subpart 1, Item A confirms that only restored wetlands are eligible for deposit in the bank. This issue was discussed previously.

Items B and C contains some conditions for depositing replacement wetlands that were restored prior to the official establishment of the bank and excludes wetlands restored without LGU approval after the bank is established. These conditions are needed to ensure that only valid, functioning restored wetlands are deposited in the bank and to ensure that the restoration is done for the express purpose of replacement, in accordance with Minn. Stat. section 103G.2242, Subd. 12

Item D imposes a 0.5 acre minimum to establish an account. To deal with smaller restorations would be administratively burdensome and would potentially open the bank to frivolous restoration attempts.

One of the potential problems with a banking system is that it tends to replace many small, well-distributed wetlands with a few large restorations. Wetland benefits are then concentrated in only a few areas. To encourage the restoration of smaller basins for the bank, the rule allows LGUs to limit the amount of credit awarded to only 90% of the full amount for restorations over 10 acres.

The Item F requirement that only the fee title owner or assignee may deposit wetland credits is to ensure that the landowner is fully aware that replacement credits are being established and that the landowner has a long-term obligation to maintain the replacement wetland.

Several of the provisions pertain to reporting requirements and notice and comment procedures for wetland restorations that are to be banked. Since banking is an alternate process for

replacement, the restorations that are to be deposited must undergo the same review requirements as for project-specific replacement. This is needed to ensure that the banked wetlands are proper restorations that will adequately replace lost wetland values. The pre-restoration review also allows the LGU to advise the depositor of the amount of replacement credit the depositor is likely to receive. Based on this estimate and other comments received, the depositor can decide whether to proceed with the restoration. The candidate bank depositor is provided a full 5 years to either undo the work, implement a revised plan, or decide to abandon the project and let it stand as a protected wetland.

The rule requires technical panel review of the restoration site after construction to ensure that construction specifications have been followed, and again no sooner than six months after construction, for a final determination on whether the restoration is likely to be successful and the amount of credit to be deposited. These are reasonable requirements, given that the goal of a wetland bank is to establish a base of restored, functioning wetlands available for replacement purposes. Also, it is important that the banked wetland be accurately classified to allow application of the type index system for determining replacement requirements.

Item D prevents an account holder from undoing a banked wetland once it has been used as a replacement credit.

Subpart 2, Item A affirms that applicants needing replacement wetlands may not use banked wetland credits unless they have complied with the avoidance/minimization requirements and have attempted and failed to accomplish project-specific replacement. Previous experience with wetland banks nationwide has shown that unless it is carefully monitored, the ready availability of replacement credits in the bank can lead to inadequate consideration of avoidance and minimization measures.

In general, the bank is intended to be used for replacement for small impacts, as discussed previously in the "Principles" section. The rule allows exceptions to this when an LGU determines that it is appropriate.

Use of banked replacement wetlands must meet all of the requirements associated with project-specific replacement, including conditions on the location and amount of replacement needed.

The board, as the bank administrator, will provide information on wetlands on deposit in the bank to applicants who need replacement credit. It is the responsibility of the applicant to contact the account holders and negotiate the purchase of wetland replacement credits. The rule does not

establish any pricing guidelines for wetland credits - the cost of wetlands credits will be left to market forces. When an applicant has reached agreement on the purchase of wetland credits, the rule requires the applicant to submit a replacement plan that includes a credit transfer form that supplies information of the proposed replacement wetland acreage. This replacement plan is subject to the same notice and review procedures as for a project-specific replacement plan. This is to allow for public and agency review and to assist the LGU in determining whether the proposed replacement is appropriate.

Item G concerning statewide replacement for public transportation projects is from Minn. Stat. section 103G.222(e). The rule establishes a 30 day time period for the Commissioner to notify the LGU and the board of the decision to approve or deny the proposed replacement. Transportation project replacement plans that use wetland credits from the bank but are consistent with the standard location criteria (within the county or watershed or follow the 80%/50% rule) do not need the Commissioner's approval.

Item 5 lists conditions governing the sale or transfer of wetland credits between accounts. These conditions are intended to apply to situations where an LGU or other entity wishes to act as a central "broker" for its constituents. For example, a county may agree to buy all available wetland credits within its jurisdiction and sell them to applicants needing replacement acreage. This would save applicants the trouble of obtaining information on available credits and negotiating the sale of credits on their own.

Auditing and Monitoring

Auditing. The rule specifies the kind of information to be maintained by the board, authorizes the board to inspect LGU records pertaining to the bank, and requires the board to prepare and distribute an annual report. These provisions are needed to ensure that the bank is maintained and operated properly.

Monitoring. Banked wetlands must be monitored by the account holder and reported to the LGU in which the banked wetland is located according to the monitoring provisions in the Replacement Plan section of the rules. It is reasonable for the account holder to be responsible for monitoring, even after the credits have been withdrawn, because the account holder made the credits available and presumably profited from their sale. After the monitoring period has expired, the board is responsible for inspecting banked wetlands at least once every five years to ensure that they continue to provide adequate replacement for the benefits lost from drained or filled wetlands.

Enforcement and Corrective Actions

This part of the rule authorizes the board and LGU to take actions necessary to ensure that banked wetlands are constructed and maintained properly. These provisions are necessary and reasonable in that they are directed toward making sure that banked wetlands fulfill the statutory requirement to replace the benefits lost from drained or filled wetlands.

CALCAREOUS FENS

The purpose part of the proposed rule dealing with calcareous fens identifies the authority granted under Article 6, section 9 of the Wetland Conservation Act of 1991 to the Commissioner of Natural Resources for identification, protection and management of calcareous fens.

Because calcareous fens are unique, replacement is not for them an applicable concept. Instead, alteration must be allowed only when it is necessary, and then management must be undertaken to minimize and rectify the damage. The exemptions do not apply to them because the exemptions only apply in a replacement context.

Identification of calcareous fens is provided for in the next part of the rule by providing a calcareous fen definition.

"Procedures to List Calcareous Fens" specify that the Commissioner is to investigate wetlands to determine if the area can be properly identified as a calcareous fen. The Commissioner is then required to maintain a current list of known calcareous fens in the state and their location and is required to provide this list to the board.

The part on management plans utilizes language from the Act by specifying that calcareous fens may not be drained or filled or otherwise altered or degraded except as provided for in a management plan approved by the Commissioner.

The part on restoration allows the Commissioner to approve management plans to restore or upgrade previously damaged calcareous fens. This flexibility is needed to allow for restoration or stabilization of existing damaged calcareous fens.

Due process is provided for in the part concerning appeals. The landowner of a wetland determined to be a calcareous fen by the Commissioner, or a project proposer impacted by a calcareous fen designation may challenge either the calcareous fen designation or the provisions identified in the calcareous fen management plan approved by the Commissioner. The appeal of the

calcareous fen designation or management plan will be conducted in the same manner as the water permit hearings currently provided for under Minn. Stat. section 103G. The request for a hearing must be received within 30 days after mailed notice on the Commissioner's decision. The calcareous fen designation decision or management plan becomes final if no demand for hearing is received within this 30 day time period. Appeals taken from the Commissioner's decision after the hearing are to be handled in the manner of contested case decisions as provided for in Minn. Stat. chapter 14.

IMPACT ON AGRICULTURAL LAND AND SMALL BUSINESS

a. Impact on agricultural land

Agencies proposing the adoption of a rule must determine if that rule will have a "direct and substantial impact" on agricultural land in the state. As the clause "direct and substantial impact" is used in Minn. Stat. section 17.80 to 17.84, the board considers this rule to have no adverse effect on agricultural land in the state because it does not take agricultural land out of agricultural use.

b. Impact on small business

The rule relates to local government administration of a state program. Therefore, pursuant to Minn. Stat. section 14.115, Subd. 7(2), the board claims exemption to describing specific impacts to small business. Nevertheless, as stated in the Introduction, the board attempted to solicit diverse opinion during the development of the rule. A number of the representatives on the rule working group are employed in small business. To the extent allowed by law, the rule affords flexibility to local governments to establish procedures that consider the needs of small business. The law does not allow any less stringent application of its substantive (i.e. No-Net-Loss) provision to small businesses than to individuals and large businesses.

FISCAL NOTE

In July of 1992, the board asked LGUs to document the cost of implementing the interim phase of the Wetland Conservation Act. In September, selected LGUs were contacted and asked to provide specific costs. Those LGUs were chosen so that a representative geographic view of the actual costs to implement the interim program could be ascertained. Program costs were requested for the following activities: project screening, exemption determinations, wetland determinations, development of replacement plans, development of restoration plans, participation on technical evaluation panels and administrative expense such as mileage, training and communications. Thirteen

LGUs responded. Their projected average annual cost to implement the interim program is $14,000. Those LGUs also commented that the permanent rule, being more specific and complex than the requirements for the interim program (e.g.the addition of a wetland banking program), will require more time and training to implement. The board estimates an additional $6,000 per year would be needed after the rule becomes effective on July 1, 1993.

The board estimates that about 200 LGUs will participate in implementing the rule and providing the requisite statewide coverage. At $20,000 per LGU, the estimated annual cost to implement the rule is 4 million dollars. In its 1994-1995 biennial budget, the board is seeking 2 million dollars per year to be granted to LGUs on a matching basis. It is the opinion of the board that administration of the rule by local governmental units will be severely hampered if adequate administrative funding is not available.