To: Chesapeake Bay Program Wetland Work Group

From: Chesapeake Bay Program Scientific and Technical Advisory Committee (STAC)

Members (Kirk Havens, Carl Hershner, Denice Wardrop, Lara Fowler)

Cc: STAR Co-Chair, Scott Phillips

Re: Review of Biennial Work Plan for Wetland Work Group

Date: March 8, 2016

Thank you for the chance to review the draft Wetland Work Group Biennial Work Plan. We recognize that the Wetland Work Group is tasked with coordinating efforts to meet an ambitious outcome of creating or reestablishing 85,000 acres, and enhancing 150,000 acres of wetland by 2025. Progress toward this outcome is behind due to multiple obstacles; see The Nature Conservancy and Ducks Unlimited October 2015 report "Accelerating Wetland Restoration in the Chesapeake Bay Watershed: Obstacles and Solutions." (Report findings are summarized at http://www.chesapeake.org/stac/presentations/253 Wetland% 20Workgroup% 20STAC% 20 % 20 Jan16.pdf). While there are many partners working on the wetland issues, accelerating implementation continues to be a challenge.

On January 14, 2016, STAC, STAR and Wetland Work Group members participated in a workshop to identify potential ways to help "enhance the capacity" of the Wetland Work Group, as well as other workgroups, to advance the effort of meeting the 2025 goals and outcomes specified in the 2014 Chesapeake Bay Watershed Agreement. After participating in this workshop, we have a number of overall comments, as well as specific comments on the proposed Management Actions. We welcome any questions you may have.

Overall comments and recommendations:

1. Enlist the Management Board to Advise on Expectations for the Work Group:

The Wetland Work Group is tasked with helping coordinate efforts on ambitious outcomes. While helping coordinate such efforts, it is our understanding that the members of the Wetland Work Group, individually and collectively, are not personally responsible for implementing such restoration. Rather, the Work Group is relying on the efforts of many, including some of the entities represented by work group members. We recommend meaningful discussion with the Management Board regarding clarification of roles and expectations for the Work Group, for prevention of Work Group "burnout". For example, are there achievable outcomes at the Work Group level, or are the stated outcomes applicable to the Management Board? If key state agencies are really the ones who can help meet the targeted outcomes, can people from all such critical agencies also sit on the Work Group and be responsible for meeting the o? Otherwise, we are concerned that while the Management Actions set by the Wetland Work Group are ambitious, the Work Group does not have all the necessary resources, commitments, or prioritization to achieve them, nor should Work Group members be made to feel solely responsible for achieving these important goals and outcomes.

2. <u>Define Work Group Management Actions vis a vis work being accomplished by others:</u>
Building on the previous comment and as part of examining the Work Group's Biennial Work Plan, we recommend that the Work Group inventory what others are doing towards protecting, restoring, and/or enhancing wetlands throughout the Chesapeake Bay region.
Carefully parsing the roles and contributions of all partners may allow for the Wetland Work

Group to better define what it can accomplish, identify any dependencies or synergies between actions, and how achievements of individual outcomes and/or interventions can be accomplished and prioritized. Further clarity about what others are doing, and what the Work Group can do, may help ensure that chosen Management Approaches can be undertaken in a realistic and manageable way given existing time and resources. This will also allow for meaningful assessment of progress.

3. Work to include wetland function when meeting Wetlands outcome, not just acreage:

Wetland function should be prioritized over a solely acreage-based approach. The wetlands outcome under the "Vital Habitats" goal already includes both acreage and function: this outcome is to "[c]ontinually increase the capacity of wetlands to provide water quality and habitat benefits throughout the watershed. Create or re-establish 85,000 acres of tidal and non-tidal wetlands, and enhance the function of an additional 150,000 acres of degraded wetlands by 2015. These activities may occur in any land use (including urban) but primarily occur in agricultural or natural landscapes." (emphasis added). However, the Work Plan focuses primarily on acreage, not functionality, of wetlands; both should be addressed.

4. <u>Include climate change in future work plan elements:</u>

Issues associated with climate change are likely to impact both tidal and non-tidal wetlands. Identification of key threats and issues would be an important Work Plan element going forward. In addition, it may be useful to consider land acquisition and planning funds as a priority for climate resiliency.

Comments on Wetland Work Group Management Approaches:

We also have several comments associated with particular Management Approaches (MA) identified in the draft Biennial Work Plan; these are discussed below.

MA #1: Improve wetland mapping, and the wetland restoration reporting and tracking process.

- A. Overall, we note that while mapping is necessary, it is not sufficient to meet the wetland outcomes. We recognize that every state needs an acceptable baseline, and that stakeholder use of maps, reporting, and tracking should remain an action item. However, mapping is not the most critical management approach and should not be the first listed priority unless the Work Group is moving towards a more focused targeting strategy.
- B. We suggest incorporating the new USGS land use data to conduct a landscape analysis of wetland opportunities. This may help identify opportunities for protecting existing wetlands, enhancing degraded wetlands, or creating new wetlands.
- C. It would also be useful to conduct a trends analysis; we recognize that this would likely require additional funding. Such an analysis would allow us to identify whether there is a net gain, or a net loss, of wetlands overall.
- D. We acknowledge that states are not regularly updating their maps and the failure to identify a significant portion of total existing wetland acreage can and does result in wetland destruction. Certain states such as Pennsylvania are in need of enhanced wetland inventories. All inventories should be ground-verified. We recommend that the Work

Group engage with states in general, and Pennsylvania in particular, to identify needs and opportunities related to wetland mapping and inventory.

MA #2: Identify barriers to wetland restoration and develop solutions to address them.

- A. We concur with the obstacles and solutions identified in the 2015 Report: Accelerating Wetland Restoration in the Chesapeake Bay. Lack of adequate resources, personnel limitations, and the challenge of working only with willing landowners has resulted in the restoration outcomes effectually being an unfunded mandate to restore wetlands.
- B. In addressing such barriers, we encourage the Wetland Work Group to explore how to increase landowner willingness to have wetlands restored on their properties. For example, are there ways to refine marketing and outreach strategies using the Chesapeake Bay Communications Work Group or others? Is there a way to construct a panel or a focus group using existing projects as case studies to attract additional and/or better restoration? We suggest examination of individual projects to glean what has been learned, what the challenges are, and what the needs are going forward.
- C. In general, the Wetland Work Group can make the most difference in addressing barriers to wetland restoration if it has concrete, specific actions that can help move things forward. To help achieve the next steps and solutions, the Work Group needs to examine what they are working on, what will help achieve key outcomes faster, and how to leverage other opportunities. See general comments above.
- D. As discussed above, the pressure put on the Wetland Work Group is really a Management Board issue. Resolution of what the Management Board or Chesapeake Bay Partnership can bring to the table will in turn help the Work Group.

MA #3: Increase our technical understanding of the factors influencing restoration success.

- A. This action item is less of a priority by itself, but should be connected to the overall goal of functional habitats. We recommend restructuring this management approach to better articulate the overall outcome, which is restoring wetland function. This may allow the vital habitat goal to actually be met if the restoration outcomes are designed better, rather than using acreage as a proxy.
- B. We recommend defining what is meant by "restored", i.e., does the term imply a wetland that meets the regulatory criteria, or one that has attained a prescribed level of function? For example, restoration of a depressional wetland to a duck pond may suffice in terms of acreage, but offers little functional resemblance to a forested, ground-water supported wetland with full hydrologic, biogeochemical, and habitat function.
- C. We recommend pushing the best techniques and best placement using a crediting approach; for example, can someone get different credit for different types of "wetlands": a duck pond versus a fully functioning wetland? We note that states are modifying wetland designs to meet TMDL requirements but many of these wetlands are not functioning properly because of placement; this is problematic. Could acres restored reflect a range of functionality, from non-functional to fully functional? Is there a way to

- provide credit for nutrient reductions from functioning wetlands rather than acreage enhanced or restored?
- D. It would be quite helpful if the Wetland Work Group could help raise these critical scientific questions; STAC will also do so through its report on the recent workshop.

MA #4: Prioritize areas for wetland restoration.

- A. Link prioritization of wetlands explicitly with the black duck outcome given the close tie between the black duck outcome and tidal wetlands. Examining both outcomes together may be critical in finding opportunities moving forward.
- B. Is there an opportunity to define wetlands in the upland, tidal, and/or black duck habitat areas?
- C. As the Work Group is settling on a prioritization protocol, we recommend using a subwatershed approach to prioritize individual wetlands or wetland types and develop a baseline. In addition, there is a need to develop specific geographic methodologies. For example, one could take a HUC 8 level watershed, assess the wetland functional capacity, and try to sustain or enhance that capacity. Partners with geospatial expertise would be helpful in conducting the work.
- D. We also recommend examining stream restoration and floodplain reconnection as other critical areas of opportunity (and potential funding).
- E. Finally, we recommend conducting an inventory of degraded wetlands on a landscape scale using remote sensing.

MA #5: Expand the involvement of local stakeholders.

- A. The current Management Approach lists participating in the "enhancing capacity workshop." While this workshop is a helpful start, we recommend serious focus on this management approach given the need for additional and consistent outreach and education. The burden for identifying wetland restoration opportunities is currently on farmers receiving potentially inconsistent or competing messages from neighbors, district offices, etc. Focused peer to peer farmer outreach is needed, as well as reaching out to farmers who may be interested
- B. A "Wetland Outreach Coordinator" might help identify key outreach opportunities, find funding for the right programs, and provide a way to address competing messages. Rather than waiting for farmers to come forward with opportunities, such outreach could be conducted in critical areas to get farmers interested. This could be tied to existing structures already used by farmers, with care given to avoid giving inconsistent messages.
- C. Consider incentives (such as positive success stories and negative report cards) to provide information and motivate action. A targeted marketing strategy would be helpful, as perhaps would be 3rd party brokers or private sector entities.

- D. Money and resources need to be consistent for wetland restoration. The Wetland Work Group could help aggregate and inventory existing efforts, and help disseminate consistent information.
- E. Consider potential demonstration projects; such pilot projects can reduce risk and provide positive examples of how to move forward. Engagement structure around these projects is critical to build momentum and inclusion of additional partners. Ask farmers what they might need to see in a pilot project to increase their willingness to engage.
- F. Others such as Greg Noe are currently working on these type of issues; we suggest interfacing with such stakeholders and helping amplify or expand on this existing work.