Wetland BMP Verification Protocols

submitted by the Habitat GIT's Wetlands Workgroup

Wetland Restoration/Creation BMP

In order to verify that restored/created wetlands are truly functional from an ecological perspective, the Habitat GIT advocates that protocols be implemented to verify not only the wetlands physical extent (acreage) and efficiency (nutrient uptake/sediment deposition), but also the biological integrity (vegetation) of the wetlands, which indicates their function as habitat to support species over time. The following wetland BMP verification protocols determine the continued functionality of a restored or created wetland habitat in terms of providing water quality benefits while also sustainably supporting biological populations.

- The verification process needs to be practical with regard to available staff, time, and resources while still maintaining a certain level of rigor and integrity.
- To address concerns of practicality, the wetlands workgroup will determine whether a percentage or subsample of wetland BMPs in reporting jurisdictions will be verified rather than every wetland BMP in place.
- Onsite inspections/monitoring will be performed to assess wetland function and will include identification of changes in hydrology, vegetation, and/or soils. Verifying tree survival, management of invasive species, and continued presence of vegetation that supports biological populations are important aspects of the ongoing inspection and monitoring process. The general recommended frequency of inspection is:
    - once per year for first 3 years
    - then, once every other year until year 10
    - approximately every 5 years after year 10
- Onsite inspections will be performed by staff with applicable expertise and capability in assessing wetland integrity.
- Wetlands workgroup will determine if any methods to address uncertainties will be applied to the wetland BMP verification process.
- If possible, it may be beneficial to coordinate and establish a single, streamlined data call for wetland restoration projects to avoid double-counting by Agriculture and Wetlands workgroups.

Concerns/Challenges to address going forward:

- Most of wetland restoration projects involve many players- challenge is in determining who is responsible for implementing BMP verification
- Monitoring protocols are inconsistent from state to state, program to program
- Available funding to implement verification programs
- Need engagement from each state in developing wetland BMP verification protocols

Next Steps:

- Fully engaging all state members of the Wetlands Workgroup in discussion and development of the protocols.
- Determine where to set the bar for verifying wetland function within the realm of what is practical.
- Given that wetland projects involve multiple agencies/partners, develop protocol(s) to determine who holds responsibility for verifying BMPs.
- Decide whether a percentage or subsample of wetland restoration projects in reporting jurisdictions will be verified rather than every wetland restoration project in place.
- Decide if any methods to address uncertainties will be applied to the wetland BMP verification process.