

Evaluating Fish Habitat Partnership Performance

Introduction

The National Fish Habitat Partnership is an unprecedented effort to build and support partnerships that are strategically focused on fish habitat conservation. The National Fish Habitat Action Plan (Action Plan) guides this initiative and establishes processes for bringing partners together, challenging them to collaboratively advance strategic priorities, as well as measure and report on the outcomes of their conservation actions. The geographic scope and focus on fish habitat conservation distinguishes the National Fish Habitat Partnership from other more local fish habitat initiatives.

To uphold the high standards set by the Action Plan, the National Fish Habitat Board (Board) adopted a set of ten measures aimed at evaluating Fish Habitat Partnership performance levels for core operational functions (i.e., coordination, scientific assessment, strategic planning, data management, project administration, communications, and outreach). At its July 2012 meeting, the Board voted to begin the first “formal” performance evaluation of Fish Habitat Partnerships in January 2015, covering a 3-year period (2012-2014), and to repeat this process every 3 years thereafter.

Performance Evaluation Process

Each Fish Habitat Partnership will submit a completed performance evaluation form by March 31, 2015. A Board-appointed team will assess each partnership’s responses to the ten measures and rate their level of performance using a scale of 1 (low) to 4 (high). The performance evaluation outcomes will be sent to each Fish Habitat Partnership for their review and response prior to being finalized by the team.

Performance measures 1–5 are focused on fish habitat conservation projects, which are defined as (a) approved actions taken for the conservation or management of aquatic habitat for fish and other aquatic organisms; (b) the provision of technical assistance to states, Indian tribes, or local communities to facilitate the development of strategies and priorities for aquatic habitat conservation; and, (c) the obtaining of real property interest in lands or waters, including water rights, if the obtaining of such interest is subject to terms and conditions that will ensure the real property will be administered for the long-term conservation of such lands and waters and the fish dependent thereon. Real property interest means any ownership interest in lands or a building or an object that is permanently affixed to land.

Performance Evaluation Form Instructions

Please provide a complete description of the information requested for each performance measure as the review team will rely on your responses when assessing your partnership’s level of performance. The time period that is being covered by this performance evaluation is Federal Fiscal Years 2011-2013 (October 1, 2010 – September 30, 2013) for measures 1- 4 and calendar years 2012-2014 (January 1, 2012 – December 31, 2014) for measures 5-10.

Fish Habitat Performance Evaluation Form

1. For federal fiscal years 2011-2013, list the title of each of your partnership's fish habitat conservation projects that:
 - a. Used National Fish Habitat Action Plan (NFHAP) funding sources (e.g., US Fish & Wildlife Service); or,
 - b. Your partnership developed and were funded by non-NFHAP sources; or,
 - c. Were neither funded by NFHAP sources nor developed by your partnership, but were formally endorsed by your partnership.

For each project listed, identify the project type (a, b, or c) as well as the specific FHP and/or national conservation priority (i.e., geographic focus areas, habitat types, key stressors or impairments) the project addresses.

The following information should be provided for each Fish Habitat Conservation Project:

- Federal Fiscal Year the project was funded or endorsed
- Project title
- Project type
- Project location
- FHP conservation priority being addressed along with a narrative that details how it is being addressed by the project
- National conservation strategy being addressed along with a narrative that details how it is being addressed by the project
- Why the project was endorsed by your FHP (if applicable)

Performance Measure 1 Response:

FY Project Title Location Project Type	EBTJV Conservation Priorities Addressed	EBTJV Priority Area	NFHP National Conservation Strategy Addressed	Brief project description
FY11 Carloe Brook Fish Passage Restoration Project Washington County, ME Supported with FWS- NFHAP Funds	1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats.	Project was located in a subwatershed with a 1.66 priority score (highest priority)	Reconnect fragmented fish habitat. Restore water quality.	This project replaced an undersized and failing stream crossing on Carloe Brook that limited passage for trout and other aquatic organisms. The crossing was replaced with a bottomless arch culvert designed to allow passage at all levels.
FY11 Brook Trout Restoration in the Chattahoochee National Forest, GA Supported with FWS- NFHAP Funds	1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats.	Project was located in subwatersheds with priority scores ranging from 0.10-0.25 (low-medium priority)	Reconnect fragmented fish habitat. Restore water quality.	This project restored fragmented habitat and Brook Trout populations by removing and replacing a perched culvert on Bryant Creek. Additionally, nine miles of habitat was improved by placing 54 structures in nine streams.
FY11 Removal of Illegally Introduced and Missed Rainbow Trout from Lynn Camp Prong, Great Smoky Mountains National Park, TN Supported with FWS- NFHAP Funds	1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Conserved Brook Trout genetic diversity.	Project was located in a subwatershed with a 0.26 priority score (medium priority)	Reconnect fragmented fish habitat.	This project removed Rainbow Trout from the Lynn Camp Prong Watershed in Great Smoky Mountains National Park, which resulted in reconnecting Brook Trout populations in three tributary streams thus eliminating fragmentation in the watershed.
FY11 Restoring Habitat Connectivity in Machias and Saint Croix River Tributary Streams, ME Supported with FWS- NFHAP Funds	1. Re-connection of adjacent Brook Trout habitats	Project was located in subwatersheds with priority scores ranging from 1.36-1.66 (highest priority)	Reconnect fragmented fish habitat. Restore water quality.	This project restored habitat connectivity on three Brook Trout streams and eliminated ongoing risks of sedimentation during culvert failure, in watersheds identified as Brook Trout habitat priorities.

Performance Measure 1 Response:

FY Project Title Location Project Type	EBTJV Conservation Priorities Addressed	EBTJV Priority Area	NFHP National Conservation Strategy Addressed	Brief project description
FY11 Marshall Brook Culvert Replacement, Hancock County, ME Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Targeted a sea-run Brook Trout population. 	Project was located in a subwatershed with a 1.66 priority score (highest priority)	<p>Restore hydrologic conditions for fish.</p> <p>Reconnect fragmented fish habitat.</p> <p>Restore water quality.</p>	This project replaced two existing undersized, improperly set round culvert inhibiting fish passage at the road/stream crossing of Marshall Brook with the Seal Cove Road in Southwest Harbor, Maine with an open bottom culvert.
FY11 Thunder Brook Dam Removal, Cheshire, MA Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Improved Brook Trout spawning habitat. 4. Conserved Brook Trout genetic diversity. 	Project was located in a subwatershed with a 1.21 priority score (high priority)	<p>Restore hydrologic conditions for fish.</p> <p>Reconnect fragmented fish habitat.</p>	This project restored natural riverine functions and values to Thunder Brook, a tributary to the South Branch of the Hoosic River, by removing 2 fish passage barriers. The project also restored Brook Trout spawning habitat.
FY11 Upper Shavers Fork Aquatic Passage Project, WV Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Improved Brook Trout spawning habitat. 4. Conserved Brook Trout genetic diversity. 	Project was located in a subwatershed with a 0.35 priority score (medium priority)	Reconnect fragmented fish habitat.	This project replaced two culverts serving as fish passage barriers and restored habitat linkages between two Brook Trout spawning tributaries and the mainstem of Upper Shaver's Fork.
FY11 Enhancing Connectivity in the Ash-Black Rock Sub basin of the West Branch Narraguagus River, ME Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Re-connection of adjacent Brook Trout habitats 	Project was located in subwatershed with a 1.66 priority score (highest priority)	<p>Reconnect fragmented fish habitat.</p> <p>Restore water quality.</p>	This project replaced two poorly functioning culverts with open bottom arch culverts to allow unhindered fish passage and enhanced stream connectivity.

Performance Measure 1 Response:

FY Project Title Location Project Type	EBTJV Conservation Priorities Addressed	EBTJV Priority Area	NFHP National Conservation Strategy Addressed	Brief project description
FY12 Restoration of Native Charr in Big Wadleigh Pond, ME Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Conserved Brook Trout genetic diversity. 3. Targeted a lacustrine Brook Trout population. 	Project was located in a subwatershed with a 1.66 priority score (highest priority)	NA	This project restored 157 acres of habitat for native Brook Trout and arctic charr in Big Wadleigh Pond by using chemical treatments to eliminate an illegal introduction of an invasive species (rainbow smelt).
FY12 Jam Black Brook Culvert Replacement Searsmont, ME Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Improved Brook Trout spawning habitat. 4. Improved Brook Trout early life history habitat. 	Project was located in a subwatershed with a 1.66 priority score (highest priority)	Reconnect fragmented fish habitat.	This project removed two improperly placed culverts and replaced them with a single, bottomless arch culvert to allow Brook Trout and Atlantic Salmon to access over 10 miles of high quality habitat in Jam Black Brook.
FY12 Nash Stream Restoration, Stratford, NH Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 	Project was located in a subwatershed with a 1.66 priority score (highest priority)	Restore hydrologic conditions for fish.	This project restored approximately 5.5 miles of instream habitat on the mainstem of Nash Stream. Restoration activities included boulder placement, pool construction, large wood additions, floodplain reconnection, and planting riparian vegetation.
FY12 Culvert Replacement and Instream Habitat Restoration in the Nulhegan River VT Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Improved Brook Trout early life history habitat. 	Project was located in subwatershed with a 1.61 priority score (highest priority)	Reconnect fragmented fish habitat.	This project replaced three fish passage barriers and installed approximately 3 miles of “chop and drop” instream restorations on the East Branch of the Nulhegan River and its tributaries.

Performance Measure 1 Response:

FY Project Title Location Project Type	EBTJV Conservation Priorities Addressed	EBTJV Priority Area	NFHP National Conservation Strategy Addressed	Brief project description
FY12 Oats Run Fish Passage Project, Pocahontas County, WV Supported with FWS-NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Improved Brook Trout spawning habitat. 	Project was located in a subwatershed with a 0.35 priority score (medium priority)	Reconnect fragmented fish habitat.	This project restored habitat linkages between a Brook Trout spawning tributary in Oats Run and the mainstem of the Upper Shaver's Fork by removing fish passage barriers and using natural stream design techniques.
FY12 Connectivity Improvement, Removal of Two Dams in the Wetmore Run Watershed, Potter County, PA Supported with FWS-NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Improved Brook Trout spawning habitat. 4. Conserved Brook Trout genetic diversity. 	Project was located in a subwatershed with a 1.12 priority score (high priority)	Restore hydrologic conditions for fish. Reconnect fragmented fish habitat. Restore water quality.	This project removed the only two dams in the Wetmore Run Watershed in Potter County, Pennsylvania opening 8.5 miles of habitat for Brook Trout. Removal of the dams also eliminated thermal pollution and restored lotic ecosystem function.
FY12 Wolf Laurel Branch Culvert Replacement, NC Supported with FWS-NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Improved Brook Trout spawning habitat. 4. Improved Brook Trout early life history habitat. 5. Conserved Brook Trout genetic diversity. 	Project was located in a subwatershed with a 0.23 priority score (medium priority)	Restore hydrologic conditions for fish.	This project replaced existing double culverts with a bottomless structure to provide passage for Brook Trout and native nongame species. Replacement of these culverts reconnected existing populations of southern strain Brook Trout.

Performance Measure 1 Response:

FY Project Title Location Project Type	EBTJV Conservation Priorities Addressed	EBTJV Priority Area	NFHP National Conservation Strategy Addressed	Brief project description
FY13 Upper White River Habitat Restoration Project, White River, Rochester, VT Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 	Project was located in subwatersheds with 0.48 and 0.56 priority scores (medium priority)	Restore hydrologic conditions for fish. Reconnect fragmented fish habitat.	This project addressed flood and flood recovery related habitat modifications on 4 tributaries to the Upper White River in VT by utilizing active in-stream management and design; establishing riparian buffers; and removing barriers to fish passage.
FY13 Dirt & gravel road, streambank stabilization projects, Cross Fork Subwatershed, Cross Fork, PA Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Improved Brook Trout early life history habitat. 	Project was located in a subwatershed with a 1.35 priority score (highest priority)	Restore hydrologic conditions for fish. Restore water quality.	This project focused on dirt and gravel road improvements, streambank stabilization, riparian buffer restoration, and Brook Trout habitat expansion.
FY13 Dam Removals to Reconnect Brook Trout Habitat on an Unnamed Tributary to Frankstown Branch, Hollidaysburg PA Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Improved Brook Trout spawning habitat. 4. Improved Brook Trout early life history habitat. 	Project was located in a subwatershed with a 0.20 priority score (low priority)	Reconnect fragmented fish habitat.	This project removed two fish passage barriers to provide 1.33 miles of unrestricted fish passage to high-quality coldwater spawning and rearing habitat.
FY13 Restoration of Natural Hydrology and Habitat Complexity in the Machias Rivers, ME Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 	Project was located in subwatersheds with 1.48 and 1.63 priority scores (highest priority)	Restore hydrologic conditions for fish. Reconnect fragmented fish habitat.	This project removed 11 remnant log drive dams and added large woody material to restore fish passage, stream connectivity and natural stream processes in tributaries of the Machias River.

Performance Measure 1 Response:

FY Project Title Location Project Type	EBTJV Conservation Priorities Addressed	EBTJV Priority Area	NFHP National Conservation Strategy Addressed	Brief project description
FY13 Meduxnekeag Watershed, ME in- stream habitat restoration Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Improved Brook Trout spawning habitat. 	Project was located in a subwatershed with a 1.56 priority score (highest priority)	Restore hydrologic conditions for fish.	This project restored 1.9 miles of habitat on the Meduxnekeag River mainstem and 0.25 miles of habitat on its north branch for Brook Trout within trust land for the Houlton Band of Maliseet Indians.
FY13 Scott Brook Fish Passage Restoration. Grand Lake Stream, ME Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Targeted a lacustrine Brook Trout population. 	Project was located in a subwatershed with a 1.36 priority score (highest priority)	<p>Reconnect fragmented fish habitat.</p> <p>Restore water quality.</p>	This project replaced an undersized and failing stream crossing on Scott Brook with an open bottom arch culvert and restored access from Big Lake to approximately 3 miles of stream habitat for Brook Trout and other native species.
FY13 Restoring Connectivity in Sunday River & Martin Stream Watersheds, ME Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 2. Re-connection of adjacent Brook Trout habitats. 3. Improved Brook Trout spawning habitat. 4. Improved Brook Trout early life history habitat. 	Project was located in subwatersheds with 1.61 and 1.66 priority scores (highest priority)	<p>Reconnect fragmented fish habitat.</p> <p>Restore water quality.</p>	This project removed two fish passage barriers providing a total of 6 miles of connectivity in the Sunday River and Martin Stream subwatersheds.
FY13 Liming, St. Mary's River, Vesuvius, VA Supported with FWS- NFHAP Funds	<ol style="list-style-type: none"> 1. Enhancement of recreational fishing. 	Project was located in a subwatershed with a 0.46 priority score (medium priority)	Restore water quality.	The streams of the Saint Mary's Wilderness have been severely compromised by atmospheric acid deposition. This project added limestone sand to the headwater streams of St. Mary's River to enhance over 12 miles of stream for Brook Trout.

2. Describe the monitoring/evaluation plan being used to measure success in achieving the expected conservation outcomes* for each fish habitat conservation project listed under Performance Measure 1. (*Outcomes represent “a desired future state” while outputs are “immediate project products.” Providing fish in a stream unimpeded access to spawning habitat is a conservation outcome, whereas removing a manmade barrier is a project output.)

The following information should be provided for each Fish Habitat Conservation Project:

- Project title
- Expected conservation outcome
- Description of the monitoring/evaluation plan

Performance Measure 2 Response:

Project Title	Expected Conservation Outcome	Monitoring/Evaluation Plan
Carloe Brook Fish Passage Restoration Project Washington County, ME	Brook Trout access to 3.0 additional stream miles of in-stream habitat.	Collection of Brook Trout survey data pre and post project completion.
Brook Trout Restoration in the Chattahoochee National Forest, GA	Brook Trout access to 4.5 additional stream miles of in-stream habitat and 12 miles of enhanced Brook Trout habitat.	For in-stream habitat improvements, fish and habitat are being surveyed for 2 years and a subset of streams are being monitored for 3 and 5 years post treatment to observe and document changes in habitat and populations.
Removal of Illegally Introduced and Missed Rainbow Trout from Lynn Camp Prong, Great Smoky Mountain National Park, TN	3.6 miles of enhanced Brook Trout habitat.	The project area will be electrofished 1 to 2 weeks after treatment to determine the success of the treatment. If rainbow trout are located those stream sections will be retreated. A second evaluation will occur in June or July of 2012.
Restoring Habitat Connectivity in Machias and Saint Croix River Tributary Streams, ME	Brook Trout access to 3.0 additional stream miles of in-stream habitat.	Electrofishing surveys will be conducted to determine Brook Trout size, condition and fish species relative abundance, and a follow-up comparison will be performed 3-5 years after the project has been completed.
Marshall Brook Culvert Replacement, Hancock County, ME	Brook Trout access to 3.0 additional stream miles of in-stream habitat.	Annual standardized fish, habitat and geomorphic survey protocols above and below the project sites for 2 years. Determine angling trip information for a minimum of two years after project completion to assess changes to the fishery.
Thunder Brook Dam Removal, Cheshire, MA	Brook Trout access to 2.4 additional stream miles of in-stream habitat.	Project monitoring will proceed in accordance with the Gulf of Maine Barrier Removal Monitoring Guide, which addresses the parameters of channel formation, fish population, substrate condition, macro invertebrate community structure, and riparian plant community composition.

Performance Measure 2 Response:

Project Title	Expected Conservation Outcome	Monitoring/Evaluation Plan
Upper Shavers Fork Aquatic Passage Project, WV	Brook Trout access to 8.0 additional stream miles of in-stream habitat and improved Brook Trout spawning habitat.	The long-term monitoring program will evaluate changes in temperature, water and habitat quality, benthic invertebrate diversity and productivity, and Brook Trout abundance, growth, movement, and survivorship.
Enhancing Connectivity in the Ash-Black Rock Sub basin of the West Branch Narraguagus River, ME	Brook Trout access to 4.3 additional stream miles of in-stream habitat.	Fish passage capacity will be evaluated visually (effectiveness of culvert installation) and through electrofishing annually for 3 years following installation of bottomless arch culverts. Continuous read temperature and pH data loggers will also be installed at each site.
Restoration of Native Charr in Big Wadleigh Pond, ME	157 acres of lentic Brook Trout habitat enhanced.	Sampling will occur after the pond is restocked with native fish to monitor the recovery, including abundance and growth. Periodic sampling will continue over the next 10 years as needed.
Jam Black Brook Culvert Replacement Searsmont, ME	Brook Trout access to 10.0 additional stream miles of in-stream habitat and improved Brook Trout spawning/early life history habitat.	Pre- and post-construction electrofishing will occur both upstream and downstream of the project site and will include a minimum of 2 years of post-project data. Pre- and post-construction longitudinal profiles and channel cross sections will be completed.
Nash Stream Restoration, Stratford, NH	5.5 miles of enhanced Brook Trout habitat.	Long-term monitoring of aquatic habitat and fish populations will include extensive fish surveys through at least 2015. Geomorphic assessments of Nash Stream will continue after the restoration activities are complete.
Culvert Replacement and Instream Habitat Restoration in the Nulhegan River VT	Brook Trout access to 8.0 additional stream miles of in-stream habitat and 3.0 miles of improved Brook Trout early life history habitat.	Temperatures will be monitored annually throughout the watershed and designated stream reaches will be surveyed yearly for trout population trends.

Performance Measure 2 Response:

Project Title	Expected Conservation Outcome	Monitoring/Evaluation Plan
Oats Run Fish Passage Project, Pocahontas County, WV	Brook Trout access to 4.0 additional stream miles of in-stream habitat and improved Brook Trout spawning habitat.	The long-term monitoring program will evaluate changes in temperature, water and habitat quality, benthic invertebrate diversity and productivity, and Brook Trout abundance, growth, movement, and survivorship.
Connectivity Improvement, Removal of Two Dams in the Wetmore Run Watershed, Potter County, PA	Brook Trout access to 8.5 additional stream miles of in-stream habitat and improved Brook Trout spawning habitat.	Surveys will be used to estimate Brook Trout abundance at treatment and control sites both pre- and post-removal for up to 5 years.
Wolf Laurel Branch Culvert Replacement, NC	Brook Trout access to 2.0 additional stream miles of in-stream habitat and improved Brook Trout spawning/early life history habitat.	Surveys downstream and upstream of the new crossing will be done to track Brook Trout movement for at least 2 years post crossing installation.
Upper White River Habitat Restoration Project, White River, Rochester, VT	Brook Trout access to 8.1 additional stream miles of in-stream habitat, 3.6 miles of enhanced Brook Trout habitat, and 30.0 acres of riparian habitat restored.	The Green Mountain National Forest maintains a long-term fish monitoring station on the West Branch to evaluate physical and biological conditions on an annual basis. The FWS will conduct pre-Project monitoring above and below each culvert site as well as post-Project monitoring for at least 2 years following Project implementation.
Dirt & gravel road, streambank stabilization projects, Cross Fork Subwatershed, Cross Fork, PA	2.4 miles of improved Brook Trout spawning and early life history habitat.	To monitor the effectiveness in terms of fine sediment contribution to the adjacent stream, Brook Trout spawning habitat surveys will be conducted upstream and downstream of the selected project sites. Periodic inspection of the riparian buffer projects will result in clearing away any non-native vegetation that may inhibit the growth of the newly planted native trees and shrubs.

Performance Measure 2 Response:

Project Title	Expected Conservation Outcome	Monitoring/Evaluation Plan
Dam Removals to Reconnect Brook Trout Habitat on an Unnamed Tributary to Frankstown Branch, Hollidaysburg, PA	Brook Trout access to 1.3 additional stream miles of in-stream habitat and improved Brook Trout spawning/early life history habitat.	Visual monitoring of stream conditions will be conducted post-removal to verify project performance and success. A stream survey will be conducted at approximately 1 year and 3 years after construction completion to evaluate the effectiveness of the project on achieving the stated objective.
Restoration of Natural Hydrology and Habitat Complexity in the Machias Rivers, ME	Brook Trout access to 34.4 additional stream miles of in-stream habitat.	The Gulf of Maine Stream Barrier Removal Monitoring Protocols will be used for pre-and post-restoration monitoring. Longitudinal profiles and benchmarked transects will be surveyed prior to dam removal and again post-removal following a year of high water following through the site.
Meduxnekeag Watershed, ME in-stream habitat restoration	2.2 miles of improved Brook Trout spawning habitat.	Annual standardized fish, habitat and geomorphic survey protocols above, within and below the project sites will be implemented for 2 years. ACOE will use these same protocols to monitor the project sites for one additional year as part of a larger Meduxnekeag Watershed Management Planning Project.
Scott Brook Fish Passage Restoration. Grand Lake Stream, ME	Brook Trout access to 3.0 additional stream miles of in-stream habitat.	Brook Trout survey data will be collected pre and post restoration.
Restoring Connectivity in Sunday River & Martin Stream Watersheds, ME	Brook Trout access to 6.0 additional stream miles of in-stream habitat and improved Brook Trout spawning/early life history habitat.	The Lively Brook project will be monitored during construction at sites for compliance with best management practices and permitting guidelines. Fishery responses to the project will be evaluated for a minimum of 2 years after.

Performance Measure 2 Response:

Project Title	Expected Conservation Outcome	Monitoring/Evaluation Plan
Liming, St. Mary's River, Vesuvius, VA	12.0 miles of enhanced Brook Trout habitat.	Water chemistry will be monitored throughout the watershed following project implementation as part of a cooperative agreement between James Madison University and the Forest Service. Fish and macroinvertebrates will be monitored at two permanent sampling stations every year and 6 permanent sampling stations every other year.

3. Describe vulnerable fish habitat being protected or the causes of and processes influencing fish habitat decline that are being addressed by each fish habitat conservation project listed under Performance Measure 1.

The following information should be provided for each Fish Habitat Conservation Project:

- Project title
- Vulnerable fish habitat being protected
- Causes of and processes influencing fish habitat decline being addressed

Performance Measure 3 Response:

Project Title	Causes of and/or processes influencing fish habitat decline being addressed by the project
Carloe Brook Fish Passage Restoration Project Washington County, ME	This project addressed habitat fragmentation resulting from a fish passage barrier and excessive sediment inputs from the road bed at the site.
Brook Trout Restoration in the Chattahoochee National Forest, GA	This project addressed habitat fragmentation resulting from a fish passage barrier and enhanced in-stream habitat impacted by historic land use practices that resulted in increased sediment loading and a reduction in the recruitment of large woody material.
Removal of Illegally Introduced and Missed Rainbow Trout from Lynn Camp Prong, Great Smoky Mountains National Park, TN	This project addressed negative impacts to Brook Trout being caused by the presence of an invasive species (Rainbow Trout).
Restoring Habitat Connectivity in Machias and Saint Croix River Tributary Streams, ME	This project addressed habitat fragmentation resulting from fish passage barriers and excessive sediment inputs at stream crossing sites.
Marshall Brook Culvert Replacement, Hancock County, ME	This project addressed habitat fragmentation resulting from a fish passage barrier that also blocks the flow of water and sediment, resulting in a significant impoundment subject to elevated water temperatures.
Thunder Brook Dam Removal, Cheshire, MA	This project addressed habitat fragmentation resulting from fish passage barriers and un-natural riverine functions such as flow regimes and sediment transport.
Upper Shavers Fork Aquatic Passage Project, WV	This project addressed habitat fragmentation resulting from fish passage barriers and genetic isolation of Brook Trout populations.
Enhancing Connectivity in the Ash-Black Rock Sub basin of the West Branch Narraguagus River, ME	This project addressed habitat fragmentation resulting from fish passage barriers and excessive sediment inputs during spring run-off and extreme storm events.
Restoration of Native Charr in Big Wadleigh Pond, ME	This project addressed negative impacts to Brook Trout being caused by the presence of an invasive species (Rainbow Smelt).
Jam Black Brook Culvert Replacement Searsmont, ME	This project addressed habitat fragmentation resulting from a fish passage barrier.
Nash Stream Restoration, Stratford, NH	This project addressed major destruction of in-stream and riparian habitats caused by a dam failure, including habitat fragmentation, loss of pool habitat, and low recruitment of large woody material.
Culvert Replacement and Instream Habitat Restoration in the Nulhegan River, VT	This project addressed habitat fragmentation resulting from fish passage barriers and negative impacts to the river that was caused by past logging practices.
Oats Run Fish Passage Project, Pocahontas County, WV	This project addressed habitat fragmentation resulting from fish passage barriers and genetic isolation of Brook Trout populations.

Performance Measure 3 Response:

Project Title	Causes of and/or processes influencing fish habitat decline being addressed by the project
Connectivity Improvement, Removal of Two Dams in the Wetmore Run Watershed, Potter County, PA	This project addressed habitat fragmentation resulting from fish passage barriers that also contributed to increased instream temperatures, interrupted the normal flow regime, and negatively impacted natural ecosystem functions.
Wolf Laurel Branch Culvert Replacement, NC	This project addressed habitat fragmentation resulting from fish passage barriers and genetic isolation of Brook Trout populations.
Upper White River Habitat Restoration Project, White River, Rochester, VT	This project addressed detrimental modifications made to in-stream habitat (i.e., extensive gravel mining) after an extreme storm event (Hurricane Irene) occurred in 2011.
Dirt & gravel road, streambank stabilization projects, Cross Fork Subwatershed, Cross Fork, PA	This project addressed unstable stream banks, dirt and gravel roads with improper profiles, inadequate drainage, and multiple stream crossings that had accelerated erosion and sediment transport into the streams, thereby degrading Brook Trout habitat.
Dam Removals to Reconnect Brook Trout Habitat on an Unnamed Tributary to Frankstown Branch, Hollidaysburg, PA	This project addressed habitat fragmentation resulting from fish passage barriers.
Restoration of Natural Hydrology and Habitat Complexity in the Machias Rivers, ME	This project addressed habitat fragmentation resulting from fish passage barriers and negative impacts to the river that was caused by past logging practices.
Meduxnekeag Watershed, ME in-stream habitat restoration	This project addressed in-stream habitat that suffered impacts from historical logging practices, and associated dams, resulting in shallow, wide channels essentially devoid of pools and other cover.
Scott Brook Fish Passage Restoration. Grand Lake Stream, ME	This project addressed habitat fragmentation resulting from a fish passage barrier and chronic sediment inputs from the road bed at the site.
Restoring Connectivity in Sunday River & Martin Stream Watersheds, ME	This project addressed habitat fragmentation resulting from fish passage barriers and improved water quality by eliminating impounded backwater areas that were increasing water temperatures.
Liming, St. Mary's River, Vesuvius, VA	This project addressed anthropogenic atmospheric acid deposition in streams that have been severely compromised by this stressor.

4. For the fish habitat conservation projects listed under Performance Measure 1, what is the amount of NFHAP funds (i.e., US Fish and Wildlife Service NFHAP funds) allocated in support of these projects, and what is the total amount of funding from all other sources?

The following information should be provided for each Fish Habitat Conservation Project:

- Project title
- Amount of NFHAP funds supporting the project
- Amount of other federal funds supporting the project
- Amount of non-federal funds supporting the project
- If pertinent, also include a description of how funding the project assisted with generating additional sources of non-NFHAP funding that is being targeted towards your partnership's priorities. For example, using NFHAP funds for a fish habitat conservation project that subsequently lead to a new funding source devoted to addressing one or more of your priorities.

Performance Measure 4 Response:

Project Title	FWS-NFHAP Funding Support	Other Federal Contributions	Non-Federal Contributions	Total Project Cost
Carloe Brook Fish Passage Restoration Project Washington County, ME	\$18,000	\$2,000	\$16,000	\$36,000
Brook Trout Restoration in the Chattahoochee National Forest, GA	\$50,000	\$200,000	\$91,500	\$341,500
Removal of Illegally Introduced and Missed Rainbow Trout from Lynn Camp Prong, Great Smoky Mountains National Park, TN	\$49,000	\$105,000	\$96,295	\$250,295
Restoring Habitat Connectivity in Machias and Saint Croix River Tributary Streams, ME	\$33,000	\$96,000	\$13,400	\$142,400
Marshall Brook Culvert Replacement, Hancock County, ME	\$50,000	\$3,750	\$96,250	\$150,000
Thunder Brook Dam Removal, Cheshire, MA	\$50,000	\$0	\$180,646	\$230,646
Upper Shavers Fork Aquatic Passage Project, WV	\$50,000	\$23,000	\$472,860	\$545,860
Enhancing Connectivity in the Ash-Black Rock Sub basin of the West Branch Narraguagus River, ME	\$47,224	\$9,100	\$42,670	\$98,994
Restoration of Native Charr in Big Wadleigh Pond, ME	\$46,010	\$62,007	\$64,039	\$172,056
Jam Black Brook Culvert Replacement Searsmont, ME	\$40,500	\$74,750	\$118,950	\$234,200
Nash Stream Restoration, Stratford, NH	\$50,000	\$91,280	\$245,000	\$386,280

Performance Measure 4 Response:

Project Title	FWS-NFHAP Funding Support	Other Federal Contributions	Non-Federal Contributions	Total Project Cost
Culvert Replacement and Instream Habitat Restoration in the Nulhegan River, VT	\$50,000	\$117,100	\$312,700	\$479,800
Oats Run Fish Passage Project, Pocahontas County, WV	\$50,000	\$20,000	\$210,000	\$280,000
Connectivity Improvement, Removal of Two Dams in the Wetmore Run Watershed, Potter County, PA	\$50,000	\$1,000	\$386,000	\$437,000
Wolf Laurel Branch Culvert Replacement, NC	\$50,000	\$240,000	\$7,000	\$297,000
Upper White River Habitat Restoration Project, White River, Rochester, VT	\$50,000	\$685,000	\$21,800	\$756,800
Dirt & gravel road, streambank stabilization projects, Cross Fork Subwatershed, Cross Fork, PA	\$45,000	\$191,730	\$74,832	\$311,562
Dam Removals to Reconnect Brook Trout Habitat on an Unnamed Tributary to Frankstown Branch, Hollidaysburg, PA	\$25,000	\$30,000	\$50,500	\$105,500
Restoration of Natural Hydrology and Habitat Complexity in the Machias Rivers, ME	\$33,000	\$10,361	\$29,580	\$72,941
Meduxnekeag Watershed, ME in-stream habitat restoration	\$13,499	\$121,550	\$2,750	\$137,799
Scott Brook Fish Passage Restoration. Grand Lake Stream, ME	\$20,000	\$500	\$19,500	\$40,000

Performance Measure 4 Response:

Project Title	FWS-NFHAP Funding Support	Other Federal Contributions	Non-Federal Contributions	Total Project Cost
Restoring Connectivity in Sunday River & Martin Stream Watersheds, ME	\$36,360	\$0	\$36,362	\$72,722
Liming, St. Mary's River, Vesuvius, VA	\$50,000	\$13,000	\$80,000	\$143,000
Totals	\$956,593	\$2,097,128	\$2,668,634	\$5,722,355

5. Please provide a copy of the criteria your partnership currently uses to prioritize fish habitat conservation projects for funding.

Link to EBTJV Project Scoring Criteria: <http://bit.ly/1y1Zsgg>

6. Describe the ways your partnership has engaged with neighboring/overlapping Fish Habitat Partnerships and/or other regional natural resource conservation entities during the past three years (2012-2014) and what these engagements produced for outcomes (e.g. reduced redundancy, enhanced message delivery or access to a larger outreach audience, greater geographic coverage).

The following information should be included in your response:

- Name of the Fish Habitat Partnership/regional natural resource conservation entity engaged.
- Type of engagement activity or activities (building awareness, coordination, collaboration) that occurred with each Fish Habitat Partnership/regional natural resource conservation entity.
- The outcome achieved by each engagement activity.

Performance Measure 6 Response:

The EBTJV partnered with the Atlantic Coastal Fish Habitat Partnership (ACFHP) and the Southeast Aquatic Resources Partnership (SARP) on a three year project (2012-2014) to conserve fish habitat from “whitewater to bluewater.” This collaborative effort advanced the coordinated implementation of strategic plans and habitat assessments and promoted a more cohesive implementation of the National Fish Habitat Partnership’s National Conservation Strategies across twenty-seven states. It also supported and enhanced the communication and outreach, steering committee operation of the three eastern Fish Habitat Partnerships, and provided for increased coordination within and between Partnerships. For more information about Whitewater to Bluewater please click on the following link:

<http://easternbrooktrout.org/groups/whitewater-to-bluewater>

During the years 2012-2014 the EBTJV worked collaboratively with the Appalachian Land Conservation Cooperative to develop a web-based project tracking system and an open-source mapping platform designed to support the conservation community’s needs to view, create, and analyze spatial data and maps (<http://www.conservationdesign.org>). This platform provides access to a suite of scientific data, relevant to a variety of conservation planning goals/tasks including the execution of custom designed decision support tools. These tools allow a manager or conservation practitioner to make dynamic scenario-based decisions using the most current scientific information. The EBTJV also assisted the Appalachian Land Conservation Cooperative with rolling out a Riparian Restoration Decision Support Tool (<http://bit.ly/1IKJAXL>), which included recruiting a team of individuals to “test drive” the tool and supporting a training session on how to use this tool during the EBTJV’s 10th Anniversary Meeting held September 8-11, 2014 at the National Conservation Training Center.

The EBTJV collaborated with the North Atlantic Land Conservation Cooperative to develop decision support tools needed to prioritize Brook Trout conservation actions in the Chesapeake Bay watershed. This collaboration included EBTJV participation in regularly scheduled teleconferences to discuss project updates; serving as a member of the project’s Brook Trout Technical Team that was established to work through issues related to the development of a predictive Brook Trout model and associated decision

support tools (visualization, ranking, and futuring); attending a workshop focused on a series of similar decision support tools developed for Midwest Fish Habitat Partnerships; and, assisting with testing the functionality of a web-based GIS visualization and decision support tool.

The EBTJV strengthened its partnership with the Chesapeake Bay Program in an effort to better align and coordinate priority Brook Trout conservation actions between the two entities. The EBTJV is leading a team developing a management strategy (<http://bit.ly/1aIwgRQ>) aimed at achieving the Brook Trout outcome identified in a recently signed (June 2014) Chesapeake Bay Watershed Agreement. The EBTJV's 2014 Brook Trout status assessment at the catchment scale serves as the foundation for the Chesapeake Bay Brook Trout Management Strategy and the EBTJV's Brook Trout conservation priorities are being used as guidance for implementing strategic actions.

7. Describe how your partnership uses resource condition assessment and/or analysis results to determine your conservation priorities and to identify the actions they require.

The following information should be included in your response:

- Title of the resource condition assessment(s) and/or analysis(es) used by your partnership along with the date(s) it (they) were completed.
- A listing of the conservation priorities, and the actions they require, determined by the resource condition assessment and/or analysis results.

Performance Measure 7 Response:

In 2005, the EBTJV completed its first range-wide assessment of Brook Trout populations throughout their native eastern United States range (<http://bit.ly/1FHcEYd>). Findings from this range-wide status and threats assessment served as the foundation for the development of the vision, goals, objectives, priority strategies, procedures, and guidelines contained within the EBTJV Conservation Strategy (<http://bit.ly/Uc7aTA>).

In 2006 an approach was developed that assists the EBTJV with prioritizing subwatersheds with the greatest potential for successful Brook Trout protection, enhancement, or restoration actions based on how intact they are and how intact neighboring watersheds are (<http://bit.ly/1zcCtLc> and <http://bit.ly/1FHo2U0>). The subwatershed priority score is used to assist the EBTJV in ranking Brook Trout conservation projects.

A finer scale assessment of Brook Trout populations in the EBTJV geographic range was recently (2014) completed in an effort to provide natural resource managers with better tools for detecting population changes and setting conservation priorities. This assessment entails determining wild Brook Trout occupancy at the catchment scale, which was then used to identify Brook Trout patches and classify them as being allopatric Brook Trout, Brook Trout sympatric with Brown Trout, Brook Trout sympatric with Rainbow Trout or Brook Trout sympatric with Rainbow Trout and Brown Trout (<http://bit.ly/1uOZuaJ>). The EBTJV's eight northern States are reviewing the assessment results from a quality assurance/quality control perspective, which is expected to be completed by April 2015. This step has already been completed by the mid-Atlantic and southern States. The findings from this assessment will be used to refine the EBTJV's Brook Trout Conservation Strategy (Strategic Plan) and modify the partnerships conservation priorities. Data layers that are associated with locating Brook Trout catchments and patches are available on the [Brook Trout Integrated Spatial Data and Tools website](#).

The EBTJV is currently working with the North Atlantic LCC and Downstream Strategies to complete development of a pilot model that uses widely available landscape variables to predict the presence of Brook Trout in catchments located in the Chesapeake Bay watershed primarily because one of the model outputs is a metric related to the optimal potential condition of a catchment, which is presented as a natural habitat quality index (HQI). The HQI is defined as the maximum probability of Brook Trout presence under a zero-stress situation; essentially, the highest attainable condition in the catchment (<http://bit.ly/19f2S56>). Additionally, the Chesapeake Bay Brook Trout Model quantifies changes in the probability of Brook Trout presence that may result from a projected future climate scenario. The EBTJV anticipates that the HQI and potential future climate-related projections will assist in further identifying priority locations for Brook Trout conservation.

The EBTJV is also using another tool that assist in identifying locations where Brook Trout have a lower vulnerability to the effects of climate change (<http://bit.ly/1DNIsvs>). While this data layer does not cover the entire EBTJV geographic range, the Brook Trout Patch Vulnerability GIS data layer (<http://bit.ly/1tuaLbH>) identifies Wild Brook Trout patches with low exposure (predicted change in water temperature per unit increase in air temperature) and low sensitivity (predicted frequency, magnitude, and duration of water temperature averaged over a range of temperatures).

The EBTJV assisted the Appalachian LCC with the development of the [Riparian Restoration for Climate Change Resilience Tool](#), which enables users to dynamically locate areas in the riparian zone that would benefit most from increased shading produced by planting of trees. The tool operates on a 200 meter stream buffer (100 on each side), and requires the user to specify values for maximum percent canopy cover and minimum solar gain percentile. The user can additionally choose to include minimum elevation (meters) and maximum percent impervious surface values in the analysis.

To determine changes in population status, the EBTJV is also assisting with pilot testing a short- and long-term monitoring protocol for Brook Trout patches (<http://bit.ly/1DoEKb7>). This protocol uses a panel design where “x” patches are sampled every year (sentinel samples) and others are sampled every 5 years. Sentinel samples are intended to capture year-to-year and fast changes while the once every five year samples will capture long-term trends.

8. Describe your partnership's outreach activities aimed at: 1) sharing information about your strategic priorities (i.e., geographic focus areas, habitat types, key stressors or impairments); 2) building broader visibility among local and regional partners; 3) tailoring events to garner media coverage; and 4) strengthening relationships with policy-makers.

Performance Measure 8 Response:

- In 2012, representatives from the EBTJV, SARP, and ACFHP developed of a joint communications strategy (<http://bit.ly/1AiYE1y>) under the Whitewater to Bluewater Project. The intent of this undertaking was to better coordinate partner engagement and outreach activities in a concerted effort to strengthen and expand an already robust base of on-the-ground conservation partners. It's also focused on implementing more streamlined communications strategy and outreach products for the three FHPs that highlight both synergies and distinguishing characteristics across the individual FHPs, and identifies FHP needs that would be best served individually and those that would benefit from a collective message. This enables consistent messaging to the public through press releases, educational institutions, special interest groups, community organizations, professional conferences, workshops, and other communications channels and venues as opportunities arise. Target audiences include any persons, groups or organizations that have an interest or "stake" in a specific species or habitat and associated conservation projects.
- The EBTJV maintains a website (<http://easternbrooktrout.org/>) that is on a common platform that also supports companion sites for the ACFHP, SARP, Appalachian LCC, and Whitewater to Bluewater. This allows an integration of conservation messaging among these regional conservation organizations and provides a larger public reach.
- The EBTJV produces quarterly Newsletters (<http://easternbrooktrout.org/news/newsletters>) that are now being distributed via an email blast tool (MailChimp) to ~570 subscribers.
- The EBTJV maintains a Facebook page (<https://www.facebook.com/EBTJV>) that is used to post information about Brook Trout conservation across the region. The EBTJV posted 101 media stories about Brook Trout conservation on its Facebook page during 2014 and tracked the reach metrics for these posts. The total reach for these media story posts totaled 40,361 people. During the time frame that these Brook Trout conservation stories were posted (March 14 – December 31, 2014), the number of individuals who "like" the EBTJV Facebook Page grew from 1,063 to 1,755; a 65% increase.
- The EBTJV worked with US Fish and Wildlife staff from Region 5 to develop a 1-page infographic (<http://bit.ly/1yC6ucc>) and blog story (<http://bit.ly/1xteYyO>) commemorating the EBTJV's 10th Anniversary and its conservation accomplishments.
- The EBTJV held three "all partners" meeting during the 2012-2014 time period (<http://bit.ly/1kjNvLU>). These events provided a forum for EBTJV partners to learn about recent brook trout conservation activities.
- The EBTJV was successful in having two of its project waters (White River, VT and Nash Stream, NH) selected for inclusion in the National Fish Habitat Partnerships 10 Waters to Watch Program (2012 and 2014), which resulted in these waters receiving increased media attention.

9. Describe the ways your partnership coordinated its aquatic resource data and regional assessment information with the NFHP Science and Data Committee during the past 3 years (2012-2014).

The following information/documents should be included in your response:

- The regional data sets and/or conservation outcomes you provided for integration into the NFHP National Assessment.
- Documents your partnership produced that provide details about the effectiveness of the conservation outcomes supported by your partnership.

Performance Measure 9 Response:

- The EBTJV provided data associated with its recently completed Brook Trout assessment at the catchment scale for uploading into the National Fish Habitat Partnership Data System (<http://bit.ly/13F1Mw8>). This geodatabase contains information on Brook Trout occupancy and delineates Brook Trout patches, which are defined as groups of contiguous catchments occupied by Brook Trout. Once the northern EBTJV states have completed their QA/QC of the output from the Brook Trout status assessment at the catchment scale, these data sets will also be forwarded for uploading into the National Fish Habitat Partnership Data System.
- The EBTJV recently produced a document that provides details about the effectiveness of conservation outcomes resulting from our partnership's support. This report summarizes the EBTJV's conservation accomplishments from 2004 to 2013 (<http://bit.ly/1lbsvz>). Included in this report are sections that describe how well fish habitat conservation projects addressed EBTJV conservation priorities, regional habitat objectives, and project outcomes.

10. List your partnership's conservation priorities (i.e., geographic focus areas, habitat types, key stressors or impairments) and describe the progress that has been made toward achieving these priorities during the past 3 years (2012-2014).

The following information should be included in your response:

- Separate listings for short-term and long-term conservation priorities.
- Target dates for achieving each conservation priority.
- Current status of achieving each conservation priority by its target date (i.e. ahead of schedule, on schedule, behind schedule).
- Efforts underway within the partnership that are focused on addressing each conservation priority.

Performance Measure 10 Response:

The EBTJV has conservation priorities at multiple scales; the largest scale encompasses the EBTJV's range-wide habitat objectives. Range-wide habitat objectives are designed to measure the overall success of the EBTJV over the long term. The EBTJV determined that the appropriate time scale to measure long-term success was at 15-year intervals. The term "healthy" is used as a planning component, which combines Intact and Reduced habitat categories. Below are the long-term habitat goals that will be used to measure success. Actions that strengthen populations include, but are not limited to, habitat enhancement, reducing excessive harvest, increasing distribution within a subwatershed, improving water quality, or reducing exotics.

1. Increase the number of subwatersheds classified as healthy by 10% by 2025.
2. Establish self-sustaining Brook Trout populations in 10% of known extirpated subwatersheds by 2025.
3. Improve 30% of reduced subwatersheds to healthy classification and maintain 70% of reduced subwatersheds in existing or improved condition by 2025.
4. Validate classification of all predicted subwatersheds by 2025.

Regional habitat objectives are intended to measure progress during a shorter-term period (5 years), and are designed to meet the range-wide habitat objectives. Regional habitat objectives are disproportionately allocated among the northern and southern regions of the EBTJV to accommodate differences in priorities within each region.

1. Maintain the status, or no net less, of 617 subwatersheds classified as healthy by 2012.
 - Northern Region = 493
 - Southern Region = 124
2. Strengthen Brook Trout populations in 31 subwatersheds classified as healthy by 2012.
 - Northern Region = 20
 - Southern Region = 11

3. Establish self-sustaining Brook Trout populations in 8 subwatersheds classified as extirpated by 2012.
 - Northern Region = 2
 - Southern Region = 6
4. Improve 7 reduced subwatersheds to healthy classification by 2012.
 - Northern Region = 2
 - Southern Region = 5
5. Strengthen Brook Trout populations in 63 subwatersheds classified as reduced by 2012.
 - Northern Region = 30
 - Southern Region = 33
6. Maintain 713 reduced subwatersheds in existing condition by 2012.
 - Northern Region = 505
 - Southern Region = 208
7. Validate the predictive Brook Trout status model by assessing 50% of predicted subwatersheds by 2012.
 - Northern Region = 700
 - Southern Region = 92
8. Maintain the status, or no net loss, of healthy pond and lake watersheds, and assess the status of 100 unknown subwatersheds by 2012.
 - Northern Region = 50
 - Southern Region = 50

An assessment of progress made towards reaching the regional habitat objectives was completed through 2010, with tracking data only available for the southern region (GA, MD, NC, NJ, SC, TN, and VA) of the EBTJV range. As depicted in Table I, the EBTJV achieved three of its regional habitat objectives (#3, #4, and #5); appeared to be on track with achieving regional habitat objective #2; and, was behind in meeting four regional habitat objectives (#1, #6, #7, and #8) by 2012. Although updating this tracking assessment with northern region accomplishments would improve the level of success being achieved for the regional habitat objectives, this never occurred because the EBTJV initiated its second Brook Trout status assessment at the catchment scale, rather than the subwatershed scale, and it's anticipated the results from this finer scale assessment will modify the EBTJV's conservation priorities.

Table I. EBTJV Regional Habitat Objectives (RHO) Tracking Summary (as of 2010)

RHO	Northern Region RHO Accomplished	Southern Region RHO Accomplished	Total RHO Accomplished	Percent of Overall RHO Accomplished
#1	Unknown	16	16	3%
#2	Unknown	15	15	48%
#3	Unknown	12	12	150%
#4	Unknown	15	15	214%
#5	Unknown	77	77	122%
#6	Unknown	112	112	16%
#7	Unknown	12	12	2%
#8	Unknown	15	15	15%

Twelve of the sixteen EBTJV partner states also completed state-level Brook Trout Conservation Action Plans. A review of these individual state plans resulted in identifying twelve common state-level objectives, which are used to further prioritize Brook Trout conservation projects. The number of these common state-level objectives addressed by the EBTJV/FWS-NFHAP funded Brook Trout conservation projects (n=67 from 2006-2014) ranged from 1 to 8 per project while the average was approximately two per project. Eighty-two percent (82%) of the Brook Trout conservation projects were aimed at maintaining or restoring natural hydrologic regimes (common state-level objective 8), followed by 54% that dealt with mitigating factors that degrade water quality (common state-level objective 7) and 35% that included targeting non-game species in conjunction with brook trout (common state-level objective 12).

Common State-Level Objectives:

1. Improve protection of Brook Trout resources.
2. Maximize Brook Trout habitat and water quality protection through state and federal agencies.
3. Pursue direct land purchase or conservation easements to protect Brook Trout habitat.
4. Establish land conservation easements that require the use of Best Management Practices and include the development of stewardship plans.
5. Assist landowners in utilizing existing land conservation programs.
6. Minimize fish stocking impacts to wild Brook Trout populations.
7. Mitigate factors that degrade water quality.
8. Maintain or restore natural hydrologic regimes.
9. Prevent the spread of invasive species into Brook Trout habitat.
10. Expand and integrate state, federal, and private programs that support riparian conservation in watersheds that support Brook Trout populations.
11. Utilize state, federal and private programs that support watershed stewardship programs in systems containing Brook Trout.
12. Partner with organizations on projects that involve nongame species, migratory birds, and brook trout.

The EBTJV Brook Trout Conservation Strategy contains 6 key Brook Trout conservation actions. Sixty-six percent (66%) of the EBTJV/FWS-NFHAP funded Brook Trout conservation projects (n=67 from 2006-2014) had outcomes that enhanced recreational fishing opportunities; 72% reconnected adjacent Brook Trout habitat by eliminating fish passage barriers; 34% improved Brook Trout spawning habitat; 20% enhanced early life history habitat needed to sustain wild Brook Trout populations; 20% preserved or enhanced the genetic diversity of wild Brook Trout populations; and, 5% targeted lacustrine Brook Trout populations, while <2% were focused on large river and coastal populations, respectively.

EBTJV Key Conservation Actions:

1. Increase recreational fishing opportunities for wild Brook Trout.
2. Protect the “best of the best” habitat that supports existing, healthy wild Brook Trout populations.
3. Improve and reconnect adjacent habitats that have a high likelihood of supporting stable wild Brook Trout populations.
4. Focus on critical wild brook trout spawning and early life history habitat in subwatersheds classified as Intact.
5. Preserve genetic diversity and strains of wild Brook Trout populations.
6. Conserve unique wild Brook Trout life history strategies (i.e. lacustrine populations, large river populations, and coastal populations).