



## Habitat Goal Implementation Team Spring Meeting

May 9, 2017

Location: PA Fish & Boat Commission, Susquehanna Room  
1601 Elmerton Ave, Harrisburg, PA 17110

### Participants

#### Present:

Christine Conn, MD DNR (Co-Chair)  
David Whitehurst, VA DGIF (Co-Chair)  
Jennifer Greiner, USFWS (Coordinator)  
Kyle Runion, CRC (Staff)  
Paige Hobough, CRC (Staff)  
Kara Skipper, CRC  
Angie Sowers, USACE  
Brooke Landry, MD DNR  
Dick Silver, TU  
Denice Clearwater, MDE  
Gina Hunt, MD DNR  
Tali MacArthur, TU  
Rich Starr, EPR

Steve Faulkner, USGS  
Mike Lovegreen, Upper Susquehanna Coalition  
Jennifer Miller Herzog, Land Trust Alliance  
Christina Bradley  
Donna Morelli, Bay Journal  
Mary Gattis, Alliance for the Chesapeake Bay  
Karl Blankenship, Bay Journal  
Julie Devers, USFWS  
Tyler Neimond, PFBC  
Ben Larson, PFBC  
Chad Thompson, WV DEP  
Geoff Smith, PFBC  
Diana Day, PFBC

#### Remote:

Scott Phillips, USGS  
Nancy Butowski, MD DNR  
Margaret Enloe, Waterfowl Chesapeake  
Jake Reilly, NFWF  
Kristin Saunders, UMCES  
Mark Hoffman, CBC

Howard Weinberg, UMCES  
Anne Timm, USFS  
Fred Henson, NY DEC  
Anne Wakeford, WV DNR  
Renee Thompson, USGS

### Action Items

**Action:** Please notify Christine Conn ([christine.conn@maryland.gov](mailto:christine.conn@maryland.gov)) and David Whitehurst ([david.whitehurst@dgif.va.gov](mailto:david.whitehurst@dgif.va.gov)) with Stream Health Workgroup Chair nominations by COB 5/23.

**Action:** Please email Angie Sowers ([angela.sowers@usace.army.mil](mailto:angela.sowers@usace.army.mil)) if you are interested in participating in stakeholder collaboration efforts or submitting a project proposal.

**Action:** Please email Anna Compton ([anna.m.compton@usace.army.mil](mailto:anna.m.compton@usace.army.mil)) if you are interested in providing feedback on the Comprehensive Plan.

### Announcements

- The Wetland Workgroup will be forming a new expert panel in order to finish tasks begun by the previous panel including recommendation of efficiencies for wetland rehabilitation and enhancement and the revision of efficiencies for wetland creation. An RFP will be released soon.

- [Nature's Network](#) is a suite of tools developed by NALCC, NEAFWA, and 13 states in the northeast. A training was offered last week in VA at the request of several of the states, a first in a series of trainings on how to apply these tools to make management decisions regarding opportunities to restore or protect habitat for species of greatest conservation need. The group hopes to bring a CBP Partnership tailored training to Annapolis in the next 6 months.
- The Sustainable Fisheries GIT will be meeting June 19<sup>th</sup> and 20<sup>th</sup> at Chincoteague Bay Field Station. Contact Kara Skipper ([kara.skipper@noaa.gov](mailto:kara.skipper@noaa.gov)) to receive more information.

## SRS Review Presentations

The Stream Health, Fish Habitat, Brook Trout, and Fish Passage outcomes will be presenting an update of their progress to the Management Board on May 11<sup>th</sup>. Each presentation will highlight challenges and gaps the workgroups are experiencing in making outcome progress. The workgroups will be presenting “asks” to the Management Board for help in bridging those gaps.

### Next Steps

- The Management Board will reconvene June 15<sup>th</sup> and provide further information regarding each outcome’s “ask”
  - Once that information is distributed, workgroups will have 90 days to complete workplan revisions (drafts will be due sometime in September).

### Outcome Report- Brook Trout — Stephen Faulkner (USGS)

Summary of progress toward/challenges in meeting outcome; dry run for May 11 report to the MB

**Outcome:** Restore and sustain naturally reproducing Brook Trout populations in Chesapeake Bay headwater streams, with an eight percent increase in occupied habitat by 2025.

#### **Management Board Requests:**

- Incentives for Team Members to be more engaged and invested in the Outcome.
- Pathways for communication/outreach with key decision-makers/planners to increase awareness/opportunities (e.g. Target culverts alongside DOTs for fish passage)
- Support for cross-GIT collaboration, monitoring programs

#### **Gaps/Challenges:**

- Driver/stressor impacts (climate/land use, temperature, sediment, invasives/exotics)
- Monitoring support
- Landowner participation
- Insufficient resources for partner engagement
- Limited understanding/access to Decision Support Tools (DSTs)

#### **Progress:**

- Identified “best of the best” brook trout patches in each state
- Completed 9/13 workplan actions
- Supporting partner restoration work
- Updated occupancy model in Upper Susquehanna River Basin
- No way of knowing actual progress on outcome; working on addressing monitoring on a temporal scale

#### **Future adaptations:**

- Improve coordination with partners and local agencies to tie their projects with our Outcome target and CBP priorities
- Develop a priority list of streams to re-introduce and restore brook trout

- Develop a template for communicating “best of the best” areas for conservation/restoration efforts
- Work with partners to revise work plan to address challenges including cross-GIT collaboration

**Discussion:**

- The Management Board (MB) consists of representatives from each of the Bay jurisdiction states and from federal agencies in the partnership as well as the chairs of each advisory committee. Their job is to feed recommendations to the Principal Staff Committee, who in turn make recommendations to the Executive Council. MB members are generally more aligned with water quality concerns, though momentum has shifted more toward living resources since signing of the 2014 Watershed Agreement.
- It could be helpful to include these kinds of brook trout data/information sources within existing state information sources (e.g. state natural resource websites) to allow for easier access to such information for non-profits/smaller conservation groups.
- Tools like the LCC’s Conservation Planning Atlases allow users to locate general areas suitable for habitat restoration, though further ground-truthing of those areas is usually necessary to realize the impacts of local stressors (e.g. Acid mine drainage).
- Not much suitable brook trout habitat remains in Maryland; a majority of suitable brook trout habitat is located in Pennsylvania.
- The Brook Trout Action Team (BTAT) does not yet foresee a key action related to Phase III WIPs in the next Workplan revision- the idea needs to be further explored.
- The Local Leadership Workgroup (LLWG) can assist the BTAT in making local, planning level connections including bringing decision makers/planner our tools to use. The Local Government Advisory Committee (LGAC) can advise both the BTAT and LLWG on how to move forward with making those connections and relationships.
- In addition to making it a point to work alongside DOTs and those doing culvert work, partnering with agencies doing future stream mitigation and stream mitigation banking could be another way of promoting brook trout projects.
- Good idea to sell water quality benefits as brook trout/economic benefits for local level WIP buy in- local governments need to understand this.

**Outcome Report- Stream Health** – Mike Lovegreen (Upper Susquehanna Coalition), Rich Starr (EPR, Inc.)

Summary of progress toward/challenges in meeting outcome; dry run for May 11 report to the MB

**Outcome:** Continually improve stream health and function throughout the watershed. Improve health and function of 10 percent of stream miles above the 2008 baseline for the Chesapeake Bay watershed.

**Management Board Requests:**

- Active leadership and involvement in accomplishing biennial workplan tasks.
- Funding (\$18K) to establish the 2008 baseline and document progress towards our Outcome

**Gaps/Challenges:**

- Lack of indicator/money for indicator
- Active/committed workgroup member participation and follow-through on workplan actions

**Progress:**

- States provided data for Chessie BIBI
- Database established
- No way of knowing specific outcome progress with no baseline; a lot of work is being done, though, driven by the TMDL.

**Future adaptations:**

- Revisit action plan tasks and revise appropriately
- Continue toward workplan tasks with active enrollment of workgroup members

**Discussion:**

- Rich Starr and Mike Lovegreen will be stepping down as SHWG Chairs. The Habitat GIT is actively seeking nominations for chairs, preferably a state representative (outside of MD).
- Data to create the outcome baseline is in hand; funds are needed to analyze that data to revise the baseline as called for in the 2014 Chesapeake Watershed Agreement.

**Action:** Please notify Christine Conn ([christine.conn@maryland.gov](mailto:christine.conn@maryland.gov)) and David Whitehurst ([david.whitehurst@dgif.va.gov](mailto:david.whitehurst@dgif.va.gov)) with Stream Health Workgroup Chair nominations by COB 5/23.

**Outcome Report – Fish Passage** – Julie Devers (USFWS)

Summary of progress toward/challenges in meeting outcome; dry run for May 11 report to the MB

**Outcome:** By 2025, restore historical fish migratory routes by opening 1,000 additional stream miles, with restoration success indicated by the presence of Alewife, Blueback Herring, American Shad, Hickory Shad, American Eel and/or Brook Trout.

**Management Board Requests:**

- Dam removal incentive programs such as tax deductions for dam owners that opt to remove dams that produce significant ecological benefits
- State dam safety offices to consider ecological harm/impacts due to dam failure in addition to public safety concerns; better coordination within state agencies to encourage removals when appropriate

**Gaps/Challenges:**

- Private owners unwilling to remove dams
- Overall shrinking pool of dam removal projects due to workgroup success (low hanging fruit is gone); harder, costlier dam removal projects remain
- Lack of resources (funding, staff willing/able to handle projects)

**Progress:**

- Nearly 25,000 miles opened to fish passage since 1989; outcome goal has been met and surpassed

**Future adaptations:**

- Shift attention and resources to road crossings/culverts (infrastructure)
- Coordinate higher level meetings in MD and VA to discuss more effective ways for state coordination of dam removals,
- Determine incentive to private landowners to remove dams
- Focus on more project opportunities in Maryland

**Discussion:**

- Pennsylvania's dam removal program is effective due to close coordination between DPE Dam Safety and the Fish and Boat Commission; next steps could be to have them meet with MDE and VA's dam removal program for discussion. Ben Larson is willing to be involved this meeting.
- Pennsylvania also has funding, people, and tools specifically for fish passage. CBP used to fund fish passage positions and projects, PA wrote fish passage into their own budgets to continue program once CBP funding stopped.
- Once passages are opened, the project is counted as progress toward the outcome regardless of whether it is good habitat. The second half of the outcome was included to gauge restoration success.
- The fish passage outcome is a direct link to the Fisheries GIT/fisheries management and the Habitat GIT- its scope is at a scale larger than just the bay.

- As group shifts focus toward road stream crossing projects, it could help to emphasize infrastructure resilience (more money now, but less maintenance later and better flood resiliency).
- Funding for fish passage efforts/dam removal doesn't necessarily need to come from a state; an incentive program established by a baywide funding source (e.g. NFWF) could be helpful.

### **Outcome Report – Fish Habitat** – Gina Hunt (MD DNR)

Summary of progress toward/challenges in meeting outcome; dry run for May 11 report to the MB

**Outcome:** Continually improve effectiveness of fish habitat conservation and restoration efforts by identifying and characterizing critical spawning, nursery and forage areas within the Bay and tributaries for important fish and shellfish, and use existing and new tools to integrate information and conduct assessments to inform restoration and conservation efforts.

#### **Management Board Management Board Requests:**

- We want to incorporate fish habitat into the Phase III Watershed Implementation Plans.
  - Prioritize Best Management Practices (BMPs) that address water quality and habitat
  - Serve as a metric of progress
  - Use fish habitat to drive local Watershed Implementation Plan (WIP) buy-in

#### **Gaps/Challenges:**

- Understanding of habitat stressor relationship to habitat function
- Agency coordination
- Lack of public engagement
- Lack of defined measure of progress
- Lack of effective mechanism to communicate fish habitat priorities to CBP partners and local community
- Lack of direct connection between fishery managers and habitat decision makers

#### **Progress:**

- Identified fish habitat threats and stressors among selected species
- Synthesized results from a multiyear shoreline and land use impact study
- Identifying critical spawning, nursery, and overwintering areas for select species
- Obtained STAC funding for a workshop which will identify representative species and evaluate factors influencing habitat function

#### **Future adaptations:**

- Conduct a workshop which will inform priority habitat stressor information
- Improve outreach to local communities and counties
- Take meaningful actions that emphasize communication as the end goal
- Target work on urbanization/development stressors; hardened shorelines and impervious surface

#### **Discussion:**

- It is important for decision makers to understand that impervious surface and shoreline hardening have deleterious impacts on fish habitat. While improvements to minimize these stressors are beneficial to fish habitat, caution should be used before indicating that any BMP can result in improved fish habitat.
- BMP benefit to fish habitat depends on the action and the location- it would be helpful to provide a tool/process (and description of additional criteria that would support habitat) for decision makers to use to verify ecological lift when choosing which BMPs to employ.
  - e.g. PA is working on a Conservation Opportunity Areas tool that describes the “species impact number” of particular BMPs for on the ground practitioners. The tool will be available late 2017/early 2018.
- Phase III WIP implementation timeline: Drafts due 10/2018, final drafts due 4/2019.

- In consideration of WIP local area target goals, consider areas where fish habitat is critical to the local economy or local fishery to strengthen buy in at the local level.
- States need to be able to understand where fish habitat can serve as a driver to WIP development.
  - Communicate via scenarios of projected land use growth through 2025; rampant growth will impact areas of fish habitat that aren't yet impacted
  - Trade-offs may be necessary between places of high water quality impact and high ecological/economic impacts
- WIP development varies by state (PA- top down, MD- by county)- it is important to figure out how to engage local players and their strategies.

Key Outcome Recommendations to bring to Management Board

- Tap into the local leadership network to improve communication pathways with local planners
- Focus on integrating habitat values in terms of practices with the Phase III WIPs
- Identify funding gaps and potential untapped/alternative sources of funding
- Engagement at the workgroup level

**Introduction to the Coldwater Heritage Partnership grant program – Tali MacArthur (TU)**

- Partnership between PA Council of TU (implementation), PA Department of Conservation and Natural Resources (funding), the Foundation for PA Watersheds (funding), and the PA Fish and Boat Commission (in-kind).
- Main focus is to provide technical assist and financial opportunities to organizations in the state who are dedicated to protecting restoring enhancing cold water resources.
- Provides small grants for conservation planning documents and small scale stream restoration and enhancement projects; they manage about 9-15 grants a year.
- The program is not brook trout specific, but applies to all wild trout (including brown and rainbows). It measures restoration success by the linear feet of stream restored- there are no monitoring funds.
- The Partnership is looking to include priority areas for brook trout restoration via CBP data/tools and is asking for help from the Habitat GIT- suggestions must not limit the access of small organizations to the grant program.

**Cross-GIT/Outcome Mapping Project Update, Renee Thompson (USGS), Jennifer Greiner (USFWS), Bruce Vogt (NOAA)**

- Purpose is to identify important areas on an outcome by outcome basis and to explore their relationship to the partnership as a whole in order to better integrate the living resources side of the Bay Program with the Water Quality side
- Restoration Example
  - Where do healthy watersheds support moderate fish habitat?
    - State-identified healthy watersheds overlaid with NFHAP-moderate risk of habitat degradation layer
  - What factors are at play in these areas that influence fish habitat?
    - Example above ranked by percent impervious land between 5-10%/watershed (anything over 5% is not good for fish)
  - How do these areas overlap with other CBP outcomes?
    - Example above overlaid with protected lands
    - Example above overlaid with brook trout presence
  - How do these areas align with the cross-GIT restoration composite score map?
    - Example above compared to the cross-GIT restoration composite map

- **Discussion**
  - The highlighted watersheds are areas to begin work with stakeholder groups and look for opportunities for restoration projects
  - The highlighted watersheds depict areas of high cross-outcome benefit; good candidate areas for investment of funding/resources
  - This tool complements the WQ/Tetra Tech BMP ranking project; geographic analysis alongside BMP influence ranking could be very powerful
  - Useful to partners in its application
    - LGAC using Cross-GIT mapping tool to areas for targeting education programs and Local Leadership baselines

**USACE Chesapeake Bay Comprehensive Plan Update**, Angie Sowers (USACE)

- Purpose is to develop an integrated master plan through which USACE can best deploy its technical, design, construction experience, and funding to partner with watershed stakeholders in order to assist with implementation of the 2014 Chesapeake Bay Agreement
  - The Plan will avoid duplicative efforts/actions
  - It will identify ecological problems, needs, opportunities, and projects for further study and implementation via a tiered geospatial analysis approach (larger scale and sub-watershed scale)
    - Employs a number of CBP relevant habitat data/layers including
      - RCOA Connectivity (considers state wildlife priorities)
      - Impervious cover
      - Brook trout catchments
      - State-identified healthy watersheds
    - The threats analysis does not consider invasive species; the MAPAIS may be able to provide data
  - The plan involves revising a Section 510 plan that would allow USACE to evaluate and plan candidate projects in a streamlined way. Funding for each project would be 75% federal, 25% non-federal.
  - Next Steps
    - Stakeholder webinar slated for June
    - Draft report out for review fall 2017
    - Final report- Summer 2018

**Action:** Please email Angie Sowers ([angela.sowers@usace.army.mil](mailto:angela.sowers@usace.army.mil)) if you are interested in participating in stakeholder collaboration efforts or submitting a project proposal.

**Action:** Please email Anna Compton ([anna.m.compton@usace.army.mil](mailto:anna.m.compton@usace.army.mil)) if you are interested in providing feedback on the Comprehensive Plan, particularly in the areas listed below:

- Restoration Opportunity Analyses
  - See Slide 10
- Selected sub-watersheds for Tier 3 analyses for each jurisdiction
  - See Slide 8
- Ecosystem Services
  - See Slide 22
- Implementation (programs and financing)
  - See Slide 23

## Planning the Fall 2017 GIT meeting, Jennifer Greiner (USFWS)

- Farewell Kyle! Thanks for your hard work and all the best in grad school at U of DE!
- Proposal to hold joint Fall 2017 meeting with the Sustainable Fisheries GIT
  - Each group would meet in a separate session, then convene jointly
  - Potential foci
    - Brook Trout
    - Fish Habitat
    - Fish Passage
    - Invasive Catfish
    - Cross-GIT Collaboration/overlapping priorities/potential geographic focus areas
  - Likely to be held mid-November
  - Will possibly take place in Virginia (Williamsburg was suggested)
  - General consensus across Habitat GIT; joint meeting will take place pending agreement by the Fisheries GIT Executive Committee at their meeting in June 2017
  - Communications Workgroup could help us to communicate the message of “why we do what we do” from a living resource/habitat perspective to local leadership