EXPLORE NC

LEARNING OUTSIDE THROUGH PLACE-BASED WATERSHED EDUCATION

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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

Long-term format



Modeling desired teaching practices

Evidence-bas ed, high-quality professional development



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 CoCoRaHS

Ecosystem Explorations





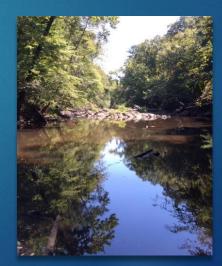






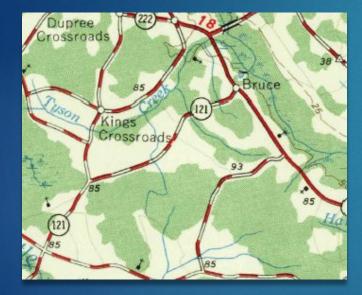


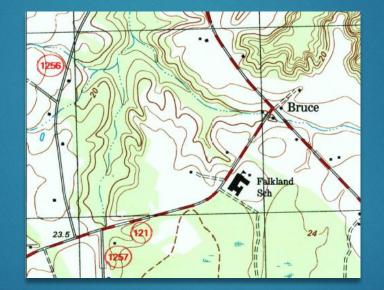




Getting to Know Your Watershed

Falkland Elementary School, Greenville





1985



2013

1954

Images from store.usgs.gov

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

- Program Team: Kathleen Gray, Megan Rodgers, UNC Institute for the Environment
- Program partners, including Goose Creek State Park, NC Aquariums, NC Coastal Federation, NC Coastal Reserves, NC Museum of Natural Sciences, NC Sea Grant

Generous funding provided by:

- Albemarle-Pamlico National Estuary Partnership
- Eddie and Jo Allison Smith Family Foundation



Thank you! Questions?

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