



FRESHWATER STREAM Monitoring Data Form

Field Checklist:			REMINDER: 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) www.cocorahs.org 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	
Water Level: <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	Water Color: (use clear container) <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:
Water Surface: <input type="checkbox"/> Clear <input type="checkbox"/> Oily Sheen <input type="checkbox"/> Algae <input type="checkbox"/> Foam <input type="checkbox"/> Other:	Water Odor: <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:
Trash Cleanup: <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?	Water Clarity: (use clear container) <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.	
Security: <input type="checkbox"/> Drug Abuse <input type="checkbox"/> Vagrancy <input type="checkbox"/> Animals <input type="checkbox"/> Other:	Bacteria Sources: <input type="checkbox"/> Dog <input type="checkbox"/> Goose <input type="checkbox"/> Livestock <input type="checkbox"/> Human <input type="checkbox"/> Other:
Hazards: <input type="checkbox"/> Steep Bank <input type="checkbox"/> Trash <input type="checkbox"/> Fast Current <input type="checkbox"/> Other:	Fish Movement Barriers: <input type="checkbox"/> Perched Culvert <input type="checkbox"/> Low Flow <input type="checkbox"/> Dam <input type="checkbox"/> Other:
Reach Dimensions: (Optional) Active Channel Width: ft. Bank Full Width: ft. Depth to Water: ft.	If outfall/pipe is present, is it flowing after 3 days of dry weather? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	Photos: <input type="checkbox"/> Upstream <input type="checkbox"/> Downstream <input type="checkbox"/> Extra Email additional photos to scaas@des.sc.gov 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. Freshwater Habitat

<p>Found Within Riparian Buffer:</p> <p><input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Herbaceous Plants</p> <p><input type="checkbox"/> Mowed Grass <input type="checkbox"/> Bare Soil <input type="checkbox"/> Unseasonable Loss of Vegetation</p> <p>Comments:</p>	<p>In-stream Habitat:</p> <p><input type="checkbox"/> Riffle <input type="checkbox"/> Run <input type="checkbox"/> Pool</p> <p><input type="checkbox"/> Leaf Packs <input type="checkbox"/> Aquatic Vegetation</p>
<p>Located Within 100 ft of Waterway:</p> <p><input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential Development</p> <p><input type="checkbox"/> Agricultural <input type="checkbox"/> Recreational <input type="checkbox"/> Paved Surfaces <input type="checkbox"/> Other</p> <p>Comments:</p>	<p>Wildlife Survey (check all that apply)</p> <p><input type="checkbox"/> Fish <input type="checkbox"/> Bird <input type="checkbox"/> Frog <input type="checkbox"/> Salamander</p> <p><input type="checkbox"/> Macroinvertebrate <input type="checkbox"/> Turtle <input type="checkbox"/> Other:</p> <p>Comments:</p>
<p>Streambank Condition:</p> <p><input type="checkbox"/> Steeply Sloping <input type="checkbox"/> Gently Sloping</p> <p><input type="checkbox"/> Undercut</p> <p>Comments:</p>	

PART VI. Bacteria

Incubation Date/Time			Incubation Temperature		Colony Count			
	Start	Finish	Max	Min	Blank	Plate 1	Plate 2	Plate 3
Time								
Date			Incubation must be 24 ± 1 hours and at 35 ± 1 °C.		Only count BLUE colonies WITH gas bubbles. Results should be discarded if the Blank/Control plate shows bacteria growth.			

Bacteria Changes, Comments, Concerns?

Next Steps

Visit www.scadptastream.org to view and enter data. Contact scaas@des.sc.gov with any questions or concerns.
FISH KILL? HEALTH HAZARD? OR DANGEROUS POLLUTION EVENT? Call the SCDES Emergency Hotline: 1-888-481-0125