Bringing Current River Research to Communities Through An Integrated Partnership with Schools in the Neuse Basin

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Understanding The Neuse

Understanding the dynamics of the rivers in North Carolina is essential for addressing key water quality concerns. Watershed management includes both scientific research to understand the complex interactions among land, water, atmosphere and organisms and the ability to communicate the results to people of diverse ideas, values, needs and resources so that appropriate management strategies can be implemented.

The Department of Marine Sciences at University of North Carolina at Chapel Hill (DMS) is monitoring seven sites on the Neuse River from below Falls Lake Dam to New Bern in order to better understand how carbon and nutrients are processed in the river. Measurements of carbon, nutrients, and other river properties, made on a monthly basis, are essential to understanding the water quality dynamics of the Neuse River.

Engaging The Stakeholders

To begin engaging stakeholders in the watershed, the UNC Institute for the Environment (IE), through a competitive application process, invited four highly motivated science teachers to participate in the project. The teachers and their students will fill temporal and spatial data gaps, integrate environmental issues of the Neuse watershed into their lessons and experience the process of conducting scientific research.

Outcomes

The teachers train with the DMS researchers in the field and lab using established sampling protocols and work with IE to integrate these experiences in the classroom. In the summer of 2011, a River Research Institute will be held to train 24 more educators in the Neuse and Tar-Pamlico River Basins. Sampling protocols, data management and watershed science lessons will be presented to science teachers and environmental education instructors. These educators have the potential to actively engage more than 2,000 students in watershed science. Continued funding will be sought to support these educators and continue expanding the network of stakeholders participating in the study of their rivers.

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