# Metro Atlanta Wetlands Conservation Education Center

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Mercer University STEM Education Innovation Lab

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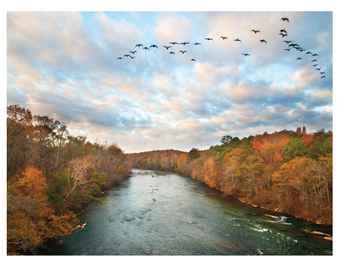
## Introduction

Mercer University's Metro-Atlanta Wetlands Conservation Education Center is an outdoor learning space that will support research and conservation outreach related to urban forests, wetlands, and broader urban ecology. Mercer University's Atlanta Campus contains 140 acres of naturally forested areas and wetlands that comprise some of the largest natural biodiversity zones within the Atlanta beltline. These areas have a crucial role in protecting the Chattahoochee watershed, which acts as the drinking water supply for the Metro Atlanta area, from runoff pollution. Mercer's urban ecosystems are a valuable tool for understanding natural resource conservation in urban locations, supporting conservation outreach, and broadening participation in STEM among minoritized groups.

## Project Goal & Objectives

The goal of this project is to develop an outdoor urban conservation education center that will support educational outreach activities for K-12 schools and the broader metro-Atlanta community.

1. Develop an outdoor experiential learning space to promote ecological education and STEM integration
2. Expose K-12 students and the broader community to STEM-based learning experience that build their knowledge of environmental science and the impacts of human activities on the environment
3. Promote and support citizen science projects that promotes environmental stewardship
4. Engage local high schools students and Mercer students and faculty in research activities related to environmental science and STEM education
5. Support activities that broaden participation in STEM among underserved and under resourced populations



## Conceptual Framework

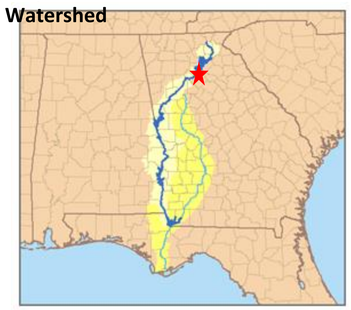
The framework is the Collective Impact Model. This model describes five conditions that are necessary to engage in multi-level partnerships that enhance the impact of programs and collaborations (Kania & Kramer, 2011). These conditions and way include:


Through collaborative partnerships with other institutions, governmental agencies, and the local community this project seeks to develop a replicable model for promoting conservation education.

## Geographic Area of Impact

The Chattahoochee watershed is an important watershed that supports broad biodiversity and is a source of drinking water for population in Georgia, Alabama, and Florida. This project will support educating school-aged children and the broader population about the impacts of human activity on the Chattahoochee watershed and the implications for wildlife and people living along this watershed. This project will also seek to engage students in citizen science to study the conditions of the Chattahoochee watershed and develop solutions for protecting this valuable natural resource.

**Map of the Chattahoochee Watershed**



★ Denotes Atlanta

**Map of Mercer University's Atlanta Campus**


## Intended Outcomes

- Strengthened collaboration between higher education institutions and K-12 school districts on engaging students in authentic STEM learning experience
- Enhanced exposure to STEM learning experiences and awareness of environmental issues among the local populace
- Increased exposure for environmental stewardship initiatives in the Metro-Atlanta region
- Greater engagement in research related to urban ecology among Mercer faculty and students
- Development of a learning resource that can be leveraged by local school districts and the broader community

## References

**Kania, J., Kramer, M. (2011) Collective impact. Stanford Social Innovation Review. Retrieved from** http://www.ssireview.org/articles/entry/collective_impact

**Blue Ridge Outdoors** https://www.blueridgeoutdoors.com/go-outside/water-wars-chattahoochee-river/

**Broadening Participation in STEM** http://cadrek12.org/broadening-participation