



# FRESHWATER STREAM Monitoring Data Form

<b>Field Checklist:</b>			<b>REMINDER:</b> Always check chemicals for expiration dates prior to sampling your freshwater stream.
<input type="checkbox"/> Handbook	<input type="checkbox"/> Waste and Rinse Bottles	<input type="checkbox"/> Trash Bag	
<input type="checkbox"/> Pen	<input type="checkbox"/> Camera / Phone	<input type="checkbox"/> Paper Towels	
<input type="checkbox"/> Nitrile Gloves	<input type="checkbox"/> Transparency Tube	<input type="checkbox"/> Incubator Set to 35 °C	
<input type="checkbox"/> Thermometer	<input type="checkbox"/> Whirl-Pak Bag	<input type="checkbox"/> Closed-toe Shoes	
<input type="checkbox"/> DO and pH Kits	<input type="checkbox"/> Sink Water Sample on Ice in Cooler		

PART I. Site Information		
Site ID:	Distance: (miles, traveled one-way)	Time Traveled: (minutes, one-way)
Monitoring Group:	Sampling Time: (minutes)	Certified Participants: (first and last name)
Time:	Date:	

PART II. Weather	
Rainfall: (REQUIRED) <a href="http://www.cocorahs.org">www.cocorahs.org</a> inches in the last 24 hours.	Weather: <input type="checkbox"/> Sunny <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Steady Rain <input type="checkbox"/> Intermittent Rain
DO NOT SAMPLE during unsafe conditions or after rain events.	

PART III. Observations	
<b>Water Level:</b> <input type="checkbox"/> Dry <input type="checkbox"/> Flood (Over Banks) <input type="checkbox"/> High <input type="checkbox"/> Low <input type="checkbox"/> Normal <input type="checkbox"/> Stagnant/Still	<b>Water Color: (use clear container)</b> <input type="checkbox"/> No Color <input type="checkbox"/> Brown/Muddy <input type="checkbox"/> Green <input type="checkbox"/> Milky/White <input type="checkbox"/> Tannic <input type="checkbox"/> Other:
<b>Water Surface:</b> <input type="checkbox"/> Clear <input type="checkbox"/> Oily Sheen <input type="checkbox"/> Algae <input type="checkbox"/> Foam <input type="checkbox"/> Other:	<b>Water Odor:</b> <input type="checkbox"/> Natural/None <input type="checkbox"/> Gasoline <input type="checkbox"/> Sewage <input type="checkbox"/> Fishy <input type="checkbox"/> Chlorine <input type="checkbox"/> Other:
<b>Trash Cleanup:</b> <input type="checkbox"/> Site is clean <input type="checkbox"/> I cleaned site <input type="checkbox"/> Needs organized cleanup <input type="checkbox"/> Concern of illegal dumping?	<b>Water Clarity: (use clear container)</b> <input type="checkbox"/> Clear/Transparent <input type="checkbox"/> Cloudy/Somewhat Turbid <input type="checkbox"/> Opaque/Turbid

Alerts are generated when unusual colors, odors, or illegal dumping are selected.	
<b>Security:</b> <input type="checkbox"/> Drug Abuse <input type="checkbox"/> Vagrancy <input type="checkbox"/> Animals <input type="checkbox"/> Other:	<b>Bacteria Sources:</b> <input type="checkbox"/> Dog <input type="checkbox"/> Goose <input type="checkbox"/> Livestock <input type="checkbox"/> Human <input type="checkbox"/> Other:
<b>Hazards:</b> <input type="checkbox"/> Steep Bank <input type="checkbox"/> Trash <input type="checkbox"/> Fast Current <input type="checkbox"/> Other:	<b>Fish Movement Barriers:</b> <input type="checkbox"/> Incised Culvert <input type="checkbox"/> Perched Culvert <input type="checkbox"/> Low Flow <input type="checkbox"/> Dam <input type="checkbox"/> Other:
<b>Reach Dimensions: (Optional)</b> Active Channel Width:                      ft. Bank Full Width:                                ft. Depth to Water:                                 ft.	<b>If outfall/pipe is present, is it flowing after 3 days of dry weather?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	<b>Photos:</b> <input type="checkbox"/> Upstream <input type="checkbox"/> Downstream <input type="checkbox"/> Water Height <input type="checkbox"/> Extra Email additional photos to <a href="mailto:scaas@des.sc.gov">scaas@des.sc.gov</a> as a .JPEG file.

PART IV. Chemical/Physical					
Reminder to repeat tests if not within DUPLICATE PRECISION.					
Parameter	Test 1	Test 2	Units	Duplicate Precision	Reminders
Air Temperature		N/A	Celsius (°C)	None	Take air temperature BEFORE water temperature. Stand in the shade. Hold thermometer from the top or use a string to hang.
Water Temperature		N/A	Celsius (°C)	None	Read thermometer while in the water or quickly after removing. Take reading in shade. Check thermometer for air bubbles.
pH			Standard Units	0.25	Use a white background behind colorimeter to read result. Check against both scales. Take off hats and sunglasses.
Dissolved Oxygen			mg/L or ppm	0.6	Take water samples from exact same place. Check the bottles and syringes for air bubbles. Add drops slowly, one at a time.
Transparency		<input type="checkbox"/> > 120cm?	cm	None	Do not wear hats or sunglasses and take measurement in the shade. Do not stir up sediment in the stream. You may need to remix the tube.
Custom Tests (optional) and any chemical changes since you last sampled:					
PART V. Bacteria					
<b>Incubation Date/Time:</b> START                      FINISH Time: Date:			<b>Colony Count:</b> Blank: Plate 1:                      Plate 2:                      Plate 3: Only count BLUE colonies WITH gas bubbles. Results should be discarded if the Blank/Control plate shows bacteria growth.		
<b>Incubation Temperature:</b> Max:                                      Min:  Incubation must be 24 ± 1 hours and at 35 ± 1 °C.			<b>Bacteria Changes, Comments, Concerns?</b>    		
Next Steps					
Visit <a href="http://www.scadoptastream.org">www.scadoptastream.org</a> to view and enter data. Contact <a href="mailto:scaas@des.sc.gov">scaas@des.sc.gov</a> with any questions or concerns. <b>FISH KILL? HEALTH HAZARD? OR DANGEROUS POLLUTION EVENT?</b> <b>Call the SCDES Emergency Hotline: 1-888-481-0125</b>					