Checking Your Data for Compatibility to STORET / WQX

Use this Checklist to determine how the water quality monitoring data you've collected can be organized in the STORET / WQX-compatible format. If you can answer "Y" to all of the REQUIRED elements, you have all of the components needed for STORET / WQX-compatibility. Each circled "N" within the REQUIRED elements indicates a data field which will need to be investigated before your data can be considered STORET / WQX-compatible.

COLOR KEY FOR THE TABLE BELOW:
- *REQUIRED* elements will be identified in BOLD, RED LETTERING
- *RECCOMMENDED* elements are identified in BOLD, GREEN LETTERING
- *OPTIONAL* elements are identified in BOLD, BLUE LETTERING
- *CONDITIONALLY REQUIRED* elements are identified in BOLD, BLACK and RED LETTERING with a note explaining the condition
- SHADED YELLOW BOXES are required in STORET / WQX Template if a NUMERICAL RESULT VALUE of a characteristic is obtained during data collection

Comparing Your PROJECT Information to STORET / WQX
(Yellow *Project* Tab in WQX Template)

REQUIRED	PROJECT NAME	Do I know the name of the Project I'm collecting data for? EXAMPLE: *"Tribal Surface Water Monitoring Program"*	Y N
REQUIRED	PROJECT IDENTIFIER	Is there an existing 'code' to identify this project that I can use? If not, can I create a code under 35 characters with no spaces or special characters that will be unique to this project? EXAMPLE: *"TSWMP"* **NOTE:** *The Project Identifier is the way STORET / WQX links your Project, Monitoring Locations, and Results.*	Y N
RECOMMENDED	PROJECT DESCRIPTION TEXT	Can I describe the purpose of my project in a short sentence or two? **NOTE:** *The Project Description Text is not required however it will help describe the project, monitoring locations, and results to others who are looking at your data. Think about future employees within your organization. Will they be able to identify the specifics of the project through project name and identifier alone?*	Y N

Comparing Your MONITORING LOCATIONS Information to STORET / WQX

(Yellow *Monitoring Locations* Tab in Template)

REQUIRED	**MONITORING LOCATION IDENTIFIER (ID)**	Is there an existing 'code' to identify each monitoring station or location? If not, can I create a code under 35 characters with no spaces or special characters that will be unique to each monitoring station or location? EXAMPLE: *"SC01"*	Y N
REQUIRED	**MONITORING LOCATION NAME**	Do I have a geographically descriptive name of each station or location I'm monitoring at? EXAMPLE: *"Smith Creek 01"*	Y N
REQUIRED	**MONITORING LOCATION TYPE**	Do I know what type of water body I am collecting data from at each monitoring station or location? EXAMPLE: *River/Stream, Lake, Estuary, etc* *(Can be selected using the drop-down option in the STORET / WQX Template)*	Y N
OPTIONAL	**HUC EIGHT-DIGIT CODE**	Do I know the Eight-Digit Hydrologic Unit Code for each station or location I'm monitoring? Do I want to include that as a part of the metadata for this Project?	Y N
OPTIONAL	**TRIBAL LAND INDICATOR**	Do I know if each station or location I'm monitoring is on Tribal Land? Do I want to include that as a part of the metadata for this Project?	Y N
OPTIONAL	**TRIBAL LAND NAME**	If a monitoring station or location is on Tribal Land, do I know the name of that Tribal Land? Do I want to include that as a part of the metadata for this Project?	Y N
REQUIRED	**MONITORING LOCATION LATITUDE**	Do I know the latitude of each monitoring station or location in a decimal 6-8 character format? EXAMPLE: *DD.DDDD*	Y N

Comparing Your MONITORING LOCATIONS Information to STORET / WQX

(Yellow *Monitoring Locations* Tab in Template)

REQUIRED	**MONITORING LOCATION LONGITUDE**	Do I know the longitude of each monitoring station or location in a decimal 6-9 character format? EXAMPLE: *-DDD.DDDD*	Y N
CONDITIONALLY REQUIRED	MONITORING LOCATION MAP SCALE	Did I use a map to determine the location of each monitoring station or location? Do I know the non-negative integer representing the proportional distance on the ground for one unit of measure on that map? ****CONDITION:** *This is a REQUIRED field ONLY if you select 'Interpolation-Map' in the HORIZONTAL COLLECTION METHOD column*	Y N
REQUIRED	**MONITORING LOCATION HORIZONTAL COLLECTION METHOD**	Do I know what method was used to determine the latitude and longitude of each monitoring station or location? EXAMPLE: *GPS-Unspecified, Address, Interpolation-Map, etc (Can be selected using the drop-down option in the STORET / WQX Template)*	Y N
REQUIRED	**MONITORING LOCATION HORIZONTALCOORDINATE REFERENCE SYSTEM**	Do I know the datum used to determine the latitude and longitude of each monitoring station or location? EXAMPLE: *NAD83, NAD27, GUAM, etc (Can be selected using the drop-down option in the STORET / WQX Template)*	Y N
REQUIRED	**STATE CODE**	Do I know the state which the monitoring stations or locations are in? ****NOTE:** *This is NOT A REQUIRED field if your monitoring location is in an Ocean or a Great Lake.*	Y N
REQUIRED	**COUNTY CODE**	Do I know the three-digit county (or FIPS) code for the county which the monitoring stations or locations are in? EXAMPLE: *DDD (Can be selected using the drop-down option or the ALLOWED VALUES-MONITORING LOCATIONS TAB in the STORET / WQX Template)*	Y N

Comparing Your *RESULTS* Information to STORET / WQX
(Yellow *Results* Tab in Template)

REQUIRED	**ACTIVITY IDENTIFIER (ID)**	Is there a unique existing 'code' to identify an activity performed at each monitoring location? If not, can I create a code under 35 characters with no spaces or special characters that will be unique to that activity? **EXAMPLE:** *Date activity was performed and sample number: 060909_01* ****NOTE:** *An Activity can be based on a unique lab ID, a suite of on-site field measurements, an individual sample, etc; Results within one Activity must share the same ACTIVITY TYPE and ACTIVITY MEDIUM (example: a water sample and a sediment sample must be separate Activities; a water sample and a measurement made in the field must be separate Activities; 2 lab results from the same water sample can be the same activity*	Y N
REQUIRED	**ACTIVITY TYPE**	Do I know if the characteristics being monitored were measured in the filed or if samples were collected to determine the results? **EXAMPLE:** *Field/Msr Obs, Sample-Routine, etc* *(Can be selected using the drop-down option or the ALLOWED VALUES-RESULTS TAB in the STORET / WQX Template)*	Y N
REQUIRED	**ACTIVITY MEDIA NAME**	Do I know what type of media I am collecting to obtain results? **EXAMPLE:** *Water, Soil, Air, etc* *(Can be selected using the drop-down option in the STORET / WQX Template)*	Y N
REQUIRED	**ACTIVITY START DATE**	Do I know the date that the samples or field measurements were collected in the following format: YYYY-MM-DD?	Y N
OPTIONAL	**ACTIVITY START TIME**	Do I know what time the samples or field measurements were collected on the date stated? Do I want to include that as a part of the metadata for this Result?	Y N

	ACTIVITY START TIME ZONE	Do I know the time zone for the ACTIVITY START TIME for this result? Do I want to include that as a part of the metadata for this Project? **NOTE:** *This is a REQUIRED field ONLY if you provide an ACTIVITY START TIME for a result.*	Y N
OPTIONAL	ACTIVITY DEPTH / HEIGHT MEASURE	Do I know the depth or the height the data was collected at to obtain a specific Result? Do I want to include that as a part of the metadata for this Result?	Y N
CONDITIONALLY REQUIRED	ACTIVITY DEPTH / HEIGHT UNIT	Do I know the unit at which the depth or height the data was collected at to obtain a specific Result? Do I want to include that as a part of the metadata for this Result? **NOTE:** This is a REQUIRED field ONLY if you provide an ACTIVITY DEPTH / HEIGHT MEASURE for a result.	Y N
CONDITIONALLY REQUIRED	SAMPLE COLLECTION METHOD ID	If a sample was taken (as opposed to a measurement recorded in the field), do I know the method used to collect it? Were there specific protocols that were used in the collection of this sample? **EXAMPLE:** *"Tribal QAPP"* *(Can be added to the STORET / WQX Template in the ANALYTICAL & COLLECTION METHODS TAB)* **NOTE:** *This is a REQUIRED field ONLY if you selected any type of sample as the ACTIVITY TYPE for a specific result.*	Y N
CONDITIONALLY REQUIRED	SAMPLE COLLECTION EQUIPMENT ID	Do I know what equipment was used to collect the sample for this result? **EXAMPLE:** *Bucket, Dip-net, Niskin Bottle, etc* *(Can be selected using the drop-down option in the STORET / WQX Template)* **NOTE:** *This is a REQUIRED field ONLY if you selected any type of sample as the ACTIVITY TYPE for a specific result.*	Y N

OPTIONAL	SAMPLE COLLECTION EQUIPMENT COMMENTS	Do I have any additional comments about the equipment used to collect a sample for this result? **NOTE:** *This is a free-text field that you can use if there is additional information about this equipment that may affect a result.* **EXAMPLE:** *Perhaps one of the sample bottles was defective, etc.*	Y N
CONDITIONALLY REQUIRED	DATALOGGER LINE	Do I have a unique ID for the specific result recorded by a continuous data logger? **EXAMPLE:** *20090601_1300 to indicate that the result was captured on June 1, 2009, at 1 pm (or 1300 hours)* **NOTE:** *This is a REQUIRED field ONLY if you selected data logger as the ACTIVITY TYPE for a specific result.*	Y N
REQUIRED	**CHARACTERISTIC NAME**	Do I know the names of each characteristic being monitored? **EXAMPLE:** *pH, Turbidity, Dissolved Oxygen (DO), etc (Can be selected using the drop-down option or the CHARACTERISTICS TAB in the STORET / WQX Template)*	Y N
OPTIONAL	RESULT DETECTION CONDITION	Do I know whether a result was obtained when data was collected? **EXAMPLE:** *Detected-Not Quantified, Not Detected, Not Reported, etc (Can be selected using the drop-down option or the ALLOWED VALUES-RESULTS TAB in the STORET / WQX Template)*	Y N
CONDITIONALLY REQUIRED	RESULT MEASURE	Do I know the numerical result of the monitored characteristic? **NOTE:** This is a **REQUIRED** field **ONLY** if a result was detected when the activity was performed.	Y N

CONDITIONALLY REQUIRED	**RESULT UNIT**	Do I know the units of the monitored characteristic? **EXAMPLE:** *in, cm, cfs, BTU, etc* *(Can be selected using the drop-down option or the UNITS OF MEASURE TAB in the STORET / WQX Template)* ****NOTE:** *This is a REQUIRED field ONLY if a result was detected when the activity was performed and you entered a value in the RESULT MEASURE COLUMN.*	Y N
CONDITIONALLY REQUIRED	**RESULT SAMPLE FRACTION**	Do I know if the sample was analyzed in total or only a fraction of the sample was analyzed to determine this result? **EXAMPLE:** *Dissolved, Fixed, Free Available, etc* *(Can be selected using the drop-down option or the ALLOWED VALUES-RESULTS TAB in the STORET / WQX Template)* ****NOTE:** *This is a REQUIRED field ONLY if a result was detected and with certain characteristics. Check the CHARACTERISTICS TAB in the STORET / WQX Template for further information.*	Y N
CONDITIONALLY REQUIRED	**RESULT STATUS ID**	Do I know if the result entered is considered 'final' according to our data collection procedures? **EXAMPLE:** *Final, Preliminary, etc* *(Can be selected using the drop-down option or the ALLOWED VALUES-RESULTS TAB in the STORET / WQX Template)* ****NOTE:** *This is a REQUIRED field ONLY if a result was detected when the activity was performed and you entered a value in the RESULT MEASURE COLUMN.*	Y N
CONDITIONALLY REQUIRED	**STATISTICAL BASE CODE**	Do I know if the reported result measure value is the average of several values of the monitored characteristic? **EXAMPLE:** *Average, Minimum, Maximum, etc* *(Can be selected using the drop-down option or the ALLOWED VALUES-RESULTS TAB in the STORET / WQX Template)* ****NOTE:** *This is a REQUIRED field ONLY if a result was detected when the activity was performed and you entered a statistically measured value in the RESULT MEASURE COLUMN.*	Y N

CONDITIONALLY REQUIRED	**RESULT VALUE TYPE**	Do I know if the result entered was the actual value measured or was the result determined through estimates, calculations, or adjustments for controls? EXAMPLE: *Actual, Estimated, Control-adjusted, etc (Can be selected using the drop-down option or the ALLOWED VALUES-RESULTS TAB in the STORET / WQX Template)* **NOTE:** *This is a REQUIRED field ONLY if a result was detected when the activity was performed and you entered a value in the RESULT MEASURE COLUMN.*	Y N
CONDITIONALLY REQUIRED	**RESULT ANALYTICAL METHOD IDENTIFIER (ID)**	Do I know the method used to analyze the result obtained? EXAMPLE: *Can be selected using the drop-down option or the NATIONAL METHODS TAB in the STORET / WQX Template* **NOTE:** *This is a REQUIRED field ONLY if a result was detected when the activity was performed and you entered a value in the RESULT MEASURE COLUMN.*	Y N
CONDITIONALLY REQUIRED	**RESULT ANALYTICAL METHOD ID CONTEXT**	Do I know who developed the method used to analyze the result obtained? EXAMPLE: *Can be selected using the drop-down option or the NATIONAL METHODS TAB in the STORET / WQX Template* **NOTE:** *This is a REQUIRED field ONLY if a result was detected when the activity was performed and you entered a value in the RESULT MEASURE COLUMN.*	Y N
CONDITIONALLY REQUIRED	**ANALYSIS START DATE**	Do I know the actual date that the sample was analyzed in a YYYY-MM-DD format? **NOTE:** *This is a REQUIRED field ONLY if a result was detected when the activity was performed and you entered a value in the RESULT MEASURE COLUMN.*	Y N

	RESULT DETECTION / QUANTITATION LIMIT TYPE	If a result value could not be provided because of detection limitations in the analytical method, to I know the type of detection limit used? EXAMPLE: *Method Detection Limit, Upper Quantitation Limit, etc (Can be selected using the drop-down option or the ALLOWED VALUES-RESULTS TAB in the STORET / WQX Template)* **NOTE: *This is a REQUIRED field ONLY when RESULT DETECTION CONDITION TEXT is "Not Detected," Present Above Quantification Limit," or "Present and Below Quantification Limit"*	Y N
CONDITIONALLY REQUIRED	RESULT DETECTION / QUANTITATION LIMIT MEASURE	If a result value could not be provided because of detection limitations in the analytical method, to I know the value of the detection limit used? **NOTE: *This is a REQUIRED field ONLY when RESULT DETECTION CONDITION TEXT is "Not Detected," Present Above Quantification Limit," or "Present and Below Quantification Limit"*	Y N
CONDITIONALLY REQUIRED	RESULT DETECTION / QUANTITATION LIMIT UNIT	If a result value could not be provided because of detection limitations in the analytical method, to I know the unit of the detection limit used? **NOTE: *This is a REQUIRED field ONLY when RESULT DETECTION CONDITION TEXT is "Not Detected," Present Above Quantification Limit," or "Present and Below Quantification Limit"*	Y N
OPTIONAL	RESULT COMMENT	Do I have any additional comments about the result that may be valuable to others or for later analysis of the data? **NOTE: *This is a free-text field that you can use if there is additional information about this result that you would like to include.*	Y N