

# Seminole County Water Atlas Learning Kit

## Estimate or Actual? Handout

Students survey water quality and hydrology tests, classify them and justify their reasoning.

Water Atlas Curriculum Lesson 9

### Instructions:

1. Go to the [Seminole County Water Atlas](#) and choose a lake by choosing Explore > Water Resources on the dropdown menu bar. Use the Filter by Topic dropdown to find a lake that has topic data for all of the following: Nutrient Chemistry, Water Clarity, and Water Levels.\*
2. On the page for your chosen lake, click on the **Water Quality** tab.
3. For each water quality parameter shown below,
  - Beside the name of the parameter write the **definition** of the term.
  - Record the **value** reported for the measurement (be sure to include units of measure).
  - Decide if the results are an **estimate** or an **actual** measurement.
  - Explain your reasoning in making that decision.

a. Total Nitrogen (TN):

Definition: \_\_\_\_\_

Reported Value: \_\_\_\_\_ Estimate or Actual? \_\_\_\_\_

Reason? \_\_\_\_\_

b. Total Phosphorus (TP):

Definition: \_\_\_\_\_

Reported Value: \_\_\_\_\_ Estimate or Actual? \_\_\_\_\_

Reason? \_\_\_\_\_

c. Chlorophyll a, uncorrected for pheophytin:

Definition: \_\_\_\_\_

Reported Value: \_\_\_\_\_ Estimate or Actual? \_\_\_\_\_

Reason? \_\_\_\_\_

d. Chlorophyll a, corrected for pheophytin:

Definition: \_\_\_\_\_

Reported Value: \_\_\_\_\_ Estimate or Actual? \_\_\_\_\_

Reason? \_\_\_\_\_

e. Secchi Depth:

Definition: \_\_\_\_\_

Reported Value: \_\_\_\_\_ Estimate or Actual? \_\_\_\_\_

Reason? \_\_\_\_\_

\* All tests may not be available for every lake. If one lake does not have data, choose a different one.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

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4. Now click on the Water Levels & Flows tab and follow the same instructions for each hydrology parameter:
  - a. Water Level, Latest Value:  
Definition: \_\_\_\_\_  
Reported Value: \_\_\_\_\_ Estimate or Actual? \_\_\_\_\_  
Reason? \_\_\_\_\_
  - b. Flood Level:  
Definition: \_\_\_\_\_  
Reported Value: \_\_\_\_\_ Estimate or Actual? \_\_\_\_\_  
Reason? \_\_\_\_\_
  - c. Historic Norm for Month:  
Definition: \_\_\_\_\_  
Reported Value: \_\_\_\_\_ Estimate or Actual? \_\_\_\_\_  
Reason? \_\_\_\_\_
  - d. Historic Range, Water Level:  
Definition: \_\_\_\_\_  
Reported Value: \_\_\_\_\_ Estimate or Actual? \_\_\_\_\_  
Reason? \_\_\_\_\_

**Hints:** Click on the **Learn more about...** links for help understanding what each parameter measures and how the value was obtained. You may also refer to the [Water Atlas Glossary](#), accessible from the menu bar on each page of the Water Atlas. Go to another source, a reference book on water quality, a dictionary or any other source your teacher has made available to you, to recheck the meaning of each parameter.

Name:

Date:

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