

**Project proposals and rankings exercise**  
part of  
**Little Tennessee Native Fish Conservation Area Annual Meeting**  
**August 7, 2014**  
**Knoxville Outdoor Center**

## Contents

Assessment Projects .....	1
Outreach Projects .....	6
On-the-Ground Projects.....	9
Overall Project Ranking.....	14

## Assessment Projects

People interested in working in this general area: Erin McCombs, Andrew Henderson, Brian Alford, Dave Matthews, Steve Fraley

### **Project group: Barrier assessment - (grouped due to similarity of individual projects)**

*Total votes - 31*

**Project:** Reconnaissance of potential barrier removals-pair desktop/computer reconnaissance of projects (found maybe from the barrier prioritization tool) with some on the ground recon (ie, sediment characterization) to identify the most feasible projects (best projects/best cost value)

- Geographic scope: Entire Little TN basin
- New or expansion of existing: Expansion
- Votes: 23
- Submitted by: Erin McCombs-American Rivers
- People interested in working on this project: Jason Farmer, Caleb Hickman

**Project:** Assessment of road/stream crossings re trout stream issues: Barriers (bad), barriers (good), erosion, fail potential, etc.

- *Geographic scope: Entire watershed*
- *New or expansion of existing: Expansion*
- *Submitted by: Damon Hearne*

**Project:** Barrier prioritization tool (dams and culverts), a decision making tool to inventory and wade through the thousands of aquatic barriers to find the most worth-while projects driven by the best available science/data, GIS based

- Geographic scope: Entire Little TN:TN expansion in the works, currently have NC finished
- New or expansion of existing: Expansion
- Votes: 5
- Submitted by: Erin McCombs-American Rivers

**Project:** Define projects cleanup restocking dam removal, env. Acceptable success, 1. Identify project site & 2 or 3 line deep, 2. Consider methods of accomplishment, 3. Identify resources need people more, 4. Identify where Bose living is needed and there is specific need, 5. Strategic project extreme & resources needed

- *Geographic scope: Consider type of organization, Define what is common & establish component groups working toward common goal*
- *New or expansion of existing: (blank)*

- Consider priority tasks
- Votes: 3
- Submitted by: Robin Hill

**Project group: Identify stressors and their sources - (grouped due to similarity of individual projects)**

Total votes: 22

**Project:** Identify major sources of sediment input into the river

- Geographic scope: Upper NC portion of river system
- New or expansion of river system: (blank)
- Votes: 9
- Submitted by: John F.

**Project:** Environmental stressors affecting hellbender distribution/abundance.

- Geographic scope: Potentially range wide but focus on populations affected by private land activities
- New or expansion of existing: Expansion
- Votes: 9
- Submitted by: Jason Farmer

**Project:** Assessment of tributary streams watershed-wide to identify stressors & sources, landowner contacts for restoration needs projects

- Geographic scope: Entire watershed-has occurred from Franklin-Fontana associated by watershed management & ban
- New or expansion of existing: (blank)
- Votes: 4
- Submitted by: Anita Goetz

**Project: Further investigation into causes of mussel die-offs in upper LTN**

- Geographic scope: NC & GA
- New or expansion of existing: Expansion
- Votes: 20
- Submitted by: Steve Fraley
- People interested in working on this project: Erin McCombs

**Project:** Although mussel absence/presence has been noted during other sampling, or some limited surveys have occurred, to my knowledge there have never been any **formal inventory of mussels on Citico/Abrams Creeks**. These would help guide management activities as well as future restoration priorities for mussels and fish (hosts).

- Geographic scope: Lower 8-12 miles of Citico/Abrams Creeks
- New or expansion of existing: New
- Votes: 14
- Submitted by: Matt Kulp NPS

**Project: Riparian habitat fragment survey** possibly survey other man-made impacts during the process, much of this could be done by use of aerial maps

- Geographic scope: Entire Little T?
- New or expansion of existing: Expansion
- Votes: 10
- Submitted by: Larry Everett

**Project: Survey and assess snail darter occurrence** in Little T and tribs & reservoirs too.

- Geographic scope: Tellico River, Chilhowie tail water
- New or expansion of existing: New, focused effort
- Votes: 9
- Submitted by: Mark Cantrell

**Project: Develop a catalog of native fish species in the basin,** at a 12-digit HUC scale, annotate with occurrence/abundance status (present/absent/extirpated/restored)

- *Geographic scope: Basin-wide, Little T*
- *New or expansion of existing: Expanded and updated*
- *Votes: 7*
- *Submitted by: Mark Cantrell*

**Project group: Fish and macroinvertebrate inventory and monitoring and water quality monitoring**

Total votes: 6

**Project:** Survey-fish, macroinv. Etc. water quality (ex. Bacti, nutrients, etc. background) for unassessed streams/sub-watersheds

- *Geographic scope: Entire Little TN*
- *New or expansion of existing: Expansion*
- *Votes: 3*
- *Submitted by: Larry Everett*

**Project:** ATBI fish (aquatic?)

- *Geographic scope: Entire Little TN*
- *New or expansion of existing: Expansion*
- *Votes: 1*
- *Submitted by: Larry Everett*

**Project:** TVA's stream ecological health (stream monitoring IBI), monitoring program, data support

- *Geographic scope: Watershed wide*
- *New or expansion of existing: Existing program*
- *Votes: 2*
- *Submitted by: Dave Matthews TVA*

**Project group— Identify and prioritize restoration sites**

Total votes - 6

**Project:** Prioritize areas for private land protection, make GIS available for all, thinking of information that can be used by land trusts to prioritize efforts

- *Geographic scope: E. TN*
- *New or expansion of existing: New*
- *Votes: 6*
- *Submitted by: Meredith Cleasch*

**Project:** Use Sierra Club outings to identify areas in need of restoration; identify water quality issues; identify potential public access areas.

- *Geographic scope: TN*
- *New or expansion of existing: (blank)*
- *Submitted by: Axel Ringe*

**Project: Collect traditional ecological knowledge,** Cherokee once lived at equilibrium w/ this system, what can we learn & apply, harvesting, management-land & water

- *Geographic scope: Basin-level*
- *New or expansion of existing: New*
- *Votes: 5*
- *Submitted by: Caleb Hickman*

**Project: Is there adequate access in the watershed?** Access often enhances public appreciation of the resource.

- *Geographic scope: Could be both TN/NC*
- *New or expansion of existing: New*
- *Votes: 5*
- *Submitted by: Mark Thurman*

**Project: Side scan sonar**, Aquatic Habitat Mapping-Trutta Consulting, Brett Connell, bathymetric data collection

- *Geographic scope: Start with free-flowing main stem, move into tributaries*
- *New or expansion of existing: New, Possible expansion*
- *Done for citico sections*
- *Votes: 4*
- *Submitted by: Andrew Henderson*

**Project: Invasive crayfish surveys & removal, survey streams to document invasiveness**, develop methods for removing invasive while preserving native crayfishes

- *Geographic scope: A watershed or stream segment within the basin*
- *New or expansion of existing: Expansion*
- *Votes: 4*
- *Submitted by: Brian Alford*
- *People interested in working on this project: Caleb Hickman*

**Project: Presence & potential impact of invasive species** to Little Tenn-River system: Inventory & experimentation, survey & map, include aquatic & terrestrial, even invasive plants, leaf litter is known to impact gill-breathing amphibians (new findings)

- *Geographic scope: Basin*
- *New or expansion of existing: New*
- *Votes: 3*
- *Submitted by: Caleb Hickman*

**Project: Larval fish drift dynamics**, how do reservoirs/dams limit native fish larval dispersal, use drift plankton nets to measure/document larval drift from upstream to downstream of dam

- *Geographic scope: Basin-wide or a reservoir with an important trib*
- *New or expansion of existing: New*
- *Votes: 3*
- *Submitted by: Brian Alford*

**Project: Characterize habitat for rare species in the Little T.** Identify areas for species restoration, augmentation, translocation.

- *Geographic scope: Entire basin-prioritize sub-basins, prioritize species*
- *New or expansion of existing: Expansion*
- *Expanded, coordinated*
- *Votes: 2*
- *Submitted by: Mark Cantrell*

**Project: Genetic inventories of rare and/or highly managed/restored spp** to ensure our management actions are not adversely effecting spp as a whole

- *Geographic scope: Upper Little T system*
- *New or expansion of existing: New*
- *Votes: 2*
- *Submitted by: Matt Kulp*

**Project: Assessment using literature/GIS of the percentage of at risk native species in the LT** vs other areas of the country to be used to further outreach efforts and gain more support for SE aquatic species conservation

- *Geographic scope: Whole LT watershed*
- *New or expansion of existing: (blank)*
- *Submitted by: (blank)*

## Outreach Projects

People interested in working in this general area: Jason Meador, Fred Harris, Steve Fraley

### Projects

#### **Project : Develop audio/visual and other outreach materials**

Total votes - 40

**Project:** "Conservation Photography" ...Going beyond pretty pictures! Consisting of: 1) People...Scientists at work. What do scientists do? The public needs to know. 2) Places...Landscapes of our rivers, creeks, and mountains. 3) Species-specific... \* "Portraits of our native aquatic species (fish, insects, crayfish, salamanders, etc.)" against a white background. \* In situ images of species in their habitats (underwater housing needed) \* I have a running portfolio of many images already, but a small grant could go a long way in purchasing new equipment, etc.

- *Geographic scope:* Eastern Tennessee
- *New or expansion of existing:* New \* note: Images can be used in presentations, local publications, blogs, posts, etc. [www.toddamacker.com](http://www.toddamacker.com) [amackertodd@gmail.com](mailto:amackertodd@gmail.com)
- *Votes:* 11
- *Submitted by:* Todd Amacker- UTK graduate student (and photographer)

**Project:** Create video or distribute freshwater I illustrated video for showing on PBS and public access networks

- *Geographic scope:* Entire watershed
- *New or expansion of existing:* New
- *Votes:* 26
- *People interested in supporting:* Steve Fraley, Caleb Hickman
- *Submitted by:* Ed Williams

**Project:** Support Production of ED. & Outreach, video materials with freshwaters

- *Geographic scope:* All
- *New or expansion of existing:* New
- *Votes:* 3
- *Submitted by:* Steve Fraley

**Project:** Snorkeling programs for kids, teachers & landowners, involve school systems, local & not so local (ie. Knox County, Macon County, Jackson County, etc.)

- *Geographic scope:* Across watershed
- *New or expansion of existing:* Expansion
- *Votes:* 21
- *Submitted by:* Jim Herrig

#### **Project group:-- Develop fish in classroom projects**

Total votes - 16

**Project:** More native fish in the classroom projects for LTNR, both in NC & TN at schools within watershed/basin

- *Geographic scope:* All
- *New or expansion of existing:* Expansion
- *Votes:* 16
- *Submitted by:* Pat Rakes

**Project:** Aquana in the classroom-proposed by Peggy-Make this happen in NC, too

- *Geographic scope:* (blank)
- *New or expansion of existing:* (blank)
- *Submitted by:* Andrea Leslie

**Project:** Expand program of H in classrooms to give elementary kids 1<sup>st</sup> hand knowledge of native organisms

- *Geographic scope:* Knox County? Monroe County? TN a county school system
- *New or expansion of existing:* (blank)
- *Submitted by:* Peggy Shute

**Project: Website**

- *Geographic scope: Basin-wide*
- *New or expansion of existing: (blank)*
- *Votes: 12*
- *Submitted by: Axel Ringe*

**Project: Educated field trips for politicians and policy makers**

- *Geographic scope: Entire Little T watershed*
- *New or expansion of existing: New*
- *Votes: 12*
- *Submitted by: Ed Williams*

**Project: Create/publish a booklet/guide/brochure featuring the fish of the LTNR system**

- *Geographic scope: System*
- *New or expansion of existing: New*
- *Votes: 11*
- *Submitted by: Pat Rakes*

**Project: Connect w/critical landowners, educate on protection, strategies for them**

- *Geographic scope: ETN*
- *New or expansion of existing: (blank)*
- *Votes: 10*
- *Submitted by: Meredith Cleasch*

**Project: Coordinate various educational projects** into a logical whole e.g. fish in the classroom-kids in the creek...impact of land use on aquatic communities

- *Geographic scope: (blank)*
- *New or expansion of existing: (blank)*
- *Votes: 9*
- *Submitted by: Fred*

**Project: Promote from bill cost/share programs** relative to trout habitat-w/coordination w/LTLT

- *Geographic scope: Entire*
- *New or expansion of existing: (blank)*
- *Votes: 4*
- *Submitted by: Damon Hearne*

**Project: Macro invertebrate sampling by kids**

- *Geographic scope: Across watershed*
- *New or expansion of existing: Expansion of kids in the creek*
- *Votes: 2*
- *Submitted by: Jim Herrig*

**Project: "Higher end" snorkel outings targeting \$, eco-tourists, and policy makers**

- *Geographic scope: Watershed-wide*
- *New or expansion of existing: Expansion of CNF project*
- *Votes: 1*
- *Submitted by: Pat Rakes*

**Project: Standardized curriculum for outreach activities**

- *Geographic scope: Per state*

- *New or expansion of existing: (blank)*
- *Votes: 1*
- *Submitted by: Jason Meador*

**Project: Facebook Page**

- *Geographic scope: Basin wide*
- *New or expansion of existing: (blank)*
- *Votes: 1*
- *Submitted by: Axel Ringe*

**Project: Advocacy**

- *Geographic scope: TN*
- *New or expansion of existing: (blank)*
- *Votes: 1*
- *Submitted by: Axel Ringe*

**Project: Schedule outreach strategically & tactically work on ID of critical interfaces** IE funding, land conservancy enlightenment, “sell” specific project, enlarge understanding of natural how project benefits the stream as well as the local, engage groups to fix problems, supporters

- *Geographic scope: Train interface people to project support*
- *New or expansion of existing: (blank)*
- *Votes: 1*
- *Submitted by: Robin Hill*



## On-the-Ground Projects

People interested in working in this general area: Caleb Hickman, Shannon O'Quinn, Steve Fraley, Erin McCombs

### **Project group (grouped due to similarity of individual projects)** – Barrier removal

Total votes – 37

People interested in working on this project: Erin McCombs

**Project:** Restore aquatic organism passage on/at road/stream barriers that are strategically beneficial to brook trout.

- *Geographic scope: Brook trout water-currently NC current sites: Buck Creek (Clay co), Caney Fork (Jackson co)*
- *New or expansion of existing: New/Expansion*
- *Votes: 19*
- *Submitted by: Damon Hearne-TU w/USFS and NCWRC*

**Project:** Aquatic barrier removal (dams & culverts)

- *Geographic scope: Entire basin*
- *New or expansion of existing: Expansion*
- *Votes: 18*
- *Submitted by: Erin McCombs- American Rivers*
- People interested in working on this project: Caleb Hickman, Jason Farmer

**Project:** Lake Emory Dam Aquatic Org Passage

- *Geographic scope: Upper Little T/Franklin NC*
- *New or expansion of existing: (blank)*
- *Votes: 0*
- *Submitted by: (blank)*

### **Project group: Fish population reintroduction/augmentation** (Note – these are grouped because they are all fish reintroduction/augmentation projects, but each one deals with different fish/locations.)

Total votes - 37

**Project:** Sicklefin RH augmentation/restoration-range expansion, upper Tuck, Upper LTN (Arbor Franklin), Oconaluftee (EBCI co/op), Potential expansion, Santeetlah Res & Tribs, Tallulah, Snow Bird, Santeetlah Creek, Cheoah R, Slickrock CR & Calderwood Res.

- *Geographic scope: NC & GA, expand to just in TN (Calderwood/Slickrock)*
- *New or expansion of existing: New/Expansion*
- *Votes: 13*
- *Submitted by: Steve Fraley*

**Project:** Expansion of Brooke Trout restoration in Tellico Watershed. Collaboration between TN/NC

- *Geographic scope: TN/NC*
- *New or expansion of existing: Expansion*
- *Votes: 7*
- *Submitted by: (blank)*

**Project:** Reintroduction of extirpated native fishes/mussels to Abrams Creek, GRSM - As mentioned, over 20 species were extirpated from lower Abrams Creek in 1957. Only about 12 of them have naturally recolonized the section left above the impoundment. This project would ID those remaining spp. And look at similar genetic stocks for reintroduction.

- *Geographic scope: Abrams Creek from Falls to Chilhowie Reservoir embayment.*
- *New or expansion of existing: Expansion*
- *Votes: 7*
- *Submitted by:*

**Project:** Re-intro Spotfin Chub to Tuckasegee R.

- *Geographic scope: NC*
- *New or expansion of existing: Expansion*
- *Votes: 6*
- *Submitted by: Steve F.*

**Project:** Re-intro (assess feasibility) YF & Smokey madtoms in Cheoah R.

- *Geographic scope: NC (re-intro) TN (source pops)*
- *New or expansion of existing: New (in NC) Expansion (overall)*
- *Votes: 2*
- *Submitted by: (blank)*

**Project:** Restore "less-charismatic" or non-listed nongame fishes to HPS & USFS waters where extirpated. (\$ usually just for rarest or game species)

- *Geographic scope: Basin-wide*
- *New or expansion of existing: Expansion*
- *Votes: 2*
- *Submitted by: Pat Rakes*

**Project group:** Riparian buffer restoration initiative



**Total extant native (n) spp.:** 98  
**Probable native (\*) spp. extirp.:** 13  
**Probable total native fish fauna:** 111  
**Probable introduced (i) spp.:** 13  
**Probable historical fish fauna:** 124

Total votes 24

**Project:** Riparian buffer restoration, large scale project, featuring cost-share & full grant resources, technical guidance and educational resources, available to all landowners-agricultural, commercial, municipal Currently there are programs & smaller scale projects available. Often, resources are only available for agricultural lands.

- *Geographic scope: Watershed-wide*
- *New or expansion of existing: (blank)*
- *Votes: 16*
- *Submitted by: Andrea Leslie*

**Project:** Target priority watersheds and implement a riparian buffer initiative

- *Geographic scope: (blank)*
- *New or expansion of existing: Expansion*
- *Votes: 8*
- *Submitted by: Shannon O'Quinn*

**Project: Agriculture best management practices**, (BMPs)- cattle exclusion fencing, stream restoration, grass waterways, etc.

- *Geographic scope: Entire Little T watershed*
- *New or expansion of existing: Expansion*
- *Votes: 15*
- *Submitted by: Ed Williams*

**Project: Mountain road & driveway repair project.** Many assessment efforts have pointed to ending roads & driveways (& associated road ditches) as primary sediment sources. Three things are needed: (1) Access to the most problematic roads & driveways (2) Offer cost-share, technical guidance to repair these problematic roads (3) Education

- *Geographic scope: Watershed-wide*
- *New or expansion of existing: (blank)*
- *NC-based regional erosion & sediment control initiative is helping to host a mtn road building course for contractors. A mtn road building course for landowners is held 1x/year in NC.*
- *Votes: 12*
- *Submitted by: Andrea Leslie*

**Project: River clean-ups** (annual) ID news locations

- *Geographic scope: All*
- *New or expansion of existing: (blank)*
- *Votes: 8*
- *Submitted by: Mike Bryant*

**Project: Urban storm water** retro-fits, constructed wetlands, detention ponds, rain gardens, cisterns, etc.

- *Geographic scope: Major population centers-Franklin, Bryson City, Knoxville, etc.*
- *New or expansion of existing: Both*
- *Votes: 7*
- *Submitted by: Ed Williams*

**Project: Re-introduction of Ashy Darter & Sickle Darter**

- *Geographic scope: Appropriate streams (Tellico R.)*
- *New or expansion of existing: New*
- *Votes: 7*
- *Submitted by: Jim Herrig*

**Project:** Little T. give stream restoration including floodplain/stream channel/barrier removal out assessment to determine priority projects

- *Geographic scope: Watershed-wide, it has been done from Franklin > Fontana, should be done for entire watershed*
- *New or expansion of existing: (blank)*
- *Votes: 5*
- *Submitted by: (blank)*

**Project: Restore substrate in “Riverine” sections of main stem to natural or historical conditions.** Restore water temps in Riverine section of main stem to natural or historical conditions.

- *Geographic scope: TN side, but could be done watershed wide*
- *New or expansion of existing: Expansion*
- *Votes: 2*
- *Submitted by: Reclamation of “Natural” habitat*

**Project: Removal/eradication of invasive species in the Little T basin**

- *Geographic scope: Start in tributaries*
- *New or expansion of existing: New*
- *Votes: 1*
- *Submitted by: Andrew Henderson*
- *People interested in working on this project: Caleb Hickson*

**Project:** Effects of tributaries on resilience of communities to damming. \*Use temporal changes & manipulation (ie. Dillsboro Dam removal)

- *Geographic scope: Basin-level*
- *New or expansion of existing: Expansion*
- *Votes: 1*
- *Submitted by: Caleb Hickman*

**Project:** Scope individual project, plan method of accomplish-base line, define resources population approval funding, make a risk assessment ie what will keep project from being completed, Identify a single person (point of responsibility) to evaluate project

- *Geographic scope: Specific to project, Do prove what is to be done, give updates*
- *New or expansion of existing: (blank)*
- *Submitted by:*
- *Votes: 0*

## Overall Project Ranking

**Project group (grouped due to similarity of individual projects) – Develop audio/visual and other outreach materials**

Total votes - 40

**Project:** “Conservation Photography” ...Going beyond pretty pictures! Consisting of: 1) People...Scientists at work. What do scientists do? The public needs to know. 2) Places...Landscapes of our rivers, creeks, and mountains. 3) Species-specific... \* “Portraits of our native aquatic species (fish, insects, crayfish, salamanders, etc.)” against a white background. \* In situ images of species in their habitats (underwater housing needed) \* I have a running portfolio of many images already, but a small grant could go a long way in purchasing new equipment, etc.

- *Geographic scope:* Eastern Tennessee
- *New or expansion of existing:* New \* note: Images can be used in presentations, local publications, blogs, posts, etc. [www.toddamacker.com](http://www.toddamacker.com) [amackertodd@gmail.com](mailto:amackertodd@gmail.com)
- *Votes:* 11
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- *Geographic scope:* NC

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- *New or expansion of existing: (blank)*
- *Votes: 0*
- *Submitted by: (blank)*

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Total votes - 31

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- *Geographic scope: Consider type of organization, Define what is common & establish component groups working toward common goal*
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- *Consider priority tasks*
- *Votes: 3*
- *Submitted by: Robin Hill*

### **Project group (grouped due to similarity of individual projects) – Riparian buffer restoration initiative**

Total votes 24

**Project:** Riparian buffer restoration, large scale project, featuring cost-share & full grant resources, technical guidance and educational resources, available to all landowners-agricultural, commercial, municipal Currently there are programs & smaller scale projects available. Often, resources are only available for agricultural lands.

- *Geographic scope: Watershed-wide*
- *New or expansion of existing: (blank)*
- *Votes: 16*
- *Submitted by: Andrea Leslie*

**Project:** Target priority watersheds and implement a riparian buffer initiative

- *Geographic scope: (blank)*
- *New or expansion of existing: Expansion*
- *Votes: 8*
- *Submitted by: Shannon O'Quinn*

### **Project group (grouped due to similarity of individual projects) – Identify stressors and their sources**

Total votes: 22

**Project:** Identify major sources of sediment input into the river

- *Geographic scope: Upper NC portion of river system*
- *New or expansion of river system: (blank)*
- *Votes: 9*
- *Submitted by: John F.*

**Project:** Environmental stressors affecting hellbender distribution/abundance.

- *Geographic scope: Potentially range wide but focus on populations affected by private land activities*
- *New or expansion of existing: Expansion*
- *Votes: 9*
- *Submitted by: Jason Farmer*

**Project:** Assessment of tributary streams watershed-wide to identify stressors & sources, landowner contacts for restoration needs projects

- *Geographic scope: Entire watershed-has occurred from Franklin-Fontana associated by watershed management & ban*
- *New or expansion of existing: (blank)*
- *Votes: 4*
- *Submitted by: Anita Goetz*

**Project:** Snorkeling programs for kids, teachers & landowners, involve school systems, local & not so local (ie. Knox County, Macon County, Jackson County, etc.)

- *Geographic scope: Across watershed*
- *New or expansion of existing: Expansion*
- *Votes: 21*
- *Submitted by: Jim Herrig*



**Project:** Further investigation into causes of mussel die-offs in upper LTN

- *Geographic scope: NC & GA*
- *New or expansion of existing: Expansion*
- *Votes: 20*
- *Submitted by: Steve Fraley*
- *People interested in working on this project: Erin McCombs*

**Project group (grouped due to similarity of individual projects) – Develop fish in classroom projects**

*Total votes - 16*

**Project:** More native fish in the classroom projects for LTNR, both in NC & TN at schools within watershed/basin

- *Geographic scope: All*
- *New or expansion of existing: Expansion*
- *Votes: 16*
- *Submitted by: Pat Rakes*

**Project:** Aquana in the classroom-proposed by Peggy-Make this happen in NC, too

- *Geographic scope: (blank)*
- *New or expansion of existing: (blank)*
- *Submitted by: Andrea Leslie*

**Project:** Expand program of H in classrooms to give elementary kids 1<sup>st</sup> hand knowledge of native organisms

- *Geographic scope: Knox County? Monroe County? TN a county school system*
- *New or expansion of existing: (blank)*
- *Submitted by: Peggy Shute*

**Project:** Agriculture best management practices, (BMPs)- cattle exclusion fencing, stream restoration, grass waterways, etc.

- *Geographic scope: Entire Little T watershed*
- *New or expansion of existing: Expansion*
- *Votes: 15*
- *Submitted by: Ed Williams*

**Project:** Although mussel absence/presence has been noted during other sampling, or some limited surveys have occurred, to my knowledge there have never been any formal inventory of mussels on Citico/Abrams Creeks. These would help guide management activities as well as future restoration priorities for mussels and fish (hosts).

- *Geographic scope: Lower 8-12 miles of Citico/Abrams Creeks*
- *New or expansion of existing: New*
- *Votes: 14*
- *Submitted by: Matt Kulp NPS*

**Project:** Mountain road & driveway repair project. Many assessment efforts have pointed to eroding roads & driveways (& associated road ditches) as primary sediment sources. Three things are needed: (1) Access to the most problematic roads & driveways (2) Offer cost-share, technical guidance to repair these problematic roads (3) Education

- *Geographic scope: Watershed-wide*
- *New or expansion of existing: (blank)*
- *NC-based regional erosion & sediment control initiative is helping to host a mtn road building course for contractors. A mtn road building course for landowners is held 1x/year in NC.*
- *Votes: 12*
- *Submitted by: Andrea Leslie*

**Project:** Website

- *Geographic scope: Basin-wide*
- *New or expansion of existing: (blank)*
- *Votes: 12*
- *Submitted by: Axel Ringe*

**Project:** Educated field trips for politicians and policy makers

- *Geographic scope: Entire Little T watershed*
- *New or expansion of existing: New*
- *Votes: 12*
- *Submitted by: Ed Williams*

**Project:** Create/publish a booklet/guide/brochure featuring the fish of the LTNR system

- *Geographic scope: System*
- *New or expansion of existing: New*
- *Votes: 11*
- *Submitted by: Pat Rakes*

**Project:** Riparian habitat fragment survey possibly survey other man-made impacts during the process, much of this could be done by use of aerial maps

- *Geographic scope: Entire Little T?*
- *New or expansion of existing: Expansion*
- *Votes: 10*
- *Submitted by: Larry Everett*

**Project:** Connect w/critical landowners, educate on protection, strategies for them

- *Geographic scope: ETN*
- *New or expansion of existing: (blank)*
- *Votes: 10*
- *Submitted by: Meredith Cleasch*

**Project:** Survey and assess snail darter occurrence in Little T and tribs & reservoirs too.

- *Geographic scope: Tellico River, Chilhowie tail water*
- *New or expansion of existing: New, focused effort*
- *Votes: 9*
- *Submitted by: Mark Cantrell*

**Project:** Coordinate various educational projects into a logical whole e.g. fish in the classroom-kids in the creek...impact of land use on aquatic communities

- *Geographic scope: (blank)*
- *New or expansion of existing: (blank)*
- *Votes: 9*
- *Submitted by: Fred*

**Project:** River clean-ups (annual) ID news locations

- *Geographic scope: All*
- *New or expansion of existing: (blank)*
- *Votes: 8*
- *Submitted by: Mike Bryant*

**Project:** Develop a catalog of native fish species in the basin, at a 12-digit HUC scale, annotate with occurrence/abundance status (present/absent/extirpated/restored)

- *Geographic scope: Basin-wide, Little T*
- *New or expansion of existing: Expanded and updated*
- *Votes: 7*
- *Submitted by: Mark Cantrell*

**Project:** Urban storm water retro-fits, constructed wetlands, detention ponds, rain gardens, cisterns, etc.

- *Geographic scope: Major population centers-Franklin, Bryson City, Knoxville, etc.*
- *New or expansion of existing: Both*
- *Votes: 7*
- *Submitted by: Ed Williams*

**Project:** Re-introduction of Ashy Darter & Sickle Darter

- *Geographic scope: Appropriate streams (Tellico R.)*
- *New or expansion of existing: New*
- *Votes: 7*
- *Submitted by: Jim Herrig*

**Project group (grouped due to similarity of individual projects)** – Fish and macroinvertebrate inventory and monitoring and water quality monitoring

*Total votes: 6*

**Project:** Survey-fish, macroinv. Etc. water quality (ex. Bacti, nutrients, etc. background) for unassessed streams/sub-watersheds

- *Geographic scope: Entire Little TN*
- *New or expansion of existing: Expansion*
- *Votes: 3*
- *Submitted by: Larry Everett*

**Project:** ATBI fish (aquatic?)

- *Geographic scope: Entire Little TN*
- *New or expansion of existing: Expansion*
- *Votes: 1*
- *Submitted by: Larry Everett*

**Project:** TVA's stream ecological health (stream monitoring IBI), monitoring program, data support

- *Geographic scope: Watershed wide*
- *New or expansion of existing: Existing program*
- *Votes: 2*
- *Submitted by: Dave Matthews TVA*

**Project group (grouped due to similarity of individual projects)** – Identify and prioritize restoration sites

*Total votes - 6*

**Project:** Prioritize areas for private land protection, make GIS available for all, thinking of information that can be used by land trusts to prioritize efforts

- *Geographic scope: E. TN*
- *New or expansion of existing: New*
- *Votes: 6*
- *Submitted by: Meredith Cleasch*

**Project:** Use Sierra Club outings to identify areas in need of restoration; identify water quality issues; identify potential public access areas.

- *Geographic scope: TN*
- *New or expansion of existing: (blank)*
- *Submitted by: Axel Ringe*

**Project:** Collect traditional ecological knowledge, Cherokee once lived at equilibrium w/ this system, what can we learn & apply, harvesting, management-land & water

- *Geographic scope: Basin-level*
- *New or expansion of existing: New*
- *Votes: 5*
- *Submitted by: Caleb Hickman*

**Project:** Is there adequate access in the watershed? Access often enhances public appreciation of the resource.

- *Geographic scope: Could be both TN/NC*
- *New or expansion of existing: New*
- *Votes: 5*
- *Submitted by: Mark Thurman*

**Project:** Little T. give stream restoration including floodplain/stream channel/barrier removal out assessment to determine priority projects

- *Geographic scope: Watershed-wide, it has been done from Franklin > Fontana, should be done for entire watershed*
- *New or expansion of existing: (blank)*
- *Votes: 5*
- *Submitted by: (blank)*

**Project:** Side scan sonar, Aquatic Habitat Mapping-Trutta Consulting, Brett Connell, bathymetric data collection

- *Geographic scope: Start with free-flowing main stem, move into tributaries*
- *New or expansion of existing: New, Possible expansion*
- *Done for citico sections*
- *Votes: 4*
- *Submitted by: Andrew Henderson*

**Project:** Invasive crayfish surveys & removal, survey streams to document invasiveness, develop methods for removing invasive while preserving native crayfishes

- *Geographic scope: A watershed or stream segment within the basin*
- *New or expansion of existing: Expansion*
- *Votes: 4*
- *Submitted by: Brian Alford*
- *People interested in working on this project: Caleb Hickman*

**Project:** Promote from bill cost/share programs relative to trout habitat-w/coordination w/LTLT

- *Geographic scope: Entire*
- *New or expansion of existing: (blank)*
- *Votes: 4*
- *Submitted by: Damon Hearne*

**Project:** Presence & potential impact of invasive species to Little Tenn-River system: Inventory & experimentation, survey & map, include aquatic & terrestrial, even invasive plants, leaf litter is known to impact gill-breathing amphibians (new findings)

- *Geographic scope: Basin*
- *New or expansion of existing: New*

- *Votes: 3*
- *Submitted by: Caleb Hickman*

**Project:** Larval fish drift dynamics, how do reservoirs/dams limit native fish larval dispersal, use drift plankton nets to measure/document larval drift from upstream to downstream of dam

- *Geographic scope: Basin-wide or a reservoir with an important trib*
- *New or expansion of existing: New*
- *Votes: 3*
- *Submitted by: Brian Alford*

**Project:** Characterize habitat for rare species in the Little T. Identify areas for species restoration, augmentation, translocation.

- *Geographic scope: Entire basin-prioritize sub-basins, prioritize species*
- *New or expansion of existing: Expansion*
- *Expanded, coordinated*
- *Votes: 2*
- *Submitted by: Mark Cantrell*

**Project:** Genetic inventories of rare and/or highly managed/restored spp to ensure our management actions are not adversely effecting spp as a whole

- *Geographic scope: Upper Little T system*
- *New or expansion of existing: New*
- *Votes: 2*
- *Submitted by: Matt Kulp*

**Project:** Restore substrate in “Riverine” sections of main stem to natural or historical conditions. Restore water temps in Riverine section of main stem to natural or historical conditions.

- *Geographic scope: TN side, but could be done watershed wide*
- *New or expansion of existing: Expansion*
- *Votes: 2*
- *Submitted by: Reclamation of “Natural” habitat*

**Project:** Macro invertebrate sampling by kids

- *Geographic scope: Across watershed*
- *New or expansion of existing: Expansion of kids in the creek*
- *Votes: 2*
- *Submitted by: Jim Herrig*

**Project:** “Higher end” snorkel outings targeting \$, eco-tourists, and policy makers

- *Geographic scope: Watershed-wide*
- *New or expansion of existing: Expansion of CNF project*
- *Votes: 1*
- *Submitted by: Pat Rakes*

**Project:** Standardized curriculum for outreach activities

- *Geographic scope: Per state*
- *New or expansion of existing: (blank)*
- *Votes: 1*
- *Submitted by: Jason Meador*

**Project:** Facebook Page

- *Geographic scope: Basin wide*
- *New or expansion of existing: (blank)*
- *Votes: 1*
- *Submitted by: Axel Ringe*

**Project:** Advocacy

- *Geographic scope: TN*
- *New or expansion of existing: (blank)*
- *Votes: 1*
- *Submitted by: Axel Ringe*

**Project:** Schedule outreach strategically & tactically work on ID of critical interfaces IE funding, land conservancy enlightenment, "sell" specific project, enlarge understanding of natural how project benefits the stream as well as the local, engage groups to fix problems, supporters

- *Geographic scope: Train interface people to project support*
- *New or expansion of existing: (blank)*
- *Votes: 1*
- *Submitted by: Robin Hill*

**Project:** Removal/eradication of invasive species in the Little T basin

- *Geographic scope: Start in tributaries*
- *New or expansion of existing: New*
- *Votes: 1*
- *Submitted by: Andrew Henderson*
- *People interested in working on this project: Caleb Hickson*

**Project:** Effects of tributaries on resilience of communities to damming. \*Use temporal changes & manipulation (ie. Dillsboro Dam removal)

- *Geographic scope: Basin-level*
- *New or expansion of existing: Expansion*
- *Votes: 1*
- *Submitted by: Caleb Hickman*

**Project:** Assessment using literature/GIS of the percentage of at risk native species in the LT vs other areas of the country to be used to further outreach efforts and gain more support for SE aquatic species conservation

- *Geographic scope: Whole LT watershed*
- *New or expansion of existing: (blank)*
- *Submitted by: (blank)*

**Project:** Scope individual project, plan method of accomplish-base line, define resources population approval funding, make a risk assessment ie what will keep project from being completed, Identify a single person (point of responsibility) to evaluate project

- *Geographic scope: Specific to project, Do prove what is to be done, give updates*
- *New or expansion of existing: (blank)*
- *Submitted by:*
- *Votes: 0*



