DEP Lake Vegetation Index and Identification of Aquatic Plants

Nia Wellendorf, Ashley O'Neal, and Sarah Noble Florida Department of Environmental Protection Aquatic Ecology and Quality Assurance Section

Who: This training is intended for anyone who will conduct the Lake Vegetation Index (LVI) sampling, interpret LVI results, identify aquatic plants, or just has an interest in learning more about the LVI.

What: The LVI is an assessment tool developed by DEP to evaluate the condition of a lake's plant community relative to a minimally impacted condition. This workshop will teach participants about the LVI and how to generate LVI data, and how to identify aquatic and wetland plants for LVI assessments.

Workshop 4: This workshop has three parts, each 1 hour in length.

- 1. Development and Uses of the Lake Vegetation Index (LVI) This hour, we will review the details of the LVI method, DEP SOP LVI 1000, how it was developed, and how it is used by DEP.
- 2. Beginners plant identification workshop This hour will include a review of the most common plants encountered during LVI surveys, and will showcase recently developed simple keys for identification of floating plants, *Persicaria*, and *Ludwigia*.
- 3. Advanced plant identification workshop This hour will include a review of plants that are likely to be mis-identified during LVI surveys, and will showcase recently developed simple keys for identification of submersed plants, *Utricularia*, and *Eleocharis*.

About the Instructors: Nia Wellendorf is the administrator of the Aquatic Ecology and Quality Assurance Section within the Division of Environmental Restoration at the Florida Department of Environmental Protection (DEP). Her section maintains DEP's quality assurance requirements for sample collection and analysis and its freshwater bioassessment program. Since she started with DEP in 2001, she has also worked on development of numeric nutrient criteria and site specific water quality standards, and biological evaluations to support those standards. Nia holds a Bachelor of Science Degree in Natural Resources from Cornell University and a Master of Science Degree in Aquatic Ecology from the University of Alabama. She especially loves aquatic plants, and enjoys exploring the natural areas and waterways of Florida with her family.

Ashley O'Neal is an Environmental Consultant in the Aquatic Ecology and Quality Assurance Section within the Division of Environmental Restoration at the Florida Department of Environmental Protection (DEP) in Tallahassee. Her work at DEP focuses on biological assessment methods for Florida's surface waters (lakes, streams, and wetlands), and her duties include training, auditing, and assisting with method development and refinement. She has a B.S. in Natural Resources from the University of the South (Sewanee) and an M.S. in Ecology and Evolutionary Biology from the University of West Florida. She loves native plants and enjoys outdoor adventures with her family.

Sarah Noble is an environmental specialist in the Aquatic Ecology and Quality Assurance Section within the Division of Environmental Restoration at the Florida Department of Environmental Protection (DEP). Sarah joined DEP in 2016 and coordinates the section's lake and stream sampling efforts, conducts water quality and bioassessment trainings, and provides bioassessment evaluations to determine numeric nutrient criteria compliance. Sarah holds a B.S. Degree in Zoology and Environmental Science from Miami University and a M.S. Degree in Biology from the University of Toledo. She enjoys hiking and paddling with her family.