



Brook Trout Workgroup Project Steering Committee Meeting

Facilitating Brook Trout Outcome Attainability through Coordination with CBP Jurisdictions and Partners

November 9, 2022

Introductions and roles

Project Steering Committee

Stephen Faulkner – (USGS Eastern Ecological Science Center) Brook Trout Workgroup Co-Chair

Katie Ombalski – (Woods and Waters Consulting) Brook Trout Workgroup Co-Chair

Gina Hunt – (MD DNR) Habitat GIT Co-Chair

Katlyn Fuentes – (CRC) Staffer for Brook Trout Workgroup

Megan Thyng – (EPA CBP Office) Helps manage EPA data center

Support

Cheyenne Owens – (USFWS) on detail to work with CBP Habitat GIT.

Chris Guy – Habitat Goal Implementation Team Coordinator, U.S. Fish and Wildlife Service (USFWS); can help as needed and provide continuity with Bay Program

Contractor

Shawn Rummel – (Trout Unlimited) Lead Science Advisor for TU Northeast Coldwater Habitat Program.

Amy Wolfe - (TU) Director of TU's Northeast Coldwater Habitat Program (could not join).

Matt Mayfield – (TU) - GIS Analyst in Idaho, working nationally, also on the EBT portfolio.

Chris Brehme – (TU Science Director) works with Matt – support role.

Lori Maloney – (EBTJV Coordinator); subcontracted (Canaan Valley Institute) to facilitate collaboration of stakeholders and partners.

Katie Ombalski introduced the main objectives of the meeting: to bring us together, review the scope of work, answer questions, and outline next steps.

Items in text boxes are an attempt at a synthesis of the 2 hr call. Following those are more detailed notes, with highlighting to indicate elements for stakeholder engagement (yellow) and data needs (blue).

The project need: track progress towards goal of 8% occupied habitat by 2025 – and connect success to activities in the watershed.

BTWG needs to report every 2 yrs:

- 1) Identify priority habitat
- 2) Understand stressors, quantify losses
- 3) Quantify increases in occupied habitat through the activities of partners in the watershed.

But BTWG does not have the capacity to fully develop the metrics and quantify all restoration activities and quantify the gains across the watershed. We need to give recognition to partners for their part in achieving the outcome. We also should build better coordination with organizations across the watershed.

Three stated project components (which will feed back into each other)

- 1) identify cross-GIT collaborations; what other GIT goals and outcomes who have connected actions
- 2) strengthen relationships with other stakeholders
- 3) build implementation database with EPA IT team to adequately track progress:
Determine the metrics, determine the data needs to support development of those metrics, and how we get the data

The call discussion focused overwhelmingly on this component of #3: Determine the metrics

Or more broadly, determine what we are going to track and report on. There may be three or more broad data categories of interest.

- 1) changes in occupancy reflected in EBTJV dataset or TU data,
- 2) “brook trout projects” (and how to define)
 - a. projects with measurable, documented responses by brook trout populations
 - b. projects with benefits that may be expected to help bkt (take caution in making claims or predictions)

First, we should look at the current state of occupancy data (EBTJV states update in 2023; TU data). What are the barriers to comparing those data to the 2016 ‘baseline’?

Concurrently, pull project information. Project information can be collected and then organized by project type, whose project, ancillary metrics collected. Likely, an analysis of all "brook trout" projects, dollars, stream miles, etc. will be valuable on its own. Beyond those

snapshots and summaries, though, what, if anything, can we say about the gains by brook trout populations associated with these projects? What do TU/NFWF projects say about this?

Feedback/Data gap analysis: what projects have monitoring data? Are those data already captured in state/EBTJV/TU occupancy datasets?

Define the baseline

Steve reiterated that we need to track changes in occupied habitat in km² at the state-by-state level, relative to the **2016 EBTJV data as the baseline**. "2016" may be fuzzy because the EBTJV data reflect a number of years (the dataset used 10 years as the threshold for switching to 'predicted' occupancy). The EBTJV data also did not include road-stream crossings. Updates to the map give us a greater # of patches of smaller size, and include waters that were previously unassessed. We may need to continue a discussion of how to compare 'apples to apples', or add a workplan element to describe the challenges here.

Work with other GIT teams, strengthen relationships, and gather and track project data from key partners.

Strengthening relationships is a stated project objective of its own. However it is also motivated by a need for data and data sharing. Most project and BMP data should be from very **recent years** and can be from just a few **key partners** who hold the majority of the data.

Gather the templates from the groups we will ask to report to us, to see what format they use already. Keep it easy for them to participate.

Create a tracking system for future use. There are additional feedback loops to this, for example, this project may inform future iterations of Field Doc for bkt projects.

Below are more detailed notes, with highlighting to indicate elements for stakeholder engagement (yellow) and data needs (blue).

1. Overview of Project Scope of work
 - a. Brook Trout Workgroup priority needs

Steve Faulkner set the stage for the project: the need and objectives. He stated the outcome from the Chesapeake Bay Watershed Agreement: *restore and sustain naturally reproducing brook trout populations in Chesapeake headwater streams with an 8% increase in occupied habitat by 2025*. That translates to an expected improvement of 137 sq km/yr, using the EBTJV occupancy dataset's metric of 13,500 sq km allopatric brook trout habitat (2015). We also need to link success to activities in the watershed. The workgroup is required to report to CB management board every 2 years: Identify priority habitat, understand stressors, quantify losses, quantify increases in occupied habitat through the activities of partners in the watershed.

But the BTWG does not have the capacity to fully develop the metrics and quantify all restoration activities and quantify the gains across the watershed. Need to give recognition to partners for their part in achieving the outcome. Also build better coordination with organizations across the watershed.

Develop appropriate reporting metrics and a reporting framework, by compiling and analyzing existing data with conservation and reporting projects, that can be continued after this project ends.

There are three primary components of this project:

- 1) identify cross-GIT collaborations; what other GIT goals and outcomes who have connected actions
- 2) strengthen relationships with other stakeholders
- 3) build implementation database with EPA IT team to adequately track progress: Determine the metrics, determine the data needs to support development of those metrics, and how we get the data

Lori Maloney asked for clarification on the 8% goal; Steve re-iterated that it was based on the EBTJV 2015 occupancy dataset and is indeed in square kilometers. The states agreed to what their increase would be by 2025, in sq km, and this number depended on the amount of occupied habitat in 2015.

- b. Interface with EPA Data Center
- c. Project deliverables

Workplan – draft due by Nov 30. Should address how we will address the three areas of activity outlined above.

Steve asked if the major partners have questions for developing the workplan.

Shawn Rummel suggested we continue discussing the data needs. Megan offered that from EPA data center perspective, the priority is identifying data. She needs to understand what we are reporting on and how we will get the data.

Steve then suggested we begin by talking about the ties to other workgroups, and that the workplan should identify the groups to work with.

Shawn asked how local of a scale should go to with groups to contact for project information? E.g. county conservation districts. Steve suggested that our time and efforts will be best optimized by collecting the majority of needed data from a relatively small number of partners. TU and NFWF already hold a large portion of the data. Most pertinent are culvert removals, AMD, etc. and not necessarily water quality BMPs.

Katie O. suggested this might inform Field Doc in the future. She suggested having a conversation with the **Chesapeake Commons**, manages the Field Doc platform for NFWF. Help us understand what data have been collected. She also asked we consider what constitutes a “brook trout project”.

Lori Maloney asked to distinguish between what the data already say on occupancy (and what the 2023 EBTJV occupancy dataset update will tell us), vs. what will be ‘expected’ or predicted benefits to bkt from on-the ground projects. Doesn’t TU already have a lot of pertinent data?

Shawn: Cons. Portfolio work, TU stated with EBTJV patch data baseline (this did not include road-stream crossings), so with updates if anything we’ve made patches smaller through a refinement of data, also unassessed waters have added bkt streams that maybe were unoccupied before but the + now isn’t due to projects but to just finding them on the ground. In PA we have some biomass data which should help this project. Our field staff also have a lot of project specific data and pre-post monitoring, too.

Matt Mayfield: Reiterated that TU data are more fine scale and help us know what we do and don’t know, more so than filling in gaps.

Shawn asked what will we set as baseline data to show progress.

Steve: looking for changes in occupied habitat since 2016 (biomass/density would be an add on analysis). We need to keep close to 2016 baseline that we have already identified, use it as a starting point and adjust as needed. JV assessment data next year can be used. **How to use data collected at other intervals** (e.g. Maryland has identified changes, but their study period spanned surveys in 2010 -2018, which doesn’t really line up with our 2016 baseline). We can go forward from 2016, assuming that the baseline that Steve Perry put in the goal is indeed the existence of brook trout in 2016.

Katie O: how does monitoring inform occupancy?

Steve: we shouldn’t assume if it is open the fish have moved in. We should use verified/documented occupancy. This database will help identify where high quality habitat is, what are most effective restoration practices? **Messaging to decision makers and locating protection zones and culvert projects etc – get the word out to other groups what works and doesn’t work for brook trout, how their workplans are connected to improving brook trout occupied habitat.**

Katie: this provides guidance and becomes a feedback loop.

Lori: can we **build a dataset of AMD and AOP projects, crosswalk that against EBTJV dataset** and ask states if they have already done a follow-up survey. **It is possible that half of these AOP projects have had follow up surveys by TU or the states.** This would help this project but is also valuable to EBTJV on its own, because if monitoring has happened it hopefully would be in the next EBTJV database update.

Shawn: monitoring is project-by-project basis, and can depend on it was funded. Should be part of the workplan. **Where are projects, and what level of monitoring (if any) have occurred.**

Katie: this would be a good outcome of the project, too.

Shawn: **identification of data gaps** is very important.

Katie: and are these data shared with other entities/other databases. **(possible workplan element to tie with cross-workgroup integration).**

Megan: is there a single data point to capture, or are we reporting on many elements?

Steve: metric is square kilometers, what for each state and 8% increase would be. But on top of that, there are lots of ways to measure a brook trout project (meters bank stabilized, acres riparian, etc.) so our database will need to **track both: what the actual conservation restoration practice is, and then how is the metric reported by reporting entity.**)

Lori: there seem to be at least three types of data – bins or categories of data – to report: 1)sq km from eBTJV dataset, TU data; 2)expected/flagged projects, 3)possible conversion from project types to expected brook trout occupancy (this would be a scientific analysis and likely beyond scope of this study; Steve agrees this would be difficult).

Steve shared the spreadsheet that the BTWG came up with last fall. Captures a suite of project information. Katie explained that much of this came from asking John Dawes to pull anything entered into Field Doc as a 'brook trout' project, then Lori populated with more records and also more fields. Katie is happy to share.

Shawn: we need to give more thought to documenting occupied increases. But sorting the data on restoration actions into bins, that's more straightforward. **Can we define as Katie asks, what a brook trout project is. Parse out project types, who did them, where they are on the landscape, dig into trout data that may be there already, and then see metrics with those projects. Collect other metrics for each restoration type/bin that have been reported, that can reflect population outcomes, resilience, or just overall population health. TU GIS team could calculate connected miles.**

Challenge regarding tracking brook trout projects, bmps, metrics: come up with a common way to look at this. Who is doing the work? How to make this different from what we are already dealing with – what would be efficient and also capture what we need to track? EBTJV states might report data differently internally. And for other programs, are we looking at acres, miles, streambanks, etc. Collect lat/long, activities, pre-post monitoring. Standardize to a unit? What is the metric, and how do data inform that metric? Also have existing databases like field doc, water quality

Gina Hunt reminded the group that one long term goal is to have project be maintained by the states or partners. This spreadsheet is overwhelming. Maybe several tools that feed into a master file? She suggested that we **gather the templates from the groups we will ask to report to us**, to see what format they use already. Keep it **easy for them to participate**. Make it a *process; point of contact with NGOs and way to keep it updates (may be phase II of this project).

Lori: this objective may need continued funding to keep the process alive.

Kate: This will be an evolution. The results of the project may likely inform Field Doc, which will help with continuity in the future.

Steve: a project result that would be useful would be **what % of projects are held/done by Trout Unlimited vs other groups. (Breakdown of who is doing brook trout projects)**

Shawn: can use that to whittle down the universe of stakeholders.

Steve: others share info with him, and he will send Shawn some 'threads' of where project data might exist.

Looking forward/timeline. Katie offers that she can answer questions as we develop workplan.

Workplan due Nov. 30, 2022

2. Next steps

- a. Workplan development and schedule
- b. Meeting schedule
 - i. Dec. 1: 1 pm ET
 - ii. Dec 15: 10 am ET
 - iii. January 10: set for 1/10 at 1pm ET

Shawn: identify stakeholders and possible additional stakeholders and plan to reach out, within workplan.

Meeting Schedule: Dec 1 look at draft workplan, finish up, and set meeting for 15th.

Katie/CBT will continue to schedule workgroup meetings and Lori will take notes. Workplan needs an outline of TU vs EBTJV roles.

Partners already proposed:

3. The Habitat Goal Implementation Team's (GIT 2) Brook Trout Workgroup,
4. Stream Health Workgroup, and Fish Passage Workgroup;

5. The Sustainable Fisheries Goal Implementation Team’s (GIT 1) Fish Habitat Workgroup;
6. The Water Quality Goal Implementation Team’s (GIT 3) Forestry Workgroup and Land Use Workgroup;
7. The Maintain Healthy Watersheds Goal Implementation Team (GIT4);
8. The Fostering Chesapeake Stewardship Goal Implementation Team’s (GIT 5) Stewardship Workgroup;
9. Climate Resiliency Workgroup (CRWG);
10. Relevant agencies in states with brook trout populations (New York, West Virginia, Pennsylvania, Maryland and Virginia); and
11. Other partners/stakeholders (e.g., Trout Unlimited, Western Pennsylvania Conservancy)

Report # and Reporting Period	Project Deliverables	Date of Delivery
Report #1: 11/1/2022 - 12/15/2022	1. Kickoff meeting minutes w/list of attendees 2. Draft workplan 3. Final workplan	1. 11/20/2022 2. 11/30/2022 3. 12/15/2022
Report #2: 12/15/2023 - 3/31/2023	1. Quarterly progress report 2. Spreadsheet of organizations contacted and summary of answers to questions	1. 3/31/2023 2. 3/31/2023
Report #3: 4/1/2023 - 7/31/2023	1. Updated spreadsheet of organizations contacted and updates 2. Draft reporting framework 3. Quarterly progress report	1. 7/15/2023 2. 7/31/2023 3. 7/31/2023
Report #4: 8/1/2023 - 11/30/2023	1. Final reporting framework 2. Quarterly progress report	1. 11/30/2023 2. 11/30/2023
Report #5: 12/1/2023 - 12/31/2023	1. Draft report on activities and results, including separate recommended approach section to continue collaborative efforts with GITs/partners/stakeholders	12/31/2023
Report #6: 1/1/2024 - 1/30/2024	1. Final report on activities, results, and recommendations 2. Presentation of the final report on activities, results, and recommendations 3. Fact sheet summarizing project	1. 1/30/2024 2. 1/30/2024 3. 1/30/2024