

Draft Replacement Section 10-10 Advisory Committee Meeting

~~STANDARDS AND PROCEDURES FOR EVALUATING WETLAND REPLACEMENT PLANS~~

8420.0500 PURPOSE AND REQUIREMENT.

~~Subpart 1. Purpose.~~ Parts 8420.0500XXXX to 8420.0630XXXX specify the procedures and criteria for avoiding and minimizing wetland impacts and for ensuring adequate replacement of lost public values for unavoidable wetland impacts.

8420.0505 PREVIOUSLY APPROVED DETERMINATIONS.

The entire 8420.0505 was relocated to the Local Government Unit Duties and Procedures section and edited there.

8420.0510 REPLACEMENT PLAN PROCEDURES.

~~Subpart 1. Generally. Subp. 2. Requirement.~~ No person shall drain, excavate in the permanent or semipermanently flooded areas of type 3, 4, or 5 wetlands, or fill may impact a wetland, wholly or partially, or otherwise impact wetlands without being eligible for an exemption or no-loss, or first having a wetland replacement plan or other determination approved by the local government unit. Before consideration of Prior to approval of a replacement plan, the local government unit must ensure that the applicant has exhausted all possibilities to avoid and minimize adverse wetland impacts according to sequencing in part 8420.0520 XXXX. The applicant must demonstrate to the local government unit that the replacement plan complies with this part and part 8420.0550 XXXX, replacement wetland construction standards (cite several parts). *The above language was relocated here from the previous 8420.0540 subpart 1.* ~~Subp. 8. Adequacy decision.~~ A replacement plan that fails to meet the replacement requirements in this part of this chapter must be considered inadequate in replacing lost functions and values and must be denied by the local government unit. *The above language was relocated here from the previous 8420.0549 subpart 8.*

~~Subp. 2. Preapplication conference and site visit.~~ Before preparation of a wetland value replacement plan, it is recommended that the landowner meet with the local government unit for a preapplication conference and site visit. The local government unit is encouraged to inform the landowner of all sequencing requirements and the criteria used to evaluate replacement plans. A landowner may submit the information required in part 8420.0520 and request a determination of compliance with the sequencing requirements from the local government unit before preparing a replacement plan.

The first two sentences of the previous subpart 2 above were relocated to the Replacement Plan Applications part of the Application Procedures section.

~~Subp. 3. Evaluation.~~ As provided for in part 8420.0240, technical questions concerning the public value, location, size, and type of wetland shall be submitted to the technical evaluation panel. The local government unit may use a technical evaluation panel to predetermine public value, location, size, or type of wetlands under its jurisdiction and use this determination in administering the act. *The preceding two sentences were relocated to XXXX.* Wetland boundaries must be determined using the methodologies in the United States Army Corps of Engineers Wetland Delineation Manual (January 1987). Wetland type must be identified according to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et al., 1979), United States Fish and Wildlife Service Circular No. 39 (1971 edition) "Wetlands of the United States," or Wetland Plants and Plant Communities of Minnesota and Wisconsin (S. Eggers and D. Reed, 1997), as modified by the Board of Water and Soil Resources United States Army Corps of Engineers Wetland Mitigation Memorandum of Understanding (May 2007). The documents referenced under this subpart are incorporated by reference, are not subject to frequent change, and are available through the Minitex interlibrary loan system or on the board's Web site at <http://www.bwsr.state.mn.us>.

The preceding three sentences were relocated to the Wetland Boundary or Type part of the Wetland Boundary or Type, No Loss, and Exemption Standards section and edited there. ~~The technical evaluation panel shall provide its determinations to the local government unit for consideration.~~

The preceding sentence was relocated to the Technical Evaluation Panel Procedures part of the LGU Duties and Procedures section and edited there.

Subp. 6 3. Alternative evaluation methodologies. The local government unit may evaluate the replacement plan using a scientifically accepted methodology that evaluates all wetland functions specified in Minnesota Statutes, section 103B.3355, for both the impacted and replacement wetlands. Such alternative methodologies must be approved and listed by the board, in consultation with the commissioners of natural resources and agriculture, and local government units. When using alternative evaluation methodologies to evaluate replacement plans, the ratio of replacement credit to impacted wetland ~~to replacement wetland~~ must not be less than the minimum acreage requirements as listed in part 8420.0546 XXXX, except as provided for in part 8420.0650 XXXX, comprehensive wetland protection and management plans.

The above language was relocated here from the previous 8420.0549 subpart 8.

8420.0548XXXX SPECIAL CONSIDERATIONS.

Subpart 1. **Scope.** The factors in this part, when identified as being applicable to an impact site or a replacement site, must be considered by the applicant in the development of a replacement plan, and by the local government unit in the review of replacement plans.

Subp. 2. **Endangered and threatened species.** A replacement plan for activities that involve taking species listed as endangered or threatened in parts 6134.0200 to 6134.0400 must be denied unless the commissioner issues a permit pursuant to part 6212.1800 or Minnesota Statutes, section 84.0895, subdivision 7. Applicants may determine if there are known locations of listed species at a particular site by contacting the Department of Natural Resources' natural heritage and nongame research program.

Subp. 3. **Rare natural communities.** A replacement plan for activities that involve the modification of a rare natural community as determined by the Department of Natural Resources' natural heritage program must be denied if the local government unit determines that the proposed activities will permanently adversely affect the natural community.

Subp. 4. **Special fish and wildlife resources.** A replacement plan for activities that would have a significant adverse impact ~~that cannot be mitigated~~ on a special or locally significant fish and wildlife resource that cannot be replaced must be denied. These activities resources include, but are not limited to:

- A. fish passage and spawning areas;
- B. colonial waterbird nesting colonies;
- C. migratory waterfowl concentration areas;
- D. deer wintering areas; and/or
- E. wildlife travel corridors.

Activities involving streams must not block fish passage unless approved by the Department of Natural Resources.

Subp. 5. **Archaeological, historic, or cultural resource sites.** A replacement plan for activities that involve the modification of known archaeological, historical, or cultural resource sites on or eligible for the National Register of Historic Places, as designated by the state historic preservation officer, must be denied, if the local government unit, in consultation with the State Historical Preservation Office, determines that the proposed activities will have a significant adverse impact on the archaeological or historical value of the site.

Subp. 6. **Groundwater sensitivity.** A replacement plan for activities must be denied if the local government unit determines the activities would have a significant adverse impact on groundwater quality. The publication "Criteria and Guidelines for Assessing Geologic Sensitivity of Ground Water Resources in Minnesota" (MDNR, 1991) may be used as a guide in determining potential impacts.

Subp. 7. **Sensitive surface waters.** A replacement plan must be denied if the local government unit determines the activities will have a significant adverse impact on the water quality of outstanding resource value waters listed in part [7050.0180](#) or on trout waters designated by the commissioner.

Subp. 8. **Education or research use.** ~~A replacement plan for impacts to W~~wetlands known to be used for educational or research purposes must be ~~denied if the local government unit determines that those uses will not be~~ maintained or adequately replaced.

Subp. 9. **Waste disposal sites.** The local government unit must evaluate the type and amount of waste material found at the site. Activities involving known or potential hazardous wastes or contaminants must be conducted according to applicable federal and state standards.

Subp. 10. **Consistency with other plans.** The local government unit must consider the extent to which proposed activities are consistent with other plans, such as [local water management plans](#), watershed management plans, land use plans, zoning, and ~~master~~ [comprehensive](#) plans.

8420.0520XXXX SEQUENCING.

Subpart 1. **Requirement.** The local government unit ~~may~~ **must** not consider or approve a wetland replacement plan unless the local government unit finds that the applicant has demonstrated that the activity impacting a wetland ~~has complied~~ **complies** with all of the following principles in descending order or priority:

- A. avoids direct or indirect impacts ~~to the wetland~~ that may destroy or diminish the wetland under the criteria in subpart 3;
- B. minimizes ~~the impacts to the wetland~~ by limiting the degree or magnitude of the wetland activity and its implementation under the criteria in subpart 4;
- C. rectifies ~~the impacts~~ by repairing, rehabilitating, or restoring the affected wetland under the criteria in subpart 5;
- D. reduces or eliminates ~~the impacts to the wetland~~ over time by [operating the project in a manner that preservation and maintenance maintains the remaining wetland operations](#) under the criteria in subpart 6; and
- E. replaces unavoidable impacts ~~to the wetland~~ by restoring or, if wetland restoration opportunities are not reasonably available, creating [substitute replacement](#) wetland areas having equal or greater public value as provided for in parts [8420.0530](#) to [8420.0760](#). Exceptions to this part include wetlands located in cultivated fields that are subject to subpart 8, ~~and calcareous fens that are subject to subpart 9.~~

~~Subp. 2. **Application options.** An applicant may either submit the information required for sequencing analysis as part of a replacement plan application or apply for a preliminary sequencing determination from the local government unit before preparing a replacement plan. The local government unit may request additional information needed to make a determination. For projects impacting wetland areas less than 10,000 square feet more than the de minimis amount listed in part [8420.0122](#), subpart 9, item A, the local government unit may provide an on-site sequencing determination without written documentation from the applicant. The first two sentences of subpart 2 above were relocated to the Sequencing Applications part in the Application Procedures section.~~

Subp. 3 2. ~~Determination of i~~mpact avoidance.

- A. Avoidance ~~must be is~~ required when indicated by part [8420.0548XXXX](#), [Special Considerations](#).
- B. Wetland dependence determination:
 - (1) Based on information provided by the applicant, the local government unit **shall must** determine if the proposed project is wetland dependent. A project is wetland dependent if wetland features, functions, or values are essential to fulfill the basic purpose of the project. A wetland present at the site of a proposed project does not make that project wetland dependent.
 - (2) A project that has been determined by the local government unit to be wetland dependent is exempt from the analysis of avoidance alternatives in item C.
- C. Alternatives analysis:
 - (1) ~~In addition to the proposed project, T~~he applicant **shall must** provide the local government unit with documentation describing at least two alternatives [that avoid wetland impacts](#), ~~in addition to the proposed project to avoid wetland impacts. O~~ne may be the no-build alternative, ~~that would avoid impacts to~~

wetlands. For projects that repair or rehabilitate existing infrastructure, only one alternative is required. The alternatives may include consideration of alternate sites or alternative project configurations on the proposed site. The alternatives must be judged by the local government unit as good faith efforts, or the local government unit may require the applicant to redraft them for reconsideration.

(2) The local government unit ~~shall~~ **must** determine whether any proposed feasible and prudent alternatives are available that would avoid impacts to wetlands. An alternative ~~shall be~~ **is** considered feasible and prudent if it meets all of the following requirements:

- (a) it is capable of being done from an engineering point of view;
- (b) it is in accordance with accepted engineering standards and practices;
- (c) it is consistent with reasonable requirements of the public health, safety, and welfare;
- (d) it is an environmentally preferable alternative based on a review of social, economic, and environmental impacts; and
- (e) it would create no truly unusual problems.

~~(3) For projects proposing impacts to type 3, 4, or 5 wetlands, the local government unit shall also determine that there are no environmentally preferable alternatives that would avoid the impact.~~

~~(4)~~ **(3)** The local government unit ~~shall~~ **must** consider the following in evaluating avoidance alternatives as applicable:

- (a) whether the basic project purpose can be reasonably accomplished using one or more other sites in the same general area that would avoid wetland impacts. An alternate site ~~may~~ **can** not be excluded from consideration only because it includes or requires an area not owned by the applicant that could reasonably be obtained, used, expanded, or managed to fulfill the basic purpose of the proposed project;
- (b) the general suitability of the project site and alternate sites considered by the applicant to achieve the purpose of the project;
- (c) whether reasonable modification of the size, scope, configuration, or density of the project would avoid impacts to wetlands;
- (d) efforts by the applicant to accommodate or remove constraints on alternatives imposed by zoning standards or infrastructure, including requests for conditional use permits, variances, or planned unit developments; ~~and~~
- (e) the physical, economic, and demographic requirements of the project. ~~Economic considerations Cost alone does~~ **es** not make an alternative not feasible and prudent; ~~and~~
- ~~(f) the amount, distribution, condition, and value of wetlands and associated resources to be impacted by the project and the potential for direct and indirect impacts over time.~~

~~(5)~~ **(4)** If the local government unit determines that a feasible and prudent alternative exists that would avoid impacts to wetlands, it ~~shall~~ **must** deny the replacement plan. If no feasible and prudent alternative is available that would avoid impacts to wetlands, the local government unit ~~shall~~ **must** evaluate the replacement plan for compliance with subparts 4 to 8.

Subp. 4 ~~3~~. **Determination of i) impact minimization.**

A. The applicant shall demonstrate to the local government unit's satisfaction that the activity will minimize impacts to wetlands. In reviewing the sufficiency of the applicant's efforts proposal to minimize wetland impacts, the local government unit must consider all of the following:

- (1) the spatial requirements of the project;
- (2) the location of existing structural or natural features that may dictate the placement or configuration of the project;
- (3) the purpose of the project and how the purpose relates to placement, configuration, or density;
- (4) the sensitivity of the site design to the natural features of the site, including topography, hydrology, and existing vegetation;
- (5) the value, function, and spatial distribution of the wetlands on the site;
- (6) individual and cumulative impacts; and
- (7) an applicant's efforts to:
 - (a) modify the size, scope, configuration, or density of the project;
 - (b) remove or accommodate site constraints including zoning, infrastructure, access, or natural features;
 - (c) confine impacts to the fringe or periphery of the wetland; and
 - (d) otherwise minimize impacts.

~~B. If the local government unit finds that an applicant has not complied with the requirements to minimize wetland impacts, the local government unit shall list, in writing, its objections to the project. If, within 30~~

~~days, the applicant does not withdraw the project proposal or indicate intent to submit an amended project proposal satisfying the local government unit's objections, the statement of objections shall constitute a denial.~~

Subp. ~~5~~ **4. Determination of impact rectification.** Temporary impacts ~~to a wetland~~ must be rectified by repairing, rehabilitating, or restoring the affected wetland ~~in accordance with part 8420.XXXX, No Loss.~~

~~A. Activities may qualify for a no-loss determination in part 8420.0220 by meeting all of the following conditions:~~

~~(1) the physical characteristics of the affected wetland, including ground elevations, contours, inlet dimensions, outlet dimensions, substrate, plant communities, and hydrologic regime, are restored to preproject conditions sufficient to ensure that all preproject functions and values are restored;~~

~~(2) the activity is completed and the physical characteristics of the wetland are restored within six months of the start of the activity; and~~

~~(3) the party responsible for the activity provides a performance bond to the local government unit for an amount sufficient to cover the estimated cost to restore the wetland to preproject conditions. The local government unit shall return the performance bond to the responsible party upon a determination by the local government unit that the conditions in this item and item B have been met.~~

~~B. An applicant shall be granted a no-loss determination under the criteria in item A once in a ten-year period for a particular site within a wetland, except that repairs to the original project shall be allowed under the no-loss determination, if the local government unit determines the request to be necessary and reasonable.~~

~~C. Wetland impacts that do not qualify for a no-loss determination according to the criteria in item A are subject to replacement under the criteria in parts 8420.0530 to 8420.0630.~~

The above language was relocated to the No-Loss part of the Wetland Boundary or Type, No-Loss, and Exemption Standards section.

Subp. ~~6~~ **5. Determination of reduction or elimination of impacts over time.** After an activity is completed, further ~~wetland~~ impacts ~~from the draining or filling~~ must be reduced or eliminated by maintaining, operating, and managing the project in a manner that preserves and maintains remaining wetland functions ~~and values~~. The local government unit must require applicants to implement best management practices to protect wetland functions ~~and values~~.

Subp. ~~7~~ **6. Unavoidable impacts.** Unavoidable ~~wetland~~ impacts that remain after efforts to minimize, rectify, or reduce or eliminate them must be replaced according to parts ~~8420.0530~~ to ~~8420.0630~~.

Subp. ~~7a~~ **7a. Sequencing flexibility.**

~~A. Sequencing flexibility in the order and application of sequencing standards cannot be implemented unless alternatives have been considered and unless the proposed replacement wetland is certain to provide equal or greater functions and public values as determined based on a functional assessment reviewed by the technical evaluation panel using a methodology approved by the board. The project sponsor must provide the necessary information and the local government unit must document the application of sequencing flexibility in the replacement plan approval.~~

~~B. Flexibility in application of the sequencing steps may be applied, subject to the conditions in item A, as determined by the local government unit if:~~

~~(1) the wetland to be impacted has been degraded to the point where replacement of it would result in a certain gain in function and public value;~~

~~(2) preservation avoidance of a wetland would result in severe degradation of the wetland's ability to function and provide public values, for example, because of surrounding land uses and the wetland's ability to function and provide public values cannot reasonably be maintained through implementation of best management practices, other land use controls, or other mechanisms;~~

~~(3) the only feasible and prudent upland site available for the project or wetland replacement or development has greater ecosystem function and public value than the wetland. Although this is a rare circumstance since there will usually be several options for siting the replacement wetland or development, it This may be appropriate only if the project sponsor applicant:~~

~~(a) demonstrates impact minimization to the wetland;~~

~~(b) agrees to perpetually preserve the designated upland site; and~~

- (c) completely replaces the impacted wetland's functions and public values; or
- (4) the wetland is a site where human health and safety is a factor.

Subp. 8. **Wetlands on cultivated fields.** If the wetland is located on a cultivated field and will be replaced through in-advance restoration, then the priority order for sequencing in subpart 1 is not required. A wetland ~~drained or filled~~ impacted under this provision must not be converted to nonagricultural land for ten years. The landowner must execute and record a notice of this requirement in the office of the county recorder for the county in which the property is located.

~~Subp. 9. **Calcareous fens.** Calcareous fens, as identified by the commissioner, may not be filled, drained, or otherwise degraded, wholly or partially, by any action, unless the commissioner, under an approved management plan, decides some alteration is necessary, as provided in part 8420.1010.~~

8420.0103XXXX WETLAND FUNCTIONS FOR DETERMINING PUBLIC VALUES REPLACEMENT STANDARDS.

Subpart 1. General Requirement. ~~Wetland R~~ Replacement wetlands must replace the functions and public values of wetlands that are lost from as a result of an wetland impact that is drained or filled. When environmentally preferable, a replacement wetland should replace the same combination of functions and values provided by the impacted wetland. Replacement of wetland functions and values may occur at more than one location. *The preceding 3 sentences were relocated here from the previous 8420.0549 subpart 1.*

The public values of wetlands ~~must be is~~ based upon the functions of wetlands, including:

- A. water quality, including filtering of pollutants to surface and groundwater, utilization of nutrients that would otherwise pollute public waters, trapping of sediments, shoreline protection, and utilization of the wetland as a recharge area for groundwater;
- B. flood water and storm water retention, including the potential for flooding in the watershed, the value of property subject to flooding, and the reduction in potential flooding by the wetland;
- C. public recreation and education, including hunting and fishing areas, wildlife viewing areas, and nature areas;
- D. commercial uses, including wild rice and cranberry growing and harvesting and aquaculture;
- E. fish, wildlife, and native plant habitats;
- F. low-flow augmentation; and
- G. other functions, ~~values,~~ and public uses as identified in board-approved wetland evaluation methods. The board shall maintain a publicly available list of preapproved wetland evaluation methods.

8420.0547 OTHER REQUIREMENTS.

Subp. 2. Ecological consistency.

A. Restoration and replacement of wetlands must be accomplished according to the ecology of the landscape area affected. The replacement site must be ecologically suitable for providing the desired functions and compatible with adjacent land uses. A replacement plan that would result in wetlands or wetland characteristics that do not naturally occur in the landscape area in which the replacement will occur will not be approved.

B. Replacement projects must be located and designed, to the maximum extent practicable, to be self-sustaining once performance standards have been achieved.

C. In determining the location, type, function, and design of replacement, applicants and local government units must consider: landscape position; sustainability of resource functions; the ability of type and location to provide desired functions over time in a changing landscape; habitat requirements; development and habitat loss trends; sources of watershed impairment; the protection and maintenance of terrestrial resources, uplands, and riparian areas; and providing a suite of functions.

8420.0530 REPLACEMENT PLAN COMPONENTS.

The entire 8420.0530 was relocated to the Application Requirements section and edited there. Both in the General Application Requirements and the Replacement Plan parts.

8420.0540 REPLACEMENT PLAN EVALUATION CRITERIA.

~~Subpart 1. **Sequencing.** Before consideration or approval of a replacement plan, the local government unit must ensure that the applicant has exhausted all possibilities to avoid and minimize adverse wetland impacts according to sequencing in part 8420.0520. The applicant must demonstrate to the local government unit that the replacement plan complies with this part and part 8420.0550.~~

Subpart 1 above was relocated to the Purpose and Requirement part of this section.

Subp. ~~2~~ **3. Type Method of replacement.**

A. The preference for the method of replacement is that which is most likely to result in a wetland area that functions wholly, perpetually, and naturally. Wetland restoration is generally preferred over creation and restoration of completely impacted wetlands is generally preferred over other methods of replacement.

B. Modification or conversion of nondegraded wetlands from one wetland type to another by damming, diking, impounding, or excavating does not constitute replacement credit.

C. Wetlands drained or filled under an exemption may not be restored for replacement credit for ten years after draining or filling.

~~D. Wetlands illegally drained or filled are not eligible for replacement credit.~~

8420.0541 ACTIONS ELIGIBLE FOR CREDIT. ~~The entire 8420.0541 was relocated to the new part 8420.XXXX in this section.~~

8420.0542 TIMING OF REPLACEMENT.

Subp. 4. Timing of Replacement.

~~A. Replacement of wetland functions and values must be completed in advance of or concurrent with the actual draining, excavation, or filling impacting of a wetland, unless an irrevocable bank letter of credit or other security acceptable to the local government unit is submitted to the local government unit to guarantee successful completion of the replacement. Local government units may require performance bonds or similar instruments to assure that the replacement wetland is successfully established. For replacement that is not in advance, a financial assurance is required according to subpart 5.~~

B. Subp. 4a. In advance replacement. Replacement is in advance if the replacement is:

~~A 1. approved wetland bank credits withdrawn prior to impact; or~~

~~B 2. a project specific replacement for which construction has been certified and the first monitoring report has been submitted according to part 8420.XXXX, and the replacement meets all goals and site that has established wetland hydrology and vegetation, but the vegetation may not be mature.~~

~~At a minimum, the replacement site must have wetland hydrology and hydrophytic vegetation established one full growing season (April-October) prior to the impact. Further, the site must meet all performance standards applicable to that development stage of the replacement site.~~

The above language was relocated here from the previous 8420.0549.

~~All wetlands to be restored or created for replacement must be designated for replacement before restoration or creation. Submission to the local government unit of the information required in part 8420.0530 and subsequent approval shall be considered evidence of designation for replacement, provided the information is submitted before the actual restoration or creation. The exceptions contained in part 8420.0544 do not apply to replacement completed using wetland banking credits established by a person who submitted a complete wetland banking application to a local government unit by April 1, 1996.~~

~~C. Any action being proposed for replacement credit must be approved by the local government unit specifically for replacement purposes prior to initiating the action.~~

Subp. 5. Financial Assurance. For wetland replacement that is not in advance, a financial assurance acceptable to the local government unit must be submitted to the local government unit to guarantee successful replacement by the applicant. The financial assurance may be used to cover costs of actions necessary to bring the project into compliance with the approved replacement plan specifications and

monitoring requirements. The financial assurance is not intended to serve as an in-lieu fee and is not a substitute for enforcement, but may be used for repair, construction, vegetation establishment and management, maintenance, monitoring, or other actions necessary to ensure adequate replacement. The local government unit may release a portion of the financial assurance upon successful completion of construction, but must retain a sufficient amount to ensure successful vegetative establishment and completion of the monitoring period. The financial assurance will be returned to the applicant upon successful completion of the monitoring requirements in 8420.XXXX.

Note: Discussions are ongoing regarding the use and requirement of financial assurances which may result in modification to this subpart.

8420.0543 WETLAND REPLACEMENT SITING.

Subp. 5. Siting of wetland replacement.

A. Siting wetland replacement must follow this priority order:

- (1) ~~on site or~~ in the same minor watershed as the affected wetland;
- (2) in the same major watershed as the affected wetland;
- (3) in the same county as the affected wetland;
- (4) for replacement by wetland banking, in the same wetland bank service area as the impacted wetland, except that impacts in a 50 to 80 percent area must be replaced in a 50 to 80 percent area and impacts in a less than 50 percent area must be replaced in a less than a 50 percent area;
- (5) for project specific replacement, in an adjacent major watershed to the affected wetland or, for replacement by wetland banking, in an adjacent wetland bank service area, except that impacts in a 50 to 80 percent area must be replaced in a 50 to 80 percent area and impacts in a less than 50 percent area must be replaced in a less than 50 percent area;
- (6) notwithstanding subitems (1) to (5), public transportation projects may be replaced statewide, except that wetlands affected in less than 50 percent areas must be replaced in less than 50 percent areas, and wetlands affected in the seven-county metropolitan area must be replaced at a ratio of two-to-one in:
 - (a) the affected county;
 - (b) if no restoration opportunities exist in the affected county, in another seven-county metropolitan area county; or
 - (c) in one of the major watersheds that are wholly or partially within the seven-county metropolitan area, but at least one-to-one must be replaced within the seven-county metropolitan area;
- (7) notwithstanding subitems (1) to (5), siting wetland replacement in greater than 80 percent areas may follow the priority order under this subitem:
 - (a) by wetland banking after evaluating on-site replacement and replacement within the major watershed;
 - (b) replaced in an adjacent wetland bank service area if wetland bank credits are not reasonably available in the same wetland bank service area as the affected wetland, as determined by a comprehensive inventory approved by the board; or
 - (c) statewide; or
- (8) notwithstanding subitems (1) to (5), siting wetland replacement in the seven-county metropolitan area must follow the priority order under this subitem:
 - (a) in the affected county;
 - (b) in another of the seven metropolitan counties; or
 - (c) in one of the major watersheds that are wholly or partially within the seven-county metropolitan area, but at least one-to-one must be replaced within the seven-county metropolitan area.

~~B. Until December 31, 2012, existing wetland bank account holders outside of the seven-county metropolitan area, but within a major watershed that is wholly or partially within the seven-county metropolitan area, may withdraw wetland credits according to part 8420.0541 that was in effect at the time of the deposit of the public value credit or new wetland credits.~~

~~C. Until December 31, 2012, local government units may approve wetland replacement plans that propose replacement via wetland banking, using credits established according to the replacement siting rule in effect on August 5, 2007.~~

~~D~~ B. When reasonable, practicable, and environmentally beneficial replacement opportunities are not available in siting priorities listed in item A, the applicant may seek opportunities at the next level.

~~E~~ C. For the purposes of item D, "reasonable, practicable, and environmentally beneficial replacement opportunities" means opportunities that:

- (1) take advantage of naturally occurring hydrogeomorphological conditions and require minimal landscape alteration;
- (2) have a high likelihood of becoming a functional wetland that will continue in perpetuity;
- (3) do not adversely affect other habitat types or ecological communities that are important in maintaining the overall biological diversity of the area; and
- (4) are available and capable of being done after taking into consideration cost, existing technology, and logistics consistent with overall project purposes.

~~The price of wetland bank credits alone is not sufficient reason to conclude that reasonable, practicable, or environmentally beneficial replacement opportunities are not available.~~

~~F~~ D. Regulatory agencies, local government units, and other entities involved in wetland restoration ~~shall~~ **must** collaborate to identify potential replacement opportunities in watersheds within their jurisdictional areas.

~~8420.0544 REPLACEMENT FOR PUBLIC TRANSPORTATION PROJECTS.~~

~~The entire 8420.0544 was relocated to the end of this section and edited there.~~

~~8420.0545 PRESETTLEMENT WETLAND ACRES AND AREAS.~~

~~The entire 8420.0545 was relocated to the Purpose and Definitions section and edited there.~~

~~8420.0546XXXX~~ SIZE OF REPLACEMENT WETLANDS REPLACEMENT RATIOS.

Subpart 1. Minimum required replacement.

~~Replacement wetlands must be of a size sufficient to ensure that they provide equal or greater public value than the wetland that was drained or filled. The minimum amount of replacement wetland that must be provided is shown in part 8420.0549, subpart 4c.~~

~~For a wetland located on nonagricultural land in a 50 to 80 percent area or a less than 50 percent area, the minimum size of the replacement wetland must be in the ratio of two acres of replaced wetland for each acre of drained or filled wetland. For a wetland located on agricultural land, or in greater than 80 percent areas, the minimum size of the replacement wetland must be in the ratio of one acre of replaced wetland for each acre of drained or filled wetland.~~

~~A. The replacement ratio is 1.5 replacement credits for each acre of wetland impacted (1.5:1) in greater than 80 percent areas or on agricultural land, and 2.5 replacement credits for each acre of wetland impacted (2.5:1) in all other areas. The replacement ratio can be reduced by 0.5:1 when the replacement consists of:~~

- ~~1. withdrawal of available credits from an approved wetland bank site within the same bank service area as the impacted wetland; or~~
- ~~2. project-specific replacement within the same major watershed as the impacted wetland, a majority of which is in-kind.~~

~~B. For replacement via banking, impacts in bank service area 10 that are replaced in bank service area 9 or the Des Moines River Basin in bank service area 8, and impacts in bank service area 1 that are replaced in bank service area 2 will count as replacement within the same bank service area for the purpose of reducing the minimum required replacement ratio according to this subpart.~~

C. Wetland Replacement wetlands must be of a size sufficient to ensure that they it provides equal or greater public value than the impacted wetland it will replace that was drained or filled. The actual replacement ratios required for a replacement wetland may be more than the minimum ratio required in item A if the local government unit determines that a higher ratio is necessary to replace the lost, subject to the evaluation of wetland functions and public values in part 8420.0549 of the wetland lost. In no case can the replacement ratio be less than 1:1 in greater than 80 percent areas and agricultural land, and 2:1 in all other areas.

D. For wetlands located in a 50 to 80 percent area or a less than 50 percent area, future owners of wetlands impacted for use as agricultural land may make no use of the wetland area after it is altered impacted, other than as agricultural land, for a period of ten years unless future replacement to achieve a ratio equaling or exceeding the appropriate ratio for non-agricultural land in part 8420.0549, subpart 4e, item A occurs. The landowner shall must record a notice of this restriction in the office of the county recorder in which the project is located.

8420.0547 OTHER REQUIREMENTS.

Subpart 1. Carbon balance. When it is necessary to replace a drained or filled peatland, the replacement wetland must be revegetated with planted or naturally pioneering native vegetation established within three growing seasons.

Subpart 2 of 8420.0547 was relocated to the new 8420.XXXX, Replacement Standards, in this section.

8420.0548 SPECIAL CONSIDERATIONS. The entire 8420.0548 was relocated to the new 8420.XXXX of this section.

8420.0549 EVALUATION OF WETLAND FUNCTIONS AND VALUES.

Subpart 1. Evaluation options. Replacement wetlands must replace the functions and values that are lost from a wetland that is drained or filled. When environmentally preferable, a replacement wetland should replace the same combination of functions and values provided by the impacted wetland. Replacement of wetland functions and values may occur at more than one location. The local government unit may allow the evaluation of wetlands by measuring and comparing public values specified in Minnesota Statutes, section 103B.3355, with a scientifically accepted methodology in subparts 7 and 8. **The first three sentences of this subpart were relocated to the previous Wetland Functions for Determining Public Value part.**

Subp. 2. Wetland types. For wetland replacement ratio determinations, wetland type shall be based on the 12 wetland plant community types as listed in this subpart.

The Wetland Type table was relocated to the Wetland Boundary or Type part of the Wetland Boundary or Type, No Loss, and Exemption Standards section.

**STATE OF MINNESOTA WATERSHED BOUNDARIES – 1979
(81 MAJOR WATERSHED UNITS)**

An improved map that includes BSAs will be developed and the DNRs official map of watersheds will be referenced.

Subp. 3 2. In-kind wetland replacement. Wetland replacement for drainage, excavation, or fill shall be considered in-kind if the replacement wetland is of the same type as the impacted wetland.

Wetland replacement is in-kind if it is:

1. the same hydrologic conditions and landscape setting as the impacted wetland;
2. the same type as the impacted wetland except, for degraded wetlands, the same type that historically occurred at the impact site; or
3. a type that has been significantly lost in the watershed or will provide important functional benefits to the watershed as determined by the technical evaluation panel based on a review of available evidence or according to a local plan approved by the board.

Note: Discussions are ongoing regarding the definition of in-kind and further refinement and/or guidance is likely.

Subp. 5 3. Determining impacts of partial drainage. In cases where wetlands will be partially or incompletely drained, the amount of wetland to be replaced must be determined as follows: The area impacted by partially draining a wetland is determined in two parts. The wetland area where the hydrology is totally removed must be ~~replaced in its entirety~~ considered an impact in its entirety. The area of impact for the area that is partially drained must be ~~replaced in an amount that is~~ at least 50 percent of the acreage of the remaining wetland area ~~or~~ determined by an assessment ~~of the wetland functions listed in part 8420.0103, using a methodology chosen by~~ acceptable to the technical evaluation panel ~~from one of the methodologies established or approved by the board.~~

~~Subp. 4. Out-of-kind wetland replacement.~~ Out-of-kind replacement is any replacement that is not in-kind in subpart 3.

~~If a wetland to be drained or filled exhibits more than one wetland type as determined by the technical evaluation panel, and more than one wetland type is proposed to be drained or filled, the local government unit shall use the following procedure to determine needed replacement. The acreage of each wetland type to be impacted shall be determined. The sum of the replacement for each wetland type shall be the resultant acreage requirement.~~

~~Subp. 4 was deleted as it is unnecessary.~~

~~Subp. 4a. In advance replacement.~~ Replacement is in advance if the replacement is:

- ~~A. approved wetland bank credits; or~~
- ~~B. a replacement site that has established wetland hydrology and vegetation, but the vegetation may not be mature.~~

~~At a minimum, the replacement site must have wetland hydrology and hydrophytic vegetation established one full growing season (April-October) prior to the impact. Further, the site must meet all performance standards applicable to that development stage of the replacement site.~~

~~Subp. 4a above was relocated to the Timing of Replacement part in this section and edited there.~~

~~Subp. 4b. In-place replacement.~~ Replacement is in-place if the mitigation occurs within the same watershed as the permitted activity or, if wetland credits are withdrawn from an approved wetland bank site, in the same bank service area as that where the permitted impact occurred, according to the map in this subpart. The following exceptions apply to this definition:

- ~~A. replacement for impacts in bank service area 10 can be accomplished in bank service area 9 or the Des Moines River Basin in bank service area 8 with no increase in the replacement ratio;~~
- ~~B. replacement for impacts in bank service area 1 can be accomplished in bank service area 2 with no increase in the replacement ratio; and~~
- ~~C.~~

Subp. 4. Special replacement ratios. the board may approve special replacement ratios based on data derived from comprehensive inventories of replacement opportunities. The board ~~shall~~ must give notice of the replacement ratios to local government units and ~~shall~~ publish the ratios in the State Register. The board ~~shall~~ must provide opportunities for public input and comment prior to publishing the special replacement ratios. The conditions and standards shall take effect 30 days after publication and remain in effect unless superseded by subsequent statute, rule, or notice in the State Register.



~~Subp. 4c. Minimum wetland replacement ratios.~~ The minimum wetland replacement ratios are based on the location of the impact and replacement, and the wetland type, and the timing of replacement, as determined by the table below.

Impact Location	Replacement	Type of Replacement	Replacement	Minimum
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	Location (in-place)	Wetland (in-type)	Process (in-time)	Replacement Ratio
> 80% area (or agricultural land)	In-place	Same type as impact wetland	In advance/Not in advance	1:11.25:1
		Different type	In advance/Not in advance	1.25:11.5:1
	Not in-place	Same type as impact wetland	In advance/Not in advance	1.25:11.5:1
		Different type	In advance/Not in advance	1.5:11.5:1
< 80% area (and non-agricultural land)	In-place	Same type as impact wetland	In advance/Not in advance	2:12.25:1
		Different type	In advance/Not in advance	2.25:12.5:1
	Not in-place	Same type as impact wetland	In advance/Not in advance	2.25:12.5:1
		Different type	In advance/Not in advance	2.5:12.5:1

Subp. 5. ~~Determining impacts of partial drainage.~~ The preceding subpart was relocated to subpart 3 of this part (above).

Subp. 6. ~~Alternative evaluation methodologies.~~ The local government unit may evaluate the replacement plan using a scientifically accepted methodology that evaluates all wetland functions specified in Minnesota Statutes, section 103B.3355, for both the impacted and replacement wetlands. Such alternative methodologies must be approved and listed by the board, in consultation with the commissioners of natural resources and agriculture, and local government units. When using alternative evaluation methodologies to evaluate replacement plans, the ratio of impact wetland to replacement wetland must not be less than the minimum acreage requirements as listed in part 8420.0546, except as provided for in part 8420.0650.

Subp. 7. ~~Special cases or appeals.~~ For projects of unusual complexity, or replacement plans that have been denied and are being appealed, and for which the local government unit believes an alternative evaluation process may produce a substantially different replacement requirement, the local government unit may evaluate the replacement plan using the current version of the Minnesota wetland evaluation methodology or another scientifically accepted methodology approved by the board, in consultation with the commissioner, that evaluates all wetland functions and values for both the impacted and replacement wetlands.

When using a board-approved methodology to evaluate replacement plans, the ratio of impact wetland to replacement wetland must not be less than the minimum acreage requirements as listed in part 8420.0546. Further, the topographic setting ratio in subpart 4 and the local public value ratio, if any, in subpart 4 must also be considered when using a board-approved methodology.

Subp. 8. ~~Adequacy decision.~~ A replacement plan that fails to meet the requirements in this part must be considered inadequate in replacing lost functions and values and must be denied by the local government unit. **The preceding sentence was relocated to the Purpose and Requirement part of this section.** A replacement plan that has been considered by the local government unit and not approved may be revised and resubmitted for consideration by the local government unit. As required by part 8420.0250, the decision of a local government unit to approve, approve with conditions, or deny a replacement plan becomes final if not appealed to the board within 30 days after the date on which the decision is mailed to those required to receive notice of the decision. Within 30 days of completing construction of a replacement wetland, the notice specified in part 8420.0530, item D, subitem (6), must be recorded and proof of recording provided to the local government unit.

8420.0541XXXX ACTIONS ELIGIBLE FOR CREDIT.

Subpart 1. **Scope.** The actions in this part are eligible for replacement credit ~~or wetland banking credit~~ as determined by the local government unit in parts [8420.0500](#) to [8420.0760](#). Sufficient information to determine eligibility and credit must be provided to the local government unit as part of a replacement plan application. This part identifies the amount of credit allowed for each action, however, the actual amount may be less as determined by the local government unit. When the local government unit allows less replacement credit than the amounts described in this part, the local government unit must provide justification for the lower credit allocation. Subparts 3 through 8 require the incorporation of buffer areas meeting the minimum requirements as described in subpart 2 of this part.

Subp. 2. Buffer areas. *Discussions are ongoing and this subpart is still under discussion. Specific language will be provided later.*

Subp. ~~23.~~ **Restoration of completely drained or filled wetland areas.** Restoration of both the natural hydrology regime and native, noninvasive vegetation on wetlands that have been completely drained or filled ~~wetlands~~ may receive new wetland replacement credit in an amount not up to exceed 100 percent of the ~~total~~ wetland area hydrologically and vegetatively restored. The vegetation management plan should set a goal of restoring the historic native vegetation typical of the wetland plant community being restored.

Subp. ~~34.~~ **Restoration of partially drained or filled wetland areas.** Restoration of both the natural hydrology regime and native, noninvasive vegetation of jurisdictional wetlands that have been degraded by prior drainage, filling, or a diversion of the natural watershed,~~or filling~~ may receive credit in accordance with the following:

A. ~~in a less than 80 percent area, receive public value credit in an amount up to 50 percent of the degraded wetland area or receive new wetland credit in an amount not to exceed 25 percent of the total wetland area hydrologically restored, provided that permanent native, noninvasive vegetation is established within the restored wetland area and on an upland buffer, which may receive replacement credit according to subpart 6; and any wetland area substantially degraded by partial drainage or fill that was planted with annually seeded crops, was in a crop rotation seeded to pasture grasses or legumes, or was required to be set aside to receive price supports or equivalent payments in at least ten of the last 20 years prior to the date of application may receive credit based on the percent of the time the wetland area was annually seeded, in rotation, or set aside during the prior 20-year period;~~

B. ~~in a greater than 80 percent area, receive new wetland credit in an amount not to exceed 25 percent of the total wetland area hydrologically restored; all other wetland areas substantially degraded by partial drainage or fill may receive wetland credit of up to 50 percent of the wetland area restored.~~

~~Subp. 4. **Exceptional natural resource value projects.**— Projects that restore exceptional natural resource values of wetlands may receive either public value or new wetland replacement credit solely or in combination as determined by the local government unit with concurrence of the technical evaluation panel. The amount and type of credit allowed shall be based on a functional assessment that documents the restoration of these values.~~

Subp. 5. **Restoration Vegetative restoration of farmed wetlands.** Reestablishment of permanent native, noninvasive vegetative cover on a farmed wetland areas that ~~was~~ have not been affected by prior drainage or filling may receive replacement credit for:

A. up to 50% of the area restored for wetland areas that were planted with annually seeded crops, ~~was~~ were in a crop rotation seeded to pasture grasses or legumes, or ~~was were~~ required to be set aside to receive price supports or equivalent payments in six at least ten of the last 20 years prior to the date of application for a replacement plan or bank plan ~~may receive credit in accordance with one of the following considerations; or~~

B. up to 90% of the area restored for wetland areas in bank service areas 2, 3, and 4 based on the percent of time the wetland areas were planted with annually seeded crops, were in a crop rotation

seeded to pasture grasses or legumes, or were required to be set aside to receive price supports or equivalent payments prior to the date of application for a replacement or bank plan.

A. if the wetland was annually seeded, in rotation, or set aside for six or more of the last 20 years, the wetland is eligible for public value credit not to exceed 50 percent of the wetland area; or

B. if the wetland was annually seeded, in rotation, or set aside for ten or more of the last 20 years, the wetland is eligible for new wetland credit based on the percent of the time the wetland area was annually seeded, in rotation, or set aside during the prior 20-year period.

Subp. 6. **Upland buffer areas.** Buffer areas of permanent native and noninvasive dominated vegetative cover established or preserved on upland adjacent and contiguous to replacement wetlands may receive credit, provided that the upland buffer must have an average width of at least 50 feet for wetlands in nonmunicipal areas and an average width of at least 25 feet for wetlands in a municipal area and the buffer vegetative establishment or preservation plan must be approved by the technical evaluation panel. Replacement credit for the buffer may not exceed 100 percent of the replacement wetland area and may only be used as public value credits for replacement above a 1:1 ratio.

Subp. 6. **Restoration and protection of exceptional natural resource value.** Replacement credit may be granted for activities that restore and protect wetlands and adjacent areas that improve or directly contribute to the function and sustainability of exceptional natural resources. For purposes of this subpart, an exceptional natural resource will include:

A. endangered or threatened species;

B. rare natural communities;

C. special fish and wildlife resources such as fish passage and spawning areas, colonial water bird nesting colonies, migratory waterfowl concentration areas, deer wintering areas, and wildlife travel corridors; or

D. sensitive surface waters.

The local government unit may identify other resources as exceptional if determined to be of high value relative to other resources in the watershed by the technical evaluation panel or a board approved plan.

Restoration and protection of calcareous fens, white cedar swamps, floodplain or riparian wetlands, or wetlands adjacent to designated trout waters are examples of potential qualifying activities. The allocation of credit under this subpart is determined by the local government unit with concurrence of the technical evaluation panel based on the actions proposed and the resulting contribution to the value and sustainability of the exceptional resource. Areas receiving credit must be protected by a permanent conservation easement in a format provided by the board that is granted to and accepted by the state.

Subp. 7. **Protection of ~~W~~wetlands previously restored via conservation easements.** Wetland areas previously restored for conservation purposes under terminated or expired conservation easements or contracts are eligible for replacement credit in an amount up to 75 percent new wetland credit for wetland areas created or restored due to the easement or contract, and adjacent upland buffer areas reestablished to permanent native, noninvasive vegetative cover are eligible for public value credit above a 1:1 ratio in an amount not to exceed 25 percent of the restored wetland area. The wetland areas eligible for credit are limited to those areas where the easement, contract or agreement granted the landowner the right to drain the restored wetlands upon termination.

Subp. 8. **Restoration of wetland vegetation.** Reestablishment and maintenance of permanent native, noninvasive vegetation cover on a wetland that is dominated by invasive or exotic species may receive public value credit. Replacement credit may not exceed 25 percent of the total wetland area vegetatively restored and the vegetative restoration and maintenance plan must be approved by the technical evaluation panel. The technical evaluation panel may require a monitoring period in excess of 12 months after the vegetative restoration is completed before approving the site for replacement credit.

Subp. 9. **Wetlands established via mineral extraction site reclamation.** Wetland areas established in nonwetland areas due to mineral extraction activities may receive new wetland credits if all of the following criteria are met:

- A. ~~application for replacement credit is made within ten years after the last day that extraction activities have taken place;~~
- B. ~~a wetland establishment and management plan has been approved by the technical evaluation panel and implemented by the landowner or authorized agent;~~
- C. ~~the wetland area meets the criteria in part 8420.0550; and~~
- D. ~~if the land is not state-owned, a conservation easement in favor of the state has been accepted by the state and recorded in the county recorder's office, or if the land is state-owned, covenants and restrictions are recorded that identify that the wetland area is a replacement wetland subject to this chapter.~~

Subp. 10. ~~Water quality treatment areas.~~

~~A. New wetland credit of up to 100 percent for wetland areas constructed as part of water quality treatment systems may be granted by the local government unit with the concurrence of the technical evaluation panel, provided that:~~

- ~~(1) the local government unit has an approved and active stormwater management plan;~~
- ~~(2) the water quality treatment system design includes pretreatment of runoff before discharge to the wetland area receiving credit;~~
- ~~(3) the wetland area receiving credit is constructed in nonwetland areas;~~
- ~~(4) the water quality treatment system is associated with an ongoing or proposed project that will impact a wetland or public waters;~~
- ~~(5) the wetland area receiving credit is separated from the water quality treatment system that pretreats runoff before discharge to the wetland area receiving credit;~~
- ~~(6) the wetland area receiving credit is designed for a maximum 24-inch rise in water level for the ten-year critical storm event;~~
- ~~(7) the standards in part 8420.0550 are followed; and~~
- ~~(8) the wetland area receiving credit is a functioning wetland.~~

~~B. Stormwater detention basins allowed for replacement are not eligible for the exemptions in part 8420.0122 and are subject to parts 8420.0500 to 8420.0630.~~

Subp. 14 8. Wetland creations. ~~All other wWetlands creation sites created in nonwetland areas may receive new wetland replacement credit in an amount not to exceed 100 up to 75 percent of the total wetland area created. Except for public projects, a performance bond or other surety shall be secured and held until the local government unit has determined that the design goal for the wetland replacement site, as approved in the replacement plan, is fully achieved.~~

~~A. Wetlands established due to mineral extraction activities may receive replacement credit in accordance with this subpart only for those areas actively mined within 10 years prior to the application for credit.~~

~~B. A. New wetland credit of up to 100 percent for wWetland areas constructed as part of water quality treatment systems may be granted receive replacement credit in accordance with this subpart only if by the local government unit with the concurrence of the technical evaluation panel, provided that:~~

- ~~(3) the wetland area receiving credit is constructed in nonwetland areas;~~
- ~~(6) the wetland area receiving credit is a functioning wetland designed for a maximum 24-inch rise in water level for the ten-year critical storm event;~~
- ~~(8) the wetland area receiving credit is a functioning wetland.~~

~~B. Stormwater detention basins Any portions of water quality treatment systems allowed for replacement are not eligible for the exemptions in part 8420.0122 and are subject to parts 8420.0500 to 8420.0630.~~

Subp. 9. Water quality and habitat improvement. ~~In greater than 80 percent areas, replacement credit may be granted for activities in upland that improve and protect water quality or wildlife habitat of adjacent wetlands as determined by the technical evaluation panel. In order to qualify for credit under this subpart, the wetland must function high for wildlife or water quality either currently or after completion of the proposed action. The activity must also contribute to the long-term sustainability of the adjacent wetland and its functions. Credit may be granted for up to 12.5 percent of the upland area enhanced and preserved. Areas receiving credit must be protected by a permanent conservation easement in a format provided by the board that is granted to and accepted by the state.~~

Permanently treating or removing sources of degradation, establishing habitat corridors with other important resources, and establishing or preserving natural buffers adjacent to qualifying wetlands are examples of activities that may receive credit under this subpart. Credit is not allowed under this subpart for treatment of new or unauthorized stormwater inputs or actions taken to comply with other requirements.

Subp. 10. **Preservation of wetlands owned by the state or a local unit of government.** In greater than 80 percent areas, replacement credit may be granted for up to 12.5 percent of wetland areas and adjacent buffer owned by a state or local unit of government and protected by a permanent conservation easement. The easement must be in a format provided by the board that is granted to and accepted by the board after approval of the replacement or banking plan application. Wetland preservation for replacement credit can only occur after considering replacement as provided under subparts 3 through 9. To be eligible for credit under this subpart, the local government unit must determine that adjacent land use, protection, and ownership are such to prevent future degradation of the wetland's functions, and:
A. preservation will benefit an exceptional resource identified in part XXXX, special considerations;
B. the wetland is of a type or function that is rare, difficult to replace, or of high value to the watershed;
C. the wetland contains a rare or declining plant community; or
D. there is a high probability or likelihood that the wetland will be degraded or impacted and the wetland is a type that is not likely to regenerate, such as northern white cedar.

Subp. 11. **Replacement Credit Conversion.** Replacement plans and banking plans approved after the effective date of this rule must determine replacement credit according to subparts 2 to 10. Public value credit that has been deposited in the state wetland bank or approved as part of a banking plan application prior to the effective date of this rule must convert all of their public value credits according to the following:

A. 100 percent replacement credit for existing public value credit derived from activities within wetlands; and

B. 90 percent replacement credit for existing public value credit derived from upland buffers.

Previously approved public value credit must be converted according to this subpart on the effective date of this rule for deposited credits, and at the time of deposit for future deposits resulting from a previously approved banking plan.

8420.0550XXXX WETLAND REPLACEMENT WETLAND CONSTRUCTION STANDARDS.

Subpart 1. **General requirements.** The standards and guidelines in this part ~~shall~~ **must** be ~~used followed~~ in wetland creation and restoration efforts to ensure adequate replacement of wetland functions and values.

In evaluating a ~~wetland proposed~~ replacement plan, ~~the local government unit must determine whether the wetland type stated as the replacement plan goal will result from the replacement plan specifications. If a wetland type other than the replacement plan goal is likely to result, the local government unit must evaluate the plan based on this determination.~~ ~~the~~ local government unit must **also** determine that the ~~proposed replacement~~ plan will adequately replace ~~functions and the~~ public values ~~of wetlands~~ lost. If ~~the local government unit determines that the proposed replacement is not likely to result in~~ adequate replacement of function and public value ~~is not likely to result~~, the local government must ~~determine what further measures are~~ **either require modifications** necessary to obtain adequate replacement or deny the replacement plan.

Subp. 2. **Specific Design requirements.** The standards in ~~items A to H shall~~ **this subpart must** be ~~followed in met for~~ all ~~replacement~~ wetlands ~~replacements~~ unless the ~~local government unit, with concurrence of the~~ technical evaluation panel, determines that a standard is clearly not appropriate.

A. Water control structures must be constructed using specifications provided in the Minnesota Wetland Restoration Guide or their equivalent. Control structures may be subject to the Department of Natural Resources dam safety regulations.

B. Best management practices must be established and maintained ~~adjacent to the entire perimeter of all replacement wetlands~~ **at the replacement site as necessary to protect the replacement wetland and other**

waterbodies. Erosion control measures must be employed during construction and until permanent ground cover is established.

~~C. For replacement wetlands where native, noninvasive vegetation that is characteristic of the wetland type identified as the replacement goal in part 8420.0530, item D, is not likely to become dominant naturally in a five-year period, the replacement wetland shall be seeded or planted with appropriate native, noninvasive species, as determined by the technical evaluation panel. If the replacement wetland is seeded or planted, the seed or planting stock should be from native, noninvasive species of regional wetland origin. Native, non-invasive vegetation must be established in restored and created wetlands. Each replacement plan must include a vegetation establishment and management plan that specifies provisions for vegetative establishment. The vegetation establishment and management plan must include a goal of establishing plant communities that correspond to the hydrology and landscape position of the replacement site. In evaluating the vegetation establishment and management plan, the local government unit must determine that implementation of the plan will result in the establishment of the appropriate native, non-invasive vegetation within the monitoring period. During the monitoring period, the applicant must take reasonable steps to control invasion by any nonnative or invasive species, for example, reed canary grass, Canada thistle, common buckthorn, spotted knapweed, leafy spurge, purple loosestrife, and Eurasian water milfoil, that would defeat the revegetation goal of the replacement plan.~~

~~D. Erosion control measures as determined by the soil and water conservation district must be employed during construction and until permanent ground cover is established to prevent siltation of the replacement wetland or nearby water bodies.~~

~~E. For all restored wetlands where the original organic substrate has been stripped away and for all created wetlands, provisions must be made for providing an organic substrate unless the technical evaluation panel recommends otherwise. When feasible, the organic soil used for backfill should be taken from the drained or filled wetland dominated by native, noninvasive species. Organic soil for backfill from wetlands dominated by nonnative, invasive species should be avoided.~~

~~F D. The bottom contours of created types 3, 4, and 5 wetlands should be undulating, rather than flat, to provide a variety of water depths, comparable to natural wetlands in the vicinity of the replacement, and be consistent with part 8420.0547 XXXX, subpart 2 X (Ecological Consistency).~~

~~G E. The edge of created or graded wetlands must be comparable to other naturally occurring wetlands of similar hydrogeomorphic position in the major watershed. Sideslopes of created wetlands, graded portions of restored wetlands, and graded buffer strips, must not be steeper than 5:1 10:1, five ten feet horizontally for every one foot vertically, as averaged around the wetland. Sideslopes of 10:1 to 15:1 are preferred. More than half of the slopes of graded areas inside the exterior boundaries of restored, created, or enhanced wetlands must be no steeper than 10:1 unless the technical evaluation panel concurs that steeper slopes are acceptable.~~

~~F. (2) the water quality treatment system design includes pretreatment of runoff before prior to discharge to the replacement wetland area receiving credit, is required, and (5) the wetland replacement area receiving credit must be is separated from the any water quality treatment system that pretreats runoff before prior to discharge to the wetland area receiving credit. Treatment of runoff in this part means any part of a stormwater treatment system needed to comply with water quality treatment requirements of state or local stormwater permits or ordinances. This includes requirements for managing hydraulic bounce as indicated in guidance document 8420.0112 subpart N.~~

~~-OR-~~

~~The hydrology source of replacement wetlands cannot include sediments, pollutants, or nutrients at levels that would degrade the wetland over time. Replacement wetlands must be separated from any water quality treatment system.~~

~~H. Created wetlands should have an irregular edge to create points and bays, consistent with part 8420.0547, subpart 2.~~

Subp. 3. Design Considerations. The following replacement wetland design elements must be considered for replacement wetlands and incorporated to the extent practicable and feasible:

A. Restored wetlands should emulate the hydrology and vegetation of the pre-settlement wetland condition.

B. Buffers should be incorporated into the design of replacement wetlands in areas of concentrated flow and when necessary to provide wildlife habitat corridor connections with other wetlands or habitats.

C. For all restored wetlands where the original organic substrate has been stripped away, and for all created wetlands, provisions must be made for providing an the organic substrate unless the technical evaluation panel recommends otherwise must be sufficient to establish a functioning wetland and to accomplish the goals of the replacement plan. When feasible, the organic soil used for backfill should be taken salvaged from the drained or filled impacted wetland dominated by native, noninvasive species for utilization in the replacement wetland. Organic soil for backfill from wetlands dominated by nonnative, or invasive species should be avoided.

8420.0544 REPLACEMENT FOR PUBLIC TRANSPORTATION PROJECTS.

A. Impacts resulting from public transportation projects must be replaced according to the requirements of this chapter except as provided for in this part.

AB. Wetlands impacted by public transportation projects; may be replaced statewide, only for wetlands affected in greater than 80 percent areas and for public transportation projects, except that wetlands affected in less than 50 percent areas must be replaced in less than 50 percent areas, and wetlands affected in the seven-county metropolitan area must be replaced at a ratio of two-to-one in:

(1) the affected county; outside the seven-county metropolitan area may be replaced statewide, except that impacts in less than 50 percent areas must be replaced in less than 50 percent areas; and

(2) in another of the seven-county metropolitan counties; or area must be replaced in the seven-county metropolitan area, or

(3) in one of the major watersheds that are wholly or partially within the seven-county metropolitan area, but at least one-to-one must be replaced within the seven-county metropolitan area.

Part 8420.0543, item A, subitem (6), does not apply to replacement completed using wetlands banking credits established by an applicant who submitted a complete wetland banking application to a local government unit by April 1, 1996.

B. Replacement of wetlands may be accomplished under the rules for wetland banking as provided for in parts 8420.0700 to 8420.0760.

C. For projects involving draining or filling of wetlands associated with a new public transportation project, and for projects expanded solely for additional traffic capacity, public transportation authorities may purchase credits from the board at the cost to the board to establish credits.

DC. A replacement plan for wetlands is not required for individual public road projects that result in the draining, excavating, or filling of impact wetlands for the repair, rehabilitation, reconstruction, or replacement of a currently serviceable existing state, city, county, or town public road necessary, as determined by the public road authority, to meet state or federal design or safety standards or requirements, excluding new roads or roads expanded solely for additional traffic capacity lanes. This item only applies to authorities for public road projects that:

(1) minimize the amount of wetland draining, excavating, or filling impacts associated with the project and consider mitigating replacing important site-specific wetland functions on site; and

(2) provide project specific plans and information including project locations, wetland boundaries, amount and type of wetlands impacted, demonstration of impact minimization, and any changes or addenda to the board's bank administrator, the technical evaluation panel, the commissioner of natural resources, and members of the public requesting a copy:

(a) submit, at least 30 days prior to construction, project-specific reports, and any changes or addenda, to the board, the technical evaluation panel, the commissioner of natural resources, and members of the

~~public requesting a copy that indicate the location, amount, and type of wetlands drained, excavated, or filled by the project;~~

(b) ~~convene at~~ an annual meeting of the parties required to receive notice, to review projects to be commenced during the upcoming year; or

(c) ~~within 30 days of commencing for~~ minor and emergency maintenance work impacting less than 10,000 square feet, ~~the public road authority may submit project-specific reports, within 30 days of commencing the activity, to the board and the technical evaluation panel that indicate the location, amount, and type of wetlands that have been drained, excavated, or filled.~~

~~Public road authorities that do not follow the process required in this item for a project must submit a complete replacement plan application to the local government unit and provide for replacement of impacts associated with that project according to the requirements of this chapter.~~

GD. For projects involving draining or filling of wetlands impacts associated with a new public transportation road project, and for or public road projects expanded solely for additional traffic capacity, public transportation authorities may purchase credits from the board at the cost to the board to establish credits.

E. The technical evaluation panel ~~shall~~ **must** review minimization and delineation decisions made by the public road authority and provide recommendations regarding on-site ~~mitigation~~ **replacement** if requested to do so by the local government unit, a contiguous landowner, or a member of the technical evaluation panel.

F. Those required to receive notice of public road projects may appeal minimization, delineation, and on-site ~~mitigation~~ **replacement** decisions made by the public road authority to the board according to part [8420.0250](#).

G. Changes to ~~wetland~~ impacts proposed by local road authorities in item **DC** ~~shall~~ **must** be reported to the board within six months from the date of the change being finalized.

H. Except for state public transportation projects, for which the state Department of Transportation is responsible, ~~and public road authority projects that do not meet the requirements of item C,~~ the board must replace public road project impacts, ~~to wetlands and wetland areas of including impacts to public waters if authorized by the commissioner or a delegated authority, that are drained, excavated, or filled by result from~~ local government projects on existing roads. ~~Replacement of the wetlands must occur in critical watersheds.~~

I. Public road authorities, at their discretion, may deviate from federal and state design standards on existing road projects when practical and reasonable to avoid ~~wetland filling or draining impacts~~, provided that public safety is not unreasonably compromised. The local road authority and its officers and employees are exempt from liability for any tort claim for injury to persons or property arising from travel on the highway and related to the deviation from the design standards for construction or reconstruction under this item. This item does not preclude an action for damages arising from negligence in construction or maintenance on a highway.