



Teacher Guide—Physical Science Module

1. Have students download 2005 abiotic data for Apalachicola NERR in Florida and examine the changes wrought by Hurricane Katrina in 2005. Have students download 2005 data from the data graphing tool on <http://estuaries.noaa.gov/ScienceData/Graphing.aspx> for three stations in the NERR: Dry Bar, East Bay, and Cat Point. Or download the data yourself, and print and copy it for students.



Figure 1. Apalachicola NERR region with monitoring stations.

2. Suggested guiding questions for students: Look at your graphs for the sites and use these questions as a guide to your analysis.
 - a. Can you determine the dates that Katrina impacted the NERR?
 - b. Describe the general pattern of values for each abiotic parameter over that time span.
 - c. What is the range of values for each parameter in the NERR?
 - d. Which parameter had the greatest change due to the storm? Give a reason for why this parameter changed so much.
 - e. What might cause the variations from station to station that you observed? Think about factors that influence this parameter, and how they might change.
 - f. What questions do you have about this graph? For example, would data from another parameter help explain the variation in this graph?
 - g. What additional information do you need to answer your questions?
 - h. What impacts on organisms, habitats, or human life did the variation of this parameter cause?