Email to:stream.team@h-gac.com

For Office Use Only
Group ID: _____
Partner ID: _____
Date Received: _____
Date Approved: _____
Approved by (name): _____

The Meadows Center for Water and the Environment
Texas State University
Texas Stream Team

~~Email to: TxStreamTeam@txstate.edu~~
~~Send to: Texas Stream Team~~
~~The Meadows Center – Texas State University~~
~~601 University Drive~~
~~San Marcos, TX 78666-4616~~

CORE ENVIRONMENTAL MONITORING FORM

PLEASE PRINT LEGIBLY

Sample Date
M M D D Y Y Y Y

Sample Time (military)
H H M M

Site ID #

Sample Depth (meters)
(not total depth)

Citizen Scientist's Name _____
Site Description _____
Group or Affiliation _____

Core monitoring type conducted ☐ Standard Core ☐ Probe Core

Instrument Calibration: Conducted within 24 hours of sampling. Store and calibrate standard solutions at room temperature.

Calibration	Date	Time	Standard Value	Standard Temp (°C)	Pre-Test Calibration Initial Reading	Calibrated To	Post-Test Calibration Initial Reading
Conductivity/Salinity							
Dissolved Oxygen							
pH							

Field Observations:

- ____ FLOW SEVERITY: 1-no flow 2-low 3-normal 4-flood 5-high 6-dry
- ____ ALGAE: 1-absent 2-rare (<25%) 3-common (26-50%) 4-abundant (51-75%) 5-dominant (>75%)
- ____ WATER SURFACE: 1-clear 2-scum 3-foam 4-debris 5-sheen
- ____ WATER CONDITIONS: 1-calm 2-ripples 3-waves 4-white caps
- ____ PRESENT WEATHER: 1-clear 2-cloudy 3-overcast 4-rain
- ____ DAYS SINCE LAST SIGNIFICANT PRECIPITATION (runoff)
- ____ RAINFALL ACCUMULATION (inches within the last 3 days)
- ____ WATER COLOR: 1-no color 2-light green 3-dark green 4-tan 5-red 6-green/brown 7-black
- ____ WATER CLARITY: 1-clear 2-cloudy 3-turbid
- ____ WATER ODOR: 1-none 2-oil 3-acrid (pungent) 4-sewage 5-rotten egg 6-fishy 7-musky

Field Quality Control:
Was a QC session conducted for this sampling event? ☐ Yes ☐ No

Core Tests and Measurements:

- ____ AIR TEMPERATURE (°C)
- ____ TOTAL DEPTH (meters)
- ____ SECCHI DISK TRANSPARENCY (meters)
  Average Appears _____ Disappears _____
- ____ TRANSPARENCY TUBE (0.01 meters)
- ____ WATER TEMPERATURE (°C)
- ____ DISSOLVED OXYGEN (mg/L)
  Average 1st titration _____ 2nd titration _____
- ____ pH (standard units)
- ____ CONDUCTIVITY (µS/cm)

Presence of Litter: Please check Yes or No

MONOFILAMENT REMOVED ☐ Yes ☐ No
Amount (please circle): 0-5 ft 6-15 ft 16 ft+
NURDLE SURVEY ☐ Yes ☐ No
TRASH REMOVED ☐ Yes ☐ No

Coastal Area Salinity Tests and Observations:

- ____ SALINITY (ppth)
- ____ TIDE STAGE: 1-low 2-falling 3-slack 4-rising 5-high

Comments:

_____

_____

TOTAL TIME SPENT SAMPLING AND TRAVELING ____ Minutes

TOTAL ROUNDTRIP DISTANCE TRAVELED ____ Miles

TOTAL NUMBER OF PARTICIPANTS ____

I certify that all procedures, including the items listed in the Quality Control Checklist on the following page and in the manual, have been followed.

CERTIFIED CITIZEN SCIENTIST'S SIGNATURE _____ DATE _____

DATA COORDINATOR'S SIGNATURE _____ DATE _____

Prepared in cooperation with the Texas Commission on Environmental Quality and the United States Environmental Protection Agency.

CORE FIELD QUALITY CONTROL CHECKLIST

The following Field Quality Control Checklist is used by the Texas Stream Team Citizen Scientist to verify that the data are collected using approved protocols. Please check all boxes that apply to this sampling event before submitting this form.

General Procedures

- ☐ Gloves and goggles were worn.
- ☐ None of the reagents used for testing were expired.
- ☐ All reagents were stored at room temperature or in an environment protected from extreme weather prior to use.
- ☐ Sampling was conducted at approximately the same time/day as previous sampling events at this site, preferably before noon or after 4pm (16:00).
- ☐ All equipment was rinsed twice with sample water/deionized water before and after tests.
- ☐ All relevant measurements were recorded in appropriate fields on monitoring form.

Questions?

Email stream.team@h-gac.com

Or Visit h-gac.com/texas-stream-team

Field Observations

- ☐ **Algae:** Recorded algae observed on the water surface and below the water surface.
- ☐ **Water Color:** Observed water color in a plastic cup or bucket with a white background.
- ☐ **Water Clarity:** Observed the relative cloudiness of the water from bridge or banks.
- ☐ **Water Odor:** Tested by wafting from plastic cup or bucket.
- ☐ **Present Weather:** Marked cloudy if there is a least one cloud in the sky.

Instrument Calibration

- ☐ The instruments/probes were calibrated within 24 hours of monitoring.
- ☐ Calibrations were conducted in a temperature-controlled environment before sampling.
- ☐ All meters were held in center of beaker not touching the bottom or sides and stirred for 2 minutes before recording the reading.
- ☐ All meters were turned on/off while submerged in solution.
- ☐ Meters were rinsed with DI water and caps were replaced immediately after use.
- ☐ Pre- and post-test calibration tests were conducted and the differences between the "Meter adjusted to" value of the pre-test calibration and "Post-test calibration initial reading" fall within the error limits listed in the table below:

Parameter	Error limit
Conductivity	± 20% of calibration standard solution
Salinity	± 1 ppt
Dissolved Oxygen (Probe Core only)	± 0.5 mg/L
pH (Probe Core only)	± 0.5 sμ

Core Tests and Measurements

- ☐ **Sample Depth:** The sample depth is either 0.3 m or half of the total depth.
- ☐ **Air Temperature:** Thermometer placed in shade and values reported in degrees Celsius.
- ☐ **Total Depth/Secchi Disk Transparency/Transparency Tube:** Values reported in meters.
- ☐ **Secchi Disk Transparency:** Ensure the average of two measurements is reported, the measurement when the disk disappears and appears. Record average then lower to bottom to get total depth reading. If water is too swift to get reading, make note in comments section.
- ☐ **Water Temperature:** If using thermometer, air temperature was measured first and reported in degrees Celsius.
- ☐ **Dissolved Oxygen:**
  - ☐ Bottles rinsed 2X with sample water and titration vials rinsed 2X with fixed solution.
  - ☐ Bottles filled so the meniscus is resting on the line.
  - ☐ Lids capped underwater with no air bubbles.
  - ☐ Duplicate sample conducted and titration values within 0.5 mg/L of each other.
- ☐ **pH:**
  - ☐ The blue cap on glass pH vial removed before viewing and held up against a white background.
  - ☐ The test tube was filled so the meniscus is resting on the line.
- ☐ **Conductivity:**
  - ☐ Values recorded in microsiemens per centimeter (μS/cm).
- ☐ Reagent bottles completely inverted when adding drops to prevent interference from air bubbles.

Refractometer

- ☐ Was time allowed for the temperature of the sample water to stabilize before the salinity measurement was recorded?
- ☐ Was instrument held up to a light source when gathering the salinity measurement