MEETING: Habitat GIT Spring Meeting Day 1
DATE/TIME: 04/25/2023, 9:00am ET
MEETING NOTES:

Welcome, Introductions, Updates
Presenter: Bill Jenkins (EPA/HGIT Chair)

- Introductions:
    - New HGIT Staffer: Dede Lawal
    - New Wetlands Vice Chairs: Nancy Schumm & Tess Danielson
    - New Fish Passage Co-Chairs: Ray Li and Jim Thompson
    - In person round of introductions and online introductions in the chat

- GIT Funding Updates:
    - Black Duck Action Team: Monitoring Vegetation Condition Throughout the Delmarva Peninsula
    - SAV Workgroup: Protecting Chesapeake Bay Submerged Aquatic Vegetation (SAV) Given Changing Hydrologic Conditions: Priority SAV Area Identification and Solutions Development
    - Stream Health Workgroup: Literature Review: Building Climate Resilience in Stream Restoration Practices
    - Wetlands Workgroup: Mapping Non-Tidal Vegetated Wetlands in Areas with Outdated Wetland Maps
    - FY21 - Wetlands Workgroup: Understanding and Addressing the Impacts of Wetland Mowing to Facilitate Meeting the Chesapeake Bay Wetland Enhancement Goals
        - Advertised again because the first round did not receive any bids from a qualified contractor
    - The RFP deadline for these projects was March 23rd. Technical leads and reviewers are now looking over and scoring the bids that came in. The Chesapeake Bay Trust will be sending out information to the recommended contractors by this week or next week. Hopefully the projects will be able to get started by May 15th.

- The Wetlands Action Plan was finalized in January 2023. It was a very intensive process and the Action Plan was a product of the Wetland Outcome Attainability Workshop held last August. The Action Plan can be found on the HGIT webpage and on the Wetlands WG webpage.
    - FYI: a poster on the Wetlands Actions Plan will be presented at the Chesapeake Bay Program SRS Biennial Meeting on May 11th and 12th in Charlottesville, VA.

- Targeted Outreach for Green Infrastructure(TOGI): In December 2022 Chris Guy and Katlyn Fuentes presented the results from this GIT funded project at the Restoring America's Estuaries Conference in New Orleans. There will also be a poster on this at the SRS Biennial Meeting.

- **Chris Guy:** I want to speak more to the Cross-GIT Funding process. On average the Bay Program has about $1 million dedicated for the 7 GITs to use towards the 31 outcomes. In the 2 years that I have been here we have successfully had 8 out of 9 proposals fully/partially funded. If you have ideas that need funding talk to your workgroup chairs because this could be one of the ways to get that funding. On average the projects are running between $50,000 and $100,000. It does work for implementation projects, but generally coordination and planning projects are funded. The cycle will start again in July.
    - **Action:** Chris encourages workgroup members to pitch ideas to their respective chairs about potential GIT funded projects. Projects are more likely to get funding if they address more than 1 outcome.

- **Gina Hunt**: Do any of the partners have any announcements?
    - **David Stillwell**: The Upper Susquehanna Conservation Alliance is having their Spring Meeting on May 19th. Anybody who wants to come is welcome. It will be a fully in person meeting with no hybrid capability.
    - **Chris Guy**: Last October the Executive Council met and had a directive that came down to all the members of the Bay Program to expedite the outcomes for 2025. Look for where things aren't happening and try to meet those goals. They also had a charge to the PSC on what the new agreement should look like. It's up to the workgroups to inform the vision of the new agreement.
        - By **June** each outcome should have one pagers about where they're at and where they want to go by 2025. Use the outcome indicators as a guide to answer questions like: What are we doing now? What outcomes are we meeting? What outcomes are we not meeting?

- **Gina Hunt**: There is a link to a survey in the chat that we would like you to fill out by the end of the day. It'll let us know how you think the HGIT is doing in relation to its Management Strategy.

HGIT Management Strategy
Presenter: Chris Guy (USFWS/HGIT Coordinator)
- The Management Strategy has 2 parts: direct priorities (what we are doing) and indirect priorities (how we do it).

- Direct Priorities:
    - Shallow water habitat conflicts: 18 of 31 outcomes are in shallow waters and not all are mutually beneficial. They do come into conflict and we need to figure out how to deal with that conflict.
    - Incorporate climate change into workgroup activities.
    - More restoration work in the urban environment.
    - Improve outcome tracking - the work you have been doing should be put in the indicators and Chesapeake Progress. We have outdated information going back to 2011.

- Indirect Priorities:
  - Infusing social science and ecosystem service valuation into our work.
  - Ensuring DEIJ has been considered in HGIT decisions.
  - Coordinating across the Bay Program to leverage resources towards common goals.

- Near Term Priorities
  - A proposal on structured decision making and shallow water opportunities was submitted for GIT funding, but it was not selected. Will be recycled in 2023.
  - Wetland Outcome Attainability Workshop and Action Plan.
  - Improving outcome tracker and reporting for wetlands.
  - Supporting current and future workgroup activities.

- On the Horizon
  - Outcome attainment up to 2025 and beyond 2025.
  - Feedback that the current outcomes are a little constrained and don't feel like they are the most appropriate, but in 2025 the workgroups have the opportunity to change the outcomes to what they feel are important.

- If you need a refresher you can find the [Management Strategy](#) on the [HGIT webpage](#).

- **Action**: Please fill out this survey on the [HGIT Management Strategy Survey](#). The results from this survey will be used to update our management strategy, and more specifically, identify ways in which we can improve HGIT priorities to better support our six Outcomes (Black Duck, Brook Trout, Fish Passage, Stream Health, Submerged Aquatic Vegetation (SAV), and Wetlands).

- **COMMENTS/QUESTIONS:**
  - **Kristin Saunders**: There will be a session at the Biennial Meeting called World Cafe. An opportunity to visit tables and describe your vision for how you want to adapt the outcomes beyond 2025 and make our work more relevant to all stakeholders and communities within the watershed. All the information learned will be given to the Beyond 2025 Steering Committee.

Workgroup Updates

WETLANDS
Presenter: Pam Mason (VIMS)

- There is some confusion about where we actually are in this outcome. Through the NEIEN accounting system we think we have about 16,000 acres of the 85,000 acre goal towards creation and restoration - this does not include enhancement. We have a small number accounted for enhancement, but it's not included because not all the data has been collected. Either way, we are far from the original goal we committed to.

- The [WWG](#) will be meeting monthly alternating between tidal and nontidal wetlands and we will meet twice a year as an entire workgroup.

- Where we are
  - Jurisdictions have completed Wetlands Action Plans and we are continuing to support and collaborate with the folks who came together to write those action plans.
  - There will be a presentation tomorrow that goes into more detail about the new wetlands (habitat) accounting system.
  - Want to initiate conversation on the outcomes for going to 2025 and beyond. Those conversations will be focused on tidal/nontidal, urban/agricultural, jurisdictions, MS4/nonMS4.
  - Refine the outcome to define creation vs enhancement vs restoration
  - Ongoing collaboration with the Chesapeake Bay Trust (CBT), Climate Resiliency Workgroup (CRWG), and others on tidal wetlands.
  - Collaborate with the communication team on wetlands outreach materials
  - Provide leadership and support for the 3 GIT funded projects in review - that were mentioned by Bill Jenkins above.

- On the Horizon
  - Policy developments: CCRM is monitoring the response to the new living shorelines law in VA.
  - Fiscal developments: there is a historic level of funding available, but the availability of money hasn't increased the capacity of the states and local partners to be able to implement those funds.

- What's Next:
  - Maintain commitment to increase capacity in jurisdictions that can help write/manage grants or propose projects. Still need people in state and local governance engaging people in wetlands.
  - Identify opportunities to restore/conserve/create wetlands within this historic loss as it relates to climate change.

- **COMMENTS/QUESTIONS**:
  - **David Stillwell**: With the increase in funding available, capacity is a challenge because some may not have the bandwidth to implement funded projects or even apply for the grants. In my perspective hiring more people should be a priority along with implementation. Have to find the balance.
    - **Chris Guy**: An RFP went out to the states that encouraged capacity building and only 1 proposal out of the 18 had to do with capacity. The states don't want 1 year of funding for a temporary position, but permanent funding for permanent positions. Unfortunately, the BIL is only a 5-year funding program and there is only 3 years left.

  - **Kevin Du Bois**: Is there anyone looking across the State Wetland Plans to identify commonalities, strategies, opportunities for collaboration, etc?
    - **Pam Mason**: It's complicated because it's all about location. Wetlands are the property of the jurisdiction they sit in. Worth talking about where

> we share larger scale watersheds and headwater wetlands because they provide a heavier lift. Otherwise, it becomes like comparing apples to oranges because it depends on the scale, the type of wetland, and services provided. We'll have more conversations about this in the future.

- ○ **David Stillwell**: Relationship building with landowners is important when it comes to wetlands. Long term engagements with private landowners are needed to gain trust and allow them to restore the wetlands on their land.

STREAM HEALTH
Presenter: Alison Santoro (MDNR)

- Land Acknowledgement Resource: https://native-land.ca/

- In February the ICPRB released the Chessie BIBI Final Report for the baseline and the first interval. There was an Improvement in stream miles by approximately 6% from the baseline. There is quite a lot of the watershed that is unrated, so there is a lot of work to be done but looks like we are trending on the right track.

- Data Review and Development of Multi-Metric Stream Health Indicators is a 2021 GIT Funded project that will address how stream health is changing and how to better characterize the response through non-biological metrics following the implementation of management efforts. Not as good as the benthic scores, but it's a guide to find better management practices.

- Literature Review: Building Climate Resilience in Stream Restoration Practices is a 2022 GIT funded project that will seek to answer how common stream restoration techniques perform when faced with climate change and the long-term resilience of stream restoration practices.

- In March 2023 there was a STAC Workshop: State of the science and practice of stream restoration in the Chesapeake: Lessons learned to inform better implementation, assessment, and outcomes.

- Stream Restoration Permitting Survey is live and will accept submissions through May 19, 2023. Geared towards professionals with permitting application and/or reviewing experience.

- The DEIJ initiative to engage with under-served, under-represented communities to increase participation in stream health concerns was delayed due to understaffing but should begin in 2023.

- There will be a joint Stream Health and Forestry WG meeting June 7th to discuss better collaboration when it comes to creating riparian buffers.

- **COMMENTS/QUESTIONS**:
    - ○ **Katie Ombalski:** Is there an estimated date for the STAC Workshop report out?

- **Alison Santoro**: The STAC report is estimated to be done by late summer.

Submerged Aquatic Vegetation

Presenter: Brooke Landry (MDNR)

- At 52% of 2025 target for 130,000 acres of SAV in the Bay and at 36% of the ultimate 185,000 goal.

- 2023 GIT Funding:
  - Protecting Chesapeake Bay Submerged Aquatic Vegetation (SAV) Given Changing Hydrologic Conditions: Priority SAV Area Identification and Solutions Development
  - Advancing Social Marketing Through Two Pilot Programs: Behavior Change Training and SAV Pilot Implementation
    - In collaboration with the communications team.

- On March 7th there was the SAV Regulatory Review Meeting where we looked at the report, *Existing Chesapeake Bay Watershed Statutes and Regulations Affecting Submerged Aquatic Vegetation*, and determined which recommendations should be further pursued.

- SAV Monitoring Programs
  - Third Tier - SAV Sentinel Site Program is running on a volunteer basis and working with partners to adopt sites in the Chesapeake Bay. Some volunteers are already lined up to monitor sites this summer.
  - Second Tier - Chesapeake Bay SAV Watchers Program is a community based SAV monitoring effort that was started in 2019. It has had great success in outreach and education. The program works with riverkeepers and watershed groups to collect the data. There will be a couple more training events this summer to get more people involved. One challenge is that the program hasn't reached Virginia yet.
  - First Tier - Baywide Aerial Monitoring Survey.

- 2021 GIT funded project, Modeling Climate Impacts on SAV in Chesapeake Bay, is just finishing up. The project addressed the role of climate stressors on Chesapeake Bay SAV.

  - The project found that with climate change the future of *Zostera* (eelgrass) in Chesapeake Bay looks bleak. Temperature increases will widen the shift in dominant species and management must adjust accordingly, so should spend more time focusing on freshwater SAV than just on *Zostera* in the Chesapeake Bay.
  - Nutrient reductions in the tidal freshwater/oligohaline and *Ruppia maritima* (widgeon grass) zones are essential because these new dominants respond well to nutrient management.
  - Results will be published soon in the National Academy of Science.

- Predicting Chesapeake Bay Shiny App: https://vims-sav.shinyapps.io/testshinyrmd/#section-segments

- **COMMENTS/QUESTIONS:**
    - **Denise Clearwater**: What were the two SAV species that you said were going to be dominant and should be focused on instead of *Zostera*?
        - **Brooke Landry**: The whole freshwater community should be focused on, which includes about 12 different species. *Ruppia* which is the most abundant plant in the Chesapeake Bay should also be focused on.
    - **Kevin Du Bois**: Is water clarity still a major limiting factor in SAV abundance? If so, are there any efforts in co-locating mussel and oyster restoration with SAV restoration areas?
        - **Brooke Landry**: Water clarity is the primary limiting factor for SAV distribution and abundance. There are no current projects looking at mussels and SAV, but it is on the list of science needs.

FISH PASSAGE
Presenters: Jim Thompson (MDNR) and Ray Li (USFWS)
- Updates to the Fish Passage Prioritization Tool
    - Incorporating new data from a variety of sources. Including culverts that have been rated severe by the North Atlantic Aquatic Connectivity Cooperative into ranked blockages. Added climate change and economic justice screening data and native lands data.
    - New tool should go live later this summer/early fall.

- Broaden workgroup engagement to include New York, Delaware, and West Virginia.

- Next [Fish Passage Workgroup Meeting](#) is May 22nd.

- **COMMENTS/QUESTIONS:**
    - **Jonathan Watson**: Has there been any effort to engage with state DOT's to help take advantage of the Federal Highway Administration Aquatic Organism Passage (AOP) grant program? There were very few, if any, applications in the Chesapeake Bay watershed in the first year of funding.
        - **Jim Thompson**: We have representatives in the workgroup from those agencies, but with Ray's connections with DOT, we hope to get them more involved.

BROOK TROUT
Presenter: Katie Ombalski (Woods & Waters Consulting, LLC)
- GIT Funded project: Facilitating Brook Trout Outcome Attainability through Coordination with CBP Jurisdictions and Partners
    - Contracted to Trout Unlimited.
    - Goal of the project is to collect and compile existing data from stakeholders and analyze the data necessary to adequately track progress.
    - Looking for data from instream restoration, riparian buffer restoration, land protection, and aquatic organism passage projects.

- ○ Plan to incorporate the data into the habitat tracker tool that was developed for wetlands but can be used for brook trout as well.

- UMBC ICARE eDNA project: Temperature and Spatial Effects on eDNA Dynamics to Inform Brook Trout Management Practices
  - ○ How do changes in temperature/season, distance downstream affect brook trout shed rate, eDNA concentration?

  - ○ Can we predict fish biomass with eDNA concentrations?

- The two projects above address the following challenges:
  - ○ Metrics to quantify conservation actions protecting current brook trout habitat
  - ○ Need to develop a reporting framework to collect and quantify all watershed restoration activities.
  - ○ More capacity to engage and coordinate on large scale priority action items with greatest impact.
  - ○ Support stakeholder needs related to cold water refugia, climate change, restoration.

- Recent Research Publications on Brook Trout

  - ○ Hitt, N. P., Rogers, K. M., Kessler, K. G., Briggs, M. A., & Fair, J. H. (2023). Stabilising effects of karstic groundwater on stream fish communities. Ecology of Freshwater Fish, 00, 1–14. https://doi.org/10.1111/eff.12705

  - ○ D.C. Kazyak, S.L. White, N. Mamoozadeh, J.S. Hargrove, M. Meek. (2022) Conservation Genetics and Wild Trout: Evolving Opportunities to Support Management. Pages 143-150 in Proceedings of the Wild Trout XIII Symposium

  - ○ D.C. Kazyak, S.L. White, N. Mamoozadeh, J.S. Hargrove, M. Meek. (2022) Benefits of Genetic Data in Design of Brook Trout Translocation Efforts. Pages 179-184 in Proceedings of the Wild Trout XIII Symposium

BLACK DUCK
Presenter: Dede Lawal on behalf of Black Duck Chairs
- With the help of other partners Virginia DWR recently acquired the Coastal Forests Wildlife Management Area (WMA), which contains several hundred acres of marshes, tidal creeks, ponds, and other wetland habitat beneficial to black ducks. 90% of the property is classified as prior converted wetlands which could provide opportunities for future wetland restoration.

- Maryland DNR has several restoration projects going on including a recently completed 25 acres of restored wetlands and 4 acres of enhancements at Wye Island Natural Resource Management Area, a 5 acre restoration project at Cedar Point WMA in Charles county and 2 miles of berm enhancement to combat sea level rise that was compromising 2 coastal impoundments at Fairmount WMA.

- Atlantic flyway--wide black duck telemetry project is currently in year 3 of 4. The objective of the project is to outfit female black ducks with backpack gps/gsm transmitters which track migratory movements and provide information on other life cycle dynamics. This research will hopefully identify factors that are limiting the growth of black duck populations that winter in the Chesapeake Bay outside of wintering habitat. To date over 500 tracking units have been deployed from Quebec to Virginia.

10 min Break

Very High-Resolution Land Use/Land Cover Data Project and Targeting Tools Portal
Presenter: Peter Claggett (USGS)
- Proposed Land Characterization and Monitoring Plan for 2024-2034
  - Continuing every 4 - 5 years with the 1m 60 class land use land cover dataset.
  - There will also be a hydrography dataset (streams/ponds/water features) .
  - Plan to add data from satellites monthly. It will be a coarser resolution (10-30m) and include spectral indices of vegetation conditions, which is important to capture transitional landscapes. Able to see when vegetation stress occurred within the 4 to 5 year time span.

- There is a 1m resolution accuracy for pretty much the entire watershed (just got NY).

- The data are consistent and comparable through time - can add extra classes to the older data to see consistent changes through time.

- Assessing the vulnerability of habitats to land conversions
  - Developed the Chesapeake Bay Land Change Model to assess the vulnerability of healthy watersheds to development. The model integrates the climate goals of the different states and can also simulate land conservation to see how that can shape future development patterns. There is an effort to use machine learning to improve predictability of the model.

- Hyper-resolution Hydrography
  - Can be integrated with landuse to find out riparian conditions, floodplain condition, and identify opportunities for stream restoration where there is incision or entrenchment.

- **COMMENTS/QUESTIONS:**
  - **Denise Clearwater**: Can you give more detail about channel metrics this is going to generate?
    - **Peter Clagget**: We have estimates of channel length, depth, and width (bank to bank). Working to compare modeled estimates based off LiDAR with what's been collected in the field. Looking at incision and entrenchment ratios would be the next logical step. Using LiDAR to look at relative levels of depth and disconnection from the floodplain.
  - **Erin Reilly**: When will products be available?

- - ■ **Peter Clagget**: Hyper resolution streams will be available June 2024, floodplain maps 2025, backcast 2025/2026.
  - ○ **Cassie Davis**: Will it be for all the counties that touch the watershed?
    - ■ **Peter Clagget**: LiDAR collections do not cover the full counties intersecting the watershed, just the overlapping portions. There are gaps and those will have to be filled in with coarser 3m resolution LiDAR, but plan to redo hydrography data every 5 years based on the best available data.

Science-Based Approaches and Tools for Targeting Chesapeake Resources
Presenter: John Wolf (USGS)

- Science approach for targeting resources to address multiple outcomes/benefits. The portal is organized around water quality improvements, land conservation, benefits to people, and fish/wildlife/habitats.

- A driver behind the portal was the recognition that there are a lot of decision support tools available/being developed but people cannot find them.

- This portal is phase 1 in a longer-term effort to have a more data driven site to allow the user to find tools relative to their interest.

- Portal Website: https://gis.chesapeakebay.net/targeting/

- How to bring together multiple decision support tools to see how projects can achieve multiple benefits.

- Next Steps for Targeting Efforts: have more stakeholder interaction, enhance tools with higher resolution land use date, promote the use of existing tools.

- **COMMENTS/QUESTIONS:**
  - ○ **Bruce Vogt**: I also think this tool at least in tidal areas could help people who are interested in applying for BIL and IRA project funding which require proposals that show how a project will benefit habitat and fish, connect to regional priorities, and to some extent climate resilience.
    - ■ Fish data inventory: https://d18lev1ok5leia.cloudfront.net/chesapeakebay/documents/FishHabitatInventoryFinalReport2020.pdf.
    - ■ Any thoughts on including EFH https://www.habitat.noaa.gov/protection/efh/newInv/index.html?

  - ○ **Kristin Saunders**: Looking at the most effective basins data layers in combination of DEIJ reminds me that STAC and members of the Chesapeake Bay Commission are interested in seeing a parallel exercise to see what areas would light up if we were to look at shallow water areas/most effective basins (rather than tied to the deep channel). This idea may surface again during the Beyond 2025 planning and certainly meshes with a lot of Habitat GIT priorities.

- ○ **Chris Guy**: Encourage workgroups to look through portal thinking about the outcomes and see how we can use the tools thinking beyond 2025.
- ○ **Gina Hunt**: Share this portal with your networks because it's important for partners to be able to access it.
- ○ **Bruce Vogt**: How can we get this portal into the hands of the partners on the ground implementing projects? Possibly NFWF?
  - ■ **John Wolf**: EPA funding can take advantage of the portal as well. Like the suggestion of reaching out to NFWF.
  - ■ **Katie Ombalski**: Look into Chesapeake Bay Funders Network in addition to NFWF.

Summary and Wrap Up
Presenter: Gina Hunt (MD DNR/HGIT Chair)
- ● Please complete the Management Strategy Survey

Presentation on Field Site: Restoring Aquatic Habitat Connectivity in Upper Susquehanna Subwatershed, One Crossing at a Time
Presenter: Carl Schwartz (USFWS)
- ● Brook trout are fall spawners and a lot of water flow goes through at that time. Everytime there is a smooth pipe there is a velocity problem because the fish are small and can't out swim the current. For fish to be able to use the culverts they need baffling and roughness.

- ● The Solution: Turn culverts into bottomless arches - so there is natural substrate for the fish. Bottomless culverts take more time, energy, and money to put in but long term it needs less maintenance.

- ● Added step pools for brook trout to get in and through the natural bottom culvert. The step pool rocks are put in at an angle to allow for sedimentation to help build the stream up to culvert height.

- ● **COMMENTS/QUESTIONS:**
  - ○ **Cassie Davis**: Do open bottom culverts have a longer lifespan than traditional culverts?
    - ■ **Carl Schwartz**: They do because traditional culverts are made of galvanized metal, and it becomes rusty and gives out.
  - ○ **Katie Ombalski**: Is there post implementation monitoring?
    - ■ **Carl Schwartz**: It's still a work in progress, but DEC is doing the monitoring on it.
    - ■ **Katie Ombalski**: 3 are NFWF funded projects - want to hear about monitoring but not enough time during the term of the grant, but it sounds like the state is doing it?
      - ● **Emily Zollweg-Horan**: Yes, have a crew that goes out for a couple hours of electric fishing - can happen as often as needed.

- **David Stillwell**: People believe monitoring should be done but there are few sources of funding for just monitoring.
  - **Katie Ombalski**: How many miles do all 5 culverts open up?
    - **Carl Schwartz**: 34 miles of increased access to streams
    - **Emily Zollweg-Horan**: Conduct surveys so you can calculate fish density per acre/land unit so you can see if there has been a density increase. We aren't just looking at brook trout but other species as well. And not just fish connectivity, but stream health, etc.

IN PERSON PARTICIPANTS (13):

Carl Schwartz (USFWS)	**Cassie Davis** (NYS DEC)	**Chris Guy** (USFWS/HGIT Coordinator)
David Stillwell (USFWS)	**Dede Lawal** (CRC/HGIT Staffer)	**Emily Zollweg-Horan** (NYS DEC)
Gina Hunt (MD DNR/HGIT Chair)	**Ian Drew** (USFWS)	**Katheryn Barnhart** (EPA)
Katlyn Fuentes (CRC/HGIT Staffer)	**Katie Ombalski** (Woods & Waters Consulting, LLC)	**Melissa Yearick** (Upper Susquehanna Coalition)
Tammy O'Connel (MD DNR)		

ONLINE PARTICIPANTS (68):

Adam Gold (EDF)	**Alex Vidal** (USFWS)	**Alison Santoro** (MD DNR)	**Amanda Poskaitis** (NWF)
Andy Howard (DNREC)	**Angela Sowers** (USACE)	**Ashley Kelly** (DoD/CBP)	**Ben Sagara** (VA DWR)
Bill Jenkins (EPA/HGIT Chair)	**Britt Slattery** (NPS)	**Brittney Flaten** (DNREC)	**Brooke Landry** (MD DNR)
Bruce Vogt (NOAA)	**Casey Johnson** (The James River)	**Danielle Algazi** (EPA)	**Dave Davis** (VA DEQ)
David Maginnes (Maginnes Productions)	**Denise Clearwater** (MDE)	**Doug Myers** (CBF)	**Doug Nemeth** (USFWS)

Habitat Goal Implementation Team Spring 2023 Meeting

Erin Reilly (The James River)	**Helen Golimowski** (Devereux Consulting)	**John Wolf** (USGS)	**Jim Thompson** (MD DNR)
Jon Niles (TNC)	**Jonathan Watson** (NOAA)	**Julie Reichert-Nguyen** (NOAA)	**Kaitlin Scowen** (MD DNR)
Karinna Nunez (VIMS)	**Katherine Stahl** (USFWS)	**Katie Brownson** (USFS)	**Kayla Clauson** (DNREC)
Kelly Maloney (USGS)	**Kevin Du Bois** (DoD/CBP)	**Kevin McLean** (VA DEQ	**Kristin Saunders** (UMCES)
Leah Franzluebbers (USFWS)	**Leon Tillman** (NRCS)	**Lisa Moss** (USFWS)	**Lori Maloney** (EBTJV)
Margi Whitmore (VA DWR)	**Marjie Zeff** (AECOM)	**Mark Biddle** (DNREC)	**Marty Gary** (PRFC)
Matt Lawrence (MD DNR)	**Matthew Cashman** (USGS)	**Mike Bednarski** (VA DWR	**Mike Lagua** (NFWF)
Mike Trumbauer (Biohabitats)	**Nancy Schumm** (PRIME AE Group, Inc)	**Natahnee Miller** (PA DEP)	**Olivia Devereux** (Devereux Consulting)
Pamela Mason (VIMS)	**Peter Clagget** (USGS)	**Ray Li** (USFWS)	**Robert Isdell** (VIMS)
Sandy Davis (USFWS)	**Sara Weglein** (MD DNR)	**Sarah Hilderbrand** (MD DNR)	**Sarah Roberts** (Biohabitats)
Stephanie Hall (MD DNR)	**Stephanie Jacobs** (EPA)	**Stephen Faulkner** (USGS/EESC)	**Susan Minnemeyer** (Nature Plus Solutions)
Taylor Woods (USGS)	**Tess Danielson** (DOEE)	**Woodson Francis** (USACE)	

MEETING: Habitat GIT Spring Meeting
DATE/TIME: 04/26/2023, 9:00am ET
MEETING NOTES:

Welcome & Summary of Day 1
- Be on the lookout for information that will be sent out for the one-pagers addressing your outcome for up to 2025.

- John Wolf and Peter Clagget are interested in your feedback on how to make the tools they presented on more accessible and more usable. You can share your feedback with the goal team or with them directly at any time.

SRS Overview
Presenter: Dede Lawal (CRC/HGIT Staffer)
- The [Strategy Review System](#) is an adaptive management tool used to measure progress towards achieving the Chesapeake Bay outcomes.

- Each outcome is organized into 1 of 7 cohorts and there are 3 cohorts represented in the Habitat GIT.
    - Healthy Watersheds: Brook Trout, Fish Passage, & Stream Health
    - Aquatic Life: SAV
    - Climate Change & Resiliency: Wetlands & Black Duck

- The next SRS cycle starts this July for the Healthy Watersheds Cohort.

- During the process the workgroups will update their Logic & Action Plan (LAP), Narrative Analysis, and Presentation.

- To get the most out of your requests to the Management Board make them actionable, specific, and within the MB's capacity.

- **COMMENTS/QUESTIONS:**
    - **Gina Hunt:** Interact with your workgroup while updating the LAP to increase engagement and ownership of the 2-year plan. Should be more than the workgroup chairs and staffers involved in the process.
    - **Chris Guy**: A role of the GIT chairs is to assist when nothing seems to be happening with the workgroup's request to the Management Board.
    - **Kristin Saunders**: Hope that people begin to see the adaptive management process as the way we work and not an add on. The method is used to systematically zero in on the actions taken that made a difference in moving the needle.
    - **Stephen Faulkner**: Important to include the beyond 2025 comments as well in this SRS cycle.

- ■ Gina: There's an opportunity to do that in the narrative analysis. You can state what needs to change for your outcome in order to address the barriers/challenges.
  - ○ **Kristin Saunders**: View the SRS cycle as the way the program manages the accountability and health of the organization.
  - ○ **Stephen Faulkner**: There is a disconnect in how the workgroup views the SRS process. They see it as bureaucracy and not necessary since they will be doing the work anyway.
  - ○ **Kristin Saunders:** The SRS planning team looked back at all the narrative analysis to synthesize commonalities of challenges between workgroups to know where to focus leadership's time and energy. The narrative analysis also showcases the successes that are happening. Even if it feels like a grind we are using the information to inform people about the changes they need to make. In the end, the work is in service to all of you to better achieve your outcome.

Integrating Social Science Integration into the Chesapeake Bay Program
Presenter: Amy Handen (EPA)
- ● [Enhancing Chesapeake Bay Partnership Activities by Integrating Social Science](#) - Report by Lisa Wainger, Daniel Reed, and Erika Blair

- ● Benefits of Social Science Integration: Understand social/economic/cultural contexts, improve governance and decision making, engage and learn local context, and provide big picture insights.

- ● Barriers to Social Science Integration: Ideology differences between natural and social sciences, knowledge barriers, capacity challenges in conservation organizations.

- ● CBP Social Science Assessment - GIT Funded Project
  - ○ Goal to evaluate the use and attitudes towards social science in the CBP, increase understanding of social science, and advance dialogue about strategies to enhance social science capacity.

- ● Finding: Found that there was broad support for but an incomplete understanding of social science.
  - ○ Recommendation: Build social science literacy.

- ● Finding: There is an uneven use of behavioral social science evidence and performance tracking.
  - ○ Recommendation: Enhance the practice of behavioral social science. Learn by experimenting.

- ● Finding: Missed opportunities to apply social science in adaptive management
  - ○ Recommendation: Use social science in adaptive management.

- ● Finding: Lack of strategic planning for social science application.
  - ○ Recommendation: Foster institutions that strategically apply social science.

- **COMMENTS/QUESTIONS:**
  - **Gina Hunt**: Was part of the interview process and thought the capacity for social science was low. Supports the suggestions to have more training on how to integrate social science into our work.

Break

Habitat Outcomes and Indicators at the Chesapeake Bay Program
Presenter: Katheryn Barnhart (EPA)
- There are 3 categories of indicators that all fit into the adaptive management framework
  - Influencing factors: what key factors are impacting the achievement of the outcome?
  - Outputs: Are we doing what we said we would?
  - Performance: are we achieving the outcome?

- Indicators framework is a conceptual model that help informs adaptive management.

- Indicators don't have due dates, but generally they are due when the data is available.

- Chesapeake Progress Website Demonstration
  - Recent progress: difference between current update and what was previously reported (increase, decrease, no change).
  - Outlook: Are we on track or not towards achieving the goal based on all of our knowledge on the system.
  - Justification for progress and outlook selected - work with workgroup chairs and members to update the wording to make sure it's correct.
  - Place where data is communicated.

- Maintaining indicators strengthens funding requests because the indicators are updated regularly with quality data and the Partnership sees the impact of funded projects on the outcome.

- Only 3 Habitat GIT outcomes are currently being reported on Chesapeake Progress: SAV, Fish Passage, Stream Health.

- Chesapeake Progress is the official external reporting for stakeholders. So, if our data is out of date then their assessment of the progress made towards the outcomes is out of date as well.

- **COMMENTS/QUESTIONS:**
  - **Doug Myers**: The trend is more important than the current status.

Habitat Tracker Updates
Presenters: Olivia Devereux and Helen Golimowski (Devereux Consulting)
- Habitat Tracker - data management system to collect and organize data related to the habitat goals and outcomes.

- Wetlands and Black Duck Acres Report

- ○ Looking at entire acres of wetlands that are impacted by projects not just new acres of wetlands.
  - ○ The report gives wetland type, geography, year, presence of black duck, pre/post project land use, and acres.

- Environmental literacy and public accessibility report
  - ○ Tracks projects that have an environmental literacy report and accessibility.

- Project Funders Report
  - ○ Tracks funding year, project type, wetland types, number of projects, and funding organization.

- BMP Summary Report
  - ○ Summarizes the BMPs that have been implemented within each of the recorded projects.

- Data Collection Status
  - ○ Received: Ducks Unlimited, The Nature Conservancy, New York, Maryland, West Virginia
  - ○ Partial: Pennsylvania, Virginia
  - ○ Not received: DC, Delaware

- Data requests from Helen will go out annually in the Spring and those data will be used to update Chesapeake Progress.

- **COMMENTS/QUESTIONS:**
  - ○ **Jeremey Hanson**: Did you say if users can share their inputs with other users (like cast users can share scenarios)?
    - ■ **Olivia Devereux**: Can certainly build out capacity in the future, but at this point focus is on getting the data and making sure we can report out for the indicators.

Using Structured Decision Making to Accelerate Wetland Restoration Outcomes
Presenter: Amy Jacobs (TNC)

- How to engage private landowners to move progress forward - integrating social science.

- Delmarva Wetland Partnership aims to accelerate on the ground wetland restoration and developed a partnership to bring in different expertise to the table.

- Decided to use structured decision making to help them hone in on where to continue their engaged landowner outreach to accelerate restoration.

- To accelerate large scale wetland restoration, they decided to focus on 2 objectives: water quality and climate resiliency.

- For restoration opportunities set a threshold of 300 acres of restorable lands because they have the capacity and funding to tackle larger scale projects. Identified 964 potentially restorable patches.

- Next step was to prioritize the patches to narrow down where they would focus their efforts. For water quality they used eco-hydrologically active areas and nutrient loads as metrics. For climate resilience they used the water storage and connected habitat as metrics. Ranked parches accordion to their weighted average value across water quality and climate metrics. Used habitat/species overlay on their priority map to help figure out what land to restore.

- After deciding the top 10% of land they wanted to restore they decided to send a survey out to the landowners in those patches to find out their views on restoration to better tailor their outreach.

- Sent mail based social marketing using postcards - got 43 landowners to respond (3.6% response rate). That response rate led to 15 - 20 new project sites in total and 370 - 518 acres of wetland. Quickly exceeded capacity to advance projects.
  - Barrier = outreach specialists shifted from outreach to advancing the projects
  - Found that most landowners were never contacted about restoration opportunities. Those that weren't contacted were interested in a follow up.

- Using SDM helped them articulate objectives clearly, create transparency in the decision-making process with partners, identify barriers, allow the team to accelerate progress, and create a framework the team can continually refine and improve.

- **COMMENTS/QUESTIONS:**
  - **Denise Clearwater**: Does the wetland loss pick up loss from sea level rise or land use change?
    - **Amy Jacobs**: Only the headwater nontidal wetlands are used in the graph.
    - **Chris Guy**: SLR is not in there because the outcome hasn't really focused on it. Not a representation of the whole wetland system, just the BMPs.
  - **Julie Reichert-Nguyen**: Wants clarification on the wetland no net loss messaging.
    - **Pam Mason**: No net loss numerically on paper, sometimes can mean in lieu fee or purchasing existing wetlands and not creating new wetlands on the ground.
    - **Denise Clearwater**: Generally, no net loss refers to the regulatory program and mitigation offsets. Agree there are additional losses that aren't being accounted for.

Management Strategy Survey
Presenter: Gina Hunt (MD DNR/HGIT Chair)

- The management strategy was created from breakout groups from the 2021 HGIT Spring meeting and every meeting since then this has been talked about. The management strategy is for what you want the GIT to be working on.

- A summary of the results from the [management strategy survey](#) was given and can be found [here](#). All the responses to the survey can be found at the bottom of this document.

- **COMMENTS/QUESTIONS:**
  - **Chris Guy**: If there are other ways, we can engage you and get your voice heard let us know. Your feedback drives what we discuss in meetings, so we want these meetings to be meaningful to you.

End of Day Announcements/Wrap Up
- Habitat GIT 2023 Fall Meeting will be on November 29th and 30th in West Virginia at the EECS Leetown Research Laboratory.

IN PERSON PARTICIPANTS (12):

Carl Schwartz (USFWS)	**Chris Guy** (USFWS/HGIT Coordinator)	**David Stillwell** (USFWS)
Dede Lawal (CRC/HGIT Staffer)	**Emily Zollweg-Horan** (NYS DEC)	**Gina Hunt** (MD DNR/HGIT Chair)
Ian Drew (USFWS)	**Katheryn Barnhart** (EPA)	**Katlyn Fuentes** (CRC/HGIT Staffer)
Katie Ombalski (Woods & Waters Consulting, LLC)	**Melissa Yearick** (Upper Susquehanna Coalition)	**Tammy O'Connel** (MD DNR)

ONLINE PARTICIPANTS (61):

Adam Gold (EDF)	**Alicia Berlin** (USGS)	**Amy Handen** (EPA)	**Amy Jacobs** (TNC)
Andy Howard (DNREC)	**Angela Sowers** (USACE)	**Ashley Kelly** (DoD/CBP)	**Becky Golden** (MD DNR)
Ben Sagara (VA DWR)	**Bill Jenkins** (EPA/HGIT Chair)	**Britt Slattery** (NPS)	**Brittney Flaten** (DNREC)
Brock Reggi (VA DEQ)	**Brooke Landry** (MD DNR)	**Cassie Davis** (NYS DEC)	**Chris Moore** (CBF)
Clint Morgeson (VA DWR)	**Danielle Algazi** (EPA)	**Dave Davis** (VA DEQ)	**David Maginnes** (Maginnes Productions)

Habitat Goal Implementation Team Spring 2023 Meeting

David O'Brien (NOAA)	**Denise Clearwater** (MDE)	**Derrick McDonald** (EPA)	**Doug Myers** (CBF)
Greg Podniesinski (PA DCNR)	**Helen Golimowski** (Devereux Consulting)	**Jennifer Starr** (ACB)	**Jeremy Hanson** (CRC)
Jess Blackburn (CAC Coordinator)	**Jim Thompson** (MD DNR)	**Julie Reichert-Nguyen** (NOAA)	**Kaitlin Scowen** (MD DNR)
Karinna Nunez (VIMS)	**Katherine Stahl** (USFWS)	**Kelly Maloney** (USGS)	**Kevin Du Bois** (DoD/CBP)
Kevin McLean (VA DEQ)	**Kristen Saacke Blunk** (Headwaters, LLC	**Kristin Saunders** (UMCES)	**Laura Cattell Noll** (ACB)
Leah Franzluebbers (USFWS)	**Leon Tillman** (NRCS)	**Lisa Moss** (USFWS)	**Mark Biddle** (DNREC)
Matthew Cashman (USGS)	**Matt Lawrence** (MD DNR)	**Mike Lagua** (NFWF)	**Mike Trumbauer** (Biohabitats)
Nancy Schumm (PRIME AE Group, Inc)	**Natahnee Miller** (PA DEP)	**Olivia Devereux** (Devereux Consulting)	**Pamela Mason** (VIMS)
Ray Li (USFWS)	**Robert Isdell** (VIMS)	**Sadie Drescher** (CBT)	**Steve Strano** (NRCS)
Sandy Davis (USFWS)	**Sara Weglein** (MD DNR)	**Sarah Roberts** (Biohabitats)	**Stephen Faulkner** (USGS/EESC)
Tess Danielson (DOEE)			

APPENDIX: HABITAT GIT MANAGEMENT STRATEGY: SURVEY RESULTS
Survey presented at the HGIT Spring Meeting on 04/25-26/2023 and closed on 05/05/2023
12 responses received

WHAT DID THE HGIT DO WELL SINCE OUR LAST MEETING? *(Reminder: Fall HGIT Meeting was on 11/15/2022)*

- Projects received funding
- I'm most tuned in on the wetlands outcome and was happy with the Wetlands Action Plan and pleased to see the GIT Funding opportunities that came out of the Wetlands Workgroup.
- Working to update habitat tracker, finalization of the wetlands action plan, hired staffers.
- The summary of strategies was helpful at keeping us all up to speed on things.
- Coordination and engagement on GIT-funded projects.
- The communication is good from the Bay Program.
- Katlyn has been very helpful.
- N/A or UNCERTAIN (6 RESPONSES)
    - Three people: "new to CBP"
    - One person: didn't attend the last meeting

WHAT DID THE HGIT NOT DO WELL SINCE OUR LAST MEETING? *(Reminder: Fall HGIT Meeting was on 11/15/2022)*

- Needs more coordination with Water Quality GIT. There are conflicts involving stream restoration and resource tradeoffs which would benefit from input from Habitat and other workgroups.
- Nothing that I know of, but I haven't been as involved in HGIT activities lately. I am somewhat lukewarm on the SDM emphasis. I've seen that be helpful in some limited situations, and not at all helpful in most cases in which I've been involved.
- Communication on the habitat tracker development could have been better since we spent a lot of time with Megan EPA data team on this topic for tracking brook trout when we should have been coordinating with Olivia from the outset
- Cross GIT communication is badly needed between SHWG, WQWG, and perhaps Climate Resiliency workgroup. Ecological uplift is not often a goal of stream restoration projects and, as a result, rarely occurs. Although TMDL goals may be achieved, water quality and biological monitoring often demonstrates harm to the immediate site. There needs to be more coordinated discussion of what constitutes an acceptable level of risk in stream restoration projects to ensure that no outcomes are being negatively impacted in order to advance other outcomes.
- Its not clear how the modeling is done and how the goals are linked to the legal framework of local habitat models (i.e. State based TMDLs), fisheries management, migratory birds, etc.
- N/A or UNCERTAIN (7 RESPONSES)
    - One person: this was their first time reviewing the document
    - One person: did not attend the previous meeting

WHAT DO YOU LIKE ABOUT THE HGIT MANAGEMENT STRATEGY?

- Direct priorities are a start, but missing some items.
- Basic start for action items.
- There were many suggestions related to improved monitoring and tracking of wetlands, improved wetlands data, cross GIT applications, better understanding of co-benefits. I think there was a good collection of data needs and opportunities.
- Concise and organized collection of thoughts.
- That it includes more emphasis on underserved communities and being more cross-cutting across the six GITs.
- It includes some clear objectives.
- Clearly steps down Administration's priorities with specific, relatable actions for the HGIT. And emphasis on cross-program to discourage silos and promotes collaboration - outcomes are not mutually exclusive.
- Clearly laid out
- I like that cross GIT coordination is a goal.
- The inclusion of shallow water opportunities and re-structuring of the wetland workgroup to include group focused on tidal wetlands. The inclusion of incorporating climate change into workgroup activities. Inclusion of efforts to utilize Federal funding to drive habitat goals and identifying places for place-based habitat restoration/network building/social sciences/DEIJ.
- UNSURE (2 RESPONSES)
    - One person: Still reading/learning the document

WHAT DO YOU NOT LIKE ABOUT THE HGIT MANAGEMENT STRATEGY?

- Not enough coordination between workgroups and GITs.
- Not enough coordination.
- I would like to see more focus in the future on the opportunity to leverage funding related to nature based climate solutions (or "natural climate solutions") that take into account carbon sequestration, and also connect Bay Program restoration efforts to federal priorities and funding related to climate. One example is the National Nature Assessment being undertaken by the USGCRP. There's a major opportunity for the Bay Program to provide leadership in this space and connect federal, state, and local government goals approaches that aim to maximize co-benefits between water quality goals and climate goals, including carbon sequestration, beyond the established climate resilience goals. There's a great need for better science around carbon sequestration in restored wetlands that the Bay Program could help facilitate, including studying restoration project sites against remaining natural wetlands to help strengthen the potential for conservation finance efforts to contribute towards the wetland restoration goal. There are silos between the water quality community (which is also often very place based and local) and the climate/decarbonization movements which offers significant funding often lacks the local science component and context. Bringing these communities closer together could be very beneficial to the Bay Program and I think a key element is where climate mitigation, habitat restoration, and water quality co-benefits are mutually reinforcing and where investments related to climate could support a faster pace of restoration implementation and potentially developing new/expanded BMP strategies and science.

- The devil is in the details, but I have questions about the desire to better track Black Duck outcomes. I'm not sure it's that important to track "Black Duck" numbers per se, and the key is to track changes to habitat (which should correspond to the wetland GIT). But perhaps that's stating the obvious...
- It does not discuss policy recommendations, but maybe this was discussed and I missed it.
- I am not a fan of the qualitative/quantitative distinctions and there are inconsistencies across those categories and direct/indirect/near term/long term. Direct priorities are described as measurable, but there is no mechanism that I can see to measure anything. Does it make sense to have specific long-term priorities if we are basically rescoping post FY25?
- Seems redundant and excessive so far. Maybe I'll change my mind when I learn more.
- I would like to see more work to integrate outcome priorities.
- Omission of NOAA funding for habitat projects. E.g., NOAA Transformational Habitat Restoration and Coastal Resilience Grants ($85 million), Coastal Habitat Restoration and Resilience Grants for Underserved Communities ($10 million). Omission of cross-GIT coordination with Climate Resiliency Workgroup (see responses to other questions for cross-GIT coordination opportunities with Climate Resiliency Workgroup).
- Unsure it has utility for TMDL implementation in Maryland.
- N/A

HOW DO YOU SEE THE HGIT MANAGEMENT STRATEGY HELPING YOU WITH YOUR JOB RESPONSIBILITIES AT YOUR AGENCY?

- I really just learned about the HGIT management strategy. I will try to use it to promote progress towards the wetlands outcome in VA.
- My job responsibilities align with both the wetland and Black Duck GITs. Having HGIT funding and emphasis has helped bring resources and attention to conservation efforts for those species.
- It helps me set some targets for the work we accomplish.
- SDM and shallow water habitat opportunities is huge issue throughout the Bay and touches on many outcomes and priorities, so would like to see continued push to pursue funding
- Provides some feedback on stakeholder priorities
- Better focus on priorities. Support from folks outside our "bubble".
- Cross GIT coordination and communication helps to prioritize outcomes or at least raise awareness of impacts to outcomes that may be outside our scope.
- NOAA has new funding for natural habitat-related projects (e.g., coastal wetland, oyster reef, SAV restoration) as a result of the Bipartisan Infrastructure Law and the Reduce Inflation Act. The wetland plan effort has been helpful in identifying jurisdictional partners to support wetland projects. However, it is unclear whether the Habitat GIT views NOAA's resources as a worthwhile funding source to pursue with partners (NOAA's funding opportunities are not mentioned in strategy). There has been success in collaborations between NOAA, Climate Resiliency Workgroup (managed by NOAA) and Habitat GIT in the past with the Targeted Outreach for Green Infrastructure Project. NOAA's partnership team assisted the project in connecting with Virginia and tribal partners and took the conceptual design for the Mattaponi Tribe's living shoreline and supported the tribe in getting the project funded through the Coastal Habitat Restoration

and Resilience Grants for Underserved Communities Grant. It would be great if we could identify more collaborative opportunities like this.
- UNCERTAIN or N/A (4 RESPONSES)

HOW DO YOU SEE THE HGIT MANAGEMENT STRATEGY HELPING YOU WITH YOUR CBP OUTCOME RESPONSIBILITIES?

- My focal area is related to improving data on wetlands and innovative approaches to monitoring and tracking wetlands and these are reflected in the Management Strategy.
- The Strategy clearly outlines wetlands outcome and improved tracking as a priority for the CBP.
- I see them more as being aligned (i.e., we both are after the same outcomes) than helping me, other than what I said above about it increasing resources/attention/focus to those species/habitats.
- It provides some guidelines that are consistent with in the divisions.
- Modeling to determine climate resilient species / communities for fish passage projects. Where is $ and effort better spent on fish passage considering climate change (= fish distribution, streamflow, temp).
- Not much since outcomes are set and workplan approaches driven by work group members.
- Build partnerships.
- Support for workgroup meetings and staffing
- The Climate Resiliency Workgroup has tidal expertise related to nearshore environments (e.g., marshes, SAV) and coastal resilience. There is continued interest in collaborating with the Habitat GIT and corresponding workgroups (e.g., Wetland Workgroup, SAV Workgroup) to support progress on connected outcomes, i.e., wetlands, SAV, climate monitoring and assessment and climate adaptation outcomes. Wetlands and SAV are key habitats that are both vulnerable to climate change impacts and can also be used to build resiliency. The Climate Resiliency Workgroup included a priority in their workplan to define resilience effectiveness of natural infrastructure type projects. It would be great to identify collaborative opportunities with the Habitat GIT in support of this effort.
- UNCERTAIN (2 RESPONSES)

WHAT PRIORITIES SHOULD BE ADDED TO THE HGIT MANAGEMENT STRATEGY?

- Closer coordination with Water Quality GIT to put more focus on habitat and living resources rather than only nutrient and sediment reductions. Also Fish and Forestry Teams.
- Add ecosystem approach to outcomes to reduce conflicts.
- More emphasis on climate, connection to federal, state and local climate strategies, and science in co-benefits.
- Perhaps more emphasis on tidal marsh imperiled by sea level rise, as many priority species, and human and economic resources depend upon that ecosystem.

- Ensuring that policy follows practices to encourage more implementation from stakeholders and updating existing policies that are outdated. Funding opportunities for implementation would be good as well.
- More discussion on resiliency benefits from HGIT outcomes?
- Not necessarily removed, but more focused effort and support on coordinating cross-GIT common goals. I would not add more since what is there will be difficult to achieve with current resources.
- Support work to define acceptable levels of risk in stream restoration projects.
- Positioning partners to pursue large-scale habitat restoration projects and establishing metrics for targeting through structured decision-making. Include cross-GIT coordination with the Climate Resiliency Workgroup on establishing the resilience and social vulnerability metrics to help target marsh restoration and conservation projects. This work has already been initiated through a GIT-funded project out of STAR/Climate Resiliency Workgroup, "Partnership-building and identification of collaborative marsh adaptation projects." This project aims to identify and use existing resilience and social vulnerability metrics to target marsh projects and bring partners together to develop marsh projects that also integrate resilience research opportunities to pursue resilience funding. It would be great if this work could be used by Habitat GIT in helping move identified projects forward by assisting partners in pursuing funding (similar to the collaborative success of the Targeted Outreach for Green Infrastructure Project). Coordination support with WQGIT to assess BMP placement and design to minimize warming impacts to streams and nearshore tidal waters. See Rising Water Temperature STAC workshop report for scientific synthesis on warming in Chesapeake Bay and recommendations for action. Forestry Workgroup and Climate Resiliency Workgroup has been doing some initial coordination, but it would be great for the Habitat GIT to also assist to help make meaningful changes in the Bay Program to tackle impacts of rising water temperatures to streams and SAV. This is connected to the Warm Water Stressors in Streams Action, but also expands action to nearshore tidal waters.
- Linking the goals to legally binding programs at the State and local levels (e.g. county based MS4 permits).
- N/A (2 RESPONSES)

WHAT PRIORITIES SHOULD BE REMOVED FROM THE HGIT MANAGEMENT STRATEGY?

- I don't see SDM as a "priority" I see it as one possible way to achieve desirable outcomes. And, in most cases I'm afraid to say I don't think it has been the most efficient or effective means to doing something, but it has its place and can be an effective tool in the right situation(s).
- Improving outcome tracking and reporting and supporting current and future WG activities - these are important for HGIT success, but not sure if I'd consider these to be priorities.
- Revise long-term.
- NONE (3 RESPONSES)
- N/A or UNSURE (6 RESPONSES)

OTHER COMMENTS/QUESTIONS:

- Pursue ecosystem approach rather than only nutrient/sediment reductions. These comments supplement those previously submitted.
- Thanks for seeking opinions and keeping all of this organized!
- I am excited to be a partner in this planning.
- More discussion on resiliency benefits from HGIT outcomes?
- Goodness knows we don't all need more emails, but perhaps increased effort to advertise when a workgroup will be discussing a topic that may be relevant to another workgroup would be helpful.
- It's unclear what type of models the Habitat GIT is using; and aside from well-intentioned voluntary programs how progress is intended to be made without a legal framework to drive implementation of goals. The word TMDL is not mentioned in the strategy, nor are concepts like subwatershed analysis, management objective or management trigger.
- N/A (6 RESPONSES)