

Wetland Workgroup June Meeting Minutes

June 15, 2021

Conference Call

Pam Mason (VIMS)	Megan Ossmann (CRC)	Vanessa Van Note (EPA)	Jeremy Hanson (Virginia Tech)
Christine Mazzearella (EPA)	Karina Nunez (VIMS)	Chris Spaur (USACE)	Kevin Du Bois (DoD CBP)
Bill Jenkins (EPA)	Dave Goerman (PA DEP)	Jackie Specht (TNC)	Emily Farr (NOAA)
Alison Santoro (MD DNR)	Molly Mitchell (VIMS)	Mark Biddle (DE DNREC)	Alana Hartman (WV DEP)
Anne Wakeford (WVDEP)	Melissa Yearick (USC)	Madison Fink (EPA)	Joel Carr (USGS)
Danielle Algazi (EPA)	Greg Podniesinski (PA DCNR)	Leah Franzluebbbers (USFWS)	Denise Clearwater (MDE)
Margaret Zacharias (EPA)	Scott Phillips (USGS)		

Action Items:

- Megan will follow up with a request for feedback on the questions that Vanessa posed during her presentation.
- Reach out to Pam and Megan with ideas for future meeting topics.
- Running list of future meeting topics/presentations:
 - Alternative financing work (Erik Meyers)
 - Tidal marsh loss in coastal bays due to grid ditching (Rich Mason)
 - Joint meeting with Climate Resiliency Workgroup
 - Joint meeting with Forestry Workgroup
 - Wetland mowing
 - Restore America's Estuaries coastal restoration toolkit (<https://restoreyourcoast.org/>)
 - Communications efforts (Rachel and Jake)

USGS Chesapeake Bay Theme 2: Assess the risks to coastal habitats, DOI lands, and migratory waterbirds

Joel Carr (USGS)

USGS is conducting science to help federal governments, working with the states, manage migratory waterfowl and their critical estuarine habitats, including coastal wetlands and submerged aquatic

vegetation. The activities within this theme focus on characterizing and modeling the risks to coastal habitats and the implications of those risks for migratory waterbirds as well as to inform restoration and adaptation approaches. These activities are focused into two broad topics 1) Assess risks to coastal habitats and DOI lands, by forecasting vulnerability and resiliency of coastal systems to future change and 2) understand the factors affecting waterbirds and their habitats. The USGS Theme 2 activities were also developed to address several of the science needs of the CBP Wetland WG, including sea-level rise and marsh migration.

[Presentation slides](#)

Questions/comments:

- Scott P: Neil Ganju is working with the USGS coastal activities (what Joel is covering) now to also look at marsh vulnerability. Here is a recent press release of the national effort, which is also being applied in the Chesapeake: https://www.usgs.gov/news/usgs-releases-nationwide-marsh-vulnerability-maps?qt-news_science_products=7#qt-news_science_products
- Kevin D: Is anyone looking at the impacts of goose predation on marsh erosion?
 - Joel: I don't know of anyone looking at this.
- Denise C: Would you repeat the name of the lead for the study on slope and inundation, plus the full title of the study?
 - Neil Ganju, myself, and Grace Molino.
- Pam M: Neil also presented at the MAWWG and there is some cross-over. He presented on the vegetated/unvegetated ratio.
 - Danielle A: We recorded that presentation and I can share it ([link](#)). Reach out to Megan or Danielle if you have any trouble accessing the video (ossmann.megan@epa.gov and Algazi.danielle@epa.gov)
- Kevin D: What was the research on marsh migration? Can you provide a link to that paper?
 - Molino GD, Defne Z, Aretxabaleta AL, Ganju NK and Carr JA. 2021, Quantifying Slopes as a Driver of Forest to Marsh Conversion Using Geospatial Techniques: Application to Chesapeake Bay Coastal Plain, United States. Front. Environ. Sci. 9:616319. doi: 10.3389/fenvs.2021.616319
- Chris S: What are points for hope/optimism?
 - Joel: It depends on your perspective. It is bleak for a coastal marsh person, but not as bad for SAV and birds that leverage SAV. I have a lot of concern about upslope migration optimism. Models suggest that as SLR rates increase, marshes will go from a transitional state straight to a low marsh, missing the high marsh.

BMP Credit Duration of Wetland Restoration

Vanessa Van Note (EPA)

The BMP Verification Ad-Hoc Action Team has been charged by the Management Board with revisiting credit durations, including Wetland Restoration. Action Team Coordinator Vanessa sought input from

Wetland Workgroup members on the potential to extend the credit duration of wetlands past the current 15-year period.

[Presentation slides](#)

Questions/comments:

- Kevin D: What are the required elements of the inspection? Is it just a date with an affirmation that the wetland is functional as designed?
- Denise C: My understanding is that it was based on the contract term for many of the NRCS practices – 15 years. I believe they do go out and inspect to make sure that everything is working as designed.
- Dave G: I think we would support changing the durations based on the type of work being done (creation or constructed as part of a treatment system vs. rehabilitation or establishment). We would suggest increasing rehabilitation or establishment to 30 years.
- Chris S: May need to change crediting over time. Finite P storage in many cases, “infinite” N removal. Some “re-enlistment” at 15 years? Allow for continuity, but re-verify?
 - Mark B: I agree – maybe we need to consider how we count the credits and the value of those credits over time based on the type of projects.
- Pam M: I do think that many of the timelines associated with conservation practices come down to how long the farmer is willing to set that land aside for that purpose for that amount of time. And that isn’t something that we should use as a driver, although they may or may not choose to revert those practices. We should consider a framework that doesn’t just reflect these endpoints.
- Kevin D: Does it need to be a regular schedule? When does restoration go wrong? Could it be like inspection in year 3, 10, 30?
 - Vanessa: If it's under that 1st cycle, which would be its contract with RCS or Virginia, they do have requirements per their contract that they have to maintain that land or maintain that practice. Once they reach the end of that 15 years, we have the states go into re-verify that that practice is still there and operating correctly. It's up to the state to provide that new regulatory framework. But because the contract has expired, it becomes a matter of keeping up to make sure that those practices are still on the ground every 15 years, but I don't know if we'll ever evolve to having a more robust program where we can have that systemic data collection or monitoring BNP performance over time. It shows the states don't really have those resources to do something like that right now.
- Kevin D: It’s not if they persist after the contract duration, right? It’s if they persist and still function to get the credit. To determine function, wouldn’t an inspection be required?
 - Vanessa: You are correct. The question comes down to “at what point in time does a wetland need to be reinspected (after it is established) to determine that it is functioning correctly?” Or “once a wetland is established, does it ever need to be reinspected?” (assuming it is not removed from the landscape).

- Pam M: The second wetland panel determined that wetland enhancement doesn't qualify for load reductions so the practices we are talking about are wetland creation, restoration, and rehabilitation.
- Denise C: It sounds like we may need to hear from NRCS about how many persist past the terms of the agreement. I think most of them do and I certainly support an extension.
 - Pam: NRCS is the major driver but water conservation districts can also financially incentivize through state programs.
- Pam M: Let's get some thoughts from everyone over email: do you think it should go past 15 years, do you have an idea of a timeline, and would there be any qualifiers like verification?
 - Action: Megan will request this feedback in the follow-up email.

Marsh Migration Project Update

Molly Mitchell (VIMS)

The FY20 GIT-funded project "Synthesis of Shoreline, Sea Level Rise, and Marsh Migration Data for Restoration Targeting" was awarded to the Virginia Institute of Marine Science and is underway. Molly gave an update on the project.

[Presentation slides](#)

Questions/comments:

- Chris S: Including possible channel re-engineering to optimize for tidal range/sediment delivery? Trying to promote greatest tidal exchange so tidal sediment makes it upstream to tidal wetlands. Channel dimensions, plan form, etc. may control tidal range a little.
 - Molly M: It will depend on what comes out of the stakeholder group. It could be a restoration activity that helps maintain resilience.
 - Karinna N: The second part of the project will be just to compare different approaches. And so some of them include settlement and tidal effects and precipitation. These components are going to be included and evaluated when we select that target area and compare output from different models.
- Megan O: At what points will the full steering committee convene for discussion/review of progress?
 - Molly: Sometime in the September to December range.
 - Kevin D: The steering committee will meet after the Quality Assurance Program Plan (QAPP) is complete.
- Joel C: Are you going to try to tackle levels of uncertainty in the data? And interactions among them in projections?
 - Karinna N: That will be covered in the second part. When running the models will address different spatial scales and uncertainty.

Round-robin Updates

- Pam M: Update on STAC workshop – we have just started our planning meetings with STAC staff.
- Danielle A: The grant RFA for wetland program development grants has been issued and the deadline is June 28th.
- Kevin D: We'd like some feedback about the wetland fact sheets. We presented it to the MB and it has gotten held up for review by VA reps before release to the public. I think the time for feedback should have been during the development of the piece, not after. One option is to treat the current document as a final draft and send it out to VMRC and chairs of local wetlands boards and the wetlands programs at DEQ. Do we need permission from the MB to do that?
 - Pam M: My understanding is that we don't.
- Denise C: We have two projects going on with VIMS to adapt the living shoreline suitability tool for Maryland. We also have two projects for restoration guidance in the stream and wetland complexes to reduce conflicts in resource tradeoffs, funded by EPA grants.

The Way Forward

- Next meeting date: August 17th, 2021

Adjourn