

Water quality conclusion

Focus questions How can the health of an aquatic ecosystem be determined by the biotic and abiotic factors present in the ecosystem? How can the human impact be lessened to maintain or improve the water quality rating for an aquatic ecosystem?

Procedure

1. Fill in the results of the biotic and abiotic group test results from Lessons 1 and 2 below for your use.

Water ranking test results (lesson 1)

Test factor						
Score	Temp.	Turbidity	pH	DO	Nitrate	Phosphate
	N/A					

Biotic Sampling (Lesson 2)

Sensitive	Somewhat sensitive	Tolerant
boxes checked × 3 = _____ index value	boxes checked × 2 = _____ index value	boxes checked × 1 = _____ index value
Water Quality Rating Total Index Value = _____	Excellent (> 22)	Fair (11–16)
	Good (17–22)	Poor (< 11)

2. Construct an explanation for the current water quality of the aquatic ecosystem from the collected data and your observations. Use the collected data from above and include any human activities that may have led to the water quality assessment.

3. Design a solution to improve the human impact at the aquatic ecosystem testing site. Be sure to address how this solution will maintain or improve the current water quality assessment.

Rubric for self-assessment

Skill	Yes	No	Unsure
Identifying Human Impact: I identified human activities that created an impact upon the tested aquatic ecosystem.			
Constructing Explanations: I constructed an explanation for the current water health of the tested aquatic ecosystem.			
Designing Solutions: I helped to design a solution to improve the water quality of the aquatic ecosystem and counteract the human impact on that system.			