Instructions for Exercise 1 and 2.

Included in this document are two exercises. Each exercise should include three tabs:

- a worksheet with the primary data elements for WQX and space beside each element for the user to fill in,
- an answer bank to help the user fill in the worksheet, and
- the field sheet or lab results sheet upon which the exercise is based.

Use the answer bank and the corresponding example field/lab sheet to fill in the worksheet with the monitoring information which matches the data elements listed in the worksheet. The exercises are intended to help the user determine how WQX data elements are related to the information collected for water quality monitoring programs.

Matching WQX data elements and monitoring information: Field Measurements

Match monitoring information from the word bank on the next page with the data elements listed here.

Project ID	
Project Name	University Water Quality Monitoring
Project Description	Baseline data collection for University Water Quality Project
Monitoring Location ID	
Monitoring Location Name	
Monitoring Location Type Name	
Latitude Measure	29.935653
Longitude Measure	-95.577643
Horizontal Collection Method Name	
Source Map Scale Numeric	
Horizontal Coordinate Reference System Datum Name	NAD83
State Code	TX
County Code	
Activity ID	
Activity Type Code	
Activity Media Name	Water
Activity Start Date	
Activity Start Time	
Activity Start Time Zone Code	CST
Activity Depth Height Measure	
Activity Depth Height Measure Units	
Sample Collection Method Identifier	
Sample Collection Equipment Name	
Characteristic Name	Dissolved oxygen (DO)
Result Detection Condition Text	
Result Measure Value	
Result Measure Unit Code	
Result Sample Fraction Text	
Result Status Identifier	
Result Statistical Base Code	
Result Value Type Name	
Result Analytical Method Identifier	
Result Analytical Method Identifier Context	
Detection Quantitation Limit Type Name	
Detection Quantitation Limit Measure Value	
Detection Quantitation Limit Measure Unit Code	

Matching WQX data elements and monitoring information: Field Measurements

Use the monitoring information from answer bank here to fill in the information which corresponds to the correct data elements on page 1.

1

8.26

2007-08-17

Actual

Final

GPS-Unspecified

Harris

m

mg/L

River/Stream

Univ_WQMP

BearCk_1

BearCk_1_08172007_F

(Not applicable since only one measurement was taken per charac.)

(Not applicable since I did not determine coordinates with a map)

(Not applicable since I have a result measure value)

(Not applicable since the result is a field measurement)

8:30:00

Field Msr/Obs

Example Field Sheet

The information on this field sheet was used to create the word bank in Exercise 1. Use this field sheet as a reference when matching the WQX data element to the information in the word bank.

Monitoring Location Name	Bear Creek at Clay Road
Monitoring Location Coordinates	GPS reading: 29.935653,-95.577643 Assume Datum of NAD83
Monitoring Location Description	Bear Creek stream crossing at Clay Road, Harris County
Sample Date	8/17/2007
Sample Time	8:35 a.m.
Sample Description	Results of instantaneous sonde reading measured according to University Water Quality Monitoring program QAPP. Recorded at 1 m below surface.
DO - mg/l	8.26
Temperature - Deg. C	17.53
pH	6.94

Notes:

Fulfills one of three sampling events in Harris County, TX for the University Water Quality Monitoring Program. See QAPP for monitoring details.

Monitoring Location coordinates taken with GPS: 29.935653,-95.577643

Assume Datum of NAD83

Water samples were also collected using a Niskin Bottle for Total Suspended Solids and sent to the lab. See Attachment 1 for lab results from 8/18/07.

A continuous reading was also taken, the results of which were provided on a different sheet.

Matching WQX data elements and monitoring information: Lab Results

Match monitoring information from the word bank on the next page with the data elements listed here.

Project ID	
Project Name	
Project Description	
Monitoring Location ID	
Monitoring Location Name	
Monitoring Location Type Name	
Latitude Measure	
Longitude Measure	
Horizontal Collection Method Name	
Source Map Scale Numeric	
Horizontal Coordinate Reference System Datum Name	
State Code	
County Code	
Activity ID	
Activity Type Code	
Activity Media Name	
Activity Start Date	
Activity Start Time	
Activity Start Time Zone Code	
Activity Depth Height Measure	
Activity Depth Height Measure Units	
Sample Collection Method Identifier	
Sample Collection Equipment Name	
Characteristic Name	
Result Detection Condition Text	
Result Measure Value	
Result Measure Unit Code	
Result Sample Fraction Text	
Result Status Identifier	
Result Statistical Base Code	
Result Value Type Name	
Result Analytical Method Identifier	
Result Analytical Method Identifier Context	
Detection Quantitation Limit Type Name	
Detection Quantitation Limit Measure Value	
Detection Quantitation Limit Measure Unit Code	

Matching WQX data elements and monitoring information: Lab Results

Use the monitoring information from the answer bank here to fill in the information which corresponds to the correct data elements on page 1.

-95.577643
29.935653
37.5
2007-08-17
160.2M
Actual
Bear Creek at Clay Rd
BearCk_1
BearCk_1_08172007_L
CST
Final
GPS-Unspecified
Harris
mg/L
NAD83
Niskin Bottle
Obtain environmental baseline and ensure water quality standards are met.
River/Stream
Sample-Routine
Total suspended solids
TX
Univ_QAPP
Univ_WQMP
University Water Quality Monitoring
USEPA
Water
(Not applicable since I have a result measure value)
(Not applicable since only one measurement was taken per charac.)
(Not required for this characteristic)

Attachment 1: Example Laboratory Results

The lab results from this example was used to create the word bank in Exercise 2. Use this lab sheet as a reference when matching the WQX data element to the information in the word bank.

Analysis prepared for University Water Quality Monitoring Program.

Characteristic Name	Monitoring Location Name	Sample Date	Analysis Date	Value (mg/L)	Preparation and Analysis Tech.	Lab Sample ID
Total Suspended Solids	Bear Creek at Clay Rd	8/17/2007	8/18/2007	37.5	USEPA 160.2M	BC1081708TSL
Total Suspended Solids	Bear Creek at Hwy 6	8/17/2007	8/18/2007	<0.02 *	USEPA 160.2M	BC2081708TSL
Total Suspended Solids	White Oak Stream at Eldridge Rd	8/17/2007	8/18/2007	9.5	USEPA 160.2M	WO1081708TSL

* The "<" symbol indicates that the constituent was not detected because it was below the detection limit of the method used in the analysis.