

APES WQI Analysis of Salt Creek and Barker Lake

Reminders

- ◆ You have the freedom to pair up with other groups and perform your tests in any order. However, please remain with your assigned group members.
- ◆ Make sure to record your results. Everyone in class is part of one big group and is depending on you!
- ◆ Once you have completed your test(s), help other groups complete their respective tests or seek out additional samples and make observations about the ecosystem within and surrounding the lake and creek.
- ◆ Remember to bring everything you left with back into the classroom.
- ◆ Respect the ecosystem. Do not throw rocks into Barker or the creek. Clean up after yourselves.
- ◆ Do not, under any circumstances, go into Barker lake. You will be dropped from APES without hesitation.
- ◆ If you feel like you have nothing left to do and others are still performing their tests, clean up the creek!

Task	Test Responsibilities	Equipment Responsibilities	Team Members
Dissolved Oxygen (DO)**	Measure DO levels immediately after samples return Store additional samples for BOD test later	Bring six ampules and DR850. Clean all equipment after use.	
Biological Oxygen Demand (BOD) **			
Temperature (T)	Record temperature at 4 main sites and central site	Bring thermometers & string (for central site)	
pH	Record pH at 4 main sites	Bring probes & beakers	
Fecal Coliform	Paddle test 4 main sites Store paddles for later observation	Bring agar paddles and 100 mL beakers	
Nitrate (NO₃) **	Test water after samples from all sites return	Bring DR850. Clean up powder pillow packets after use.	
Phosphate (PO₄) **	Test water after samples from all sites return	Bring DR850. Clean up powder pillow packets after use.	
Total Dissolved Solids (TDS)	TDS test 4 main sites	Bring TDS testers	
Total Suspended Solids (TSS)	Estimate turbidity using Secchi Disk at 4 main sites	Bring Secchi Disk, rope and pole	
Trap	Trap, document, and release macroinvertebrates	Help with additional collection once finished	
Seine Net	Use kick-seine technique over riffle	Bring seine nets and specimen collection containers	
Additional Sample Collection	Seek additional biological specimens in creek and riparian zones	Ensure all specimen containers are brought back with you	

**Do NOT bring DR850 anywhere near the creek! Use the DR850 only at base station.