

# Mitigation Newsletter

## Wisconsin and Minnesota

U.S. Army Corps of Engineers  
Wisconsin Department of Natural Resources  
Environmental Protection Agency  
Minnesota Department of Natural Resources  
Minnesota Board of Water and Soil Resources

### Welcome!

Welcome to Chelsey Lundeen, our new Wisconsin Department of Natural Resources (WDNR) mitigation coordinator and Interagency Review Team (IRT) member for compensatory mitigation site reviews in Wisconsin.



### Wisconsin Withdrawal Affidavits

The U.S. Army Corps of Engineers (Corps) set up a separate Outlook inbox to receive withdrawal affidavits from Wisconsin permittees and bank/in-lieu fee (ILF) sponsors. Rather than sending to Karen Eklund directly, starting immediately, please submit all withdrawal affidavits to the Corps via [WisRIBITS@usace.army.mil](mailto:WisRIBITS@usace.army.mil) and to Chelsey Lundeen at [Chelsey.lundeen@wisconsin.gov](mailto:Chelsey.lundeen@wisconsin.gov). For information on preparing complete withdrawal affidavits to ensure efficient processing, please refer to our [Fall 2022 Mitigation Newsletter](#).



### Stream Quantification Tool (SQT) Worksheets

The agencies make updates to the WI and MNSQT worksheets as needed and we have noticed a few project proponents using outdated versions on their projects. Make sure you are using the most up to date versions of the worksheets available [on RIBITS](#) under Menu, Assessment Tools. We most recently updated the MNSQT worksheets on October 27, 2020.

### Release of WISQT BETA

The Corps, WDNR and U.S. Environmental Protection Agency (EPA) are pleased to announce the release of the Wisconsin SQT BETA version! The Corps posted a 60-day Special Public Notice on August 21, 2023, announcing the release of this tool and requesting comments. The agencies are reviewing comments and expect to release WISQT Version 1.0 in 2024. You can [Find the WISQT BETA in RIBITS](#) under Menu, Assessment Tools.

### Hydrology Monitoring Webinar

The Corps, Minnesota Board of Water and Soil Resources (BWSR) and WDNR are hosting a public webinar on January 18, 2024, to discuss use of monitoring wells for monitoring wetland hydrology. The agencies will cover the importance of monitoring wetland hydrology, developing monitoring plans, techniques, proper well installation, gathering and presenting data and hydrology analyses, and lessons learned. When sponsors are working to demonstrate site success and request credit releases, it is crucial to accurately gather sufficient hydrology data to document whether hydrology performance standards are met. We hope to see you there!

If you would like to attend and haven't received an invite to the webinar, please contact Leslie Day at [Leslie.e.day@usace.army.mil](mailto:Leslie.e.day@usace.army.mil)

### APT Version 2.0

Version 2.0 of the U.S. Geological Survey (USGS) Antecedent Precipitation Tool (APT) is now available. The updated APT contains additional functionalities, to include a newly developed gridded daily precipitation dataset from the National Oceanic and Atmospheric Administration, National Centers for Environmental Information. All users including Corps staff, agencies, consultants and other practitioners should download Version 2.0 of the APT from GitHub.

[Download the APT \(VERSION 2.0.0\) User Guide](#)

[Download the APT \(VERSION 2.0.0\)](#)

## BWSR RFP

The BWSR wants to generate wetland credits for use through the Local Government Road Wetland Replacement Program (LGRWRP) by contract for credits, partnerships, or easement purchases. BWSR will post a request for proposals (RFP) in the next few weeks for these opportunities in Bank Service Areas (BSA) 4,5,6,7,8,9, and 10. You can contact Dennis Rodacker at [dennis.rodacker@state.mn.us](mailto:dennis.rodacker@state.mn.us) with questions and find more information on BWSR's website when the RFP opens [here](#).

## Unique Find at a Wisconsin Mitigation Bank

Mitigation banks can provide an abundance of surprises with the diversity and native flora that come back following restoration. Despite decades of agricultural production, the native seed bank prevailed at the

Shawano County Highway Department Wetland Mitigation Bank with the presence of our native Nodding Lady's Tresses orchid (*Spiranthes cernua*) popping up in two different locations during years 8 and 9 of monitoring! An awesome find and photo by Stuart Boerst of McMahan Associates, Inc.



## Tips for Improving Mitigation Bank Instrument (MBI) Reviews

- ◆ We encourage sponsors to use bookmarks in their electronic submittals to increase efficiency of Corps/IRT review. Please add bookmarks directly to your Table of Contents page, so they will work like a link and take the reader to other parts of the document quickly. [Follow these steps to add bookmarks](#).
- ◆ Please ensure all figures are high resolution and easy to read.
- ◆ Please include summary responses to previous agency comments.
- ◆ If file size is an issue, reach out to the Corps Project Manager for alternative submittal options.

## Jurisdictional Determinations are Not Required for Banks

On August 29, 2023, the EPA and Department of the Army (the agencies) issued a conforming rule, "Revised Definition of 'Waters of the United States'; Conforming," [published in the Federal Register](#) and effective on September 8, 2023. This final rule conforms the definition of "waters of the United States" to the U.S. Supreme Court's May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*.

The Corps will continue to review proposed bank and ILF proposals in coordination with the IRTs in Minnesota and Wisconsin as we always have. Sponsors who obtain both federal and state credit approvals at their sites are able to sell available credits to applicants needing to offset impacts regulated under federal and/or state laws. There is no requirement for waters at a potential bank or ILF site to be jurisdictional waters of the United States at the time that a project is proposed, approved or constructed. Sponsors should continue to use the Corps' [Site Selection Criteria Checklist](#) when exploring and evaluating sites for bank or ILF potential.

## As-built Requirements for Mitigation Banks and In-Lieu Fee Sites

Sponsors for compensatory mitigation banks or ILF sites must submit as-built documentation of site construction, seeding and planting, as well as other administrative documentation, as part of credit release requests. To aid sponsors in submitting documentation sufficient to support IRT review and timely credit release decisions, the Corps developed [a checklist](#) for sponsor use.

Sponsors should continue to use WDNR and [BWSR guidance on monumentation](#) to ensure appropriate signage and ensure compliance with those programs. In Minnesota, sponsors should continue to engage the BWSR Engineer to ensure they include any additional documentation required for the state's mitigation program.

# Mitigation Monitoring Reports

Sponsors who present their annual monitoring data in clear, complete and organized reports will ensure more efficient agency review and timely credit release decisions. To facilitate this review and reduce the request for additional information, sponsors should include the following in reports:

- ◆ A summary of monitoring methods and any management actions completed during that growing season.

- ◆ In table format, present a comparison of the MBI's approved performance standards to collected monitoring data along with a summary of whether performance standards were met. An example to support a hydrology release request is shown below. Note: two seasons of hydrology data are included as required. If a credit release is requested even if some collected data shows that

Community Type	Well ID	2022 Year 1						2023 Year 2					
		Consecutive Days of Inundation			Within 12"			Consecutive Days of Inundation			Within 12"		
		PS	O	M	PS	O	M	PS	O	M	PS	O	M
Wet Meadow	Well 1	<14	0	Y	>28	32	Y	<14	0	Y	>28	32	Y
	Well 2	<14	2	Y	>28	35	Y	<14	0	Y	>28	35	Y
	Well 3	<14	0	Y	>28	27	N	<14	0	Y	>28	36	Y
Shallow Marsh	Well 4	>28	35	Y	N/A	N/A	Y	>28	36	Y	N/A	N/A	Y
	Well 5	>28	36	Y	N/A	N/A	Y	>28	45	Y	N/A	N/A	Y
	Well 6	>28	34	Y	N/A	N/A	Y	>28	38	Y	N/A	N/A	Y
Deep Marsh	Well 7	GS	GS	Y	N/A	N/A	Y	GS	GS	Y	N/A	N/A	Y
	Well 8	GS	GS	Y	N/A	N/A	Y	GS	GS	Y	N/A	N/A	Y

PS = performance standards M = met Yes or No O = observed days GS = entire growing season

the target performance standards are not met, the sponsor should provide justification.

- ◆ A hydrograph for each well (plus any reference well associated with that well), identifying the start and end of the growing season, the wetland basin and community, the days the performance standard was met, ground surface elevation, elevation at 1 foot below the surface, bottom of well elevation, and precipitation data.
- ◆ The credit release schedule from the MBI, identifying any credits previously released by the Corps and state. If the Corps and state approved different credits, include a comparison.
- ◆ Maps showing the mitigation site location, approved wetland community and compensation types, transects/plot/meander paths, photographic reference points, sampling data points such as well locations, and other features required in the mitigation plan.
- ◆ Antecedent Precipitation for the monitoring year.
- ◆ Vegetation summary data.

## Submitting a Complete Mitigation Work Plan within the Mitigation Plan

When Sponsors propose construction as part of hydrology restoration, they must prepare and submit a complete Mitigation Work Plan in their Mitigation Plan (MP) at the Draft MBI phase. While sponsors may submit preliminary or partially complete construction plans at Prospectus phase for IRT review and comment, sponsors must include their design information and final construction plans in their MP. Design information must accurately describe existing project conditions, design objectives, construction issues or constraints, and a summary of analyses. Sponsors must include, as applicable, the following information and any other information deemed necessary by the agencies:

- ◆ A summary of soils and geotechnical investigations completed where embankments, ditch plugs, or other project features are proposed;
- ◆ A summary of hydrologic/hydraulic analyses completed, and information demonstrating whether the project will impact adjacent properties and any draft lawful agreements or easements with affected owners;
- ◆ A summary of expected restoration outcomes compared to historic conditions, thoroughly justifying any restorations that deviate from historic conditions and wetland community types; and
- ◆ Any necessary lateral effect determinations.

Sponsors must include final construction plans that include the following and any other information deemed necessary by the agencies:

- ◆ Plan maps of an appropriate scale, including sizes and elevations of existing and proposed drainage and hydrologic features, and contours that use maximum one-foot intervals and reflect existing topography and proposed grading work; and
- ◆ Scale cross sections, profiles and other drawing details, notes, and specifications allowing for accurate grading, fabrication, and installation of all proposed project components, such as pipes, channels, embankments, ditch plugs, or outlet structures.

## Mitigation Method Series: Preservation

When submitting a prospectus proposing credit from preservation of wetland communities, sponsors must demonstrate that the wetlands contribute significantly to the ecological sustainability of the watershed (33 CFR 332.3(h)(ii)). The sponsor must demonstrate they meet this eligibility criteria for each wetland community type and basin proposed for preservation. This eligibility criteria may appear to set a high bar and may be challenging to demonstrate. That is the intent of the federal mitigation rule because preservation alone would not support the agencies' goal of no-net loss of aquatic resource functions. Sponsors should begin their assessment by: (1) identifying the appropriate watershed extent, typically starting with the minor watershed (HUC 10 or 12) and then expanding their assessment to the HUC 8 or 6 watershed; (2) Reviewing existing watershed plans or other datasets available to identify the existing and projected stressors, needs and challenges to the watershed's ecological condition and sustainability and (3) Demonstrating how your mitigation site and its wetlands fill important functional roles or ameliorates stressors.

The following are just a few examples of the type of assessments sponsors may provide to demonstrate that the wetlands proposed for preservation contribute significantly to the ecological sustainability of the watershed:

- ◆ Compare site resources with those of regional scarcity, historical (pre-settlement) prevalence, and significance within the watershed. Consult Minnesota DNR's Field Guides to the Native Plant Communities of Minnesota and WDNR's Wisconsin Wildlife Action Plan Conservation Opportunity Areas.
- ◆ Consider ability of site resources to restore once lost or degraded (i.e. difficulty of replacement through traditional mitigation actions, difficulty of regeneration or propagation, atypical hydrologic or geomorphic requirements).
- ◆ Evaluate the resource's location and extent within the watershed.
- ◆ Evaluate the resource's location relative to other conserved properties or conserved resources (e.g., protected, designated or fragile and whose condition is supported by the mitigation site) in the watershed with an emphasis on the identification of properties and resources in close proximity to, immediately adjacent to, or downstream of the mitigation site.
- ◆ If the wetland mitigation site is a part of a larger wetland complex, assess the condition of the complex within which the mitigation site exists and how the proposed site contributes to the sustainability of the complex.

See Fall 2022 and Spring 2023 Newsletters for past articles)

## Monitoring Well Construction

Proper construction of hydrology monitoring wells is important to a successful monitoring plan. Review and use the reference documents posted [on BWSR's website](#) and be aware of the following:

- ◆ Ensure you are sufficiently deep enough (2-4 feet) to capture hydrology bounce during the growing season. Watch out for restrictive layers so to not penetrate them.
- ◆ Record your soil boring profile information; this will help you make decisions on well construction and proper depth.
- ◆ Use 1- 1.5-inch diameter 0.010 slotted PVC pipe. Wrap the casing in landscape material to keep the inside of the casing clean. Ensure there are drain holes at the bottom of the casing, and at the top to allow drainage and pressure equalization.
- ◆ Wells in most soil material require backfilling with clean sand or native soil, covering the slotted portion of the casing. The bentonite should only be a few inches deep and not allowed to enter the slotted casing.
- ◆ When using a hanging type data logger, use metal cable or very small chain. Other material will stretch and give inaccurate readings.
- ◆ Survey the ground and top of casing elevations annually as the casing will heave through the freeze thaw cycles of winter.
- ◆ Check multiple times during the growing seasons that data loggers are functioning. Otherwise you may lose valuable data.

