SECTION 10: WETLANDS PROTECTION

10-1 INTENT AND PURPOSE

A. Intent

1. The City finds that wetlands serve a variety of beneficial functions. Wetlands maintain water quality, reduce flooding and erosion, provide food and habitat for wildlife, provide open space, and are an integral part of the City's environment. Wetlands are important physical, educational, ecological, aesthetic, recreational and economic assets to the City. They are critical to the City's stormwater management and other aspects of health, safety, and general welfare. Regulating wetlands and the land uses around them is therefore in the public interest.

2. In order to protect wetlands, this Ordinance incorporates by reference the Minnesota Wetland Conservation Act of 1991 (hereinafter referred to as the WCA) and any future amendments adopted by the legislature. The City has determined that some activities are exempted from the provisions of the WCA. Any activities exempted from the provisions of the WCA are also exempted from the requirements of this Ordinance, insofar as they relate to the WCA. The provisions of this Ordinance cover all wetlands, including those governed by the Department of Natural Resources.

3. In addition to having regulations that affect the physical impacts within wetland areas, the Minnesota Pollution Control Agency has required the City to address potential non-point source impacts from future development with the establishment of buffer strip standards to complement the existing stormwater standards. A buffer strip is an upland area left in its (or restored to its) natural (non-turf grass) state that surrounds a wetland and reduces negative impacts to wetlands from adjacent development.

   Catch basins and storm sewers typically collect street and front yard drainage and direct the drainage to an appropriately sized pond for pre-treatment prior to discharge to a wetland or waterbody. Back yard drainage typically reaches wetlands or waterbodies without any pre-treatment, thereby allowing lawn and garden chemicals, sediments, pet wastes, fertilizer and other types of contaminants to directly impact the receiving waterbody.

4. The City has found that wetlands vary significantly in the degree that they have been altered. Wetlands exhibit great variations in their overall quality. Therefore, the City has determined that it is necessary and beneficial to protect wetlands

based on their needs for their existing quality.

B. **Purpose**

1. Through the adoption and enforcement of this Ordinance, the City shall promote the general health, safety, and wetland of its residents by both conserving and protecting wetlands, and requiring sound management practices and mitigation when development occurs in the vicinity of wetlands. Through the implementation of this Ordinance, the City seeks to accomplish the following:

   a. To satisfy the requirements of the WCA as it may be amended and, thereby, achieve no net loss of wetlands within the City.

   b. To satisfy the requirements of the Minnesota Pollution Control Agency by treating non-point source pollution that currently is not treated by ponds (primarily back yard drainage) and to limit disturbance from adjacent development by utilizing the appropriately sized buffer strip.

   c. To balance the needs to preserve and protect natural resources and systems with both the rights of private property owners and the need to support the efficient use of developable land within the City.

   d. To promote water quality by maintaining the ability of wetlands to recharge groundwater and receive the discharge of groundwater, to retain sediment and toxins, and to filter nutrients from surface water runoff before it discharges into the Crow River, thus avoiding the contamination and eutrophication of these water features.

   e. To provide wildlife habitat and thereby support the maintenance of diversity of both plant and animal species within the City.

   f. To prevent property damage and the losses associated with flood conditions, and reduce erosion problems.

   g. To preserve the natural character of the landscape through the restoration of wetland ecosystems.

10-2 SCOPE OF APPLICATION

A. Applicants that have preliminary plat approvals previously obtained or have subdivision

approvals within sixty (60) days after Council's approval of this Ordinance are exempt from this Ordinance. Any subdivisions submitted for approval sixty (60) days or more after the Council formally approves this Ordinance shall be subject to this Ordinance.

B. This section shall apply to any applicant for a subdivision approval, or a grading, excavation, or mining permit to allow wetland disturbing activities. No subdivision approval, or grading permit to allow wetland disturbing activities shall be issued until approval of the wetland replacement plan application or a certificate of exemption has been obtained in strict conformance with the provisions of this section and the Minnesota Wetland Conservation Act. This section applies to all land, public or private, located within the City of Delano.

C. This section shall apply to all land containing wetlands, rivers, lakes or streams and land within the setback and buffer areas required by this section. Wetlands, rivers, lakes or streams shall be subject to the requirements established herein, as well as restrictions and requirements established by other applicable Federal, State, and City ordinances and regulations. These wetland protection regulations shall not be construed to allow anything that is otherwise prohibited in the zoning district where the wetland area is located.

D. A wetland is land that meets the definition of "wetlands" set forth in the Minnesota Wetland Conservation Act. The Westland Management Classification will be established at the time of development and will be incorporated onto the City maps. The official maps shall be maintained by the Wetland Conservation Act Agent for Delano. It will be the responsibility of an applicant to have wetland(s) that are located on their property delineate by approved methods as stated in the Wetland Conservation Act and assessed utilizing the Minnesota Routine Assessment Method (Version 2.0 or updated version). All delineations and MNRAM evaluations must be reviewed by the City's Wetland Conservation Act Agent for approval. The City will classify wetlands based on the criteria discussed under Section 10-3 of this Ordinance. The applicant shall get final delineation and MNRAM approval from the Wetland Conservation Act Agent. As with the Wetland Conservation Act, this section allows the convening of a WCA TEP if requested by the applicant or local government unit. The WCA TEP may be utilized to review MNRAM and provide recommendations to the local government unit for wetland classification based on Section 10-3 of this Ordinance. The Wetland Conservation Act Agent or City Council will make the final classification determination taking into consideration the recommendation of the WCA TEP and information provided by the applicant. The decisions regarding wetland classifications cannot be appealed to the Board of Water and Soil Resources. This section is applicable to wetlands that are delineated to be jurisdictional wetlands, based on delineation procedures of the Wetland Conservation Act.

E. This section establishes three wetland classifications as defined in Section 10-3 of this Ordinance: Manage 1, Manage 2, Manage 3.

10-3 WETLAND MANAGEMENT CLASSIFICATION DETERMINATION

In the provisions that follow, the methodology and criteria required for evaluation of floral diversity/integrity are based on those detailed in the ***Minnesota Routine Assessment Method for Evaluating Wetland Functions (Version 2.0),*** Minnesota Board of Water and Soil Resources, September, 1998. The functional value for Floral Diversity/Integrity will be determined from MNRAM which divides wetlands into wetland communities (i.e., wet meadow, shallow marsh, floodplain forest, etc.) and provides a ranking of exceptional, high, moderate, and low to all major wetland communities within a wetland.

An applicant that is proposing any new development will be required to submit a MNRAM form filled out for each wetland if located on the subject property. This MNRAM form will need to be filled out by a consultant trained in wetland science. This ordinance provides the criteria to place wetlands into appropriate classifications.

A functional value index, which is based on a scale of 0.1 to 1.0 with 0.1 being the lowest ranking and 1.0 being the highest ranking, will be utilized to determine an overall functional value index for the wetland.

Floral Diversity/Integrity	Functional Value Index
Exceptional Quality	1.0
High Quality	.075
Moderate Quality	0.5
Low Quality	0.1

Each wetland will be given a ranking based on the functional value for each of the major wetland communities or community within the wetlands. The overall ranking for the wetland will be based on a weighted average that incorporates the area of the wetland community (percent) and the functional value index (0.0 to 1.0) for the wetland community within the wetland.

The overall wetland functional index range for floral diversity/integrity and the associated wetland management classifications are shown in Table 1. Table 2 shows how management classifications are determined for an example wetland.

Table 1. Overall Wetland Functional Index Range for Floral Diversity/Integrity and Stormwater Susceptibility and the Associated Wetland Management Classification	
Floral Diversity/Integrity	*** Wetland Management Classification**
1.0 – 0.60	Manage 1
0.59 – 0.5	Manage 2
Less than 0.5	Manage 3**

* Wetlands located within 300 feet of the Crow River will be raised one management classification from that determined in the method above due to the direct relation of these wetlands in protecting the river from water quality and quantity impacts. Example: Manage 3 basin within three hundred (300) feet of river will have a final classification of Manage 2.

** Wetlands that fall under the Manage 3 classification, as described above, but are less than five thousand (5,000) square feet in size will not receive a wetland management classification.

Table 2. Example Showing How Final Wetland Management Classifications Will Be Determined					
Wetland ID	**Community**	**Floral Diversity/ Integrity**	**Percent Community**	**Floral Diversity/ Integrity**	**% Community * Floral Diversity/ Integrity Value**
AV-W7.2	Deep Marsh	Moderate	0.3	0.75	0.225
AV-W7.2	Shallow Marsh	Moderate	0.6	0.75	0.45
AV-W7.2	Wet Meadow	Low	0.1	0.10	0.01
				TOTAL	0.685

Floral diversity/integrity has a functional index of 0.685. This overall functional value index falls within the Manage 1 classification (see Table 1 above).

10-4 GENERAL STANDARDS

The following standards apply to all lands within and/or abutting a wetland:

A. Building elevation standards shall conform with the standards of the Delano Surface Water Management Plan.

B. Structures intended to provide access across a wetland shall be prohibited unless a permit

is obtained in conformance with State regulations.

C. The Minnesota Pollution Control Agency's Best Management Practices shall be followed to avoid erosion and sedimentation during construction processes.

10-5 WETLAND ALTERATION

This section follows the requirements of the Minnesota Wetland Conservation Act with the following exception:

A. A wetland alteration permit will not be issued for dredging, excavating or grading in all wetlands (including those not regulated by WCA) unless the following standards are followed:

1. The dredging will not have a net adverse effect on the ecological and hydrological characteristics of the wetland.

2. It shall be located as to minimize the impact on vegetation. Exceptions may be allowed in basins dominated by invasive exotic species such as reed canary grass (Phalaris arundinacea).

3. It shall not adversely change water flow.

4. The size of the dredged area shall be limited to the minimum required for the proposed action.

5. Disposal of the dredged material is prohibited within the wetland area unless it is part of an approved wetland replacement plan.

6. Disposal of any dredged material shall include proper erosion control and nutrient retention measures.

7. Dredging in any wetland area is prohibited during waterfowl breeding season or fish spawning season, unless it is determined by the City that the wetland is not used for waterfowl breeding or fish spawning.

8. For wetlands currently not regulated by the WCA, but regulated by this section of the ordinance, special exceptions to excavation, dredging and grading within wetlands will be allowed if the work within the wetland is determined to be valuable for flood storage attenuation by the City Engineer.

10-6 WETLAND BUFFER STRIPS

For subdivisions approved sixty (60) days after this ordinance was passed by the City Council on December 17, 2002, a buffer strip shall be maintained abutting all wetlands.

A. **Design Standards**

1. Buffer strip vegetation shall be considered adequate when the buffer has a continuous, dense layer of perennial grasses, flowers, trees and/or shrubs that have been undisturbed for at least ten (10) consecutive years. Vegetation shall be considered unacceptable if:

   a. It is composed of twenty (20) percent or greater noxious weeds; or

   b. Topography or sparse vegetation tends to channelize the flow of surface water; or

   c. For some other reason, the vegetation is unlikely to retain nutrients and sediment.

2. Where buffer strips or a portion thereof are not vegetated or have been cultivated or otherwise disturbed within ten (10) years of the permit application, such areas shall be replanted and maintained according to each of the following standards:

   a. Buffer strips shall be planted with a seed mix containing one hundred (100) percent perennial native plant species, except for a one time planting of annual nurse or cover crop such as oats or rye.

   b. Native seed shall be of local ecotype and be from stock originating within three hundred (300) miles of the site, and shall represent species that were historically part of the native vegetation of the Wright County region. Seeding rates shall follow 2000 MnDOT Standard Specification for Construction.

   c. Native shrubs or trees may be substituted for forbs. Shrubs and/or trees shall be planted at a rate of sixty (60) plants per acre. Shrubs and/or trees shall be distributed so as to provide a natural appearance and shall not be planted in rows. Plants shall be of local ecotype, and represent species that were historically part of the native vegetation of Wright County.

   d. Native grasses, forbs, trees and shrubs shall be planted by a qualified contractor utilizing methods described in the 2000 MnDOT Standard Specifications for Construction.

   e. No fertilizer shall be used in establishing new buffer areas.

f. Buffer strips (both natural and created) shall be protected by erosion control measures as determined by the City. These must be employed during construction until permanent ground cover is established to prevent siltation of the buffer area and wetland.

g. A walking trail may be established within a wetland buffer area. The trail should be constructed to minimize erosion. An undisturbed area of vegetative buffer at least ten (10) feet in width should remain between the trail and the wetland edge.

h. A wetland strip landscaping plan will need to be submitted to the Local Government Unit WCA Agent for approval. At a minimum, this plan shall include the following:

(1) A plan sheet that shows the location of the buffers within the subdivision. This sheet should also show buffers that are considered acceptable in their current state and identify them as areas that shall not be disturbed during grading.

(2) For buffer areas that are not acceptable, a plan shall be developed that provides species and planting and/or seeding locations.

(3) The following maintenance will be required for seeded areas.

(a) Establishment (spring seeding):

i. Prepare site – late April – May.
ii. Seed – May 1 – July 1.

(b) Maintenance:

i. Mow (6-10 inches) – July 15 – August 15.
ii. Mow – September 1 (optional).
iii. Weed control – mowing should keep annual weeds down. Spot spray thistles, etc.

(c) Establishment (fall seeding):

i. Prepare site – late August – early September.
ii. Seed – late September to freeze up.

(d) Maintenance (following season):

i. Mow (6-10 inches) – June 15 – August 15.
ii. Mow – September 1 (optional)
iii. Weed control – mowing should keep annual weeds down. Spot spray thistles, etc.

i. Applicants may obtain from the City a set of standard seeding and planting specifications for buffer areas which meet all the City requirements.

B. **Buffer Strip Maintenance**

1. The clearing and removal of vegetation in the buffer area is prohibited, except for selective clearing and pruning of individual trees and shrubs which are dead, diseased, noxious weeds, or hazards.

2. Where acceptable to adjacent properties, owners are encouraged to leave dead trees and branches in the buffer area, because they are part of the native natural environment and provide necessary habitat to many birds and native wildlife.

3. All buffer areas are measured from the wetland edge as marked in the field.

C. **Buffer Strip Width**

1. Table 3 provides the wetland buffer average required for each classification. The total acres of buffer required should be determined based on the average width. The buffer width can be adjusted along the wetland boundary as long as the width does not fall below the minimum and the average acres requirements are met. The Wetland Conservation Act agent or City Council will approve the final buffers variations and taken into considerations guidance as provided in Exhibit A.

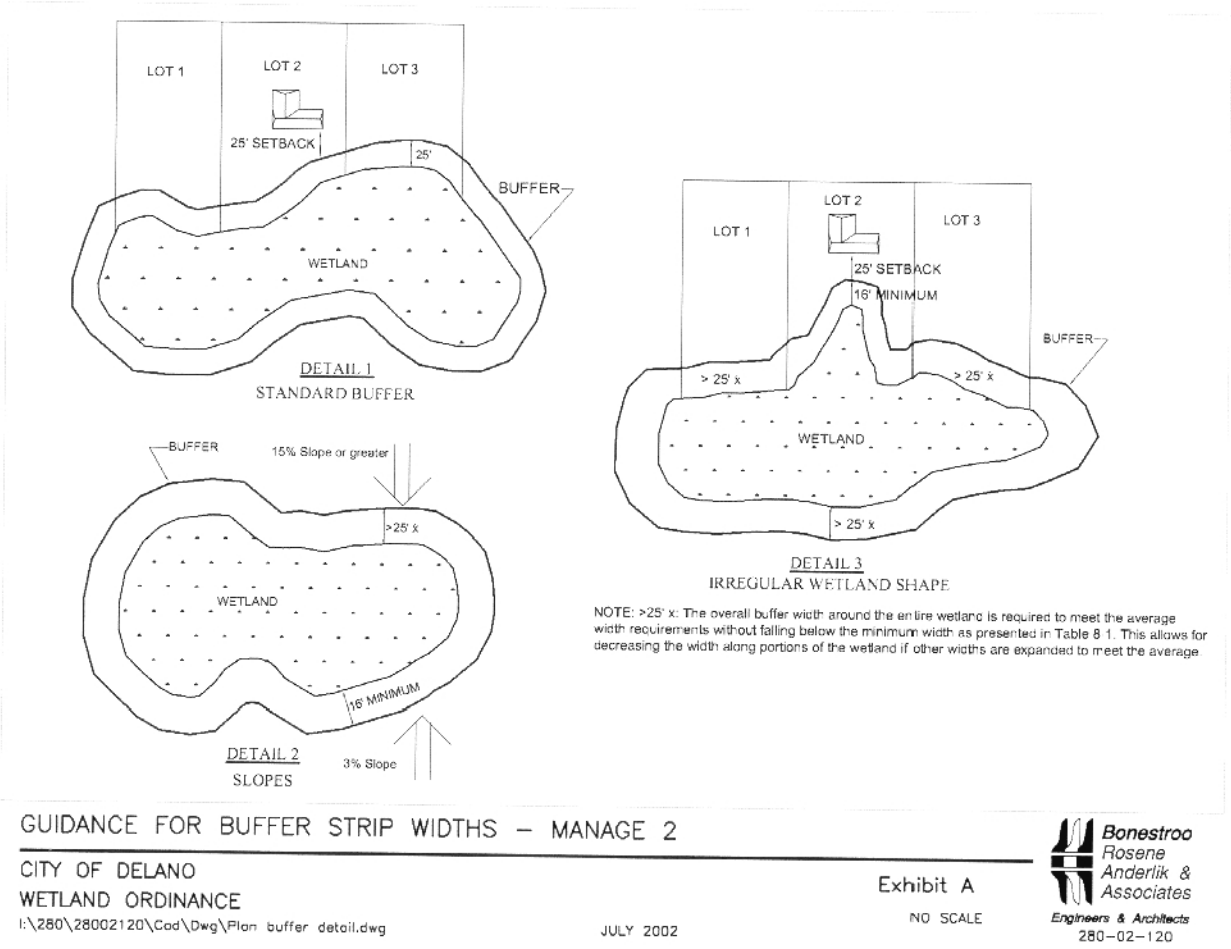
Table 3. Wetland Buffer Strip Widths

Wetland Classification	Permanent Buffer Zone Average Width (feet)	Minimum Permanent Buffer Zone (feet)	Minimum Building Setback from Outer Edge of Buffer (feet)
Manage 1	40	25	25
Manage 2	25	16	25
Manage 3	16	16	25

DNR Protected Waters	50	30	25

Exhibit A provides guidance for buffer strip widths that are presented in this table.

2. Any wetland restored, relocated, replaced or enhanced because of wetland alterations should have at least the minimum buffer area required for the class of wetland involved.



3. For roadways, trails, and driveways, or portions thereof, that are routed across wetlands and are subject to WCA replacement requirements, buffer will be required on the fill slope but fill should not be expanded to accommodate additional wetland buffer.

4. If the area of the buffer has a pre-construction slope of twelve (12) percent or greater, the buffer shall be at the maximum width for the applicant's wetland classification. The use of a meandering buffer area to maintain a natural appearance is encouraged but not required in areas of flat topography.

5. For all lots adjacent to wetlands, the maximum easement on the property shall be sixteen (16) feet. The remainder of the upland buffer and the wetland area will become an outlot to the development. The establishment of the buffer area will be the responsibility of the developer.

10-7 WETLAND AND BUFFER STRIP MITIGATION

Where wetland alteration is approved and mitigation is required, mitigation must result in equal or improved wetland function and value. Mitigation plans must address water quality improvement and maintenance of pre-existing hydrological balance and wildlife habitat. The wetland function and value will include improvement of water quality, maintaining hydrological balance, and provision of wildlife habitat. Mitigation will be performed at ratios required by the Wetland Conservation Act to achieve replacement of the wetland function and value.

A. Mitigation Standards

The following criteria shall be required for wetland or buffer area mitigation:

1. Wetland mitigation will be performed at a ratio required by the Wetland Conservation Act. Buffers will be required to be replaced on the fill slope. When a wetland is completely filled, the buffer area requirement associated with the classification of the wetland that was filled will be required for the replacement wetlands unless replacement is occurring adjacent to a wetland with a higher classification. In this case, the buffer area requirement for the higher wetland classification will apply.

2. Mitigation should always result in equal or improved wetland function and value. The wetland function and value will include improvement of water quality, maintaining hydrological balance, and provision of wildlife habitat.

3. Mitigation shall maintain or enhance the wetland hydrological balance through the following:

    a. Restoration of partially drained wetlands.

    b. Creation of new wetlands.

    c. Restoration of buffer area functions.

4. Mitigation involving the buffer area shall provide landscaping for nesting, and food for wildlife habitat. The buffer area landscape shall provide for wildlife cover and utilize a diversity of native flora (i.e., trees, shrubs, grasses, herbaceous plants) to encourage wildlife diversity.

5. Wetland and buffer area mitigation should be undertaken on site. If this is not feasible, mitigation should occur locally within the sub-watershed. If this is not possible, mitigation should occur outside the sub-watershed, elsewhere in the City.

6. Wetland and buffer area plantings that are completed for mitigation shall meet the standards for plantings specified in Section 10-8.A.

7. Wetland buffers can be utilizes for wetland mitigation credits if it meets the requirements of the Wetland Conservation Act.

10-8 WETLAND RESTORATION REQUIREMENT

An applicant will be required to provide a hydrologic restoration plan and implementation of the plans for wetlands within a proposed subdivision if all the following criteria are met:

A. A wetland that has been hydrologically altered by ditching, drain tile, or a lower outlet elevation but still exists in a partially drained state. Wetlands that have been entirely drained by ditches or tile lines and are no longer jurisdictional wetlands will not have a hydrologic restoration requirement.

B. The wetland, if restored, can be reasonably designed to only impact the hydrology of the property in which it is located. If the restoration will impact the hydrology or drainage of an adjacent landowner, the landowner shall be contacted to determine if they are willing to allow the alteration. If the landowner is not willing to accept the alteration, then the wetland restoration will not be required.

C. The hydrologic restoration can be designed in a way to limit the conversion of upland to wetland. If the wetland is restored, the applicant will be allowed to grade up to the delineated wetland edge to maintain the developable upland of the property. The wetland restoration will not be required if the applicant cannot reasonably restore the wetland without a net increase of five (5) percent or more of wetland on the property.

D. All wetlands within a subdivision will be required to be hydrologically restored if they meet the criteria of one (1) to three (3) above unless it is proven that it is technically or economically not feasible. The goal of the restoration shall be to the previous (prior to hydrologic alteration) wetland type.

10-9 APPLICATION AND ISSUANCE OF PERMIT

A. Subdivisions that have preliminary plat approvals previously obtained or have subdivision approvals within sixty (60) days after Council's approval of this Ordinance are exempt from this Ordinance. Any subdivisions submitted for approval sixty (60) days or more after the Council formally approves this Ordinance shall be subject to this Ordinance and the following will be required as part of the submittal for approval.

1. A grading plan with pipe locations and sizes for the property.

2. Existing and proposed drainage areas to wetlands.

3. Wetland delineation report.

4. Filled out Minnesota Routine Assessment Method (Version 2.0 or newer) (General sections along with Floral Diversity section).

5. Buffer landscaping plan that meets the requirements in Section 10-6 of this Ordinance.

6. Wetland restoration plan if it meets the requirements of Section 10-8 of this Ordinance.

7. Submittals required by the Wetland Conservation Act if wetland impacts are proposed.

B. Ordinance compliance can be approved at the staff level. A wetland replacement plan application approval shall not be issued without having first been reviewed and approved by the City Council.

C. Decisions made under this Ordinance may be appealed to the City's designated Technical Evaluation Panel. Staff costs to the City associated with the appeal shall be borne by the applicant.

10-10 VARIANCES

Variances from the requirements of this section may be granted in accordance with the variance provisions as regulated by the City Code, so long as the variances do not violate the Wetland Conservation Act or its rules.