Brook Trout Restoration in the Chattahoochee National Forest, GA Through the NFHAP within the Goals of the EBTJV

Project Location: Fannin, Rabun, Union and Habersham Counties, Georgia

Project Congressional Districts: 9 and 10

Applicant Congressional District: 9

NFHAP/ EBTJV Funding Requested: $50,000

Total Project Cost: $341,500

Total Federal Matching Contribution: $200,000

Total Non-Federal Matching Contribution: $91,500

Total Partner Matching Contribution: $291,500

Ratio of Partner Contribution to NFHAP Funding Request: 5.83:1

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USFWS FONS Database Project Number: 42330-2010-147

Coordination Completed with US Fish and Wildlife Service Fisheries Office (Check One):

____X____Yes, ____Sept. 1, 2010____Date Coordination Began

_____No

I. PROJECT DESCRIPTION, SCOPE OF WORK, AND PARTNER INFORMATION

A. Project Description and Scope of Work (Max Characters: 500)

The purpose of this proposal is to restore fragmented poor quality habitat and brook trout populations on the Chattahoochee National Forest in Georgia. The Georgia Department of Natural Resources (GA DNR), US Forest Service (FS) and Georgia Council of Trout Unlimited (TU) will be responsible for completing the work.

This proposal has four objectives, first we would like to remove and replace a culvert on Bryant Creek that is perched and a barrier to fish movement with a bottomless arch. Second, we propose to use electrofishing to renovate three streams. Third, we would improve nine miles of habitat by placing 54 structures in nine streams. The final component of the proposal is project and water quality monitoring.

The existing pipe in Bryant Creek at Forest Road 33A is a 60 inch metal culvert showing signs of deterioration with water flow around and under the pipe. The pipe will be replaced by a bottomless arch. This will connect approximately two miles of upstream habitat in Bryant Creek with two and a half miles of downstream habitat in Bryant Creek and Pretty Branch.

Bryant Creek is located on National Forest Land in the Coopers Creek WMA and is a high quality trout stream containing a healthy brook trout population. Genetic analysis has determined that the brook trout in Bryant Creek and its tributary Pretty Branch are native southern strain.

Renovation of Stover Creek, Walnut Fork and Tate Branch will be continued. A natural barrier on Stover Creek was reinforced in 2007, a barrier on Tate Branch was constructed in 2007 and Walnut Fork has a natural bedrock barrier. Renovation will be accomplished on three miles of stream.

Habitat improvement work will occur in Bryant Creek, Chester Creek, Lovinggood Creek, Long Creek, and Underwood Creek in the Toccoa River watershed; Walnut Fork, an unnamed tributary to Ammons Branch, and Smith Branch in the Chattooga River watershed; and Chastain Branch in the Chattahoochee River watershed. The primary purpose of this work is to create deeper pools and more overhead cover that will provide adult trout refuge during the summer.

The final component of this work is monitoring which includes habitat and population monitoring on streams targeted for improvements. It also includes quarterly water quality sampling on 15 brook trout streams across seven major drainages.

B. Proposed Methods (Max Characters: 350)

The design for the culvert replacement on Bryant Creek would be completed by US Forest Service (FS) engineers. The replacement would be contracted out and FS engineers would oversee the installation. Grant money would be used to help fund the culvert replacement.

The remaining work would be accomplished by using grant money to hire a five to eight person crew that would be jointly supervised by GA DNR and FS personnel. The crew would be responsible for completing the stream renovation work, habitat improvements and monitoring. Renovation would be completed by doing multiple electrofishing passes and removals of non-native trout in three streams. Habitat improvements would be comprised of placing log structures or felling and anchoring whole trees (tree felling) in nine streams. Additional brook trout streams may be worked on as part of the TU match for this grant.

Project monitoring will include pre-construction conditions and post-construction responses of native brook trout and habitat in at least nine streams. Water quality will be monitored by sampling pH, acid neutralizing capacity (ANC) and water temperature.

C**. Project Timeline**

Activity	Start Date	Completion Date
Complete NEPA		Completed 2010
Bryant Creek Crossing Design	October 2011	March 2012
USACE permits for stream work	January 2012	February 2012
Advertise Bryant Creek Contract	June 2012	July 2012
Stream Habitat Improvements	May 2012	September 2012
Stream Renovation	May 2012	September 2012
Bryant Creek Culvert Installation	August 2012	January 2012
Project & Water Quality Monitoring	January 2012	June 2013
Final Report & Grant Close-out	June 2013	October 2013
Long Term Monitoring	June 2015	June 2017

D. Proposed Accomplishment Summary (Max Characters: 500)

Activity	Accomplishment
Bryant Creek Culvert Replacement	This will reconnect four and a half miles of southern strain brook trout habitat that is protected by a waterfall barrier. This will occur on the Cooper Creek WMA which is heavily used by anglers and hunters.
Stream Renovations	This will restore brook trout populations in three miles of headwater streams by removing non-native salmonids.
Stream Restoration	Large wood structures and tree felling will be used to enhance nine miles of brook trout habitat. Much of the current brook trout habitat in Georgia has little pool habitat. These improvements will enhance residual pool depth and overhead cover.
Monitoring	Pre and post construction habitat and population monitoring in eight streams. Water quality monitoring in 15 streams.

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E. State the Importance of the project to the Resource (Max Characters: 350)

This proposal is vitally important to the brook trout program in Georgia. Since Georgia is the southern end of the eastern brook trout range populations are exposed to more extreme weather conditions such as drought and flood events following hurricanes. Brook trout populations in Georgia are greatly reduced in 25% of the subwatersheds, extirpated in 65% and unknown in 20% (TU 2006). By reconnecting fragmented habitat, removing non-natives and improving habitat we will provide critical refuge and remove competition for valuable resources for our brook trout populations.

This proposal is also important to the continued success of the Brook Trout program in Georgia. To date, the program has been successful and supported by the public however, some stakeholders are cautious in the area of stream renovation. We believe this proposal will allow us to show the value of connectivity and that we can have success with renovation efforts whether they are through electrofishing or the use of chemicals while keeping our partners engaged.

F. Problem and Specific Cause of the Problem (Max Characters: 350)

As with most areas in the brook trout range historic land use, roads and the introduction of non-natives have caused the decline of brook trout in Georgia. In addition, to these range wide problems brook trout populations are also subjected to extreme conditions as a result of droughts, warm summer water temperatures and flood events.

The existing culvert at Bryant Creek is perched and in poor condition. If the culvert remains in its existing condition it will continue to fragment habitat in the watershed and could lead to channel incision and sediment downstream.

Rainbow trout and brown trout were introduced into Walnut Fork, Stover Creek and Tate Branch. These non-natives are competing with native brook trout in these streams.

Historic land use practices have resulted in poor habitat conditions in all the streams proposed for habitat improvements. Historic land use practices resulted in increased sediment into streams which caused them to widen resulting in shallow water depths with long stretches of homogenous run/glide habitat. The shallower water can lead to increased water temperatures. Historic logging practices also resulted in a reduced amount of large wood in the streams. Large wood is important that it creates pools, results in local scour that uncovers spawning gravel, and helps buffer stream banks against high flows.

G. Objective of the Project with Reference to the Problem (Max characters: 350)

As stated previously the culvert on Bryant Creek is fragmenting brook trout habitat. By replacing it with a bottomless arch we will reconnect four and half miles of brook trout habitat. The bottomless arch will allow a continuous stream channel with natural substrate that will allow much easier fish passage.

The removal of non-native salmonids from Walnut Fork, Stover Creek and Tate Branch will renovate three miles of brook trout habitat. To date, removals in these three streams have resulted in greater than a 99% reduction of non-natives in Walnut Fork, a 69% reduction in Tate

Branch and a 37% reduction in Stover Creek. Continued removal efforts in these and potentially other streams are important to the continued viability of brook trout in Georgia.

Over the years the Chattahoochee National Forest has matured and most areas including riparian areas are well vegetated. This has resulted in a reduction in sediment delivery to the streams. However, the result of the historic land use is wider shallower streams with a lack of woody debris. By placing log structures or utilizing tree felling we will be able to enhance habitat by creating pools, increasing overhead cover and uncovering spawning gravel for brook trout to utilize. Structures built in 2008 increased the percent of pools by 151%, increased the amount of large woody debris by 270%, and increased the mean stream depth by 51% when compared to control sites. In response to these habitat changes, the biomass of brook trout increased in the enhanced habitat sections by an average of 48% when compared to control sites in these streams.

H. Partner Information (not to exceed 100 words)

Partner Name	**Contribution In-Kind**	**Contribution Cash**	**Federal or Non-Federal**	**Partner Category**	**Role of Partner**
U.S. Forest Service	$50,000	$150,000 (expected contribution from HTAP funds)	Federal	Federal & Landowner	Design & contract Bryant Creek Culvert replacement, supervise workcrew, provide labor, obtain permits, Supply crew vehicle
GA – DNR	$45,000	None	Non-Federal	State Fisheries Resource Agency	Oversee field operations and supervise work crew
Trout Unlimited	$28,500	$10,000	Non-Federal	National Conservation Group	Provide cash for supplies and labor force
North Georgia Technical College (NGTC)	$6,000	None	Non-Federal	Education Institution	Analyze water samples for pH and ANC
Soque River Watershed Assoc. (SRWA)	$2,000	None	Non-Federal	Local Conservation Group	Manage the bookkeeping and payroll
Total	**$131,500**	**$160,000**			

II. MAP OF PROJECT AREA (one only)

See attachment.

III. PHOTOGRAPH(S) OF PROJECT AREA (no more than 2, please provide credits and attach photo release forms)

Before and after photos of Gurley Creek representing a typical brook trout stream on Chattahoochee National Forest. This log structure increases stream depth in the plunge pool, increases pool depth upstream of the structure, and provides cover through the addition of large woody debris. Photos were taken by Leon Brotherton (GA-DNR) in July 2009.

IV. PROJECT BUDGET

See table on next page.

Partner Name	Partner Category *	Activity of Partner **	Budget Category***	EBTJV NFHAP Request	Non-Federal Contribution		Federal Contribution		Total Contribution	Acres/Miles Affected
					In-Kind	Cash	In-Kind	Cash		
Activity Bryant Creek Culvert Replacement										4.5 miles
USFS	Federal Landowner	Design &Contract oversight	Personnel				25,000		25,000	
		Contract	Contractual	20,000				150,000	170,000	
Activity Stream Renovation										3 miles
USFS	Federal Landowner	Labor	Personnel				4,000		4,000	
GA DNR	State Agency	Labor	Personnel		4,000				4,000	
Trout Unlimited	Conservation Group	Labor	Personnel	2,000		2,000			4,000	
Activity Stream Restoration										9 miles
USFS	Federal Landowner	Labor	Personnel				18,000		18,000	
			Equipment				3,000		3,000	
GA DNR	State Agency	Labor	Personnel		30,000				38,000	
			Equipment		3,000				3,000	
Trout Unlimited	Conservation Group	Labor	Personnel	20,000	28,500	8,000			46,500	
SRWA	Local CG	Labor	Personnel		2,000				2,000	
Activity Monitoring										23 miles
GA DNR	State Agency	Labor	Personnel		8,000				8,000	
Trout Unlimited	Conservation Group	Labor	Personnel	8,000					8,000	
NGTC	Local College	Labor	Personnel		6,000				6,000	
Total Contribution				50,000	81,500	10,000	50,000	150,000	341,500	

V. EVALUATION QUESTIONS

1. Please provide the GPS Coordinates for the project in UTM NAD 83.

Stream	Watershed	Zone	Easting	Northing
Bryant Creek	Toccoa	16	771401	3851467
Chester Creek	Toccoa	16	758589	3838574
Long Creek	Toccoa	16	758601	3839814
Lovinggood Creek	Toccoa	16	754761	3840910
Stover Creek	Toccoa	16	757140	3838609
Underwood Creek	Toccoa	16	758463	3838091
Chastain Branch	Chattahoochee	17	264609	3849418
Smith Branch	Chattooga	17	296294	3869360
Unnamed Tributary of Ammons Creek	Chattooga	17	292435	3873794
Walnut Fork	Chattooga	17	291126	3867531
Tate Branch	Tallulah	17	267687	3871892

2. Please list the type of project. Examples include: in-stream habitat, riparian planting, fencing, AMD, fish passage, reintroduction, assessment, etc.

This project includes fish passage, in-stream habitat work, stream renovation and monitoring.

3. Does the project include a protection component? If so, explain how the project sufficiently protects brook trout habitat. Does the project include fee simple land purchase or easements?

This project does not include a protection component and does not include a purchase or easement. These sites are already protected in that they are on Federal Land and the vast majority of brook trout streams in Georgia are on public land.

4. What percentage of the watershed above the proposed project is protected in perpetuity?

All of the proposed activities will occur on National Forest System Lands.

Watershed	Streams proposed for work	6th level HUCs	% of HUCs in Public Ownership
Tallulah	1	1	93
Toccoa	6	2	83
Chattooga	3	3	83
Chattahoochee	1	1	33

5. List the specific regional EBTJV habitat objectives addressed by the project and describe how the project will contribute towards them.

This project addresses regional objectives 5 and 6. It will strengthen and maintain brook trout populations in reduced watersheds.

6. List the specific state-level EBTJV habitat objectives addressed by the project and describe how the project will contribute towards them.

The following are the Georgia EBTJV Habitat Objectives,

Short Term Goals

2.1 Develop a prioritized list of habitat improvement projects

Strategy 2.1.1. Work with the U.S. Forest Service (USFS), Trout Unlimited (TU) and other stakeholders to develop a prioritized list of habitat improvement projects by 2007.

2.2 Develop a cooperative water quality sampling program

Strategy 2.2.1. Work with the USFS, TU and North Georgia Technical College (NGTC) to establish a sampling program to monitor pH, ANC and temperature for a subset of Georgia brook trout streams by 2007.

Long Term Goal

2.3 Evaluate all brook trout watersheds for sources of anthropomorphic sediment

Strategy: Work with the USFS to locate possible sources of sediment. Corrective measures should be proposed and implemented where possible.

The GA DNR, USFS and TU have worked together to prioritize habitat improvement projects and this proposal involves implementing them. It also continues the water quality monitoring program with NGTC. The road approaches associated with the culvert replacement on Bryant Creek are contributing sediment to the stream and this will be addressed during culvert replacement.

In addition to meeting these habitat objectives this proposal will allow us to continue to assess brook trout populations in Georgia (Priority 1), restore brook trout populations (Priority 3) through renovation, provides for Public Education (Priority 4) and increases brook trout fishing opportunities.

7. Please state whether the project is an enhancement, restoration or protection project.

The entire proposal is an enhancement project in that we are manipulating the physical and biological characteristics of various sites with the goal of improving specific functions.

Specifically, at Bryant Creek we are removing a physical man made barrier to restore fish passage. In-stream habitat enhancements have occurred in Bryant Creek and Pretty Branch and these habitats will now be connected. At our stream renovation sites we are removing non-natives to reduce competition with brook trout populations and for our habitat improvements we are enhancing in-stream habitat function by adding woody debris.

8. State which, if any, EBTJV priority the project addresses:

This project addresses EBTJV priorities two and three in that we are reconnecting habitats that have a high probability of supporting brook trout populations and it will enhance streams that have unstable brook trout habitats.

9. What is the EBTJV priority ranking for the proposed project watershed for the type of project (enhancement, restoration or protection) being proposed?

All data was taken from the enhancement map.

Watershed	Value
130792	.25
1302388	.23
130285	.22
1302384	.18
13015	.11
13013	.10

10. Will the completed project benefit any federally listed threatened or endangered species?

There are no known federally listed species that will benefit from this project.

11. Will the completed project benefit any state listed threatened or endangered species?

The Eastern Hellbender (Cryptobranchus alleganiensis) a species of concern is known to occur in Bryant Creek and would potentially benefit from the improvement of aquatic passage at Bryant Creek. Other species of concern occur such as the Redline Darter (Etheostoma rufilineatum), Wounded Darter (Etheostoma vulneratum), Banded Darter (Etheostoma zonale), Tangerine Darter (Percina aurantiaca), Gilt Darter (Percina evides), Olive Darter (Percina squamata), and Blotched Chub (Erimystax insignis) occur in the watersheds we propose to work in but, these species do not occur in the high elevation stream reaches proposed for restoration.

12. Does the project demonstrate watershed scale planning?

Yes it does demonstrate watershed scale planning. In Georgia, 25% of our subwatersheds are greatly reduced, 65% are extirpated and 20% are unknown. All of our watersheds proposed for work are greatly reduced and are adjacent to other watersheds which are greatly reduced. At this time we are concentrating on strengthening exiting populations where they occur. Under this grant proposal the majority of the work will occur within the Chattooga River and Toccoa River watersheds with some work occurring in the Chattahoochee River and Tallulah River watersheds. As we move further along we will able to connect these isolated populations within these watersheds.

13. Please describe how the project will provide for the expansion or improvement of existing habitat?

This project will provide through the removal of a barrier, removal of non-natives and in-stream habitat improvements a moderate expansion of existing habitat. For specific details please see Sections A and G of the grant proposal.

14. What are the root causes of the watershed degradation and which of these are addressed by the project?

This project addresses two major causes of watershed degradation. First, it addresses habitat fragmentation by replacing a perched culvert which is a barrier. Second, it mitigates the effect of historic land use practices by adding woody debris to enhance habitat.

This proposal also addresses through the removal of non-natives a major cause of the decline of brook trout throughout its range. This question is addressed further in Sections F and G of the application.

15. Describe the plans for post project monitoring and evaluation.

In all streams proposed for in-stream habitat improvements, fish and habitat will be surveyed. Surveys will be repeated the following year and documented in a Final Report. In addition to this a subset of streams worked on will be monitored three and five years post treatment to observe and document changes in habitat and populations. Once stream renovation efforts are completed these streams will be monitored on a rotating basis to ensure non-natives have not been reintroduced.

16. Describe the expected effect on the brook trout population. To what degree will the project strengthen the brook trout population status?

We expect a moderate effect to the brook trout population. By removing the barrier at Bryant Creek the population in this area will be strengthened and made more resilient by an increase in the amount of habitat available and greater opportunity for emigration and immigration between subpopulations. Removing non-natives will again strengthen populations by removing competition for brook trout. Habitat improvements will also strengthen populations (see Section G) and provide critical habitat during low water years.

17. Please describe the long term benefit of the project and provide an estimate of the length of time the project is expected to be effective. If a plan for long term maintenance is necessary, please describe it.

The probability of long term success is high. The bottomless arch on Bryant Creek should remain in place for up to 50 years. Stream renovation efforts will have to be monitored and there may need to be some maintenance removal efforts. The types of stream structures being used have lasted for 25 years or more in some Georgia

watersheds. Even as the woody debris deteriorates and moves through the system it provides fish cover and habitat.

18. What size stream does the project benefit - tributary stream or mainstem habitats?

In Georgia, brook trout have mostly been relegated to high elevation headwater streams as such the work proposed here will occur in tributary streams. Bryant Creek is the largest stream proposed for work and it is a 3rd order stream just below the crossing proposed for work.

19. What competitive non-native or invasive fish are in the watershed with access (no barrier) to the proposed project?

Currently, all the streams proposed for work have a barrier that blocks fish passage. The only streams with non-natives are those proposed for renovation efforts (Stover Creek, Walnut Fork and Tate Branch).

20. Are other strains of brook trout or other salmonids or other exotics stocked within the proposed project watershed? Where (e.g. upstream, downstream, and distance from project site) does the stocking take place with respect to the project site?

Stocking of non-native salmonids does occur downstream in some of the watersheds proposed for work but the stocking occurs below a barrier.

21. Please describe the current status of the project. Is it planned, permitted and ready to begin? Please identify the targeted month and year for project completion.

NEPA requirements for the project have been completed. Permitting has not been completed. A project timeline can be found in Section C of the grant application.

22. Will public access be allowed at the project site? If so, what kinds of recreational activities are allowed - public fishing, nature trails, etc?

These projects all will occur on National Forest System lands and all streams have unrestricted public access by foot travel. All of the streams are open to fishing and are regulated by the State of Georgia fishing regulations. Some streams are adjacent to developed campgrounds and trails including the Appalachian Trail.

23. What is the recreational quality of the potential fishery?

These streams offer a moderate recreational quality fishery. While they are small in physical stature (fish density and biomass, total number of angler trips), they present unique opportunities to fish for native trout. Such opportunities are highly prized by the Georgia trout fishing constituency. An indicator of this would be that several

streams to be worked on are listed on outfitter/guide permits issued by the Chattahoochee-Oconee National Forests.

24. Describe any outreach or educational components of the project and how many individuals / students will be served.

TU has taken the lead in outreach and educational components of this program. The Georgia Council of TU has two Back-the-Brookie coordinators that spend time giving presentations and updates to the various TU chapters and other conservation organizations in the state. TU worked with the State Legislature to get the brook trout designated as a state symbol and Georgia's Cold Water Game Fish.

Specifically, for this project the work crew would largely be comprised of college students majoring in fisheries management with hopes that exposure to these proposed project activities will benefit their career. In addition, TU offers an annual, week long summer Trout Camp for 24 middle school aged children with at least 12 adult volunteers. During trout camp students spend a day focused on brook trout installing habitat structures and electrofishing for brook trout. We also hold approximately four workdays per year with 30 (total of 120) or more TU volunteers assisting with habitat improvement work per event.

25. If applicable, please briefly describe how this project will promote adaptation to climate change.

All of the habitat and renovation activities proposed should make brook trout populations more resilient to climate change. One of the primary objectives of our in-stream habitat projects is to "drought proof" the streams by increasing the amount of pools and their depth. This should provide critical refugia habitat that can be utilized by brook trout. Reconnecting fragmented habitat and removing non-natives will provide critical habitat and remove competition for valuable resources for our brook trout populations.

26. Please explain how this project is a good investment of funds, using a quantitative approach where possible and the recreational and / or economic value of the project.

This project has a 5.83:1 ratio of partner funds to NFHAP funds. Improvements should have a lasting effect specifically the culvert replacement should last up to 50 years and habitat improvements structures have endured for up to 25 years in some locations in Georgia.

From a recreation standpoint there is a limited amount of trout water in Georgia and this proposal helps expand opportunities for anglers to catch Georgia's State Cold Water Game Fish. As mentioned previously several of the streams proposed for work are listed on outfitter/guide permits issued by the Chattahoochee-Oconee National Forests.

Georgia brook trout have also been used as seed stock for South Carolina's restoration efforts. Enhancing our brook trout resource will maintain it as a seed

stock source for future efforts. Given that Georgia represents the southernmost distribution of Southern Appalachian brook trout, maintaining this segment of the gene pool is important.

27. Specify the NFHAP tasks upon which you will work. A list of tasks to choose from can be found in the instruction document.

- **Number:** P-6. 2 | **Type:** Habitat
  Support Fish Habitat Partnerships in identifying priority habitat areas within focus areas, developing action plans and conservation strategies, and implementing projects. The plan will help local and regional efforts garner the necessary resources and provide decision analysis and other evaluation tools necessary to succeed. Working with partnerships to demonstrate successful on-the-ground habitat improvement projects is recognized as critical to the success of the national effort.

- **Number:** P-6. 4 | **Type:** Habitat
  Build strong grassroots support that places fish habitat conservation high on the public agenda. Partners at all levels—federal, tribal, state and local—will help bring new and sustained attention to the need for action and will mobilize diverse stakeholder groups to advocate for fish habitat protection, restoration and enhancement.
- **Number:** P-7. 7 | **Type:** Habitat
  Communicate project results and lessons learned. Enable and facilitate learning among all partners about aquatic ecosystems and how to be good stewards of aquatic resources.
- **Number:** Strategy 2- Restore natural variability in river and stream flows and water surface elevations in natural lakes and reservoirs. | **Type:** Habitat
  Project or action works towards rehabilitating natural flow regimes in a system. Actions could include but are not limited to identifying those areas in need of flow regime restoration, and actively restoring natural flow and variability through such actions as water level manipulation or stream bed restoration.
- **Number:** Strategy 3 – Reconnect fragmented river, stream, reservoir, coastal, and lake habitat to allow access to historic spawning, nursery and rearing grounds. | **Type:** Habitat
  Project or action works towards reconnecting habitats within a system. This would include, but are not limited to, actions such as barrier removal.

28. Performance Metrics

- 5.1.10 Total number of in-stream/shoreline miles restored in U.S.

  A total of twelve miles will be restored. Nine miles of in-stream brook trout habitat will be restored through habitat improvements. Another three miles of stream will be restored to by removing non- native salmonids.

- 5.1.11 Total number of fish passage barriers removed or bypassed

  One barrier will be removed.

- 5.1.12 Number of miles re-opened to fish passage

  Two miles of stream will be re-opened to fish passage.

- 12.2.3 Number of aquatic invasive species populations controlled/managed (annually)

  Three populations of aquatic invasive species will be controlled.

- Number of Fishing activities and/or events for adults and children

  One fishing activity, Trout Camp, which includes middle school aged students with adult supervision, will be held.

- Number of Drop In activities and/or events for adults and children

  At least four volunteer workdays will be held.