

Name _____ Class _____ Date _____

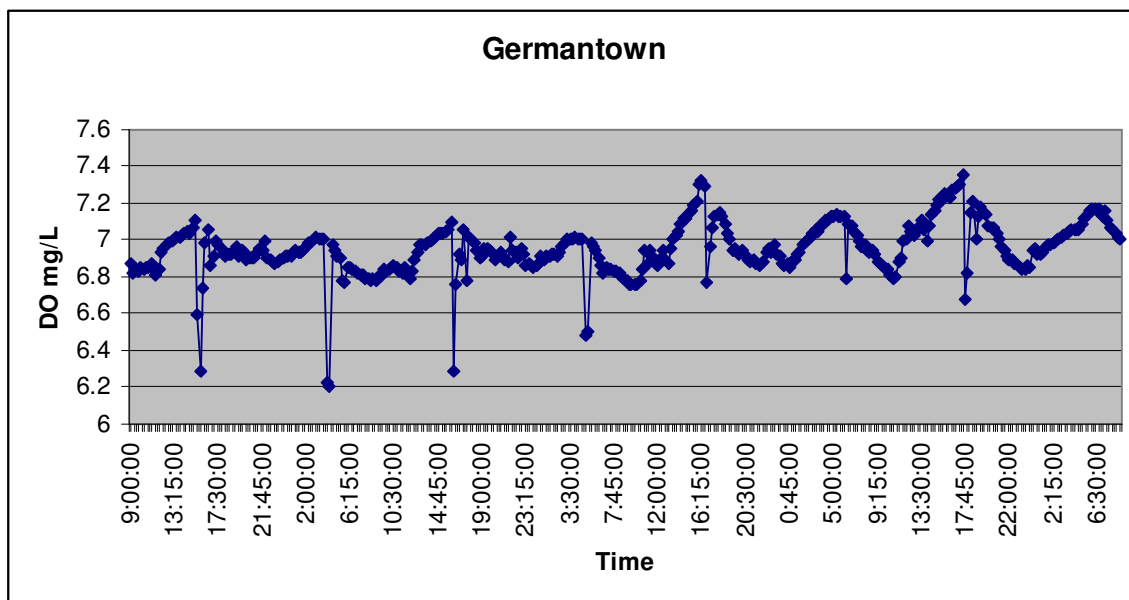
Dissolved Oxygen Changes

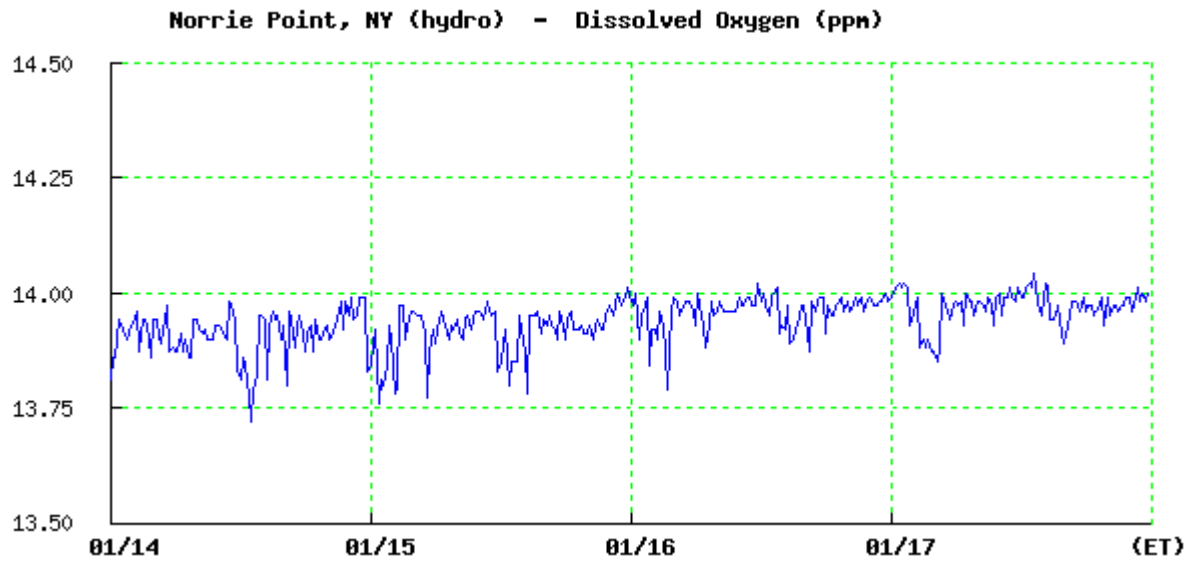
Part 1: Discussion questions from lab

1. Which aquarium was a model of a balanced ecosystem? What characteristics did it have that made it successful?
2. What do you think would happen if all three ‘ponds’ were placed in direct sunlight for one day? For one week?
3. What do you think would happen if all three were placed in darkness for one day? For one week?
4. Where does the oxygen come from that the animals need to survive?
5. What does the plant need to make its food through photosynthesis?
6. How are these organisms dependent on each other?

Part 2: What does it mean?

You have now learned about dissolved oxygen and how changes in the water can affect DO levels. Scientists have been gathering data along the Hudson for many years, and two of those sites are Germantown and Cheviot, both of which are on the east side of the Hudson River. Use the two graphs to answer the questions given. Both groups of samples were collected in August of 2006, starting at 9am in the morning and continuing for four days.





4. Why does the dissolved oxygen go up and down each day during the summer months (first graph)?
5. Why do you think the dissolved oxygen levels in the winter months don't change as much?
6. If scientists and policy makers are concerned about low dissolved oxygen levels which could kill aquatic life (below 4 ppm or mg/L), when should they test the waterways?