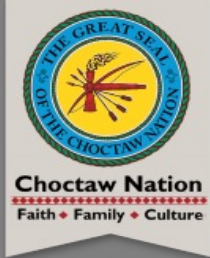


# COMMUNITY ENGAGEMENT AND EDUCATION

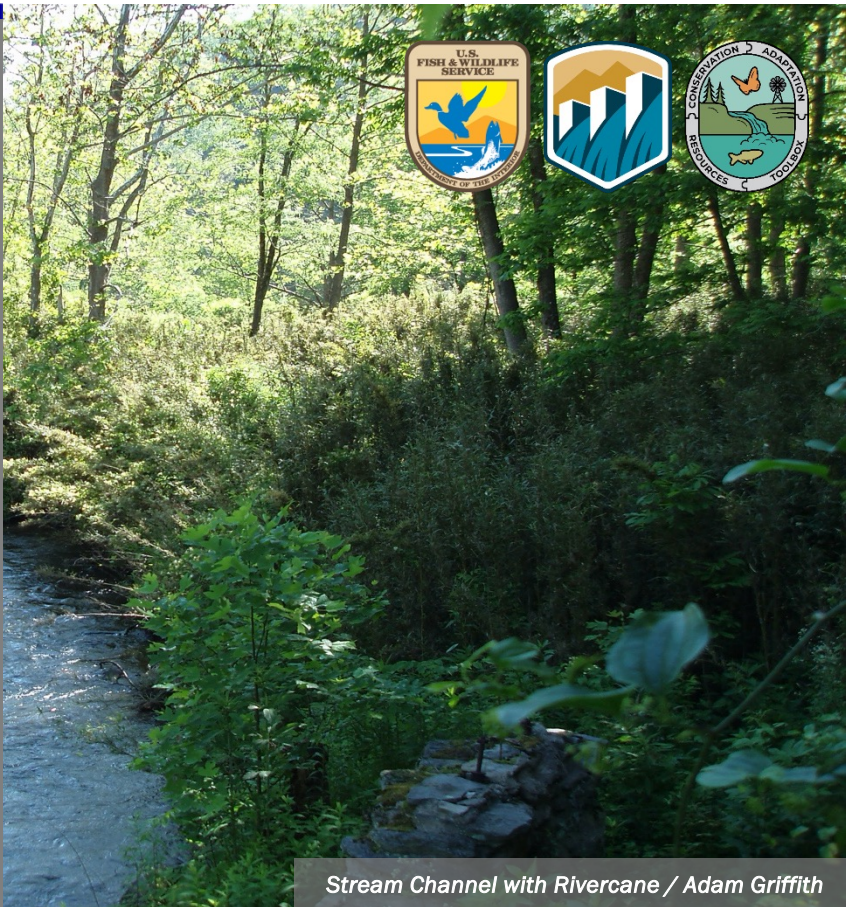
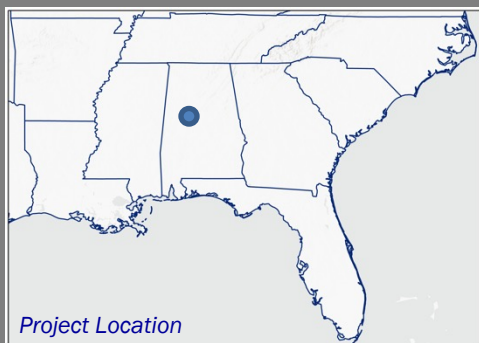
## Rivercane Recovery to Support Tribal Cultural Practices



**US Army Corps  
of Engineers.**



The United States Army Corps of Engineers (USACE) Tribal Nations Technical Center of Expertise (TNTCX) engages with 574 Federally recognized Tribes on key water infrastructure projects to deliver and meet USACE missions. Through the TNTCX, the USACE has been able to support the recovery of rivercane (*Arundinaria gigantea*), one of many cultural keystone species, which broadly includes plants or animals that have helped shape the cultural identity of a group. The TNTCX, University of Alabama Water Institute, and others created the Rivercane Restoration Alliance (RRA) to combine Traditional Ecological Knowledge (TEK) and Western science to achieve successful rivercane recovery across the southeastern United States.



Stream Channel with Rivercane / Adam Griffith

### KEY ISSUES ADDRESSED

Rivercane once covered 33% of the southeastern U.S., but now only covers two percent of its historic range. As rivercane abundance declines, there are fewer areas for Tribal Nations to harvest rivercane. Tribal Nations and other stewards have worked to carry out rivercane recovery, but there was no central location for individuals engaged in rivercane recovery to collaborate with one another and share resources. The negative ecological qualities of Asian bamboo have become conflated with the positive ecological benefits of native rivercane. Asian bamboo is not native to the Southeastern US and is an aggressive, invasive species that outcompetes native rivercane for resources.

### PROJECT GOALS

- Collaborate with Tribal Nations to support rivercane recovery
- Create a forum to increase knowledge sharing around rivercane recovery efforts
- Increase the amount of available land for rivercane harvesting
- Engage Federal agencies and other land managers in education that will highlight the ecological benefits of rivercane

# TULE RECOVERY

RRA's success inspired a similar restoration alliance between USACE and Tribal nations in California's San Joaquin Valley focused on recovery of tule, a type of bulrush used for weaving.



Healthy Rivercane Stand / Rivercane Restoration Alliance

## PROJECT HIGHLIGHTS

**Virtual Workshop:** In October 2021, RRA held a three-day virtual workshop to facilitate the sharing and documentation of the cultural and ecological significance of rivercane in the southeastern U.S. Over 200 participants attended from a variety of backgrounds, with approximately 27% representing Tribal Nations.

**Incorporating TEK:** The TNTCX identified TEK informed rivercane management strategies that could be incorporated into existing USACE waterway projects by listening to the Tribal Nations' rivercane stories. For example, cane thinning is an important strategy that was continually emphasized throughout the various stories told by the Tribal Nations.

**Expanding Access to Rivercane:** Tribal Nations expressed their need for expanded access to rivercane, and the USACE listened. Now, Tribal Nations throughout the southeastern U.S. are gaining access to USACE properties with canebrakes outside their immediate Tribal lands for harvesting. Access to rivercane brakes preserves cultural heritage and ensures stewardship of rivercane brakes.

**Agency Education:** The RRA engages in education and outreach that will help USACE land managers incorporate TEK into existing projects and support rivercane recovery efforts across the southeastern United States.

## Collaborators

- United States Army Corps of Engineers
- Choctaw Nation of Oklahoma
- University of Alabama Water Institute

CART Author: Liam Thompson, University of Oklahoma, February 2024  
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## LESSONS LEARNED

USACE commitment to Tribal needs facilitated the building of trust and willingness to advance future rivercane recovery efforts. Conversations with Tribal Nations across the southeastern U.S., continually identified rivercane as a priority. The RRA ensured adequate time for Tribal voices during the workshop.

The use of conceptual ecological models effectively demonstrated cultural and ecological relationships between Tribal Nations and rivercane. The models synthesized the perspectives of various Tribal community members, which created a shared understanding of rivercane and demonstrated the importance of rivercane recovery in supporting the cultural and ecological practices of Tribal Nations.

Tribal Nations possess TEK that can support rivercane recovery. When direct access to agency managed rivercane sites cannot be granted to Tribal Nations, agency managers should consider incorporating TEK to support future rivercane recovery. Rivercane recovery is dependent on stewardship from current and future generations.

## NEXT STEPS

- Host additional workshops where Tribal Nations can share the cultural and ecological significance of rivercane
- Share the RRA model with other agency partners to inspire additional cultural keystone species recovery projects
- Conduct field studies to identify new areas that can support rivercane recovery and incorporate this knowledge into ongoing development of educational materials

For more information on this project, contact Brian Zettle:  
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Mississippi Band Choctaw Elder Weaving Rivercane / Michael Fedoroff