

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

Farewells and Welcomes

Welcome to our new Environmental Protection Agency (EPA) Interagency Review Team (IRT) representative, Nikki Dewese, for compensatory mitigation site reviews in Wisconsin and Minnesota!



Farewell for now to our incomparable EPA IRT representative, Kerrynn Weaver. We appreciate her significant contributions to the review of many mitigation sites, development of the Stream Quantification Tools, and our mitigation programs at large. We will miss working with her on a regular basis. In her new position as US EPA Region 5 Wetlands Section Supervisor, she'll still be involved in programmatic initiatives but not on day-to-day site reviews.



Issuance of the Stream Mitigation Procedures!

On April 18, 2023, the U.S. Corps of Engineers, St. Paul District (Corps) issued the Stream Mitigation Procedures for use across Minnesota and Wisconsin. The Corps will host a webinar on May 10, 2023 to review content of the procedures and answer questions. If you are interested in participating and are not currently on our streams contact list, email stpaulsqt@usace.army.mil.

[https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Special%20Notices/ANNOUNCEMENT%20OF%20RELEASE%](https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Special%20Notices/ANNOUNCEMENT%20OF%20RELEASE%20)

BWSR Rulemaking Updates

The Minnesota Board of Water and Soil Resources (BWSR) has re-initiated the state's rulemaking process to incorporate the statute changes from 2011, 2012, 2015 and 2017. Some changes were effective immediately and others are only effective upon further development of Wetland Conservation Act (WCA) rules. Of particular interest to those involved in wetland banking are changes to the following:

- *wetland replacement siting
- *pre-settlement wetland areas
- *in-lieu fee replacement
- *decision authority for wetland bank plans

Other BWSR initiatives with rulemaking include potential changes to wetland typing for wetland impacts and replacement credits and changes to bank service area (BSA) boundaries.

BWSR has established a [WCA rulemaking page](#) for the public to access relevant information. BWSR held two Wetland Advisory Committee meetings this year with more to come in 2023. In addition to advisory committee meetings and other outreach and public input efforts, BWSR plans to hold a virtual session in the near future on those issues most relevant to wetland bankers. BWSR will provide information on the session via our email list or future newsletters.

Wisconsin Guidelines Update

The Wisconsin DNR (WDNR) and Corps recently began an update of the joint 2013 Guidelines for Wetland Compensatory Mitigation in Wisconsin. We will issue a public notice and host a listening session to solicit comments on the outline within the next few months. Please sign up for either the compensatory mitigation activities or special public notice RSS feed at the following link if you're interested in participating! <https://www.mvp.usace.army.mil/Contact/RSS/>

SQT Field Camp

Stream Mechanics is hosting a Stream Quantification Tool (SQT) Field Camp in southern Wisconsin the week of October 16, 2023. Stream Mechanics will use the Wisconsin SQT, which is currently under development, during the field camp. If you work on stream compensatory mitigation projects and are interested in attending, please watch their website for registration information. Please note the Stream Functions Pyramid and Quantification Tool Workshop is a prerequisite for the field camp. <https://stream-mechanics.com/workshops/>

New APT Link

A recent change to the U.S. Geological Survey (USGS) server housing the elevation data required by the Antecedent Precipitation Tool's (APT) weather station selection criteria caused the APT to become inoperable. The Corps has released a new version of the APT which remedies this issue. All users, to include Corps staff, agencies, consultants, and other practitioners, should download the new version of the APT (version 1.0.23) from GitHub.

Link to Download the APT: <https://github.com/erdc/Antecedent-Precipitation-Tool/releases/tag/v1.0.23>

The Corps will release additional functionalities, to include the incorporation of gridded precipitation data within the APT, and an updated APT user guide soon. To report additional issues with the APT, please email apt-report-issue@usace.army.mil.



Minnesota SQT, Bed Material Characterization

We have identified an error within the Bed Material Characterization parameter in the Minnesota SQT. At this time, sponsors cannot use this parameter for calculating functional lift on projects. We are working to correct the issue and will provide a follow up when complete. This parameter is only applicable on gravel and cobble streams, and sponsors can measure proposed lift in those stream types through other parameters.

Mitigation Method Series: Preservation

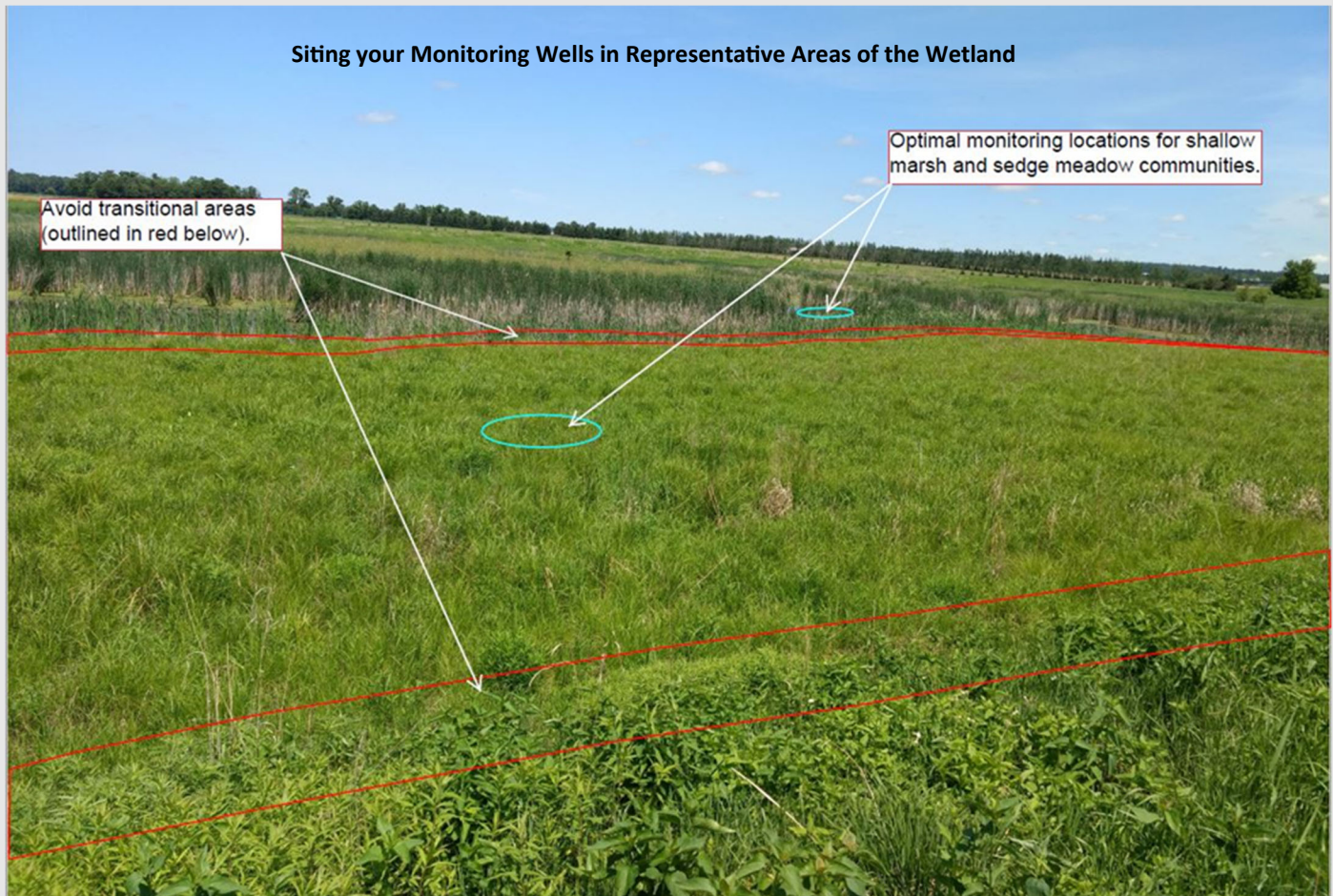
When submitting a prospectus proposing credit from preservation of wetland communities, sponsors must demonstrate that the wetlands provide important physical, chemical, or biological functions for the watershed (33 CFR 332.3(h)). The sponsor must demonstrate that they meet this eligibility criteria for each wetland community type and basin proposed for preservation.

This eligibility criteria may appear to set a high bar. That is the intent of the federal mitigation rule because preservation alone would not support the agency's requirement to ensure impacted wetland functions at permitted sites are adequately offset. The following are just a few examples of the type of information sponsors need to provide to support that the wetlands proposed for preservation provide important physical, chemical or biological functions for the watershed:

- ◆ State or local watershed plans or water or natural resource-related documents that discuss important functions in the watershed;
- ◆ Assessment methodologies documenting wetland functions (e.g., Floristic Quality Assessment, Rapid Assessment Methods, Hydrogeomorphic approach where guidebooks are available, bioassessments);
- ◆ State or local decision support tools to capture specific functions (e.g., providing suitable habitat for specific species, contributing to downstream water quality, providing floodwater storage).

Monitoring Wells

When developing mitigation plans, sponsors should propose a minimum of one monitoring well in each proposed wetland community within each wetland basin to be hydrologically restored. Sponsors should locate their monitoring wells in representative locations within each community to ensure the data collected is typical of the entire polygon. Sponsors should not locate their only wells at the transition between communities or near the wetland boundary, although sponsors can propose to include additional wells in those areas to support the final wetland delineation. Mitigation plans should include a map of the site that identifies the location of all monitoring wells overlaid on a proposed wetland community and restoration activity map.



Corps As-built Report Approval

Sponsors of approved banks who recently completed construction or who anticipate constructing in 2023 should contact their Corps Project Manager (PM) and WDNR in Wisconsin or the Technical Evaluation Panel in Minnesota as soon as possible this year to schedule site visits. Sponsors must complete construction ahead of these visits. Sponsors may organize a visit before they submit their as-built report, especially if their as-built submittal might be delayed to after the first snowfall. If you cannot finalize your as-built report before the site visit, please work with your Corps PM to determine what information you should provide to facilitate an effective site review. Sponsors should anticipate we will hold off approving initial credit releases until either the Corps or other IRT member(s) can complete a site visit post-construction.

Identifying an Appropriate Reference Reach

33 CFR 332.7(b) requires sponsors to design their compensatory mitigation projects to be self-sustaining once the site has met performance standards. For stream restoration projects in Minnesota and Wisconsin, the identification of an appropriate reference is crucial to guide your project's design and for the Corps to verify whether your restoration work meets the reference standard, which helps ensure the site is likely to be successful.

Wherever practicable, sponsors should include the identification of potential reference reaches as part of their prospectus for stream compensatory mitigation sites. The Corps and IRT can then help the sponsor evaluate the potential of these reaches for use in design. Sponsors should look for reference reaches within the same watershed and of the same stream classification type as the stream they are proposing to restore. Sponsors should look for reference reaches that are stable (neither incised nor aggrading), in a similar valley type as the proposed restoration reach, with similar flow and sediment regimes, riparian vegetation community, and preferably of similar drainage area. Historic aerial photos may help sponsors in understanding where to relocate the channel, but sponsors should still identify a reference reach within the watershed.

Sponsors will need to include dimension, pattern and profile information for their reference reach to support the proposed design in the Draft Mitigation Banking Instrument phase.

Delineating Reach Breaks: When and How to Split your Stream Restoration Proposal into Different Reaches

For each stream restoration project proposed as compensatory mitigation, sponsors must delineate appropriate reaches based on changes in overall stream type or significant changes in dimension, profile and pattern. This is especially true where these changes would create a difference in the functional feet score generated by the SQT. The following are a few of the characteristics that sponsors should use to delineate reach breaks:

- ◆ Changes in slope
- ◆ Changes in stream classification type (C-channel versus E-channel)
- ◆ Changes in bank height ratio or entrenchment ratio
- ◆ Presence of headcuts
- ◆ Changes in sinuosity
- ◆ Changes in proposed restoration technique (ex. Rosgen Priority Level 1 versus 2)
- ◆ Changes in channel incision
- ◆ Significant differences in riparian vegetation
- ◆ Confluence with another tributary

Please contact April Marcangeli with the Corps with any questions or for assistance in determining appropriate reach breaks.

