



July 12, 2024

COMMUNICATING APNEP'S IMPACT

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Communication and Outreach Intern



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WHO AM I?

My name is Katie Whittington!

I am APNEP's Communication and Outreach Intern for the summer.

A LITTLE ABOUT ME

- Rising senior at UNC Chapel Hill studying Public Policy and Sustainability
- Minor in Musical Theatre (one of my hobbies!)
 - Other hobbies of mine are hiking, traveling, and writing
- Originally from Greensboro, NC
- Fun fact: I'm a barista at a 100% student-run nonprofit coffee shop, The Meantime Coffee Co.!



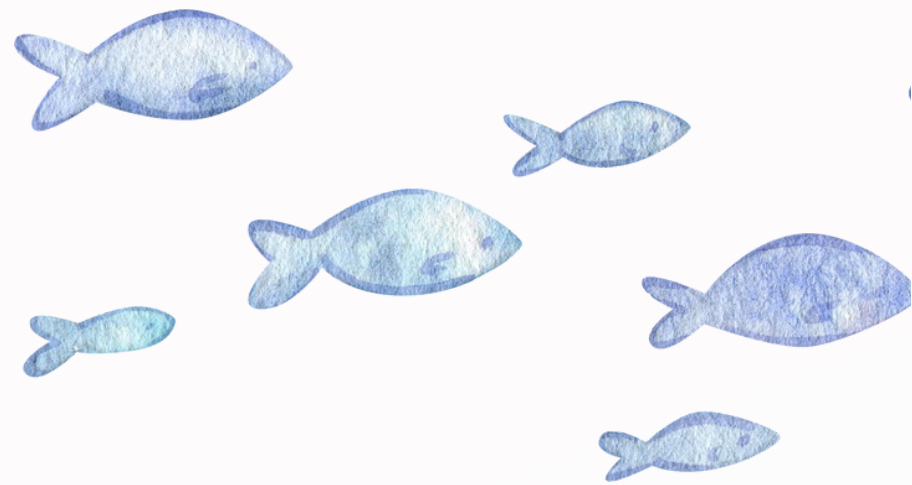
WHAT IS APNEP'S ENGAGEMENT AND STEWARDSHIP GRANT?

Awarded to projects conducted in the Albemarle-Pamlico river basins that encourage public engagement and stewardship of the water and land.

THIS YEAR: \$94,250

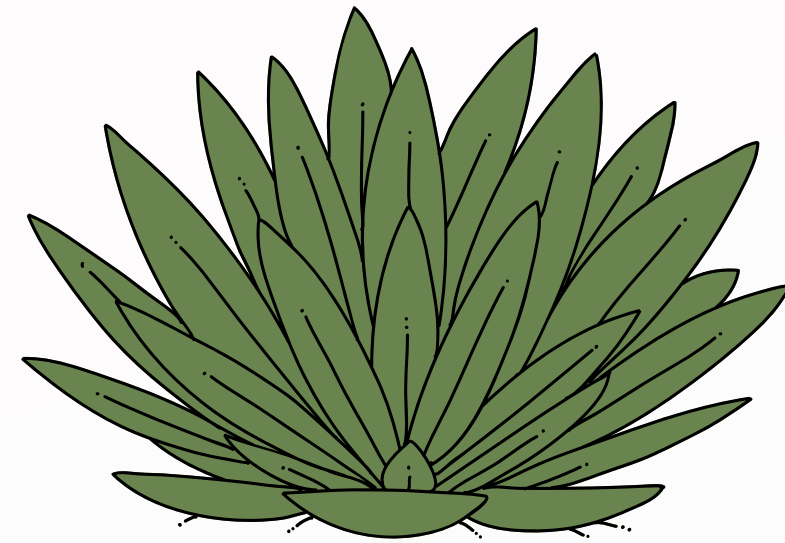
awarded to four projects across the APNEP region

E&S GRANT RECIPIENTS



Shad in the Classroom

\$20,000



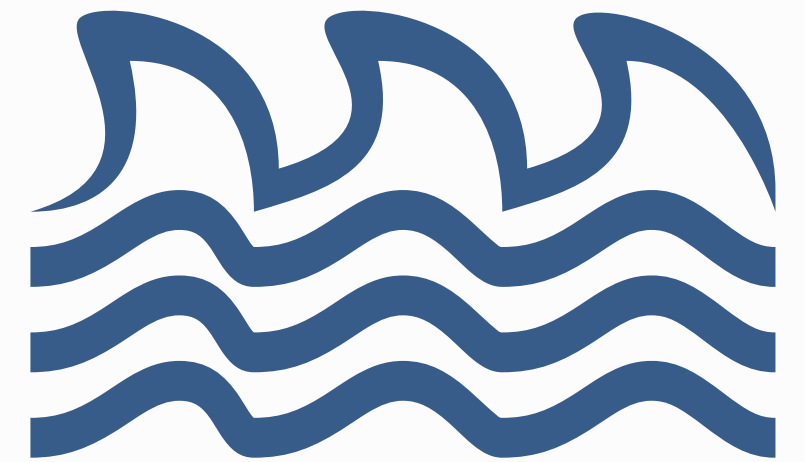
**Growing Wild Celery to
SAVE Our Wetlands:
A Grassroot
Colaborative**

\$30,000



**Experiencing the
Albemarle-Pamlico
Estuary: Fostering
Watershed
Stewardship**

\$14,250



**Down East
Resilience
Network**

\$30,000

1



TEACHER TRAININGS

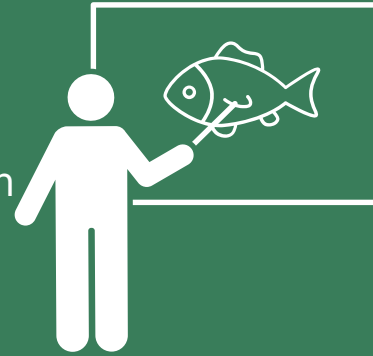
Teachers are trained to educate students about the biological, historical, and cultural importance of the American Shad.

Shad in the Classroom

A hands-on learning experience for children to raise and release American Shad into the Neuse River.

CURRICULUM

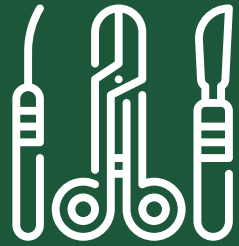
Students participate in activity like "Migration Madness" and gyotaku fish painting to learn more about the importance of the American Shad.



2

FISH DISSECTIONS

Student volunteers from NCSU and ECU along with NC Wildlife Resources Commission biologists will direct in-class fish dissections with students.



FIELD TRIP RELEASE

Students care for American Shad embryos in the classroom before embarking on a field trip to release the fry into the Neuse River.



4



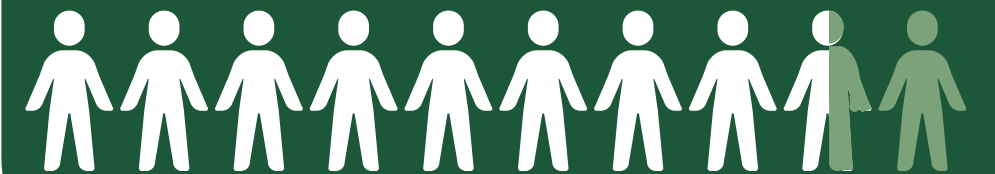
What makes Shad in the Classroom special?

Low barrier to entry.

In 2025, **2500** students will participate across **31** classrooms.

300+

of these students come from Title I schools



The program provides **ALL** equipment to schools. They can also assist with **field trip expenses**, as requested.



JULY 1, 2024

APNEP Funded Engagement & Stewardship Projects: Shad in the Classroom

Environmental Education Program Supplements American Shad in the Neuse River, Giving Students a Hands-On Learning Experience

In 2024-2025, Shad in the Classroom will involve 2,500 students from 31 classes, with over 300 students coming from Title I schools. Around 1,000 of these students will release the fry into the Neuse River and all will learn directly from experts about the immense value of the American Shad.

With guidance from expert fishery biologists, like **Dr. Wilson Laney**, the blog illustrates the

historical, economic, cultural, and ecological importance

of American Shad, tying this closely with the program's positive impact on supplementing shad populations in the Neuse River.

Long-form blog article highlighting Shad in the Classroom's mission, impact, and what they hope to accomplish during the upcoming school year.

Quotes from **Danielle Pender**, the primary program coordinator, and **participating teachers** underscored the program's importance to the community.



Growing Wild Celery to SAVE Our Wetlands: A Grassroot Collaborative

A project focusing on environmental education and stewardship in the Back Bay area.

SAV = Submerged Aquatic Vegetation

Teacher Training

Teachers are invited to Back Bay and Falls Cape to learn about the history of the area, the importance of SAV, and gain hands-on experience with wild celery habitats.

Virtual and In-Person Lessons

Project leaders will visit classrooms virtually or in-person for lessons about the project and its importance, focusing on the history of Back Bay, the wildfowl in the area, and the significance of SAV.

Students Grow Wild Celery in Classroom

Wild celery plants will be delivered to classrooms for students to grow over the course of ~4 months.

Monitoring

Students and projects leaders will continue to monitor wild celery growth and take measures to protect it from predation in the months immediately following the planting.

Wild Celery Planting at Back Bay

25-30 students will go on a field trip to Back Bay to plant the wild celery their classrooms have grown.

Stay tuned for a blog post about this project!


Experiencing the Albemarle-Pamlico Estuary: Fostering Watershed Stewardship

Across four sites, this project will engage in planting three pollinator gardens and restoring one wetland.

Pocosin Lakes National Wildlife Refuge



Millennium Forest
Native Pollinator Garden



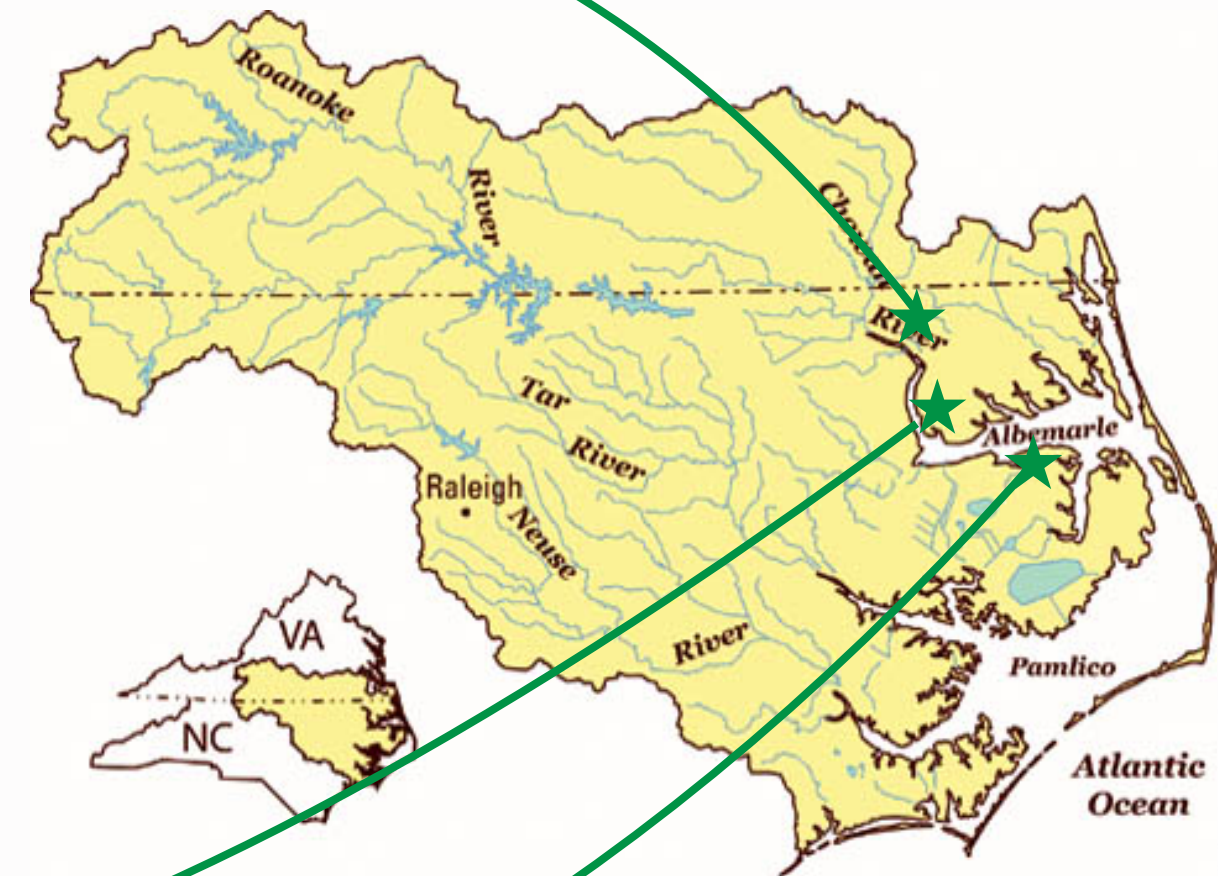
Center for the Sounds Visitor Center
Native Pollinator Garden



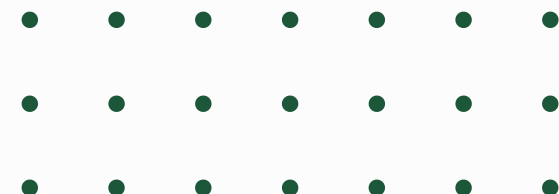
Merchants Millpond State Park
Native Pollinator Garden



Pembroke Creek Park
Wetland Restoration



Stay tuned for a blog post about this project!



Youth and Community Engagement

Community members will be invited to participate in nature walks and immersive educational programs at each site.

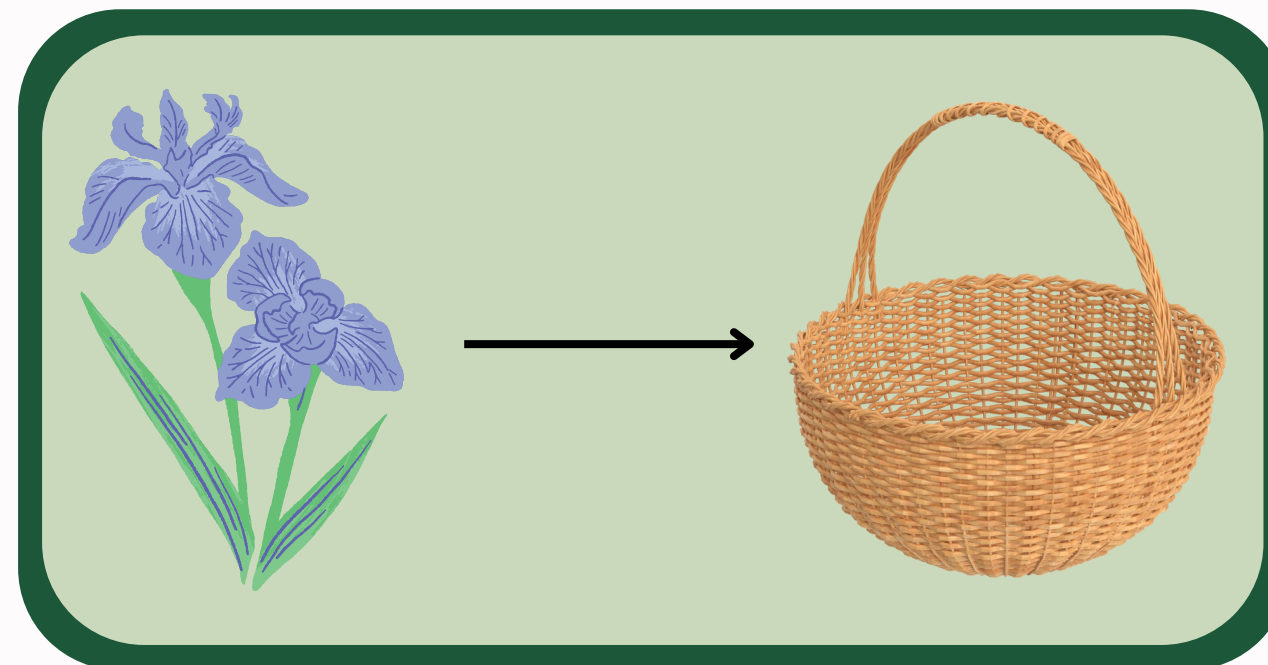
In collaboration with many local partners, this project will combine ecosystem restoration with community engagement and environmental education.



Two sites will have educational panels* detailing the history of the area and importance of native plants/wetlands to maintaining ecological integrity.

*Translated into both English and Spanish!

Pocosin Arts School of Fine Craft will collaborate with project partners to create programming for children that marries art with nature. Participants will be able to explore the Refuge while making art from discarded invasive species, like irises.



Down East Resilience Network

The Down East Resilience Network (DERN) aims to **promote resiliency** in the Down East Carteret County area of NC. This area faces unique circumstances as **severe weather events** become more frequent and severe, **sunny day and traditional flooding** worsens, and **saltwater intrusion** continues to invade the community.

Residential Flooding



Many residents Down East are forced to contend with flooding on their property after intense storms and as a result of rising sea levels. The latter is often referred to as sunny-day flooding.

Ghost Forests



As saltwater intrudes into many forest ecosystems, entire swaths of trees are killed, leaving behind remnants like these, known as ghost forests.

Hurricane Damage



After Hurricane Florence nearly wiped out the Down East community completely, an emphasis was placed on resilience by DERN leaders and founders.

Stay tuned
for a blog
post about
this project!

Communications Strategy

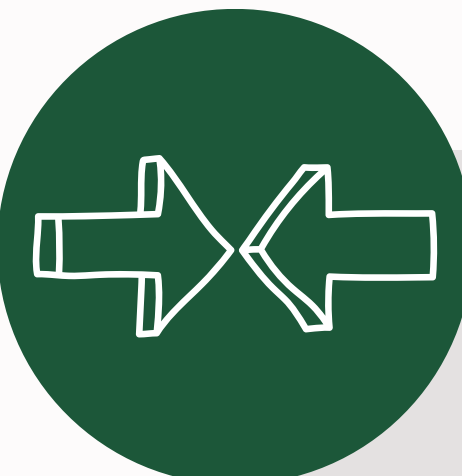
- External and internal communications
- Foster a sense of support in a community that has faced many hardships over the decades
- Put Down East on track toward planning for a more resilient future



Share practical solutions



Cultivate community trust



Tailor communication to meet people where they're at



Increase accessibility of learning opportunities



Emphasize benefits of investing in resilience sooner rather than later



Articulate community needs with local, state, and federal governments

Scuppernong Water Management Study

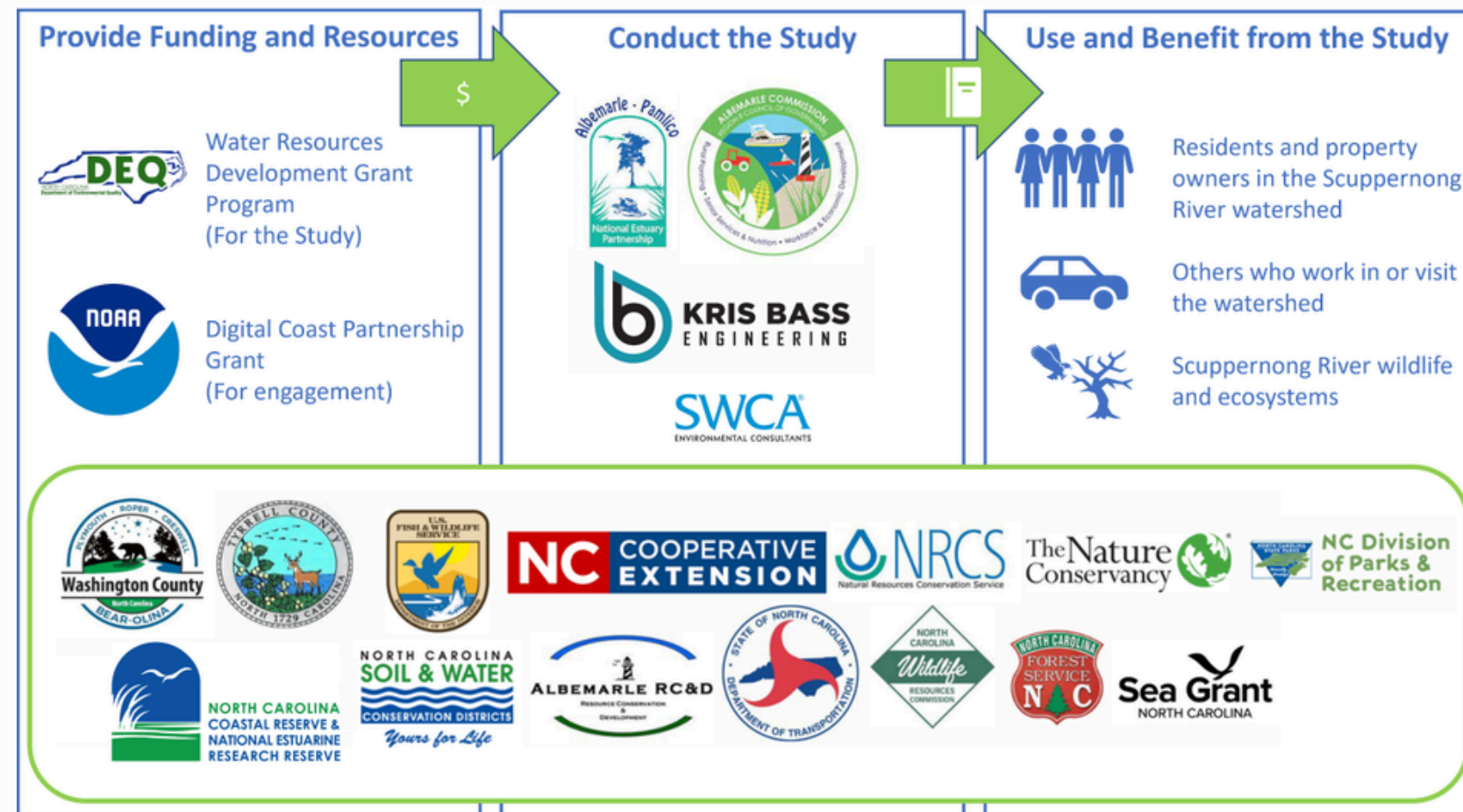
Community water study aimed at resolving local flooding concerns and promoting resilience.

Create a water budget to show how water moves through the watershed

Identify flood prone areas and development models that can simulate conditions during different storm events

Use models to test possible water management actions to determine effective solutions

Recommend short and long-term actions to reduce flood risk and water management issues



Stay tuned for a blog post about this project!

Phase 1: Community Engagement and Research

- Community events engaged hundreds of locals across the study area
- Key takeaways
 - Community values (word cloud)
 - Map of areas of concern
 - Building trust and rapport within the community



Phase 1: Community Engagement

OCTOBER

Water Study Booth
Scuppernong River
Festival

Community Meeting
Eastern 4-H Center

DECEMBER

Parade Booth
Creswell Christmas
Parade

JANUARY

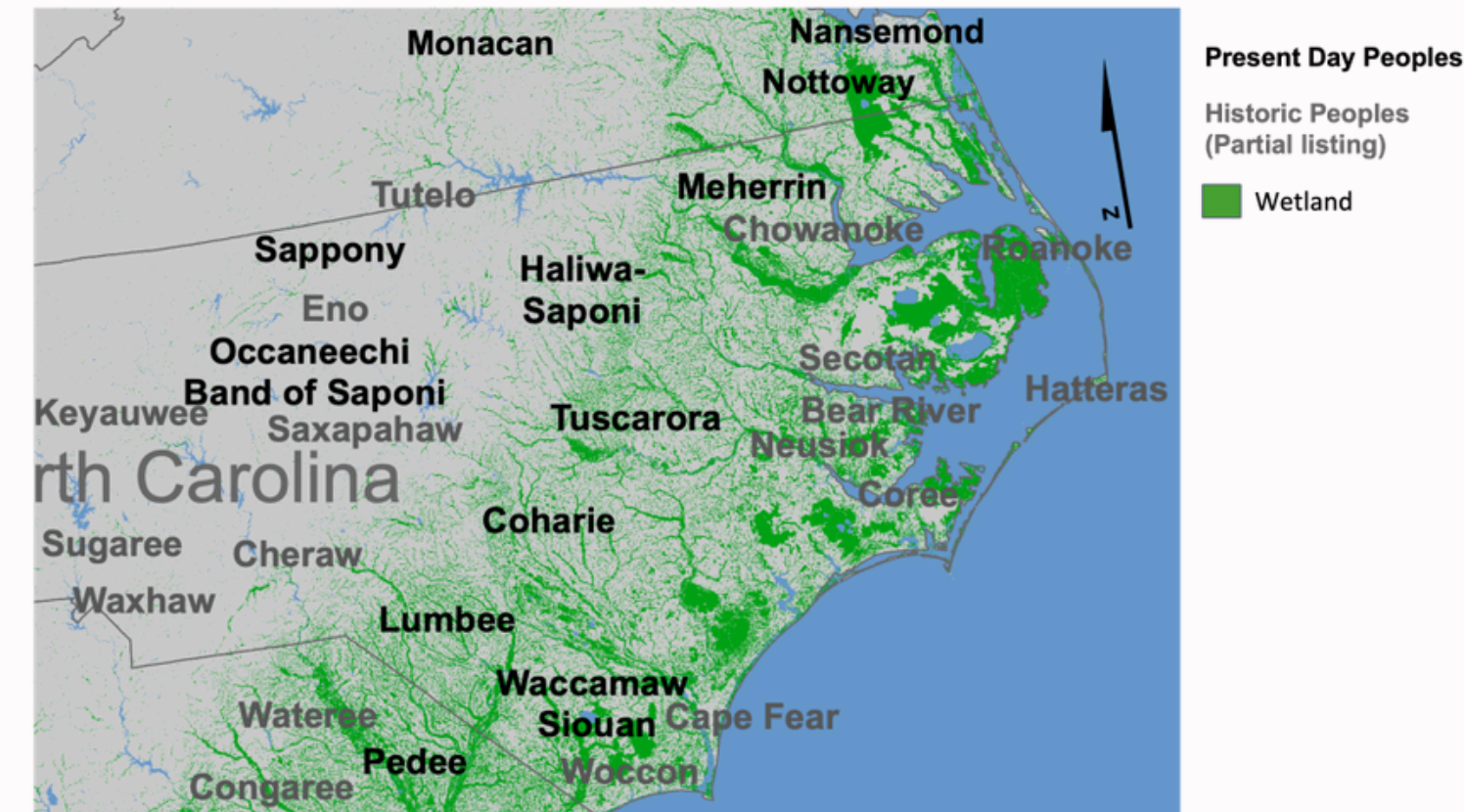
**Washington County
Drainage Board
Meeting**

**Blackland Farm
Manager
Association Annual
Business Meeting**

Tribal Coastal Resilience Connections

The Tribal Coastal Resilience Team formed in 2020 to “examine ways in which agencies involved in coastal climate resilience planning might better engage and coordinate with Tribal nations in the region”

- 1 Increase awareness among Tribal communities around the risks and threats of climate change
- 2 Foster discussions about adapting to these changes
- 3 Educate resilience practitioners on best practices for engaging with Tribes and Indigenous peoples



Map of Tribal communities throughout the APNEP region.

THE TEAM

Beth Roach Stacey Feken Dr. Ryan Emanuel Jocelyn Painter Chandler Allred Giancarlo Richardson

Stay tuned for a blog post about this project!

Phase 1: Community Outreach and Research

Two-pronged approach

1. Community outreach and engagement
2. Review of Tribal-led climate resilience/adaptation plans

#WaterStories

- Launched on Indigenous Peoples Day (Oct. 12, 2020)
- Call for people to share what they love about their water, what threats concern them, and what they hope for their water through songs, poetry, quilt/regalia art, and pictures

“Our Minds are One . Our Rivers connects our Nations. Our waters connect us to our Ancestors. Water is life. WE ARE thankful for clean water.”

“The river is embedded not only in my own identity but that of my family. My grandpa told me stories about swimming and fishing there. I know his grandpa did the same when he got here from Oklahoma.”

Tribal Climate Adaptation Plans

- Literature review of climate adaptation plans created by Tribal communities throughout the US by Jocelyn Painter
- Goal: Conduct a systematic study to identify key themes that emerge from the plans and compare these to climate adaptation or resilience plans prepared by non-Indigenous entities (e.g., municipalities, regional government councils, etc.)

45
plans were
identified
and mapped

Phase 2: Promoting Inclusivity and Taking a Step Back

With new team members Chandler Allred and Giancarlo Richardson, the team plans to

- Create new, inclusive, and accurate maps
- “Take a step back” to focus on outreach to Tribal communities and building trust
- Research history and document Tribal involvement in the APNEP region
- Lay groundwork for the project to be Tribal led in the future
- Strategize partnerships with other Tribal and climate organizations throughout the area
- Build capacity



Communications and Social Media Content

apsounds
Albemarle-Pamlico National Estuary Partnership

[View insights](#) [Boost post](#)

Liked by **nccoastalfed** and **9 others**

apsounds We are the Albemarle-Pamlico National Estuary Partnership (or APNEP for short)! Our mission is to identify, restore, and protect the Albemarle-Pamlico estuarine system, which was named an "Estuary of National Significance" by the EPA in 1987.

With initiatives stretching from North Carolina to Virginia, we support research studies, measures to protect/restore ecosystems, environmental monitoring programs, education and outreach efforts, and so much more! We are guided by our Comprehensive Conservation and Management Plan (CCMP) which outlines APNEP's primary goals for adaptive and meaningful environmental resource management in the region. Learn more about our mission, partners, and projects at the link in our bio.

Albemarle-Pamlico
National Estuary Partnership

What Are Living Shorelines?

Living shorelines are **sustainable additions to coasts** that help stabilize areas that may be more vulnerable to **extreme flooding, land loss and storm damage**.

They work well in developed areas where their effectiveness can be optimized.

Visit www.nccoast.org for more information!

Some of the main techniques used in living shorelines include:

Marsh Plantings

Marsh plants, when grown on a shoreline, can prevent upland erosion while also bolstering biodiversity! Some examples of plants include cattails and water lilies.

Oyster Shell Bags

Oyster shore bags provide a safe habitat for oysters to grow and form reefs. They help protect shorelines from erosion, improve water quality, store nutrients and even outperform "harder" shoreline techniques.

Granite Sill

This is the "hardest" and most traditional technique for protecting shorelines. Configurations are often sloped so sediment can accumulate, thus protecting the marsh. Although it does promote oyster growth and prevents wave energy from hitting the shore, it is not nature-based.

Low energy/wave intensity → High energy/wave intensity

What can you do?

Volunteer for marsh plantings

Donate your time or money to the Coastal Federation, one of NC's leading living shoreline providers

Don't mess with them and avoid moving or harvesting oysters!

Albemarle-Pamlico
National Estuary Partnership

APNEP in partnership with the **Albemarle Commission, Tyrrell County, Washington County,** and many other organizations is proud to present...

THE SCUPPERNONG WATER MANAGEMENT STUDY

A study aimed at resolving **local flooding concerns** in the northern Albemarle-Pamlico peninsula through **community engagement** and **strategic planning**.

Phase I: Community Engagement

OCTOBER	DECEMBER	JANUARY
Water Study Booth Scuppernong River Festival	Community Meeting Eastern 4-H Center	Parade Booth Creswell Christmas Parade
		Washington County Drainage Board Meeting
		Blackland Farm Manager Association Annual Business Meeting

Thanks to the valuable input from community members and stakeholders, partners have been able to...

- Identify flood-prone areas
- Incorporate community feedback into the study's plans to model and reduce future flood risks
- Understand key community values

What's Next: Phase 2

- Create a water budget to show how water moves through the watershed
- Model storm events in flood-prone areas
- Use models to test possible water management solutions



THANK YOU!

QUESTIONS?

Katie Whittington

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