Mitigation Newsletter
Wisconsin and Minnesota

U.S. Army Corps of Engineers
Wisconsin Department of Natural Resources

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Welcome!

We are excited to welcome Board of Soil and Water Resources' (BWSR) Wetland Mitigation Supervisor, Dennis Rodacker! Many have worked with Dennis on bank reviews and local road program mitigation bank projects. Dennis is now leading BWSR's mitigation section & joining the Minnesota programmatic interagency review team.

We also extend a warm welcome to US. Army Corps of Engineers St Paul District (Corps) Senior Ecologist, Brian Yagle! Many have worked with Brian on both bank and permit reviews. Brian is now joining the Corps' Technical Services Branch with a focus on the mitigation program.

Dennis Rodacker, BWSR Wetland Mitigation Supervisor (Left);

Brian Yagle, Corps Senior Ecologist (Right)

Tools Coming Soon

- Vegetation Monitoring Guidance
- Corps' Informational Public Notice on Hydrology Credit Releases

Tools Under Development

- SQT Regionalization for Wisconsin
- MN/WI Wetland Functional Assessment Tool

  https://bwsr.state.mn.us/wisconsin-minnesota-wetland-functional-assessment-initiative

Tools Available Now

- Site Selection Criteria Checklist
- Prospectus Completeness Determination Checklist
- Mitigation Plan Completeness Determination Checklist

Find these tools here under "Information for Bank Sponsors by State:"

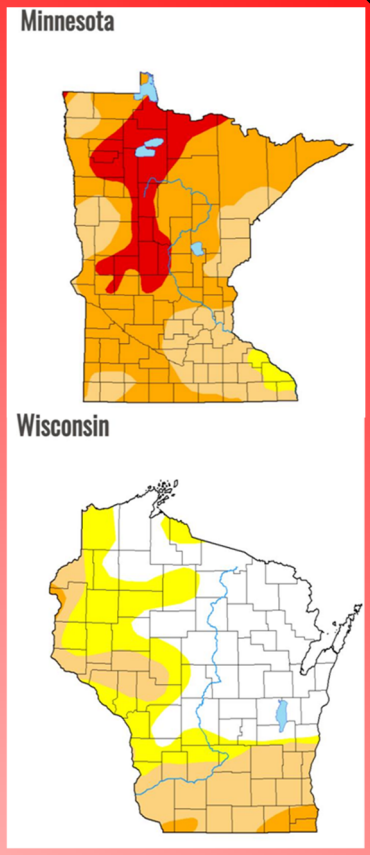
https://www.mvp.usace.army.mil/Missions/Regulatory/Mitigation/

Use of Reference Data During Drought Conditions

2021 data indicates there is severe to extreme drought in portions of the St. Paul District. Our hydrology performance standards typically require sponsors to assess water table or inundation depths during the growing season under normal or wetter than normal conditions.

When sponsors seek credit releases tied to hydrology performance standards during drought conditions, they may need to compare their mitigation site data to the hydrology monitoring data from appropriate reference wetland(s) or the local SWCD or watershed district office. Even during normal and wetter than normal years, data from a reference well can expedite credit releases. See the "Technical Tidbit" below for more information on how to identify a good reference site.

Are you curious about background information on hydrology performance standards? Check out our guidance on-line: "Target Hydrology and Performance Standards for Compensatory Mitigation Sites." Stay tuned for more information on this topic from the agencies. Please contact Faye Healy, Senior Ecologist, at Faye.L.Healy@usace.army.mil with questions while preparing your monitoring reports.



Tan: Moderate Drought **Yellow:** Abnormally Dry

Orange: Severe Drought **Red:** Extreme Drought

Technical Tidbit

Topic: In Reference to Reference Wells and Reference Wetlands

Ideally, the target hydrology for a compensation site would be determined by collecting and applying data from a **reference wetland**. Installing a monitoring well in a reference wetland can help justify credit releases in drier than normal periods in addition to determining target hydrology.

What should you consider when identifying a good reference wetland?

- Proximity to the compensation site
- Similar landscape positions
- Similar Community types
- Similar soil types
- If it is an undisturbed, natural wetland system.

What if there is no suitable reference wetland?

- Use baseline hydrology monitoring and/or surface water runoff calculations

What else can reference wells tell us?

- Reference well data can be a key factor to help determine if a site would be eligible for a credit release in a drought year as well as provide supporting information for delineations.

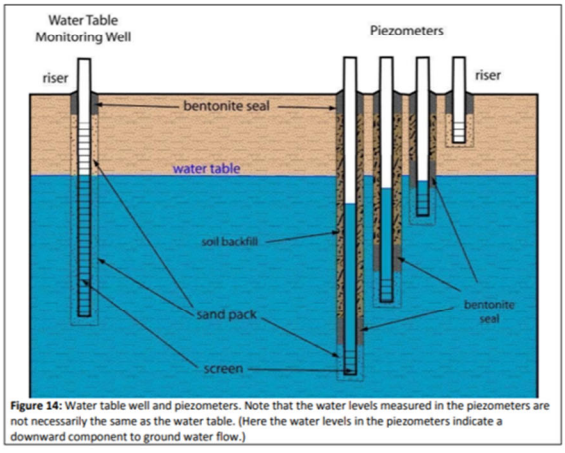


Figure 14: Water table well and piezometers. Note that the water levels measured in the piezometers are not necessarily the same as the water table. (Here the water levels in the piezometers indicate a downward component to ground water flow.)

What did the well say to the piezometer?

"I'm well, thank you"

Buffers and Reduced Credit Areas

Upland buffer is required to protect mitigation sites from incompatible adjacent land uses. The ideal upland buffer is contiguous and at least 100 feet wide. When the sponsor demonstrates that an area meets the definition of upland buffer, the agencies will typically approve credit at up to 25%. Credits for upland buffer cannot exceed 25% of total credits generated by the mitigation site.

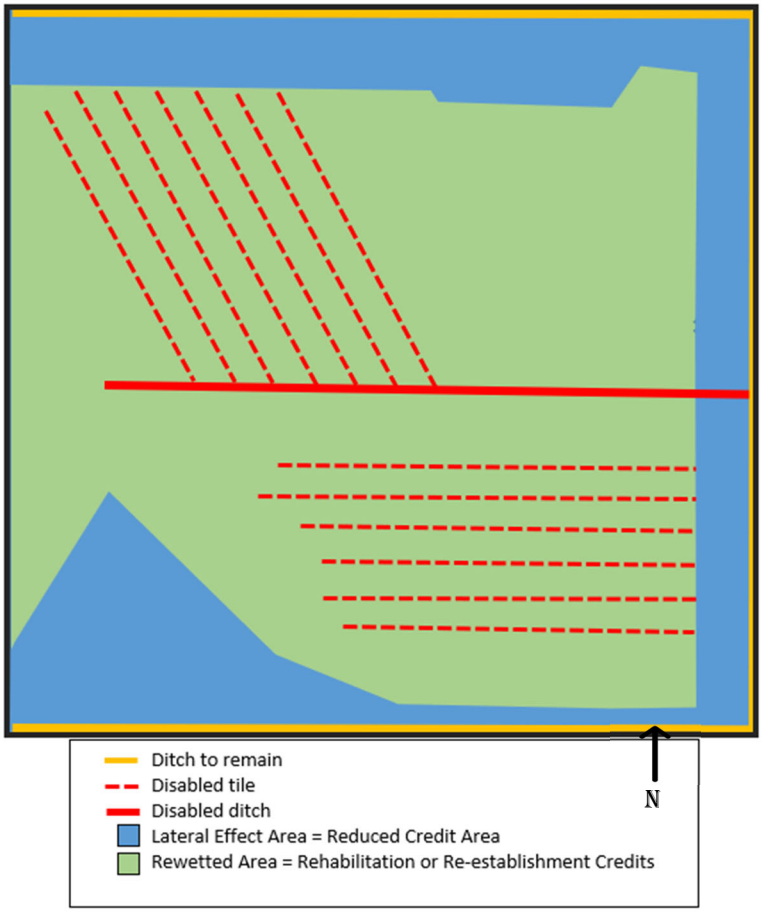
If sufficient upland buffer cannot be established because wetlands extend near or to the mitigation site boundary, sponsors are required to identify wetland area(s) within the mitigation site that could be impacted by adjacent land uses. These areas may be subject to reduced credit (also known as the reduced credit area). A number of variables will influence how these wetland areas are credited. Sponsors should provide information to justify their proposed credit ratio(s), to include anticipated functional lift that will occur from the project, the current and anticipated uses of adjacent lands, and the conservation status of adjacent lands.

Drains, Ditches and Credit Implications

All drains or ditches have the potential to affect the hydrology of adjacent lands by quickly removing surface water or subsurface water. The distance on either side of a ditch or drain where hydrology is impacted is known as the lateral effect.

In most instances, if the mitigation plan does not propose to disable a ditch or drain as part of a site's restoration, the ditch or drain will continue to affect adjacent areas. Sponsors should estimate the lateral effect area (see below for resources to help with this) and determine whether implementation of their mitigation plan includes disabling of ditches and/or drains that will rewet these areas. Sponsors may propose reestablishment or rehabilitation credit as appropriate in lateral effect areas where hydrology is restored, and may propose reduced credit in lateral effect areas where hydrology is not restored (refer also to column above.)

The figure (right) shows how a hypothetical restoration scenario with both disabled ditches & drain tile as well as ditches that will continue to drain the site will affect site crediting.



For MN: NRCS setback tables (https://bwsr.state.mn.us/lateral-effect-drainage-setback)

For WI: Drainage equations (e.g. Van Schilfgaarde) or NRCS drainage tables (https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/ndcsmc/?cid=stelprdb1042198. Contact Tom Nedland, DNR's Wetland Mitigation Coordinator, at 920-286-3739 for additional information.

Airports: What to know

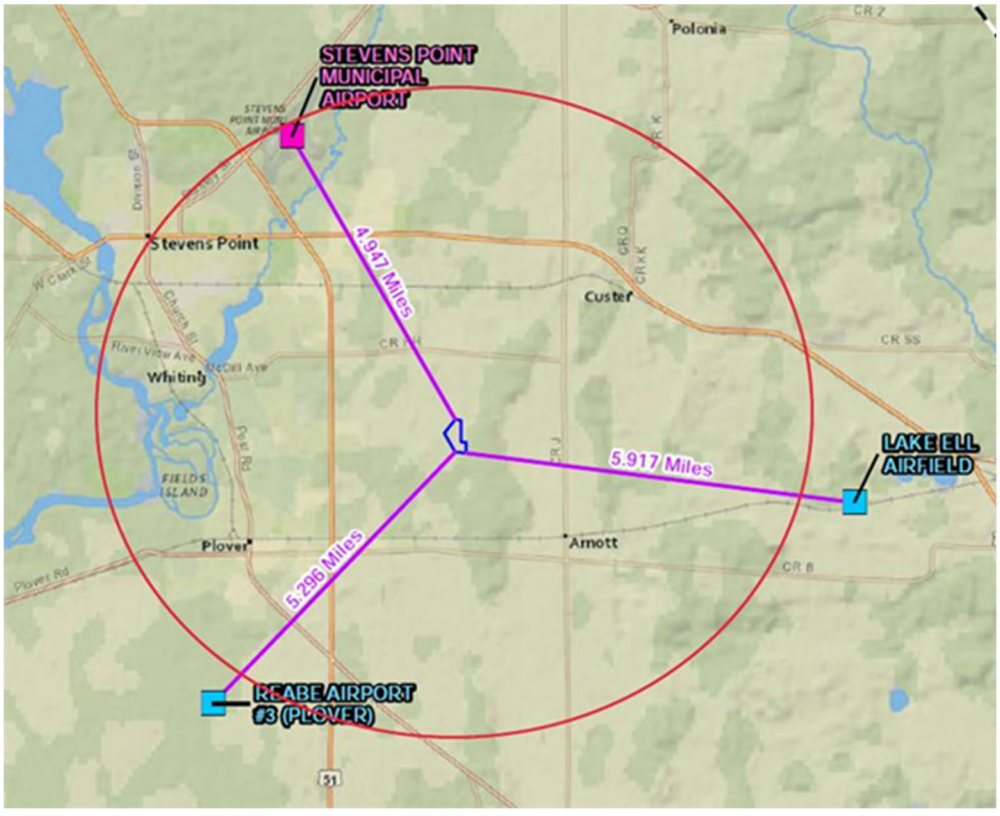
Sponsors cannot locate compensatory mitigation projects where they will increase risks to aviation by attracting wildlife to areas where aircraft-wildlife strikes may occur.

Sponsors should coordinate with the Corps right away when a mitigation site is within 5 miles of any airport. See links below for assistance in identifying these airports.

Proximity of a mitigation site to an airport represents a potential fatal flaw that can prevent or significantly complicate project approval, especially if the proposal incorporates wetland community types that attract waterfowl. If remedy is possible, sponsors should expect to spend substantial time and resources to work towards resolution.

When your proposal is close to an airport, the Corps is here to assist! Sponsors should provide the following information in a draft Prospectus, and the Corps will coordinate with the Federal Aviation Administration (MN) or Bureau of Aeronautics (WI) to assess the site's potential as a hazardous wildlife attractant:

- Maps depicting distance between your site and any airport or airstrip. Only those airports WITHIN the 5 mile radius will require coordination, but please include any just outside that radius as well. (See figure for example)
- Site orientation in relation to airport approaches;
- Proposed wetland communities;
- Local watershed and land use characteristics between the airport and the site; and
- The airport management plan.



Use the following link for Minnesota:

https://www.faa.gov/airports/planning_capacity/npias/reports/media/NPIAS-Report-2017-2021-Appendix-A.pdf

Use the following links for Wisconsin:

https://www.faa.gov/airports/planning_capacity/npias/reports/media/NPIAS-Report-2017-2021-Appendix-A.pdf

and

https://wisconsindot.gov/Pages/travel/air/airport-info/arptdir-city.aspx