

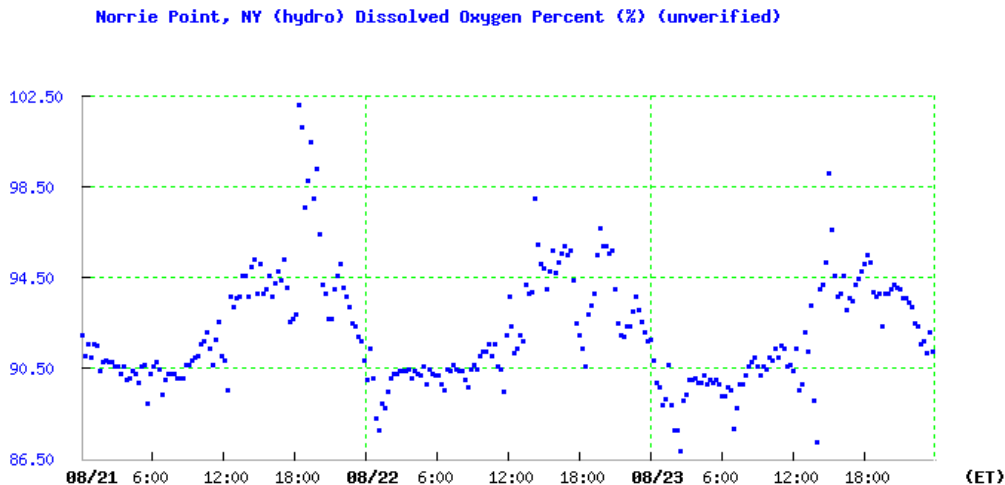
## Using Real-Time Data: Introduction

1. Go to: [www.hrecos.org](http://www.hrecos.org)
2. You are on the main HRECOS website. Where is Norrie Point? Use the map on the left to help you. Describe its location in the Hudson River watershed.

3. Open the “Current Conditions” page in a new tab or browser window.



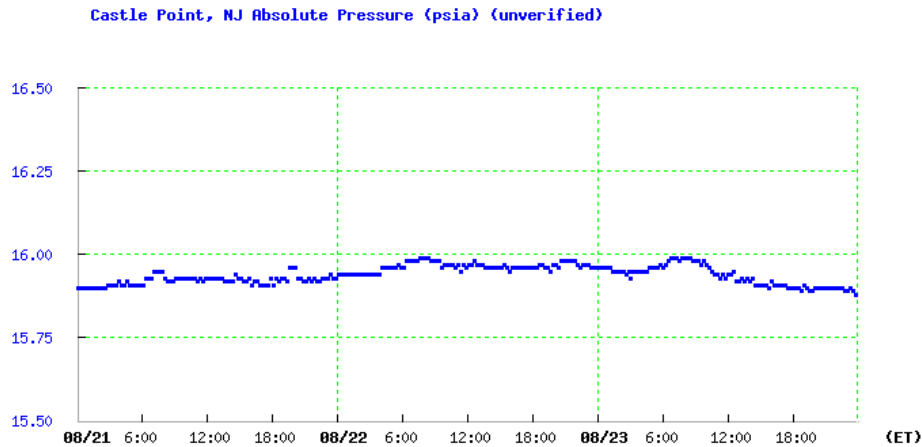
4. Set the following parameters:
  - a. Station1: Norrie Point, NY (hydro)
  - b. Parameter1: Dissolved Oxygen (%)
  - c. We will not be using Station2 and Parameter2
  - d. Units: English AND Continuous
  - e. Start Date: 2008-08-21
  - f. End Date: 2008-08-23
  - g. Time Zone: Eastern Time (EST/EDT)
  - h. Hit “Plot1”. You should see a graph that looks like this:



5. What does the X axis represent? \_\_\_\_\_ Y axis? \_\_\_\_\_
6. How does dissolved oxygen get into the water?
7. What affects dissolved oxygen in water?
8. How did the dissolved oxygen change during these two days in August, 2008, at Norrie Point, NY? Explain why you think this happened.

9. Next, select Castle Point, NJ. Where is Castle Point, NJ? Use the map on the HRECOS homepage to help you. Describe its location in the Hudson River watershed.

10. Now, in the Current Conditions Page, hit 'plot' and create the same graph for the same date for Castle Point. You should get a graph that looks like this:



11. How is this graph different? Explain why you think the two graphs are so different. Think about the locations of the sample sites, and what that might mean for temperature, salinity, etc. If you're not sure, explain what kind of information you would like to have in order to be confident about your answers.

12. Now, decide on two of your own stations to research, and choose a parameter to study:

O (% or ppm)

Salinity (*note: Schodack Island has conductivity instead of salinity*)

Turbidity

Water Temperature

Water Level (*Note: not available at Castle Point*)

Acidity (pH) (*Note: not available at Castle Point, Piermont Pier, or GW Bridge*)

13. Create at least two graphs that compare **either**:

- Your chosen parameter during the same time period at the two locations. (Note: The maximum amount of time that you can view data using HRECOS is three months. You may also find that some stations don't have data for the dates you would like to investigate.) Explain what you learned from your graphs, and print the graphs if required by your teacher.
- Your chosen parameter during different time periods at the same location. Explain what you learned from your graphs, and print the graphs if required by your teacher.