

Wetland Workgroup Response to BMPVAHAT Comments on the Wetland Recommendation to Extend Credit Duration of Select Wetland Practices

Reference Materials

- BMPVAHAT December 2021 Minutes:
https://www.chesapeakebay.net/channel_files/42754/bmpvahat_dec_minutes_draft_v2.pdf
- BMPVAHAT October 2022 Minutes:
<https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/BMPVAHAT-Oct-Minutes-2022.pdf>
- Recommendation from the Wetlands Workgroup:
https://www.chesapeakebay.net/channel_files/42754/wetland_credit_duration_recommendation_report_october2021meeting_%28002%29.pdf

Purpose of this document: The recommendation from the Wetlands Workgroup (WWG) was discussed at the December 2021 BMPVAHAT meeting. The following document outlines the comments from the BMPVAHAT on the recommendation and the comment responses from the WWG addressing their concerns.

Who will be the audience for the recommendation? The WQGIT will need to approve the recommendation to remove verification requirements from wetland restoration, rehabilitation, and creation in the model (these practices currently need to be reinspected every 15 years). The audience will be composed of state representatives, program managers, members of the advisory committees, and representatives from the source sectors (Agriculture, Forestry, Urban Stormwater, Watershed Technical Workgroup). The audience focuses primarily on the CAST model and will need to understand how these practices are reported, what structures exist on the ground to ensure the practices exist and function on the landscape, and how wetlands function as a natural resource.

1. Do NRCS and state specifications apply to one or all three of those practices?

- If the NRCS specifications don't apply to all three practices, then we shouldn't be extending this to all practices.
- [Practice 657, Wetland Restoration](#)
- [Practice 658, Wetland Creation](#)
- [Nontidal Wetland Creation, Rehabilitation, and Enhancement:](#) *Ongoing verification – Verification is required to ensure that the wetland BMP projects are performing as designed. The installing agency should confirm that the project was built according to plans (as-built survey was completed). Monitoring of vegetation, hydrology, and soil should be completed for the first three - five years of the project. Native vegetation species cover, invasive species, and wetland indicator status should be recorded. Invasive species should be managed early to prevent further invasion. Hydrology or indicators of hydrology should be*

recorded, as well as indicators of hydric soils (per the Army Corps of Engineers Wetland Delineation Manual and Regional Supplements). After 5 years, annual observations are recommended to document the continued success of the project. However, if on-site observations are not possible, other methods can be used as a proxy. The Chesapeake Bay Program BMP Verification guidance states the following:

Onsite monitoring within the three years following construction is recommended. For any long-term monitoring, use of aerial imagery for remote observations is highly recommended for verification of wetland BMPs; remote observations can indicate encroachment of agricultural activities, clearing, and tree removal. Any issues or concerns with projects implemented on private lands are typically reported by the landowner to the installing agency and addressed as needed.

2. Is there any evidence that shows that wetlands aren't being changed to developed lands? What data do we have that shows no net loss of wetlands?

- There are jurisdictional and regulatory requirements to ensure no net loss of wetlands.
 - Virginia (VA DEQ): [Virginia Water Protection](#) (VWP) permit program
 - Maryland (MDE): [Wetlands and Waterways Protection](#) Program
 - Pennsylvania: [Bureau of Waterways Engineering and Wetlands \(BWEW\)](#) Programs
 - New York (NYSDEC): [Freshwater Wetlands Program](#) / [Freshwater Wetlands Act](#) under Division of Fish and Wildlife Marine Resources Bureau
- What does the Bay Barometer say about wetland contribution to water quality?
 - [2021 Bay Barometer](#): 2010-2017 =9,103 acres of wetlands established, rehabilitated or reestablished per CAST.

3. The [VA coastal master plan](#) that was just released stated that 89% of our tidal wetlands were going to be gone by 2080. "An estimated 170,000 acres, or 89%, of existing tidal wetlands and 3,800 acres, or 38%, of existing dunes and beaches may be permanently inundated, effectively lost to open water."

- The tidal wetlands scenario that was raised would be loss due to climate change.

4. Can the land use model pick up wetlands?

- "Cannot assess change in wetlands aside from change to new development. Field-based wetland mapping for regulatory purposes is based on hydrology, soils, and vegetation. We only map land cover and land use, though the LU team is working on mapping hydrology. We use state, NWI, and topographic overlays

to determine what's a wetland and these overlays are mostly static over the 2013-2021 timeframe. **Therefore, we can only reliably map wetland loss to impervious cover (and maybe to turf grass) but we can't map wetland gain due to creation or loss due to altered hydrology.**" - Information from Peter Claggett, USGS/Land Use Workgroup Coordinator.

○ **How about remote sensing?**

"Nothing is affordable yet. The best remote sensing work I've seen is high-res side-aperture radar acquired for select sites that indicate the seasonal pulsing of surficial soil wetness in forested environments. Hyper-spectral data would provide another option for both soil wetness and species identification, but such data are very expensive and difficult to manage and interpret 200+ spectral bands (instead of 4) and the software and field data needed to interpret them. Regulatory definitions may limit shifting focus from monitoring wetlands to monitoring hydrologically important landscape features (many of which are wetlands.)" - Information from Peter Claggett, USGS/Land Use Workgroup Coordinator.

5. Clarify which wetland practices in the recommendation are land use change practices.

- All practices are load source change/land use change practices.

6. The role of the Food Security Act - requirements needed to convert a wetland (classification based on hydrology) to agricultural land. NRCS makes sure classified wetlands are not being converted. Once it's determined as a wetland, it is rare that it is lost. NRCS monitors wetlands to ensure size and function is retained.

- Requirements on maintenance or mitigation if there is a land use conversion.

7. When NRCS reports wetland enhancement and restoration practices to states for inclusion in CAST, they report that for NRCS easement programs as well, so these are **BMP acres that are restored or made into wetlands that are perpetual or 30 yearlong easements. If we don't take that into consideration, states will lose a lot of easement credit that they have because of that credit duration.**

- The easements prevent development. Wetlands may become "Waters of the US".
- NRCS monitoring program is rigorous.

8. In some states, a wetland may be converted back to agriculture land. Once the contract expires after 10-15 years, a landowner has 5 years to decide whether or not to convert the wetland back to ag land. This would need to be paid for by the landowner. Establishing the hydrology of the wetland is a cost-intensive process.

- **Does NRCS have documentation of this process?**

- NRCS documents this internally. They have confirmed that once a wetland is in place, there are certain regulations that require protection of the wetland converting back to agricultural land.

9. How are wetlands that are implemented voluntarily treated? Are they automatically considered regulated wetlands?

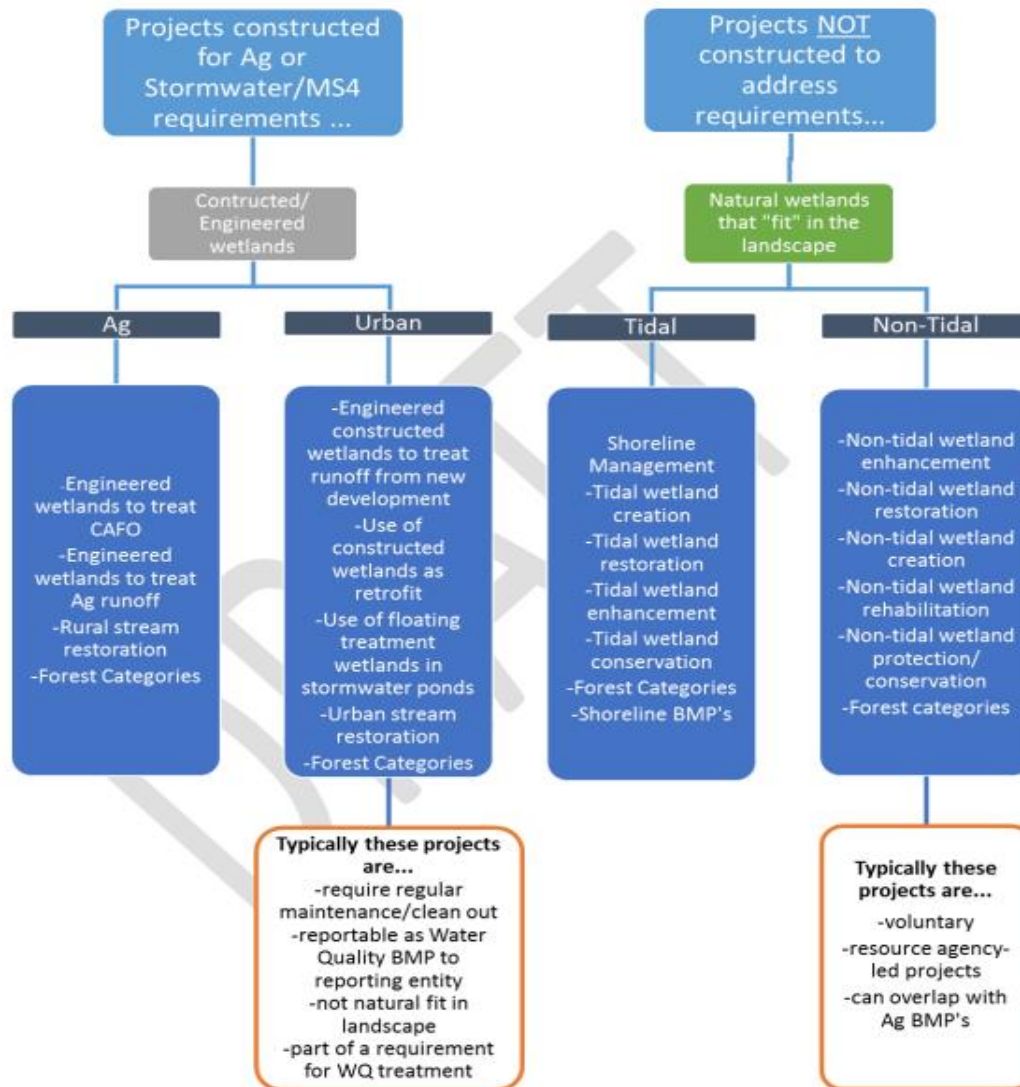


Figure 4. Wetland BMP Reporting Matrix

10. Clarify the existing regulatory and verification structure for wetlands in each state.

- Be clear about what happens when a wetland is developed to ensure no net loss of wetlands.
- Jurisdictional regulations to protect wetlands:
 - Virginia (VA DEQ): [Virginia Water Protection](#) (VWP) permit program

- Maryland (MDE): [Wetlands and Waterways Protection](#) Program
- Pennsylvania: [Bureau of Waterways Engineering and Wetlands \(BWEW\)](#) Programs
- New York (NYSDEC): [Freshwater Wetlands Program](#) / [Freshwater Wetlands Act](#) under Division of Fish and Wildlife Marine Resources Bureau

11. Can these comments be considered at the August 2022 workshop?

- Wetlands outcome attainability workshop in August 2022 did not focus on credit duration. The workshop covered the following major outcomes (see post-workshop [Action Plan](#)):
 - 1) Understanding of the barriers that limit the rate of nontidal and tidal wetland restoration that is necessary to achieve the 2025 Wetlands Outcome.
 - 2) Identification of approaches, including changes to existing programs and proposing new programs, to increase the implementation of nontidal and tidal wetland restoration.
 - 3) Within three months following the workshop, work with partners and workshop participants to develop an action plan that outlines steps and a timeline for dedicating resources to implementing these approaches.

12. Specify how wetlands differs from forest practices, which may also be considered “naturally regenerative”.

- The wetlands WG feels strongly that wetland and tree practices are not comparable. Wetlands are their own ecosystems and are covered by water with vegetation that has adapted to wet soil, while a forest buffer contains combination of trees, shrubs or other perennial plants that is managed differently than surrounding landscape and is adjacent to a stream, lake or wetland.

13. Should practices with regulatory protections (like the CWA, Food Security Act, state regulations) have verification requirements?

- The Wetlands WG argues that practices with regulatory protections should not have verification requirements as there are programs in place to inspect and verify functionality of practices.

14. Number of wetland practices reported by each jurisdiction for 2021 Progress.

- Wetland Restoration (2021 Progress):
 - Delaware: 4,000 acres
 - Maryland: 7,000 acres
 - New York: 1,100 acres
 - Pennsylvania: 900 acres

- Virginia: 340 acres
- West Virginia: 29 acres
- Wetland Creation/Rehabilitation (2021 Progress):
 - Delaware: 0 acres
 - Maryland: 1300 acres creation, 1300 rehabilitation.
 - New York: 64 acres creation, 500 acres rehabilitation
 - Pennsylvania: 100 acres creation, 100 acres rehabilitation,
 - Virginia: 240 acres creation, 26 acres rehabilitation
 - West Virginia: 0 acres
- The original BMP Verification Committee determined credit durations based on a number of principals, one of which was a consideration of how much reliance jurisdictions place on individual practices to meet their water quality goals. Since the jurisdictions are not reporting wetland creation, restoration and rehabilitation in substantial amounts (see above), this raises the question of whether or not there should be verification requirements in place.
- Wetland practices fall under the Wetland WG source sector. Workgroups were given the responsibility for developing credit durations for practices under their source sector.