

Final Report for Florida Department of Environmental Protection Graduate Fellowship,
Apalachicola National Estuarine Research Reserve: Increment I

*Development of FlowCam/Visual Spreadsheet Zooplankton Classification Schemes for Use in
Identifying Apalachicola Bay Plankton Communities*

PI: Kendra Daly
University of South Florida

Graduate student: Katherine Neilson
University of South Florida

Date: September 30, 2022

USF Responsibilities

- Task 1 – Selected candidate purchases necessary supplies, training and hardware to become familiar with existing samples that have been imaged and begins training with the software.

Timeline: June 15, 2022 – September 9, 2022

Because the start of first increment of the Fellowship was delayed, the end date of the grant was extended from June 30, 2022 to September 9, 2022.

All tasks for this period were completed. A Dell laptop meeting the specifications of the FlowCam software was purchased, as well as two back-up drives that will be able to store the FlowCam data files. The FlowCam software, Visual Spreadsheet version 6, was purchased and installed on the Dell laptop.

The PI, Kendra Daly, and the graduate student, Kat Neilson, visited ANERR on June 23 and 24, to become acquainted with the ANERR team, Jason Garwood, Megan Lamb, and Samantha Lucas, and to complete initial training on the FlowCam instrument and software. Kat also visited ANERR in September 2022 to provide help on the zooplankton collection cruise and to learn zooplankton sampling techniques. During this trip, the ANERR FlowCam runs were loaded onto our back-up drives and returned to USF for further analyses.

Kat Neilson completed FlowCAM University online training in order to become more familiar with the Visual Spreadsheet software and the FlowCAM instrument. She also has been examining preserved zooplankton using a microscope in order to become familiar with the typical zooplankton present in Apalachicola Bay and how they might be distinguished in FlowCam images. In addition, Kat has been researching relevant papers discussing Apalachicola

Bay physical circulation, nutrients, phytoplankton, and zooplankton. She is summarizing these papers as part of the Introduction to her Master's thesis proposal.