



Lynn Padgett/Jeff Litteral, Project Coordinators (970) 626-4045 PO Box 113 Ridgway, CO 81432  
[www.ColoradoWaterQuality.org](http://www.ColoradoWaterQuality.org)

## Minimum Data Elements

as determined by the CWQMC, March 8, 2006  
 UPDATED October 8, 2009 to match AWQMS terminology

**Overview:** The following is a list of data elements that are required for acceptance into Colorado Data Sharing Network. This list was constructed from initial input from the CWQMC and United States EPA. This list is considered the minimum amount of information that is needed to make useable data comparisons between databases and water quality entities. These requirements also represent the minimum criteria for acceptance into the EPA National STORET Warehouse. This initial list covers only chemical and physical datasets. Biological datasets will be covered in future stages of the CDSN.

### Recommended Fields:

PROJECT	
<b>Project ID</b>	Unique name for each agency or group (use agency acronym). No duplicates allowed.
<b>Project Name</b>	The name of agency submitting data.
<b>Project Description</b>	Project start date and expected duration, project goals, primary agency contact
<b>QAPP Approved</b>	A description of the timeframe in which the data collection effort is/was performed.
<b>QAPP Approval Agency</b>	QAPP Approval Agency
MONITORING LOCATION	
<b>Monitoring Location ID</b>	ID representing a station where a sample is collected or a field measurement is taken. No duplicates or allowed.
<b>Monitoring Location Name</b>	Name representing the station identified by Location ID. If no name exists then duplicate the Station ID.
<b>Type</b>	Type of location at which samples are collected and field measurements are made (e.g. stream, well, lake, canal, etc...see EPA Guidance).
<b>Monitoring Location Latitude</b>	Latitude in decimal degrees.
<b>Monitoring Location Longitude</b>	Longitude in decimal degrees.
<b>Horizontal Location Datum</b>	Define the ge positioning datum which was used for lat/long measurements (see EPA R8 Guidance).
FIELD MEASUREMENTS (same as Results in AWQMS)	
<b>Field ID</b>	ID that groups together a suite of field measurements that were made at the same date, time, place, and in the same medium.
<b>Field Medium</b>	Medium in which the field measurements were made. (see EPA R8 Guidance)
<b>Sample Collection Method ID</b>	The identification number or code assigned by the method publisher (ex., refer to QAPP)
<b>Sample Collection Comment</b>	Description of the Sample Collection Method
<b>Sample Collection Equipment</b>	The name that represents equipment used in collecting the sample.

## Colorado Data Sharing Network

<b>Date</b>	Date that the field measurements were made.
<b>Time</b>	Time that the field measurements were made.
<b>Characteristic</b>	Name of the characteristic that was measured, e.g. Dissolved Oxygen (DO). (see EPA R8 Guidance)
<b>Result Measure</b>	The reportable measure of the result for the chemical, microbiological or other characteristic being analyzed.
<b>Result Value Units</b>	Units associated with the value measured.(see EPA R8 Guidance)
<b>Result Comments</b>	Text comments to be associated with a group of field measurements.

### CHEMISTRY (non-biological)

<b>Sample ID</b>	ID that groups together the results of a sample analyzed in a lab.
<b>Sample media</b>	Name or code indicating the environmental medium where the sample was taken.
<b>Date</b>	Date that the sample was collected.
<b>Time</b>	Time that the sample was collected.
<b>Characteristics</b>	Name of the characteristic that was measured (see EPA R8 Guidance)
<b>Sample Fraction</b>	Fraction of the sample that was analyzed to obtain a Result Value (Total, total recoverable, dissolved, etc...)
<b>Result Measure</b>	The reportable measure of the result for the chemical, microbiological or other characteristic being analyzed.
<b>Result Value Units</b>	Units associated with the value measured (see EPA Guidance)
<b>Result Comments</b>	Memo field that can include user-defined information, e.g. whether the result is an estimate or average, possible problems with collection or analysis, sample preparation, less than (for below detection limit), etc...
<b>Detection Limit</b>	The detection limit associated with result measure from sample analysis.
<b>Detection Limit Unit</b>	Units associated with the value measured
<b>Detection Limit Type</b>	The type of reportable measure of the result for the chemical, microbiological or other characteristic being analyzed (ex. Method Detection Limit, Reporting Limit see AWQMS Lookup Tables)
<b>Analytical Method</b>	The lab analytical procedure that was used to obtain a result from a sample (See EPA R8 Guidance).
<b>Analytical Method Context</b>	The source of the lab analytical procedure (See EPA R8 Guidance).