



Eastern Brook Trout
JOINT VENTURE
A Fish Habitat Partnership

EBTJV Steering Committee Meeting Agenda
March 19, 2024 1-3pm ET

Zoom link

<https://us06web.zoom.us/j/84101670719?pwd=UkVIY2lpWmNTWExnSmRjL2dUaWtCZz09>

One tap mobile

+13017158592,,84101670719# US (Washington DC)

Dial by your location

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Meeting ID: 841 0167 0719

- **Steering Committee Roll Call (intros) & Establishment of Quorum (Jake Rash)**
 - **Meet NFHP Board Buddies (2 of the 5 named liaisons)**
 - Anne Kinsinger, USGS
 - Bryan Moore, Trout Unlimited
- **Announcements**
- **SC Vote to approve the November and December 2023 meeting notes (Jake Rash)**
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 - [November 1-2 2023 partnership meeting summary](#)
 - [December 2023 SC meeting summary](#)
- **Conservation project RFP package (Lori Maloney) PAGE 28**
 - Review the funding timeline
 - Summary of project submissions and [EBTJV Project Review Team recommendations](#)
 - **SC Vote to approve** project ranking and list to submit to NFHP by 3/31
- **NFHP/ACE ACT update (Bryan Moore)**
- **Annual meeting update (Lori Maloney)**
- **Science and Data Committee update (Jason Detar/Jason Coombs)**
 - Catchment updater data team met in January ([notes here](#)).
 - Status of range-wide catchment updates

- **Communications workgroup update (Lee Simard) PAGE 31**
 - [Pitch language summary document](#)
 - Purpose
 - Example use
 - [EBTJV Catchment Updater release template language](#)
- **SC review and approve EBTJV annual workplan (Lori Maloney) PAGE 33**
 - [Workplan draft](#)
- **Opportunity for focused bkt project funds for Delaware watershed in NY, NJ, and PA: (Lori Maloney)**
 - Goals for 2024 DRWF funding cycle and brook trout
 - EBTJV support
- **Member updates**
 - Open time for project or initiative updates from any SC member



**EBTJV Steering Committee Meeting Summary
December 19, 2023**

Participants:

Lori Maloney, EBTJV Coordinator
Jacob Rash, EBTJV Chairman; NCWRC
Lee Simard, EBTJV Vice Chairman; VFWD
Todd Ewing, Guest; Southeast Aquatic Resources Partnership Coordinator
Ross Shramko NJFW
David Thorne, WV DNR
Steve Perry, EBTJV/NFHP
Sarah Baker, GA DNR
Jason Coombs, USFWS
Nat Gillespie, USDA FS
Jason Detar, PA FBC
Jaime Masterson, USFWS
Jason Cessna, MD DNR
Brad Fink - Virginia DWR
Adam Kautza MassWildlife
Than Hitt - Researcher, USGS
Steve Vedra – Volunteer, Fundraising
Fred Henson, NY Dept. Environmental Conservation
Jud Kratzer - AFS Liaison to EBTJV; VFWD
Matt Lawrence - Maryland DNR
Christina Ryder, Guest; USFWS
John Magee-NH Fish and Game

This Zoom meeting was called to order by Chair Jacob Rash at ~1:00 p.m. on December 19, 2023. The first order of business was for the Chair to establish a quorum (≥ 10 SC members), which was achieved as 15 Steering Committee (SC) members participated in the meeting.

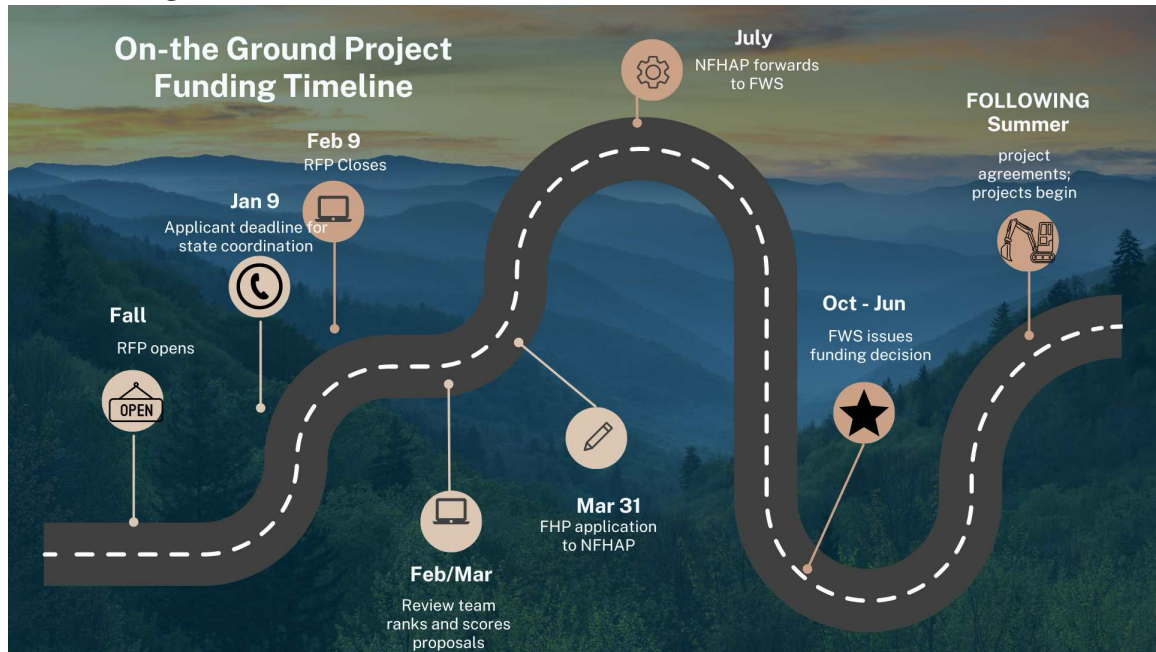
The following notes summarize the business conducted during the meeting held on **December 19, 2023:**

- **The group went through a full round of introductions.**

- **Todd Ewing gave a presentation about the Southeast Aquatic Resources Partnership (SARP).** The presentation and conversation provided valuable insights into SARP's mission, programs, funding mechanisms, and outreach strategies, emphasizing the importance of collaborative efforts in conserving and restoring aquatic resources across the southeastern United States.
 - Todd Ewing, program coordinator for Southeast Aquatic Resources Partnership (SARP), discussed SARP's mission and activities.
 - SARP, a joint committee under the Southeastern Association of Fish and Wildlife Agencies, aims to conserve aquatic resources across 15 states.
 - SARP focuses on restoration, aquatic connectivity, research, and planning programs.
 - Restoration Program:
 - Facilitates and funds aquatic restoration projects, primarily stream or river-based with some estuary projects.
 - Over 130 restoration projects completed since inception, totaling over \$8 million in direct contributions.
 - Project types include stream restoration, barrier removal, dam removal, bank restoration, covert removal, water savings projects, and invasive species removal.
 - Aquatic Connectivity Program:
 - Comprises four components: inventory, prioritization, aquatic connectivity teams, and barrier assessment training.
 - Started in the Southeast and expanded nationally with grants from the Fish and Wildlife Service.
 - Aquatic connectivity teams established in most states and territories within the Southeast footprint.
 - Conducts barrier assessment training to assess culverts and road-stream crossings for fish passage barriers.
 - Research and Planning:
 - Smaller program focusing on improving barrier assessment tools and identifying fish passage barriers using Lidar technology.
 - Projects include improving the assessment tool to incorporate smaller fishes and determining the distribution of conservation-needs fish species in the Virgin Islands.

- Collaboration with Clemson University for ongoing projects.
 - During Q&A, questions covered capacity, funding sources, project review; outreach/social media, and past and potential future collaboration among fish habitat partnerships.
 - Funding sources include state dues, operational funds from the National Fish Habitat Partnership, trusts, and NFWF. They do not currently solicit individual giving but might be interested in that.
 - Project selection involves review by a steering committee representing state agencies, NOAA, and the U.S. Fish and Wildlife Service.
 - SARP conducts outreach through social media
 - Todd is interested in future collaborations with other fish habitat partnerships.
 - EBTJV and SARP had a multi-year collaboration with ACFP on “Whitewater to Bluewater” ending in 2019.
 - Challenges include limited capacity and the need for increased staff and resources.
- **The Steering Committee Vote to approve the [September 2023 SC meeting summary](#)**
 -
- **The Steering Committee heard an update from Coordinator Lori Maloney on the FY25 RFP cycle process.** The RFP opened in November, and the deadline for initial consultation with the state points of contact is January 9, 2024. This is to help ensure that the state agency biologists have adequate time to give input on the projects and provide letters of support if appropriate. Fred Henson noted that the consultation deadline is helpful.
 - **The final deadline is February 9, 2024.** EBTJV’s application package will be approved at the March steering committee meeting for submission to NFHP by March 31, 2024. Lori reviewed the overall timeline and touched on the infographic (below).
 - The review team is always accepting more volunteers.

- The state and federal agencies who give input to this process are critically integral and we are grateful for their contributions.



- **Lori Maloney gave an update on the Congressional Designation Process and Application**
 - Under the America's Conservation Enhancement Act of 2020 all 20 fish habitat partnerships are required to apply officially to Congress by 2025 for designation as a national fish habitat partnership. EBTJV went through a process in 2007 of officially applying to become a member of NFHP under the National Fish Habitat Action plan. This application to Congress has a lot of similar elements. Priority, geography, species, habitats, strategies. What does your strategic plan look like, how did you develop it? Who are your partners? What does your governance look like? What's your fiscal structure?
 - This process is a multi-step process: December 31 is the deadline for our draft application, for review by a NFHP committee. NFHP will return the draft with comments in the Spring, at which point EBTJV will revise and solicit any final input from our Steering Committee. The final version will be due in June, 2024.
 - Lori had provided a draft by email link to a Google Doc in early December. Steve Perry noted that he had reviewed the draft and found it in good shape; he had a few suggestions for items to include. Lori encouraged anyone else to review the document and provide feedback.
- **Steve Perry gave an update on NFHP**
 - At the NFHP meeting in Charleston, SC in early December, the FHPs met and the board also had an in-person meeting.
 - The board contracted a consultant to help with the nonprofit arm, Beyond the Pond. Two key recommendations resulting from this assessment are

advancement of an action plan for BTP that illustrates key strategies, milestones, timelines, evaluation process; and that BTP should focus their mission on fundraising and securing financial resources to augment NFHP – in particular the nonfederal match for operations and for projects.

- NFHP initiated a “board buddy” system to increase communication between board members and individual FHPs. EBTJV was one of the highest interest fish habitat partnerships among the Board members.
- The board approved a motion to increase the cap on the amount of operation funding that FHPs can request, from \$85,000 to \$125,000.
- Title 2 of the ACE Act requires that FHPs seek formal Congressional designation by 2025. A board team will review the initial applications submitted by the FHPs. This review will result in the feedback to strengthen their application. Steve volunteered to be a member of of this review team.
- Steve’s initial three-year term as a member of the NFHP board is to expire at the end of February of 2024. Steve was pleased to announce he was reappointed to another 3 year term.

- **Lori Maloney gave an update on planning from the November 1-2 meeting at NCTC**

- EBTJV is making important progress towards our update to the range-wide catchment level salmonid assessment
- March 1 2023 deadline for updates to catchments and final QAQC
- The group hopes to publish the results, possibly as 2 papers
- Yoichiro Kanno's team will help
- Jason D. seeking list of 'core questions' from updater data team
- Updater communication team: Lee S, Jake R, Dianne T, Lori M, Jason C, Nat G, T Sadler
- Updater data team: Jason D, Jason C, Yoichiro K, Matt L, Colby D, Ross S, Jarrod P.
- These groups interact with each other and with the fundraising team that Steve Vedra is leading.

- **Proposal to increase capacity for brook trout conservation projects in the Delaware River Watershed – scoping and discussion, with Christina Ryder, USFWS**

Christina Ryder, Delaware Program Manager in Science Applications, from the US Fish and Wildlife Service (USFWS) spoke about the Delaware River Basin Restoration Program and its components. The Grant program is run through the National Fish and Wildlife Foundation (NFWF), awarding around \$15 million in conservation funding in 2023. The program focuses on interstate collaboration, especially with State administrators from Pennsylvania, New York, New Jersey, and Delaware, to prioritize conservation efforts within the watershed.

Efforts have been successful in initiatives like expanding boating access and aquatic organism passage programs. Currently, there's an interest in increasing the focus on brook trout conservation, with discussions on how to allocate funds effectively across state lines within the Delaware River watershed.

The conversation addressed administrative limitations, the need for a dedicated project manager, and potential models for implementing the program, including partnering with conservation organizations like Trout Unlimited or The Nature Conservancy.

There was agreement on the need for capacity building and the potential for a joint team approach to project prioritization and management. The proposal currently involves using Wildlife Management Institute (WMI) as a fiscal sponsor and establishing a dedicated biologist or project coordinator to facilitate on-the-ground implementation.

Jason Detar (PAFBC), Fred Henson (NYDEC) and Ross Shramko (NJ DEP) each weighed in on the strong need for project managers; there simply is not the capacity at the state level to do the work that is needed. This is in context of challenges of shifting priorities within state agencies. If we want these dollars spent well, we need capacity, and in general we need to maintain long-term engagement and support for conservation efforts.

Christina and Lori solicited feedback and participation from the group in reviewing the proposal and providing letters of support, emphasizing the goal of creating a replicable model for conservation efforts in other watersheds. The ask from EBTJV would be time spent by the Coordinator and agency staff on a workgroup to help set priorities for the program. Overall, there was enthusiasm for the initiative and a commitment to collaborative efforts moving forward.

- **Lee Simard gave an update about EBTJV communications workgroup.**
 - The communications workgroup had a meeting and the notes are available online. It has started to develop EBTJV “pitch” language, using simple And – But - Therefore framework.
 - The group is also working on language to promote the Catchment Updater.
 - Next steps: Work on refining this messaging toolbox; Build this into a more specific communications plan/framework
 - Than Hitt noted a citizen science effort of USGS and TU, to use AI to identify individual fish – primarily brook trout, through angler effort. It would help stewardship ethic for the for the river. It will have national social media presence through TU, and is something that EBTJV could engage in.

The EBTJV Steering Committee meeting adjourned at 3:00 p.m.



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EBTJV Partnership Meeting

November 1-2, 2023

National Conservation Training Center, Shepherdstown, WV

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DAY 1 AGENDA

Day 1: Wednesday Nov 1 *meeting open to partners/conservation practitioners beyond EBTJV Committees*

8:00 -10:30	Chesapeake Bay brook trout workgroup meeting – agenda developed separately.
10:30-10:45	Break/ socializing outside of classroom

10:45 -11:20	<p>Official EBTJV meeting start.</p> <p>Overview of Eastern Brook Trout Joint Venture and where we are headed next - Lori Maloney, Canaan Valley Institute and EBTJV’s Coordinator, and Jake Rash, North Carolina Wildlife Resources Commission, and EBTJV Chairman.</p> <p>Intro to the day and format - Jeff Feldman, Eagle's View Enterprises, Facilitator.</p> <p>Introductory thought question and visualization of where attendees are from.</p>
11:20 -11:40	Tracking the Chesapeake Bay Program’s Brook Trout Outcome: what changes do we see to wild brook trout catchment and patch occupancy from 2016 to 2022, and are there links to nearby restoration and habitat projects? Shawn Rummel and Matt Mayfield , Trout Unlimited).
11:40 -noon	Chesapeake Bay Rising Water Temperatures Report - Katherine Brownson , US Forest Service Liaison to the Chesapeake Bay Program (virtual)
12:00 – 1:00	Lunch on your own
1:00-1:15	Updates on range-wide abundance and temperature models - Yoichiro Kanno , Colorado State University
1:15 - 2:20	<p>Discussion of temperature reporting and science tools.</p> <p>Framing question: What thermal datasets, analyses, or tools are most needed?</p>
2:20 – 2:40	Break
2:40 – 3:00	National Fish Habitat Partnership (NFHAP) update - Jason Olive , NFHAP Coordinator, USFWS.
3:00-3:45	Regional funding initiatives, short overviews from several agencies. What funding is available for brook trout related projects? How do we continue to inform these funding priorities and make sure the best approaches are supported? EPA (Jeff Lerner/Richard Mitchell – virtual), FWS (Shannon Boyle), NOAA (Melanie Gange – virtual), USDA Forest Service (Nat Gillespie), NFWF (Amanda Tipton Bassow and Mike Laguna)
3:45 – 4:30	<p>Discussion segment: indicators of brook trout progress.</p> <p>Summary of NFWF, EBTJV, and TU goals, objectives, metrics for brook trout. Jake Rash</p> <p>Breakout groups: How do range-wide goals and objectives feed into or assist local/regional goals and objectives?</p>
4:30 – 4:45	Break
4:45 – 5:30	Report back from progress break outs, recap the day.
5:30 pm	Adjourn; dinner on your own/socializing

DAY 1 ATTENDANCE

Name	Title	Organization	email	Attendance
Ryan Roberts	NFHAP Program Manager	Assoc. Fish and Wildlife Agencies	rroberts@fishwildlife.org	In person
Yoichiro Kanno	Associate Professor	Colorado State University	Yoichiro.Kanno@colostate.edu	In person
Jeff Feldman	Facilitator	Eagle's View Enterprises	eaglesviewenterprises@gmail.com	In person
Lori Maloney	Coordinator	EBTJV	lori.maloney@canaanvi.org	In person
Merry Gallagher	Native Fish Conservation Biologist	Maine Dept of Inland Fisheries & Wildlife	merry.gallagher@maine.gov	In person
Tom Sadler	Deputy Director	Marine Fish Conservation Network	Tsadler@MiddleRiverGroup.com	In person
Matt Lawrence	Coldwater Fisheries Specialist	Maryland Department of Natural Resources	james.lawrence@maryland.gov	In person
Dan Goetz	Statewide Operations Manager	Maryland Department of Natural Resources	danielb.goetz@maryland.gov	In person
Jason Cessna	Natural Resource Biologist	Maryland Department of Natural Resources	jason.cessna@maryland.gov	In person
Seth Moessinger	Aquatic Ecology and Grant Specialist	Maryland Department of Natural Resources	seth.moessinger@maryland.gov	In person
Jason Cessna	Natural Resource Biologist	Maryland Department of Natural Resources	jason.cessna@maryland.gov	In person
Amanda Bassow	Northeast Regional Director	National Fish and Wildlife Foundation	amanda.bassow@nfwf.org	In person
Michael Laguna	Senior Data Scientist	National Fish and Wildlife Foundation	michael.lagua@nfwf.org	In person
Jacob Rash	Coldwater Research Coordinator	NC Wildlife Resources Commission	jacob.rash@ncwildlife.org	In person
Ross Shramko	Principal Fisheries Biologist	New Jersey DEP	ross.shramko@dep.nj.gov	In person
Jason Detar	Fisheries Biologist	PA Fish and Boat Commission	jdetar@pa.gov	In person
Mark Hudy		Retired, FS and USGS	mshudy@gmail.com	In person
Hailey Goyette	Fisheries Biologist	South Carolina DNR	goyetteh@dnr.sc.gov	In person
Shawn Rummel	Lead Science Advisor; Northern Trout Unlimited	Western Maryland Initiative	shawn.rummel@tu.org	In person
Ben Harris		Western Maryland Initiative	ben.harris@tu.org	In person
Dawn Kirk	Forest Fisheries Biologist	US Forest Service	dawn.kirk@usda.gov	In person
Nat Gillespie	Assistant National Fish Program	USDA Forest Service	nathaniel.gillespie@usda.gov	In person
Matthew Fairchild	Fish Biologist	USDA Forest Service - Colorado	matthew.fairchild@usda.gov	In person
Jason Coombs	Geneticist	USFWS	jason_coombs@fws.gov	In person
Will Duncan	Branch Chief, Aquatic Species	USFWS	will_duncan@fws.gov	In person
Peter Tango	Chesapeake Bay Monitoring	USGS	ptango@chesapeakebay.net	In person
BARB LUBINSKI	BIOLOGIST	USGS - EESC	blubinski@usgs.gov	In person
Than Hitt	Fish Biologist	USGS - EESC	nhitt@usgs.gov	In person
Steve Faulkner	Retired, Supervisory Scientist	USGS - EESC	spf5209@gmail.com	In person
Karfi Rogers	Fish Biologist	USGS - EESC	kmrogers@usgs.gov	In person
Zachary Kelly		USGS - EESC	zkelly@usgs.gov	In person
Lee Simard	Fisheries Biologist	Vermont Fish and Wildlife Department	lee.simard@vermont.gov	In person
Steve Reeser	Regional Fisheries Manager	Virginia Department Wildlife Resources	steve.reeser@dwr.virginia.gov	In person
Brad Fink	Region 4 District Fisheries Biologist	Virginia Department Wildlife Resources	brad.fink@dwr.virginia.gov	In person
Brandon Keplinger	WV DNR Fisheries Biologist	West Virginia Division of Natural Resources	Brandon.j.keplinger@wv.gov	In person
David Thorne	Coldwater Fisheries Biologist	West Virginia Division of Natural Resources	DAVID.W.THORNE@WV.GOV	In person
Katie Ombalski	Principal Conservation Biologist	Woods and Waters Consulting; CBP Brook Trout Working Group	katie@woodswaters.com	In person
Katlyn Fuentes	Environmental Resource Staff	Chesapeake Bay Program	fuentesk@chesapeake.org	Virtual
Xinyi Lu	Post-Doctoral Associate	Colorado State University	xinyi.lu@colostate.edu	Virtual
Brian Eltz	Fisheries Biologist	CT DEEP Fisheries Division	brian.eltz@ct.gov	Virtual
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Gina Hunt	Deputy Director	Maryland Department of Natural Resources	gina.hunt@maryland.gov	Virtual
Jonathan Leiman	Integrated Water Planning Program	Maryland Department of the Environment	jonathan.leiman@maryland.gov	Virtual
Adam Kautza	Coldwater Fisheries Project Lead	Mass Wildlife	adam.kautza@state.ma.us	Virtual
James Suleski		Native Fish Coalition		Virtual
Michael Smith		Native Fish Coalition - VA		Virtual
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Stephanie Heidebreder		NFWF		Virtual
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Jud Kratzer	Fisheries Biologist	VT FWD	jud.kratzer@vermont.gov	Virtual
Jessie Howard				Virtual
Jared Bishop				Virtual
Ryan Cooper				Virtual
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Sherry Witt	Facilitator	Chesapeake Bay Program		Virtual
Keith Bolt		US EPA	Bolt.Keith@epa.gov	Virtual

Tracking the Chesapeake Bay Program's Brook Trout

Outcome: what changes do we see to wild brook trout catchment and patch occupancy from 2016 to 2022, and are there links to nearby restoration and habitat projects? - Shawn Rummel and Matt Mayfield, Trout Unlimited.

This project is funded by the Chesapeake Bay Program under Goal Implementation Team (GIT) funding. The project aims to quantify the Chesapeake Bay Program's Brook Trout Work Group's goal of an 8% increase in occupied habitat by 2025.

The baseline for the goal is the initial data collected in 2016. The project team is working to compare the 2016 data to the new data collected in 2023 to track progress towards the goal.

The project team has four main goals:

1. Identify opportunities for cross-agency collaboration.
2. Identify areas where the program can strengthen communication and coordination with stakeholders outside of the GIT program.
3. Collect and compile existing data from stakeholders.
4. Work with the EPA Data Center team and the Habitat Work Group to build Brook Trout metrics into the Habitat Tracker to track projects on the ground in the future.

The team has made progress on data collection, reaching out to 102 stakeholders and compiling data on over 5,400 projects. They have also developed a template for collecting additional project-specific metrics to populate a living database that will allow the Chesapeake Bay Program to track its Brook Trout Outcome into the future. Shawn presented preliminary analyses from the West Branch of the Susquehanna River, to showcase how the data can be handled - however the data are draft and the actual numbers presented are not final. The team will continue to work on data collection and analysis, and will develop a report with preliminary results for a future EBTJV meeting.

Rising Water Temperatures Report: ecological implications and management recommendations. Katherine (Katie) Brownson, USDA Forest Service Liaison to the Chesapeake Bay Program.

Katie discussed the findings and recommendations that emerged from a Science and Technical Advisory Committee (STAC) workshop on water temperature in the Chesapeake Bay watershed.

The workshop brought together over 100 scientists and subject matter experts to address the drivers of rising water temperature, identify ecological impacts, develop management and policy recommendations, and identify research, monitoring, or analyses needed to support the recommendations.

Water temperatures have been warming in both the tidal and non-tidal waters of the Chesapeake Bay watershed. This warming is having a negative impact on aquatic life, including cold-water species like trout and brook trout, as well as warm-water species.

The report discusses the different factors that influence water temperature in non-tidal waters, including groundwater inputs, land use, and forests. It notes that forests play a significant role in shading and cooling streams, and that conserving and restoring forests can help to moderate rising water temperatures.

The report includes a list of recommendations for moderating rising water temperatures and adapting to the impacts of rising water temperatures. These recommendations include conserving and restoring forests, managing impervious surfaces, and reducing nutrient pollution.

Rising water temperatures are a serious threat to the health of the Bay and its aquatic ecosystems, and that urgent action is needed to protect these vital resources.

Executive summary of the report can be accessed at:

<https://www.chesapeake.org/stac/document-library/rising-watershed-and-bay-water-temperatures-ecological-implications-and-management-responses/>

Batiuk, R., Brownson, K., Dennison, W., Ehrhart, M., Hanson, J., Hanmer, R., Landry, B., Reichert-Nguyen, J., Soueidan, J., Tassone, S., Vogt, B.. (2023). Rising Watershed and Bay Water Temperatures— Ecological Implications and Management Responses.

Updates on Southeast Temperature and Abundance: Eastern range-wide analysis as a next step. Yoichiro Kanno, Associate Professor, Department of Fish, Wildlife, and Conservation Biology, Colorado State University.

YouTube:

<https://www.youtube.com/watch?v=E8Yw7vo2QdY&list=PLX8BInbmYQpwbZCqJwt8qKWRD46AeqPQA&index=1>

This presentation discusses the research on temperature and brook trout abundance in the southeastern United States. The goal of the project is to use data and models to inform management decisions about protecting brook trout populations.

Yoichiro began by discussing the importance of visual analysis, using genetics as an example. He presented the results of a recent study on the relationship between temperature and brook trout abundance in the southeastern United States. The study found that there is a lot of spatial variation in thermal habitat and how brook trout respond to climate change. He then discussed the challenges of predicting thermal refugia and the importance of considering multiple data sources when making management decisions. The analysis shows that there are thermal refugia in the southern United States, but Yoichiro cautions that these results may be partly due to the spatial interpolation used in the analysis.

Yoichiro sought audience feedback on the range-wide analysis and how to make it more useful for managers. He hopes to make the analysis as collaborative as possible.

Discussion:

The group went into breakout sessions to discuss the framing question: **What thermal datasets, analyses, or tools are most needed?**

The participants discussed the importance of having accurate and up-to-date data on spring inputs, precipitation, groundwater, and temperature. They also discussed the need to identify and protect resilient habitats and groundwater resources. Finally, they discussed the challenges of prioritizing data collection and monitoring efforts, given limited resources. A follow up to the workshop will include a query sent to jurisdictions for information:

- Number of current loggers with annual temperature records in trout streams
- Annual number of sites surveyed with single-pass electrofishing
- Annual number of sites surveyed with multi-pass electrofishing
- Number of sites surveyed repeatedly over the years, whether single- or multi-pass electrofishing

Funding Presentations:

National Fish Habitat Partnership (NFHAP) update - **Jason Olive**, NFHAP Coordinator, USFWS.

Youtube: <https://youtu.be/T3CzfVyriKA?si=jHMi18wHYLFR3lpr>

Fish and Wildlife Service Fish Passage Program funding Shannon Boyle – National Interagency Fish Passage Task Force Coordinator for FWS.

Youtube: <https://youtu.be/QmluisVWX4M>

[PDF of presentation](#)

NOAA Office of Habitat Conservation funding through the BIL and IRA Melanie Gange – NOAA Habitat Restoration Center.

Youtube: https://youtu.be/_k25XH1Y8fE

[PDF of presentation](#)

EPA fisheries funding through the BIL. Jeffrey Lerner, Partnership Programs Branch Chief, and Richard Mitchell, Lead, National Rivers and Streams Assessment.

Youtube: <https://youtu.be/k25XH1Y8fE>

US Forest Service Fish and Aquatic Organism Passage Programs in the Bipartisan Infrastructure Law. Nat Gillespie, Assistant National Fish Program Leader, USDA Forest Service

Youtube: https://youtu.be/Zof_l3ggXe8

[PDF of presentation](#)

Investing (nearly) Range-wide to Restore Brook Trout Habitat. Amanda Bassow, Northeast Director, National Fish and Wildlife Foundation

Youtube:

[PDF of presentation](#)

Goal Setting Discussion Session: How do range-wide goals and objectives feed into or assist local/regional goals and objectives?

YouTube:

https://www.youtube.com/watch?v=ugbDQ6ZZ1_U&list=PLX8BlbmYQpwbZCqJw8qKWrD46AeqPQA&index=7

Jacob Rash, Helen Neville, and Michael Laguna reviewed the goals and objectives of EBTJV, Trout Unlimited, and NFWF. (A summary table for each is below). Breakout groups then discussed the framing question. *How do range-wide goals and objectives feed into or assist local/regional goals and objectives?* A follow-up action from this meeting will be to query all of the management units (states, tribes, national parks and forests) to gather what their goals and objectives, and monitoring needs are.

Jake Rash reviewed the EBTJV goals, objectives, and metrics. EBTJV's goals are to increase the number and size of brook trout patches, restore brook trout to areas where they have been lost, maintain the current number of brook trout, and improve connectivity among and within catchments. Much of this work integrates the data of the EBTJV assessment, and also relies on reporting of habitat and repatriation project data. Jake reiterated the importance of EBTJV providing value to other groups and entities across the range.

Helen Neville explained TU's 3R approach as a framework for conservation. TU has provided bkt portfolio in all of the range except for Driftless (planning to complete in coming years). The framework is a conservation assessment which integrates EBTJV catchment and patch data, along with threats, habitat features, etc. to describe ability to produce strongholds. The end goal is for others to use in their conservation planning. TU also works closely with NFWF on specific watershed plans – sometimes these are habitat based, some are fish based; these also speak to feasibility. TU just completed an effort to describe trout and salmon state priority waters. Within those waters, are creating conservation action plans, and goals within those are still under development, and the TU portfolio helps to inform those.

Mike Laguna explained NFWF's newer modeling approach to track progress for brook trout. NFWF has 4 business plans for eastern brook trout including the Great Lakes, and recently came up with standardized goals that cover those 4 business plans. In essence they

are looking to increase relative abundance within *persistent* and *stronghold* patches (using TU's portfolio). Within patches, NFWF rolls up funded project metrics from grantees, such as miles opened, riparian acres planted, etc. They are working with TU to develop a consistent monitoring approach that has these habitat data and also the fish data: CPUE, and other data from states. Over time with enough data (and data structured/stratified correctly with sufficient power), the goal is to use a Bayesian approach to model brook trout response at select points within select patches.

During breakout groups, attendees discussed how to incorporate range-wide goals and objectives into local and regional goals and objectives.

Attendees agreed that range-wide goals and objectives can provide a framework for local and regional planning, and can help to ensure that local and regional efforts are aligned with broader conservation goals. Additionally, range-wide goals and objectives can help to raise awareness of important issues and can provide a justification for allocating resources to address these issues - especially due to the name recognition of the EBJTV.

Examples:

Merry Gallagher: EBTJV goals have helped to elevate the management importance of certain life history characteristics of trout in Maine, and have helped the state to focus management efforts on these populations.

Brandon Keplinger: patch-level priorities can help guide working on private land.

Dianne Timmins: for New Hampshire, EBTJV goals and strategies fit perfectly into state strategies. Also, scale is important; keep EBTJV assessment at scale relevant to state strategies.

Others noted the need to frame the question the other way: to ask how local goals and plans can feed into the EBTJV range-wide goals.

Lee Simard :states will prioritize in very different ways due to the different realities of how much brook trout they have lost. The range-wide goals need to recognize the autonomy of the states while bringing resources to them.

Will Duncan: incorporate local goals so that they can be translated down to geographies on the landscape.

Than Hitt: disconnect between range-wide goals and objectives and planning conditions and decisions on the ground level. This is an opportunity to make things better if we do more to involve local planners and decision makers.

Lee Simard state coordination is an important component due to connection to the ground; let the states gain the buy-in of those at the local level.

Tom Sadler: State buy-in was important to the formation and strength of the EBTJV. That we are all here 18 years later, is evidence that the plan was not one that ended up on a bookshelf.

Mark Hudy: maintain a focus on the foundational vision of “fishable” populations of brook trout. He would like to see EBTJV classify catchments by fishability and other more qualitative metrics, especially because it is easier for the public to understand and appreciate.

The overarching sentiment was that we need to know what is doable at a local level, while setting range-wide goals that help provide weight to decisions made at state and local levels.

Highlights of the day according to participants:

Jason Coombs: liked the new insight of the TU analysis of the 2016 to 2023 occupancy in the West Branch and to also see the number of management actions that happened in those catchments. It provides hope and it will be good to see the results from other watersheds.

Brandon Keplinger: there are likely a lot of co-benefits for species (including RTE) that we aren’t necessarily focusing on and would be great to talk about what other types of environmental uplift we are achieving through brook trout work, especially repatriation which often results in stronger protective regulations.

Dianne Timmins: Learned some new sites for research and data variables that we need to look into further.

Lori Maloney: the dollars spent on brook trout work are impressive.

Matt Fairchild: having worked primarily in the Western US and being a relative newcomer to this group, he was heartened to see this voluntary work and shared conservation vision across multiple states.

Jake Rash: great level of engagement to keep this partnership going forward, especially given the geographic breadth and also the level of responsibility of the various people involved.

Jeff Feldman wrapped up the day with the observation that we are on a great path.

Links of interest:

Rising Water Temperatures summary report: <https://www.chesapeake.org/stac/wp-content/uploads/2023/04/CBP-STAC-Rising-Water-Temperatures-Summary-Report.pdf>

NOAA opportunities: <https://www.fisheries.noaa.gov/national/habitat-conservation/habitat-restoration-under-bipartisan-infrastructure-law-and-inflation-reduction-act>

FWS LOI interest due Nov 17: <https://www.fws.gov/press-release/2023-10/36m-available-fish-passage-and-river-restoration-projects>

EPA National Estuary Program and Coastal Grants: <https://www.epa.gov/nep/overview-national-estuary-program>

EPA Geographic Programs: <https://www.epa.gov/water-infrastructure/geographic-programs>

USDA Forest Service Legacy Roads and Trails: <https://www.fs.usda.gov/managing-land/national-forests-grasslands/legacy-roads-trails>

USDA Forest Service Collaborative Aquatic Landscape Restoration: <https://www.fs.usda.gov/managing-land/natural-resources/collaborative-aquatic-landscape-restoration>

Fish Passage Portal, a first attempt at compiling the programs for barrier removal funded under BIL: <https://interagency-bil-fish-passage-project-1-fws.hub.arcgis.com/>

EBTJV's Roadmap to Conservation:  [Eastern Brook Trout Roadmap to Conservation \(2018\)](#)

TU's EBT Conservation Portfolio: <https://www.tu.org/science/conservation-planning-and-assessment/conservation-portfolio/eastern-brook-trout-conservation-portfolio/>

NFWF business plans: www.nfwf.org/strategies-results/businessplans

ORGANIZATION	GOAL	OBJECTIVE	Metrics/Monitoring plan and needs
EBTJV	Increase the average size (km ²) of wild Brook Trout patches, which is currently 19 km ²	Increase the size (km ²) of 30 wild Brook Trout patches by the year 2022.	Occupancy data from field surveys
	Restore wild Brook Trout to catchments where they were extirpated	Establish wild Brook Trout in 15 extirpated catchments by the year 2022.	Project data
	Maintain the current number of wild Brook Trout patches (i.e. no net loss)	-Retain at least 6,022 allopatric wild Brook Trout patches (1.1) across the EBTJV geographic range by the year 2022. -Retain at least 3,838 sympatric wild Brook Trout patches (1.2, 1.3, and 1.4) across the EBTJV geographic range by the year 2022.	Occupancy data from field surveys

	Increase connectivity within and among wild Brook Trout catchments	Complete Aquatic Organism Passage projects within 45 wild Brook Trout catchments by 2022.	Project data
NFWF	Increase in eastern brook trout relative abundance in X number of persistent or stronghold patch types and maintain relative abundance by improving habitat in X number of additional persistent or stronghold patches.	Implement one or more of in-stream restoration, riparian restoration, and/or AOP projects within high value patches. Note: priority and secondary patches have been identified via spatial prioritization in each business planning process.	Miles of in-stream restoration Acres of riparian restoration Miles with riparian restoration (minimum 35 feet) Stream miles opened # of barriers rectified
		Invest in capacity building and good brook trout projects throughout the region.	
		Invest in a consistent monitoring approach in appropriate patch sub-samples.	Habitat data (mean wetted width, riparian cover, patch type, etc.) Field parameters (weather, time, fishing method, transect length, upstream/downstream of project site etc.) Fish data (# of fish caught, age-class, length, etc.) -> CPUE
Trout Unlimited	Representation	1. Conservation of genetic diversity 2. Protection and restoration of life history diversity 3. Protection of geographic (ecological) diversity	1a. Presence of genetically unaltered populations 2a. Presence of all life histories that were present historically 3a. Presence of peripheral populations
	Resiliency	1. Protect/restore large metapopulations or strongholds	1a. Large brook trout-only populations

	Redundancy	1. Protect multiple persistent populations within each subregion	1a Large brook trout-only populations 1b. Moderately sized brook trout-only populations with high habitat suitability 1c. Small brook trout-only populations with exceptional habitat suitability
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Day 2 AGENDA

Day 2 November 2: EBTJV Steering Committee and committees only

8:00 - 8:45	Intro to the day, introductions from all participants and facilitator - Jeff Feldman ; Eagle's View Enterprises. Desired outcome: introductions and consensus on how to spend the day
8:45 - 10:00	Revisit any questions on EBTJV catchment updater. Jason Detar , EBTJV Science and Data Committee Chair. Desired outcome: awareness of status, deadline. Address any outstanding issues, agree to a plan and timeline for analyses and publication. Peer review What resources are needed to achieve goals.
10:00 - 10:20	Break
10:20 - noon	EBTJV organizational planning facilitated discussion. Visioning. Desired outcome: lay out options of organizational initiatives. What are the needs EBTJV can fill better than anyone else?
noon	Lunch
1:00- 1:30	Review of EBTJV RFP and projects/ possible SC vote on new small grants)– Lori Maloney
1:30- close	EBTJV operational planning facilitated discussion. Desired outcome: Gather in groups to brainstorm possible organizational initiatives. What additional resources might we need to achieve these initiatives? More follow up work will happen over the winter. Meeting end at 3 to allow folks to drive/fly home.

DAY 2 Attendance

(*SC member or proxy)

Jeff Feldman (Facilitator)

Yoichiro Kanno

Lori Maloney

Jason Coombs

Merry Gallagher*(not present at vote)

Tom Sadler

Matt Lawrence*

Jacob Rash*

Ross Shramko*

Mark Hudy

Hailey Goyette*

Matthew Fairchild

Shawn Rummel*

Matt Kulp*

Brad Fink*

Steve Perry*

David Kazyak*

Lee Simard*

David Thorne*

Adam Kautza* (not present at vote)

Will Duncan*

Dan Goetz

Nat Gillespie*

Brandon Keplinger

Jim Habera*

Jaime Masterson

Dianne Timmins*

Megan Lehew

Steve Vedra

The overarching theme was that EBTJV is here to add value to already strong partners, and help your individual agencies, management units, and states realize your own goals under a collective vision.

Catchment updater discussion

The EBTJC selected March 1 as the date for updates and final state checks on the updater, and March 1 will be the yearly timestamp going forward, too. For this year, there will be an additional amount of work after the updates are complete, to crunch the numbers and to see what progress we have made to our 2016 goals. Two teams formed: outreach/messaging, led by Lee Simard, and data, led by the SDC. If anyone wants to join a team, reach out to Lee (communication), Jason Detar (data), or Lori Maloney

Updater communication team: Lee S., Jake R., Dianne T., Lori, Jason C, Nat G.

Updater data team: Jason D, Jason C, Yoichiro K., Matt F., Colby D., Ross S., Jarrod P.

The group hopes to publish - peer review - the final product. Hudy paper cited 217 times. Some groups still refer back to the early (2006) analysis and aren't even aware of EBTJV's 2016 catchment level data. So, there is a real need for some basic communications about it, even before we update the map. Also on communications, we can do a much better job branding ourselves as the holders of this unique and important dataset that is used by other conservation groups and in setting conservation priorities. For any teams established for the outreach and analysis efforts be sure to review the 2016-2018 catchment/patch-related documents produced as potential resources for discussion purposes. We should be careful to explain changes in occupancy especially in light of previously unassessed waters. There was a reminder that we can promote "fishable" streams, and there may be value in that kind of more qualitative classification. At the same time as we look at local priorities, we want to focus on range-wide goals; keeping the right balance is at the heart of EBTJV's role in assisting the work of all its partners and serving as a hub for the science. Finally, the issue of scale continues to come up and we should be careful in how we communicate changes to the map especially if in future iterations we change the resolution of analyses.

Small Grants program for training and outreach

Summary: This is a new program, funded through our FY22 FWS award, to give grants of up to \$12,000 to applicants for enacting education or outreach related to one of our EBTJV brook trout conservation actions. EBTJV received 8 applications. The group voted to fund the top four.

A quorum was established with 15 Steering Committee members in attendance. Lori Maloney opened a discussion and voting item related to new (one time) Small Grants program for training and outreach. The RFP information is here: <https://easternbrooktrout.org/projects/funding/ebtjv-coldwater-stewardship-small-grants-program>

This is a new program intended to give grants of up to \$12,000 to applicants for enacting education or outreach related to one of the EBTJV brook trout conservation actions. The audience must extend beyond anglers, and priority is placed on applications that train or educate on
EBTJV March 19 SC Meeting Packet

concepts and skills that will be used by managers or future conservation professionals to conserve wild brook trout. There is \$35,000 allocated for the awards, and funds can be used by applicants as soon as EBTJV and CVI forge agreements with the grantees.

The five-member review team was Merry Gallagher, Jim Habera, Jake Rash, Matt Kulp, and Lori Maloney. The RFP opened September 1 and closed October 6, and received 8 applications. The scoring rubric was much simpler than the annual project RFP, with 10 points and 4 floating bonus points. Two applications rose to the top and another two scored above 7. There was some difference in opinion of the reviewers in overall quality of applications and degree of match to program objectives. Some reviewers found the applications hard to score because the application guidelines were broad, and applicants did not clearly document how they would achieve their deliverables. Furthermore, applicants were not required to consult with a state agency or furnish letters of support, and this was also reflected in application quality.

Steve Perry made a motion to fund top 4 but ask 3 and 4 to improve their plans. Lori asked to discuss if we could fund just the top 2 and contract out the remaining funds for an EBTJV training need. Steve Perry noted that in the past, EBTJV has made a threshold of 75% scores being eligible for funding, and that all four of the top applicants here met that mark. Furthermore, contracting outside of the RFP might be seen as a change to what EBTJV had proposed to NFHAP in 2021. Steve repeated his motion, which was seconded by Lee Simard, and passed.

Will Duncan noted that as a first attempt, to get 8 applications with over \$60,000 in ask reflected the need out there and commended us for thinking outside the box to help enact outreach and training. If we offer this program again, we will implement lessons learned.

Title	Applicant	Avg score	amount requested	Cumulative Ask
Maine: thermal imagery training	Maine IFW	9.48	\$6,758	\$6,758
Maine: Training road professionals on connectivity	Maine Audubon	9.11	\$8,578	\$15,336
Massachusetts: Engaging Land Stewards in Fisheries Habitat Restoration	MA Woodlands Institute	7.6	\$11,850	\$27,186
Southern Appalachian Brook Trout (SABT) of the Chattooga River Watershed	Chatooga Conservancy, SC	7.52	\$6,570	\$33,756 FUNDED TO HERE
PA: Headwaters Hemlock Conservation Stewardship Project	Potter County Conservation District, PA	5.45	\$3,128	\$36,884

VA NFC: “Help Stop The Drop”	Virginia Chapter, Native Fish Coalition	5.1	\$2,000	\$38,884
PATU: Conservation Communications Coordinator	PA Council of TU	4.59	\$12,000	\$50,884
NJ Bonsal Preserve: Monitoring Coldwater Habitat	Bonsal Wildlife Preserve Conservancy, NJ	3.68	\$12,000	\$62,884

Project summaries (First four were funded)

Maine: thermal imagery training This project seeks to bring collaborators from the United Kingdom and France to Maine to train natural resource biologists, managers, and restoration practitioners for a two-day training workshop on the use of aerial thermal infrared (TIR) imagery in mapping spatial extents within rivers and tributaries.. The objective of the workshop would be to equip our team with the knowledge required to build a housing for the cameras used in the surveys, select the appropriate thermal and optical imaging cameras, and learn the workflow and techniques for analyzing the acquired data. Resource biologists from across Tribes, NGOs, State and Federal agencies have determined a need to develop both the physical infrastructure and analytical tools needed to conduct TIR surveys and create maps of cold water patch availability and distribution within Maine’s rivers and streams. Such maps will help resource agencies and restoration practitioners by informing where to deploy temperature loggers to capture cold water patch/refuge dynamics and persistence, prioritize restoration actions that enhance or ensure connectivity to essential cold-water fish habitat, evaluate restoration actions (such as addition of large wood), and set measures that confer long-term protection to cold-water refuges.

Maine: Training road professionals on connectivity This project seeks to increase the awareness and understanding of Stream Smart (Stream Simulation design) road-stream crossing principles in the population of road professionals and their supporting collaborators in Aroostook County, Maine. The goal will be to train local municipal officials, foresters, surveyors, contractors, students, and engineers on the need for and principles of replacing poorly functioning culverts with Stream Smart crossings. We are targeting Aroostook County because there are still many high quality brook trout streams in the county but there has been limited outreach on how to reconnect streams there as compared with other areas of the state. By introducing Stream Smart principles to a wide audience including practitioners, local officials, and the general public we can increase the likelihood of implementation of these principles, and the reconnection of fragmented aquatic habitats for brook trout and other local species. Specifically, we anticipate approximately 10-15 people will attend each of 2 Stream Smart Introductory workshops and go on to share their knowledge with associates. We will target road professionals – road commissioners, municipal public works staff, engineers, foresters, forestry students, surveyors, and contractors – and decision-making staff from their supporting municipalities and industries.

Massachusetts: Engaging Land Stewards in Fisheries Habitat Restoration The proposed project is a multi-step outreach program to engage western Massachusetts landowners in

land management activities to enhance stream resources in the southern Deerfield River Watershed headwaters. This project uses aquatic, forestry, and riparian science to provide guidance on restoration and adaptation techniques to buffer the effects of increased precipitation and air temperatures on cold water streams, their floodplains, and surrounding forest stands. Dubbed “Forests for the Fish” and collected in a written toolkit, these techniques will be made available as guides for landowners. Building on past partnerships between the MA Woodlands Institute, Franklin Land Trust and Trout Unlimited, these activities will launch Foresters for the Fish by summer 2024.

Southern Appalachian Brook Trout (SABT) of the Chattooga River Watershed The Southern Appalachian Brook Trout (SABT) of the Chattooga River Watershed: On the Edge of Change project will seek to educate and inform watershed citizens of the threats facing the SABT in the Chattooga Watershed. Additionally, opportunities and assistance will be made available to private landowners for riparian restoration in the watershed. The Chattooga watershed represents the southern limit of the natural range of brook trout in eastern North America. Targeted outreach will include mailouts, community programming, personalized outreach, and curricula for schools in the watershed.

PA: Headwaters Hemlock Conservation Stewardship Project The Headwaters Hemlock Conservation Stewardship Project will educate the public about invasive species, threats to brook trout habitat and thermal refuge zones, loss of riparian buffers, and the current state of Hemlock Woolly Adelgid (HWA) in headwaters of Potter County and the surrounding area. This will be completed through a Brook Trout Habitat Field Day on Lyman Run in Potter County, followed by a stewardship project at the same site at a later date. Awarded funding will be used to support the introductory Brook Trout Habitat Field Day and supplementary outreach, monitoring efforts, and surveying - all of which will culminate towards a Fall 2024 stewardship project in which PA NFC volunteers will treat and protect nearly 10 acres of vital hemlock stands against HWA.

Eastern Brook Trout Joint Venture Funding would provide an educational and collaborative conservation benefit. Funding this project will increase environmental self-efficacy of local and state-wide conservation organizations as well as protect brook trout habitat strongholds in a headwater region of Potter County, PA.

(Project seemed better aligned with implementation than education; also not clear if pest control would require environmental compliance that is not part of a non-construction grant)

VA: “Help Stop The Drop” This project would focus on raising public awareness about perched culverts as barriers to brook trout movement; moreover it would encourage anglers to help locate perched culverts on both public and private lands. It would describe for lay audiences the problems posed to native brook trout by such culverts. The project will produce a brochure, including a QR code accessed video and brief data form to encourage participants to use their smart phones to photo document perched culverts with GPS and other descriptive locators. NFC/Virginia would share collected data with natural resource and public transportation agencies so that the worst case culverts could be prioritized for replacement.

(Applicant did not showcase that they were working with the appropriate partners)

PATU: Conservation Communications Coordinator In keeping with the small grant program’s objectives to support the transfer of knowledge and skills, and general awareness, of conservation actions for brook trout, PA Council of Trout Unlimited (PATU) wishes to hire a full-

time Conservation Communications Coordinator (hereinafter referred to as CCC) in our main Bellefonte, PA, office, to act as the primary content-creation source of all PATU communications, both electronic and in print. It is intended that this position be permanent, and that it ultimately shall be funded from permanently-allocated General Operating funds within PATU.

(The EBTJV program was not designed to support staff salaries).

NJ : Bonsal Preserve Monitoring Coldwater Habitat Project seeks to create a continuous online monitoring program that the public will be able to access at all times and inform of possible introduction of native brook trout into the Alonzo F. Bonsal Wildlife Preserve in New Jersey. The group's long-term goal is to restore the Third River within the Bonsal Preserve to a fully functional healthy river system. Their short-term goal is to achieve this through scientific methods based on continuous monitoring with the expertise and guidance of river professionals but implementation will be through citizen science supported by the two municipalities (Montclair and Clifton) that share the park.

EBTJV Visioning and development of initiatives.

With the guidance of Jeff Feldman, facilitator, the outlined four areas to work on. Please see attached report.

Eastern Brook Trout Joint Venture

Strategy Session, November 2, 2023

Approximately 25 members of the Steering Committee of the EBTJV met (in-person and online) on November 2, 2023 at NCTC to develop a strategy for approaching funding and other needs over the next three years. Prompted by a visioning exercise, the group was charged with beginning the process of developing a set of strategic initiatives and an “elevator speech” which might be applied toward expanding funding and general promotional opportunities in support of the organization’s work.

The process began with some pre-meeting work, inviting each member of the group to imagine and envision EBTJV’s future as they’d like to see it unfold by October of 2026. These Individual Visions were then shared across small teams, with the group looking for alignment in their thinking and/or really interesting divergent ideas, bringing their Individual Visions together into a sense of Collaborative Vision. Group by group, these Collaborative Visions were shared with the full assembly which was encouraged to listen for Emergent Themes . . . concepts/ideas that exist within each group’s future thinking. From these Emergent Themes, the foundation for a set of strategic initiatives would begin to take shape.

The Emergent Themes, along with the visioning elements from which they emerged, identified through this process include:

1) Funding

- Target both shorter and longer-range needs
- Develop diverse funding streams: Federal \$\$, private partnerships, business/industry aligned with mission . . . not necessarily trout but clean water, etc.
- Work toward strong operational budget . . . \$1 million!!

2) Expanding the EBTJV Community

- Seek broader representation on the EBTJV Steering Committee
- Engage non-anglers and non-fish-focused partners
- Develop value-added opportunities to serve EBTJV partners, outside of on-the-ground projects

3) Increase Public Awareness/Outreach

- Increase visibility in outreach and communications
- Develop an EBTJV branding campaign
- Reinforce/Reinvigorate EBTJV’s standing as the “go-to” group for everything Brook Trout
- Highlight the Story of EBTJV’s efforts and success in Protecting, Restoring, & Enhancing the resource . . . “How we’ve done it.”

3) Increase Public Awareness/Outreach (continued)

- Promote Landscape-Scale Conservation . . . define success across the range
- Host a “Wild Trout” Symposium
- Build more broad and equitable messaging, applying language such as “Beautiful Resources”, “Restoration Efforts”, “Future Generations”, etc.
- Leverage the Brook Trout as an iconic, charismatic species
- Create EBTJV tagline /rallying cry . . . “No Net Loss!”

The three Emergent Themes above were those identified by the group as they reviewed the thinking shared by the Collaborative Vision Groups. One additional theme seemed to emerge as well . . .

4) Maintain Science & Data as EBTJV’s Core / Authenticity / “Bread and Butter”.

- Work toward “better, smarter” regs based on data gathered
- Expand range-wide assessment to the next level
- Publish peer-reviewed articles
- Prioritize / Characterize patches

Next Actions . . .

These Emergent Vision Themes represent a general sense of direction for EBTJV’s future, the beginnings of a path that now needs to come into greater focus. Recommended next actions include bringing together a team to develop these possibilities more fully. Once these themes are more clearly focused, perhaps separate committees or work groups might convene around each vision theme to frame action steps for advancing that theme more specifically.

As noted during the session, the visionary themes identified by the group very nicely “nest” into one another: EBTJV’s strong scientific core lends authenticity to the message the organization is promoting, providing a solid platform for a robust PR/Outreach Campaign to take shape. Such a PR campaign, if targeted correctly, would serve to expand those interested in the organization’s work, leading to engagement with new potential supporters and partners. The group seemed to align around the notion of leveraging the iconic, charismatic nature of the Brook Trout as the heart of EBTJV’s messaging. This obviously makes sense and seems to offer an ideal starting point for brand development and promotion.

EBTJV Review Team FY25 Project Recommendations

March 6, 2024

Overall summary

The EBTJV project review team is recommending 6 on the ground brook trout conservation projects and the EBTJV operational funding for FY25 to the National Fish Habitat Partnership. The review team was extremely pleased with the quality of all eligible applications.

The projects collectively remove 9 barriers to aquatic organism passage, (2 dams and 7 culverts), reconnecting a total of 34.5 miles in priority brook trout catchments. A total of 9 acres of riparian habitat will be restored. Four of six occur in allopatric brook trout catchments, two will restore (repatriate) brook trout, including one restoration which will follow the removal of non-native rainbow trout.

The total for on the ground projects is \$299,870, and will bring an additional \$1.1M in nonfederal funds (4:1 match) and a total of \$1.87M in nonfederal and federal contributions.

FY 25 Review Team Members

Jacob Rash (NC), Matt Kulp (GSMNP), Merry Gallagher (ME), Jim Habera (TN) Adam Kautza (MA), Mark Staley (MD), Brad Fink (VA), Will Duncan (FWS), Lori Maloney (Coordinator)

RFP and review process

The FY 25 review team met in the fall of 2024 to review program priorities, timeline, and make any needed revisions to the RFP. The only revision for FY25 was to shift the date for initial consultation with state agency points of contact from December to January.

The RFP was released in November 2023, with a final deadline of February 9, 2024. Proposals were accepted by file submission to the EBTJV website. Five members of the review team reviewed and scored applications according to a scoring rubric which has been developed over many years and which was most recently rescaled and revised for FY23.

The RFP addresses 25 application elements. Many of these elements ask if the projects address criteria of the ACE ACT:

.

ACE act HARD criteria

Has this project been evaluated by your FHP to address elements outlined by the America's Conservation Enhancement (ACE) Act?

1:1 Federal:Non-federal Match

Pertinent Sponsor Experience & Project Management Ecological benefits

Measurable Goals and Objectives

Appropriate Monitoring and Evaluation Plan

Meets At Least 1 FHP Objective

ACE act SOFT criteria (considered in overall FHP package to NFHP)

Meets at Least 1 NFHP Objective

Supports FHP and NFHP Assessment Findings
Well Defined Budget
Leverages Other Funds to Implement the Project
Address the causes and process behind declines
Includes an Outreach/Education Component
Improves Recreational Fishing Opportunities
Increases Public Access
Advances Conservation Specified by Existing Management or Conservation Plans (ie state agency plans or Magunson Stevens)
Project Will Be Carried Out With Partners (federal, state, and local governments, Indian tribes, and private entities)
Is this project being implemented by a Tribe or implemented with tribal funds

In addition to these hard and soft criteria, the EBTJV application asks about EBTJV priorities and places a strong emphasis on well-developed projects that address the root cause of decline in the catchment, and which have been planned with input from a state or federal agency biologist in the EBTJV network.

Seven applications were submitted; one was disqualified because it did not have a state letter of support and it also did not meet the core requirements of the ACE Act.

The review team met on March 6, 2024 to agree upon a ranking and project submission list, including EBTJV operational funding, to recommend to the EBTJV Steering Committee on March 19.

The review team agreed that the EBTJV operations funding request should be increased to \$125,000 to reflect the costs of inflation and to meet needs for fulfilling the EBTJV mission. Although this reduces the amount that can go to projects, the review team felt that this was acceptable and that by increasing EBTJV capacity we may be in a better position in several years to support partners and projects in more ways.

The review team was extremely pleased with the quality of all eligible applications for this round and recommends that they are all funded. The total for on the ground projects (excluding operations) is \$299,870, and will bring an additional \$\$1.1M in nonfederal funds (4:1 match) and a total of \$1.87M in nonfederal and federal contributions. The total NFHP ask including EBTJV operations is \$424,870.

The projects collectively remove 9 barriers to aquatic organism passage, (2 dams and 7 culverts), reconnecting a total of 34.5 miles in priority brook trout catchments. A total of 9 acres of riparian habitat will be restored. The majority of projects occur in allopatric brook trout catchments, two will restore (repatriate) brook trout, including one restoration which will follow the removal of non-native rainbow trout. Nearly all the projects address in-stream habitat and propose large wood addition to improve hydrology, sediment sorting, and habitat for aquatic macroinvertebrates and fishes. In addition to meeting the hard ACE Act criteria, each of the on-the-ground projects meets at least nine of the soft criteria. In particular, the projects are all expected to benefit recreational fishing for wild brook trout. Applicants utilized well thought out methods, timelines, and partners, addressed a state or local level planning need, contained a monitoring plan, and incorporated public outreach.

The review team agreed upon the following ranking:

Rank	Name	State	Lead Organization	EBTJV request	Nonfederal contributions	Nonfederal ratio	Total contributions	Score	Summary
1	EBTJV Operations	WV	CVI	\$ 125,000	\$ 125,000	1.00	\$ 125,000.00		Continue to serve as a hub for science, data, and communications on wild brook trout, and to promote and fund brook trout conservation projects in the Eastern geographic range.
2	Restoration and Habitat Jocassee Gorges, SC	SC	South Carolina DNR	\$ 50,000	\$ 290,334	5.81	\$ 354,425.00	91	We propose to restore native Eastern Brook Trout populations in four streams in three patches totaling 14.6 km (9.1 miles) of habitat. Our proposal includes comprehensive restoration, including non-native removals (eradication) above barriers in 8.7 km (5.4 miles) of stream, physical in-stream habitat enhancement/restoration in all 14.6 km, followed by reintroduction of native Brook Trout in 14.6 km.
3	Burke's Pond Dam Removal, MA	MA	Squan-a-Tissit Chapter of TU	\$ 50,000	\$ 437,300	8.75	\$ 437,300.00	74	Burke's Pond Dam is the only remaining permanent barrier to the migration of fish and other aquatic species along Sucker Brook. Project will remove Burke's Pond dam, opening an additional 1.1 mile of Sucker Brook upstream (4 miles total reconnected), and also improve public safety, add large instream wood, restore 2-3 acres riparian habitat, relocate brook trout to the stream from nearby Gulf Brook.
4	Waits River Culvert Replacements, VT	VT	Trout Unlimited	\$ 50,000	\$ 90,000	1.80	180000	68	This project proposes to replace two proximate culverts on the same unnamed tributary to the Waits River and reconnect the remaining two miles of upstream habitat. Supporting work by project partner Vermont Fish and Wildlife Department will also be restoring 3.2mi of in- stream woody habitat both in the tributary upstream and downstream of the culverts, but also on the adjacent stream network, amplifying the overall benefit to stream reconnection at this location. This will open 2 miles of headwater stream (reconnecting 5.7 mi total).
5	Batavia Kill Reconnection, NY	NY	Trout Unlimited	\$ 49,870	\$ 165,000	3.31	\$ 310,000.00	67	The Batavia Kill project will include the replacement of three culverts that will reconnect over 4 miles of high-quality headwater habitat for Brook Trout. Location chosen as the highest priority site for potential culvert replacement project as part of TU's East Branch Delaware River Trout Habitat Improvement Project.
6	N. Fork Bens Creek Passage and Wood, PA	PA	Somerset Conservation District, PA	\$ 50,000	\$ 65,742	1.31	\$ 65,742.00	63	The proposed North Fork of Bens Creek (PA) large wood fish habitat and aquatic passage project is intended increase the biomass of the stream and buffer the watershed against a changing climate. This will be accomplished through the installation of strategically placed large woody material and upgrading two failing stream crossings in the upper basin. The project goals are to increase stream connectivity, encourage infiltration and groundwater recharge, and engage floodplain reconnection and protection. An additional project focus is to increase the diversity of aquatic and riparian habitats by increasing the floodplain water table, managing sediment deposition, creating side channels, fish refuge, floodplain wetlands and encouraging fine debris and leaf pack storage.
7	E. Calais Mill Dam Removal, VT	VT	Friends of the Winooski River	\$ 50,000	\$ 50,000	1.00	\$ 524,000.00	58	Removing the East Calais Mill dam would open 2.5 miles of main stem upstream habitat and 10 miles of upstream tributaries to the wild brook trout population, while a dam in the lower end of the Kingsbury will remain a barrier to other salmonid populations downstream. Removing this impoundment will additionally re-establish up to 7 acres of connected floodplain. This floodplain will more effectively manage flood waters and will be restored to floodplain forest.
TOTALS				\$ 424,870	\$ 1,223,376	2.88			

EBTJV Pitch Summaries

Purpose

- A “toolbox” language and information that anyone can use to promote EBTJV
- Use this to hook and draw in a specific audience at which point an “ask” of some kind can be made
- Follow the ABT format – And, But, Therefore

Why brook trout are important / “AND”

- Eastern Brook Trout are a recreationally important species
- Anglers bring millions of dollars to local economies
- They represent clean water, forested mountains, beautiful streams
- They are an icon in many states.
- Their presence tells us about the health of our waters
- They are a beautiful fish

What is the concern / “BUT”

- Shockingly, brook trout occupy less than 30% of their historic range
- Loss and ongoing degradation of their sensitive homes have resulted in them only being found in a fraction of the waters where they once live
- Threats are increasing.

What is EBTJV / “THEREFORE”

- The EBTJV was formed to protect, restore and enhance aquatic habitat throughout the brook trout's native range
- The EBTJV works with partners to enact meaningful conservation, science, and recovery projects that are showing real conservation benefits
- The EBTJV is a unique network that connects the leading scientists, fisheries managers, and experts from state, federal, NGO and other on-the-ground practitioners across 17 states
- The EBTJV is the leading authority on brook trout science and management in its eastern native range
- Through science-based planning we have identified strategies and actions to guide conservation decisions at local, regional, and range-wide levels.
- It is important for us all to work on improving conditions for Brook Trout as it helps them, along with everyone and everything downstream

EBTJV Catchment Updater Template Language

Eastern Brook Trout are a recreationally and culturally important species and an icon in many states. However, degradation of the cold, clean, forested waterways the species need to survive means Brook Trout are now only found in a fraction of the waters where they once lived. To effectively conserve and manage this species in the face of increasing threats, we need to accurately know where the species still lives.

Through a tremendous collective effort resulting from years of field surveys by state, federal, and nonprofit resource biologists, the Eastern Brook Trout Joint Venture has recently released an update to its celebrated Brook Trout range wide assessment. This assessment shows the currently known distribution of wild brook, brown, and rainbow trout across the Brook Trout's entire eastern native range.

Audience Group 1: Local communities; general public (Platform: social media followers or those on email listservs; leverage existing PR networks of SC Member agencies)

Do you know where Brook Trout are in your state and community? Explore EBTJV's range-wide assessment to see where Brook Trout can be found near you. Then visit easternbrooktrout.org or your state's fisheries management agency to learn more about what is being done to conserve this iconic species and what you can do to help.

Audience Group 2: Scientists/managers and policy/decision makers (Platform: direct emails; leverage existing PR networks of SC Member agencies).

The results from the EBTJV's range-wide assessment provide the foundational knowledge needed to guide and prioritize Brook Trout conservation efforts across their range. EBTJV and its partners are using this map to track conservation progress, support the case for increased protection and funding, and highlight areas in need of increased research and monitoring. Visit easternbrooktrout.org (insert new public or data link when available) to explore or download the catchment data yourself and discover new ways these data can be used to help conserve this iconic species.



01/09/23

Eastern Brook Trout
JOINT VENTURE
A Fish Habitat Partnership

EBTJV workplan (2024)

The purpose of this document is to set targets for activities of the Coordinator and key volunteers and contractors with the Eastern Brook Trout Joint Venture. Activities are organized according to their fit under one of four “Conservation Goals” as outlined in the 2018 Action Strategies document.

The vision of the Eastern Brook Trout Joint Venture is to ensure healthy, fishable wild Brook Trout populations throughout their historic eastern U.S. range.

Outline: EBTJV’s Conservation Goals in bold guide the organization of work elements, which are shown in small letters.

- 1. Conserve, enhance or restore wild Brook Trout populations that have been impacted by habitat modification, non-native species, and other population level threats.**
 - a. NFHP funding/annual RFP
 - b. Assist partners in finding funds from other programs
 - c. Promote EBTJV priorities to other funding programs
- 2. Encourage partnerships among management agencies, researchers, and stakeholders to seek solutions to regional environmental and ecological threats.**
 - a. Support existing partnerships
 - i. Other FHPs
 - ii. Chesapeake Bay
 - b. Seek opportunities to create new partnerships (Delaware)
- 3. Develop and implement outreach and educational programs to raise public awareness about the challenges that wild Brook Trout populations are facing.**
 - a. Create communications plan
 - b. Use outlets
 - c. Mini-grant program
- 4. Develop support for program implementation to perpetuate and restore wild Brook Trout populations throughout their historical eastern U.S. range.**
 - a. Catchment dataset
 - b. EBTJV operations/ committees/meetings
 - c. Strategic priorities (and revisions)
 - d. Funding/fundraising
 - e. Training (managers/scientists)

Items with an * need more attention and/or are aspirational. Items highlighted in yellow are immediate priorities

Goal 1: conserve, enhance or restore wild brook trout populations that have been impacted by habitat modification, non-native species, and other population level threats.

Task	Timeline	Funding	Who
<i>Objective 1: Promote, assist awarding of, and track EBTJV/NFHAP funding</i>			
Revise project funding process and RFP to reflect EBTJV and NFHAP priorities.	August-October	Operational	Coordinator EBTJV review team
Revise project funding process and RFP to reflect EBTJV and NFHAP priorities.	August-October	Operational	Coordinator EBTJV review team
Promote RFP and conservation priorities via email and regular e-newsletters though fall and winter	October-January	Operational	Coordinator

Promote RFP and conservation priorities via social media and website	October-January	Operational	Coordinator
Assist applicants with process of applying via EBTJV website, answer questions, and refer to additional resources	October – January	Operational	Coordinator
Meet with applicants to review their project fit prior to applying	October – Jan (with a cutoff date)	Reviewer time match in-kind	State and federal points of contact
Review and rank EBTJV-NFHP proposals	Completed March 6	Operational, Reviewer time match in-kind	Coordinator and EBTJV review team
Write EBTJV operational funding application including use of up to \$125k	Budget drafted 3/1, DB entries done	Operational	Coordinator
Approve EBTJV project list including operational funding	March SC meeting		SC, Chairman

Goal 1, objective 1 (continued): Promote, assist awarding of, and track EBTJV/NFHP funding			
Submit project list to NFHAP	31-Mar	Operational	Coordinator
Grant Solutions support/ FWS agreements	Early-mid summer, late fall	FWS leverage	FWS
Communicate with project applicants and awardees with status of awards.	Mar-Jun	Operational	Coordinator
Request annual project status updates from awardees	Nov, Feb	Operational	Coordinator, FWS reps
Goal 1 (continued), Objective 2: Assist partners in obtaining funds from other avenues (e.g., help groups like local watershed groups identify funding opportunities and support their applications where appropriate)			
Share regional and national funding program RFP, priorities, dates, etc. via email and website	Ongoing	Operational	Coordinator
Write support letters for partners	As needed	Operational	Coordinator
Goal 1 (continued), Objective 3: Promote EBTJV priorities to other funding programs			
Communicate with NFWF to ensure EBTJV priorities and knowledge are utilized	Generally, fall prior to winter/spring RFP season	Operational	Coordinator

Goal 2 encourage partnerships among management agencies and stakeholders to seek solutions to regional environmental and ecological threats.

Task	Timeline	Funding	Who
Objective 1: Support existing partnerships			
Contribute to Chesapeake Bay Partnership (CBP) Brook Trout Workgroup discussions and goal setting	2 meetings/yr	Operational; team member in-kind time	Coordinator and state contacts from MD, PA, WV, VA, and NY
Support tracking of the CBP Brook Trout Outcome	Dec 2022-March 2024	Currently, GIT funding via TU (\$10k)	Coordinator
Write up report components on stakeholder engagement and cross-GIT collaboration	Mar-24	Currently, GIT funding via TU (\$10k)	Coordinator
Support work of adjacent FHPs*	Ongoing	Operational	Coordinator
Maintain and update lists of MOU signatories and partners. "Maintain relationships"	Spring 2024		
Create year end list of who we did communicate directly with and work within that prior year.		Operational	Coordinator
Communicate with NEAFWA and SEAFWA*		Operational	Coordinator

Present EBTJV overview to NEAFWA meeting in a NFHP segment	April 23 2024	Operational	Coordinator
Goal 2(continued), objective 2: Seek opportunities to create new partnerships			
Participate in scoping for a Delaware Brook Trout Work Group	Ongoing as of March 11, 2024	Operational/ seek DWCF funding?	Coordinator
Goal 2 (continued), Objective 3: Promote EBTJV priorities to other funding programs			
Communicate with NFWF so they may integrate EBTJV priorities and data into their business plans*	Generally, fall prior to winter/spring RFP season	Operational	Coordinator
Goal 3 develop and implement outreach and educational programs to raise public awareness about the challenges that wild brook trout populations are facing.			
Objective 1: Create a communications plan.			
Task	Timeline	Funding	Who
Define target audiences, outline pitch language	Completed Feb 2024	Operational; team member in-kind	Communications Workgroup
Develop initial outreach messaging (catchment update)	Completed Feb 2024	Operational; team member in-kind	Communications Workgroup
Goal 3 continued, Objective 2: Maintain and improve EBTJV website			
Convene monthly to discuss sections of the website	June-Nov 2023	Operational; team member in-kind	Website 'team'

Add content regularly as needed (e.g., project data, partner bios, funding programs)		Operational	Coordinator
Prepare and submit report on statistics on site visits and usage	annually	Operational	Ferguson-Lynch
Goal 3 continued, Objective 3: Utilize e-newsletters, social media, and other media outlets			
Respond to media inquiries	As needed	Operational	Coordinator
write articles or support partners in writing articles. Target 2/yr	As needed	Operational	Coordinator, members
Send ≈10 e-newsletters per year* target minimum 30% open rate	Monthly	Operational	Coordinator
Submit ≈1 post/month to Instagram and Facebook	Monthly	Operational	Coordinator
Goal 3 Continued, Objective 4: Manage EBTJV Coldwater Stewardship Mini Grant Program			
Communicate with awardees to ensure they are requesting reimbursement and properly documenting activities and expenses	~Monthly in 2024	NFHP funding FY22	Coordinator, CVI staff
Ensure awardees are making progress towards their stated goals and EBTJV meets its deliverables	~Monthly in 2024	NFHP funding FY22	Coordinator

Project reporting and financial reporting at close out	Nov-24	NFHP funding FY22	Coordinator, CVI staff
Goal 4 develop support for program implementation to perpetuate and restore wild brook trout populations throughout their historical eastern U.S. range. (Build Internal, support external capacity)			
Goal 4, Objective 1: update ebtjv catchment dataset			
Task	Timeline	Funding	Who
Provide support to data stewards on use of catchment tool	Jan-Dec	Operational (\$13K in 2023)	Science and Data Committee, w/J. Coombs
Collect, compile, QAQC, upload data to catchment tool	Mar-24	Varies, use as match if allowed	Federal and state data stewards
Run patch algorithm and output essential range wide statistics	Mar-April 2024	TBD or match	J. Coombs
Update public facing data site	April -May 2024	TBD or match	SDC and J. Coombs
Analyze and write up results	2024-2025	TBD	Science and Data Committee
Goal 4 continued, Objective 2: maintain EBTJV business operations			
Set quarterly meetings and agenda	Mar, Jun, Sept, Dec	Operational	Coordinator, Chairman
Plan/execute an annual meeting with at least 30 participants	September	Operational	Coordinator, team?
Ensure committees are operational and support their meeting structure		Operational	Coordinator, Committee chairs

(see appendix A)			
Maintain list of science and data needs	Ongoing	Operational	Science and Data Committee
Complete and share out revisions to workplan	11-Mar	Operational	Coordinator, Exec. Team
Approve annual workplan	19-Mar		SC, Chairman
Prepare and submit grant and financial reporting	Per grant agreements		EBTJV, CVI
Goal 4 continued, Objective 3: review and update strategic priorities (See appendix C)			
Identify process for updating strategy*	By June 30	Operational	Coordinator
Ensure the Conservation Strategy remains current, relevant, and realistic and is representative of available data and information.		Operational	Coordinator
Determine whether there is a need to revise the range-wide habitat objectives, particularly in the context of the catchment scale assessment that is underway		Operational (outside funding might be needed)	Coordinator and SDC
Goal 4 continued, Objective 4: Ensure EBTJV remains a functioning Fish Habitat Partnership under the National Fish Habitat Partnership			
Engage with NFHAP through board meetings	ongoing	Operational	Coordinator and S. Perry
Engage with NFHAP through committee work	ongoing	Operational	Coordinator and S. Perry

Provide annual report of accomplishments to NFHP	31-Mar	Operational	Coordinator
Provide application to NFHAP for EBTJV operations, data projects, and partner projects	31-Mar	Operational	Coordinator
Keep EBTJV's project data up-to-date on the NFHAP project database (specific: Complete process of adding all FY22 and 23 project data to NFHP portal)	Completed as of March 6	Operational	Coordinator
Maintain 'board buddy' relationships	Ongoing	Operational	Coordinator
Goal 4 continued, Objective 5: Ensure adequate funding for other EBTJV priority initiatives			
Maintain EBTJV budget	Ongoing	Operational	Coordinator
Approve EBTJV budget	June		EXEC team or SC
Goal 4 continued, Objective 5 continued: Ensure adequate funding for other EBTJV priority initiatives			
Scope out and prioritize unmet funding needs of the EBTJV	Present to SC at June meeting		Coordinator; fundraising team
Seek private and foundation funding*			Coordinator; fundraising team/Vedra
Communicate with current individual donors (keep up with thank yous and cultivating relationships)*			Beyond the Pond;Coordinator; Steering Committee

Determine best uses of the current private donor funds*			Coordinator; fundraising team; SC
Objective 6: Support training and communication needs of managers and biologists			
Task	Timeline	Funding	Who
Lunch n learn series*		seek funding	
Develop list of communications and training needs*	Ongoing	Operational	Coordinator

Appendix A Organizational Structure

Guided by EBTJV's Charter/By-Laws, the Steering Committee is a self-directed group of its members interested in achieving the partnership's vision of healthy coldwater systems with fishable wild brook trout populations throughout their historic eastern geographic range. It has no authority beyond those of its individual members. Participation on the EBTJV Steering Committee is voluntary. The Steering Committee is the decision-making body for the EBTJV partnership and has oversight responsibility for all EBTJV activities. The Chair and Vice-Chair positions are 2-year roles by election of the Steering Committee. A quorum (10) is needed to pass votes. The activities of the Steering Committee directly support the Eastern brook trout Action Strategies and Eastern brook trout Roadmap to Conservation. The Steering Committee meets quarterly by webinar and annually in person.

Workgroups currently include:

- **Project Review Team** : to revise and release the annual project RFP, and to review, score, and rank proposals for consideration by the EBTJV Steering Committee and the NFHP Board.

- **Science and Data**: To facilitate applied research directed to answer questions relative to brook trout conservation actions and the establishment of a centralized, web-based, data management system. This committee also oversees the assessment data and products and has a workgroup dedicated to disseminating the results of the 2023 update to the range-wide assessment.

- **Outreach and Communications**: To engage partners for the purpose of seeking solutions to regional and ecological threats, raise awareness of brook trout conservation outcomes among the Eastern brook trout Joint Venture's community of support, and communicate the partnership's accomplishments to targeted audiences. This team has two sub groups: EBTJV website and 2023 update to the range-wide assessment.

- **Fundraising**: this team is not formally included yet in the EBTJV organizational structure, but has been working to develop a fundraising workplan since mid-2023. It interacts with the Outreach and Communications group to craft effective messaging.

The EBTJV also formulated a Memorandum of Understanding (MOU) that confirms the intent of state, tribal, and federal fishery resource agencies, as well as interested non-governmental organizations, to participate in and support our Fish Habitat Partnership with its efforts to conserve wild brook trout and their habitats in the eastern portion of the United States. As of December 2019, 38 organizations have signed the EBTJV's MOU.

The Steering Committee is supported by a full-time Coordinator who has many duties including running the business operations of the EBTJV, promoting the value of EBTJV's work and partners' work to conserve brook trout habitat, ensuring the committees are running effectively, writing and reporting on grants, convening meetings, responding to inquiries and requests, communicating

with partners, and overseeing the annual conservation project RFP. The Coordinator also participates on the national level via the NFHP Partnerships and Science and Data Committees.

The EBTJV's operations are supported by the Canaan Valley Institute, a 501c3 non-profit organization based in Davis, WV, that works to create healthy communities, vibrant economies, and clean watersheds across Central Appalachia. Beginning in 2021, CVI has held grants for EBTJV operations, primarily NFHP grants but also include smaller outside awards for the Coordinator's time. CVI supports the Coordinator's position (payroll, benefits); makes payments to vendors and contractors, tracks finances and and submits reports for the operational grants, and otherwise ensures its operations sufficient to maintain its status as a 501 c3 non-profit eligible to receive federal funding. Under the FY22 grant, it has also supported disbursement and management of grant funds as sub-awards to four organizations for the Coldwater Stewardship Small Grant Program.

Beyond the Pond, the 501 c3 arm of NFHP hosts our individual giving platform. BTP has also held several Multi-State Conservation Grants that have benefited EBTJV.

The EBTJV is grateful for the continued support of the USFWS and its Fish and Wildlife Conservation Offices (FWCO) in Regions 4 and 5. These offices are critical to the habitat project funding process. Most importantly, they administer the funds that allow EBTJV/NFHP projects to happen (writing grant agreements, working with applicants to execute all steps, reviewing and approving reports, distributing fund draws, and tracking short and longer-term project success). In addition to these duties, biologists also spend time assisting applicants with project generation, partnership formation, provide technical assistance, and outreach.

Appendix B, MOU Signatories, 2019

Organization Date MOU Signed

American Fisheries Society 11/9/2006

American Fly Fishing Trade Association 11/3/2010

American Sportfishing Association 1/2/2007

Bureau of Land Management 8/17/2009

Connecticut Department of Energy and Environmental Protection 5/23/2007

Doweast Salmon Federation 9/11/2015

Eastern Band of Cherokee Indians 4/8/2014

Federation of Fly Fishers 2/22/2012

Georgia Department of Natural Resources 11/28/2006

Izaak Walton League of America 2/8/2007

Maine Department of Inland Fisheries and Wildlife 11/13/2006

Maryland Department of Natural Resources 10/30/2006

Massachusetts Division of Fish and Wildlife 1/25/2007

National Park Service 12/6/2006

Native Fish Coalition 12/31/2018

New Hampshire Fish and Game Department 10/27/2006

New Jersey Department of Environmental Protection, Division of Fish and Wildlife
12/15/2006

New York State Department of Environmental Conservation 12/13/2006
North Carolina Wildlife Resources Commission 11/30/2006
USDOI - Office of Surface Mining 5/27/2008
Pennsylvania Fish and Boat Commission 12/1/2006
Protect RI Brook Trout 12/2/2018
Rhode Island Department of Environmental Management 3/28/2007
Sea Run Brook Trout Coalition 12/14/2012
South Carolina Department of Natural Resources 3/14/2007
Tennessee Wildlife Resources Agency 3/7/2007
The Trust for Public Lands 4/17/2007
Trout Unlimited 1/18/2006
US EPA 11/7/2011
US Fish and Wildlife Service, Region 5 1/29/2007
USDA Forest Service, Eastern Region 12/14/2006
USDA Forest Service, Southern Region 11/21/2006
Vermont Department of Fish and Wildlife 12/13/2006
Virginia Department of Game and Fish 1/29/2007
Western Pennsylvania Conservancy 12/7/2012
West Virginia Department of Natural Resources, Wildlife Resources 2/15/2007
Wild Trout Flyrodders 2/22/2012
Trout Power 12/1/2019

Appendix C. EBTJV Strategies

EBTJV's purpose is clear: coordinated conservation to ensure fishable populations of wild brook trout for future generations.

Brook trout have been lost from many of the watersheds they once inhabited, because of factors including logging, sedimentation, elevated temperatures, and non-native species. The EBTJV was established in 2004 to collaboratively address this alarming decline.

Our operational priorities fall into three core areas:

- 1) recruiting and supporting fish habitat conservation projects that address priority wild brook trout conservation needs;
- 2) developing and maintaining a range-wide salmonid assessment that is used in conservation planning; and
- 3) serving as a communications hub for brook trout science, management, and outreach.

Our Strategic Plan further outlines priorities:

Conservation Goals
Conserve, enhance or restore wild brook trout populations that have been impacted by habitat modification, non-native species and other population level threats.
Encourage partnerships among management agencies and stakeholders to seek solutions to regional environmental and ecological threats.
Develop and implement outreach and educational programs to raise public awareness about the challenges that wild brook trout populations are facing.
Develop support for program implementation to perpetuate and restore wild brook trout populations throughout their historical eastern U.S.range.

Key Conservation Actions
Increase recreational fishing opportunities for wild brook trout
Conserve and increase habitats that support robust wild brook trout populations
Restore and reconnect suitable habitats adjacent to robust wild brook trout populations
Conserve genetic diversity of wild brook trout populations
Minimize threats to wild brook trout populations (e.g., degraded water quality, invasive species, altered hydrologic regimes)
Conserve unique wild brook trout life history strategies (e.g., lacustrine populations,large river populations, and coastal populations)

Range-wide Goals and Objectives, supported by EBTJV assessment.

GOALS	OBJECTIVES (by 2022)
Increase the average size (km ²) of wild brook trout patches, which is currently 19 km ²	Increase the size (km ²) of 30 wild brook trout patches.
Restore wild brook trout to catchments where they were extirpated	Establish wild brook trout in 15 extirpated catchments.
Maintain the current number of wild brook trout patches (i.e. no net loss)	-Retain at least 6,022 allopatric wild brook trout patches (1.1) across the EBTJV geographic range. -Retain at least 3,838 sympatric wild brook trout patches (1.2, 1.3, and 1.4) across the EBTJV geographic range.
Increase connectivity within and among wild brook trout catchments	Complete Aquatic Organism Passage projects within 45 wild brook trout catchments.

The EBTJV works in all habitats for wild brook trout including streams, rivers, coastal rivers, lakes, and ponds, in all or portions of the following states: CT, GA, ME, MD, MA, NJ, NH, NY, NC, OH, PA, RI, SC, TN, VT, VA, WV. This encompasses the historic US eastern range of brook trout, except the Midwest. The causes for brook trout declines within this region are similar. Also, by functioning at this large geographic scale, the EBTJV is better positioned to secure adoption of policies favoring brook trout habitat conservation while maximizing the energies and expertise of existing partnerships.