



## Teacher Guide—Life Science Module

### Final Assessment

- Provide a list of NERR sites to students with their home Internet address. Find the list on page two of this Final Assessment document.
- Break your students into small groups and either assign each group a NERR site or have them select their own to investigate.
- Student groups should select three endangered or threatened species in their chosen estuary to study.
- Students focus on one monitoring station within their estuary.
- Direct students to (<http://cdmo.baruch.sc.edu/>) where they can download their NERR's abiotic parameter data for the most recent complete year available.
- Students produce a PowerPoint, poster, or other presentation outlining the following items:
  - a. What research studies focusing on endangered or threatened species in your NERR have been completed or are underway? What are the results of these studies?
  - b. Display your data graphs and discuss the water quality in your estuary.
  - c. Have hypoxic or anoxic conditions occurred in your estuary during the year? Can you determine the cause of the hypoxia or anoxia (natural cause, human activity cause)?
  - d. Are populations of your three chosen species increasing, decreasing or stable?
- e. Name some interventions that you think could increase the number of each of your chosen species in your estuary.
- f. How does a decreasing population of each of your species affect other plant and animal species in your estuary?
- Grade student presentations for clarity, presentation style, and depth of research and analysis.



<b>State</b>	<b>National Estuarine Research Reserve</b>	<b>Website (URL)</b>
<b>Alabama</b>	Weeks Bay NERR	<a href="http://nerrs.noaa.gov/WeeksBay/welcome.html">http://nerrs.noaa.gov/WeeksBay/welcome.html</a>
<b>Alaska</b>	Kachemak Bay NERR	<a href="http://nerrs.noaa.gov/KachemakBay/welcome.html">http://nerrs.noaa.gov/KachemakBay/welcome.html</a>
<b>California</b>	Elkhorn Slough NERR	<a href="http://nerrs.noaa.gov/ElkhornSlough/welcome.html">http://nerrs.noaa.gov/ElkhornSlough/welcome.html</a>
<b>California</b>	San Francisco Bay NERR	<a href="http://nerrs.noaa.gov/SanFrancisco/welcome.html">http://nerrs.noaa.gov/SanFrancisco/welcome.html</a>
<b>California</b>	Tijuana River NERR	<a href="http://nerrs.noaa.gov/TijuanaRiver/welcome.html">http://nerrs.noaa.gov/TijuanaRiver/welcome.html</a>
<b>Delaware</b>	Delaware NERR	<a href="http://nerrs.noaa.gov/Delaware/welcome.html">http://nerrs.noaa.gov/Delaware/welcome.html</a>
<b>Florida</b>	Apalachicola NERR	<a href="http://nerrs.noaa.gov/Apalachicola/welcome.html">http://nerrs.noaa.gov/Apalachicola/welcome.html</a>
<b>Florida</b>	Guana Tolomato Matanzas NERR	<a href="http://nerrs.noaa.gov/GTM/welcome.html">http://nerrs.noaa.gov/GTM/welcome.html</a>
<b>Florida</b>	Rookery Bay NERR	<a href="http://nerrs.noaa.gov/RookeryBay/welcome.html">http://nerrs.noaa.gov/RookeryBay/welcome.html</a>
<b>Georgia</b>	Sapelo Island NERR	<a href="http://nerrs.noaa.gov/SapeloIsland/welcome.html">http://nerrs.noaa.gov/SapeloIsland/welcome.html</a>
<b>Maine</b>	Wells NERR	<a href="http://nerrs.noaa.gov/WellsBay/welcome.html">http://nerrs.noaa.gov/WellsBay/welcome.html</a>
<b>Maryland</b>	Chesapeake Bay MD NERR	<a href="http://nerrs.noaa.gov/ChesapeakeBayMD/welcome.html">http://nerrs.noaa.gov/ChesapeakeBayMD/welcome.html</a>
<b>Massachusetts</b>	Waquoit Bay NERR	<a href="http://nerrs.noaa.gov/WaquoitBay/welcome.html">http://nerrs.noaa.gov/WaquoitBay/welcome.html</a>
<b>Mississippi</b>	Grand Bay NERR	<a href="http://nerrs.noaa.gov/GrandBay/welcome.html">http://nerrs.noaa.gov/GrandBay/welcome.html</a>
<b>New Hampshire</b>	Great Bay NERR	<a href="http://nerrs.noaa.gov/GreatBay/welcome.html">http://nerrs.noaa.gov/GreatBay/welcome.html</a>
<b>New Jersey</b>	Jacques Cousteau NERR	<a href="http://nerrs.noaa.gov/JacquesCousteau/welcome.html">http://nerrs.noaa.gov/JacquesCousteau/welcome.html</a>
<b>New York</b>	Hudson River NERR	<a href="http://nerrs.noaa.gov/HudsonRiver/welcome.html">http://nerrs.noaa.gov/HudsonRiver/welcome.html</a>
<b>North Carolina</b>	North Carolina NERR	<a href="http://nerrs.noaa.gov/NorthCarolina/welcome.html">http://nerrs.noaa.gov/NorthCarolina/welcome.html</a>
<b>Ohio</b>	Old Woman Creek NERR	<a href="http://nerrs.noaa.gov/OldWomanCreek/welcome.html">http://nerrs.noaa.gov/OldWomanCreek/welcome.html</a>
<b>Oregon</b>	South Slough NERR	<a href="http://nerrs.noaa.gov/SouthSlough/welcome.html">http://nerrs.noaa.gov/SouthSlough/welcome.html</a>
<b>Puerto Rico</b>	Jobos Bay NERR	<a href="http://nerrs.noaa.gov/JobosBay/welcome.html">http://nerrs.noaa.gov/JobosBay/welcome.html</a>
<b>Rhode Island</b>	Narragansett Bay NERR	<a href="http://nerrs.noaa.gov/NarragansettBay/welcome.html">http://nerrs.noaa.gov/NarragansettBay/welcome.html</a>
<b>South Carolina</b>	ACE Basin NERR	<a href="http://nerrs.noaa.gov/ACEBasin/welcome.html">http://nerrs.noaa.gov/ACEBasin/welcome.html</a>
<b>South Carolina</b>	North Inlet-Winyah Bay NERR	<a href="http://nerrs.noaa.gov/NorthInlet/welcome.html">http://nerrs.noaa.gov/NorthInlet/welcome.html</a>
<b>Texas</b>	Mission-Aransas NERR	<a href="http://nerrs.noaa.gov/Texas/welcome.html">http://nerrs.noaa.gov/Texas/welcome.html</a>
<b>Virginia</b>	Chesapeake Bay VA NERR	<a href="http://nerrs.noaa.gov/ChesapeakeBayVA/welcome.html">http://nerrs.noaa.gov/ChesapeakeBayVA/welcome.html</a>
<b>Washington</b>	Padilla Bay NERR	<a href="http://nerrs.noaa.gov/PadillaBay/welcome.html">http://nerrs.noaa.gov/PadillaBay/welcome.html</a>