
Unmuddy the Tuck

Katie

Submission Date

Aug 12, 2025 7:45 AM

Name of Initiative

Unmuddy the Tuck

Contact Person

Katie

Title

Price

Address

569 Mill Street

City

Sylva

State

North Carolina

Zip Code

28779

Primary Phone Number

7062242678

Email

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Organization Type

Non-Profit

Organization Tax ID

56-2254501

Time of Year of Initiative

Peak (April - November)

Describe the timing of the initiative in as much detail as possible (please list key project dates, milestones, timeframes, etc.)

In this initial effort, with funds from Jackson County Tourism and Development Authority, we seek to deploy four datalogging turbidity sensors during September and October, 2025:

August 2025: Onboard fall WCU intern who will assist with deployment and maintenance.

September 2025: Receive funds, obtain equipment, finalize locations for installation, install equipment.

October 2025: Begin to process data and identify sources. Continue data collection and sensor maintenance. Pursue solutions to current chronic turbidity problems.

November 2025: Continue to collect data and pursue solutions to current turbidity problems. Finalize plans for monitoring network expansion and identify additional funding sources.

Describe your initiative

The Tuckasegee River has experienced regular episodes of incredibly high sediment loads since June of this year, often without high rainfalls that normally explain high turbidity, or cloudiness, of the water. One of the worst of these events occurred over July 4th week of this year, when the annual gathering of Carolina Canoe Club in our region occurred alongside other holiday river tourism.

These turbidity problems are a major aesthetic concern for outdoor recreation tourism, are linked to high E. coli values in the river, and create added expense for local industry and residents relying on water withdrawn from the river. The size of the Tuckasegee watershed makes it extremely difficult to identify specific sources. In this proposal, WATR seeks funds to launch a turbidity monitoring program - Unmuddy the Tuck. Deploying a network of sensors will help us promptly address sediment problems when they occur.

We propose to grow a network of datalogging turbidity sensors over the next year as funds become available from a variety of sources, including state agencies, Western Carolina University researchers, Tennessee Valley Authority, and Swain County. The datalogging turbidity meters will remain deployed for the foreseeable future, helping us to prevent embarrassing turbidity episodes during the recreational season of 2026 and beyond.

Describe what previous experience applicant has in successful execution of similar endeavors

WATR currently participates in two water quality monitoring programs, both of which rely on volunteer sampling and extensive coordination. We work with NC Department of Environmental Quality to sample 11 Jackson County and five Swain County recreational sites along the Tuckasegee for E. coli bacteria levels. This program runs from April to September of each year. We have successfully met all criteria for this program for all three years we have been involved.

We also work with the Environmental Quality Institute to collect monthly water quality data at 16 Jackson County sites and five Swain County sites throughout the watershed for general water quality characterization. WATR has participated in this program for decades and has steadily added sites to the monitoring effort.

This program will be supervised by Katie Price, Ph.D. who has managed large-scale water monitoring projects for 20 years. The initial effort funded by TDA will have the staff support of a WCU student intern and a part-time staff member who has worked in environmental monitoring for 5+ years. A WCU professor and student groups will run projects to add additional information and data to the program during Fall Semester, 2026.

Website

protectourwaters-wnc.org

Social Media Channels - paste URLs below

www.facebook.com/watr-nc, instagram: @watr-nc

Amount of Funds Requested?

Total \$4,000.00: 4 x Datalogging turbidity sensors (\$3,500.00), Misc. installation supplies (\$500.00)

Date Funds Needed

Sep 1, 2025

Give a narrative description of how this project will increase tourism and visitation in Jackson County

Developing a monitoring network to identify sediment sources and promptly remediate turbidity problems will help ensure Jackson County remains a tourism destination for its natural beauty and outdoor recreation. The high turbidity in the Tuckasegee River has been noted and publicized as recreational groups post pictures on their websites and social media. Anglers in particular rely on clean water, as fish have difficulty seeing bait when turbidity is high. Paddlers and other recreators who spend money to travel to enjoy Jackson County's beautiful mountain waters are disappointed when the Tuckasegee looks no better than their downstate, muddy river. The chronic turbidity problems threaten to create a bad reputation for the Tuckasegee River and Jackson County as an outdoor recreation or mountain beauty tourist destination.

I have separately emailed a pdf of some photos showing this summer's turbidity conditions, including one downloaded from Carolina Canoe Club social media after July 4th.

If this initiative has occurred before, what is new that differentiates it from prior years?

This initiative has not occurred before.

What is your advertising and marketing plan for your initiative?

If funded, WATR will add a page to our website for the Unmuddy the Tuck program, its funding by Jackson County TDA. We will also use this page to make data publicly available and seek public input on identifying sediment sources.

Four members of the WATR Board of Directors serve as our Communications Committee and maintain active social media presence (Facebook and Instagram). Jackson County TDA funding and Unmuddy the Tuck progress will be highlighted regularly on our channels. WATR will also send a press release to the Sylva Herald announcing the program launch.

Do you agree to acknowledge the 'Jackson County TDA' in materials as required? Any releases or ad placements should have a statement that "the event was made possible, in part, by the Jackson County TDA." Print ad placements, where/when possible should include the JCTDA logo.

Yes

Total anticipated cost of initiative

30000

Total funds your organization will provide toward total cost?

8000

Detail funds requested from other sources and note commitments or anticipated receipt of funds from other sources

As we are just beginning this effort, all funding sources are not known, but the following are anticipated:

TVA - Little Tennessee Native Fish Conservation Partnership: \$5000 (Spring 2026)

Swain County TDA - \$3000 (Winter 2025-2026)

In-kind Volunteer and Partner - \$10000 (2025-2026)

Please upload your detailed budget, including event or initiative expenses and revenue. You can attach a spreadsheet (Excel), PDF, or Word Document.



Budget.xlsx
13.03 KB

Anticipated Attendees from Jackson County:

N/A

Anticipated Attendees from outside Jackson County:

N/A

Anticipated overnight stays generated:

N/A

How will you measure success of your initiative?

The datalogging turbidity meters will also measure our success! As we are able to remediate problems identified by the instrumentation, turbidity values in the river should decrease, and high-turbidity episodes should become less frequent.

Upload any supporting documentation for your application here:



Photo page.pdf
541.32 KB

Signature:



Photos of kayakers on the Tuckasegee during Carolina Canoe Club “Week of Rivers”, July 1, 2025



Aerial image from August 1, 2025, where the Oconoluftee River (left side of image) flows into the Tuckasegee River (right side), just downstream from the Jackson-Swain County Line



	Count	Unit Price	Subtotal
Turbidity meter (refurbished)	4	\$ 600.00	\$2,400.00
Data loggers	4	\$ 250.00	\$1,000.00
Installation housing	4	\$ 150.00	\$ 600.00
		Project Total	\$4,000.00