How clean is the water?

Focus questions	What is clean water? How can we monitor water quality and the conditions that allow for different animals and plants to survive?
Vocabulary	Ecosystem, biodiversity, aboiotic, bioti, turbidity

Background

Human activities have altered the landscape and quality of many **ecosystems** around the world, including aquatic ecosystems. Many aquatic ecosystems have been impacted by climate change, pollution, population, and habitat changes. A healthy aquatic ecosystem is one in which the water quality supports a high **biodiversity** of organisms. For this to happen, the biotic and abiotic components of the ecosystem must be in balance with one another. The interrelationships between human activities, changing watershed conditions, and water quality can quickly make the balance shift, causing a change in the composition of the ecosystem. What are some ways that abiotic and biotic factors can change an aquatic ecosystem?

Procedure

1. What are some visible indicators of a healthy water ecosystem?

2. What are some ways in which aquatic ecosystems have been impacted due to human activity?

3. How can we assess the health of an aquatic ecosystem? What can we test for?

4. What are some ways that humans can improve the health of an aquatic ecosystem?

Rubric for self-assessment

Skill	Yes	No	Unsure
I can explain what a healthy aquatic ecosystem is.			
I can describe both biotic and abiotic components that can lead to aquatic ecosystem imbalances.			
I can describe possible ways that the health of a disrupted aquatic ecosystem can be improved.			