

For Office Use Only  
 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

Citizen Scientist's Name \_\_\_\_\_

Site Description \_\_\_\_\_

Site ID #  
 | | | | | |

Sample Depth (meters)  
 | | | | | |  
 (not total depth)

Group or Affiliation \_\_\_\_\_

**Core monitoring type conducted**  
 Standard Core     Probe Core     Other

**Instrument Calibration:** Conducted within 24 hours of sampling. *Store standard solutions and calibrate 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

**Core Tests and Measurements:**

AIR TEMPERATURE (°C)

SECCHI DISC TRANSPARENCY (meters)  
 Average Disappears \_\_\_\_\_ Appears \_\_\_\_\_

TOTAL DEPTH (meters)

TRANSPARENCY TUBE (meters)

WATER TEMPERATURE (°C)

CONDUCTIVITY (µS/cm)

DISSOLVED OXYGEN (mg/L)  
 Average 1st titration \_\_\_\_\_ 2nd titration \_\_\_\_\_

pH (standard units)

**Presence of Litter:**

MONOFILAMENT REMOVED Please check Yes or No  
 Amount (please circle): 0-5 ft    6-15 ft    16 ft+     Yes     No

NURDLE SURVEY     Yes     No

TRASH REMOVED     Yes     No

**Coastal Area Salinity Tests and Observations:**

SALINITY (ppt)

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

# CORE FIELD QUALITY CONTROL CHECKLIST

**Citizen scientists are required to check all applicable boxes for each monitoring event to verify the procedures are followed. If the monitoring event fulfills a Field Audit Session, the trainer must observe the citizen scientist conducting the monitoring event and document observations in the comments field. The trainer will also sign to verify Field Audit Session was conducted.**

## General Procedures

- Gloves were worn or hand sanitizer was applied throughout.
- No reagents used for testing were expired and all reagents were stored 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.
- Monitoring sample was collected from the centroid of flow with minimal streambed disturbance.
- All equipment was rinsed 2X with sample water before the test was conducted.
- All equipment was rinsed 2X with deionized water after testing was conducted.

## Field Observations

- Algae:** Recorded algae observed on 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 at least one cloud in the sky.

## Instrument Calibration

- The instruments/meters were calibrated within 24 hours of monitoring and conducted in a temperature-controlled environment.
- 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 were conducted and the difference between the "Calibrated To" value of the pre-test calibration and "Post-Test Calibration Initial Reading" is within the error limit listed below for each parameter:

Parameter	Error limit
Conductivity	± 20% of calibration standard solution
Salinity	± 1 ppt
Dissolved Oxygen (Standard Core)	± 0.5 mg/L
Dissolved Oxygen (Probe Core)	± 6% saturation
pH (Probe Core only)	± 0.5 s.u.

## Core Tests and Measurements

- Sample Depth:** The sample depth is either 0.3 m or 1/3 of the total depth.
- Air Temperature:** Thermometer placed in shade.
- Transparency Tube:** Be careful to not scrape the streambed or disturb or kick up sediment.
- Secchi Disc Transparency:** Secchi lowered in water shaded from the sun. Record average then lower to bottom to get total depth reading.
- Water Temperature:** If using thermometer, air temperature was measured first.

### 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.
- Reagent bottles completely inverted when adding drops to prevent interference from air bubbles.

### pH:

- The pH vial cap was removed and the tube was held up against a white background before viewing.
- The test tube was filled so the meniscus is resting on the line.

## Refractometer (tidally-influenced saltwater only)

- Time was allowed for the temperature of the sample water to stabilize before the salinity measurement was recorded.
- Instrument was held up to a light source when gathering the salinity measurement.

---

## Field Audit Session

*This section should be filled out by a certified trainer ONLY if a Field Audit Session was conducted. Field Audit Sessions are required at a minimum every two years.*

Legible Trainer Full Name: \_\_\_\_\_ Trainer Signature: \_\_\_\_\_

Trainer Comments: \_\_\_\_\_

---

---