



# Wisconsin Mitigation Newsletter

U.S. Army Corps of Engineers & WI Department of Natural Resources

Vol.4| Spring 2021

## Farewells and Welcomes

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



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



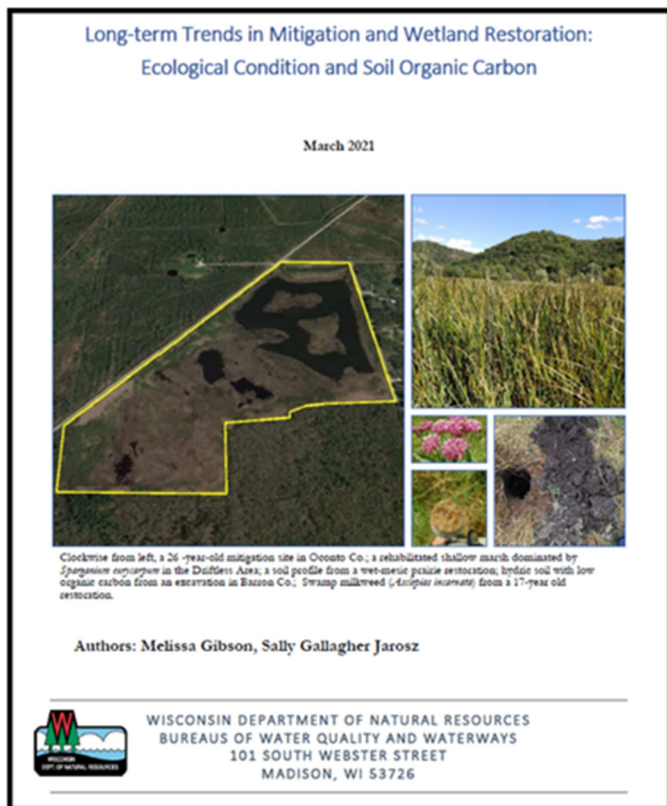
Farewell to our incomparable colleagues, Steve Eggers (Corps SE) and Greg Larson (Corps SE). They will be missed and we appreciate their significant contributions to our mitigation programs and their respective fields!



# WDNR's Mitigation Condition Assessment Report

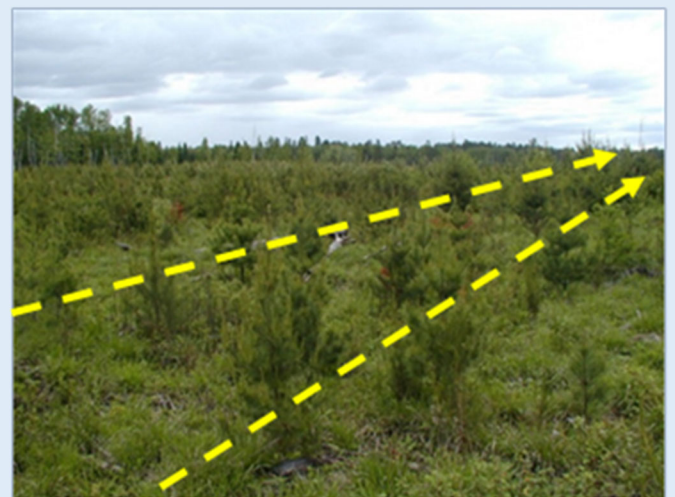
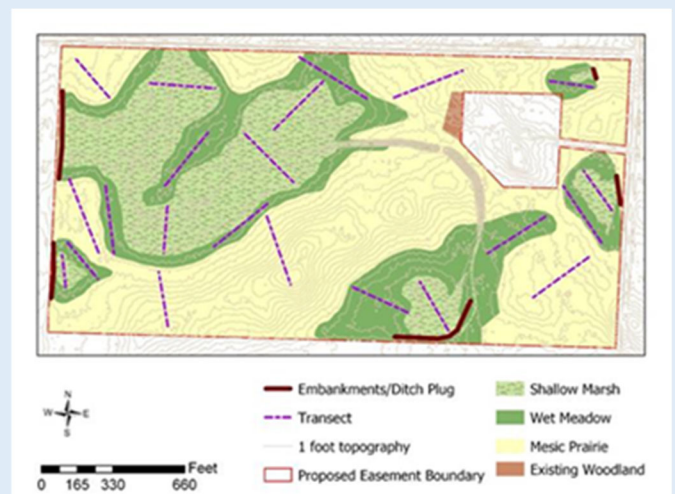
Wisconsin DNR has completed a report documenting results from a study of floristic quality and soil carbon stocks in wetland mitigation sites ranging in age from 13 to 26 years old. Attributes that may affect floristic quality development within mitigation sites are also examined and recommendations for improving wetland mitigation in Wisconsin are provided. The report is available on the WDNR's website at:

<https://dnr.wisconsin.gov/topic/Wetlands/reports.html>.



# 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.



# Webinar Announcement

Thank you to all participants at this year's Wisconsin Wetland Association discussion. As a result of that discussion, we identified topics for our next series of mitigation webinars! Please email [Leslie.e.day@usace.army.mil](mailto:Leslie.e.day@usace.army.mil) for an invitation.

## Webinar 1: Conservation Easements

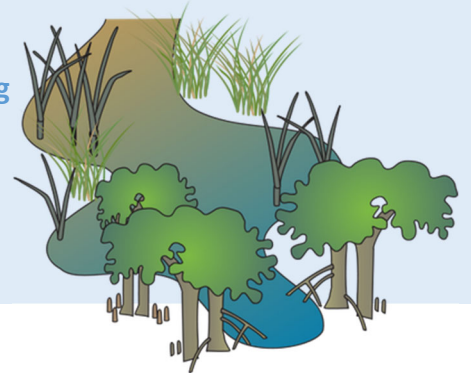
October 5, 2021; 11-12pm

## Webinar 2: Financial Assurances

November 4, 2021; 11-12pm

## Webinar 3: Long-Term Management Funding

December 9, 2021; 11-12pm



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

### 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.

#### Wet Prairies

Woolly sedge (*Carex pellita*)[140]  
Buxbaum’s sedge (*C. buxbaumii*) [204]  
Common stiff sedge (*C. tetanica*)[205]

#### Bogs

Bog sedge (*Carex oligosperma*)[258]  
Three-seeded sedge (*C. trisperma*)[261]  
Few-flowered sedge (*C. pauciflora*)[260]  
Poor sedge (*C. magellanica*)[259]  
Brown sedge (*C. brunnescens*)[386]  
Creeping sedge (*C. chordorrhiza*)

#### Hardwood Swamps

Common hop sedge (*C. lupulina*)[356]  
Bladder sedge (*C. intumescens*)[355]  
Fringed sedge (*C. crinita*)[354]

#### Sedge Meadows

Tussock sedge (*Carex stricta*)[138]  
Lake sedge (*C. lacustris*)[112]  
Aquatic sedge (*C. aquatilis*)[115]  
Porcupine sedge (*C. hystericina*)[111]  
Woolly sedge (*C. pellita*)[140]  
Stalk-grain sedge (*C. stipata*)[310]  
Fox sedge (*C. vulpinoidea*)[178]

#### Calcareous Fens

Sterile sedge (*Carex sterilis*)[226]  
Prairie sedge (*C. prairea*)[228]  
Buxbaum’s sedge (*C. buxbaumii*)[204]  
Running marsh sedge (*C. sartwellii*)  
Common stiff sedge (*C. tetanica*)[205]  
Tussock sedge (*C. stricta*)[138]

#### Marshes

Lake sedge (*Carex lacustris*)[112]  
Slough sedge (*C. atherodes*)[117]  
Bottlebrush sedge (*C. comosa*)[118]  
Yellow lake sedge (*C. utriculata*)[114]  
Aquatic sedge (*C. aquatilis*)[115]

#### Floodplain Forests

Common bur sedge (*Carex grayi*)[424]  
Swamp oval sedge (*C. muskingumensis*)[425]  
Common hop sedge (*C. lupulina*)[356]  
Cattail sedge (*C. typhina*)[426]  
Awl-fruited oval sedge (*C. tribuloides*)

#### Coniferous Swamps

Interior sedge (*C. interior*)[384]  
Brown sedge (*C. brunnescens*)[386]  
Small yellow sedge (*C. cryptolepis*)[385]

## 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*

# 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.

	Conservation Easement	Financial Assurance	Long-Term Management
<b>What is it?</b>	<ul style="list-style-type: none"> <li>A legal mechanism that ensures a mitigation project will not be destroyed or substantially degraded by any subsequent owner or holder of interest in the property on which the mitigation site is located; it must prohibit incompatible uses long term.</li> <li>Referred to as 'site protection' in the Federal Mitigation Rule 40 CFR 230.97(a)/33 CFR 332.7(a).</li> <li>In Wisconsin, WDNR holds perpetual CEs on all mitigation banks. A title insurance policy is also required to insure WDNR's interests.</li> </ul>	<ul style="list-style-type: none"> <li>A financial mechanism based upon estimated costs of providing replacement mitigation in the event an approved mitigation project is not successful, and can include mechanisms such as, but not limited to, a bond, escrow, or letter of credit.</li> <li>FA levels are based on costs such as potential land acquisition, engineering and design, construction, and maintenance and monitoring costs.</li> <li>The IRT can call upon the FA if the approved mitigation project is not successful.</li> <li>See Federal Mitigation Rule 40 CFR 230.93(n)/33 CFR 332.3(n).</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>The plan 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> <li>See Federal Mitigation Rule 40 CFR 230.97(d)/33 CFR 332.7(d).</li> </ul>
<b>When is it applicable?</b>	<ul style="list-style-type: none"> <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 the MBI signing.</li> <li>The sponsor and WDNR must sign the conservation easement and the sponsor must record the easement prior to initial credit release.</li> </ul>	<ul style="list-style-type: none"> <li>The sponsor should begin developing a financial assurance plan during the draft CSP stage and finalize the plan prior to the MBI signing.</li> <li>The sponsor must establish financial assurances (i.e., fund the financial assurances) prior to an initial credit release.</li> </ul>	<ul style="list-style-type: none"> <li>The sponsor should begin planning for long-term management during the draft CSP development stage.</li> <li>The sponsor must develop the long-term management plan as part of the MBI.</li> <li>If the Corps requires a long-term management funding mechanism, the sponsor must include details in long-term management plan in their MBIs.</li> </ul>
<b>Why is it important?</b>	<ul style="list-style-type: none"> <li>Prohibits incompatible uses (e.g., clear cutting, encroachment, or mineral extraction) that might otherwise jeopardize the objectives of the compensatory mitigation project.</li> <li>Is a requirement per state law and per Federal Mitigation Rule.</li> </ul>	<ul style="list-style-type: none"> <li>Ensures compliance with the mitigation plan.</li> <li>Provides a mechanism for the IRT to complete the restoration and monitoring if a sponsor is unable.</li> <li>Is a requirement per state law and per 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 per state law and per Federal Mitigation Rule.</li> </ul>
<b>Who to work with?</b>	<ul style="list-style-type: none"> <li>All IRT members review and approve.</li> <li>WDNR is IRT member responsible for working with the bank sponsor to establish.</li> </ul>	<ul style="list-style-type: none"> <li>All IRT members review and approve.</li> <li>WDNR is IRT member responsible for working with the bank sponsor to establish.</li> </ul>	<ul style="list-style-type: none"> <li>All IRT members review and approve.</li> <li>Corps is IRT member responsible for working with the bank sponsor in coordination with the IRT to establish.</li> </ul>