



# Minnesota Mitigation Newsletter

U.S. Army Corps of Engineers & MN Board of Water and Soil Resources

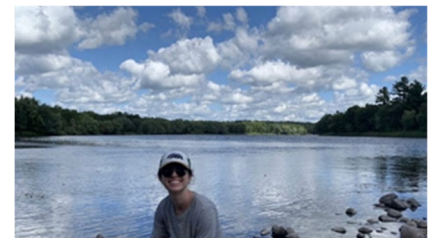
Vol.4| Spring 2021

## Farewells and Welcomes

Welcome to our new EPA representatives, Nichole Deweese, Katie Quesnell, and Liz Peloso, assisting Kerryann Weaver on the IRT!



Welcome to Corps Senior Ecologists (SE) Marissa Merriman and Faye Healy!



Farewell to our incomparable colleagues, Steve Eggers (Corps SE), Greg Larson (Corps SE) and Tim Smith (BWSR). They will be missed and we appreciate their significant contributions to our mitigation programs and their respective fields!



## Webinar Announcement

To follow-up from the 2019 Listening Sessions, we are hosting a pair of webinars during 2021. We intend to expand this webinar series in 2022 and welcome your suggestions for future topics! Please email [Leslie.e.day@usace.army.mil](mailto:Leslie.e.day@usace.army.mil) for an invitation.

**Webinar 1: Demonstrating Baseline Conditions**

September 30, 2021; 1-2pm

**Webinar 2: Mitigation Site Selection**

October 26, 2021; 1-2pm



US Army Corps of Engineers®  
St. Paul District



# BWSR's Mitigation Condition Assessment Report

BWSR recently completed a three-year study funded by the USEPA that evaluated the vegetative quality of restored wetlands and compared the sites to naturally occurring wetlands. The report suggests that conservation practices commonly used to restore wetlands—such as installing native plants and adopting management plans to limit invasive species establishment - result in wetlands of similar quality to naturally occurring wetlands. The report is available on the BWSR website at: <http://bwsr.state.mn.us/wca-program-reports>.



## Assessing Wetland Quality of Depressional Wetlands to Refine Restoration Requirements and Strategies

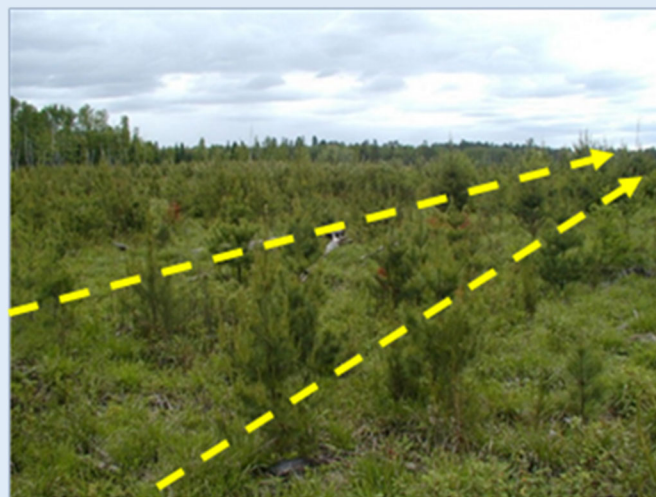
Grant Number CD-00E02072



October 30, 2020

# Vegetation Monitoring Plan Procedures

State and federal agencies from Minnesota and Wisconsin are collaborating on a document addressing vegetation monitoring techniques and the preparation of vegetation monitoring plans for mitigation sites. The procedures target those developing and implementing monitoring plans as well as those who review plans or monitoring reports. We expect to release the procedures this summer.



Example figures from proposed procedures.



“Yes, another sedge one  
(what can I say, I’m a sedge  
fanatic).”  
-Steve Eggers

# Technical Tidbit

Topic: Plant Identification

Members of the sedge family in the genus *Carex* are excellent indicators of habitat conditions: duration of inundation and/or high-water table, nutrients, minerals, pH, soil type, etc. By observing the *Carex* species present you can infer quite a bit about a site. Given a short list of *Carex* species that occur on a site somewhere in Wisconsin, you would be amazed at how much information a botanist can deduce from that limited information. If the assemblage of *Carex* species consists of creeping sedge, brown sedge, poor sedge, three-seeded sedge and few-flowered sedge—the site is almost certainly a bog meaning a Sphagnum moss mat, saturated, acidic (specifically pH <5.5) peat soils that have very low concentrations of nutrients and minerals. If the list has cattail sedge, swamp oval sedge, common bur sedge and common hop sedge—the site is almost certainly a floodplain forest meaning alluvial, mineral soils that are temporarily flooded and that have very high levels of nutrients and are in the southern half of Wisconsin.

So, learn your sedges!! If you’re just getting into sedges, start with those on the accompanying chart (page numbers to photographs and descriptions in the District’s wetland plant field guide are given). It can pay dividends when interpreting the conditions of a field site.

Numbers in brackets are page numbers in *Wetland Plants and Plant Communities of MN and WI*

## Some Characteristic Assemblages of *Carex* Species in Specific Habitats\*

\*Some species are characteristic of more than one habitat. Wet prairies and calcareous fens, for example, have a high degree of floristic similarities including several *Carex* species.

<b>Wet Prairies</b> Woolly sedge ( <i>Carex pellita</i> )[140] Buxbaum’s sedge ( <i>C. buxbaumii</i> ) [204] Common stiff sedge ( <i>C. tetanica</i> )[205]	<b>Calcareous Fens</b> Sterile sedge ( <i>Carex sterilis</i> )[226] Prairie sedge ( <i>C. prairea</i> )[228] Buxbaum’s sedge ( <i>C. buxbaumii</i> )[204] Running marsh sedge ( <i>C. sartwellii</i> ) Common stiff sedge ( <i>C. tetanica</i> )[205] Tussock sedge ( <i>C. stricta</i> )[138]
<b>Bogs</b> Bog sedge ( <i>Carex oligosperma</i> )[258] Three-seeded sedge ( <i>C. trisperma</i> )[261] Few-flowered sedge ( <i>C. pauciflora</i> )[260] Poor sedge ( <i>C. magellanica</i> )[259] Brown sedge ( <i>C. brunnescens</i> )[386] Creeping sedge ( <i>C. chordorrhiza</i> )	<b>Marshes</b> Lake sedge ( <i>Carex lacustris</i> )[112] Slough sedge ( <i>C. atherodes</i> )[117] Bottlebrush sedge ( <i>C. comosa</i> )[118] Yellow lake sedge ( <i>C. utriculata</i> )[114] Aquatic sedge ( <i>C. aquatilis</i> )[115]
<b>Hardwood Swamps</b> Common hop sedge ( <i>C. lupulina</i> )[356] Bladder sedge ( <i>C. intumescens</i> )[355] Fringed sedge ( <i>C. crinita</i> )[354]	<b>Floodplain Forests</b> Common bur sedge ( <i>Carex grayi</i> )[424] Swamp oval sedge ( <i>C. muskingumensis</i> )[425] Common hop sedge ( <i>C. lupulina</i> )[356] Cattail sedge ( <i>C. typhina</i> )[426] Awl-fruited oval sedge ( <i>C. tribuloides</i> )
<b>Sedge Meadows</b> Tussock sedge ( <i>Carex stricta</i> )[138] Lake sedge ( <i>C. lacustris</i> )[112] Aquatic sedge ( <i>C. aquatilis</i> )[115] Porcupine sedge ( <i>C. hystericina</i> )[111] Woolly sedge ( <i>C. pellita</i> )[140] Stalk-grain sedge ( <i>C. stipata</i> )[310] Fox sedge ( <i>C. vulpinoidea</i> )[178]	<b>Coniferous Swamps</b> Interior sedge ( <i>C. interior</i> )[384] Brown sedge ( <i>C. brunnescens</i> )[386] Small yellow sedge ( <i>C. cryptolepis</i> )[385]

## BWSR State Wetland Bank Database Update

On March 17, 2021 BWSR completed the database upgrade project initiated in 2019 and began processing wetland bank transactions in a new Oracle based application. Historical data upload from the outdated BSuite database was completed as part of the project. The new modern application allows more efficient processing of wetland bank transactions and centralizes all of BWSR’s program management tools in one location (credit ledgers, fee tracking, monitoring, and bank application reviews). The project also resulted in an updated version of the *Available Wetland Credit Listing* on the BWSR webpage. Although there was extensive testing of the new application and the data upload process, account holders are encouraged to check their account ledgers and contact information and report any issues to BWSR.

### Available Wetland Bank Credits

The Available Wetland Bank Credit Listing displays credits in wetland bank accounts where the account holder has requested that the credits be listed as available for sale. The default view displays all wetland bank accounts with credits available for sale. More refined searches can be conducted by account type (standard or agricultural), major watershed, or bank service area using the dropdown lists and selecting the filter button.

BSA	Major Watershed	County	Account	Account Type	Group	Program Approval	Wetland Plant Community	Credits	Account Manager		
									Name	Email	Phone
5	Mississippi (Brainard)	Aitkin	1134		A	Fed and State Approved	UNKNOWN	0.5	Richard Michutt		(218) 729-0206
			1134					TOTAL CREDITS	0.5		
5	Mississippi (Brainard)	Aitkin	1485	Standard	D	Fed and State Approved	7 - Hardwood Swamp	0.4718	Aitkin County Highway Department		
5	Mississippi (Brainard)	Aitkin	1485	Standard	A	Fed and State Approved	1 - Seasonably Flooded Basin	2.56	Aitkin County Highway Department		
5	Mississippi (Brainard)	Aitkin	1485	Standard	C	Fed and State Approved	6 - Shrub Carr	13.9959	Aitkin County Highway Department		
5	Mississippi (Brainard)	Aitkin	1485	Standard	B	Fed and State Approved	2 - Sedge Meadow	20.7535	Aitkin County Highway Department		
			1485					TOTAL CREDITS	37.7812		
5	Mississippi (Grand Rapids)	Aitkin	1545	Standard	D	Fed and State Approved	2 - Fresh Wet Meadow	0.5847	Steve Gilbertson (EIP Acct Mngr)	steve@minnesotamitigation.com	(218) 326-6510
5	Mississippi (Grand Rapids)	Aitkin	1545	Standard	C	Fed and State Approved	7 - Hardwood Swamp	6.9873	Steve Gilbertson (EIP Acct Mngr)	steve@minnesotamitigation.com	(218) 326-6510
5	Mississippi (Grand Rapids)	Aitkin	1545	Standard	E	Fed and State Approved	6 - Shrub Carr	14.051	Steve Gilbertson (EIP Acct Mngr)	steve@minnesotamitigation.com	(218) 326-6510
5	Mississippi (Grand Rapids)	Aitkin	1545	Standard	B	Fed and State Approved	3 - Shallow Marsh	70.8811	Steve Gilbertson (EIP Acct Mngr)	steve@minnesotamitigation.com	(218) 326-6510
5	Mississippi (Grand Rapids)	Aitkin	1545	Standard	A	Fed and State Approved	2 - Fresh Wet Meadow	667.961	Steve Gilbertson (EIP Acct Mngr)	steve@minnesotamitigation.com	(218) 326-6510
			1545					TOTAL CREDITS	760.4651		

# Conservation Easements, Financial Assurances and Long-Term Management

What's the difference between conservation easements (CE), financial assurances (FA) and long-term management (LTM)? If you are uncertain, you are not alone! The table below should clarify differences and hopefully you'll find it helpful.

	<b>Conservation Easement</b>	<b>Financial Assurance</b>	<b>Long-Term Management</b>
<b>What is it?</b>	<ul style="list-style-type: none"> <li>• A legal recorded agreement giving the easement holder an interest in the property and the ability to permanently protect it by restricting activities that could degrade or nullify the mitigation objective.</li> <li>• In Minnesota, BWSR holds perpetual CEs on all mitigation banks. A title insurance policy is also required to insure BWSR's interests.</li> <li>• Referred to as a 'site protection' mechanism in the Federal Mitigation Rule.</li> </ul>	<ul style="list-style-type: none"> <li>• A funding mechanism most often used when credits are released before project completion or specific performance standards are met. FAs often have a term of five years or less and ensure sponsors successfully complete projects.</li> <li>• Letters of credit, bonds, or cash escrow are common FAs.</li> <li>• A FA is based on estimated cost of providing replacement mitigation in the event the approved mitigation project is not successful and can include land acquisition, planning and engineering, construction, monitoring and maintenance costs.</li> <li>• The IRT can call upon the FA if the approved mitigation project is not successful.</li> </ul>	<ul style="list-style-type: none"> <li>• A plan to sustain functional gains after performance standards are met and annual monitoring is complete.</li> <li>• It identifies management activities, specific conditions that trigger these activities, and should specify a funding mechanism to pay for them.</li> <li>• Endowments are a common form of long-term management funds.</li> </ul>
<b>When is it applicable?</b>	<ul style="list-style-type: none"> <li>• The easement must be accepted by BWSR.</li> <li>• Prior to land purchase, sponsors should complete a title review to identify conflicting easements/encumbrances.</li> <li>• The sponsor must resolve any conflicts prior to MBI signing.</li> <li>• The sponsor must establish, sign and record the CE prior to initial credit release.</li> </ul>	<ul style="list-style-type: none"> <li>• When needed, sponsors incorporate FA into the Mitigation Plan and MBI and they should be finalized prior before any credits are released.</li> </ul>	<ul style="list-style-type: none"> <li>• The sponsor should begin planning for LTM during the draft mitigation plan development stage.</li> <li>• The sponsor must establish LTM plan as part of the MBI.</li> <li>• If the Corps requires a LTM funding mechanism, the sponsor must include details in the LTM plan in their MBI.</li> </ul>
<b>Why is it important?</b>	<ul style="list-style-type: none"> <li>• Because the state has an interest in the property, CEs allow BWSR, and other agencies, to permanently protect and sustain the compensatory mitigation site.</li> <li>• Prohibits site alterations and incompatible uses (e.g., clear cutting, encroachment, or mineral extraction) that could jeopardize compensatory mitigation objectives.</li> <li>• Required by state law and the Federal Mitigation Rule.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensures the mitigation plan will be fully implemented.</li> <li>• Provides a mechanism for the IRT to complete restoration and monitoring if sponsors are unable.</li> <li>• Required by the Federal Mitigation Rule.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensures the environmental gains provided by a mitigation project will persist into perpetuity.</li> <li>• Required by the Federal Mitigation Rule.</li> </ul>
<b>Who to work with?</b>	<ul style="list-style-type: none"> <li>• Once the DMBI phase is complete, sponsors can initiate easement acquisition with BWSR easement staff.</li> </ul>	<ul style="list-style-type: none"> <li>• TEP and IRT members review and the Corps and LGU approve.</li> </ul>	<ul style="list-style-type: none"> <li>• All IRT members review and approve.</li> <li>• Corps IRT members will work with the bank sponsor to establish.</li> </ul>