



GUIDELINES FOR WETLAND COMPENSATORY MITIGATION IN WISCONSIN



WISCONSIN DEPARTMENT OF NATURAL RESOURCES
U.S. ARMY CORPS OF ENGINEERS-ST. PAUL DISTRICT
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Guidelines for Wetland Compensatory Mitigation in Wisconsin

Wisconsin Department of Natural Resources
U.S. Army Corps of Engineers–St. Paul District
U.S. Environmental Protection Agency–Region V
U.S. Fish and Wildlife Service

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1. PURPOSE OF THIS DOCUMENT

This document establishes guidelines for required compensatory mitigation for permitted wetland loss in Wisconsin. These guidelines are for agency personnel, mitigation bank sponsors, permit applicants, and others in meeting the requirements of Section 404 of the Clean Water Act (including the USEPA 404(b)1 Guidelines and the November 1995 Federal Mitigation Banking Guidance), Section 10 of the Rivers and Harbors Act, Section 281.37 of the *Wisconsin Statutes*, Chapter NR 350 of the *Wisconsin Administrative Code*, and other applicable federal, state, and local statutes, regulations, guidelines, and ordinances. Wisconsin Department of Transportation projects will continue to be reviewed in accordance with the DNR/DOT Cooperative Agreement and the *Wetland Mitigation Banking Technical Guideline* dated July 1993 (as amended).

These guidelines will not tell someone how to construct a wetland compensation site, but do provide details on what information is needed before a compensation project may proceed. Enforcement authority associated with compensatory mitigation follows the authorities listed in the pertinent statute or law under which the permit, permit conditions, contract, or order requiring compensatory mitigation was issued.





2. DEFINITIONS

For the purposes of this document the following terms are defined below.

Bank Document A document that contains specifications pertaining to the establishment, operation, and maintenance of a mitigation bank, identification of the goals, objectives, and procedures for operation of the bank, and incorporates the appropriate terms and conditions of Chapter NR 350, *Wisconsin Administrative Code*, and these guidelines.

Bank Sponsor Any public or private entity responsible financially for establishing and, in most cases, operating a mitigation bank.

Compensation or Compensatory Mitigation The restoration, enhancement, or creation of wetlands expressly for the purpose of compensating for unavoidable adverse impacts that remain after all appropriate and practicable avoidance and minimization has been achieved.

Compensation Ratio The number of acres a project proponent must provide as compensation compared to the acres of wetland lost from a permitted project.

Compensation Search Area The area in which an applicant may provide compensation defined as an area that includes the Geographic Management Unit (GMU) of the impacted wetland, the county of the impacted wetland, and a circle with a 20-mile radius from the impacted wetland.

Compensation Site Plan A comprehensive document prepared by a project proponent or bank sponsor that provides a thorough description of a proposed compensation project.

Corrective Action An action taken by a project proponent or bank sponsor to correct deficiencies in a wetland compensatory mitigation project as early as possible after the problem is noticed. Problems may be the result of poor construction techniques, failure to install planned features, unexpected design deficiencies, and natural causes.

Creation A technique involving the establishment of a wetland where one did not historically exist (generally within the last 200 years).

Credit A unit of measure, in acres, representing the accrual or attainment of wetland functions and values at a compensation site.

Debit A unit of wetland value, in acres, that is withdrawn from the wetland mitigation bank upon approval of a banking transaction.

Degraded Wetland Wetland subjected to deleterious activities such as drainage, grazing, cultivation, increased stormwater input, and partial filling, to the extent that natural wetland characteristics are severely compromised and where wetland function is substantially reduced.

Enhancement Activities conducted in existing wetlands, which increase one or more wetland functions.

Established A compensation site that the permitting agency or MBRT (for bank sites) determines has met performance standards set forth in the Compensation Site Plan.

Exchange The establishment of a wetland type different from the one that exists at the site, usually achieved by modifying water levels or scraping ponds at an existing wetland.

Farmed Wetlands As defined by the National Food Security Act Manual, wetlands that were both manipulated (e.g., drained, filled) and used to produce an agricultural commodity at least once prior to December 23, 1985, but that still meet certain wetland hydrology criteria and are not abandoned. See also definition for “prior converted croplands.”

Functional Values The physical, chemical, and biological processes or attributes that occur in a wetland system and how society finds certain functions beneficial.

Geographic Management Unit (GMU) or Basin One of the DNR’s 22 statewide administrative management units based on the major river drainage basins of the state (see Figure 3.2, page 10).

In-Kind Replacement Wetland loss replaced with wetland from a compensation project of the same or similar plant community type (as listed by Eggers and Reed [1997] in *Wetland Plants and Plant Communities of Minnesota and Wisconsin*).

Management Actions taken at a compensation site to establish and maintain desired habitat and human use conditions including water level manipulations, herbicide application, mechanical plant removal, prescribed burning, fencing, signage, and vandalism repair.

Mitigation Bank A system of accounting for wetland loss and compensation that includes one or more sites where wetlands are restored, enhanced, or created to provide transferable credits to be subsequently applied to compensate for adverse impacts to other wetlands.

Mitigation Bank Review Team (MBRT) An interagency group of federal, state, local, and tribal regulatory and resource agency representatives who oversee the establishment, use, and operation of a mitigation bank.

Mitigation Bank Site A site that is recognized formally by the MBRT where wetlands are restored, enhanced, or created expressly for the purpose of providing compensatory mitigation credits in advance of authorized impacts to similar resources. The development of the bank site accrues credits that can be sold or used in accordance with an approved Bank Document.

Mitigation Summary Sheet A one-page document, prepared by a project proponent, that outlines key information to be used by permitting agencies for tracking purposes.

Monitoring Plan A specific program of data collection, conducted, analyzed, and reported by a project proponent or bank sponsor, which documents the physical, biological, hydrological, and human-use characteristics of compensation site wetlands.

On-Site A compensation site located within one-half mile of the impacted wetland.

Performance Standards The list of quantifiable measures or objectives identified for a compensation site in the compensation site plan, agreed to in advance by the project sponsor and permitting agency or MBRT, that must be met before a compensation site can be deemed “established.”

Practicable Available and capable of being implemented after taking into account cost, available technology, and logistics in light of overall project purposes.

Preservation The protection of ecologically important wetlands or other aquatic resources in perpetuity through the implementation of appropriate legal and physical mechanisms.

Prior Converted Cropland As defined by the National Food Security Act Manual, a wetland that was both manipulated (e.g., drained, filled) and used to produce an agricultural commodity prior to December 23, 1985, but that fails to meet certain hydrology criteria. See also definition of “farmed wetlands.”

Project-Specific Compensation that does not involve purchase of bank credits.

Restoration A technique involving the re-establishment of historic (pre-European settlement) wetland conditions and functions to the maximum extent practicable, at a site where they have ceased to exist, which can include focus on re-establishing hydrologic conditions, plant communities, land contours, and surrounding land conditions.

Watershed A drainage area or basin that contributes surface water and/or groundwater to a given location in the landscape (usually a specific lake, stream section, or wetland) used interchangeably with “drainage basin” or “contributing area.” **Sub-watershed** refers to a portion of a watershed, and this term is often used to mean a localized area.

Waters of the United States Those areas subject to federal regulatory authority pursuant to Section 404 of the Clean Water Act, as defined at 33 CFR part 328.3(a).

Wetlands Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted typically for life in saturated soil conditions.

Wetland Type Wetland plant communities as listed in by Eggers and Reed (1997) in *Wetland Plants and Plant Communities of Minnesota and Wisconsin*.





3. MEETING THE COMPENSATION REQUIREMENT

A. Early Consultation

Project proponents are encouraged to consult with the permitting agency in pre-proposal conferences or during the permit application process to identify appropriate options. Compensatory mitigation may consist of development of a project-specific compensation site or purchase of bank credits. Development of a project-specific compensation site or bank site may involve a combination of techniques to offset adverse impacts resulting from an authorized activity.

B. Timing of the Compensation

The compensation efforts must be implemented concurrent with or prior to construction of the project causing the wetland impacts. Where construction work is involved for development of a compensation site, the work should begin before or at the same time as the work for the authorized activity (except in cases of after-the-fact permits). Failure to conduct the compensation requirements in a timely manner may result in forfeiture of performance bonding and/or suspension or revocation of a permit.

C. Compensation Techniques

Several techniques for developing a compensation site (either project-specific or bank site) are available, and it is likely that a combination of techniques will be required for any given site proposed. The techniques include:



RESTORATION or re-establishment of historic (pre-European settlement) wetland conditions and functions, to the maximum extent practicable, to a site where they have ceased to exist due to drainage, filling, cultivation, grazing or other disturbances. **This is the preferred compensation technique.** Restoration of former wetlands may involve: re-establishing historical hydrology and topography on a site by removing fill, re-grading or re-contouring, plugging or filling ditches, breaking drainage tile; re-establishing wetland plant communities via site preparation, seeding, and planting; and manipulating water levels to restore hydrology.



ENHANCEMENT activities conducted in existing wetlands, which increase one or more wetland functions. Enhancement of substantially degraded wetlands (such as farmed wetlands that still meet jurisdictional wetland criteria) may involve: re-establishing historical hydrology and topography on a site by removing fill, re-grading or re-contouring, plugging or filling ditches, breaking drainage tile; re-establishing



wetland plant communities via site preparation, seeding, and planting; and manipulating water levels to restore hydrology. Exchange from one wetland type to another will generally not be approved unless the applicant can demonstrate substantial benefits of such work.
















CREATION of wetland where one did not historically exist (based upon geophysical evidence). Creation along the edges of existing wetlands or in landscape settings that are conducive to improving or creating certain wetland functions may be acceptable.

D. Compensation by Wetland Type

1. “In-kind” is preferred

“In-Kind” refers to replacement with an ecologically similar plant community (i.e. plant communities as listed by Eggers and Reed [1997] in *Wetland Plants and Plant Communities of Minnesota and Wisconsin*, Figure 3.1) to that lost. Due to difficulties with measuring and enumerating specific functions and values of a wetland that is impacted or of a mitigation project, acres by wetland type (plant community type) is used as a surrogate for functional values. Restoration or creation of ecological communities similar in type (and thus with similar functional values) to those being impacted is preferred over out-of-kind replacement. This should not be construed to mean that if the project impacts a degraded sedge meadow dominated by the invasive reed canary grass, that the preference is to replace with a reed canary grass meadow. Rather, the preference would be to replace that loss with a sedge meadow restoration to the extent practicable.

Figure 3.1: Wetland Plant Communities in Wisconsin

 Shallow Open Water	 Coniferous Bog
 Deep Marsh	 Shrub-Carr
 Shallow Marsh	 Alder Thicket
 Sedge Meadow	 Hardwood Swamp
 Fresh (Wet) Meadow	 Coniferous Swamp
 Wet Prairie	 Floodplain Forest
 Calcareous Fen	 Seasonally Flooded Basin
 Open Bog	

2. Creation of Ponds or Deepwater Habitats as Compensation is Discouraged

Past experience with compensatory mitigation projects in Wisconsin and elsewhere in the United States has shown that creation of small, deep ponds with a ring of emergent vegetation has had a poor track record in terms of species diversity, nuisance species invasions, and water quality problems. Unless the wetland impacted by the permitted activity is a deep marsh or shallow open water community, such compensation proposals will generally not be accepted.

E. Compensation Location

1. Replace On-site or Near the Loss

If site conditions are acceptable and a project is practicable, compensation should occur on-site or in close proximity to the area being impacted—generally within the same sub-watershed or one-half mile of the wetland impact. Off-site replacement is encouraged if on-site replacement opportunities are not expected to have long term viability, due to factors such as unsuitable hydrologic conditions or incompatible adjacent land uses, or if off-site replacement would provide greater ecological value than on-site replacement.

2. Replace Off-site or Purchase Credits from an Approved Bank

Project-specific off-site compensation may be acceptable, or the applicant may opt to purchase credits from an approved bank. An off-site compensation site or bank site should be located as near as practicable to the location of the adversely impacted wetland and within the compensation search area.

A project proponent could also opt to purchase credits from a bank outside its search area, if that bank was established prior to January 2002. Special coordination with DNR will be required for such transactions.

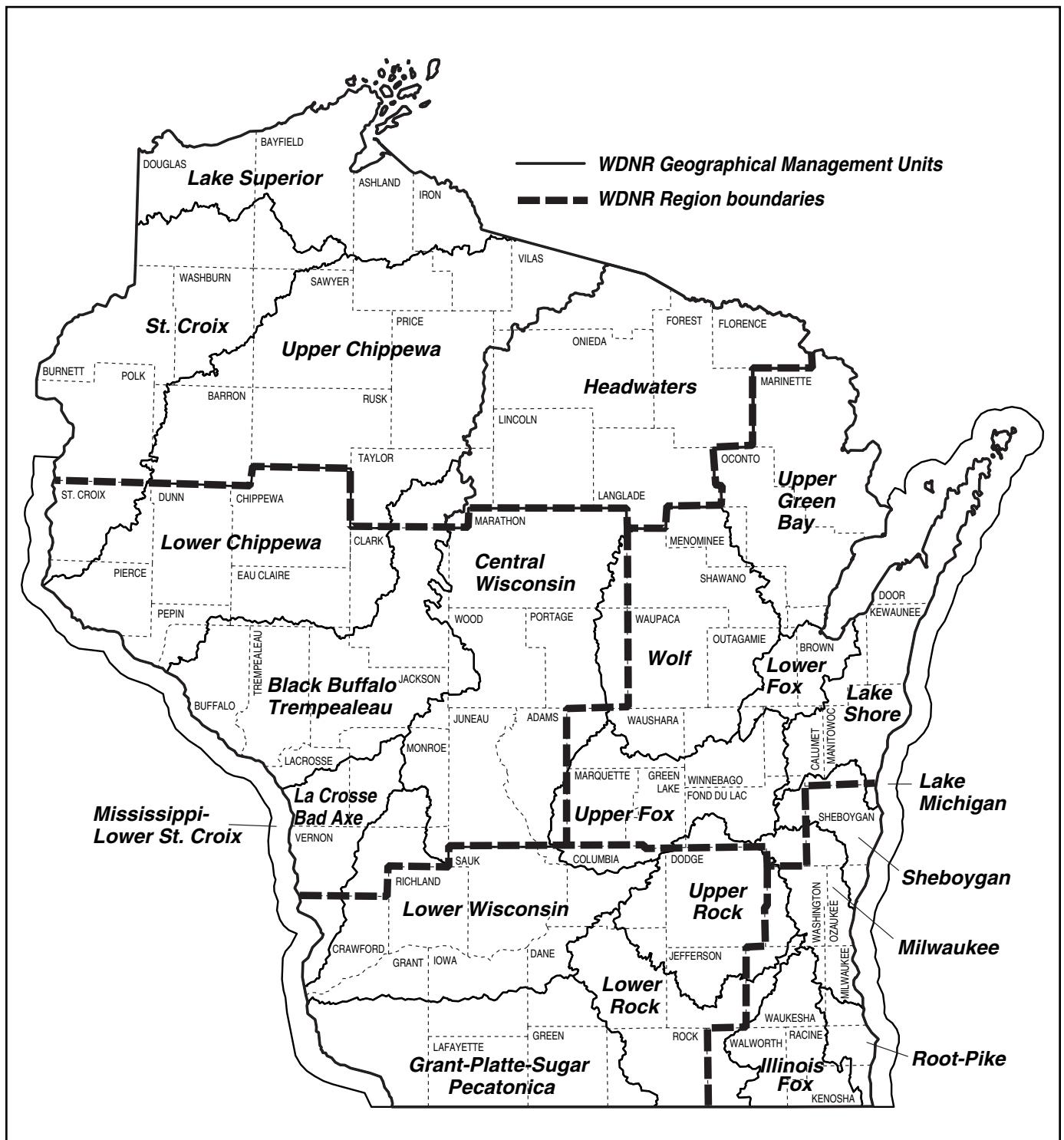
The Compensation Search Area is defined as an area that includes all of the following: the Geographic Management Unit (GMU) of the project with adverse wetland impacts (see Figure 3.2), the county of the project, and a circle with a 20-mile radius from the project site. The use of the GMU is based on the assumption that this delineation combines the concepts of watershed and eco-region. GMUs are the basis for most DNR planning and management activities as well.

For example, if a permitted project results in wetland fill in Mineral Point, the compensation search area is the entire Grant-Platte-Sugar-Pecatonica GMU, all of Iowa County, and a 20-mile radius circle centered on the project site in Mineral Point. If the permitted project is located in South Milwaukee, the compensation search area is the entire Root-Pike GMU, all of Milwaukee County, and a 20-mile radius circle centered on the project site in South Milwaukee.

Requirements for the development and administration of a mitigation bank are covered in Chapter 9. If the project proponent plans to purchase credits from an approved bank, such a proposal must be approved by the permitting agency. The State of Wisconsin maintains a registry of approved bank sites on the Department of Natural Resources web site (www.dnr.state.wi.us).

The permitting agency will inform the project proponent of the number of acres of compensation required (based on the ratios established in Chapter 4). An Affidavit of Bank Credit Purchase must be submitted to the permitting agency (see Appendix C).

FIGURE 3.2: Geographic Management Units (GMUs) of Wisconsin



F. Low Maintenance is Preferred

Compensation sites that do not rely on structures that require active maintenance and management are preferred. A compensation site that fits the natural landscape should require less management than a created site in an area that was not previously wetland.

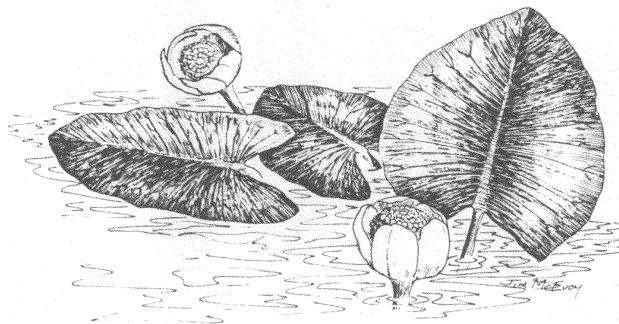
G. Include Adjacent Vegetated Upland to Protect the Site

Appropriate upland areas are necessary to protect the wetlands and increase ecological functions of compensation sites. All compensation sites should have adequate buffers as described in Figure 3.3. This is intended to provide guidance during site selection and planning. Site-specific conditions may be considered in determining what constitutes an adequate buffer.

Some additional restoration activities on the adjacent uplands (e.g., restoring appropriate native prairie) may be appropriate for additional compensatory mitigation credit (see Chapter 5).

Figure 3.3: Conditions for Adequate Vegetated Upland Buffer

- The adjacent upland area should be at least 100 feet wide or to the edge of the sub-watershed of the wetland, if less than 100 feet.
 - The area should contain a dense herbaceous ground layer, except when a shrub or forest community is the goal.
 - Rills and gullies due to erosion should not be present inside the buffer area.
 - Areas disturbed during construction must be stabilized and vegetated as quickly as possible with an annual grass cover crop.
 - Because these species invade and degrade wetlands, no seed mix can contain reed canary grass (*Phalaris arundinacea*) or giant reed grass (*Phragmites australis*).
 - Because of the major difficulty these species would create for future prairie restoration, the following invasive grasses are highly discouraged: cheat grass/downy brome (*Bromus tectorum*), smooth brome grass (*Bromus inermis*), and quack grass (*Elytrigia* [previously *Agropyron*] *repens*).
-





4. AMOUNT OF COMPENSATION REQUIRED

This chapter provides the guidelines for how much compensation may be required as mitigation for a given permitted wetland loss. The minimum amount of compensation is 1 acre for each acre of wetland loss.

Departure from the prescribed ratios must be documented in the record by the permitting agency.

A. The Standard Compensation Ratio is 1.5:1

In most cases the ratio is 1.5 acres of compensation for each acre of wetland impacted.

B. Under Certain Circumstances, the Compensation Ratio May be Set at 1:1

A compensation ratio of 1:1 will be allowed for use of an established mitigation bank, only if the project will not be impacting one of the following wetland types:

- ♦ deep marsh.
- ♦ ridge and swale complex.
- ♦ ephemeral pond in a wooded setting.
- ♦ wet prairie not dominated by reed canary grass (*Phalaris arundinacea*) to the exclusion of a significant population of native species.
- ♦ sedge meadow or fresh wet meadow not dominated by reed canary grass (*Phalaris arundinacea*) to the exclusion of a significant population of native species and located south of highway 10.
- ♦ bog located south of highway 10.
- ♦ hardwood swamp located south of highway 10.
- ♦ conifer swamp located south of highway 10.
- ♦ cedar swamp located north of highway 10.





5. ESTABLISHING CREDIT AT A COMPENSATION SITE

Chapter 4 provides the answer to the question of how many acres are needed for a project proponent to meet a compensation obligation. This chapter focuses on how a project proponent can develop the needed acres through an on-site or off-site compensation project. These guidelines are also used by bank sponsors and the Mitigation Bank Review Team (MBRT) to determine available credits at a bank site.

A. Credit for Restoration

As discussed in Section 3.C., restoration involves techniques for re-establishing a wetland where it historically occurred. Credit for restoration will be 1 credit acre for each acre restored.

B. Credit for Enhancement

As discussed in Section 3.C., enhancement involves activities similar to restoration that are conducted on existing wetlands which are substantially degraded (such as farmed wetlands that still meet jurisdictional wetland criteria). Credit for enhancement can range from no credit to one acre of credit for each acre enhanced. The appropriate level of credit will be determined by the permitting agency, with input from the MBRT, based on a comparison of the functional values of the current condition of the site and the projected functional values of the completed compensation site.

Management activities on fully functioning wetlands typically will receive no credit. Re-establishment of historic hydrology, land contours, and plant communities on substantially degraded wetland sites typically will receive higher credit. In some cases, intensive management activities based on an approved plan and backed with financial assurances that the work will be conducted may receive credit. Activities that result in exchange or conversion of one wetland type to another generally will not be given credit unless there is a demonstrated value in doing so.

C. Credit for Creation

Only creation that is adjacent to existing wetland and/or fits into the natural landscape will be allowed for compensation purposes. Though acre for acre credit is possible, because of the greater difficulty, poorer track record and the typically longer time scale involved in the development of wetland functions, creation projects accepted for project-specific compensation typically will receive 1/2 acre credit for each acre created. As discussed in Section 9.H., no more than 25% of the credits for a bank site can be the result of creation.

D. Credit for Adjacent Vegetated Uplands

As discussed in Section 3.G., a minimum amount of vegetated upland adjacent to the wetland is required to protect or buffer the site. The area of set aside upland may receive credit of 1 acre for every 10 acres of buffer. Additional restoration efforts on adjacent uplands that provide increased ecological functions to the site may receive

greater credit. Figure 5.1 describes conditions that should be met to receive the higher credit. Projects that restore native upland plant communities will receive 1 acre of credit for every 4 acres restored. As discussed in Section 9.H., no more than 15% of the total credits for a bank site can be the result of upland credits.

Figure 5.1: Conditions for Greater Adjacent Upland Credit

- Greater than 100 feet in width (research indicates a need for over 300 feet of upland habitat for wildlife purposes).
 - Vegetation is not a monoculture, but is dominated by a diversity of native species.
 - If planting is done, the seed should be local Wisconsin genotype, originating in Wisconsin or the first tier counties from adjoining states.
 - Upland restoration efforts must be included in site goals, objectives, and performance standards with appropriate monitoring and management plans.
-

E. No Credit for Stormwater or Wastewater Treatment Facilities

Some innovative facilities have been designed for treating stormwater and wastewater, using designs that create the physical, chemical and biological processes that occur in wetlands. These facilities have been referred to as bioretention basins, biofilters, or constructed wetlands and are considered artificial wetlands. While these facilities may serve an important function in alleviating impacts to natural wetlands and waterways by moderating substantially the bounce in water levels and trapping sediment loads, such single-function wetlands do not meet the intent of compensatory mitigation—replacing lost wetland acres with high quality multiple-function wetlands. Though not eligible for full compensation credit, inclusion of such facilities in a proposed plan may warrant a reduction in the overall replacement ratio (see Chapter 4) for the project.

F. Considering Preservation of Existing Wetlands in a Compensation Plan

Preservation and protection of existing wetlands may be creditable for meeting compensation requirements. In exceptional circumstances, credit may be given when existing wetlands are preserved, if the wetlands perform physical or biological functions, which are important to the region and are under demonstrable threat of loss or substantial degradation due to human activities that might not otherwise be expected to be restricted. The existence of a demonstrable threat will be based on clear evidence of destructive land use changes which are consistent with local and regional land use trends and are not the consequence of actions under the control of the bank sponsor or compensation site developer. Maintenance of an upland buffer is also required. If preservation is proposed and accepted by the permitting agency, there will be no greater than 1 acre of credit for every 8 acres preserved.

G. Credit Calculation

Figure 5.2 below summarizes the credit amounts for the various techniques and any special provisions for bank sites.

Figure 5.2: Establishing Credits at a Compensation Site

Credit Acres	Actual Acres	Technique Used – Notes	Bank Site Provisions (see also Section 9.H.)
1.0	1.0	Restoration	
Up to 1.0	1.0	Enhancement – Credit level determined by MBRT or permitting agency depending on a comparison of current functional values to those projected for the compensation site.	
Up to 1.0	1.0	Creation	No more than 25% of total credit acres can be creation.
0.1	1.0	Minimum Upland Buffer	No more than 15% of total credit acres can be upland buffer.
0.25	1.0	Ecological Enhancement in Adjacent Uplands	No more than 15% of total credit acres can be upland buffer.
Up to 1	8.0	Fully Functioning Wetlands – Preservation of existing wetlands under a demonstrable threat may be credited at a rate no greater than 1 acre of credit for every 8 acres preserved.	MBRT determines acres of fully functioning wetland within the bank site.
No credit		Fully Functioning Wetlands – If within or adjacent to the compensation site and not under demonstrable threat, then no credit is received.	MBRT determines acres of fully functioning wetland within the bank site.
No credit		Exchange – Exchange from one wetland type to another is generally not approved for credit.	
No credit		Constructed Facilities for Stormwater/Wastewater Treatment	

H. Example Credit Calculation

For example, a compensation site is proposed for a 120 acre parcel in an agricultural setting. Today the site is drained by a series of ditches and drain tiles. The NRCS has determined that the site contains: 20 acres of non-wetland, 75 acres of prior-converted cropland now in corn; 20 acres of farmed wetland that is now in corn, but has not been farmed more than 3 out of the last 5 years; and 5 acres of existing high quality wetland. Of the 20 acres classified as farmed wetland, there are about 3 acres that contain remnant wetlands dominated by willow shrubs and reed canary grass in most years.

When the project is completed, the applicant expects there to be 100 acres of wetland on the parcel. The proposed compensation project will involve removal of drain tile and closing of the ditch system, tree removal along the ditch lines, and brush removal and burning management in existing wetland and farmed wetland areas. The applicant also proposes a prairie restoration on all the uplands of the site, which total 20 acres and are at least 100' wide around the entire wetland. A preliminary determination of credit is made in Figure 5.3.

Figure 5.3: Example Credit Calculation

Activity	Acres	Crediting	Credit Acres
Restoration of historic wetland area	75	1.0 : 1	75.0
Enhancement of severely degraded areas that still meet wetland definition	17	1.0 : 1	17.0
Enhancement of marginally degraded area that still meets wetland definition	3	0.25 : 1	0.75
Adjacent upland restoration	20	0.25 : 1	5.0
Brush removal and burning in fully functioning wetland	5	0	0
Total	120		97.75



6. SELECTING A SUITABLE COMPENSATION SITE

Due to a great degree of variability in landscape settings, surrounding land-uses, and level of impact, it is not possible to establish definitive site selection criteria for good wetland compensation sites. As such, much of the agency review of a proposed site will rely on the professional judgment of the persons working on the project. Though specific criteria cannot be developed, Figure 6.1 lists some general “rules” for a viable compensation site or bank site proposal.

Figure 6.1: General “Rules” for a Viable Compensation Site Proposal

- Features which impacted historic hydrology (e.g., tiles, ditches) are contained within the property boundaries of and can be affected by activities of the bank sponsor or compensation site developer.
- The site allows for adequate buffers to the wetland from adjacent present and anticipated future land-uses.
- The work proposed will result in no more than an incidental impact to federal or state endangered, threatened, or special concern species.
- The work proposed will not threaten or degrade high quality upland habitat, such as prairie remnants and oak savannas.
- The site offers the opportunity to provide or enhance ecological or hydrological functions missing in the surrounding landscape, such as those identified in regional habitat conservation plans.
- The site will not require long-term structural maintenance to sustain important ecological functions.





7. REQUIREMENTS FOR A COMPENSATION SITE PLAN

A. Purpose

For any proposal to construct a compensation site, either for project-specific compensation or for a bank site, a **Compensation Site Plan** is required. For banking, the Compensation Site Plan will be included with the bank document (see Chapter 9).

The purpose of the **Compensation Site Plan** is:

- ♦ to demonstrate that the applicant (or consultants for the applicant) has sufficient scientific expertise to carry out the proposed compensation project work;
- ♦ to outline the construction plan, project goals and objectives, monitoring plan, success criteria, and management plan;
- ♦ to demonstrate that the applicant has sufficient financial resources to assure the project is built according to the plans and specifications and will be monitored and maintained as proposed; and
- ♦ to provide evidence that the site will be maintained as wetland in perpetuity.

B. Expertise

In order to develop a high quality wetland compensation project, a significant level of professional expertise and experience is required. Depending on the complexity of the selected site, a team of experts may be required for planning, design, construction, inspection, monitoring, and maintenance. This interdisciplinary team may include plant ecologists, hydrologists, soil scientists, hydrogeologists, contractors, engineers, and wildlife biologists. The Compensation Site Plan should list the personnel working on the project and include reference to past projects and qualifications.

C. Financial Responsibility

As set forth under section NR 350.10, *Wisconsin Administrative Code*, the project proponent or bank sponsor may be required to secure a performance bond, irrevocable letter of credit, irrevocable escrow account, irrevocable trust account, or other financial assurance to insure that a mitigation project is constructed, operated, monitored, and maintained in accordance with the approvals issued by the permitting agencies.

There are two time periods and types of activities for which assurance of financial responsibility must be provided: **site construction** and **post-construction care**. Different financial responsibility methods will be applied to: smaller, simple projects; larger, more complex projects; and bank projects. Financial assurances are intended to ensure that funds will be available to assure proper construction and to provide for the monitoring, management, and maintenance of the site, including repair or replacement of damaged structures. Financial assurances to guarantee adequate post-construction care are for a specified time period after construction is complete, or after success criteria are met, depending on the type of project.

Though closely related, financial assurance mechanisms and release of credits for banks are different mechanisms with different purposes. Bank credits are released as milestones, related to when success criteria are met (see Section 9.K.), while financial assurance mechanisms are released as approved construction and post-construction care actions are completed.

1. Site Construction Financial Assurance

Construction performance bonds, with a third party approved by the lead agency as the obligor, may be required for any compensation site unless construction is completed before credit is certified to compensate for a permitted wetland loss.

The bond obligation is released when the lead agency (for non-banks) or the lead agency with MBRT concurrence (for banks), certifies in writing that the initial construction (including initial seeding and planting) and any needed corrective actions have been completed. A final construction inspection will be held by the lead agency and, in the case of bank sites, as many of the MBRT members as possible. This inspection will provide the basis for releasing the bond.

2. Post-Construction Care

a. Post-Construction Care Financial Assurance Period

Non-Bank Sites – The post-construction care period for small projects begins after a final construction inspection verifies that construction is complete and lasts for the monitoring period agreed to in the Compensation Site Plan. If the desired hydrology has not been established by the end of the monitoring period, corrective actions must be taken and the post-construction care period will be extended.

Bank Sites – The post-construction care period for bank sites begins after the final credit amount has been determined (usually at year 5) and lasts for 5 more years.

b. Post-Construction Care Costs

The amount of financial assurance required will consist of the costs in the following categories, as estimated in the approved Compensation Site Plan. In the event unanticipated contingencies arise, post-construction care costs can be adjusted by agreement of the lead agency (or MBRT) and the project sponsor. The financial assurance mechanism can be amended accordingly.

Monitoring - costs to carry out the monitoring plan

Corrective Actions and Maintenance - costs to replace or repair any structures constructed on the site, maintain trails, etc.

Management - costs to carry out the management plan or take actions identified through site monitoring (e.g., invasive species control, prescribed burns, mowing)

c. Post-Construction Care Financial Assurance Mechanisms

The purpose of any mechanism is to assure that post-construction care actions identified in the compensation site plan are taken. The amount required must be sufficient to cover the total of the costs for actions identified in the Compensation Site Plan during the post-construction period. If ownership of the project is transferred, the requirement for a financial assurance mechanism applies to the new owner. The following are acceptable mechanisms for assuring financial responsibility:

Irrevocable Escrow Account - The project owner deposits cash, certificates of deposit, or U.S. government securities into an irrevocable escrow account held by an escrow agent. Any withdrawals from the account must be authorized by the lead agency. The third party approved by the lead agency may draw on the account to take actions outlined in the Compensation Site Plan if the project owner fails to do so. After taking actions outlined in the plan the project owner may apply to the lead agency for reimbursement from the escrow account. At the end of the post-construction care period if funds remain in the escrow account the lead agency will inspect the project and determine any further actions that are necessary to meet the objectives of the site plan. If no further action is necessary the remainder of the escrow amount is released.

Irrevocable Trust - This method will operate similar to an escrow account, except the owner deposits sufficient cash, certificates of deposit, or U.S. government securities into an irrevocable trust fund held by a trustee, with a third party approved by the lead agency as the beneficiary.

Irrevocable Letter of Credit - The project owner obtains an irrevocable letter of credit from a financial institution, with a third party approved by the lead agency as the beneficiary. The third party approved by the lead agency may withdraw and use part or all of the funds to take actions outlined in the Compensation Site Plan if the project owner fails to do so. At the end of the post-construction care period the lead agency will inspect the project and determine any further actions that are necessary to meet the objectives of the site plan.

Performance Bond - The project owner obtains a performance or forfeiture bond from a surety company, with a third party approved by the lead agency as the obligor. The third party approved by the lead agency may use all or part of the bond to take actions outlined in the Compensation Site Plan if the project owner fails to do so. When the project owner completes all the actions identified in the Compensation Site Plan or determined by the lead agency to be necessary to meet the objectives of the site plan, the obligation of the surety becomes void.

Other mechanisms may be considered on a case-by-case basis that meet the objective of assuring that post-construction care actions identified in the Compensation Site Plan and any identified corrective actions are taken.

D. Site Failure

The permitting agency will review monitoring reports to determine whether a compensation project is meeting performance standards. These standards are measurable objectives set in the project-planning phase. The lead agency will submit to the applicant recommendations for corrective actions if the monitoring reports indicate that performance standards are not being met.

If at the end of the monitoring period, the compensation project is determined by the lead agency to be unsuccessful in meeting its performance standards, the permitting agency has several options. The monitoring period may be extended while imposing a compliance schedule specifying corrective actions to be taken by the project owner and deadlines for completing these actions. Or, the third party approved by the lead agency may pursue access to the financial assurance funds to complete construction at the site. Lastly, the third party approved by the lead agency may pursue access to the funds to develop an alternate site if the lead agency determines that the existing site is not a viable compensation site.

The permitting agency will determine the course of action on a case-by-case basis. Factors to be used to determine the course of action include: the project owner's willingness to work with the agency, past work accomplished on the site, and the existing site conditions. The permitting agency will document the reasons for any course of action selected.

E. Long-term Protection of Site

A governing principle of compensatory mitigation in Wisconsin is that sites approved as compensation areas **must be protected in perpetuity**. Compensation sites must be protected in perpetuity with appropriate real estate arrangements (e.g., conservation easements) that effectively restrict harmful activities (i.e. incompatible uses) that might otherwise jeopardize the purpose of the compensation site. See Appendix A for suggested easement language.

F. Outline for the Compensation Site Plan

The final Compensation Site Plan will include the information listed in Figure 7.1. The level of detail required for each section should be commensurate with the size and complexity of the proposed site. The applicant should prepare a preliminary plan before any pre-application consultation with the permitting agency.

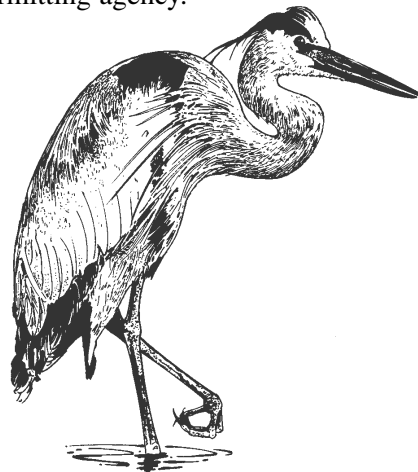


Figure 7.1: Compensation Site Plan Outline

- i. Executive Summary (*use format in Appendix B*)
 1. Introduction and Purpose
 2. Identify Plan Developers and Expertise
 3. General Description of Site Plan
 4. Location of Site
 5. Baseline Conditions
 6. Site Map
 7. Design Features
 8. Goals and Objectives for the Site
 9. Setting Performance Standards as Success Criteria
 10. Monitoring Plan
 11. Management Plan for the Site
 12. Protection of Site
 13. Implementation Schedule for Construction and Monitoring
 14. Financial Assurances
-

1. Introduction and Purpose

Identify the development project for which the compensation effort is required. State if the plan is for development of a bank site. Provide the projected start and end dates for construction of the development project and the compensation site.

2. Identify Plan Developers and Expertise

Provide the names and professional experience information for the personnel responsible for investigating the proposed site and preparing the site plan, construction plans, and specifications.

3. General Description of Site Plan

Provide a brief summary of the proposed compensation site plan including: total acreage of wetland anticipated; wetland type(s) currently found on the site and expected when complete; proposed techniques (restoration, enhancement, or creation); and expected functions.

4. Location of Site

Provide location by County, Township, Range, and Quarter-Quarter section. Locate the site on the USGS 1:24,000 quadrangle map.

5. Baseline Conditions

This section is to document the site investigation work done before the design was developed. The level of effort for the investigation necessarily will vary by site. **At a minimum**, the investigation should include:

- ♦ survey of current contours;
- ♦ summary of historic and current on-site land uses;

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- ♦ description of current zoning designations;
 - ♦ description of nearby land uses;
 - ♦ description of any known historic/archeological resources on the site;
 - ♦ assessment of the geology and soils on site using the county soil survey and some representative borings;
 - ♦ description of current hydrology including channelized and un-channelized flows, groundwater, and tiling information;
 - ♦ description of the present flora;
 - ♦ description of fauna using the site;
 - ♦ NRCS and WWI mapping of the site;
 - ♦ wetland delineation in accordance with the 1987 federal manual (if wetland currently exists on the site);
 - ♦ wetland functional assessment of any wetlands existing on the site;
 - ♦ floodplain mapping of the site;
 - ♦ description of any state navigable waters on or near the site; and
 - ♦ description of the site in context of other wetlands, wildlife habitat, and natural areas (corridor concepts).

6. Site Map

The site map should be at a scale of 1 inch = 400 feet and should show 1 foot contours.

7. Design Features

Clearly explain the proposed construction activities and refer to pertinent plan sheets. Provide details on post-construction contours and expected hydrologic conditions. Provide plan sheets for proposed topographic changes and hydrologic structures. Provide plans for the establishment of wetland vegetation. Provide details on any planting proposed. Describe erosion and sedimentation control measures. Provide details on measures to assure adequate buffering of the wetland from adjacent land uses. Identify any constraints potentially outside the owner's control that might affect the compensation site.

8. Goals and Objectives for the Site

This section of the report is critical for determining design concepts and establishing monitoring plans. Goals should be general visions of how the site will look and function. Designers will need to set a goal for total wetland acreage, plant community types expected and functions (or functional values) that the site will provide. Goals for hydrologic conditions over time (i.e. the proposed hydroperiod) must also be established. Objectives are then set to be quantifiable measures of the goals identified.

For example, a project goal is to restore a southern sedge meadow community to a pre-disturbance condition that supports a diverse native plant community for a variety of uses including aquatic life and wildlife support and passive recreation. Examples of objectives for this goal may include:

-
- ♦ within 5 years the site supports over 75% of dominant native species as compared to a southern sedge meadow reference site.
 - ♦ after 5 years less than 20% of vegetative cover is dominated by exotics and the plant composition is trending toward native species.
 - ♦ handicap-accessible boardwalk and public access will be constructed in the first year.
 - ♦ at least 4 school and civic groups each year are scheduled to tour the site after 3 years.
 - ♦ the site will be colonized by at least 3 species of anurans within 3 years.
 - ♦ the site will support actively nesting birds after 3 years and active use by over 20 species of birds.
 - ♦ within 5 years hydrology is established which will support a southern sedge meadow community.

9. Setting Performance Standards as Success Criteria

Performance standards are the list of quantifiable objectives that must be met to determine that a site has been deemed “established.” The Compensation Site Plan may determine that if a subset of the goals and objectives have been met, the site is a “success” and thus full credit for mitigation purposes should be given. The performance standards must be easily understood by both the applicant and the permitting agency (or MBRT for bank sites) so that future reviewers can use monitoring information to determine if the mitigation proposed was completed. At a minimum, the performance standards should include: the number of acres of land delineated in the final monitoring year that meet the wetland definition; a description of an acceptable hydrologic regime; and the acceptable level of occurrence of invasive species. See the next section on monitoring plan requirements for more on this subject.

10. Monitoring Plan

Regular monitoring reports must be provided to the permitting agency (or the MBRT for bank sites). Monitoring of a site must have purpose. The monitoring should be meaningful in the context of the established objectives. The level of the effort should be decided on a site-by-site basis. Keep in mind what you want to know when deciding on a monitoring scheme.

Monitoring should look at not just the actual presence of a given wetland function at the end of monitoring period, but should also consider a trending toward successful establishment of the function. Since most restorations and creations will likely be in an early successional state after 5 years, looking at a trend toward a goal community is important.

Monitoring will also indicate need for corrective actions and trigger points for management activities. At the end of the monitoring period, if the permitting agency concurs that the site is successful, information will be forwarded to the DNR Wisconsin Wetland Inventory program (WWI) for inclusion on inventory maps and the associated WWI database.

Smaller non-bank compensation sites (less than 1 acre in size) will typically have monitoring periods of 3 to 5 years. Larger sites, including all bank sites will have monitoring periods of 5 or more years.

It is impossible to design a standard procedure for monitoring all sites. Each site is different in the resources present and techniques to be used. The applicant must work with the permitting agency to determine what should be included in the monitoring plan. The type of data gathered must allow you to determine if specific objectives have been met. See Figure 7.2 for requirements for the monitoring plan.

Figure 7.2: Monitoring Plan Elements

1. A restatement of the compensation site plan goals, objectives and performance standards.
 2. Identification of any structural failures or external disturbances on the site.
 3. A description of management activities and corrective actions implemented during the past year.
 4. A summary of and full presentation of the data collected during the past year.
 5. A site map showing the locations of data collection.
 6. An assessment of the presence and level of occurrence of invasive species.
 7. An assessment of the degree to which performance standards are being met.
 8. Proposed corrective actions to improve attainment of performance standards.
 9. A narrative summary of the results and conclusions of the monitoring.
-

11. Management Plan for the Site

The management plan should lay out the specifics for how the site will be used, how the site will be maintained, who will be responsible for the work, and what will be the schedule for these activities. The management plan must be very clear as to what conditions will trigger needs for certain maintenance or management activities. Plans for prescribed burns, invasive species control, fencing and signage, and water level manipulation should be included.

Describe the short and long-term management plans for the site. There may be different activities and level of effort for different management units or zones within the site.

The monitoring report for each year should clearly identify what corrective actions and other activities occurred the previous year, what corrective actions are needed and assurances that the work will be carried out.

12. Long-term Protection of Site

Provide a copy of the actual or proposed conservation easement that will be used to protect the site in perpetuity. Appendix A provides an example.

13. Implementation Schedule

Provide details on timelines for the construction work, plantings, inspections, and follow-up monitoring. Identify other permits that may be required for the construction work. Except for cases involving after-the-fact permits, construction of the compensation site must occur before or at the same time as construction of the development project.

14. Financial Assurances

Provide details on the financial assurance instrument(s) to be used for construction bonding and post-construction care for the project. See Section 7.C. for further discussion.

G. As-Built Report

Within one month of the completion of construction, the applicant will provide an as-built report to the permitting agency. This report will summarize the construction activities and note any changes to the construction plan that occurred following the format outlined in Figure 7.3. If immediate corrective actions are needed, these must be identified along with a timeline for when the work will be completed. This document will act as the “Year Zero” monitoring report and will serve as the basis for the construction inspection.

Figure 7.3: Outline for the As-Built Report

1. Identify site, designer, and sponsor.
 2. Identify the construction contractor.
 3. Dates of construction (including completion date).
 4. Describe any changes to the original plan.
 5. Describe problems encountered during construction and what was done to correct the problem.
 6. List any follow-up corrective actions needed, provide a schedule, and list who is responsible.
 7. Provide the as-built plan sheets.
-

H. Construction Inspection

As discussed in Section 7.C., an inspection by the lead agency (MBRT for bank sites) is required before the lead agency approves the release of the construction performance bond. The purpose of the inspection is agency verification that the project was completed in accordance with the approved plans and specifications. A final list of corrective actions will be developed after the inspection. The lead agency will only release the construction performance bond after the applicant demonstrates that all corrective actions have been satisfactorily addressed.

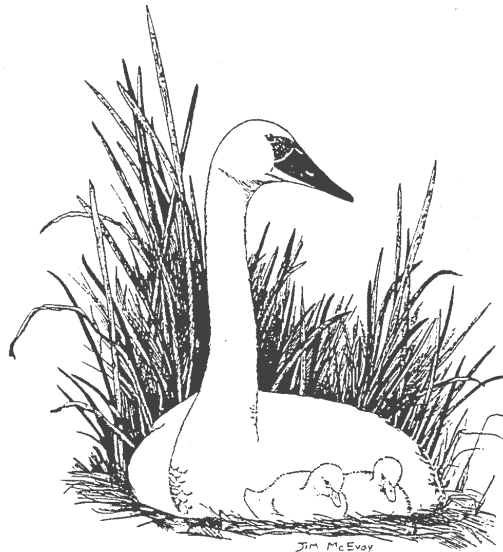


8. THE MITIGATION SUMMARY SHEET

In order for the applicant, the reviewing agencies, and the interested public to clearly understand what is proposed, a **mitigation summary sheet** must be completed. This one-page document will be drafted by the project proponent or their consultant, will become part of the permit for the proposed activity, and will allow for tracking of decisions and conditions. See Figure 8.1 for the format for the mitigation summary sheet.

Figure 8.1: The Mitigation Summary Sheet

1. Applicant Name/Address/Phone:
 2. Agent/Consultant:
 3. Location of project that will impact wetlands
(including DNR Region and GMU—*see Figure 3.2*):
 4. Brief Project Description:
 5. Expected wetland impacts including acreage and type(s)
of wetland lost/impacted:
 6. Brief explanation of how the applicant has avoided
and minimized wetland impacts:
 7. Compensation Approach
 - ___ a. Project-specific on-site
 - ___ b. Project-specific off-site
 - ___ c. Debit from or purchase credits from an approved
bank site (provide copy of Affidavit of Bank Credit
Purchase—*see Appendix C*)
 - ___ d. Other (describe):
-





9. REQUIREMENTS FOR MITIGATION BANKING

Mitigation banking involves a formal administrative framework in which wetlands are restored, enhanced, or created, expressly for the purpose of providing compensatory mitigation **in advance** of authorized impacts to similar resources. Banking is characterized by transfer of the legal and financial responsibility for executing compensatory mitigation from the permittee to a third party—the bank sponsor.

Established wetland compensation bank site acres are quantified as “credits” which are available for use by the bank sponsor or by other parties to compensate for adverse wetland impacts from permitted activities (i.e. “debits”).

Requirements for compensatory mitigation may be satisfied through the use of mitigation banks only when on-site compensation is not practicable or when use of a mitigation bank is environmentally preferable. **Prospective bank sponsors should not construe or anticipate participation in the establishment of a mitigation bank as ultimate authorization for specific projects, as excepting such projects from any applicable requirements or as pre-authorizing the use of credits from that bank for any particular project.**

A. “Mitigation Bank” versus “Bank Sites”

Throughout this document a distinction between a bank and a bank site is made. A bank is the administration of establishing, debiting, and selling credits at one or more bank sites. A bank site is the actual compensation project. The techniques (i.e. restoration, enhancement, creation) for establishing bank sites are the same as those described for project-specific compensation sites.

B. Types of Banks

There are two types of banks:

Single Client— Bank sites are developed to accrue credits for use by the bank sponsor or by a single client of the sponsor for one or more projects with wetland impacts. The client or sponsor may be an individual, a corporation, a governmental unit, or an association.

General Use— Bank credits are available for sale to third parties.

C. Role of the Bank Sponsor

The bank sponsor is the entity financially responsible for establishing a bank site (or sites) in accordance with an approved Compensation Site Plan, administration of the accounting of debits and credits, conducting required corrective actions, providing required monitoring and status reports to the MBRT, and assuring long term maintenance and protection of the site(s). The bank sponsor prepares the bank document, the terms of which outline the above responsibilities. See Chapter 10 for the process for developing a bank.

D. Role of the Credit Purchaser

The purchaser of credits from a third party bank is not responsible for the success or failure of the bank or bank sites. The credit purchaser must come to agreement with the permitting agency as to the number of credits to be purchased and the bank to be used. The purchaser shall provide a copy of the Affidavit of Bank Site Purchase (Appendix C) to the permitting agency and this will be included in the mitigation summary sheet for the permitted activity.

E. Role of the Mitigation Banking Review Team (MBRT)

Representatives of the U.S. Army Corps of Engineers (COE), U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), the Wisconsin Department of Natural Resources (DNR) and other state, tribal, or local agencies, as appropriate to a particular site, will comprise the Mitigation Banking Review Team (MBRT).

The primary role of the MBRT is to facilitate the establishment of the mitigation bank through the development of the mitigation bank document. The MBRT will visit each proposed bank site and will determine the expected credits for the site. At the end of the monitoring period, the MBRT will recommend the final creditable acreage for each site.

The MBRT will be convened by the **lead agency**, which in most cases will be the COE.

The goal is to have the MBRT reach consensus on specifics in the bank document and on preliminary and final credit determinations. Disputes will be resolved through a conflict resolution process established in a memorandum of agreement between the agencies.

F. Role of the Permitting Agency

The permitting agency shall determine the appropriate compensation required for a given permit or approval. If purchase of bank credits is the selected approach, the permitting agency will determine the compensation ratio (see Chapter 5) that is appropriate considering the specifics of the wetland loss and the bank site selected. The permitting agency is responsible for assuring that a mitigation summary sheet is in place and that the affidavit of bank credit purchase is provided. The permitting agency is responsible for enforcement of the conditions of its permit, including compensation requirements.

G. Compensation Site Plan for Bank Sites

A bank may include one or more bank sites developed to accrue credits for the sponsor to use or for sale to other parties. In general, the bank site plan will cover the specifics of bank site development and management and will follow the outline for a Compensation Site Plan as described in Chapter 7. Timelines and requirements for the release of credits for sale are established in the Bank Document, discussed in Section 8.K. Since failure of a bank site would mean that compensation for wetland loss from several projects has not occurred, the requirements for the Compensation Site Plan for bank sites are more rigorous than for most project-specific compensation plans.

H. Credit Generation for a Bank

The number of acres available for credit will be recommended by the MBRT using guidance in Chapter 5. A bank may consist of more than one bank site and thus the total balance of credits may be the combination of credits from the various bank sites. The total available credits will be stated clearly in the bank document.

The total credits for a bank from creation or upland buffers will be limited. No more than 25% of the total credits can be the result of creation. No more than 15% of the total credits can be the result of upland buffer restoration.

I. The Bank Service Area

The service area for a bank includes the entire GMU that a bank site is located within (see Figure 3.2), the entire county of the bank site, and a circular area with a 20-mile radius from the bank site. A bank may limit its service area or clients as part of the bank document. For example, a bank may declare that it will only provide credits to certain clients and/or within a certain geographical area that is smaller than the service area described above.

J. Financial Responsibilities/Assurances

As set forth in Section 7.C., the bank sponsor must provide adequate financial assurances for construction and post-construction care.

K. Timeline for Release of Credits

Each bank document will include a schedule for release of credits (see Figure 9.1 for general guidelines) agreed to by the MBRT and the sponsor. Site conditions and performance will determine the actual schedule to be included in the bank document. Note that this means that the bank sponsor may sell or use some credits before the site is deemed “established” by the MBRT.

Figure 9.1: General Guidelines for Release of Credits for Sale or Use

Up to 10% (of the total estimated credit acres)	Upon signing of the mitigation bank document.
Up to 20%	Upon MBRT recommendation and lead agency approval of the As-Built Plan.
Up to 30%	When the bank sponsor can document that wetland hydrology has been established and vegetation appears to be trending toward the planned community. This will usually mean the project is meeting performance standards for the Year 2 monitoring report.
X %	Added increments for meeting performance standards determined on a case-by-case basis.
Up to 100%	Ending monitoring year. At this point the MBRT will recommend final adjustments to the final credit amount for approval by the lead agency.

L. The Mitigation Bank Document

The Mitigation Bank Document is the record of agency (MBRT) concurrence on the objectives and administration of the bank. The terms and conditions of the bank document may be amended, subject to notification of all MBRT members and approval by the lead agency.

The **Mitigation Bank Document** must include the following information:

I. INTRODUCTION

- A. Identity of bank sponsor.
- B. Purpose of bank and its relationship to the regulatory program.

II. BANK SPECIFICS

- A. Type of bank - Is the bank single client or general use?
- B. Description of Bank Site(s) - A brief description of the sites included in the bank. Provide details on the ownership of the site(s). Other details will be in compensation site plan(s), which should be attached to the bank document.

III. OPERATION OF THE BANK

- A. Number of credits - The Draft Bank Document should propose a figure for total credits (assuming the plan is successful) following guidance in Chapter 5. The MBRT, will determine the final figures for use in the Final Bank Document.
- B. Provisions for sale of credits - The bank sponsor should assure that a prospective client has been in consultation with the permitting agency prior to the sale of any credits. The bank sponsor is not responsible for applicant compliance with permit conditions. The purchase of credits from a bank is a transaction between the applicant and the bank sponsor and in no way will prejudice the permit decision if such transaction occurs before the permitting agency decision. The bank sponsor may add its own requirements for clients.

See Appendix C for a sample "Affidavit Of Bank Credit Purchase" document. The bank document will include the agreed to schedule for release of credits for sale (see Figure 9.1).

- C. Accounting and reporting procedures - The bank sponsor shall track all debits and credits and provide an annual report of such to the MBRT on or before January 15 of each year. Within 30 days of receipt of the accounting report, the MBRT lead agency shall, in writing, acknowledge receipt of the report and identify any discrepancies.

The bank sponsor will report sales and credit balance at the bank using the following format:

Acres sold	Buyer	Date	Project (include permit # if applicable)	Location of project	GMU location of project	County location of project

D. When a bank is closed for business - Upon notification from the bank sponsor that all credits have been used or sold, the lead agency will schedule a meeting with the bank sponsor and will invite members of the MBRT. The meeting will allow for concurrence that the site was managed as planned and that no further credits are available. The parties will review previous agreements for post-construction care and long-term protection and ownership of the site. The outcome of the meeting will be a written agreement between the lead agency and the bank sponsor that the bank is closed and that certain long-term measures will occur in accordance with the approved or amended Bank Document and/or Compensation Site Plan(s). Identification of the requirements and responsible party for post-construction care will be important at this step.

E. Provisions for site inspections - The bank sponsor shall allow inspection of any bank site to any member of the MBRT, as long as reasonable notice is provided. The bank sponsor must allow the permitting agency access to the compensation site to inspect for compliance with the approvals, permits and other applicable laws.

IV. LONG-TERM RESPONSIBILITIES

This section of the banking document will need to be specifically tailored to the bank and bank site(s) involved. The applicant/sponsor and the MBRT will work together to identify the who's, how's and when's of long-term responsibilities. The bank sponsor is responsible for securing adequate funds for the post-construction care of the bank site during its operational life, as well as for the long-term management of the site. This section of the bank document should provide the specific details of the type of assurance and amounts and contingencies for release.

V. TRANSFER OF BANK TO ANOTHER ENTITY

A bank sponsor may not sell or otherwise transfer a bank to another entity without the approval of the MBRT.

VI. AMENDMENTS TO THE BANK DOCUMENT

The bank sponsor or any member of the MBRT may request, in writing, changes to the bank document. Substantive change proposals may require the involvement and input of the MBRT.

VII. SIGNATURES

The document will be signed by the bank sponsor and is effective upon signature by the lead agency.



10. PROCESS FOR ESTABLISHING A BANK

Establishing a mitigation bank is an 8-step process involving a variety of actors. Each step in this process is outlined below.

Step 1

A prospective bank sponsor should first submit a bank prospectus to the lead agency to initiate formal agency involvement and review. The prospectus should include the following information:

- ♦ Identification of the bank sponsor and purpose of the bank.
- ♦ Identification of consultants or experts to be involved in design of the bank's compensation site.
- ♦ Location of the proposed compensation site.
- ♦ General description of current ownership and land-use at the compensation site.
- ♦ General description of anticipated design concept for wetland restoration, enhancement, or creation at the proposed compensation site.

Step 2

The lead agency will notify the members of the MBRT that a bank prospectus has been received by sending them a copy of it. A date for an inter-agency site meeting will be set.

Step 3

Based on the interagency meeting and a site visit, the lead agency will provide a written response to the prospective bank sponsor indicating likelihood for compliance with these guidelines and other state and federal rules and regulations.

Step 4

Based on comments and suggestions of the MBRT, the prospective bank sponsor will prepare a draft bank document. The draft bank document shall include the following information:

- ♦ Information required under Step 1.
- ♦ A draft compensation site plan for each proposed compensation site (see Chapter 7).
- ♦ Information on the operation of the bank including the expected number of credits, provisions for sale of credits, accounting and reporting procedures, and provisions for site inspections.
- ♦ A discussion of the persons responsible for management of the bank accounting, long-term ownership of the bank site, monitoring of bank site, and maintenance and management of the bank site.
- ♦ A proposed conservation easement for the bank site.
- ♦ A proposed schedule that includes, at a minimum, a timeline for finalizing the bank document, starting construction, and project monitoring.

Step 5

The DNR will provide notice to the public that a draft Bank Document has been submitted and will make copies of any of the plans and other documentation available for review by any person who requests such.

Step 6

The bank sponsor will complete the Bank Document and Compensation Site Plan(s) and submit them for review by the MBRT and approval by the lead agency. The MBRT will advise the bank sponsor as to the initial credit estimate for the bank site.

Step 7

The lead agency will confirm in writing acceptance of the Bank Document.

Step 8

DNR will provide public notice that the Bank Document has been signed and the bank will be added to the statewide registry of approved banks. Credit amounts for the bank will be set pursuant to the process described in Chapter NR 350, *Wisconsin Administrative Code*, and Section 9.K.



11. OTHER INFORMATION

Four important publications provided the foundation for this document:

Guidelines for Developing Freshwater Wetlands Mitigation Plans and Proposals, Washington Department of Ecology, March 1994, Publication #94-29.

Wetland Mitigation Banking Technical Guideline, Wisconsin Department of Transportation, July 1993 (revised January 1997).

Compensatory Wetland Mitigation: Some Problems and Suggestions for Corrective Measures, Steve D. Eggers, U.S. Army Corps of Engineers- St. Paul District, February 1992.

Draft Federal Guidelines for Wetland Mitigation Banking in Wisconsin, U.S. Army Corps of Engineers- St. Paul District, September 1996.





APPENDIX A: Example Easement

GRANT OF CONSERVATION EASEMENT AND COVENANTS

This GRANT OF CONSERVATION EASEMENT and these COVENANTS are made by _____, residing at _____ (hereinafter referred to as the “Grantors”) to _____, (hereinafter referred to as “Grantee”).

WITNESS THAT:

WHEREAS, the Grantors are the owners in fee of certain real property located in the County of _____, in the State of Wisconsin, described more particularly as follows, and referred to herein as the “Conservancy Area”;

WHEREAS, the Grantors desire and intend that the natural elements and the ecological and aesthetic values of the Conservancy Area be maintained and improved in accordance with the terms and conditions of this Easement and these Covenants;

WHEREAS, the Grantors and Grantee both desire, intend and have the common purpose of conserving and preserving in perpetuity the Conservancy Area in a relatively natural condition by placing restrictions on the use of the Conservancy Area and by transferring from the Grantors to the Grantee, by the creation of a conservation easement on, over and across the Conservancy Area, affirmative rights to ensure the preservation of the natural elements and values of the Conservancy Area; and

WHEREAS, the Grantors have received valuable consideration for the granting of this Easement and the making of these Covenants.

NOW THEREFORE, the Grantors, for valuable consideration received, do hereby give, grant, bargain and convey to the Grantee, its successors and assigns, forever, a Conservation Easement in perpetuity over the Conservancy Area consisting of the following:

- a. The right of the Grantee to enforce by proceedings at law or in equity the Covenants hereinafter set forth. The right shall include but not be limited to, the right to bring an action in any court of competent jurisdiction to enforce the terms of this Easement or these Covenants, to require the restoration of this property to its natural condition or to enjoin non-compliance by appropriate injunctive relief. The Grantee does not waive or forfeit the right to take action as may be necessary to ensure compliance with terms of this Easement and these Covenants by any prior failure to act. Nothing herein shall be construed to entitle the Grantee to institute any enforcement action against the Grantors for any changes to the Conservancy Area due to causes beyond the Grantors’ control and without the Grantor’s fault or negligence (such as changes caused by fire, flood, storm, civil or military authorities undertaking emergency action or unauthorized wrongful acts of third parties).
- b. The right of the Grantee, its contractors, agents and invitees, to enter the Conservancy Area, in a reasonable manner and at reasonable times, for the purpose of inspecting the Conservancy Area to determine if the Grantors are complying with the Covenants and purposes of this grant, and further to observe, study, record and make scientific studies and educational observations.

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- c. The right to install, operate and maintain water control structures for the purpose of protecting, re-establishing and enhancing wetlands and their functional values. This includes the right to transport construction materials to and from the site of any existing or proposed water control structure.
 - d. The right to establish or re-establish vegetation through seedings or plantings.
 - e. The right to manipulate vegetation, topography and hydrology on the Conservancy Area through diking, pumping, water management, excavating, burning, cutting, pesticide application and other suitable methods for the purpose of protecting and enhancing wetlands and wetland vegetation.

AND IN FURTHERANCE of the foregoing affirmative rights, the Grantor's make the following covenants on behalf of themselves and their heirs, successors and assigns, which covenants shall run with and bind the Conservancy Area in perpetuity:

COVENANTS

- a. **USES.** There shall be no commercial or industrial activity undertaken or allowed.
- b. **BUILDINGS AND STRUCTURES.** There shall be no buildings, dwellings, barns, roads, advertising signs, billboards or other structures not related to conservation of wetland-based recreation or education purposes built or placed in the Conservancy Area.
- c. **LAND DISTURBANCE.** There shall be no dredging, filling, excavating, mining, logging, drilling, or removal of any topsoil, sand, gravel, rock, minerals, or other materials within the Conservancy Area except in conjunction with authorized management activities.
- d. **DUMPING/DISPOSAL.** There shall be no dumping of trash, plant materials or compost, ashes, garbage or other unsightly or offensive material, especially including any hazardous or toxic waste.
- e. **WATER.** The hydrology of the Conservancy Area will not be altered in any way or by any means including pumping, draining, diking, impounding or diverting surface or ground water into or out of the Conservancy Area.
- f. **AGRICULTURAL USES.** All agricultural uses are prohibited (e.g., plowing, tilling, haying, cultivating, planting or other agricultural activities). This does not include native seed production activities, mowing, planting, or herbicide use conducted for the purpose of enhancing the ecological functions and values of the Conservancy Area. The Grantor may not stock animals or allow the grazing of animals on the Conservancy Area without prior written permission of the Grantee.
- g. **NOXIOUS WEEDS.** The Grantors are responsible for compliance with all federal, state and local laws governing the control of noxious weeds within the Conservancy Area.
- h. **MOTORIZED VEHICLE USE.** There shall be no operation of any motorized vehicle or equipment within the Conservancy Area except in conjunction with the authorized management activities.

RESERVED RIGHTS

This easement does not authorize entry upon or use of the Conservancy Area by the general public.

The Grantors and their invitees may hunt and fish in the Conservancy Area so long as they comply with all federal, state and local game and fishery regulations.

Nothing herein shall be construed as limiting the right of the Grantors to sell, give or otherwise convey the Conservancy Area, or any portion or portions thereof, provided that the conveyance is subject to the terms of this Easement and these Covenants.

GENERAL PROVISIONS

This Conservation Easement and these Covenants shall run with and burden the Conservancy Area in perpetuity and shall bind the Grantors and their heirs, successors and assigns. This Easement and these Covenants are fully valid and enforceable by any assignee of the Grantee, whether assigned in whole or in part.

The Grantors agree to pay any and all real property taxes and assessments levied by competent authority on the Conservancy Area.

The Grantors agree that the terms, conditions, covenants and restrictions set forth in this instrument will be inserted in any subsequent conveyance of any interest in said property. The Grantors agree to notify the Grantee of any such conveyance in writing and by certified mail within 30 days before the conveyance.

The Grantee may assign or transfer this Conservation Easement and the rights and Covenants contained herein to any Federal or state agency or private conservation organization for management and enforcement.

The terms "Grantors" and "Grantee" as used herein shall be deemed to include, respectively, the Grantors and their heirs, successors, personal representatives, executors and assigns, and the Grantee and its successors and assigns.

The Grantors hereby warrant and represent that the Grantors are seized of the Conservancy Area in fee simple and have good right to grant and convey this Conservation Easement and make these Covenants, that the Conservancy Area is free of all encumbrances, except as hereinafter set forth.

And _____, being the owner and holder of _____
certain _____ lien _____ which is
_____ against said premises do hereby join in consent to said
conveyance free of said lien.

IN WITNESS THEREOF, the Grantors have hereto set their hand and seal this ____ day
of _____, _____.

APPENDIX B: Compensation Site Plan Executive Summary

Site Name: _____

Location of Compensation Site:

County _____, Basin (GMU) _____
_____ 1/4, _____ 1/4, Section _____, Township _____, Range _____

Is this a Bank Site? (Yes or No). If yes, name of bank sponsor _____.

Is this Project Specific? (Yes or No). If yes, this is compensation for which project?
_____ which is scheduled for construction (Date?) _____.

General description of design concept for the compensation site:

_____.

Upland Buffers for the compensation site:

Max. Width _____ Min. Width _____ Surrounding Land-Uses _____
Restoration Work Planned in buffer zone: _____

Planned hydrology (include expected water depth): _____

Planned Construction date: _____

Wetland Type	Acres Impacted (for non-bank sites)	Compensation Site Acres Restored or Enhanced	Compensation Site Acres Created
open water			
deep marsh			
shallow marsh			
seasonally flooded basin			
bog			
floodplain forest			
alder thicket			
conifer swamp			
hardwood swamp			
shrub carr			
sedge meadow			
wet meadow			
low prairie			
fen			
Totals			

APPENDIX C: Affidavit of Bank Credit Purchase

Applicant Information	
Name:	
Address:	
Phone:	
Project Summary	
Brief Description of Project	
Acres of Wetland Impact by Wetland Type	
Location of Wetland Impacted	
County	
Basin (GMU)	
Township/Range & 1/4-1/4 Section	
Expected Replacement Ratio	

1. I certify that I have purchased _____ acres of compensation credit from the _____ Wetland Mitigation Bank.

Applicant Signature

Date

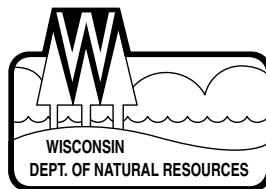
2. I certify that the _____ Wetland Mitigation Bank has sold _____ acres of approved compensation credit to the above named applicant and that such debit has been noted in the bank's accounting system.

Bank Sponsor Signature

Date



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