

RED RIVER BASIN MONITORING NETWORK / *STREAM* FIELD SHEET

Project Name: _____ **Sampler Code:** _____
Individual Observers-First and Last Names :

Sonde S/N: _____

Handpad S/N: _____

Turbidimeter S/N: _____

FIELD INFO.	A	B	C	D	E	F	G	H	I	J
SITE NAME										
DATE										
TIME (military)										
STAGE										
TD: Bottom										
TD: Surface										
Depth										
Sample Depth: 50% of water depth										
GAGE TYPE										
T-Tube: First / Final 60 cm AVG (Circle length if using longer T-tube)	/	/	/	/	/	/	/	/	/	/
Appearance: 1A-clear; 1B-tea-colored; 2-cloudy; 3-muddy; 4-green; 5-muddy & green	100 / 120	100 / 120	100 / 120	100 / 120	100 / 120	100 / 120	100 / 120	100 / 120	100 / 120	100 / 120
Appearance:										
Recreation Suitability: 1-Beautiful; 2-Excellent body contact; 3-Body contact impaired; 4-no swim/boating OK; 5-recreation nearly impossible										
Recreation Suitability:										
Stream Condition <u>H</u> igh- <u>N</u> ormal- <u>L</u> ow										
Rain Event (Y/N)										
Water Temp °C										
Conductivity (µS/cm)										
DO (% Saturation)										
DO (mg/l)										
pH										
Turbidity Hach 2100P (NTRUs) YSI Sonde (FNUs)										
SAMPLE DEVICE (Van Dorn / None)										
SAMPLE TYPE (Grab)										
QA (<u>F</u> ield <u>D</u> up)										

See back of sheet for additional instructions/information for above entries

Observer(s): _____ Date: _____

FIELD NOTES: station name/location, vegetation status(leaf out, cropping, harvest), land use, erosion, wildlife, general phenology, wind, cloud cover, recent precipitation, ice condition, picture #, GPS coordinates, etc. **Also record here if NO FLOW.**

A	
B	
C	
D	
E	
F	
G	
H	
I	
J	

INSTRUCTIONS FOR COMPLETING STREAM FIELD DATA SHEET

PROJECT NAME: Write down the project this data is being collected for: **REDRWTC**H-River Watch; **REDRIVER**-Condition and FDR; **REDRTURB**-Turbidity TMDL; others as per project being monitored for.

SAMPLER CODE: Enter sampler code that your school, organization, individual is referred to as for online data entry.

INDIVIDUAL OBSERVERS: List all samplers involved in collection of field data—use first and last names

SONDE S/N: Serial number of sonde used in field sampling

HANDPAD S/N: Serial number of handpad/datalogger used in field sampling

TURBIDIMETER S/N: Serial number of Hach 2100P Turbidimeter used in field sampling (if used)

SITE NAME: Enter the common site name. If this is an un-established site and you want the site established and data entered in STORET, obtain the GPS coordinates and station description/location. Note these in field observations section and contact MPCA to establish site.

DATE: Enter the date of sampling

TIME: Enter the time of sampling—military style, e.g. 14:00 rather than 2:00 p.m.

STAGE: Measure of water level, also called “stage,” determined by reading a staff gage, wire weight gage or subtracting a tape down measurement to water level from a reference point (RP). Record any stage measurements here if other than Tape Down. A description of the gage should be noted in “field observations,” as well as any conditions that affect the measurement (debris around the staff, wind catching the tape, fast/deep current, standing waves, etc.).

TD BOTTOM: Enter the tape down measurement to the bottom of the stream

TD SURFACE: Enter the tape down measurement to the surface of the stream

DEPTH: Subtract TD SURFACE from TD BOTTOM

SAMPLE DEPTH: Enter 50% of the DEPTH (if sample taken at other than 50% record estimated depth and note reason in field notes)

GAGE TYPE	CODE	DEFINITION
USGS Staff or Wire Weight	U-R	USGS outside reference gage, such as staff or wire-weight, at an active gage
Tape-down from RP	TD	Tape-down measurement to water level from established reference point (RP) on bridge or other structure
Other Staff or Wire Weight	R	Outside reference gage, such as staff or wire-weight, that is maintained by a non-USGS agency (describe in comments)

<p>T-TUBE Assumed use of the 60 cm transparency tube. If water clarity exceeds 60 cm and a longer transparency tube is used, circle appropriate length of tube used—either 100 or 120 cm tube.</p> <p>Enter the FIRST and FINAL height of water column in tube. Calculate the average (AVG) as the value to enter in Excel data template.</p>	<p><u>Example:</u> if first reading <u>44 / 36</u> is 44 and final reading is 36, the average is 40</p>
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APPEARANCE: Record the one number that best describes the appearance of the stream water within one meter of your site. NOTE: Evaluate appearance and recreational suitability BEFORE taking sample. **1A=Clear**—crystal clear, transparent water; **1B=Tea colored**—transparent water, which has been colored by dissolved organic matter from upstream bogs or wetlands; **2=Cloudy**—not quite crystal clear; cloudy white, gray or light brown; **3=Muddy**—cloudy brown due to high sediment levels; **4=Green**—due to algae growth; indicative of excess nutrients released into the stream; **5=Muddy AND Green**—a combination of cloudy brown from high sediment levels and green from algae growth.

RECREATIONAL SUITABILITY: Record the one number that best describes your opinion of how suitable the stream water is for recreation and aesthetic enjoyment. **1=Very Good**—beautiful, could not be better; **2=Good**—very minor aesthetic problems; excellent for body-contact recreation (swimming, wading); **3=Fair**—body-contact recreation and aesthetic enjoyment slightly impaired; **4=Poor**—recreation potential & level of enjoyment substantially reduced (would not swim but boating okay); **5=Very Poor**—swimming and aesthetic enjoyment nearly impossible.

STREAM CONDITION - This refers to the relative amount of water flowing in the stream channel.	
L = Low:	Water covers 1/3 or less of the distance from the stream bottom to the top of the bank.
N = Normal:	Water covers 1/3 to 2/3 of the distance from the stream bottom to the top of the bank.
H = High:	Water covers 2/3 or more of the distance from the stream bottom to the top of the bank.

RAIN EVENT (Yes/No): Put a “Y” in the “Rain event” column if you are sampling in response to a significant rainfall event (over 1 inch in previous 24 hour period or ½ inch in relatively short period of time); an “N” if you are taking your regular weekly or monthly stream measurements.

WATER TEMP, CONDUCTIVITY; DO-%SAT; DO-mg/l; pH: Record values for these parameters from handpad after readings stabilized.

TURBIDITY: Circle the unit being used for measurement. Measurement units are NTRUs if using a Hach 2100P or FNU's if using a YSI sonde.

SAMPLE DEVICE: **VD-H** if using Van Dorn horizontal sampler; **VD-V** if using Van Dorn vertical sampler; **None**-if sample collected directly into bottle (hand dipped); **SIM**-simple open bucket; **Other**-another type of sampler (describe in notes)

SAMPLE TYPE: Grab or G—sampling vessel or bottle filled at one point in water column and cross section of a waterbody. A sample collected with a Van Dorn sampler or hand dipped are both considered grab samples.

QA (Quality Assurance): Enter **FD** if sample is a Field Duplicate. Also **SB, EB, or FB** when a Sampler/Equipment Blank or Field Blank is processed.