2/20/2024 – Wetlands Workgroup Meeting: Tidal

MEETING: Wetlands Workgroup Meeting: Tidal
DATE/TIME: 2/20/2024, 10:00 - 12:00 ET

WELCOME AND INTRODUCTIONS

Presenter: Tess Danielson (Workgroup Vice Chair)

- Roll Call

BLACK DUCK ACTION TEAM (BDAT) UPDATE

Presenter: Alicia Berlin (BDAT Co-Chair)

- Black Duck Outcome: Restore, enhance, and preserve wetland habitats to support a wintering population of 100,000 black ducks.
- The target of 100,000 black ducks is quite ambitious because usually about 35,000 – 40,000 black ducks winter in the Chesapeake Bay.
- Populations have experienced declines due to land use change and habitat availability.
- Black ducks serve as an indicator for wetland health and food availability.
- The American Black Duck Decisions Support Tool
    - Uses remotely sensed wetland inventory maps to compare the energetic carrying capacity of HUC12 watersheds to the energetic demands of black ducks.
    - The model indicates where there is sufficient or insufficient wetland quality/quantity to support the target number of black ducks.
    - Shows conservation status of habitats, and where wetland habitat needs to be restored or enhanced.
- Using a structured decision-making framework determined there were 5 key habitats critical for overwintering black ducks: subtidal, freshwater, high marsh, low marsh, & mudflat.
- Additionally looked at sea level rise and land use change to determine how the habitat will change over time.
- To get to 1000,000 black ducks there needs to be an additional ~152,000 acres of wetlands in the Chesapeake Bay.
- Challenges
    - Tracking restoration acres towards the outcome.
    - Restoration efforts on agricultural land may not be viable habitat.
    - Reconciling Black Duck Outcome of an additional ~152,000 acres of primarily tidal marsh and the Wetlands Outcome of 85,000 acres on primarily agricultural land.
- Since both black duck and wetlands outcomes are off course, it would be best to merge the two and work towards the common goal of wetland restoration.
- Next steps: coordinate and align with the Wetlands Workgroup.

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Comments/Questions:

- **Chris Guy**: A part of the joint nontidal and tidal wetlands workgroup meetings will be dedicated to the Black Duck Outcome.
    - **ACTION**: Invite black duck or waterfowl experts to upcoming joint meetings on April 15th and October 15th.
- **Pam Mason**: Is there a way we can make projects in agricultural lands more suitable habitat for black ducks?
    - **Alicia Berlin**: Black ducks don't like to be in areas populated by people. I would recommend looking at the Decision Support Tool to see if there is any alignment of the habitats identified as suitable habitat with agricultural lands.
- **Pam Mason**: Thinking about incorporating black ducks into the wetlands outcome maybe we can have a tiered outcome or temporal time steps. Have a wetlands writ large outcome and then wetlands focused on black ducks/waterfowl/bird guilds outcome.

SCIENCE NEEDS DISCUSSION

Presenters: Tess Danielson (Workgroup Vice Chair) & Pam Mason (Workgroup Chair)

*** An excel file of the Wetlands Science Needs can be found here under "Supporting Documents"**

- Do workgroup members use the Science Needs Database?
    - Based on the Mentimeter Poll only one person from the meeting uses the science needs database.
- Science needs came about as part of the adaptive management process where outcomes would go through and identify these science needs and prioritize them to advance progress towards the outcome.
- The science needs database can be used as a jumping off point for local entities, federal agencies, or academics looking for research projects.
- The database was put together to identify and align research needs and priorities of all the outcomes.
- During this exercise we are going to go over the current wetlands science needs and see if there are any outdated needs or new needs to add.

Comments/Questions:

- **Chris Guy**: I would suggest creating an abstract and estimated budgets for the top 3 science needs to help find funding.
- **Pam Mason**: People that represent regulatory/nonregulatory may help define science needs to help with program management and nonprofits/academics can define science needs based on knowledge gaps.

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- **Pam Mason**: How do these science needs get rolled up into bigger frameworks around science?
    - **Breck Sullivan**: A science need can look different depending on what field you're in, so there are different avenues in which we can support those needs. Usually, one outcome will take the responsibility of the science need and note how it links to other outcomes/GITs to initiate the connection.
- **Greg Noe**: A recommendation from a STAC workshop a couple years ago was to enhance our ability to predict ecosystem services of wetlands and science need 189 seems to be a subset of that greater need. Would it be useful to create a larger umbrella science need?
    - **Pam Mason**: The Virginia Wetland Condition Assessment Tool (WetCAT) tool could determine the provision of ecosystem services.
    - **Greg Noe**: WetCat is a tool we can use, but there is still the need do the science to build a model for other services.
    - **Pam Mason**: The ability to do wetland condition on multiple scales for multiple services can be one of our overarching needs that can then be broken down into pieces. Science needs 312 & 313 can be included in the overall ecosystem services need.
- **Chris Guy**: Does the database allow for a sort of nested science need?
    - **Breck Sullivan**: It does if it clearly states how they are connected. Like "Part 1 of Part 3". Be as specific as possible when writing the need.
- **Julie Reichert-Nguyen**: MD has a resilience portfolio to help prioritize wetland restoration. Does VA have something similar?
    - **Pam Mason**: We can start with MD's framework and see if it works for other partners and if it can be cross walked between tidal and nontidal.
- **Chris Guy**: Science need 312 is particularly important for beyond 2025 priorities. Should look into designing this need further.
- **Pam Mason**: I suggest these as our 3 buckets.
    - **1**. Risk assessment on wetland habitats for climate change
    - **2**. Ecosystem services
    - **3**. Management/legal/regulatory barriers and gaps and decision maker understanding
- **Julie Reichert-Nguyen**: Is there a science need around healthy soils and sediment to allow for effective marsh migration? With the TMDL focused on sediment reduction, are there places where we should not be reducing sediment to allow for marsh persistence?
    - **Chris Guy:** Healthy soils is something that hasn't really been considered in the Bay Program, but it's time to start looking into it.
    - **Katie Stahl**: There's a lot of interest in how sea level rise is impacting carbon storage. Having the ability to calculate how much carbon storage is lost due to losing tidal marsh is a number that would be really helpful.

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  - **Sadie Drescher** (*in chat*): FYI for the notes, we will have two research projects around soil health related to streams (Univ of DE); likely related to this topic, Julie (on soil/sediment "health" and potential accretion/erosion): 1) Memories of the soils: Evaluation of soil nitrogen stable isotope as a robust metric to assess floodplain restoration and nitrogen removal effectiveness" and 2) "More than dirt: Soil health tradeoffs with stream and floodplain restorations".
- **Leah Franzluebbers**: It would be helpful to better connect dredging to restoration projects and explore having a regulatory requirement that a certain percentage of it be used for restoration projects.
  - **Katie Stahl**: I think it would be worth having conversation on the process of testing dredge materials.
- **Tess Danielson**: These don't have to be research needs in particular. They can be social science needs, outreach needs, or literature reviews.
  - **Breck Sullivan:** We have a category in the science needs database for social science and the database can be updated at any time.
- **Sadie Drescher:** Wondering about capacity building and social science because we care about what motivates people to do restoration considering some projects might happen on private lands.
  - **Pam Mason:** Maybe we can expand science need 314 to include social and policy science.
- **Mark Biddle**: Maybe each jurisdiction should put together a list to help with prioritizing the needs. Might be a need to help streamline the regulatory process for permitting.
- **Andrew Larkin** (*in chat*): Pam would it be useful to crosswalk the Coastal Wetlands Plan for York, Piankatank and Mobjack Bay's recommended research topics with this list?
- **Tess Danielson** (*in chat*): While we are aiming for 3 high priorities to focus on- we can add more at lower priority to keep on the list and on our radar.
- **ACTION:** If you have any tidal wetland science needs to add the list, please send them to Dede Lawal (lawal.dede@epa.gov) by March 12th. Anyone can send in science needs, but we ask that jurisdictions send in their top 3 tidal wetlands science needs. Science needs take on many forms: research, social science, outreach, knowledge gaps, literature reviews etc.

ANNOUNCEMENTS AND UPDATES

- The Wetlands Workgroup's Statement on the Sackett v EPA decision is now on the WWG webpage.
- The wetlands indicator was updated on Chesapeake Progress. Here's a link to the press release: https://www.chesapeakebay.net/news/pressrelease/chesapeake-bay-program-notes-increase-in-wetlands-across-the-watershed
- **ACTION:** When thinking about the Wetlands Outcome beyond 2025, it would be helpful if jurisdiction leads can gather estimates of what wetlands projects might be in the

pipeline and what is already happening on the ground to get an estimate of wetland acres (both tidal and nontidal). Please send those numbers to Dede Lawal (lawal.dede@epa.gov).

PARTICIPANTS (26):

Pam Mason (VIMS)	**Tess Danielson** (DOEE)	**Nancy Schumm** (City of Gaithersburg)	**Dede Lawal** (CRC)
Chris Guy (USFWS)	**Greg Noe** (USGS)	**George Doumit** (DNREC)	**Alison Rogerson** (DNREC)
Duncan Simpson (Princeton Hydro)	**Kayla Clauson** (DNREC)	**Kevin Mclean** (VA DEQ)	**Megan Diehl** (CBT)
Alicia Berlin (USGS)	**Megan Fitzgerald** (EPA)	**Katie Stahl** (USFWS)	**Breck Sullivan** (USGS)
Scott Lopez (CBT)	**Sadie Drescher** (CBT)	**Aaron Wendt** (DCR)	**Alison Santoro** (MDNR)
Sarah Hildebrand (MDNR)	**Mark Biddle** (DNREC)	**Leah Franzluebbers** (USFWS)	**Andrew Larkin** (NOAA)
Julie Reichert-Ngyuen (NOAA)	**Amanda Poskaitis** (NWF)		