

TAKE LEARNING OUTSIDE

OVERCOMING BARRIERS TO CONNECTING STUDENTS AND NATURE

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ExPLORE NC: Program Objectives



- ▶ Increase teacher **knowledge of current watershed science and local ecosystems**, using content-integrated, place-based lessons aligned with required curriculum
- ▶ Increase teacher **confidence in using the outdoors** and local natural resources for instruction
- ▶ Increase teacher **awareness of local environmental education resources** in their watershed

Connections to APNEP CCMP

- ▶ Objective D2: **Conduct targeted environmental education efforts** regarding sustainable use, habitats, and ecosystem services
 - ▶ Action D2.2: **Provide environmental education training** opportunities for educators in the region.
 - ▶ Action D2.1: **Provide and promote opportunities for outdoor experiences** that connect individuals with the Albemarle-Pamlico ecosystem.
- ▶ Objective D1: **Foster environmental stewardship**



Why teach outdoors?



Real world

Relevant connections provide context for learning



Benefits whole child

Emotional, social, cognitive, & physical development



Future stewards

Fostering stewardship behaviors

Barriers to teaching outside

2016 Office of EE/UNC IE survey, n=440

53% of respondents statewide **NEVER** or **RARELY** take their students outside

70% in Tar-Pamlico river basin



WHY?

- ▶ Lack of resources
- ▶ Curriculum standards
- ▶ Lack of time
- ▶ School grounds

Overcoming barriers

Evidence-based,
high-quality
professional
development



Long-term
format



Modeling
desired
teaching
practices



Peer network

EXPLORE NC Components



Summer Institute



Weekend Outdoor
Science Immersions



Peer Network



EE Center Network



School Field Experiences

Curriculum



7 Original Lessons

Observing Ecosystem Response to Human Activity

Here's to the Land of the Longleaf Pine

Mills and the Changing Landscape
by EGRET Fellow Toni Stadelman

Nature Journaling

Writing Prompts

Event Mapping

Field Sketching

Citizen Science

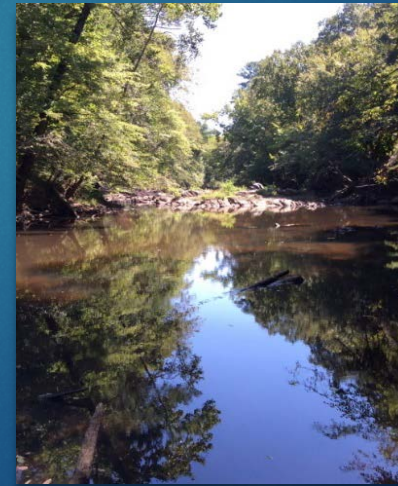
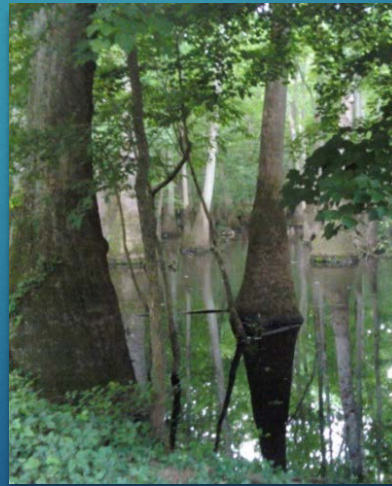
iNaturalist

Nature's Notebook

NASA S'COOL

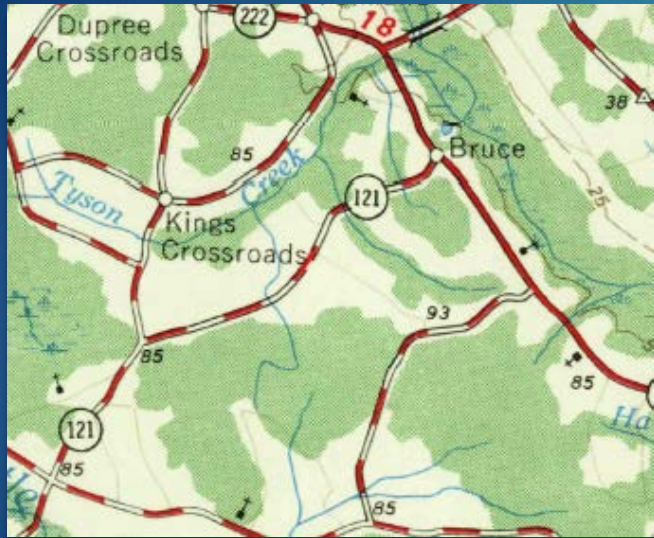
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Ecosystem Explorations

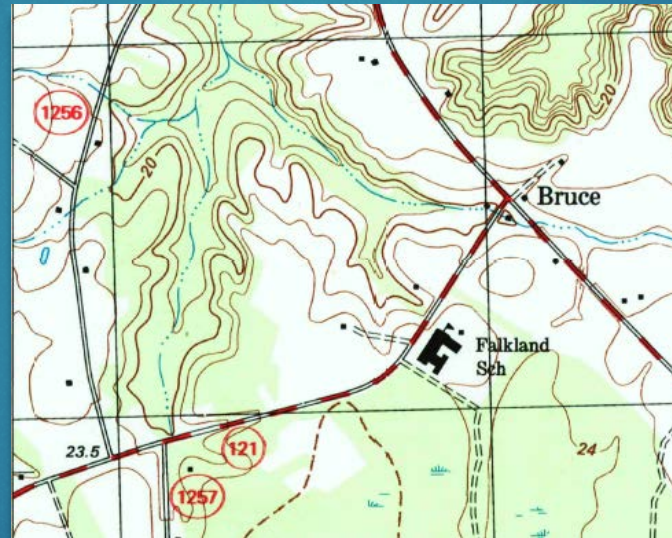


Getting to Know Your Watershed

Falkland Elementary School, Greenville



1954



1985



2013

Program Impacts

Pilot program participants demonstrated:

- ↑ Knowledge of local ecosystems and watershed science
- ↑ Confidence in using the outdoors to teach required curriculum
- ↑ Awareness of local EE resources



Stay tuned! We expect similar results from ExPLORE NC participants.

Acknowledgements

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Thank you!
Questions?

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