

**ASMFC – EBTJV Contract Number:** 015-0602

**Grant Title:** Promote Strategic Fish Habitat Conservation through Regionally-Coordinated Science and Collaboration

**Report Number:** January 1, 2015 – December 31, 2015 Final Report

**Objective 1:** Fill gaps in the National Fish Habitat Assessment and its associated database to empower strategic conservation action supported by broadly available scientific information.

Milestones:

- Each FHP will further its resource assessment work and/or refine their science and data needs.
- The FHPs will actively contribute data and participate in the development and refinement of the National Fish Habitat Assessment (coastal and freshwater) and Decision Support tools.
- Building upon work from previous Whitewater to Bluewater grants the FHPs, in partnership with LCCs, will continue to collect, and compile regional fish population and aquatic habitat data for use in decision support tools for aquatic habitat restoration and conservation actions, and share data of mutual need.
- Efforts will focus on areas where SARP, EBTJV, and ACFHP overlap to determine current connectivity activities and identify gaps and will allow the FHPs to establish connectivity teams where applicable (internal and external to overlapping areas).

*Accomplishments:*

- 1) The EBTJV worked with its web portal contractor to finalize the fields for the partnership's web-based Project Tracking Database and began working with the coordinator who is developing the National Fish Habitat Partnership's Project Tracking Database to determine the best way to integrate the two systems. The EBTJV also reviewed its portion of the National Fish Habitat Partnership's [Project Tracking Database](#).
- 2) The EBTJV Coordinator worked with the North Atlantic Land Conservation Cooperative's Science Coordinator and Downstream Strategies to complete a statistical [model](#) linking present-day Brook Trout distributions to land use/land cover conditions throughout the Chesapeake Bay watershed. The outcomes from this model includes: independent measures of anthropogenic stress (urbanization, agriculture, and mining) and natural habitat quality (water temperature and precipitation), which allow for priority Brook Trout conservation areas to be identified at multiple spatial scales; predictions of likely future conditions of Brook Trout population status under a range of climate change scenarios; a web-based decision support tool that provides a user-friendly interface to examine and manipulate data and model results; an ability to query, map and download data and model results; the ability to integrate other relevant data and model products (e.g., EBTJV "patches," TNC dispersal barriers); a sophisticated, interactive optimization and ranking algorithm that allows for construction of multiple, optimized Brook Trout conservation strategies that vary depending on user-defined preferences; the ability to simulate brook trout population response to

spatially-explicit changes in land use (e.g., loss of forest) or in response to restoration action within the context of current or future climate; and, the ability to download or print data or maps created within the web-based decision support tool. The EBTJV reviewed and provided feedback on North Atlantic LCC/Downstream Strategies' [summary report](#) describing the pilot Brook Trout Modeling Project developed for the Chesapeake Bay watershed.

- 3) The EBTJV Coordinator assisted in planning a two-day [workshop](#) that was focused on the various modeling approaches that have been applied toward the conservation of cold, high-elevation stream habitat supporting wild Brook Trout populations in the northeast portion of the U.S. The workshop was sponsored by the USGS Northeast Area Office in support of the Eastern Brook Trout Joint Venture, and the North Atlantic and Appalachian LCC communities. The objectives of the workshop were to bring together, in a facilitated workshop format, researchers in USGS and with other institutions that have been developing Brook Trout models and assessments to more effectively share data resources and to assure that shared data resources is being fully reconciled among researchers; develop a document or documents that provide guidance to the management community on application of models and assessments and their interpretation; investigate the use of a shared database for information relevant to Brook Trout research that would act as a clearing house for both natural resource managers and researchers; investigate and suggest steps that would make regional temperature data available for researchers and managers, including information and models being developed for assessment of Brook Trout as well as temperature data being developed and consolidated for other purposes; and, begin a process that would provide guidance for developing models and assessments for other species or groups of species that would take advantage of the research community's shared experience regarding Brook Trout research.
- 4) The EBTJV performed analyses of its range-wide [Brook Trout assessment](#) at the catchment scale for use in identifying priority areas for Brook Trout conservation actions. The initial focus is on using the EBTJV HUC 12 [subwatershed priority scores](#) in combination with the percentage of each subwatershed's area (km<sup>2</sup>) containing allopatric populations of wild Brook Trout ([EBTJV Classified Catchments](#)). The intent is to use these two metrics to assign each of these subwatersheds (n=6,450) a priority level (i.e. a tiered approach).
- 5) The EBTJV participated in a [workshop](#) focused on conserving Brook Trout in the Deerfield watershed, and rolling out a related [decision support tool](#).
- 6) The EBTJV participated in conference calls with members of the Atlantic Coastal Fish Habitat Partnership (ACFHP), Southeast Aquatic Resources Partnership, Ohio River Basin Fish Habitat Partnership, and Appalachian Land Conservation Cooperative that entailed providing updates on the respective organization's activities, discussing opportunities to collaborate, and furthering coordination among these regional conservation partnerships.

**Objective 2:** Broaden the community of support for fish habitat conservation by effectively communicating the conservation outcomes produced by the Eastern Fish Habitat Partnerships, as along with advancing new opportunities and voluntary approaches for conserving fish habitat.

Milestones:

- Communicate the results of NFHP, FHP, and partner-led habitat conservation projects via web, print and in-person outreach, aided by strategies previously developed via the Whitewater to Bluewater partnership.
- Continue to implement Sustainable FHP plans developed through a previously conducted organizational review/capacity assessment with knowledge gained via participation in the national workshop to enhance the effectiveness and capacity of the FHPs to achieve their missions and goals.

*Accomplishments to Date:*

- 1) The EBTJV Coordinator posted 102 Brook Trout conservation media stories on the [EBTJV Facebook page](#) , which resulted in more than 71,000 views. During the performance period (January-December 2015), the number of individuals who like the EBTJV Facebook page increased from 1,758 to 2,276.
- 2) The EBTJV Coordinator developed the partnership's nomination for the [2015 NFHP 10 Waters to Watch Program](#), which was selected for inclusion in this national initiative.
- 3) The EBTJV worked with Freshwaters Illustrated to produce a film that communicates the nature, value, and conservation needs of Brook Trout in the eastern portion of the U.S.

**Objective 3:** Achieve measurable habitat conservation results through strategic actions of the Eastern Fish Habitat Partnerships that improve ecological condition, restore natural processes, or prevent the decline of intact and healthy systems leading to better fish habitat conditions and increased fishing opportunities.

Milestones:

- Support regular meetings of the individual FHP Steering Committees to engage with partners, identify opportunities to implement the FHP Strategic Plans, and prioritize actions toward protection and restoring function of eastern aquatic habitats.
- Support FHP staff that facilitates implementation of Strategic Plan activities towards protecting and restoring function of eastern aquatic habitats, communicating those accomplishments to stakeholders, and coordinate science objectives supporting fish habitat conservation efforts.

*Accomplishments to Date:*

- 1) The EBTJV Coordinator and the partnership's Executive Leadership Team held periodic conference calls to discuss business-related issues.

- 2) The EBTJV Steering Committee held three [meetings](#) via conference call.
- 3) The EBTJV convened a [meeting](#) of the partnership's Steering Committee, Conservation Strategy and Science/Data committees September 28-30 2015, which was focused on incorporating the results from the partnerships recently completed assessment of Brook Trout status at the catchment scale into its strategic plan.
- 4) The EBTJV Coordinator chaired a team that developed a draft [Brook Trout Management Strategy](#) aimed at achieving the Brook Trout Outcome identified in the June 2014 Chesapeake Bay Watershed Agreement. The EBTJV's key strategic conservation actions, priority subwatersheds, and its classification of Brook Trout patches were integral components of this management strategy. The EBTJV Coordinator collaborated with Chesapeake Bay Program Staff, USDA Forest Service/UMass researchers, and State Fish and Wildlife Agency Staff (MD, NY, PA, VA, and WV) to implement the Brook Trout population monitoring program described in the draft Brook Trout Management Strategy.
- 5) The EBTJV received six Brook Trout conservation project proposals in response to the partnership's request for proposals, which were reviewed and [ranked](#) for [FWS-NFHAP funding support](#).
- 6) The EBTJV developed its operational project proposal [operational project proposal](#) for FY16 FWS-NFHAP funding considerations.
- 7) The EBTJV developed and submitted its [Work Plan and Accomplishment Report](#) to the Fish and Wildlife Service, which is required for FY16 FWS-NFHAP funding considerations.