

## WQX Schema Changes for finalized schema release (September 30, 2006)

System and Business Rule Changes		
Change No.	Change	Description
1	Partial Submittals	WQX will now allow partial submittals. This means that users will have the ability to submit one to all of the primary components uniquely identified within an Organization (Project, Monitoring Location, Activity and Activity Group). Previously, it was required that all of the components be submitted every time a transaction occurred through WQX.
2	Tribal reporting	The tribal code data element was moved out of the Organization Address section and placed into the Organization description section. Within the Monitoring Location section, a tribal land indicator ("TribalLandIndicator") was added, allowing submitters to indicate whether the monitoring took place on a tribal land. Also within Monitoring Location, an optional data element for reporting of tribal land name was added ("TribalLandName").
3	External Monitoring Location ID	Added External Monitoring Location ID data elements with "AlternateMonitoringLocationIdentity" data group. The schema now allows reporting of multiple external monitoring location IDs with a required context element. Within the "AlternateMonitoringLocationIdentify" group, "MonitoringLocationIdentifierContext" will be mandatory if "MonitoringLocationIdentifier" is reported.
4	Activity Types rules	Some activity types will now require a monitoring location, as Activity is no longer a child of Monitoring Location. Some activity types will be used for grouping activities in the Activity Group table. Some activity types will also require an analytical method, as defined in the Activity Type domain value list.
5	Unit code reporting for non-detects	Schema now allows Unit Code ("MeasureUnitCode") to be entered into the database for Non-detects (and other non-numeric results).
6	Sample Fraction requirement	The schema now requires the sample fraction ("ResultSampleFractionText") for certain characteristics, as defined in the characteristics domain value list.
7	Choice lists for Characteristics	For certain characteristics, result values from a choice list will be required. For example, the characteristic "Cloud cover (choice list)" will require a value chosen from the choice list. The choice list values will be added as a separate look up table within the WQX reference tables.

### Data Element Additions and Changes

1	Time Zone	Added time zone element "TimeZoneCode" to wherever time is reported in schema. (Activity start and end times, Analysis start and end times, Preparation start and end times). This will be a field length of 4 to accommodate 4 digit codes.
2	8-Digit HUC	Added 8-digit HUC data element "HUCEightDigitCode" to Monitoring Location section.
3	12 Digit HUC	Added 12-digit HUC data element "HUCTwelveDigitCode" to Monitoring Location section.
4	Relative Depth	Added Relative Depth data element "ActivityRelativeDepthName" to Activity section, defined as the name that indicates the approximate location within the water column at which the activity occurred. The domain values for this element include: Bottom, Midwater, Near Bottom, Subbottom, Surface.
5	Result Qualifier	Added Result Qualifier data element "MeasureQualifierCode". The domain values for this qualifier code include: J (Estimated), R (Rejected), U (Not Detected), UJ (Not Detected/Estimated).
6	Result level depth	Added depth at the result level. Three elements will provide for reporting this information: "ResultDepthHeightMeasure/MeasureValue", "ResultDepthHeightMeasure/MeasureUnitCode", "ResultDepthAltitudeReferencePointText".
7	Collection equipment comment	Added an optional collection equipment comment data element "SampleCollectionEquipmentCommentText".
8	Result Measure Value field length	Changed the Result Measure Value field length from string max 12 to string max 60. This will allow for longer text result values to be reported, including values for characteristics that require a value from a choice list. For example, the characteristic "Cloud cover (choice list)" may have a reported value of "Clouds obscured by precip or obstruction."

## Domain Value Changes

1	Activity Group Domain Values	Determined activity group domain value list. The activity group section allows for grouping together activities for purposes of subsamples, field sets, replicates and QC. This list thus includes the following domain values: Subsample, Field Set, Replicate and QC sample.
2	Analytical Methods Domain Value List	The schema will now provide a domain value list for analytical methods. This domain value list will not be validated against, unless the Method Identifier Context is a value in the domain value list. (if you don't use an defined context for a method such as EPA, there will be no check on whether you've used a domain value).
3	Domain Values	Added monitoring location type of 'seep' to domain values list.
4	Domain Values	Added monitoring location type of 'playa' to domain values list.
5	Domain Values	Changed 'Municipal Water Supply' monitoring location types to 'Public Water Supply' in the domain value list.
6	Domain Values	Changed sample collection equipment name 'Flexible Vinyl Tube' to 'Vinyl Tube' in the domain value list.
7	Domain Values	Added perennial / intermittent stream monitoring location types to domain value list.
8	Domain Values	Added Monitoring Location Type for 'Drowned River Mouth' (similar to a 'Freshwater Estuary') to domain value list.