

# The Unique and Complex Relationships Between Natural Wetland and Upland Habitats and Phosphate Mining



Kym Rouse Campbell, ENVIRON, Tampa, FL  
Sandra Patrick, Mosaic Fertilizer, LLC, Lithia, FL

# Purpose of Session

- To discuss innovative approaches that have been developed to restore, reclaim, and monitor phosphate mined lands
- To discuss innovative uses of reclaimed phosphate mined lands
- To discuss the ecosystem services of reclaimed phosphate mined lands



# Kristen Nowak

- Fluvial geomorphologist for the past five years at AMEC Environment & Infrastructure
- Conducted extensive research on streams throughout Florida
- Research applied to stream restoration and creation projects for clients, including the Florida phosphate mining industry
- BA in Environmental Science, Wellesley College
- MS in Environmental Engineering Sciences, UF
- Will be discussing the environmental benefits of stream restoration

# Mark Rains



- Associate Professor of Ecohydrology , Department of Geology, USF
- President of Coshow Environmental, Inc.
- Over 20 years experience in functional assessment, restoration, and management of degraded wetlands and rivers
- BA in Ecology, Behavior, and Evolution, UC San Diego; MS in Forestry, University of Washington; PhD in Hydrologic Sciences, UC Davis
- Will be discussing the hydrology of clay settling areas and the surrounding landscapes

# Tyler Nicoll

- Ecologist for Ground Level, Inc.
- Manages large-scale restoration projects
- BS in Natural Resources, University of Delaware
- Completed wetlands and biological monitoring internships with USFWS, NYC Parks Department, and Bureau of Land Management
- Taking graduate classes at UF in Wetland Management
- Will be discussing the incorporation of biochar into wetland reclamation