

# **Conserving the Eastern Brook Trout: Action Strategies (Nov. 2011)**

## **Review Summary and Recommendations**



Eastern Brook Trout  
**JOINT VENTURE**  
A Fish Habitat Partnership

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## Background

The Eastern Brook Trout Joint Venture (EBTJV) completed the first version of its action strategies for conserving brook trout (Conservation Strategy) in August 2007. These action strategies are aimed at achieving the EBTJV's principal goals and are used to guide the partnership's decision-making as well as measuring its progress and successes. The EBTJV Steering Committee purposely decided when it adopted the Conservation Strategy, that it would be a living document and therefore would be updated whenever it was warranted. In keeping with this precept, the Conservation Strategy was revised in November 2007, July 2008, and November 2011. However, the focus of these revisions centered primarily on changes to the regional and range-wide habitat objectives, which occurred as a result of periodic recommendations made by the Northern and Southern Workgroups.

Since the Conservation Strategy has been in place for a little more than five years, it was the Steering Committee's desire to initiate a full review of all components of the plan and so they tasked the EBTJV Coordinator with the responsibility of leading the effort of ensuring the Conservation Strategy is current, relevant, and realistic and is representative of the pertinent data and information that is now available. The following narrative describes segments of the Conservation Strategy that should be considered for revisions during 2013 along with recommendations for possible action by the EBTJV Steering Committee.

## EBTJV Conservation Strategy Revision Needs and Recommendations

### *Introduction*

In the Conservation Strategy's Introduction, one of the reasons cited for forming a broad-scale, range-wide conservation strategy was to improve technology transfer among partners. A section describing the ways the EBTJV is facilitating the effective transfer of valuable developments in brook trout management technologies among its partners should be added to the Conservation Strategy.

**Recommendation: Task the Science and Data Subcommittee, in concert with the EBTJV Coordinator, with identifying and describing the ways the EBTJV is facilitating effective transfer of brook trout management technologies among its partners.**

### *Range-wide Status of Brook Trout Populations*

The Conservation Strategy describes the 2005 range-wide assessment findings at the 6th level hydrologic unit watershed (sub-watershed). However, a finer scale assessment at the catchment level has been recently completed for states in the southern portion of the EBTJV geographic range, which found brook trout population status is vastly different than what was determined at the sub-watershed scale. So there is a need to incorporate the assessment method(s) used to determine brook trout status at the catchment scale into the Conservation Strategy in conjunction with a summary of the results. The Conservation Strategy also uses the findings from the assessment at the sub-watershed level as the foundation for the EBTJV's vision, goals,

objectives, strategies, procedures, and guidelines. Each of these planning components should be reviewed in light of the catchment level assessment findings.

**Recommendation: Task the Conservation Strategy Subcommittee, in concert with the EBTJV Coordinator, with incorporating the catchment scale assessment methods and results into the Conservation Strategy and reviewing the range-wide and regional habitat objectives to determine if they should be modified in light of the findings from this finer scale evaluation.**

Intact stream populations of brook trout were initially defined as sub-watersheds where >90% of historic brook trout habitat was occupied. This designation was later changed to >50% occupied for management purposes. The reasoning for this change should be described in the Conservation Strategy.

**Recommendation: Task the Conservation Strategy Subcommittee, in concert with the EBTJV Coordinator, to add a section to the Conservation Strategy that describes the various brook trout status designations currently being used by the partnership.**

### *Key Priorities*

Included among the key priorities that were established to accomplish the Conservation Strategy goals are the following:

3. Monitor and evaluate brook trout population responses to habitat protection, enhancement, and restoration projects; and,
5. Increase recreational fishing opportunities for wild brook trout.

If the EBTJV is monitoring and evaluating the brook trout population responses to the various conservation actions being implemented then the processes being used for the monitoring and evaluation should be described along with how the outcomes from these conservation actions are being shared among the EBTJV community. Also, if EBTJV-related conservation actions have increased recreational fishing opportunities then this needs to be quantified and reported.

**Recommendation: Task the Conservation Strategy Subcommittee, in concert with the EBTJV Coordinator, with determining the processes being used to monitor and evaluate brook trout population responses (including increases in recreational fishing opportunities) to EBTJV-related conservation actions.**

**Recommendation: Task the Outreach and Education Subcommittee, in concert with the EBTJV Coordinator, with developing ways to share the conservation outcomes and increases in recreational fishing opportunities among the EBTJV community of support.**

### *Principal Goal I*

The system the EBTJV is using to prioritize sub-watersheds for protection, enhancement, and restoration actions should be described under the Principal Goal I section. This system entails deriving scores using the criteria from models that effectively predicted sub-watershed status. Five sub-watershed metrics: % forest; % agriculture; road density; acid precipitation; and riparian forest were used to determine the probability of each sub-watershed being intact. Higher priority scores are given to sub-watersheds with high probabilities of being surrounded by intact sub-watersheds. The current prioritization system also needs to be reviewed for its continued relevance once the catchment-scale assessment is completed across the entire EBTJV geographic range. The EBTJV should also consider summarizing the distribution of the sub-watershed priority scores for all fish habitat conservation projects the partnership has recommended to the US Fish and Wildlife Service (FWS) for National Fish Habitat Action Plan (NFHAP) funding.

**Recommendation: Task the Conservation Strategy Subcommittee, in concert with the EBTJV Coordinator, with developing a description of the process used to prioritize sub-watersheds for conservation action and incorporating the description, along with associated maps, into the Conservation Strategy.**

**Recommendation: At the appropriate time, task the Conservation Strategy Subcommittee, in concert with the EBTJV Coordinator, with reviewing the relevance of using the sub-watershed prioritization process at the catchment scale.**

**Recommendation: Task the Conservation Strategy Subcommittee, in concert with the EBTJV Coordinator, with summarizing the priority scores of the sub-watersheds where FWS NFHAP funded fish habitat conservation projects have been implemented.**

The Conservation Strategy states that for those conservation actions that are targeting largely intact brook trout habitat, the focus should be on critical spawning and early life history habitat needed for sustaining natural reproduction.

**Recommendation: Task the Conservation Strategy Subcommittee, in concert with the EBTJV Coordinator, with cataloging the EBTJV associated fish habitat conservation projects that have targeted critical spawning and early life history habitat in sub-watersheds classified as Intact.**

The Conservation Strategy identifies the need to preserve the genetic diversity or strains of wild brook trout populations.

**Recommendation: Task the Conservation Strategy Subcommittee, in concert with the EBTJV Coordinator, with cataloging the EBTJV-related work that is being done to preserve the genetic diversity of wild brook trout.**

The Conservation Strategy calls for the preservation of unique brook trout life history strategies, such as lacustrine populations, large river populations, and coastal populations.

**Recommendation: Task the Conservation Strategy Subcommittee, in concert with the EBTJV Coordinator, with cataloging the work that is being done to preserve lacustrine, large river, and coastal populations of brook trout.**

#### *State-Level Habitat Strategies*

State-level habitat objectives and associated strategies were summarized into 12 general conservation actions, so it would be beneficial to account for what has been implemented under each of these objectives.

**Recommendation: Task the Conservation Strategy Subcommittee, in concert with the EBTJV Coordinator, with developing a process that tracks the progress being made towards meeting each of the State-level habitat objectives.**

#### *Monitoring Strategies*

The Conservation Strategy identifies the need for the EBTJV to develop and implement methods for monitoring the status trends for brook trout populations and their habitats.

**Recommendation: Task the Science and Data Subcommittee, in concert with the EBTJV Coordinator, with the development of a range-wide protocol for monitoring brook trout population trends.**

#### *Data Management Strategies and Research Strategies*

The progress the EBTJV is making towards implementing its data management and research strategies should be described in the Conservation Strategy. These strategies also should undergo a review to determine if there are any revisions that need to be made to these two sections of the Conservation Strategy.

**Recommendation: Task the Science and Data Subcommittee, in concert with the EBTJV Coordinator, with describing the progress being made towards implementing the six data management strategies and five research strategies.**

**Recommendation: Task the Science and Data Subcommittee, in concert with the EBTJV Coordinator, with reviewing the data management and research strategies and to revise the strategies if it's warranted.**

#### *Standards for Determining Success*

The Conservation Strategy contains evaluation strategies that are aimed at determining if the EBTJV conservation actions that have been implemented are achieving the desired outcomes. These include creating short-term and long-term benchmarks; producing an annual evaluation

report that provides an accounting of EBTJV conservation action accomplishments, as well as operational costs; and, communicating the EBTJV accomplishments to a variety of audiences.

**Recommendation: Task the Northern and Southern Workgroups, in concert with the EBTJV Coordinator, with identifying the outcomes from EBTJV-related conservation actions, along with analyzing the progress these outcomes have made towards achieving the regional (short-term) and range-wide (long-term) habitat objectives.**

**Recommendation: Task the EBTJV Coordinator with producing a report that provides an accounting of EBTJV accomplishments and summarizes the partnerships operational costs for the period of 2006-2012.**

**Recommendation: Task the Outreach and Education Subcommittee, in concert with the EBTJV Coordinator, with communicating the EBTJV's accomplishments to a broad audience.**

#### *Strategic Planning for Partnerships*

Principal Goal II is aimed at encouraging partnerships among management agencies and stakeholders to seek solutions to regional and ecological threats. Actions the EBTJV has facilitated in its efforts to address this goal should be documented and communicated.

**Recommendation: Task the Outreach and Education Subcommittee, in concert with the EBTJV Coordinator, with identifying, documenting, and communicating the EBTJV efforts that resulted in the engagement of partners that are seeking solutions to regional and ecological threats.**

#### *Strategic Planning for Outreach and Educational Programs*

The Conservation Strategies calls for the development of a comprehensive outreach and education plan that addresses five focus areas: 1) raising public awareness about wild brook trout resources; 2) fostering public/private collaborative stewardship of brook trout resources; 3) building strong coalitions that support the conservation of wild brook trout; 4) producing information about the impacts invasive species have on brook trout and their habitats; and, 5) developing an understanding of and support for protecting brook trout habitat among policy makers with an educational and public awareness campaign.

**Recommendation: Task the Outreach and Education Subcommittee, in concert with the EBTJV Coordinator, with re-visiting the intent of the five outreach/education focus areas to ensure agreement they should form the framework for a comprehensive outreach and education plan.**

**Recommendation: Task the Outreach and Education Subcommittee, in concert with the EBTJV Coordinator, with developing a comprehensive outreach and education plan, which includes targets, timelines, and metrics for measuring the plan's effectiveness.**

*Strategic Plan for Program Support*

Goal IV in the Conservation Strategy centers on the need to generate consistent, reliable funding that allows the EBTJV to accomplish its vision.

**Recommendation: Task the Grants and Development Subcommittee, in concert with the EBTJV Coordinator, with developing a Business Plan that identifies strategies for generating the funding needed by the EBTJV, both for the short-term (five years) and long-term (20 years) time scales.**