

Explore Dissolved Oxygen *Handout*

Part 3 of 4 in the "Exploring the Watershed Atlas" Series

INSTRUCTIONS: Go to the website: www.pinellas.wateratlas.org

Go to the Research tab > Metadata. Read the Summary of Data in the Atlas to get an idea of the scope of the Watershed Atlas project. If there is known scientific data recorded about a Pinellas County water body, it is here! You will download data and make a graph to better understand the trends.

1. Go to the Data Download tab, read and accept the disclaimer to continue. Follow the steps.

Step 1 > Select Data Type > Surface Water Quality

Step 2 > Select Filters

a. By Location > check Waterbody Name and Water Atlas

b. By Sample Info > check Date Range and Parameter > Submit

Step 3 > Specify Search Criteria

a. Enter Lake Tarpon in the box for Waterbody Name

b. Select Pinellas County Water Atlas and move to the box on the right by using the arrow

c. For Date Range, specify the last 2 years by changing the drop down box from days to years and typing in 2 in the box.

d. For Parameters, select Dissolved Oxygen and Water Temperature degrees F

e. Click Submit

Step 4 > Select Stations > Select the box next to Lake Tarpon with the dates that correspond closest to the year date range you provided

Step 5 > Choose Format > Click Graph Data

Windows: Follow the directions to download the data.

Mac: Control click.

Save the Excel file as **Tarpon Lake Data**.

2. Copy the graph and paste it into a Word document. Research and write a paragraph about why dissolved oxygen is so important to lakes and rivers. Use a browser (www.google.com or www.ask.com) to get information. (Hint: Use the history tab in the browser to easily switch between your page on the watershed website and your search page.)

3. What is the relationship between dissolved oxygen and temperature? Look it up and write a second paragraph. Give details. (Hint: Look at a soda.)

Name:

Date:

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4. There are many reasons for changes in dissolved oxygen in a lake. Temperature is only one reason for DO to fluctuate. However, see if you can find a broad relationship. Lake temperatures are generally higher in the summer. Use a highlighter pen and highlight the sections on the graph between June and September of each year. Do the lowest levels of Dissolved Oxygen occur in the summer or other seasons? _____

5. What would most likely cause a lake's dissolved oxygen level to fluctuate?

Name:

Date: