

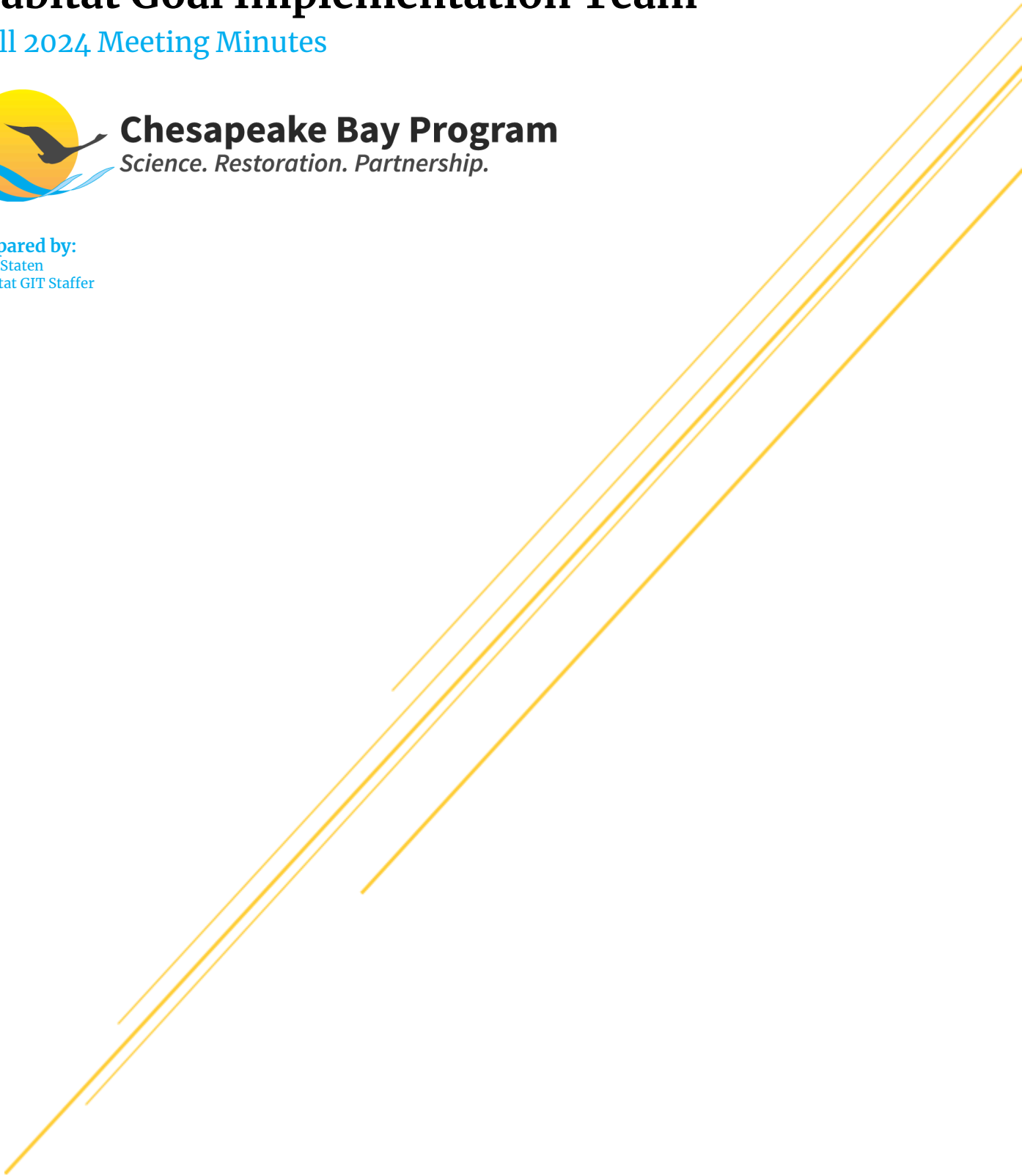
# Habitat Goal Implementation Team

Fall 2024 Meeting Minutes



**Chesapeake Bay Program**  
*Science. Restoration. Partnership.*

**Prepared by:**  
Nick Staten  
Habitat GIT Staffer





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## HABITAT GOAL IMPLEMENTATION TEAM FALL 2024 MEETING

October 2 and 3rd, 2024

Links to Meeting Materials: [Day 1](#) ; [Day 2](#)

### DAY 1, October 2nd:

09:00-12:50 PM ET, followed by lunch and a field trip for those attending in-person

#### ATTENDEES:

- Lawal, Dede (CRC)
- Guy, Chris (USFWS)
- Whitemore, Margaret (VDWR)
- Bollt, Keith (EPA)
- Claggett, Peter (USGS)
- Deiter, Aaron R. (DNREC)
- Megan Diehl (CBT)
- Jenkins, Bill (EPA)
- Du Bois, Kevin (DoD CBP)
- Thompson, Jim (MD DNR)
- Walker, Holly (DNREC)
- Wolter, Faren R (USFWS)
- Noe, Gregory (USGS)
- Hyer, Kenneth E (USGS)
- Luecke, Julie (CBF)
- Zuknick, Gregory (EA Engineering, Science, and Technology, Inc.)
- Golden, Becky (NOAA)
- Saunders, Kristin (University of Maryland Center for Environmental Science)
- Jonathan Niles (TNC)
- Emmons, Sean C (USGS)
- Nunez, Karinna (VIMS)
- Clearwater, Denise (MDNR)
- Golimowski, Helen (Devereux Consulting)
- Schumm, Nancy (City of Gaithersburg)
- Brzezinski, Sarah (EPA)
- Danielson, Tess (DOEE)
- Brooks, Kelsey (UMD EFC)
- Small, Amanda (MD DNR)
- Waddell, Jeremy (Upper Susquehanna Coalition)
- Weglein, Sara (MD DNR)
- Goetz, Dan (MD DNR)
- Woods, Taylor E (USGS)
- O'Connell, Tammy (MD DNR)
- Biddle, Mark A. (DNREC)
- Duncan S. Simpson (Princeton Hydro)
- Taillon, Stefanie (GOV)
- Cloyd, Rese (DOEE)
- Boyle, Lindsey J (USGS)
- Earley, James (USFWS)
- Doumit, George (DNREC)
- Poskaitis, Amanda (Underwood & Associates)
- Zollweg-Horan, Emily C (DEC)
- Goerman, David (DNREC)
- Santoro, Alison (MD DNR)
- Kotula, Adrienne (CBC)
- Heidel, Scott (PADEP)
- Lewis, Benjamin (DWR)
- Reilly, Erin (CBNERR-VA)



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- Davis, Dave (VDEQ-Wetlands)
- Devereux, Olivia (Devereux Consulting)
- Schell, Joseph (DNREC)
- Landry, Brooke (MD DNR)
- Southerland, Mark (AKRF)
- Barnhart, Katheryn (EPA)
- Seufert, Sophia B (USFWS)
- Ombalski, Katie (Woods and Waters Consulting, LLC)
- Hunt, Gina (MD DNR)
- Staten, Nick (CRC)
- Young, Emily (ICPRB)
- Kelly, Ashley (DoD)
- Nabors, Adam (AMT Engineering)
- Sowers, Angie (USACE)
- Maloney, Kelly O (USGS)
- Scowen, Kaitlin (MD DNR)
- Baldine, Marisa (Alliance for the Chesapeake Bay)
- Maloney, Lori (EBTJV, Canaan Valley Institute)
- Rogers, Karli M (USGS)
- Lesley P. Baggett (AKRF)
- Reggi, Brock (DEQ)
- Mason, Pam (VIMS)
- Robinson, Matthew (EPA)
- Phinney, Jonathan T (USFWS)
- Yearick, Melissa (Upper Susquehanna Coalition)
- Koser, Sarah (CBT)
- Li, Ray (USFWS)
- McDonald, Everal A (PA Dept Of Environmental Protection)
- Berlin, Alicia (USGS)
- Barranco, Gregory (EPA)
- Shimkin, Martha (EPA)
- Sonnenburg, Erin (CRC)
- Kirk Havens (VIMS)
- Jeryl Phillips (VIMS)

## 09:00 Welcome, Introductions, Updates – HGIT Co-chairs Gina Hunt (MDNR) & Bill Jenkins (EPA) – 30 min

**Speaker:** Gina Hunt , MD DNR & Kirk Havens, VIMS

- **Gina Hunt**, Co-Chair of the Habitat GIT, opened the meeting, welcoming both in-person and virtual attendees. She thanked VIMS for hosting the meeting and acknowledged **Bill Jenkins**, the other Co-Chair of the team.
- Opening remarks from Kirk Havens, Director of Center for Coastal Resources Management
  - Gina introduced **Kirk Havens**, the host and Director of the Center for Coastal Resources Management at VIMS, highlighting his extensive involvement with the Chesapeake Bay Program (CBP) over the past 20 years and his role as a member of the Scientific and Technical Advisory Committee (STAC).
  - **Kirk Havens:**



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- Welcomed attendees and provided an overview of VIMS' recent expansion, which now includes an undergraduate program in Coastal and Marine Sciences at William & Mary, alongside its established graduate programs.
- Kirk highlighted that VIMS focuses on translating scientific research into actionable policy and decision-making, aligning with Habitat GIT's efforts in restoring ecosystems.

- Updates on FY2024 GIT Funding

**Speaker:** Bill Jenkins, EPA

- **Bill Jenkins** provided a comprehensive update on the Habitat GIT's funding efforts for Fiscal Year 2024:
  - 5 proposals were submitted by the team, of which 3 were funded:
    1. SAV: Chesapeake Bay Shallow Water Habitat Sentinel Site Program Development
    2. Wetland: Increasing Effectiveness of Landowner Engagement to Accelerate Wetland Restoration Across the Chesapeake Bay Watershed
    3. Stream Health: Phase 3B – Data Review and Development of Multi-Metric Stream Health Indicators – Physicochemical Metric Analysis
- **Bid Deadlines:** The bids opened on **September 20, 2024**, and will close on **October 21, 2024**. Participants interested in applying for funding through the Chesapeake Bay Trust were directed to visit [the website](#) for more information.
- **Discussion:**
  - **Pam Mason** raised concerns about potential bidders for these projects, given past experiences where few applicants were available.
  - **Chris Guy** mentioned that as a technical lead he put out a few names and the CBT already has a long list of possible bidders.

- UMD Environmental Finance Center Update

**Presenter:** Gina Hunt, MD DNR

- **Gina Hunt** introduced the role of the Environmental Finance Center (EFC) within the Chesapeake Bay Program. The EFC focuses on securing and mobilizing financial resources to support environmental projects, particularly for rural and underserved communities.



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- A key development is the formation of a steering subcommittee within the EFC, which will coordinate efforts to provide technical assistance and increase capacity for these communities to assess environmental and energy justice concerns.
  - **Chris Guy** mentioned that he is serving on this steering subcommittee, which allows Habitat GIT to stay informed and influence the center's work. The EFC is eager to provide technical assistance on grant applications, which can be especially helpful for local governments seeking financing for community-based environmental projects.
  - **Chris** also mentioned that although the Center is out of the University of Maryland, it is watershed wide, not confined to just Maryland.
  - **Next Steps:** The subcommittee is still in its formative stages, and more concrete plans are expected once meetings are underway. In the meantime, the Habitat GIT was encouraged to identify any underserved communities that may benefit from this new resource.
- New Habitat GIT Staffer Introduction

**Presenter:** Bill Jenkins, EPA

- **Bill Jenkins** introduced **Nick Staten**, the newly hired staffer for the Habitat GIT. Bill expressed his excitement about having Nick on board.
  - **Nick Staten's Background:**
    - Nick graduated from the University of Maryland with a degree in bioengineering and has experience in consulting and cancer biology research. After transitioning to work in the scuba diving industry, he rekindled his passion for nature and conservation, particularly in the Chesapeake Bay area.
    - He applied for the staffer position after learning about the Habitat GIT and its mission and expressed gratitude to the team for the opportunity.
- Habitat Tracker

**Presenters:** Olivia Devereux, Devereux Consulting

- **Olivia Devereux** provided a detailed overview of the current status of the Habitat Tracker, a critical tool used by the Habitat GIT to track and report on various habitat restoration projects. Over the past year, the tracker has successfully gathered data for projects related to wetlands and black duck, and it is now ready to incorporate brook trout data from Eastern Brook Trout Joint Venture (EBTJV).



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- **Accomplishments:**
  - **Wetlands and Black Ducks Data:** A year's worth of data collection has been completed, and data for wetlands and black ducks is now available on the Chesapeake Progress website.
  - **Brook Trout Integration:** Work is underway to integrate brook trout data into the tracker, and the necessary infrastructure is already in place.
- **Future Plans:**
  - A data call will be issued in the next month, inviting partners and stakeholders to submit new or updated data for wetlands, brook trout, and black duck. This will help build a more comprehensive data set for the Chesapeake Bay Program's monitoring efforts.
  - Olivia emphasized the importance of timely data submission, even if submissions are incomplete. The Habitat Tracker team will format and clean the data to ensure it can be used effectively in decision-making processes.
- **Wetlands White Paper:**
  - **Chris Guy** shared that a white paper has been in development for over six months. This paper synthesizes definitions from all partners (including federal, state, and NGOs) to create a common set of terms for wetland restoration efforts. The goal is to ensure consistency across all jurisdictions and facilitate easier reporting for stakeholders.
  - The white paper will be distributed alongside the upcoming data call to aid contributors in categorizing their projects appropriately.
- **Chris Guy** addressed the challenges and opportunities related to the Bay Program's 2-year milestone tracking:
  - Many Habitat GIT workgroups have struggled to meet their 2-year milestone reporting requirements.
  - **Milestones:** Each workgroup is required to report progress on their specific outcomes every two years as part of the Chesapeake Bay Program's Chesapeake Progress monitoring system. For the Habitat GIT, there has been inconsistency in milestone updates.
- **Strategic Review System (SRS):** Gina emphasized the importance of aligning milestone reporting with the SRS, which will allow workgroups to better track progress and inform decision-making for the Beyond 2025 framework.
- **Looking Beyond 2025:**



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- As the 2025 deadline for many Bay Program goals approaches, there is a growing focus on what comes next. The team discussed how accountability for post-2025 goals might look, particularly regarding how outcomes are reported.
- Gina suggested that workgroups begin thinking about how their milestone reporting and overall project tracking might evolve in the Beyond 2025 period. There is the potential for stronger accountability mechanisms in the future, but many details are still being worked out across the Bay Program.
- **Olivia Devereux** shared that for data reporting to the habitat tracker, she is seeking data from 2014 and beyond.
- **Kevin Du Bois** asked if the 2 year milestone reporting was based on state specific milestones or bay wide.
- **Chris Guy** specified the goals are bay wide. We can't help that data submission ends up being state specific since it is the states reporting, but the reporting on Chesapeake Progress is cumulative and encompassing the whole watershed.
- **Kevin Du Bois** follows up by saying he asked because he recognizes that not every state has the same potential for restoration ability, and thought that having a state specific goal could be a great approach.
- **Pam Mason** emphasized that we do not want to lose the Habitat Tracker because it was an invaluable tool that took a lot of thought to be able to inform the Habitat GIT's work.
- **Kristin Saunders:** This whole conversation around "milestones" reminds me of the opportunity for habitat and other goal teams to connect with the water quality goal team over the next several months as they dig into what "milestones" reporting will look like in the future. There may be good insight from the non-water quality teams to build into or connect with the next iteration of milestones in some way that is representative of the goals and outcomes in the agreement.
- **Chris Guy** emphasized that this should be mentioned in the Spring Meeting.

## 09:30 HGIT Strategic Framework (aka Management Strategy) – 15 min

*Presentation on the updated HGIT Strategic Framework will be followed by a survey to solicit feedback on the updated framework. The survey link will be distributed during the meeting, and survey responses will be due by COB, 10/2. The current Strategic Framework can be found on the Habitat GIT webpage.*

*Survey questions include:*

1. *Does the Habitat GIT Strategic Framework support your workgroup activities?*



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2. *What priorities should be added to the Habitat GIT Strategic Framework?*
3. *What more can the Habitat GIT do to support your workgroup(s)? General feedback on the Fall 2024 meeting?*
4. *Any other comments/questions?*
5. *If you would like HGIT leadership to followup, please add your email.*

**Slides: See "Related Files" at [ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 1 of 2](#)**

**Presenter:** Chris Guy, USFWS

- **Chris** provided an update on the Habitat GIT's Strategic Framework, which has undergone iterative revisions over the past year. The framework is designed to guide the workgroups' activities in a way that aligns with the broader Chesapeake Bay Program goals while allowing flexibility to adapt to changing priorities.
- **Key Changes:**
  1. **Title Change:** The framework was previously referred to as the "Strategic Plan" but it has been renamed the "Strategic Framework" to reflect its flexible, evolving nature. This change was made based on feedback from the workgroups, as they felt the document served more as a guiding framework than a rigid plan.
- **Near-Term Priorities:**
  1. **Phase 1 of Beyond 2025:** The framework includes guidance on how to implement Phase 1 of the Beyond 2025 initiative, ensuring that the Habitat GIT's priorities align with those of the overall Chesapeake Bay Program.
  2. **Wetlands Action Plan:** The team is working to fully implement the wetlands action plan, which includes a focus on expanding restoration efforts and increasing stakeholder engagement.
  3. **Brook Trout GIT-Funded Project:** Incorporating the results and recommendations from the recently completed EBTJV brook trout project, particularly around cross-workgroup collaboration and data tracking improvements.
  4. **Geographic Targeting:** The framework emphasizes the importance of focusing restoration efforts on geographic areas that have been under-served or disproportionately impacted by environmental degradation.
  5. **Social Science Integration:** There is a growing recognition of the importance of integrating social science into the framework, particularly in understanding how human behaviors and community engagement impact restoration success.





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6. **Robust Monitoring Networks:** Strengthening the monitoring systems used to track progress across all workgroups remains a key priority. This includes the Habitat Tracker and expanding its use for other habitat types beyond wetlands, black ducks, and brook trout.
  7. **Improve Outcome Tracking and reporting** for the wetland, black duck, stream health, and brook trout workgroups.
  8. **Supporting current and future workgroup activities around emerging science.**
- **Long-Term Priorities (6 months and beyond) :**
    1. **Ecosystem Services and Social Science:** Supporting a broader understanding of ecosystem services (such as carbon sequestration, water quality, and habitat provisioning) and incorporating social science principles to better engage communities and stakeholders.
    2. **Urban Habitat Restoration:** Urban areas have been historically underserved in habitat restoration efforts. The framework stresses the need for more work to be done in densely populated areas where environmental degradation is often most severe.
    3. **Cross-Workgroup Collaboration:** The framework encourages continued collaboration between different GITs and workgroups.
    4. Continue to have conversations about **wetland and shallow water habitat opportunities** that were defined in the CESR report.
    5. **Support the 3 new GIT funded projects and the Brook Trout STAC Workshop.**
    6. Develop social science strategy around **recalcitrant dam owners.**
    7. **Data Accessibility:** Ensuring that the data collected through the Habitat Tracker and other systems remains accessible and usable by all stakeholders is essential for future planning and decision-making.

**Kevin Du Bois:** The Executive Council is working to establish an Agricultural Advisory Committee and was wondering if it should be included in the Long Term Priorities to create a relationship with this group since the strategic framework highlights the need to restore wetlands in agricultural landscapes. There are a number of different avenues, example being to pay farmers to grow wetlands as crops.

09:45 Workgroup Updates – Workgroup Chairs or Co-Chairs – 1hr 45min



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\*Workgroups will have 10 minutes each to present updates/highlights and 5 minutes for questions.

- BROOK TROUT

*Slides: See “Related Files” at [ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 1 of 2](https://ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 1 of 2)*

**Presenter:** Dan Goetz, MD DNR

- **Dan**, representing the Brook Trout Work Group, provided an in-depth update on the group’s progress and current projects. The workgroup recently completed a significant project that assessed brook trout habitat and conservation efforts across the Chesapeake Bay watershed:
- **2022 GIT-Funded Project: FACILITATING BROOK TROUT OUTCOME ATTAINABILITY THROUGH COORDINATION WITH CBP JURISDICTIONS AND PARTNERS**
  - This project involved collaboration with multiple stakeholders to assess brook trout conservation strategies and identify opportunities for cross-workgroup collaboration. The focus was on ensuring the longevity of brook trout populations in stronghold areas and improving overall conservation planning.
- **Key Outcomes:**
  - **Data Collection and Stakeholder Engagement:**
    - Over 5,419 implementation projects were identified across various jurisdictions, including habitat restoration efforts related to acid mine drainage (AMD), aquatic organism passage (AOP) improvements, brook trout reintroduction efforts, dirt and gravel road improvements, and riparian habitat restoration.
    - The workgroup identified over 100 stakeholders, including state and federal agencies, NGOs, and local government partners, to collect data and enhance cooperation on brook trout habitat restoration.
  - **Habitat Gains:**
    - Initial analyses indicated a modest but positive **0.5% net gain in brook trout habitat** across the watershed. This was a significant finding, as many experts had feared greater habitat losses. The data suggested that while brook trout populations remain vulnerable, targeted restoration efforts are helping to mitigate some of the habitat loss.
  - **Challenges with Data Quality:**



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- Dan explained that there were some initial reporting errors, particularly with GIS shape file overlaps and discrepancies between different data sources. After resolving these issues, the team was able to confirm the overall net gain, though some originally reported habitat gains had to be adjusted.
- **Next Steps:**
  - STAC Workshop: The workgroup is developing plans for a series of Stakeholder Workshops in Pennsylvania and Maryland, focusing on the conservation of brook trout stronghold watersheds. These workshops will bring together county-level governments, state agencies, federal partners, and NGOs to develop comprehensive restoration and conservation plans.
  - **Workshop Details:**
    - In Pennsylvania, the focus will be on counties like **Potter, Clearfield, and Cameron**, where brook trout strongholds exist. In Maryland, attention will be on **Garrett, Baltimore, and Carroll counties**.
- **Recommendations from the GIT-Funded Project:**
  - The project provided several recommendations for improving brook trout habitat tracking and restoration:
    - The Brook Trout Workgroup should submit an annual data request to the Habitat Tracker to keep records up-to-date.
    - Collaboration with grant administrators (such as NRCS) is essential to ensure that data on brook trout restoration projects is included in reporting systems.
    - The workgroup should avoid mandates and instead work collaboratively with agencies and stakeholders to promote voluntary participation in data tracking.
    - Continue engaging higher-level agencies and funders who already compile grant progress reports to gather necessary data for the Habitat Tracker.
- **Future Targets:**
  - The workgroup will focus on restoring streams impacted by acid mine drainage, improving culverts and dam removals for better fish passage, and increasing forest cover in brook trout watersheds to ensure long-term resiliency.
- **WETLAND**



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Slides: See “Related Files” at [ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 1 of 2](#)

Presenter: Tess Danielson, DOEE

- **Workgroup Structure and Operations:**

- **New Team Structure:**

- Separate Tidal and Non-Tidal Teams, meeting every other month.
- Joint Meetings every six months with participation from the Black Duck Action Team. Most recent joint meeting being October 2024.

- **Biggest Wetland Challenges**

- Lack of Consistency
- Capacity
- Outreach
- Tracking
- Funding

- **Key Projects and Updates:**

- **Wetland Mowing Policy Report:**

- **Title:** *The Intersection of Tidal Emergent (E2em) Wetland Mowing with Wetland Protection Laws, Regulations and Policies in Virginia and Maryland.*
- **Objective:** Assess the extent of wetland mowing in Maryland and Virginia to identify vulnerabilities and policy gaps.
- **Status:** Report is in the final stages of review. Recommendations will guide policy updates to enhance wetland protections.

- **New GIT-Funded Project:**

- **Title:** *Increasing Effectiveness of Landowner Engagement to Accelerate Wetland Restoration Across the Chesapeake Bay Watershed.*
- **Focus:**
  - Develop communication strategies to encourage private landowners to engage in wetland restoration.
  - Improve community outreach to address challenges related to voluntary participation in restoration projects.
- **Next Steps:** Project steering committee will review proposals by November 2024.



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- **Coordination and Partnerships:**
  - **Climate Work Group:**
    - Collaborative development of a coastal wetland impact indicator to assess how sea-level rise impacts tidal wetlands and support adaptive management.
  - **Chesapeake Bay Trust** - Tidal Wetlands Strategic plan.
  - **STAC** - Final report: *Evaluating an Improved Systems Approach to Wetland Crediting.*
  - **University of Michigan SEAS Program Partnership:**
    - Students are developing a non-tidal wetland communication strategy with deliverables expected around May 2025.
    - Focus: Engage stakeholders in Maryland, Virginia, and Delaware to promote restoration in non-tidal areas.
  - **Franklin and Marshall College Summer Intern** - Wetland Definitions Synthesis White Paper
  - Future Priorities:
    - Align wetland restoration data with the upcoming SRS (Strategy Review System) reporting cycle.
- BLACK DUCK

**Written Submission: See Appendix I**

**Presenter:** Ben Lewis, VA DWR

- Recent Restoration Projects:
  - **Wellington Wildlife Management Area (MD):** Restored 40 acres of habitat.
  - **Fairmount WMA (Somerset County, MD):** Improved water control structures for 300 acres of managed wetlands.
  - Completed enhancement project in Virginia where Ducks Unlimited worked with VA Department of Wildlife Resources to restore hydrology and enhance management of approximately 85 acres of wetlands.
  - **Doe Creek WMA (VA):** Enhanced 147 acres of wetlands, funded by Chesapeake WILD and the Virginia Migratory Waterfowl Stamp Grant.
- New NRCS and Ducks Unlimited Partnership:
  - **Working Lands for Wildlife Black Duck Initiative:**



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- Aims to restore wetlands on private lands through new technical assistance and capacity-building.
- A new biologist has been hired to cover the Eastern Shore and Western Bayshore, accelerating restoration efforts.
- Challenges:
  - **Need for Improved Tracking:**
    - Develop a guidance document to help identify projects that contribute to black duck habitat, even when they are not explicitly wildlife-focused.
- Preparing for Upcoming SRS cycle

## **Discussion:**

**Chris Guy:** There was a thought that maybe we need some training to help people recognize that they have a black duck project for Habitat Tracker purposes. Have you thought any more on that and would you talk a little on that?

**Ben:** I appreciate you bringing that back to my attention. I have not thought more to it, but definitely it is something we need to address. In future Action Team meetings I will inquire the group about ways, guidelines, bullet points, etc. about how they can identify their project as relevant to Black Duck Habitat.

- Break – 15 min
- STREAM HEALTH

**Slides:** See “*Related Files*” at [ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 1 of 2](#)

**Presenter:** Sara Weglein, MD DNR

- Strategic Review System:
  - Has taken a majority of the workgroup’s time the past few months.
  - Incorporated the Chessie BIBI First Interval (2012-2017) Dataset and Analysis
  - Focused on continuing work to identify additional non-biological metrics to provide more immediate feedback regarding management actions and complement the Chessie BIBI.



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- Updated Management Strategy and developed two year Work Plan to encourage greater consideration for ecological uplift, resource tradeoffs, and the maintenance of high quality resources.
- Ongoing Projects:
  - **2024 GIT-Funded Project: Phase 3B – Development of Physicochemical Indicators:**
    - **Objective:** Create non-biological metrics to complement Chessie BIBI’s biological assessments, which are updated every five years.
    - **Metrics:** pH, dissolved oxygen, conductivity, and total dissolved solid.
    - **Proposal Deadline:** October 21, 2024.
  - **Climate Resiliency Literature Review:**
    - **2022 GIT-Funded Project**
    - **Partner:** Stroud Water Research Center.
    - **Goal:** Assess the long-term resilience of stream restoration techniques under future climate scenarios.
    - **Preliminary Findings:** Expected by the end of 2024.
- Coordination with Other Groups:
  - **Joint Meeting:** Planned with Climate Resilience and Healthy Watersheds Workgroups
    - Stream temperature trends and land-use impacts as a possible topic.
  - Next steps:
    - Development of Chessie BIBI Second Interval (2018-2023) Dataset and Analysis.
      - Datacall will be issued in late 2024.
- FISH PASSAGE

**Presenter:** Jim Thomason, MD DNR

- Did not get GIT-Funded Project for Social Science
  - Will look for other funding avenues for this increasingly necessary work.
- Overview and Recent Activities
  - The Fish Passage Work Group has been actively working on several key projects over the past six months, despite challenges related to funding, stakeholder engagement, and project coordination.
  - The primary focus has been on:
    - Dam removals



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- Fish ladders
- Culvert replacement projects to improve aquatic organism passage (AOP)
- Project Updates and Achievements
  - **Daniels Dam Feasibility Study – Patapsco River, Maryland**
    - **Funding:**
      - Received \$1.8 million from NOAA, awarded to American Rivers for feasibility analysis.
    - **Scope:**
      - Last remaining dam on the main stem of the Patapsco River.
      - Expected to open 248 miles of river once completed.
    - **Timeline:**
      - Project still in early stages; expected to take 3–5 years to complete.
      - First coordination meeting held with American Rivers and DNR leadership to kick off planning.
  - **Cypress Branch Dam Removal – Fall 2024**
    - **Status:**
      - Dam has already been breached and counted toward fish passage goals, but full fish passage has not yet been achieved.
    - **Additional Work:**
      - Stream restoration activities are planned as part of the removal process to ensure target fish species can navigate the area successfully.
  - **Potomac River Dam Project – Cumberland, Maryland**
    - **Funding:**
      - Secured \$10 million out of an estimated \$25 million needed.
    - **Scope:**
      - This large-scale project will remove a dam in downtown Cumberland, contributing to local redevelopment efforts (similar to the Canal Place project).
      - The project has significant DEIJ (Diversity, Equity, Inclusion, and Justice) components and benefits for resident fish and American eel populations.
    - **Timeline:**





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- Likely 5+ years to complete due to complex urban redevelopment elements.
    - Once finished, it will open 311 miles of upstream habitat.
  - **Eden Mill Dam Fish Ladder – Deer Creek, Maryland**
    - **Installation:**
      - A new fish ladder will be installed in October 2024 to become operational next year.
    - **Species Impacted:**
      - The ladder will open 46 miles of river for American eels and is expected to become one of the most productive eel ladders in Maryland, second only to the Conowingo Dam.
  - **Ashley Mill Dam – Virginia**
    - **Scope:**
      - Opening 143 miles of habitat for native fish populations, including American eel.
    - **Timeline:**
      - Construction has started and is expected to be completed by winter 2024–2025.
- **Challenges and Opportunities**
  - **Culvert Replacement and Funding Coordination Issues**
    - **Problem:**
      - Many culverts are identified too late in the design phase (often at 60% plans), leaving little time to redesign them to be fish-friendly.
      - Tight budgets during maintenance cycles mean agencies often skip AOP designs unless additional incentives or funding are available.
    - **Solution Explored:**
      - Develop mitigation credits to incentivize agencies to go beyond standard maintenance and design AOP-compliant culverts.
      - Engage with transportation departments earlier in the planning process to ensure fish-friendly designs are integrated from the start.
  - **Leveraging Federal Funding through BIL-AOP**
    - **BIL-AOP Funding (Bipartisan Infrastructure Law – Aquatic Organism Passage):**



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- Identified as a key funding source for culvert upgrades and replacements.
- **Challenges:**
  - Many local and state governments struggle to meet the required 20% funding match to qualify for BIL grants.
- **State Perspectives:**
  - **Maryland:** Struggles to meet federal match.
  - **Virginia:** Successfully secured one BIL-AOP grant, but overall participation from Mid-Atlantic states has been low.
- Use of Prioritization Tools
  - **The Nature Conservancy (TNC) Prioritization Tool:**
    - The work group continues to rely on this tool to identify priority fish passage projects.
    - **DEIJ Data Integration:**
      - The tool helps identify comparable projects where we can prioritize the one including DEIJ components.
- Social Science and Stakeholder Engagement
  - **Social Science Research Proposal:**
    - The group submitted a proposal to fund social science research but did not receive GIT-funded support.
    - **Goal:**
      - The research aims to explore landowner attitudes toward dam removal and develop strategies to persuade private landowners to participate in fish passage efforts.
    - **Future Funding:**
      - The group is actively seeking alternative funding sources for this research, as it is crucial to unlocking additional fish passage opportunities.
- Future Planning and 2025 Goals
  - **Chesapeake Progress Indicators:**
    - Discussions are underway about setting new fish passage indicators for Chesapeake Progress as part of the 2025 framework.
    - **Key Focus Areas Moving Forward:**
      - **Culvert Replacement Opportunities:**



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- Culverts offer the greatest potential because ownership is known, and redesign efforts can align with routine maintenance schedules.
  - **Improved Coordination with DOTs and Local Agencies:**
    - The work group aims to engage transportation agencies earlier in the planning process to ensure AOP-compliant designs are feasible.
- **Key Takeaways and Next Steps**
  - **Priority Actions:**
    - Continue working with transportation agencies to integrate fish-friendly culvert designs into future maintenance schedules.
    - Secure funding for the social science research project to improve landowner engagement and address barriers to dam removal.
    - Maintain progress on large-scale dam removal projects.
    - Prepare for discussions on the new fish passage indicators for Chesapeake Progress.
  - **Discussion and Questions**
    - **Gina Hunt:** Why haven't agencies applied for more BIL-AOP funding?  
**Response:**
      - Many agencies struggle with the 20% non-federal match requirement, and there is a lack of awareness or coordination in identifying eligible projects early enough to secure funding.
    - **Comment:**
      - There may be opportunities to leverage existing culvert budgets to meet the required match for BIL-AOP funding.
- **Sub-Aquatic Vegetation**

*Slides: See "Related Files" at [ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 1 of 2](#)*

**Presenter:** Brooke Landry, MD DNR

- **SAV Restoration and Progress**
  - **Target and Progress:**
    - Goal: Achieve 185,000 acres of SAV Bay-wide.



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- 2023 Data: Virginia mapped 79,234 acres, estimating a total of 83,000 acres, which is 61% of the 2025 target.
- **Challenges:**
  - Losses in the oligohaline regions of the Upper Bay and specific tributaries like the Gunpowder River due to sedimentation from large-scale development projects and poor water quality.
- **Sentinel Site Program Development**
  - Success in obtaining GIT funding for the shallow water habitat sentinel site program.
  - Program will focus on a broad-scale monitoring system for shallow habitats.
  - Literature review, scoping workshops, and development of full protocols for the sentinel site program planned.
- **Project Progress and Updates**
  - **Shallow Water Habitat Sentinel Site Program:**
    - The RFP (Request for Proposal) for the program is out, with contractors expected to begin by January 2025.
  - **2022 Git Funded Project: *Protecting Chesapeake Bay SAV Given Changing Hydrologic Conditions: Priority SAV Area Identification and Solutions Development***
    - Ongoing project to identify high-priority SAV areas and strategies to protect them from environmental changes.
    - Final project presentation scheduled for November 13, 2024.
    - No new updates on 2022 GIT-Funded Project: *Advancing Social Media Marketing Through Two Pilot Programs*
- **Community and Volunteer Involvement**
  - Expansion of the Chesapeake Bay SAV Watcher Program in Virginia through The Nature Conservancy and new volunteer training sessions.
  - Encouraging public participation using smartphone apps to gather data on SAV health.
  - New app: ArcGIS Survey123
  - [www.chesapeakebaysavwatchers.com](http://www.chesapeakebaysavwatchers.com)
- **SAV Data Dashboard and Legislative Updates**
  - Updating of SAV data dashboards and related fact sheets.
    - [gis.chesapeakebay.net/wdd](http://gis.chesapeakebay.net/wdd)
  - Legislative update from Maryland: A successful bill reduced the allowed SAV removal from 60 feet to 20 feet for navigational purposes.



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- **Living Shorelines and SAV Protection**
  - Discussion on balancing living shorelines, SAV restoration, and aquatic habitat management.
  - Planning of a quarterly meeting on October 30, 2024, to discuss living shoreline science and SAV interactions.
- **Future Funding and Collaboration**
  - Plans to continue collaborating with experts and seek more funding for the implementation and long-term monitoring of SAV and shallow habitat programs.
- **Additional Announcements**
  - Upcoming East Coast SAV Collaborative meeting on October 30.
  - The next SAV Workgroup meeting is scheduled for November 13, 2024.

**11:30 Break – 15 min**

**11:45 Beyond 2025 Update – Martha Shimkin (EPA) – 30min**

**Slides: See “Related Files” at [ChesapeakeBay.Net](https://ChesapeakeBay.Net): *Habitat GIT Fall 2024 Meeting: Day 1 of 2***

**Presenter:** Martha Shimkin (Chesapeake Bay Program Office Director)

- **Martha Shimkin**, Deputy Director of the Chesapeake Bay Program Office, gave an update on the progress of the Beyond 2025 initiative. This initiative is focused on creating a pathway for the Chesapeake Bay Program to continue its work post 2025.
- **Key immediate Next Steps:**
  - Management Board Meeting on October 10, 2024:
    - Review and discuss the Draft PSC charge.
    - Collect feedback to refine the strategic framework before implementation.
  - October 25, 2024: PSC meeting
    - Receipt of final Steering Committee Report, decision on Executive Council action in response.
  - December 10, 2024: Executive Council meeting
    - Steering Committee report presented and ideally accepted to be able to confirm the direction of the Partnership beyond 2025.
  - December 11, 2024: Official start of Phase Two of the Beyond 2025 strategy.
- **Challenges:**



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- Martha acknowledged that the timeline is tight and emphasized that once the new framework is approved, work will need to begin immediately. There will be little time for further planning.
- **Recognition:**
  - **Bill Jenkins** and **Gina Hunt** were praised for their 18-month effort in representing the Habitat GIT during the Beyond 2025 discussions. Martha expressed gratitude for their tireless participation in steering committee meetings, reading and responding to drafts, and contributing to decision-making processes. Bill and Gina were commended for their leadership and representation of the GIT during a period of intense planning.
- **Participant Questions:**
  - **Kevin Du Bois** raised a question about whether the PSC briefing scheduled for later that day would be the same presentation as what was just provided. Martha Shimkin explained that while the content would be similar, the briefing for the Principals' Staff Committee (PSC) would be tailored slightly for that audience and would not include as much background information.
- **December 11 Start Date:** Martha reiterated that Bill and Gina would once again represent the Habitat GIT during phase two of the Beyond 2025 discussions, and she thanked them for their continued commitment.

## 12:15 Student Presentations – Evan Hill & Ashley Rose (VIMS/CCRM) – 30min

**Presenters:** Evan Hill & Ashley Rose, VIMS Graduate Students

- As the meeting was held at VIMS, it included a special session showcasing the research of two VIMS graduate students:
  - **Evan** presented on his dissertation research, which focuses on modeling the interactions between key ecosystem engineers in the Chesapeake Bay, including oysters, marsh vegetation, and submerged aquatic vegetation (SAV). His work seeks to better understand how these species interact to promote shoreline resilience and carbon sequestration. Evan's research involves high-resolution hydrodynamic modeling using the SCHISM model, which will help predict how climate change and management strategies affect habitat evolution over time.
  - **Ashley** shared her research on ribbed mussels and their role in salt marsh restoration. She explained that ribbed mussels form dense colonies along marsh edges, which stabilize sediment and improve water quality through their filter-feeding. Ashley's work explores how incorporating ribbed mussels into restoration designs can enhance marsh



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accretion, shoreline stability, and biodiversity. Her presentation highlighted the symbiotic relationship between ribbed mussels and marsh vegetation, as well as the potential benefits of integrating mussels into future restoration efforts to improve resilience to sea level rise and erosion.

- **Evan Hills's Presentation:**

- **Topic:** Individual and Combined Effects of Dominant Ecosystem Engineers Nearshore: A Multi-Habitat Approach
- **Research Methodology:**
  - Evan is using the SCHISM model (Semi-implicit Cross-scale Hydroscience Integrated System Model), an advanced hydrodynamic model that allows detailed simulation of circulation across various scales, from open oceans to small creeks.
  - He is enhancing the model to evaluate marsh evolution by incorporating factors such as wave attenuation and sediment trapping. This allows him to predict how marshes will respond to sea-level rise and management practices such as realignment (breaching dikes to allow marsh migration).
  - Evan is working on validating the model in high-energy environments, particularly in The Wash, UK, which has significantly higher wave energy and tides compared to the Chesapeake Bay. This will help in understanding how marshes in different environments react to climate stressors.
  - **Next Steps:** He will also create a new module to incorporate oyster reef structures and SAV migration, allowing the model to evaluate how these habitats interact under different climate scenarios.
- **Key Questions this work will allow us to ask:**
  - How do marshes and SAV interact over time under different climate and management scenarios?
  - How do oyster reefs and shoreline structures contribute to shoreline resilience?
- **Discussion and Questions:**
  - **Kevin Du Bois** asked about Evan's plans to incorporate carbon sequestration estimates into the model. Evan replied that while the model currently focuses on physical processes (like sediment deposition and erosion), carbon sequestration could potentially be added in future iterations.
  - **Kevin Du Bois** also inquired about the consideration of ribbed mussels in marsh stabilization, noting their importance in marsh dynamics. Evan acknowledged the complexity of modeling small-scale organisms like mussels but agreed it could be an interesting future addition.



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- **Ashley Rose's Presentation:**

- **Topic:** Putting the "Living" in Living Shorelines: Incorporating Ribbed Mussels in Restoration Design
- **Research Focus:**
  - Ashley's research explores the symbiotic relationship between ribbed mussels and smooth cordgrass. Ribbed mussels help increase sediment retention and enhance the growth of marsh vegetation by depositing nutrients that benefit plant health.
  - Restoration Potential: The integration of ribbed mussels into marsh restoration projects could significantly improve the stability of marsh edges and prevent erosion, especially in areas with high wave energy. Mussels also improve water quality through filter feeding, further contributing to ecosystem health.
  - Field Studies: Ashley has been conducting fieldwork to observe how dense mussel beds can act as natural breakwaters, reducing wave energy and protecting marshes from erosion. She is particularly interested in how mussels can be used in conjunction with other restoration methods (like living shorelines) to increase the resilience of coastal habitats.
- **Key Questions Explored:**
  - How do ribbed mussels affect marsh accretion rates and the overall stability of marshes?
  - What is the relationship between ribbed mussel marsh adoption with cordgrass density?
  - What is the relationship between substrate composition and ribbed mussel seeding?
  - Why is it observed that ribbed mussel marsh adoption is less efficient in artificial living shorelines?
- **Discussion and Questions:**
  - **Chris Guy** shared that during his time on Poplar Island he found that in these artificial marshes you wouldn't see invertebrates for about 10 years. He suggested that it was due to the microphonic food sources that weren't developed in the soil yet to be able to sustain a population of invertebrates. 5-7 years after they did develop in the soil did you see the density you would observe in a natural marsh.





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**12:45 Summary and Wrap Up – Gina Hunt & Bill Jenkins – 5 min**

**12:50 Day 1 Meeting adjourned**

**1:00 LUNCH – 30 min**

**1:30 Field Trip - 2hrs**

We will visit the Captain Sinclair living shoreline.

**8:00 Yorktown Ghost Tour – 1hr 30min**

<https://yorktownghostwalks.com/>

## **ACTIONS ITEMS FROM DAY 1**

- The Habitat GIT was encouraged to identify any underserved communities that may benefit from the UMD Environmental Finance Center. (Page 4-5)
- Incorporate EBTJV's Brook Trout data and any new wetlands and blackduck data into Devereux Consulting's Habitat Tracker after November data call. (Page 5-7)
- Distribute Wetlands Whitepaper alongside data call to aid contributors in categorizing their projects appropriately. (Page 6)
- Consider Kevin Du Bois's comment about whether outcome attainment should be state specific rather than watershed wide. (Page 7)
- For Spring Meeting: Consider Kristin Saunders's Comment:
  - This whole conversation around "milestones" reminds me of the opportunity for habitat and other goal teams to connect with the water quality goal team over the next several months as they dig into what "milestones" reporting will look like in the future. There may be good insight from the non-water quality teams to build into or connect with the next iteration of milestones in some way that is representative of the goals and outcomes in the agreement. (Page 7)
- Consider Kevin Du Bois's comment about creating a relationship with the upcoming Agricultural Advisory Committee. (Page 9)
- Address the need for training to help people recognize that their project helps Black Duck population. (Page 14)



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## DAY 2 October 3:

**09:00 PM - 12:30 PM ET, followed by lunch and a field trip for those attending in-person**

### ATTENDEES:

- Lawal, Dede (CRC)
- Ashley, Kelly (DoD)
- Deiter, Aaron R. (DNREC)
- Jenkins, Bill (EPA)
- Guy, Chris (USFWS)
- Hanson, Jeremy (CRC)
- Zuknick, Gregory (EA Engineering, Science, and Technology, Inc.)
- Reggi, Brock (DEQ)
- Bollt, Keith (EPA)
- Luecke, Julie (CBF)
- Berlin, Alicia (USGS)
- Golimowski, Helen (Devereux Consulting)
- Brzezinski, Sarah (EPA)
- Earley, James (USFWS)
- Brownson, Katherine (USFS)
- Clearwater, Denise (MD DNR)
- McDonald, Everal A (PADEP)
- Golden, Becky (NOAA)
- Li, Ray (USFWS)
- Weglein, Sara (MD DNR)
- Niles, Jonathan (TNC)
- Blankenship, Karl (Bay Journal)
- Yearick, Melissa (Upper Susquehanna Coalition)
- Sullivan, Breck (USGS)
- Saunders, Kristin (University of Maryland Center for Environmental Science)
- Goetz, Dan (MD DNR)
- Sturgis, Brittany E. (DNREC)
- Simpson, Duncan S. (Princeton Hydro)
- Doumit, George (DNREC)
- Franzluebbers, Leah C (USFWS)
- Maloney, Lori (EBTJV, Canaan Valley Institute)
- Waddell, Jeremy (Upper Susquehanna Coalition)
- Small, Amanda (MD DNR)
- Woods, Taylor E (USGS)
- Tango, Peter (USGS)
- Danielson, Tess (DOEE)
- Austin, Douglas (EPA)
- Landry, Brooke (MD DNR)
- Du Bois, Kevin (DoD CBP)
- Emmons, Sean C (USGS)
- Wolter, Faren R (USFWS)
- Maloney, Kelly O (USGS)
- Kotula, Adrienne (CBC)
- Handen, Amy (EPA)
- Zollweg-Horan, Emily C (DEC)
- Sonnenburg, Erin (CRC)
- Poskaitis, Amanda (Underwood & Associates)
- Young, Emily (ICPRB)
- Barranco, Gregory (EPA)
- Koser, Sarah (CBT)
- Staten, Nick (CRC)
- Weaver, Lawless (DWR)
- Boyle, Lindsey J (USGS)
- Devereux, Olivia (Devereux Consulting)
- Sowers, Angie (USACE)
- Hunt, Gina (MD DNR)
- Mason, Pam (VIMS)
- Santoro, Alison (MD DNR)



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- Diehl, Megan (CBT)
- Felver, Rachel (Alliance for the Chesapeake Bay)
- Noe, Gregory (USGS)
- Buchanan, Claire (ICPRB)
- Cattell Noll, Laura (Alliance for the Chesapeake Bay)
- Baldine, Marisa (Alliance for the Chesapeake Bay)
- Nabors, Adam (AMT Engineering)
- Robinson, Matthew (EPA)
- Power, Lucinda (EPA)
- Scowen, Kaitlin (MD DNR)
- Barnhart, Katheryn (EPA)
- Seufert, Sophia B (USFWS)
- Dave Davis (DEQ-Wetlands)
- Clint Morgeson (VDWR)

## 09:00 Welcome & Summary of Day 1 – 5 min

**Presenters:** HGIT Co-chairs Gina Hunt , MD DNR & Bill Jenkins, EPA

- **Pam’s Retirement Announcement:** Pam, chair of the Wetlands Work Group, will retire after 30+ years of involvement. She has been with the workgroup since the early 1990s and led it for the past five to six years.

## 09:05 Ecosystem Services Presentation – Jeremy Hanson (CRC) – 40 min

**Slides:** See “*Related Files*” at [ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 2 of 2](https://ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 2 of 2)

**Presenter:** Jeremy Hanson, Chesapeake Research Consortium (Water Quality GIT Coordinator, Workshop Steering Committee Chair)

- **Workshop Overview:**
  - Purpose: Explore ecosystem services beyond water quality improvements (such as sediment and nutrient reduction) to encompass co-benefits like biodiversity, carbon sequestration, and habitat restoration.
  - **Workshop Format:**
    - Originally planned as a 2-day workshop, but an additional session was added to gather input from agricultural stakeholders.
    - Day 1: In-person session with hybrid option. Focused on case studies and listening sessions.
    - Day 2: Collaborative prioritization of actionable recommendations.
- **Goals of the Workshop:**
  - Broaden the scope to multiple ecosystem benefits.
  - Identify gaps in stakeholder representation, particularly from the agricultural sector.



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- Challenge existing assumptions within the Bay Program on how ecosystem services are valued and integrated.
- Develop recommendations for an actionable plan of how ecosystem services can be used to address multiple CBP outcomes.
- **Major Observations and Insights:**
  - Need for Clearer Communication of Co-Benefits:
    - Jeremy emphasized that water quality is not always the primary motivator for many stakeholders (e.g., farmers care more about pollinators, soil health, and local fish populations).
  - Barriers:
    - Many natural resource projects remain stalled due to lack of integrated funding streams, despite their potential for multiple benefits (e.g., carbon sequestration and flood mitigation).
    - Agricultural participants expressed challenges in accessing ecosystem services funding.
- **Six Recommendations from the Workshop:**
  - Develop a Tool:
    - A tool to quantify ecosystem services provided by different land uses and management actions (similar to Maryland’s “Greenprint” tool).
  - Increase Capacity:
    - Appoint a dedicated coordinator to manage ecosystem services efforts within the Bay Program, fostering cross-cutting initiatives.
  - Framework for BMP Impact Evaluation:
    - Establish a framework to assess ecosystem services generated by Best Management Practices (BMPs) (e.g., carbon sequestration through cover cropping).
  - Incorporate Ecosystem Services into Land-use Planning:
    - Encourage local partners to embed ecosystem services considerations in their comprehensive plans.
  - Leverage Funding Opportunities:
    - Integrate ecosystem services into public and private funding models (e.g., FEMA grants for flood mitigation).
  - Long-Term Priority in Bay Program:
    - Ensure that ecosystem services remain a core focus in the Bay Program’s Beyond 2025 framework.
- **Discussion Highlights:**
  - **Olivia Devereux:**



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- Olivia provided updates on the inclusion of carbon sequestration metrics within the Chesapeake Assessment Scenario Tool (CAST).
- Timeline: Full integration expected by December 2024.
- **Kevin Du Bois:**
  - Shared examples of using co-benefits (e.g., carbon sequestration) to unlock Department of Navy funding for natural resource projects.
  - Example: Fish passage projects have been partially framed as flood mitigation efforts to secure DoD funding.
- **Denise Clearwater:**
  - Raised concerns about oversimplifying the valuation of ecosystem services in tools, emphasizing the need to capture site-specific trade-offs (e.g., forest-to-wetland conversion).

**09:45 Social Science of Partnership Networks Part 2 – Faren Wolter (USFWS) – 60 min**

**Slides:** See “Related Files” at [ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 2 of 2](#)

**Accompanying Mentimeter:** See “Related Files” at [ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 2 of 2](#)

**Presenter:** Faren Wolter, USFWS

- **Objective:**
  - Continue the discussion from the spring meeting on how Habitat Goal Implementation Team (GIT) members can shift from informing and consulting to collaborating and integrating efforts across the Bay Program.
- **Spectrum of Collaboration:**
  - Framework Presented: Partnerships operate across a continuum:
    - Inform: One-way communication.
    - Consult: Limited two-way input.
    - Coordinate/Cooperate: Basic collaboration, shared goals, but separate decision-making.
    - Collaborate: Multi-way communication with shared decision-making.
    - Empower/Integrate: High trust, shared authority, and deep integration.
  - Current State: The Habitat GIT operates primarily in the coordinate/cooperate range.
  - Aspirational Goal: Shift toward collaboration and integration.



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- **Key Discussion Points:**

- Barriers to Collaboration:

- Limited capacity and the reliance on a small number of coordinators to connect workgroups.
- Information overload (too many emails from various groups without a structured communication platform).

- Potential Solutions:

- Dashboard System: Participants suggested creating a dashboard to track updates from other GITs and workgroups.

- Retreats and Fieldwork:

- Kevin emphasized the value of in-person activities to build trust and relationships.
- The group acknowledged that virtual meetings, while convenient, hinder personal connections.

- **Challenges of Integration:**

- Participants agreed that achieving full integration (empower/integrate stage) may not be realistic across all levels, but small pockets of integration can exist within focused workgroups.

- **Open Floor Discussions:**

- **Nick Staten (Habitat Staffer)** proposed using SharePoint or other collaborative platforms to streamline communications.

- Participants noted access limitations across agencies.

- **Gina Hunt** emphasized the need for multi-way communication and suggested leveraging STAC workshops as examples of effective collaboration.

- **Claire Buchanon** shared that previously, when the bay program was smaller, we were in the collaborate/empower/integrate section, but as the bay program grew we started moving in the wrong direction of the continuum.

- **Kevin Du Bois** Highlighted that deeper collaboration relies on personal relationships, not just professional structures.

- **Amy Handen** added that there will be an expert hired by the bay program to address some of these questions of implementation of moving from corporate to collaborate more effectively.

- **Chris Guy** asked if Participants would like to have a dedicated session to have a Part 3 of Faren's Presentation. Participants expressed interest in the idea.

10:45 Break – 15 min

11:00 Living Resources Data Manager Overview – 10 min



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## ***Accompanying Slides & Mentimeter: See Appendix II***

**Presenter:** Emily Young, ICPRB

- Explained her role as data management support and analysis services to the Chesapeake Bay Program and its partners.
- Responsible for collecting data, QA, updating and maintaining data, access and dissemination, and indicator calculations.
- Works closely with the CBP Data Center, and uses R and SQL programming languages.
- She requests information on Habitat GIT Relevant Databases that aren't:
  - Wetlands – Habitat Tracker
  - Black Duck – Habitat Tracker
  - Stream Health – Nontidal benthic invertebrates, CEDR
  - Brook Trout – EBTJV and Habitat Tracker
  - Fish Passage – TNC Fish Prioritization Tool
  - SAV - VIMS
- See accompanying materials for Mentimeter Responses during Emily's Presentation.
- Contact: [eyoung@chesapeakebay.net](mailto:eyoung@chesapeakebay.net)

## **11:10 Strategic Plan Development using CBT Tidal Wetlands Capacity Grant as a Model – 1hr 10 min**

**Slides:** See “Related Files” at [ChesapeakeBay.Net: Habitat GIT Fall 2024 Meeting: Day 2 of 2](#)

**Presenter:** Sarah Koser, CBT

- **Overview of the Chesapeake Bay Trust (CBT):**
  - Role: Non-profit grant-making organization focused on empowering communities to restore natural resources.
  - Mission: Convening collaboration, sharing information, and distributing resources effectively across the Chesapeake Bay Watershed.
  - Funding Sources:
    - State funding through Maryland's Bay Plate Program (now expanded to cover Chesapeake and Coastal Bays).
    - Federal funds from EPA and NOAA.
    - The organization often acts as a pass-through entity, managing funds from larger agencies like the EPA and redistributing them to local contractors for projects.
- **Key Focus: Tidal Wetlands Strategic Plan Development**
  - Background:



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- Sarah's team has been working on a Tidal Wetlands Capacity Building Grant funded by the EPA.
- The grant was designed to boost the capacity for tidal wetland restoration and create a strategic plan to address existing challenges.
- This grant supports restoration efforts by consolidating resources from the Infrastructure Investment and Jobs Act into actionable projects for tidal wetlands.
- **Purpose of the Presentation:**
  - To share the CBT's approach to strategic planning using tidal wetlands as a model.
  - Explore how this model could apply to other resources (e.g., fish passage or submerged aquatic vegetation projects).
  - Solicit feedback from participants to improve planning processes and make them more collaborative.
- **Strategic Plan Process and Methodology**
  - Framework Development:
    - The plan integrates input from various Bay Program workgroups, such as:
      - Coastal Resiliency Work Group
      - Fish Passage Work Group
      - Diversity Work Group
    - The strategic plan includes actionable goals and timelines for the restoration of tidal wetlands, focusing on hydrology, habitat connectivity, and climate resilience.
    - Compile Guidance Documents, Workshops, and other resources for the benefit of the chosen contractor prior to starting the contract.
    - Come up with a plan vision, goals, strategies, objectives, actions, and cross-cutting strategies. Then break into small groups to refine the individual strategies.
    - Objectives were time bound with immediate, near-term, and long-term objectives. Specific years informed by modeling groups involving predictions on marsh migration.
  - Collaboration and Context:
    - Emphasized alignment with the Bay Program's long-term goals beyond 2025.
    - Acknowledged the need for continuous feedback loops between stakeholders and funders to adapt to emerging challenges (e.g., sea level rise, tropicalization).
  - Framework example
    - Goal: Manage and Restore Large Scale Tidal Marshes
    - Strategy: Define a strategy to complete goal





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- Rationale: Clearly outline rationale for strategy to make sure it aligns with your overarching goal.
- Immediate Objective (1-yr target): What is something you can achieve quickly.
- Near-term Objective (by 2030): What is an objective you can get to in a few years
  - Action 1
    - Anticipated Outputs: What do you hope to achieve from this action?
    - Success Indicator: Defining an indicator allows for monitoring of effectiveness of the action.
    - Effective Example from other work: Identify an example of this action working in another context.
    - Responsible Party/Stakeholder: Identify who is responsible for or affected by the action.
  - Action 2
  - Action 3
- Long-Term Objective (by 2050)
- **Challenges and Lessons Learned**
  - Capacity Issues: Many of the participating stakeholders have limited capacity to engage in additional planning processes, making collaboration difficult. So it is important to create calendar holds early and be clear about team expectations.
  - Consensus building is important to build a very thoughtful plan.
  - Build a Strategic plan so you can update it and adaptively manage your work.
  - Consider Trade-Offs in Ecosystem Services: Ex. managing wetlands often requires balancing conflicting goals (e.g., habitat creation vs. forest conservation).
  - Don't waste time fighting over words, defining words will keep people on the same page and reduce the probability of a meeting going off track due to wording.
- **Next steps**
  - Draft strategic plan is to be reviewed by the Wetland Workgroup.
  - CBT will respond to the comments.
  - The Wetlands Workgroup will vote to accept the plan and present it to EPA CBP.
  - Finalize the plan to inform tidal wetland protection and restoration efforts.

**12:20 Summary of Strategic Framework Survey – Gina Hunt (MD DNR) & Bill Jenkins (EPA) – 10 min**

**12:30 Meeting Adjourned**



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**1:00 LUNCH – 30 min**

**1:30 Field Trip – 1hr 30min**

Pam Mason will lead a tour of the VIMS teaching marsh.

## **ACTIONS ITEMS FROM DAY 2**

- Consider Jeremy Hanson’s presentation of Ecosystem Services in which some recommendations may be outside of the GIT’s scope, but will be important to review. (Page 28)
  - Recommendations:
    - Develop a tool to quantify ecosystem services provided by different land uses and management actions (similar to Maryland’s “Greenprint” tool).
    - Appoint a dedicated coordinator to manage ecosystem services efforts within the Bay Program, fostering cross-cutting initiatives.
    - Establish a framework to assess ecosystem services generated by Best Management Practices (BMPs) (e.g., carbon sequestration through cover cropping).
    - Encourage local partners to embed ecosystem services considerations in their comprehensive plans.
    - Integrate ecosystem services into public and private funding models (e.g., FEMA grants for flood mitigation).
    - Ensure that ecosystem services remain a core focus in the Bay Program’s Beyond 2025 framework.
- Consider Faren Walter’s presentation’s discussion points about: (Page 29-30)
  - The value of in-person activities to build trust and relationships.
  - The need for increased collaboration facilitation.
- Coordinate a Part 3 of Faren Walter’s Social Science work with the Habitat GIT between the Fall 2024 and Spring 2025 meetings. (Page 30)
- Supply CBPO data manager, Emily Young (Contact: [eyoung@chesapeakebay.net](mailto:eyoung@chesapeakebay.net)) with any relevant datasets that are not currently known to the Habitat GIT. (Page 31)



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## Appendix I: Black Duck Action Team Update to HGIT

### **Maryland- Update from MD DNR/DU**

- Completed construction on a 40 acre restoration project at Wellington WMA in MD is starting in the next couple of weeks
- Getting ready to install new water control structures to replace old/degraded structures on 2 tidal impoundments at Fairmount WMA in Somerset County, 300 acres managed by the structures.
- NFWF is partnering with Virginia Tech to evaluate the effectiveness of wetland restorations to provide habitat for black ducks. DU has been indirectly involved by identifying several past DU projects for them to visit a few times last winter.

### **Virginia- Update from VA DWR**

- Mattaponi WMA Wetland Enhancement Project with DU and VDWR
  - Ducks Unlimited worked with the Virginia Department of Wildlife Resources to restore hydrology and/or enhance the management of approximately 85 acres of wetland habitat at Mattaponi Wildlife Management Area. This project was funded through North American Wetlands Conservation Act (NAWCA) and Virginia Migratory Waterfowl Stamp grants. This project was completed in September 2024.
- Doe Creek WMA Wetland Enhancement with DU and VDWR
  - Ducks Unlimited worked with the Virginia Department of Wildlife Resources to enhance the management capabilities of 147 acres of existing wetland impoundments at Doe Creek WMA for the benefit of American Black Ducks and other wetland species. This project was funded through Chesapeake WILD and Virginia Migratory Waterfowl Stamp grants, and was completed in June 2024.



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· NRCS, Ducks Unlimited, and the [Working Lands for Wildlife Black Duck Initiative](#)

· Ducks Unlimited received 2022 America the Beautiful Challenge funding to provide engineering technical assistance and advance on-the-ground wetland habitat restoration in cooperation with the Natural Resources Conservation Services (NRCS) Working Lands for Wildlife Black Duck Initiative. DU staff is currently working with Eastern Shore NRCS who is actively pursuing private lands projects which were previously stalled or denied due to capacity and funding limitations. DU also recently hired a Working Lands Biologist stationed in Chesapeake Virginia for to provide this capacity across eastern Virginia.



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## Appendix II: Living Resources Data Manager Emily Young Mentimeter Responses

 Mentimeter

### Habitat and Living Resources Data Manager

Emily Young  
Interstate Commission on the Potomac River Basin





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 Mentimeter

## Habitat and Living Resources Data Manager

- Provide data management support and analysis services to the Chesapeake Bay Program and its partners.
- Collection, QA, update & maintenance, metadata, access and dissemination, indicator calculation
- 
- Manage CBPO's biological monitoring databases
- Assist with Habitat Tracker data calls (Wetlands, Black Duck, Brook Trout).
- Update indicator data for ChesapeakeProgress.com and Analysis and Methods documents
- 
- I work closely with the CBP Data Center, and use R and SQL programming languages



 Mentimeter

## HGIT Databases

- Wetlands - Habitat Tracker
- Black Duck - Habitat Tracker
- Stream Health - Nontidal benthic invertebrates, CEDR
- Brook Trout - EBTJV & Habitat Tracker
- Fish Passage - TNC Fish Prioritization Tool
- SAV - VIMS





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CURRENT DATA USE

## What datasets does your workgroup manage and/or use?

Water Quality status and trends (SAV Workgroup)

SAV Watchers data SAV Sentinel Site data

Wetlands and Stream Health Workgroups. Wetland gain data and various stream metrics

Wetlands Habitat Tracker (Chesapeake Progress)

FPWG - dam removal tracking in TNC tool

Water quality progress, land conservation, stewardship activities

Wondering if Va Deq reg data is tracked.

Chesapeake Healthy Watersheds Assessment tool/suite of data (SHWG)



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CURRENT DATA USE

## What datasets does your workgroup manage and/or use?

EBTJV assessment

Forestry Workgroup- state-reported tree planting data (from CAST) and LULC data

BLDU Habitat DST (BDAT)

CBT has identified 50 tools identified as part of tidal wetland effort

Water clarity criteria assessment (SAV Workgroup)

Va SWCD Living Shoreline wetland area

North Atlantic aquatic connectivity collaborative- fish passage.

additional stream health indicators TBD





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CURRENT DATA USE

## What datasets does your workgroup manage and/or use?

Aquaticbarriers.org National aquatic barrier inventory and prioritization tool.



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ANTICIPATED DATA NEEDS

## What data management support does your workgroup need?

Co-benefits

Tracking SAV impacts/SAV restored by watershed/segment

Additional stream health indicators TBD

Translating data into other summary formats.

SAV Watchers data is currently stored in ArcGIS Survey 123...I would love to have it backed up in another database housed at CBP.  
Brooke.landry@maryland.gov

Tracking fish passage projects at road stream crossings.

Communicate data stories

Assuming we implement a shallow water habitat sentinel site program, that will require a centralized database.  
Brooke.landry@maryland.gov







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ANTICIPATED DATA NEEDS

## What data management support does your workgroup need?

Bridge existing NEIEN reporting to habitat



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[eyoung@chesapeakebay.net](mailto:eyoung@chesapeakebay.net)

Thank you!

