MN CREP

CP23 and CP23A

Environmental Benefits
Scoring Sheet Instructions

4/14/17

Scoring is a primary means of comparing the environmental benefits of each submitted application for MN CREP. To properly compare the merits of one application to another requires that they be scored following a consistent process. As individual practice types have targeted enrollment acres as part of MN CREP, only applications of like practice types will be scored against each other.

To ensure consistency, the following instructions have been prepared as a guide to completing the scoring sheet for the above referenced eligible MN CREP conservation practice. Please carefully read these instructions for each Section prior to completing the form.

There are four Sections within the document which should be scored. Check the appropriate checkbox or checkboxes within each Section, as instructed. Left click your mouse on a checkbox to activate it. The score sheet automatically calculates the score. If an "Error" message appears, too many checkboxes are activated for that Section. Uncheck the incorrect checkboxes to clear the "Error" message.

A. RESTORATION BENEFITS *(maximum score 50 points)*:

This is the primary scoring Section of the form. It is used to define the extent of anticipated restoration benefits or outcomes that will be achieved should an application be accepted and funded into MN CREP. It represents both the benefits of restoring drained and altered wetlands along with the associated adjoining upland buffer. The purpose of the scoring criteria within this Section is to identify the number and size of wetlands that can be restored, the associated functional gain that can be expected, and the extent of upland nesting and other wildlife habitat that will be included as a buffer around the wetlands.

This Section is divided into two parts that represent two different wetland landscape settings often associated with wetland restoration projects. The first part represents the restoration of drained and altered depressional wetlands. The second part represents the restoration of drained and altered non-depressional wetlands. Scoring of an application within this Section can only occur in one of these wetland landscape settings. Generally, the restoration of depressional wetlands provides greater functional value and therefore higher scoring. Definitions and examples of depressional and non-depressional wetlands are included in the definitions Section below.

When completing the scoring sheet, a landscape setting based on the characteristics of the site needs to be determined. Refer to the county hydric soils list for guidance on determining landscape position (depressional, floodplain, flats, swales etc.) by hydric soil map unit and hydric criteria. General hydric criteria are provided in the CP23 and CP23A CCRP Practice Eligibility and Suitability Worksheets.

If an application contains restorable drained and altered wetlands in both depressional and non-depressional landscape settings, choose the landscape setting that provides the greatest score. An error message will occur if attempting to score both depressional and non-depressional wetlands within a scoring sheet.

The following definitions should be used when completing this Section of the form:

Depressional Wetlands – Wetlands occurring in topographic land depressions within steeply, mildly sloping, and in some cases flat landscapes. For the purposes of this definition, restored depressional wetlands will include *sedge meadows, seasonal* or *temporary wetlands*, *shallow marshes*, and *deep, open water marshes*.

Non-Depressional Wetlands – These types of wetlands occur in a variety of landscapes including areas with steeply or mildly sloping topography, riverine areas, fringe areas to lakes and other larger water bodies, and large, relatively flat areas. For the purposes of this definition, restored non-depressional wetlands will include *fens*, *shrub swamps*, *floodplain forests*, *marshes*, and *bogs.*

Farmed Only Wetlands– There is no record or evidence of current hydrologic manipulation (drainage) of the wetland and it is cropped during years of normal precipitation. These wetlands are often mapped as **"W's"** by NRCS. Crop cessation and establishment of hydrophytic vegetation or natural colonization if best professional judgement determines that an adequate seedbank is present shall meet minimum restoration requirements and allow these types of wetlands to be scored under this category.

Drained Wetlands – These are wetlands with hydrology altered or removed by drainage, fill, or other means. They are often mapped by NRCS as Farmed Wetlands **"FW's"** or Prior Converted Wetlands **"PC's"**. These wetlands shall be included in the scoring only if substantive hydrology restoration can occur and hydrophytic vegetation or natural colonization if best professional judgement determines that an adequate seedbank is present be established as part of enrollment. Wetlands that will be minimally restored as defined in the CP23 and CP23A CCRP Practice Eligibility and Suitability Worksheets are not allowed scoring in this Section.

The current condition of each wetland allowed scoring in this category must be assessed in terms of drainage effectiveness or loss of hydrologic function that has occurred. This results in having to choose either "**Effectively Drained**" or "**Partially Drained**" when scoring in this category.

Effectively Drained - Hydrology has been effectively removed from a majority (more than 50 percent) of the wetland area allowing those acres to be planted in normal years of precipitation. No primary indicators of wetland hydrology (presence of hydrophytic vegetation, flooded or drown out crop, surface water, inclusion of non-cropped areas) are evident in the effectively drained portion of the wetland in those years of normal precipitation.

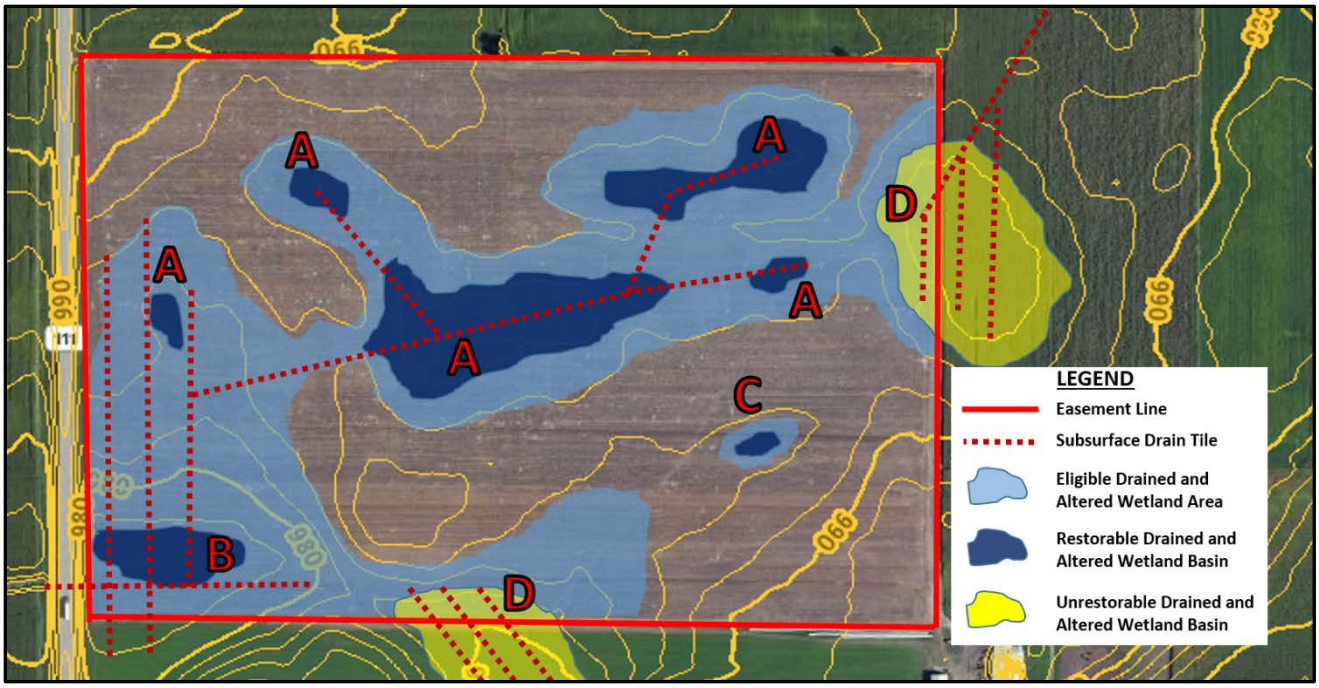
Partially Drained – Hydrology has been partially removed from a wetland that does not meet the definition of being "effectively drained". A majority of the wetland area exhibits one or more primary indicators of wetland hydrology in years of normal precipitation.

Basin - The basin shall be determined as the area of restored ponded water (temporary or permanent) under normal conditions of a depressional wetland. The basin size is typically not the same as the restored wetland size. The size of the restored wetland would typically be larger and includes the full extents of restored wetland hydrology and vegetation, including fringe areas that do not normally pond water. Under this definition, a defined wetland area could contain more than one depressional basin within it. A depressional area that is split by a proposed embankment shall be allowed to be considered as multiple basins only when said embankment is necessary to achieve restoration and is feasible and practicable to construct.

Size of Largest Basin – Refers to the size of the largest depressional wetland basin than can be restored as part of the application (see basin definition).

Total Upland to Wetland Ratio – Refers to the ratio of all upland acres to the total drained and altered wetland acres determined for the application.

Section A - CP23a Scoring Example:



The CP23A eligible wetlands within this 100 acre application for CREP are affected by tillage, and to varying degrees, subsurface tile drainage. Both depressional and non-depressional drained and altered wetlands exist within the site. Scoring the site using the depressional wetland landscape within the upper part of Section "A", however, provides the greatest score. The upland buffer to wetland ratio is just over 1:1 for this site.

The "A" labeled wetland basins are effectively drained and fully restorable. These wetland basins are all eligible for scoring. The largest basin is 6.4 acres in size which provides for additional score points.

The "B" labeled wetland basin does not appear to be fully restorable due to potential adverse impacts to adjoining properties. It is determined though that enough hydrology can be restored upon completion of appropriate tile blocks to allow this basin to be scored.

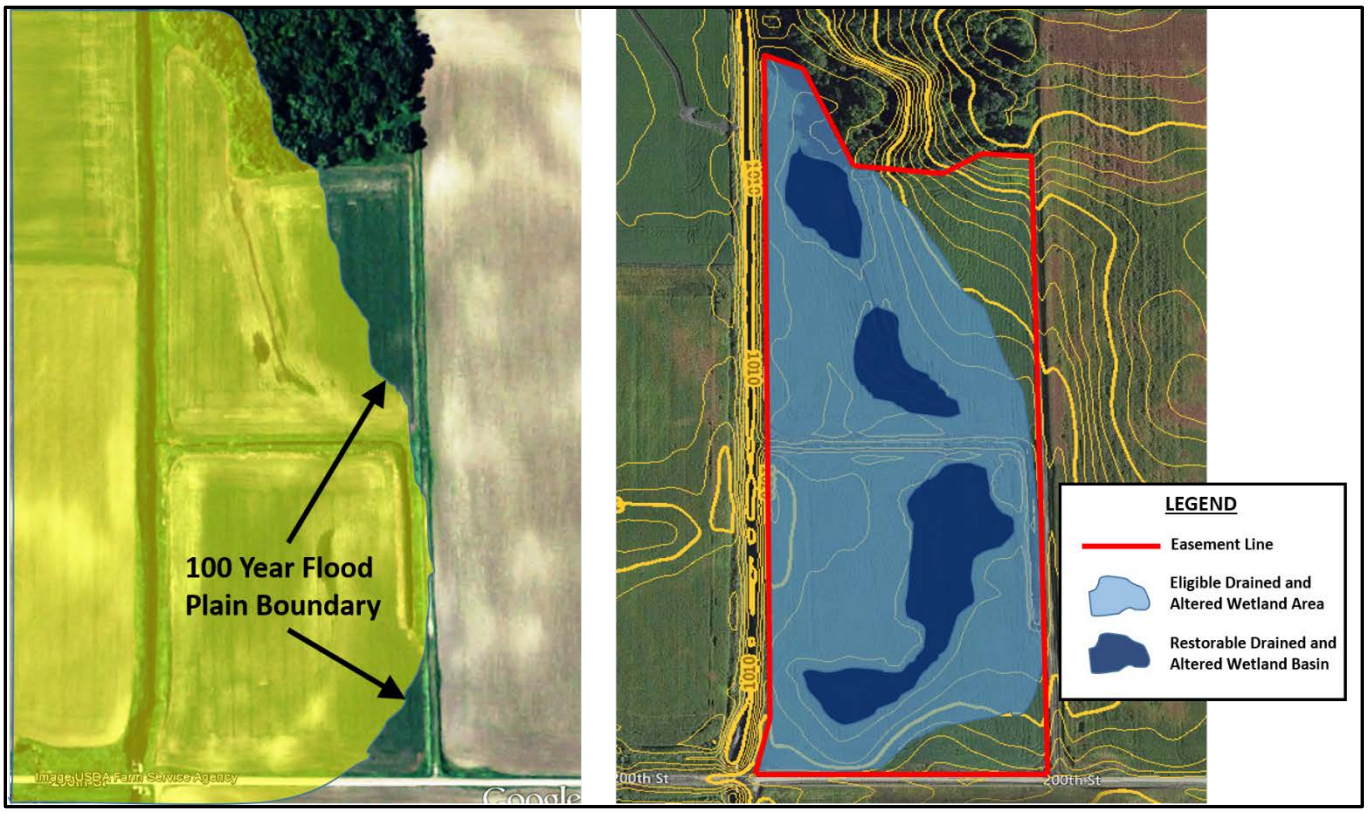
The "C" labeled farmed wetland basin is not impacted by drainage. It is scored in the "Farmed Only" category.

The "D" labeled wetland basins while drained, are not feasible or possible to restore due to impacts to the adjoining properties. These areas are eligible for enrollment as wetlands and will be considered minimally restored upon establishment of vegetation. They cannot however, be allowed scoring.

A. RESTORATION BENEFITS *(maximum score capped at 50)* **Score** **47**

Wetland Condition →		*Effectively Drained*	*Partially Drained*	*Farmed Only*		Size of Largest Basin (acres)		Total Upland : Wetland Ratio
	No. of Basins	Check one *(if applicable)*	Check one *(if applicable)*	Check one *(if applicable)*		Check one *(if applicable)*		Check one *(if applicable)*
Restorable Depressional Wetlands (Basins)	1	☐ 10	☐ 6	☑ 3	AND	< 6 ☐ 0	AND	< 1:1 ☐ 0
	2	☐ 15	☐ 10	☐ 5		6-10 ☑ 7		≥ 1:1 ☑ 2
	3	☐ 20	☐ 14	☐ 7		11-20 ☐ 15		≥ 2:1 ☐ 6
	4	☐ 25	☐ 17	☐ 9		21-30 ☐ 20		≥ 3:1 ☐ 8
	5	☐ 30	☐ 21	☐ 11		31-40 ☐ 25		≥ 4:1 ☐ 10
	6	☑ 35	☐ 24	☐ 13		> 40 ☐ 30		
	≥ 7	☐ 40	☐ 28	☐ 15				

Section A - CP23 Scoring Example 1:



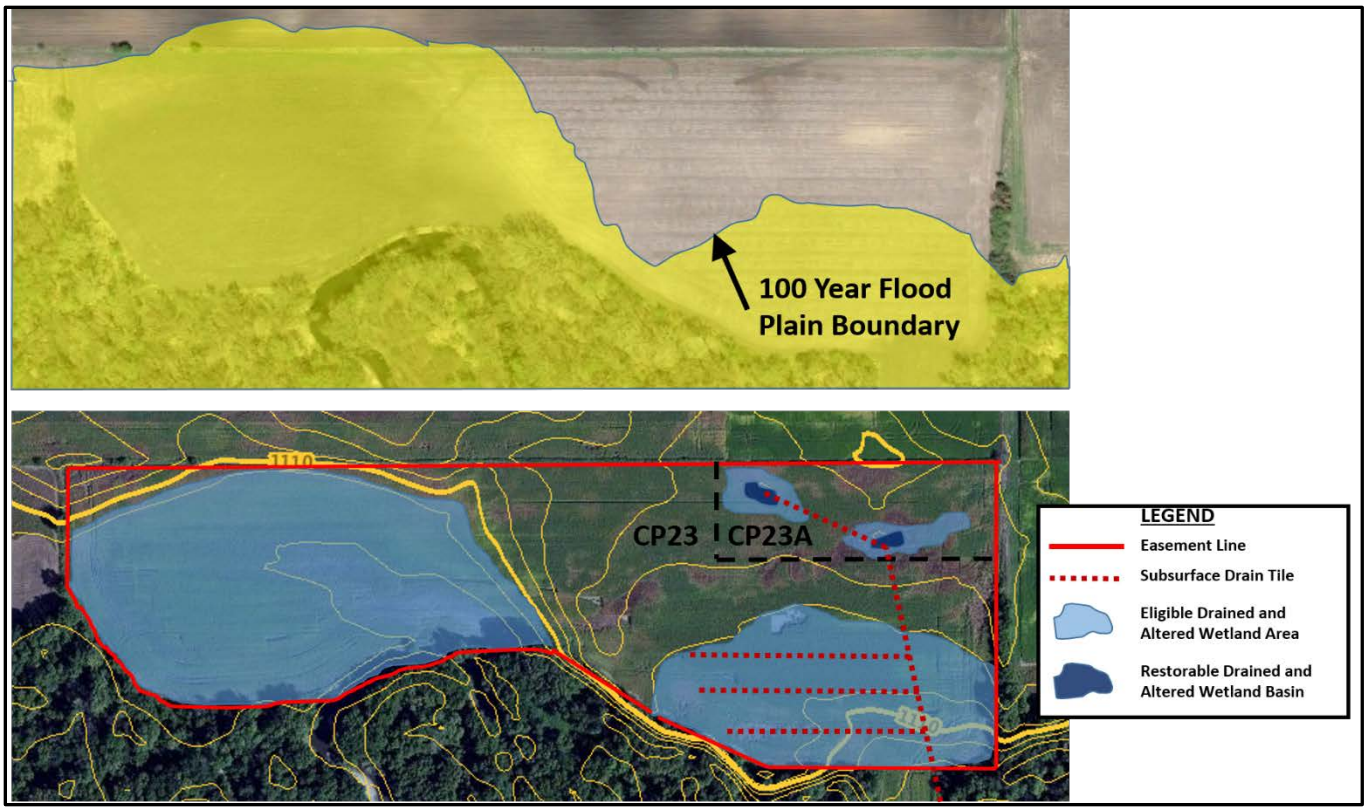
The CP23 eligible wetlands within this 30 acre application for CREP are all within the 100 year floodplain and affected by surface drainage ditches. Three restorable depressional wetlands (basins) have been identified within the application area. They appear to be effectively drained and restorable. The application area is not large in size so scoring it using the depressional wetland landscape within the upper part of Section "A" provides the greatest score.

The upland buffer to wetland ratio is under 1:1 for this site and the largest restorable basin is less than 6 acres in size.

A. RESTORATION BENEFITS *(maximum score capped at 50)* **Score** **20**

Wetland Condition →		*Effectively Drained*	*Partially Drained*	*Farmed Only*		Size of Largest Basin (acres)		Total Upland : Wetland Ratio
	No. of Basins	Check one *(if applicable)*	Check one *(if applicable)*	Check one *(if applicable)*		Check one *(if applicable)*		Check one *(if applicable)*
Restorable Depressional Wetlands (Basins)	1	☐ 10	☐ 6	☐ 3	AND	< 6 ☑ 0	AND	< 1:1 ☑ 0
	2	☐ 15	☐ 10	☐ 5		6-10 ☐ 7		≥ 1:1 ☐ 2
	3	☑ 20	☐ 14	☐ 7		11-20 ☐ 15		≥ 2:1 ☐ 6
	4	☐ 25	☐ 17	☐ 9		21-30 ☐ 20		≥ 3:1 ☐ 10
	5	☐ 30	☐ 21	☐ 11		31-40 ☐ 25		
	6	☐ 35	☐ 24	☐ 13		> 40 ☐ 30		
	≥ 7	☐ 40	☐ 28	☐ 15				

Section A - CP23 Scoring Example 2:



The drained and altered wetlands within this 120 acre CREP application lie both within and outside of the 100 year floodplain. The wetland areas within the 100 year floodplain must be enrolled under the CP23 practice and conversely, wetland areas outside of the 100 year floodplain must be enrolled under the CP23A practice. In this example, both CP23 and CP23A practices should be included as part of the application.

Only one practice type can be scored as part of the application. Per program criteria, the CP23 practice would be scored since it constitutes the greatest acreage of the two practices within the application area. Two distinct wetland areas are located within the identified CP23 area. Neither of these two wetland areas is depressional so they should be scored using the non-depressional wetland landscape within the lower part of Section "A". Note that the two CP23A depressional wetlands do not get scored.

The west CP23 wetland is just over 40 acres in size and is not impacted by drainage. It is scored in the "Farmed Only" category. The east CP23 wetland is about 23 acres in size and is effectively drained by subsurface tile allowing it to be scored under the effectively drained category. The upland to wetland ratio is just under 1 to 1.

A. RESTORATION BENEFITS *(maximum score capped at 50)* **Score** **13**

Wetland Condition →		*Effectively Drained*	*Partially Drained*	*Farmed Only*		Total Upland : Wetland Ratio
	Wetland Acres	Check one *(if applicable)*	Check one *(if applicable)*	Check one *(if applicable)*		Check one *(if applicable)*
Restorable Non-Depressional Wetlands	< 10	☐ 5	☐ 3	☐ 1	AND	< 1:1 ☑ 0
	10 - 40	☑ 9	☐ 6	☐ 2		≥ 1:1 ☐ 2
	41 - 80	☐ 12	☐ 8	☑ 4		≥ 2:1 ☐ 6
	81 - 120	☐ 16	☐ 11	☐ 6		≥ 3:1 ☐ 10
	≥ 121	☐ 20	☐ 14	☐ 8		

B. ECOLOGICAL/HABITAT BENEFITS *(maximum score 20 points)*:

This Section of the form is used to help further define the benefits of CP23 and CP23A applications for MN CREP with respect to size of the site. Larger easement parcels provide better wildlife habitat and are less prone to the edge effects caused by smaller parcel sizes. Using a sliding scale, CP23/CP23A applications with larger acres being enrolled are allowed more points.

Applications in close proximity to other permanently protected habitat are similarly important in building complexes and minimizing predation. Permanent Habitat (or Permanently Protected Land) shall mean those areas that are permanently protected or soon will be protected, including but not limited to: Approved CRP offers as a part of this MN CREP, DNR WMAs, SNA's, Public Waters/Wetlands, USFWS WPAs, State and Federal Wildlife Refuges, Nature Conservancy Preserves and Managed Areas, State and National Forests, perpetual RIM, WRP, and USFWS Conservation Easements, etc.

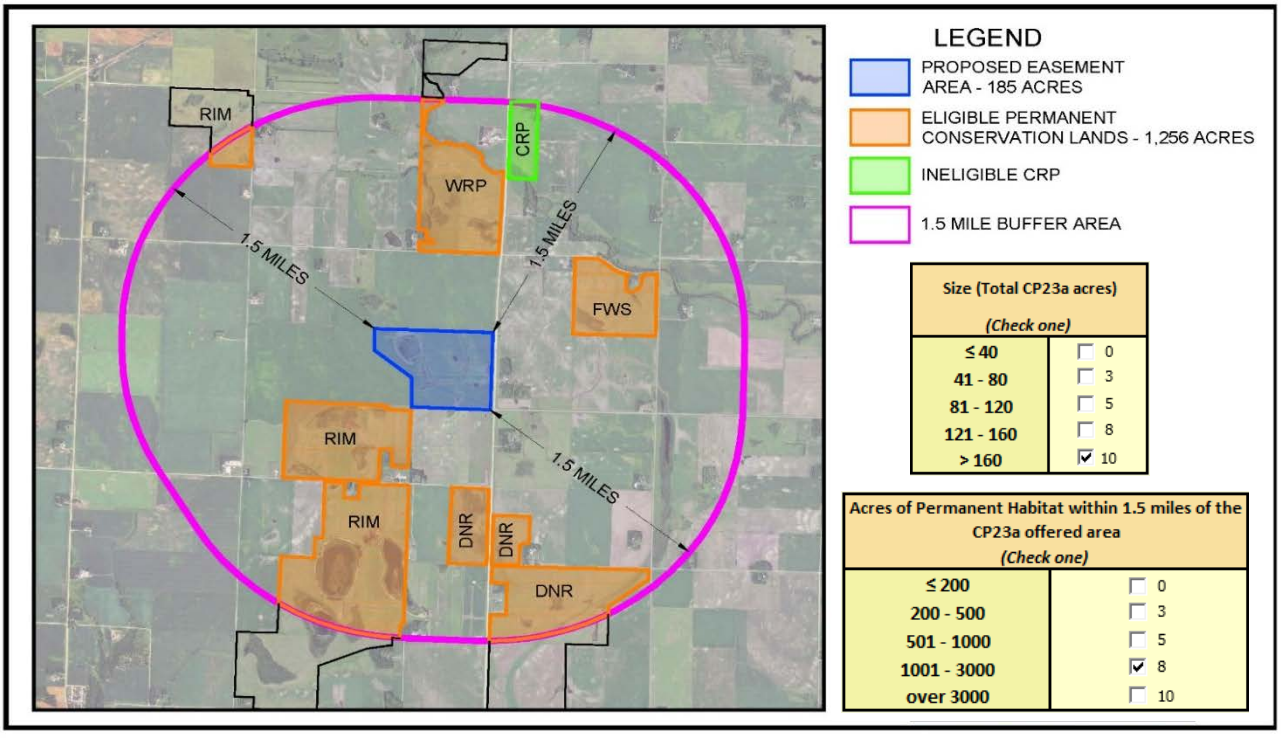
This should not include CRP lands or lands enrolled in other short term conservation programs.

CP-23a additional guidance: Points are allowed depending upon how much other habitat is permanently protected within a 1.5 mile radius of the proposed application boundary.

To quickly show the 1.5 mile buffer in your mapping software, perform the following steps:

1. Enable the "editor" toolbar: Customize > Toolbars > Editor
2. With the editing toolbar selector, select your CREP easement boundary shapefile/layer
3. On the editor toolbar, select "Editor" and then "Start Editing"
4. If a dialog appears, choose your CREP easement boundary shapefile/layer and hit "OK"
5. On the editor toolbar, select "Editor" and then "Buffer"
6. Click "Template" and again choose your CREP boundary shapefile/layer and hit "OK"
7. Under Distance, enter exactly "1.5mi" including the units
8. Your 1.5 mile buffer will now appear. You can optionally save your edits to retain the buffer.
9. Measure the acreage of any "permanent conservation lands" within the buffer distance using the ArcGIS Measure Tool: http://resources.arcgis.com/en/help/main/10.1/index.html#//00s500000022000000

Section B Scoring Example:



C. ADDITIONAL WILDIFE BENEFITS *(maximum score 20 points)*:

Landscape position is also an important factor in maximizing wildlife value. Up to 20 points may be earned in this Section depending upon where in the state the parcel is located. Score is based using Appendix 1 and GIS data that was originally developed by the USFWS HAPET Office but revised by USDA NRCS and BWSR to include the 54 county CREP area. This data and map were developed using grassland nesting waterfowl along with other migratory species and wetland dependent wildlife as primary factors. If the easement boundary crosses a landscape position then score the majority of the offered area (greater than 50%) and claim the respective score on the scoresheet.

Use ***Appendix 1: MN CREP Additional Wildlife Benefits Map***

D. ADDITIONAL CONSIDERATIONS *(maximum score 10 points)*:

Additional water quality and other environmental considerations are credited in this section. Mark all applicable checkboxes. Documentation must be provided for Considerations 1 thru 3 in this Section. This documentation should be in the form specified below.

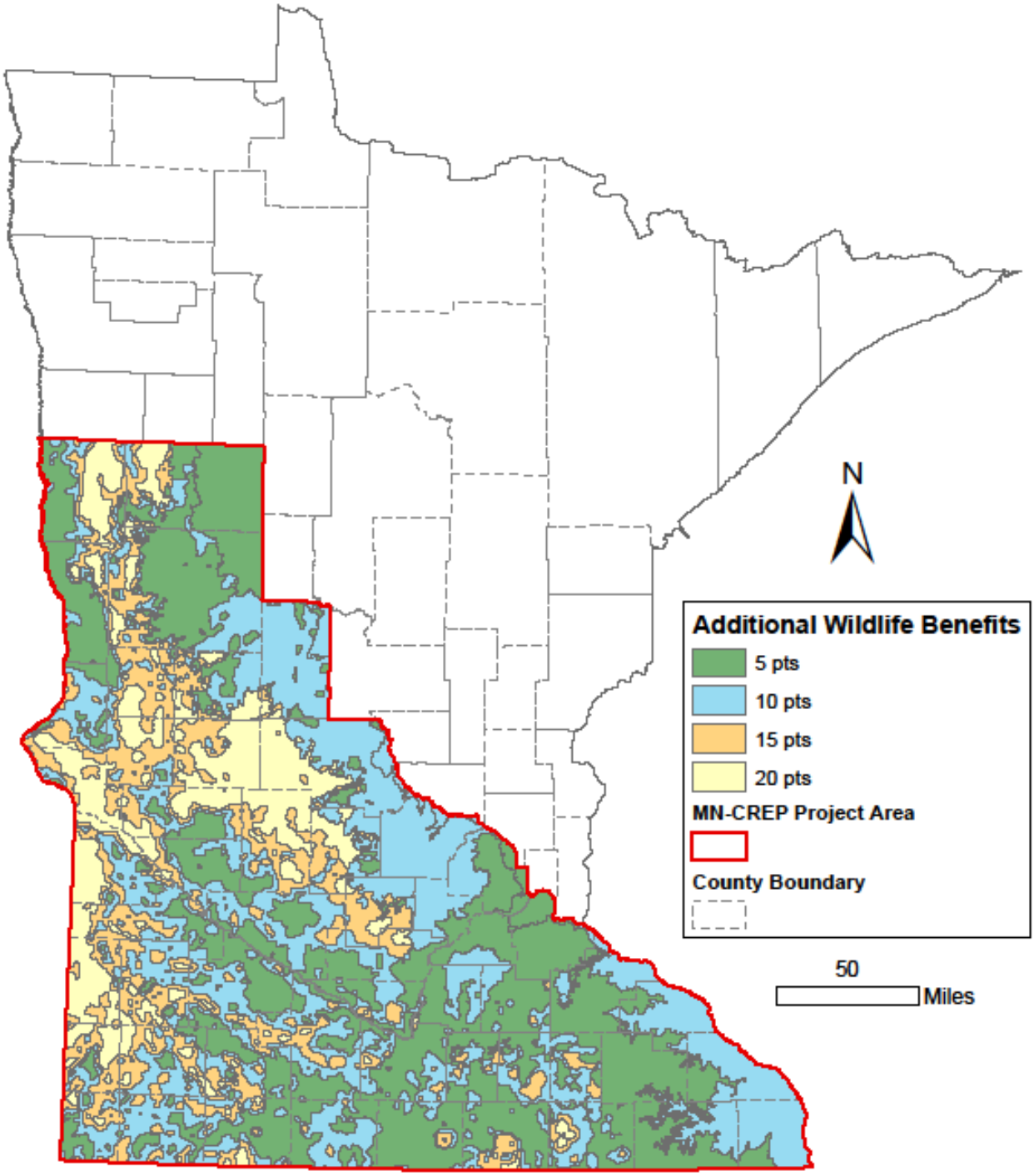
Consideration 1: Aerial photo with applicable GIS layer displayed of application's location with respect to Prairie Plan Core or Corridor areas. Use ***Appendix 2: Prairie Core and Corridors Map***

Consideration 2: Aerial photo with applicable GIS layer displayed of application's location with respect to 1 mile radius of Federal or State listed Endangered or Threatened species.

Consideration 3 (only applicable to CP-23a): Aerial photo with applicable GIS layer displayed of application's location with respect to 1/2 mile radius of downstream DNR Protected Waters or designated aquatic management areas.

Refer to the MN CREP-signup webpage for access to GIS shapefiles used in score determinations.

Appendix 1 – MN CREP Additional Wildlife Benefits Map



Appendix 2 - Prairie Core and Corridors Map