Environmental Changes: Plastic Pollution in the Pacific Ocean

A. In Google Earth, go to the Search Panel under the "Fly to" tab.
B. Type your school's name or address and hit search
C. Click "**Add Placemark**" on the tool bar.
D. **Name** your placemark with the name of your school.
E. Use the Navigation Controls to "zoom out" until you can see the ocean.
F. Use the Ruler tool to **measure the distance** from your school to the ocean.

1) What is the distance from your school to the Ocean?

_____

G. Find the North Pacific Ocean. The small blue sailboats show the voyage of a research vessel carrying scientists studying plastic pollution in the Pacific Ocean.
H. Follow the voyage by clicking on the sailboats to see what the scientists found along the way.

2) Below list 5 marine organisms and 5 pieces of plastic debris the crew observed during the voyage. Using the ruler tool measure the distance the boat was from the nearest shore when these were observed. Write the distance under the corresponding label.

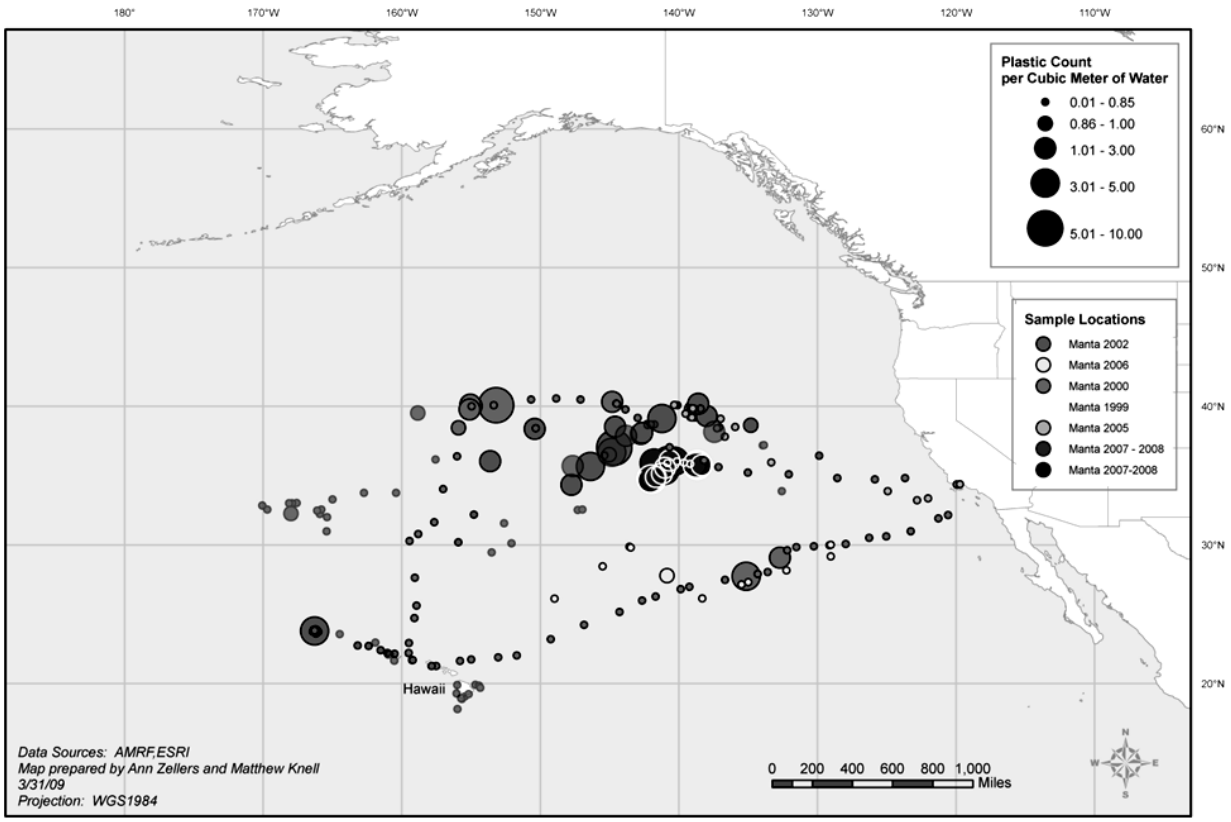
Marine Organisms

1. 2. 3. 4. 5.

_____ _____

Plastic Debris

1. 2. 3. 4. 5.



The map above shows the number (count) of plastic particles per cubic meter of water that the ORV Alguita research team has collected during voyages over the past 10 years.

3) Approximately how far from shore are the samples with the most plastic particles? (Use the scale on the map to approximate the distance.)

4) In what ways might plastic debris be changing the marine environment?

5) What effects might these changes have on marine organisms? What organisms do you think will be most impacted?

6) What might happen to species that are unable to adapt to this change in their environment if we continue to allow plastic debris to pollute the ocean?