

Denise Wardrop, Ph.D. Bio:

Most of my time at Penn State has been spent as a research scientist at Riparia, a center dedicated to providing science that informs policy and practice. My research has centered on ecological responses to human disturbance and climate change in freshwater wetlands, their neighboring headwater streams, and coastal marshes. My experience as both an ecologist and an educator led me down the path of exploring the responsibility of Higher Education in the pursuit of a sustainable world; I served as the founding Director of Penn State's Sustainability Institute, dedicated to leading and supporting the University's integration of sustainability into all of its functions, which is closing in on its five year anniversary. I have just returned to my faculty position in the Department of Geography, building an Office of Engaged Scholarship in the College of Earth and Mineral Sciences and pursuing the vision of humans and aquatic ecosystems bringing out the best in each other. Current research is in carbon sequestration and cycling in Mid-Atlantic freshwater wetlands and in the high altitude peatlands and tropical marshes of Peru; relative vulnerability of freshwater wetlands to climate change impacts via high-resolution hydrologic modelling; assessment of restoration progress in the Everglades; and the role of monitoring and assessment (including ecologic indices) in adaptive management in the Chesapeake Bay watershed.