

# GEORGIA ADOPT-A-STREAM CHEMICAL MONITORING QA/QC TEST



Name:

Trainer's Name:

Workshop Location:

Date:

A score of 80% is required for QA/QC certification (stream monitors – 76 out of 95 points, coastal monitors – 86 out of 108 points, lake monitors – 83 out of 104 points). Answer all questions related to the certification you are acquiring (i.e. stream, coastal, or lake).

1. What are the goals of Georgia Adopt-A-Stream? (5 points)
  
2. Where and when is it ideal to sample? (5 points)
  
3. True/False. Volunteers should submit their data as soon as possible to the online AAS database. (5 points)
4. How often do you conduct chemical monitoring? (5 points)
  
5. What is a watershed? What watershed are you currently in? (5 points)
  
6. True/False. Basic kit maintenance includes storing reagents in a cool, dark place, checking reagents' dates, and replacing them as they expire and/or are contaminated. (5 points)
  
7. What are the state standards, duplicate precision and units for the following parameters?

A. Please fill out the chart below. (2 points/blank)

Parameter	State Standards	Duplicate Precision	Units
Dissolved Oxygen			
pH			
Salinity			
Clarity (Secchi Disk)			

← Coastal Volunteers

← Coastal & Lake Volunteers

B. What happens if the samples are not within the correct precision? (5 points)

## 8. pH

A. How low might you find pH in some south Georgia streams? (5 points)

B. True/False. The pH range on the coast falls within state standards. As salinity goes up, pH increases and becomes more basic. (Coastal Volunteers; 5 points)

**9. Temperature**

- A. Where is the best place to measure air and water temperature and which should be measured first? (5 points)
  
- B. True/False. Temperature affects feeding, respiration, and metabolism of aquatic organisms. (5 points)

**10. Dissolved Oxygen**

- A. Name two ways oxygen is introduced into water: (10 points)  
(Temperature is not a correct answer.)
  - 1.
  - 2.
- B. Would you expect to obtain higher oxygen levels in the summer or winter? Explain why or why not. (5 points)
  
- C. What effect would excess organic matter have on dissolved oxygen levels in the stream? (5 points)

**11. Conductivity (Stream and Lake Volunteers)**

- A. What does conductivity measure? (5 points)
  
- B. List two sources that can cause changes from baseline conductivity levels: (5 points)
  - 1.
  - 2.
- C. True/False. The conductivity meter should be calibrated within 24 hours prior to each monitoring event. (5 points)

**12. Salinity (Coastal Volunteers)**

- A. Name one factor that could cause salinity levels to fluctuate. (5 points)
  
- B. True/False. The refractometer should be calibrated/zeroed within 24 hours prior to each monitoring event. (5 points)

**13. Water Clarity (Lake and Coastal Volunteers):** How does water clarity affect the growth of aquatic plants? (5 points)