The Chesapeake Bay Watershed
Largest estuary in the United States
• Fishing Industry of:

- Blue Crab
- Oysters
- Striped Bass
- Clams

• No other American estuary has a higher yield
The Bay Is Not Healthy
Nutrient Pollution Causes Algal Blooms and Fish Kills
Nutrients, Algae and Fish Kills

- In normal ecosystem low nutrient levels keep algae in check
- Adding nutrients causes algal blooms
- Algae die and become detritus (decaying matter)
- Detritus is decomposed by microbes, microbe populations boom.
- Microbes use the oxygen in the water
- Low dissolved oxygen in the water kills fish and other organisms
- Dead zones appear in the bay where nothing can live

Fish kill caused by nutrient build-up, Nanticoke River, Chesapeake Bay, 1992
What causes the excess nutrients? Rivers and tributaries are bringing the nutrients to the Chesapeake Bay:

• Sewage
• Farming

Factory farms discharge 650 million lbs of chicken manure each year
Have people played a role in changing the ecosystem to make it more vulnerable to algal blooms and dead zones?
To Investigate this question you will:

• Analyze historic and modern day food webs
• Chart trends in harvesting and ocean health using real data on the Chesapeake Bay
• Draw conclusions from your analyses and make recommendations for restoring Chesapeake Bay ecosystems
• Watch a short film about the Chesapeake Bay and discuss your seafood consumption choices
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7. Dead Fish: US Geological Survey
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