

Elevation & Tides in Tampa Bay

Student Handout

INSTRUCTIONS:

1. Go to www.pinellas.wateratlas.org Go to the bottom where it says New Near Real Time Data Mapping Application. Click the link. You are looking at the sites where live data is collected in Pinellas County.
2. On the left pane you will see options to filter the view of the Atlas data stations. Filter by atlas for “All Atlases”. Click Filter. You should now see the entire state of Florida with many stations.
3. Zoom in and center the page to see the stations around Tampa Bay. On the Hillsborough County side of Tampa Bay, find the area of the map labeled Gibsonton. It is near the Alafia River. Zoom in to see all 3 stations on the Alafia River.
4. You will compare one of the Alafia stations to another station in Tampa Bay. Click on the green bubble for “Alafia River at Gibsonton FL-02301721”.
5. In the pop-up data box for each station you will see a series of four tabs. You want to view the last 24 hours of data recorded for elevation.

COMPARE ROOSEVELT & ALAFIA STATIONS:

1. In the DATA tab select the button for “show me the last 24 hours”. Fill in the first column in the table below.
2. Close the station pop-up box.
3. Now find on the map, I-275 and the Howard Franklin Bridge. Looking northwest of where the bridge enters Pinellas County, find the Roosevelt Station, click on the bubble, and fill in the second column according to the directions you followed for the Alafia station.
4. Answer the questions below the table.

Elevation Comparison Table		
Time	Alafia River Station Elevation (ft.)	Roosevelt Canal Station Elevation (ft.)
8:00 am		
10:00 am		
12:00 pm		
2:00 pm		
4:00 pm		
6:00 pm		
8:00 pm		
10:00 pm		
12:00 am		

- a. Based on the elevation data you recorded what time is high tide at the Alafia station? _____
- b. What time is high tide at Roosevelt? _____
- c. Are they different? If so, by how much time? _____
- d. Zoom out and look at the aerial of the map by clicking Satellite in the top right corner. Describe the geography of both stations. What do you see? Why do you think the tides are different? _____

- e. How is this information useful and to whom? _____

Name: _____

Date: _____