

Water Quality Exchange

WQX Web User Guide



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1.0 Introduction

The Water Quality Exchange (WQX) has been implemented as the new mechanism for exchange of water-quality data between EPA and its partners. WQX has adopted a standard format for data submissions, based on XML – a computer industry standard for formatted data. Adopting the WQX standard frees a data provider from a dependency on any specific local system, such as STORET, for managing and submitting data to EPA. However, this transition away from STORET also means a transition away from tools like SIM and WebSIM which support file formats that many users are accustomed to (such as comma or tab-delimited text files – easily exported from Microsoft Excel).

In the transition from STORET to WQX and the Exchange Network, the EPA recognizes that new challenges have been presented for some of their data providers. In particular, many of the smaller organizations such as the nations' tribes, volunteer monitoring groups, and superfund programs may need support to produce the XML file required by WQX. Additionally, many of these organizations may not be familiar with, or have access to, the exchange network node software required to submit WQX files to the EPA.

WQX Web is a web-based application designed to assist smaller organizations with these specific needs.

2.0 WQX Web Overview

2.1 *What does WQX Web do?*

WQX Web is a tool for converting text files (such as comma or tab-delimited files) into a valid WQX Submission File (based on XML). WQX Web also interacts with the Central Data Exchange (CDX), which is the EPA's portal through which all environmental data is expected to flow. WQX Web is also a data conversion and validation tool, providing support for user-defined file formats and user-defined translations to WQX-compliant values for items like Characteristics, Taxonomic Names, Units of Measure, etc.

2.2 *How does WQX Web fit into the big picture?*

In February 2007, the Water Quality Exchange (WQX) version 1.0 was released with the goal of providing EPA partners with a means of exchanging water quality monitoring data via CDX. Version 1.0 supported physical, chemical and fish tissue results. WQX version 2.0, released in May 2008, incorporated biological and habitat data elements into the schema structure.

With the addition of WQX Web in January 2009, two methods are now supported for submitting ambient water quality monitoring data to the EPA:

1. XML file sent via your state or tribe's node on the National Environmental Information Exchange Network. This method requires a node on the Exchange Network and the ability to create a WQX-compatible XML file. This is the method commonly used by states and other large organizations with their own Information Technology support staff.
2. Flat file imported into WQX Web, where it can be converted and corrected to make it compatible with WQX, then submitted to CDX to make it final. This method requires a flat file (such as comma or tab-delimited file created from products like Microsoft Excel or Access). This method supports files that may not comply with

the WQX standards for format or domain values. This is the method anticipated to be used by smaller organizations without IT support staff or their own Exchange Network Node.

- A third, hybrid option for submitting data to EPA could be to use WQX Web to create a WQX-compatible submission file, then download the file and submit it CDX via your state or tribe's node. This may be appropriate if you have your own node on the Exchange Network, but don't have the ability to create a WQX-compatible XML File.

WQX Web integrates into a set of products and services provide by the EPA, as shown in figure 1 below. This set includes the following items:

- **CDX-Web:** This is CDX's web portal, providing access to applications and data flows within CDX that are accessible via a web browser. Before a user can use WQX Web, they must first register with CDX-Web, be given an Organization ID and granted access to the WQX Web application. Once you log into CDX-Web, you will see a link to the WQX Web application.
- **WQX Web:** The tool that will assist a user in converting a flat file into a WQX-compatible submission file.
- **CDX:** Central Data Exchange (EPA's Node on the Exchange Network). Once a WQX Submission File is created in WQX Web, it can be submitted directly to CDX.
- **WQX:** This is the backend system that processes a WQX Submission File and loads it into the WQX Database. This data is also loaded into the STORET Data Warehouse on a regular basis.

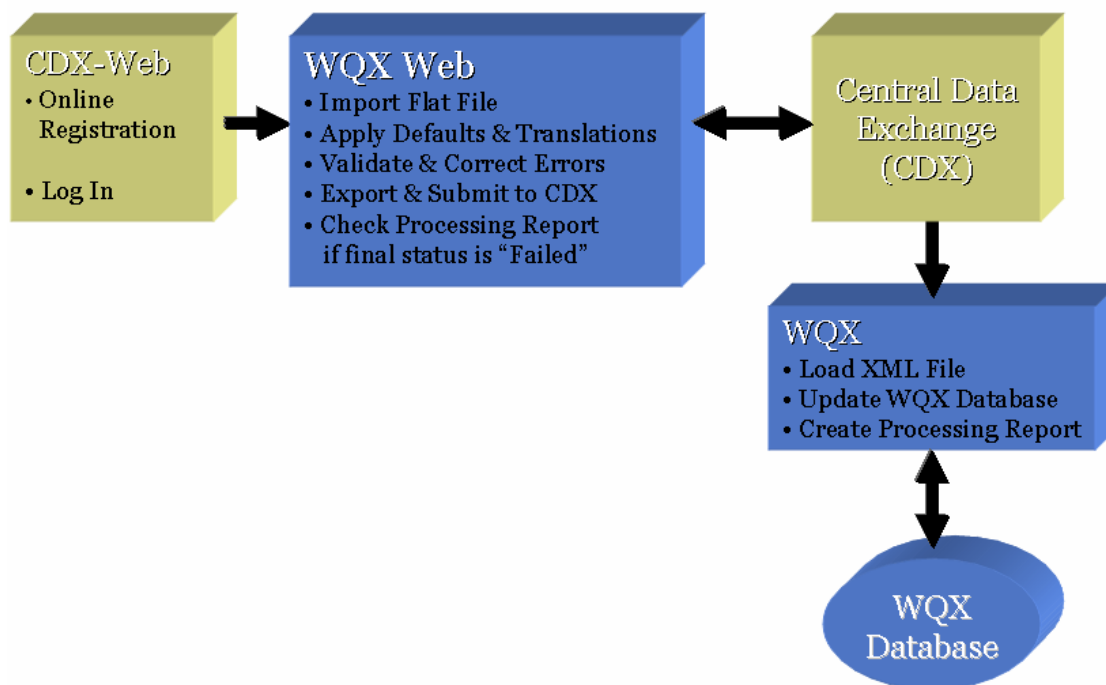


Figure 1 WQX Web Overview

2.3 Overview of WQX Web Security

In order to access the WQX Web application, you must log into CDX-Web, as shown in Figure 2 below.

The screenshot shows the CDX-Web Login Page. On the left is a blue sidebar with the EPA logo and a menu: About CDX, Account Login, Registration, Frequently Asked Questions, Help & Support, CDX Home, and Terms & Conditions. The main content area has a dark blue header with 'U.S. Environmental Protection Agency' and 'Login'. Below the header are links for 'Recent Announcements | Contact Us' and 'CDX Home > Login'. A message states: 'If you have forgotten your password, or if your password doesn't work, you may re-establish your password by clicking [here](#).' The central area contains a grey button labeled 'Central Data Exchange Login', followed by a 'Warning Notice' section with text about unauthorized access, and a 'Privacy Statement' section with text about information use and a link to a Federal Register notice. At the bottom is a login form with 'User Name:' and 'Password:' labels, two input fields, and 'LOGIN' and 'CLEAR' buttons.

Figure 2 CDX-Web Login Page.

After successfully logging in, you will be placed on the MyCDX Page. If you've been granted access to the WQX Web System, you will see a link to it on the My CDX Page (see figure 3 below).

Central Data Exchange - MyCDX		
Welcome, Mr. Ryan Jorgensen	Last Login: October 30, 2008 Registered Since: September 10, 2008 Recertification Date: September 10, 2008	
CDX Registration Status: Active		
You have 1 new message in your Inbox		
Change System Password	Edit Personal Information	Edit Current Account Profiles
Add New Employer Profile		
Available Account Profiles: <ul style="list-style-type: none"> • WQX: WQX Web 		

Figure 3 MyCDX Page.

Clicking on the "WQX: WQX Web" link will redirect you to the WQX Web Home Page below:



U.S. ENVIRONMENTAL PROTECTION AGENCY

WQX Web Version: 1.04.12.11

You are here: Home

Home

- Import Configurations
- Create New Dataset
- Datasets
- Lookup Tables
- Event Log
- Organizations
- Preferences
- User Information

Welcome!

This tool will assist you with the creation of an XML file compatible with the Water Quality Exchange

The following links will assist you with the most common features of the application:

- [Create or Edit an Import Configuration](#): Create a reusable configuration that describes what your import file looks like and how it maps to WQX data elements.
- [Create a New Dataset](#): Create a set of data that will be the source for your WQX XML Submission File.
- [Continue with an Existing Dataset](#): Continue where you left off on an existing dataset.
- [Review Lookup Values](#): Review the list of allowed values for a specific domain or add values to organization-specific lists of values.

[STORET Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)

Figure 4 WQX Web Home Page.

The following is a summary of the security restrictions built into WQX Web:

- **Users & Organizations:** Each user must have an account in the system and must be assigned to at least one organization. Each organization has an ID that will be used throughout the system to relate data and settings to an organization. At least one user will be set up as the organization administrator, which will allow him/her to manage the lookup tables for the organization.
- **Lookup tables:** Most lookup tables are read-only and are managed by EPA staff. However, WQX has a couple of tables (e.g. "Analytical Method" and "Metric Type") which support organization-specific values as well as EPA managed values. WQX Web also supports a number of additional lookup tables that do not exist in WQX. These tables are used to simplify import files by allowing a file to reference a set of related fields by their ID. For example: A Sample Collection Method in WQX includes the following fields: Method ID, Context, Name, Qualifier Type, and Description. Rather than repeating all of this information on every sample in the import file, once you set up the Sample Collection Method in WQX Web's lookup table, you can reference it in your import file by its ID and all the details will be automatically inserted into your submission file when you export it. The WQX tables, Analytical Method and Metric Type work similarly. However, you must reference the ID and Context in your import file to identify one of these.
 - Only users in a specific organization can use that organization's list of lookup values. Users assigned the "Admin" right for an organization, are allowed to add, update, and delete these organization-specific lookup values.
- **System Administrator:** One or more users will be designated as a System Administrator, which allows him/her to manage users, organizations and rights to those organizations. This designation is typically reserved for a few key EPA staff or contractors.
Import Configurations: An import configuration is used to describe what an import file looks like. A user can create as many import configurations as he/she likes. By default the import configuration is only accessible by the user who created it. However, you can assign rights to any organization or to users within any organization to which you've been assigned. You can also restrict access to be "read-only", if you wish to allow someone to use it or create copies of it, but not be able to modify it.
Datasets: a collection of data that has been imported for an organization is accessible by anyone who has been granted at least "read-only" rights to the organization.

2.4 *Understanding the WQX Data Structure*

To fully understand how to use WQX Web, it is necessary to first understand the types of data WQX supports and how they relate to one another.

All data within WQX relates to an organization. Each organization has a unique ID which will be used throughout the system to relate import configurations and datasets to an organization.

Once you have obtained an Organization ID, start by loading Projects into WQX Web. A Project can be described as the reason why a set of environmental data is being collected. For example, an organization may have several projects related to specific locations, events, or studies. An organization's projects must be submitted to WQX before other data can be submitted. Each Project is given a unique ID. Individual sampling activities and results are then associated with a

project by referencing its ID. There is no limit to the number of projects an organization may have and no limit to the number of projects an activity relates to.

Next, you must import the locations from which you will be collecting data samples. These sampling sites are called Monitoring Locations in WQX. For example: if you have five locations along the Bear River where you plan to collect water samples, these five monitoring locations must be submitted to WQX before activity (i.e. sample) and result data can be submitted for this organization. Each Monitoring Location is given a unique ID that you can reference in your activity and result data.

In addition to Projects and Monitoring Locations, other meta-data is typically entered prior to importing your Sampling Activity and Results data. Examples of these meta-data are: Methods and Citations. Additionally, if you will be importing biological or habitat index data (such as IBI scores or habitat assessment scores), you may need to set up your Index Types and Metric Types.

Once your Projects and Monitoring Locations have been imported, and your meta-data entered into their respective lookup table, you are ready to import Sampling Activity and Result data. WQX supports water chemistry and biological sampling results as well as field measurements and observations. All results must be associated with an Activity which represents a sample or group of field measurements or observations. Each Activity must be assigned a unique ID which is never reused.

2.5 Overview of WQX Web Work Flow

Figure 5 outlines the basic work flow for creating a WQX-compatible submission file with WQX Web.

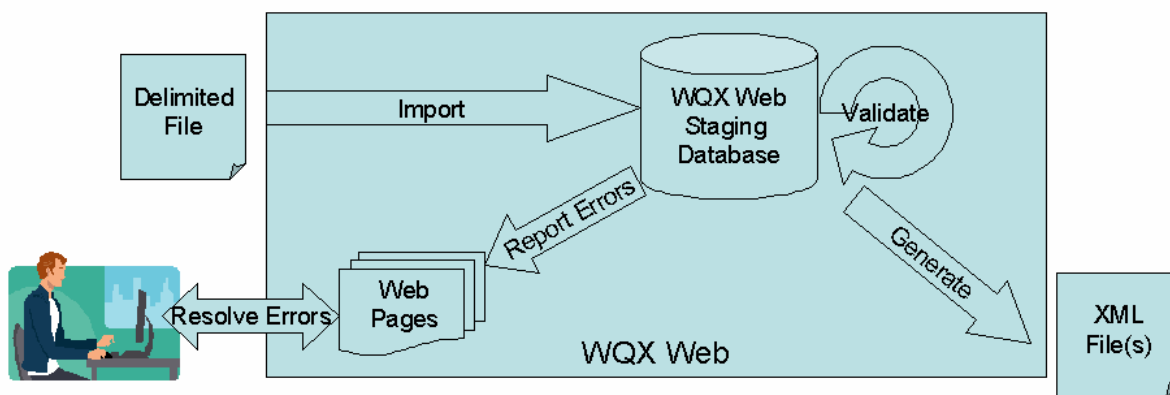


Figure 5 The WQX Web Work Flow

2.5.1 Prepare the Import File(s)

The user gathers their water quality monitoring data into a series of text files that are organized into rows and columns with the columns delimited by a predetermined character such as a comma or a tab. Rows will be designated by a carriage return or line feed. Microsoft Excel supports comma and tab-delimited files from its "Save As" menu. This is convenient for hand-enter data that is already in a spreadsheet. Lab data is often in a format supported by WQX Web. In some cases it may be useful to load it into a spreadsheet to do clean up or to add additional values not provided by the lab.

The following types of datasets are supported by WQX Web:

- Projects
- Monitoring Locations
- Monitoring Location Weights
- Biological/Habitat Indices
- Activities and Results
- Activities and Metrics
- Activity Groups
- IDs for Projects to be Deleted
- IDs for Monitoring Locations to be Deleted
- IDs for Biological/Habitat Indices to be Deleted
- IDs for Activities to be Deleted
- IDs for Activity Groups to be Deleted

2.5.2 Specify Configurations for the Import Files

Before importing a file, a matching import configuration must be defined. An import configuration describes the columns in your import file and maps them to data element in WQX. You can provide default values for elements that may not have a value or that are not included in the file. Additionally, you can define translations to convert values in your files to valid values in WQX.

2.5.3 Import the Dataset File

To import a file, you will need to indicate the associated import configuration and delimiter. Browse to your file and begin the import process. You can refresh the status page as needed to check on the import progress and see a count of any warnings or errors that have been logged so far. Once the import has completed, a summary page will display the number of valid or invalid records loaded and a list of validation errors that can be resolved within the system.

2.5.4 Resolve Validation Errors in the Dataset

You can click on the links next to a specific type of validation error to navigate to a page where you can resolve the error. For example, if a value from your import file did not match a valid value in WQX, a resolution page will let you correct the value, and, if you wish, create a translation so you will not have to make the same correction in the future.

2.5.5 Export / Submit the Dataset to WQX

Once the validation errors have been resolved, you will be able to export and (optionally) submit your submission file to CDX. If you belong to an agency or organization with its own Exchange Network Node, you will likely wish to download the file and submit the file to CDX via your own node, rather than having WQX Web perform this step.

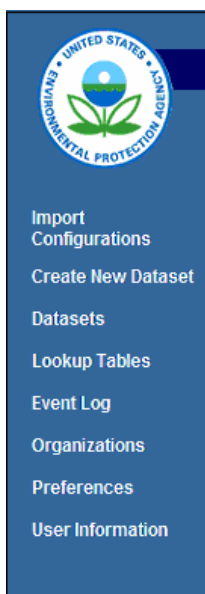
If you choose to submit your file directly to CDX you will be notified of the status of that submission and be able to download related documents once it has been processed by the WQX System.

2.6 *Standard Page Features*

There are many features within WQX Web that are common to all pages or to a group of pages. These sections describe those common features.

2.6.1 **General Page Features**

- A navigation panel will exist on the left side of the page to assist you in accessing the system's main pages.



- Breadcrumb navigation will be available whenever appropriate to facilitate navigation to related pages
You are here: [Home](#) >> [Import Configurations](#) >> [Import Configuration Detail](#) >> [Translations](#)
- All dates in the system will be formatted as “MM-DD-YYYY”.
- Each page will have links at the bottom to access the STORET Home page, view the privacy notice or contact the STORET/WQX Support. Note: these links navigate out of the application. It's recommended that you right click on them and choose to open them in a new tab or new page.

[STORET Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)

2.6.2 **List Page Features**

All pages whose purpose is to display a list/table of data will have the following standard features:

- Tables will have a system-specified number of rows (e.g. 10).
- First, Previous, Next and Last buttons available for paging through the list.

- Page number will be displayed (e.g. Page 1 of 4).
- Column headings can be selected to sort the list on the current column.
- The page will only display data which you have been granted access to.
- Return button – Returns you to the previous page or the page above it in the hierarchy.
- Add New button – Initiates the process of creating a new record for the type of list you are viewing (in most cases this takes you to a detail page where you can add a new record).

2.6.3 Detail Page Features

All pages whose purpose is to serve as a form for viewing and editing records will have the following standard features:

- The Return button – will return you to the previous page (usually a list page). If the form contains unsaved changes, the system will automatically save the changes prior to returning to the previous page. The same validation logic will apply as if you had selected the Save button.
- The Save button – will validate the data that has changed and then save any changes made to data in the form and then refresh the page. If validation errors are found, the record will be redisplayed (and not saved) and the errors messages will be listed on the page. On exception exists: the Import Configuration Page will save your changes and mark the record invalid if there are validation errors, so you can return and correct them at a later time.
- The Cancel button – will abort any changes made to data on the page since the data was last saved (or since it was retrieved) and then return you to the previous page.
- The Delete button – will delete the record displayed on the page. The system will prompt you for confirmation before the record is deleted.
- An asterisk at the end of a field label will indicate that the field is always required. However, some fields will be conditionally required based on the existence/non-existence of other values and will not necessarily have an asterisk on their label. The system will notify you of these conditionally required fields when you save the record.

2.6.4 Hybrid Pages

Organization-specific lookup tables are hybrid pages that share most of the features of list pages and detail pages. See section 4.3 Managing Lookup Tables for more details.

3.0 Reference

3.1 *Managing Import Configurations*

An import configuration defines how WQX Web should interpret an import file. Import Configurations define each column that you will have in your import file, the data elements each column maps to and the format you will use for date, time, latitude, longitude, etc. A user can have an unlimited number of Import Configurations. Access to an Import Configuration can be limited to specific users or organizations.

The following types of import configurations are supported:

- Projects
- Monitoring Locations
- Monitoring Location Weights
- Biological/Habitat Indices
- Activities and Results [& Activity Groups]
- Activities and Metrics [& Activity Groups]
- Activity Groups

There are two methods for creating an Import Configuration:

1. Create a new import configuration from scratch.
2. Copy an existing import configuration.

3.1.1 **Creating a New Import Configuration**

Click on the “Import Configurations” link on the navigation panel or click on the “Create or Edit an Import Configuration” link on the Home Page to display the Import Configurations list page.

You are here: [Home](#) >> Import Configurations

Import Configurations

ID	Name	Type	Created By	Valid
1076	Ryan Debug Results	Activities and Results	Ryan Jorgensen	Yes
1092	Ryan Debug Results - Expanded	Activities and Results	Ryan Jorgensen	Yes
1321	Ryan Debug Results Clean	Activities and Results	Ryan Jorgensen	Yes
1065	Ryan Demo	Activities and Results	Ryan Jorgensen	Yes
1223	Ryan RequiredValueTest	Activities and Results	Ryan Jorgensen	Yes
22	Ryan Results w/ two Activity Groups	Activities and Results	Ryan Jorgensen	Yes
1091	Ryan Results w/o Activity Group	Activities and Results	Ryan Jorgensen	Yes
1226	websimChemResultsWCharNames	Activities and Results	Mark M. LeBaron	No
1240	websimChemResultsWCharNamesSuperSim	Activities and Results	Mark M. LeBaron	Yes

First Previous Next Last Page 2 of 2

Return Add New

To add a new import configuration click the “Add New” button on the Import Configurations list page.

The New Import Configuration Page will display.

You are here: [Home](#) >> New Import Configuration

New Import Configuration

Import Configuration Type:

Create new Import Configuration From Scratch

Create a New Import Configuration by copying an existing Import Configuration or Template

Import Configuration:

Copy Translations

Continue Cancel

After you have entered the Import Configuration Type, the page will allow you to choose whether you wish to create a new import configuration from scratch or copy an existing one as a template.

Select which method you wish to use to create a new import configuration. If you choose to copy an existing import configuration, then you must select the import configuration from the dropdown list. If you wish to also copy the translations from that import configuration, select the “Copy Translations” check box.

Then click the Continue button to go to the Import Configuration Detail Page, where you can edit and save your new import configuration.

You are here: [Home](#) >> [Import Configurations](#) >> [Import Configuration Detail](#)

Import Configuration Detail

Name: [Change Access Rights](#)

Description:

Type:


Column Delimiter:

Element Values to be Generated Automatically:

Data Element	Default Value	Format
Organization ID	{none}	

[Pick Generated Elements](#)

Map Import Columns to Data Elements:

Column	Pick	Data Element	Default Value	Format	Translation Count
					

Now you can create an import configuration that matches your import file.

Name:

A new import configuration will begin with the name “New Import Configuration”. You should change the name to something that is more meaningful.

Description:

This is optional if you wish to provide more information about the use of this import configuration.

Column Delimiter

This is the character you will use in your import file to designate the start of each new column. It’s important to use a delimiter that would never be used within any of your data, because the system will assume that the character is the start of a new column and have errors reading your file. A pipe (|) or tilde (~) are typically the safest delimiters to use. When saving from Microsoft Excel, tab-delimited is preferable to the CSV (comma-delimited) format.

Element Values to be Generated Automatically

This section of the page is for managing a list of data elements for which the system will automatically generate values. This is useful for elements whose value is not included in your import file and whose value will be the same for every row.

- New import configurations include one generated element by default: “Organization ID”. Since WQX Submission Files only allow one organization per file, it’s generally simpler to generate the Organization ID for each record, rather than provide the same value on every row of your import file.

Adding or Removing an Element to be Generated Automatically

You can click the "Pick Generated Elements" link to display a list of data elements.

OK Cancel Map selected elements to single column?

Element Name	
<input checked="" type="checkbox"/>	Organization ID
<input type="checkbox"/>	Activity ID
<input type="checkbox"/>	Activity Type
<input type="checkbox"/>	Activity Media Name
<input type="checkbox"/>	Activity Media Subdivision Name
<input type="checkbox"/>	Activity Start Date
<input type="checkbox"/>	Activity Start Time
<input checked="" type="checkbox"/>	Activity Start Time Zone
<input type="checkbox"/>	Activity End Date
<input type="checkbox"/>	Activity End Time
<input type="checkbox"/>	Activity End Time Zone
<input type="checkbox"/>	Activity Relative Depth Name
<input type="checkbox"/>	Activity Depth/Height Measure
<input type="checkbox"/>	Activity Depth/Height Unit
<input type="checkbox"/>	Activity Top Depth/Height Measure
<input type="checkbox"/>	Activity Top Depth/Height Unit
<input type="checkbox"/>	Activity Bottom Depth/Height Measure
<input type="checkbox"/>	Activity Bottom Depth/Height Measure Unit
<input type="checkbox"/>	Activity Depth Altitude Reference Point
<input checked="" type="checkbox"/>	Project ID

When you check the box next to an element in the list and click the OK button, the system will add that element to the table of "Element Values to be Generated Automatically".

Element Values to be Generated Automatically:

Data Element	Default Value	Format
Organization ID	GOLDRYAN	
Activity Start Time Zone	{none}	
Project ID	<input type="text"/>	

[Pick Generated Elements](#)

If you uncheck the box next to an element in the list and click the OK button, the element will be removed from the table of generated values.

Each row in the table of generated values includes the data element, its value, and, if appropriate, a format.

The default value is displayed in two different ways.

1. A Link: If the element is constrained by a list of allowed values, then it will be displayed as a link. In the example above, links are displayed for Organization ID and Activity Start Time Zone. Links display “{none}” when no value has been set. When you click the link, a list of allowed values will be displayed. For example: if Activity Start Time Zone was a generated value, clicking on the link for its default value would display the following list (abbreviated):

TIME ZONE			
<input type="button" value="Cancel"/>			
	Code	Name	Offset
Select	{none}		
Select	ADT	Atlantic Daylight Time	-3
Select	AHST	Alaska-Hawaii Standard Time (*retired: >1983 use AKST)	-10
Select	AKDT	Alaska Daylight Time	-8
Select	AKST	Alaska Standard Time	-9
Select	AST	Atlantic Standard Time	-4
Select	BST	Bering Standard Time (*retired: >1983 use HAST)	-11
Select	CDT	Central Daylight Time	-5
Select	CST	Central Standard Time	-6

Click the “Select” link on the value you wish to use and the default value will now be set.

Element Values to be Generated Automatically:		
Data Element	Default Value	Format
Organization ID	GOLDRYAN	
Activity Start Time Zone	AKST	
Project ID	<input type="text"/>	
Pick Generated Elements		

2. Text Box: If the element is not constrained by a list of values, it will be displayed in a text box. In this example, Project ID displays a text box. The text box allows any value you wish to enter.

Element Values to be Generated Automatically:		
Data Element	Default Value	Format
Organization ID	GOLDRYAN	
Activity Start Time Zone	AKST	
Project ID	<input type="text" value="My Project"/>	

[Pick Generated Elements](#)

Note: Although generated values must have a value when you import a file, it is not mandatory to set their value in your import configuration. You are given another opportunity to set generated values each time you import a file. *See Creating a New Dataset for more details.*


For example, suppose you have a policy of creating data files for each project that you have. You don't want to have to include the Project ID on every row of your file because it's always the same (within a file). It doesn't make sense to set the Project ID's value in your import configuration, because you don't use the same Project ID every time. In this case, you are allowed to have a generated value for Project ID in your import configuration and not set its value. Each time you import a file you will have the opportunity to set the Project ID for that import file.


Alternately, if you had the policy described above, but most of the time you use a specific Project ID, it might be a good idea to set that Project ID in the import configuration so that you didn't have to set it each time you import a file. You could then override it only when importing data for another project.

Map Import Columns to Data Elements

This section of the page contains a table used for describing the columns in your import file and mapping them to WQX Data Elements.

Initially the table has a single blank row:

Map Import Columns to Data Elements:						
Column	Pick	Data Element	Default Value	Format	Translation Count	
						










Click the Pick List button  to display a list of data elements.

OK Cancel Map selected elements to single column?

Element Name
<input type="checkbox"/> Organization ID
<input checked="" type="checkbox"/> Activity ID
<input checked="" type="checkbox"/> Activity Type
<input checked="" type="checkbox"/> Activity Media Name
<input type="checkbox"/> Activity Media Subdivision Name
<input checked="" type="checkbox"/> Activity Start Date
<input checked="" type="checkbox"/> Activity Start Time
<input type="checkbox"/> Activity Start Time Zone
<input type="checkbox"/> Activity End Date
<input type="checkbox"/> Activity End Time
<input type="checkbox"/> Activity End Time Zone
<input type="checkbox"/> Activity Relative Depth Name
<input type="checkbox"/> Activity Depth/Height Measure
<input type="checkbox"/> Activity Depth/Height Unit
<input type="checkbox"/> Activity Top Depth/Height Measure
<input type="checkbox"/> Activity Top Depth/Height Unit
<input type="checkbox"/> Activity Bottom Depth/Height Measure
<input type="checkbox"/> Activity Bottom Depth/Height Measure Unit
<input type="checkbox"/> Activity Depth Altitude Reference Point
<input type="checkbox"/> Project ID
<input type="checkbox"/> Activity Conducting Organization(s)
<input checked="" type="checkbox"/> Monitoring Location ID
<input type="checkbox"/> Activity Comment
<input checked="" type="checkbox"/> Activity Latitude
<input checked="" type="checkbox"/> Activity Longitude

Select the elements you wish to populate from values in your import file.





After you click the OK button, the table will display the elements you selected, each mapped to an assigned column position.

Map Import Columns to Data Elements:						
	Column	Pick	Data Element	Default Value	Format	Translation Count
Remove	1		Activity ID	<input type="text"/>		0 Add/Edit
Remove	2		Activity Type	{none}		0 Add/Edit
Remove	3		Activity Media Name	{none}		0 Add/Edit
Remove	4		Activity Start Date	<input type="text"/>	<input type="text" value="v"/>	0 Add/Edit
Remove	5		Activity Start Time	<input type="text"/>	<input type="text" value="v"/>	0 Add/Edit
Remove	6		Monitoring Location ID	<input type="text"/>		0 Add/Edit
Remove	7		Activity Latitude	<input type="text"/>	<input type="text" value="v"/>	0 Add/Edit
Remove	8		Activity Longitude	<input type="text"/>	<input type="text" value="v"/>	0 Add/Edit
						





Each row in the table represents a column in your import file and describes how it maps to a data element.


Each row of the table has the following features.

- “Remove” Link: click this link to remove a row from the table.
- Column Position: this represents the column position in your import file used to populate each data element. The example above describes a file where Activity ID is in column 1 and Activity Type is in column 2 of an import file. To change a column’s position, select a new value from the dropdown list.

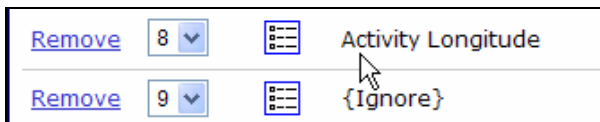
Map Import Columns to Data Elements:			
	Column	Pick	Data Element
Remove	1		Activity ID
	1		
Remove	2		Activity Type
	2		
Remove	3		Activity Media Name
	3		
Remove	4		Activity Start Date
	4		
	5		
	6		
	7		

After the new position is selected, the column positions update accordingly.

Map Import Columns to Data Elements:			
	Column	Pick	Data Element
Remove	1		Activity Type
Remove	2		Activity Media Name
Remove	3		Activity ID
Remove	4		Activity Start Date

- Pick List Button : Click this button on an existing row to change the data element(s) that are mapped to an existing column position. Click this button on the last (blank) row to add additional data elements to the table. You are allowed to map more than one data element to a column position. *See Import Configuration – Advanced Features for more details.* You are also allowed to have a column mapped to no data elements. This tells the system to ignore the column in that position in your import file.

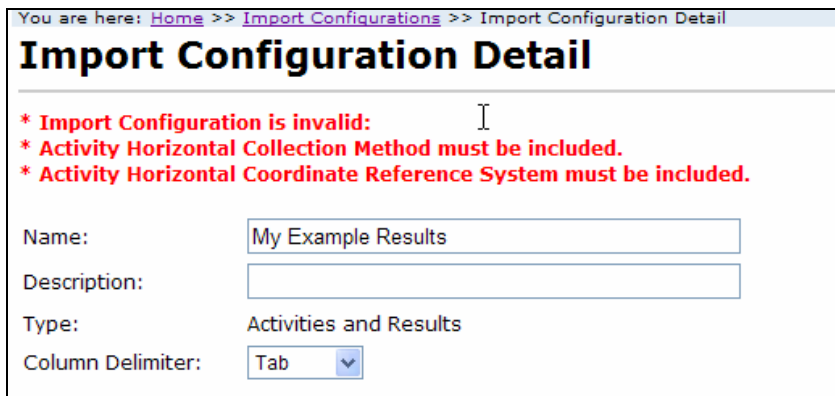
- Data Element: This shows the name of the data element(s) mapped to a specific column position. “{Ignore}” will be displayed for columns mapped to no data elements.



- Default Value: Set a default value if you wish to have the system fill in a value for this data element when one is not provided in your import file. As mentioned in the previous section, default values are displayed in two different ways: links or text boxes, depending on whether the element is constrained by a list of allowed values. When the default value is a link, and has not been set, it will display “{none}”.
 - Note: default values behave a bit differently when a column is mapped to more than one data element. See *Import Configuration – Advanced Features for more details*.
 - If you wish to remove the default value where the value is displayed as a link, click the link and select the value titled “{none}” from the list of values.
- Format: In order for the system to know how to interpret certain types of data in your import file, a format may need to be selected. The system requires that you indicate the format you plan to use for the following types of data: dates, times, latitude, longitude, and yes/no fields.
- Translation Count: Displays the number of translations that have been added for a specific import column. Also, provides a link to add or edit the list of translations. See the next section for details about translations.

Once you have completed the mapping process and filled in defaults and formats, click the Save button (or Return button) to save your changes.

Your import configuration will be checked to make sure it is valid. If there are any issues with it, they will be displayed at the top of the page.



In this example, two additional elements are required to make the import configuration valid. Without these values you would not be able to produce a valid WQX Submission File.

Correct the issues described and save your changes again.

If the import configuration saves successfully and is valid, the validation errors will disappear and a message will state that the import configuration was saved successfully.

You are here: [Home](#) >> [Import Configurations](#) >> Import Configuration Detail

Import Configuration Detail

Import Configuration saved successfully.

Name: [Change Access Rights](#)

Description:

Type: Activities and Results

Column Delimiter:

Element Values to be Generated Automatically:

Data Element	Default Value	Format
Organization ID	{none}	
Activity Start Time Zone	AKST	
Project ID	<input type="text"/>	

[Pick Generated Elements](#)

Map Import Columns to Data Elements:

	Column	Pick	Data Element	Default Value	Format	Translation Count
Remove	<input type="text" value="1"/>		Activity ID	<input type="text"/>		0 Add/Edit
Remove	<input type="text" value="2"/>		Activity Type	Sample-Routine		0 Add/Edit
Remove	<input type="text" value="3"/>		Activity Media Name	Water		0 Add/Edit
Remove	<input type="text" value="4"/>		Activity Start Date	<input type="text"/>	<input type="text" value="MM/DD/YYYY"/>	0 Add/Edit
Remove	<input type="text" value="5"/>		Activity Start Time	<input type="text"/>	<input type="text" value="HH:MI PM"/>	0 Add/Edit
Remove	<input type="text" value="6"/>		Monitoring Location ID	<input type="text"/>		0 Add/Edit
Remove	<input type="text" value="7"/>		Activity Latitude	<input type="text"/>	<input type="text" value="-DD.DDDDDDDDDD"/>	0 Add/Edit
Remove	<input type="text" value="8"/>		Activity Longitude	<input type="text"/>	<input type="text" value="-DDD.DDDDDDDDDDDD"/>	0 Add/Edit
Remove	<input type="text" value="9"/>		{Ignore}			
Remove	<input type="text" value="10"/>		Activity Horizontal Collection Method	{none}		0 Add/Edit
Remove	<input type="text" value="11"/>		Activity Horizontal Coordinate Reference System	{none}		0 Add/Edit

Managing Translations for an Import Column

Translations are used to automatically convert a value in your import file to an alternate value in the dataset that will be sent to EPA. Most often, translations are used to convert a value that is not compatible with WQX into something that is. For example, a translation could be used to convert “DO” in your import file to “Dissolved oxygen (DO)” in your dataset (making the value valid for WQX).

Translations can also be used to convert one value in the import file to multiple values in your dataset. *See Import Configuration – Advanced Features for more details.*

To add or edit translations:

Select the Add/Edit link in the Translations Count column of your import configuration. This takes you to the Translations Page for that import column.

You are here: [Home](#) >> [Import Configurations](#) >> [Import Configuration Detail](#) >> Translations

Translations

Del	Translate From: Value from Import File	Translate To: Characteristic Name
<input type="checkbox"/>	<input type="text" value="DO"/>	Dissolved oxygen (DO)
<input type="checkbox"/>	<input type="text" value="HCl"/>	Hydrochloric acid
	<input type="text"/>	{None}

Each translation has at least two parts: the value from the import file (labeled “Translate From”) and the value for the data element(s) in the dataset (labeled “Translate To”). The example above shows a translation for “DO” in the import file that will create a value of “Dissolved oxygen (DO)” for the Characteristic Name element in your dataset.

The bottom row of the table can be used for adding a new translation. Once you’ve entered the appropriate values on the bottom row, clicking the Save button will save your new translation and give you another blank row where you can add an additional translation if you wish.

To delete a translation:

1. Check the Del checkbox next to one or more translations
2. Click the Delete button to remove the translations
3. Click the Save button (or Return button) to save the changes.

3.1.2 Viewing/Editing an Import Configuration

Click on the “Import Configurations” link on the navigation panel or click on the “Create or Edit an Import Configuration” link on the Home Page to display the Import Configurations list page.

You are here: [Home](#) >> Import Configurations

Import Configurations

ID	Name	Type	Created By	Valid
1076	Ryan Debug Results	Activities and Results	Ryan Jorgensen	Yes
1092	Ryan Debug Results - Expanded	Activities and Results	Ryan Jorgensen	Yes
1321	Ryan Debug Results Clean	Activities and Results	Ryan Jorgensen	Yes
1065	Ryan Demo	Activities and Results	Ryan Jorgensen	Yes
1223	Ryan RequiredValueTest	Activities and Results	Ryan Jorgensen	Yes
22	Ryan Results w/ two Activity Groups	Activities and Results	Ryan Jorgensen	Yes
1091	Ryan Results w/o Activity Group	Activities and Results	Ryan Jorgensen	Yes
1226	websimChemResultsWCharNames	Activities and Results	Mark M. LeBaron	No
1240	websimChemResultsWCharNamesSuperSim	Activities and Results	Mark M. LeBaron	Yes

Page 2 of 2

Click on the link for the Import Configuration you wish to view. The Import Configuration Details page will be displayed, where you can view or edit the import configuration.

Note: While you have a dataset in the system that relates to an import configuration, certain types of changes to the import configuration are not allowed (such as changing column positions, data elements that map to them, or deleting the import configuration). The system will display a message at the top of the Import Configuration Details page for any Import Configuration that has associated datasets. You will have to delete the associated dataset(s) before you will have full access to change the import configuration. See section 3.2 for an explanation datasets.

You are here: [Home](#) >> [Import Configurations](#) >> Import Configuration Detail

Import Configuration Detail

Certain types of changes to this import configuration have been restricted while there are existing datasets that depend on it.

Name: [Change Access Rights](#)
 Description:
 Type: Activities and Results
 Column Delimiter:

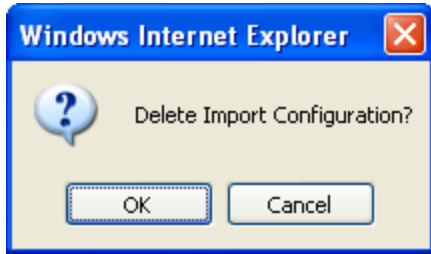
Element Values to be Generated Automatically:

Data Element	Default Value	Format
Organization ID	WQXTEST	

Pick Generated Elements

3.1.3 Deleting an Import Configuration

You can delete an import configuration by clicking the Delete button on the Import Configuration Detail page.



Confirm the deletion by clicking the OK button.

The system will return you to the Import Configuration list page after performing the delete.

3.1.4 Managing Access Rights for an Import Configuration

By default only the user that created an import configuration is granted rights to use or change it. If you wish to allow other users or organizations to use it, you will need to change the access rights.

Click the “Change Access Rights” link on the top-right side of the Import Configuration Detail page. A list of organizations and users will pop up.

Name	Rights		
Test Admin User	<input type="checkbox"/> View	<input type="checkbox"/> Update	<input type="checkbox"/> Delete
Test Standard User	<input type="checkbox"/> View	<input type="checkbox"/> Update	<input type="checkbox"/> Delete
Ryan Jorgensen	<input checked="" type="checkbox"/> View	<input checked="" type="checkbox"/> Update	<input checked="" type="checkbox"/> Delete
Mark M. LeBaron	<input type="checkbox"/> View	<input type="checkbox"/> Update	<input type="checkbox"/> Delete
Nathan Bove	<input type="checkbox"/> View	<input type="checkbox"/> Update	<input type="checkbox"/> Delete
Rick Cooke	<input type="checkbox"/> View	<input type="checkbox"/> Update	<input type="checkbox"/> Delete
Bruce Holt	<input type="checkbox"/> View	<input type="checkbox"/> Update	<input type="checkbox"/> Delete

The list will include organizations you have been granted and users within those organizations. Select the checkboxes for the rights you wish to assign and click the OK button to apply them.

Click the Save button (or Return button) on the Import Configuration Detail page to save your changes.

3.1.5 Import Configuration – Advanced Features


Import Configurations can be leveraged in a number of powerful ways. However, that power also comes with some extra complexity. This section will highlight some of the powerful features and provides some specific examples of how to solve some problems that you may be faced with.

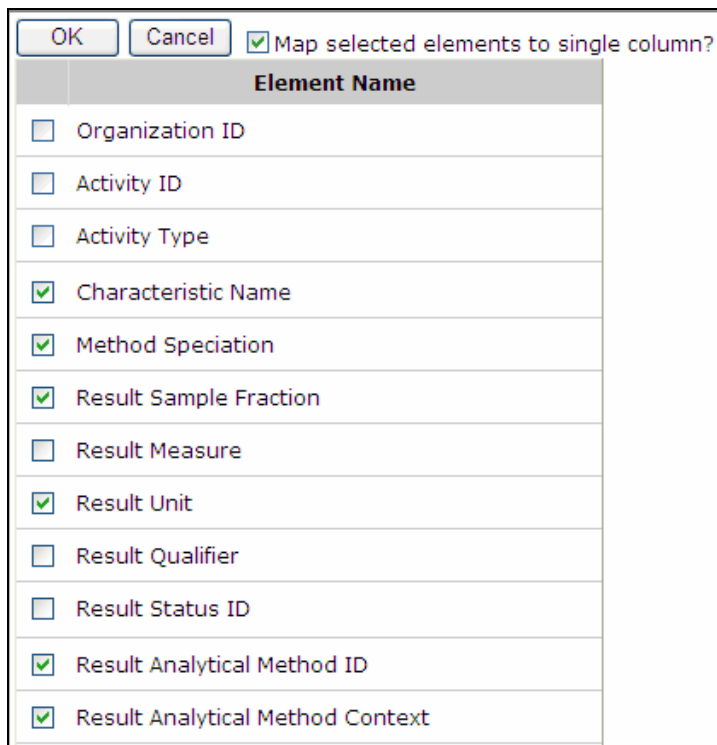
One of the most powerful features of an import configuration is the ability to map one import column to more than one data element in WQX. This allows you to populate multiple data elements with just one value in your import column.

Using Translations to Populate Many Related Data Elements

One common reason to map one column to more than one data element is when the value in your file contains more than one piece of information. Using translations you can break the value into its relevant components in WQX. For example: suppose your lab provides you with a file that includes a parameter code that specifies the analyte, sample fraction, units, and analytical method used for a particular result. You could open the file into something like Microsoft Excel, create four new columns, and manually type in the values for each of these items on every row, or you could map that one import column to the data elements you want to populate in WQX and then create translations to explain how to populate them. The advantage of this approach is that you only have to do it once in WQX Web and the system will perform the conversion every time you import a file.

To map a column to multiple data elements, do the following:

1. If you are adding a new import column, click the pick list button  on the blank row at the bottom of the table. Otherwise, click the button on an existing row. The list of data elements will pop up.



The screenshot shows a dialog box with the following elements:

- Buttons: OK, Cancel
- Checkbox: Map selected elements to single column?
- Table with header "Element Name":

Element Name
<input type="checkbox"/> Organization ID
<input type="checkbox"/> Activity ID
<input type="checkbox"/> Activity Type
<input checked="" type="checkbox"/> Characteristic Name
<input checked="" type="checkbox"/> Method Speciation
<input checked="" type="checkbox"/> Result Sample Fraction
<input type="checkbox"/> Result Measure
<input checked="" type="checkbox"/> Result Unit
<input type="checkbox"/> Result Qualifier
<input type="checkbox"/> Result Status ID
<input checked="" type="checkbox"/> Result Analytical Method ID
<input checked="" type="checkbox"/> Result Analytical Method Context

2. Click the checkbox at the top of the list titled "Map selected elements to single column?".
 - a. On a new import column, this checkbox is unchecked by default. On an existing import column, this is checked and locked by default. In other words, if you ever

click the pick list button on an existing import column and then select additional data elements from the list, they will always be mapped to a single import column. For a new column, you can choose whichever is appropriate.

- Click the OK button. The elements you selected are now mapped to one import column (column 12 in the example below):

Column	Pick	Data Element	Default Value	Format	Translation Count
Remove 10		Activity Horizontal Collection Method	GPS-Unspecified		0 Add/Edit
Remove 11		Activity Horizontal Coordinate Reference System	{none}		0 Add/Edit
Remove 12		Characteristic Name	{none}		0 Add/Edit
		Method Speciation	{none}		
		Result Sample Fraction	{none}		
		Result Unit	{none}		
		Result Analytical Method ID	{none}		
		Result Analytical Method Context	{none}		

- Click the Add/Edit link for Column 12 to add translations. The Translations page will open.

You are here: [Home](#) >> [Import Configurations](#) >> [Import Configuration Detail](#) >> Translations

Translations

Del	Translate From:		Translate To:				
	Value from Import File	Characteristic Name	Method Speciation	Result Sample Fraction	Result Unit	Result Analytical Method ID	Result Analytical Method Context
<input type="checkbox"/>	<input type="text"/>	{None}	{None}	{None}	{None}	{None}	{None}

[Return](#) [Save](#) [Cancel](#) [Delete](#)

Notice that there is a text box under "Translate From" where you can place the value that will be in your import file. Under "Translate To" there are six fields (one for each element this import column maps to). These are the values you want to populate in your dataset when the value in "Translate From" shows up in your import file.

- Fill in the appropriate values for the translations.
 - Clicking the Save button will save your row and give you another blank row.

Del	Translate From:		Translate To:				
	Value from Import File	Characteristic Name	Method Speciation	Result Sample Fraction	Result Unit	Result Analytical Method ID	Result Analytical Method Context
<input type="checkbox"/>	<input type="text" value="P71887"/>	Nitrogen	as NO3	Total	mg/l	351.3(C)	USEPA
<input type="checkbox"/>	<input type="text"/>	{None}	{None}	{None}	{None}	{None}	{None}

- Click the Return button to save and return to the Import Configuration Detail page.

If you imported a file using this import configuration (with the translation created above), and there was a value of "P71887" in column 12 of your file. The following values would be populated in the dataset created from your file:

Characteristic Name: **Nitrogen**

Method Speciation: **as NO3**

Sample Fraction: **Total**

Units: **mg/l**

Analytical Method: **351.3(C)**

Analytical Method Context: **USEPA**

This is a powerful feature for minimizing unnecessary data in your import file (when values can be inferred).

Note: It is very important to recognize that when you have a translation on a column that maps to more than one data element, you need to provide translations for every value that will be used in your import file. The system does not know how to interpret values that do not have translations (in this case). If one is encountered while importing a file, an error will be logged. You will need to add a new translation for this value and re-import the file.

Using Defaults to Conditionally Generate a Value

Remember that Generated Values are values that get populated automatically on every row of your file. For example, if you add the element "Activity Start Time Zone" to the section titled "Element Values to be Generated Automatically" and set its value to EDT, then every row of your imported data will get a generated value of EDT for Activity Start Time Zone. This would be appropriate if you always include a Start Time with every Activity you import. If there are activities that have a Start Time and some that do not, then this solution would not work for you because rows where the Time Zone is generated but there is no Time provided will get flagged as missing a required value (because every Time needs a Time Zone and visa versa). In this case what you need is to generate a value for Time Zone only when the Time column in your file is populated. This can be accomplished by adding the Time Zone as an additional data element mapped to the same import column as the Time. Then set a Default Value for the Time Zone.

Remove	5		Activity Start Time	<input type="text"/>	HH:MM PM	Add/Edit
			Activity Start Time Zone	EDT		

The system will treat Activity Start Time Zone as a "conditionally" generated element. The Activity Start Time will get populated with the value from column 5 of the import file. Activity Start Time Zone will get a generated value of "EDT" whenever Activity Start Time has a value. This is a convenient way to generate a value, but only when a related value gets populated by a value from the import file.

There are many other examples of where you may wish to conditionally generate values. Here are a few examples:

- Generate the value for Horizontal Collection Method and Coordinate Reference System Datum on an Activity whenever latitude or longitude is provided on an Activity.
- Generate the value for a Unit Code whenever the related Measure Value is provided.
- Generate the value for Activity Group Type whenever an Activity Group ID is provided (*this special case is described in more detail in a subsequent section*)

Note: it's important to remember to that the system treats the Default Value for an element differently when an import column is mapped to one element than when it's mapped to more than one element.


- When a column is mapped to only one element, the system will behave in the following manner when importing your file:
 - Read a value from a specific column in the import file. If no value was found, then the related data element gets the default value from the import configuration. Otherwise, it gets the value from the file.
- When a column is mapped to more than one element, the system will behave as follows:
 - Read a value from a specific column in the import file. If no value was found, then do nothing. Otherwise, the elements without a default, get the value from the file. The elements with a default, get the default value.

Note: In the previous two sections we've described how to map a column to multiple data elements and use translations (in the first example) to populate the elements or use default values (in the second example) to populate some of the elements. In most cases you will use one of these two methods (but not usually both) to describe to the system how to convert your data. Mixing Default Values and Translations can be done, but is not generally needed and can create more confusing import configurations. If you chose to mix these two methods, be aware of the following rule (when a column maps to more than one data element): **Translations have precedence over default values.** When your file is imported, the system will check whether a value in your file matches a translation. If there's a match, it will populate the element values from values in your translation. If there is no match, then it will copy the value from your file into the elements without a default and will populate the elements with defaults from the default value in your import configuration.

Populate Multiple Data Elements with the Same Value from your Import File

A less common reason to map one column to more than one data element is when you actually want to populate both elements with the same value from the import file. Although this is not common there may be times that it's useful. In this case, you would map the column to the data elements and make sure to not set the default values for any of them and to not create any translations on the column (because defaults and translations will change the behavior).

For example: suppose you want to provide a Top and Bottom Depth on an Activity and don't want to have to list the Units twice. You could map a column to the Unit Code element for both of them and populate them both with one value in your file.

Remove	13		Activity Top Depth/Height Unit	{none}
			Activity Bottom Depth/Height Measure Unit	{none}



Keep in mind that this is only appropriate when you know you would always populate both of these values together. If it were not true that top and bottom depth are always provided together, it wouldn't be appropriate to always populate their measurement units together.

Use a Data Element Multiple Times in an Import Configuration

There are places in the WQX Data Model where an element can have multiple values per parent element. In a WQX Web environment, think of this as an element having multiple values per row in your import file. Here are some examples:

- A Monitoring Location can have multiple Alternate IDs
- An Activity can have multiple:
 - Project IDs
 - Conducting Organizations
- A Metric can have multiple Index IDs
- A Result can have multiple collections of:
 - Frequency Class Information
 - Detection Limit Information
 - Lab Sample Prep. Information
- A Taxon (within a Result) can have multiple:
 - Habits
 - Functional Feeding Groups

To model these scenarios in an import configuration, you should add the repeating elements as many times as needed (each to their own import column). For example: If you know that in your situation, an Activity can relate to up to two projects, you should add the Project ID twice.

Remove	13		Project ID	<input type="text"/>
Remove	14		Project ID	<input type="text"/>

In this case, column 13 and 14 of your import file will be used for the Project ID (of an Activity). If an Activity is only used on one project, put the Project ID in column 13. If it is used on two projects, put the first Project ID in column 13 and the second one in column 14 of your file.

A more complex example might be something like Frequency Class Information, which is used to classify a group of taxa that are being counted in a biological survey. Frequency Classes include a descriptor, and for certain types of classes, an upper and lower range and units are

required. For example: You may be conducting a fish survey and counting the number of fish (of a particular species) and grouping them based on sex and weight. In this case, sex and weight are each Frequency Class Descriptors and the weight needs a range of values (with) units. Your import file would need two Frequency Class Descriptors and might contain values like the following (subset):

F.C. Descriptor	F.C. Descriptor	Lower Bound	Upper Bound	F.C. Units
Male	Weight	0	100	g
Female	Weight	101	300	g

To support this data your import configuration could look like the following:

Remove	13		Frequency Class Descriptor	{none}
Remove	14		Frequency Class Descriptor	{none}
Remove	15		Lower Class Bound	<input type="text"/>
Remove	16		Upper Class Bound	<input type="text"/>
Remove	17		Frequency Class Descriptor Unit	{none}

Special Case: Activity Groups in a file of Activities and Results

Another specific example of leveraging the flexibility of an import configuration is in modeling Activity Groups in a file of Activities and Results. Activity Groups are used to group a collection of Activities (i.e. samples) together for various purposes which include (Field Sets, Replicates, linking Samples and Subsamples, and linking Samples with their related QC Samples). The relationship between Activities and Activity Groups in data modeling is referred to as "many to many" which means that an Activity can belong to many Activity Groups and an Activity Group can contain many Activities. Addressing this complex relationship in a flat file could be challenging, but with the support of some specific features in WQX Web, there are ways to address this that are fairly simple.

In WQX an Activity Group contains the following elements: Activity Group ID, Type, Name (optional), and two or more Activity IDs. WQX Web understands the relationship between Activities and Activity Groups and does not require that you indicate the Activity ID (because you've already provided it elsewhere on the row for the Activity). So, at a minimum you will need a way to provide the Activity Group ID and Type (and optionally Activity Group Name).





Following the other examples, one way to address this in your import configuration is to map one column to the Activity Group ID and another column to the Type. For Example:

Remove	13		Activity Group ID	<input type="text"/>
Remove	14		Activity Group Type	{none}



If you wanted to use the Activity Group Name element as well, you could map column 15 to that element.

In this example: if you wanted to include a specific Activity in an Activity Group, you would list the Activity Group's ID in column 13 and its Type in column 14.

If you wanted to allow an Activity to belong to two Activity Groups then you would need to repeat the Activity Group Elements again.

Remove	13 ▼		Activity Group ID	<input type="text"/>
Remove	14 ▼		Activity Group Type	{none}
Remove	15 ▼		Activity Group ID	<input type="text"/>
Remove	16 ▼		Activity Group Type	{none}

It might be tedious to have to keep typing the Activity Group Type every time you want to include an Activity in an Activity Group. An alternative to providing that value in your import file would be to (conditionally) generate it (as is explained in a previous section). To do that, map the Activity Group ID and Type to the same column and provide a default value for the type. For Example:

Remove	13 ▼		Activity Group ID	<input type="text"/>
			Activity Group Type	Field Set
Remove	14 ▼		Activity Group ID	<input type="text"/>
			Activity Group Type	Replicate

In this example, column 13 would be used for the Activity Group IDs for groups that are Field Sets and column 14 would be used for groups that are Replicates. In other words, you would not need to indicate the Type of Group in your file. Just by placing the ID in column 13 or 14 it would automatically be assigned a Type.

Here's a brief explanation of how this might be implemented in your import file. Suppose you receive a file from your lab with data that is 12 columns wide, which includes your main Activity and Result fields that you plan to import into WQX Web. You've already created an import configuration to address the 12 columns from the lab plus you added two additional columns (shown in the last example above). You load the file into something like Microsoft Excel. If not already done, you may want to label the columns on row 1 of your file so you know what each column contains. Label column 13 something like "Field Set Group ID" and column 14 something like "Replicate Group ID". Now you would go through the file and put the same Group ID on any activities you wanted to group together. For example: if you wanted to create an Activity Group for a Field Set that included activities on row 3, 7, and 12 and use a Group ID of "F2000-08-15B" you would put "F2000-08-15B" on rows 3, 7 and 12 (in column 13). If the activities on rows 7 and 9 were replicates then you would put the same Group ID value on rows 7 and 9 (in column 14).

After you import your file into WQX Web, you will have two Activity Groups: one will be a Field Set with 3 activities in it and the other will be a Replicate group with two activities in it.

Attached Objects

WQX Web allows you to attach binary objects (like pictures, documents, etc) to any Project, Monitoring Location, Activity or Result. There are two parts to doing this:

- Reference the file name and type (for each attachment) where appropriate in your import file.
- Include all of the attachment files in an attachments zip file and upload it at the same time as your import file.

To support the file name and type in your import file you need to map two columns in your import file to those data elements in your import configuration.

Remove	15 ▾		Activity Attachment File Name	<input type="text"/>
Remove	16 ▾		Activity Attachment Type	<input type="text"/>

The Attachment Type needs to contain the file's extension (e.g. JPG, PDF, etc) and the Attachment File Name needs to hold the complete file name, including the extension (e.g. QAPP.doc). If you need to support multiple files per Project, Activity, etc, then repeat these columns as many times as needed.

3.2 Working with Datasets

Datasets are the source for the submission file that's created by WQX Web (and sent to CDX). It represents the outcome of importing your data file, applying defaults and translations from your import configuration, and resolving any validation issues that the system identifies (most of which can be corrected within the system).

Datasets are temporary and do not represent data that is in WQX. Importing, correcting, deleting datasets has no effect on the data that is in WQX (the official repository of ambient water quality data at the EPA).

The data in a dataset only becomes permanent once a submission file has been exported, submitted to CDX and processed successfully by the WQX System (which is separate from WQX Web).

You can work with a dataset in WQX Web for a maximum number of days at which time it will be automatically purged from this system to keep the system from being overloaded with temporary data. Currently the system allows about two weeks for you to work with your dataset.

Once you have submitted your dataset to CDX and it has loaded successfully, you are encouraged to delete your dataset from WQX Web (since it is no longer needed).

3.2.1 Dataset Purpose and Type

Dataset Purpose

A dataset can be created for the purpose of either Adding & Updating data or for Deleting data in the WQX System. Add/Update datasets contain a full set of data and will update records in

WQX where the ID for the record matches an existing value. If no match is found then the data will be added to WQX. Delete datasets include just one column which contains the unique ID of the record(s) you wish to delete from the WQX System.

Once a dataset is created in WQX Web, it will be available to anyone with rights to the organization referenced in the import file. Other users will not see it.

Dataset Types

The types of datasets supported by WQX Web are as follows:

- Projects
- Monitoring Locations
- Monitoring Location Weights
- Biological or Habitat Indices
- Activities and Results
- Activities and Metrics
- Activity Groups
- Delete Projects
- Delete Monitoring Locations
- Delete Activities
- Delete Activity Groups
- Delete Biological or Habitat Indices

3.2.2 Creating a New Dataset

1. Click the “Create New Dataset” link on the navigation panel.
2. On the Create New Dataset page, select the method and type of dataset you wish to create (e.g. Import a File of Projects).

You are here: [Home](#) >> Create New Dataset

Create New Dataset

To Insert or Update Data:

- [Import a File of Projects](#)
- [Import a File of Monitoring Locations](#)
- [Import a File of Monitoring Location Weights](#)
- [Import a File of Biological or Habitat Indices](#)
- [Import a File of Activities and Results](#)
- [Import a File of Activities and Metrics](#)
- [Import a File of Activity Groups](#)

To Delete Data:

- [Import a File of Project Identifiers to be deleted](#)
- [Import a File of Monitoring Location Identifiers to be deleted](#)
- [Import a File of Activity Identifiers to be deleted](#)
- [Import a File of Activity Group Identifiers to be deleted](#)
- [Import a File of Index Identifiers to be deleted](#)

3. The system will display the Import File page.

You are here: [Home](#) >> [Create New Dataset](#) >> Import File

Import File

Import Configuration: ▼

Type: Activities and Results

Import File: *.txt, *.csv, *.zip

Attachments File: *.zip

Delimiter: ▼

Ignore First Row of Import File?

Note: If you selected to create one of the "Delete" datasets on the previous page, then the following fields/sections will not be displayed:

- Import Configuration dropdown list,
- Attachments Zip File,
- Delimiter dropdown list,
- Default Values section.

4. Select an import configuration from the dropdown list. Note: The list will be filtered to only show Import Configurations that match the type you clicked on the previous page.

You are here: [Home](#) >> [Create New Dataset](#) >> Import File

Import File

Import Configuration:

Type: Activities and Results

Import File: *.txt, *.csv, *.zip

Attachments File: *.zip

Delimiter:

Ignore First Row of Import File?

WQX Element	Default Value	Format
Activity Start Time Zone	MST	
Organization ID	GOLDRYAN	

5. Use the Browse button on the Import File field to browse and find the file to be imported. You can also type the path and name of the file in the field if you know it.
 - a. The file you select must have an extension of TXT, CSV or ZIP. If it is a zip file, it must contain a TXT or CSV file inside it.
6. If you have attachments referenced in your data file (from step 5), then use the Browse button on the Attachments File field to browse and find the zip file that holds all of the attachments.
 - a. The file must be a ZIP file.
7. If necessary, change the delimiter to match that of your import file. It will default to the delimiter specified in the selected import configuration.
8. If the first row of your import file has column headings, select the “Ignore First Row of Import File?” check box, so that the first row will not be interpreted as data.
9. Review the table showing the generated values that will be used when importing this file. The Default Values are from the selected import configuration and can be overridden here for this file (without affecting the values in the import configuration). Change any values as needed.
10. Click the Continue button.

The system will begin importing the file(s) and validating the imported data. Validation will check for the following types of errors:

 - a) Values that exceed the maximum allowed length
 - b) Values that do not match a related lookup table value
 - c) Values that are not in the correct format
 - d) Values that are missing but are required in WQX.
11. The system will display the Dataset Summary page. The Dataset Summary page provides information regarding the status of a dataset, including the percent complete and a count of


any warnings or errors logged so far. An animated image will spin to remind you that an active process is running on the server.

You are here: [Home](#) >> [Datasets](#) >> Dataset Summary

Dataset Summary

Type: Activities and Results

Import Configuration: [Ryan Demo](#)

Status:  Importing (9% Complete)
click Refresh Button to update status

Errors & Warnings: 25 / 0 [View Log](#)

Start Time: 12-16-2008 03:36:35 AM

End Time:

During the import process the status will be one of the following:

- **Waiting to Import** – The dataset has been queued for importing but has not yet started. Generally a dataset only has this status for a fraction of a second. In many cases you will not even see this status. However, in some cases when the server is heavily loaded, a dataset may remain in this state for an extended period of time waiting for other datasets to finish processing.
- **Importing** – The dataset is being imported. Percent Complete and a count of Errors & Warnings will be displayed. If you wish to review the errors while the file is being processed, you can click the "View Log" link.

Keep in mind that this page does not continue to show you updates of the status automatically. You must initiate the process manually (as explained in the next step).

12. After waiting 10 or 20 seconds, click the Refresh button and check the Status. If it is importing, you will be able to see the percentage complete and start to get a feel for how long it will take to finish importing. You can click the Refresh button periodically to check on its progress again. If it appears that it will take more than a few minutes to complete you can choose to navigate elsewhere in the system and perform other tasks or leave the system entirely and come back at a later time. The process will continue on its own and you can check back at any time by following the instructions in the next section. When the import process completes it will have one of the following statuses:

- **Imported** – The dataset has been imported and validation errors, if any, may be reviewed and resolved. Record counts are displayed.
- **Cancelled or Failed** – Either the import was cancelled (*future feature*) or there were serious errors that prevented the file from being imported.

At this point, the Dataset Summary Page will display additional information about your dataset. See the next section for more information.

You are here: [Home](#) >> [Datasets](#) >> Dataset Summary

Dataset Summary

Type: Activities and Results
 Import Configuration: [Ryan Demo](#)
 Status: Imported

Import

Errors & Warnings: 190 / 0 [View Log](#)
 Start Time: 12-16-2008 03:36:35 AM
 End Time: 12-16-2008 03:37:43 AM
 File/Transaction ID: Ryan - Demo250.txt

Record Counts	Valid	Invalid	Validation Errors	Original	Remaining
Result	124	126	Invalid Domain Value	126	126
Activity	46	78	Invalid Format	32	32
Activity Group	2	0	Max Length Exceeded	32	32

3.2.3 Continuing with Existing Datasets

To find an existing dataset in the system:

1. Select the “Datasets” link on the navigation panel. This will navigate to the Datasets list page. The page displays a list of datasets that you have created or were created by users that belong to organizations that you have rights to.

You are here: [Home](#) >> Datasets

Datasets

ID	File Name	Type	Status	Created	Created By
1461	Ryan - Demo250.txt	Activities and Results	Imported	12-16-2008 03:36 AM	Ryan Jorgensen
1399	ExportResults11122008.txt	Activities and Results	Imported	12-08-2008 12:57 PM	Kristen Gunthardt
1396	ExportResults11122008.txt	Activities and Results	Completed at CDX	12-08-2008 10:17 AM	Kristen Gunthardt
1371	Level2_WQXWeb_Results.txt	Activities and Results	Failed at CDX	12-04-2008 08:46 AM	Kristen Gunthardt
1367	ExportMonitoringLocations11122008.txt	Monitoring Locations	Completed at CDX	11-26-2008 07:39 AM	Kristen Gunthardt
1366	ExportProjects11122008.txt	Projects	Completed at CDX	11-26-2008 07:35 AM	Kristen Gunthardt
1105	Level2_WQXWeb_Results.txt	Activities and Results	Imported	10-30-2008 09:59 AM	Dwane Young
1084	Level1_WQXWeb_Project.txt	Projects	Completed at CDX	10-30-2008 09:13 AM	Dwane Young
1056	Level1_WQXWeb_Project.txt	Projects	Completed at CDX	10-30-2008 08:25 AM	Kristen Gunthardt
1054	Level1_WQXWeb_Project.txt	Projects	Completed at CDX	10-30-2008 08:24 AM	Kristen Gunthardt

[Return](#) [Add New](#)

2. Click the link on the ID of the dataset you wish to work with.
3. The system will display the Dataset Summary page.

You are here: [Home](#) >> [Datasets](#) >> Dataset Summary

Dataset Summary

Type: [Activities and Results](#)
 Import Configuration: [Ryan Debug Results - Expanded](#)
 Status: Imported

Import

Errors & Warnings: 31 / 0 [View Log](#)
 Start Time: 12-16-2008 05:35:31 PM
 End Time: 12-16-2008 05:35:35 PM
 File/Transaction ID: Ryan - Debug Results - Expanded.txt

Record Counts	Valid	Invalid	Validation Errors	Original	Remaining
Result	7	9	Invalid Domain Value	8	8
Activity	0	8	Invalid Format	9	9
Activity Group	4	0	Max Length Exceeded	2	2
			Required Value Missing	12	12

[Return](#) [Refresh](#) [Delete](#) [Export/Submit File\(s\)](#)

While the system is importing your file, it tracks errors in two manners:

1. As each Project, Activity, Result, etc. is processed, the system performs a number of specific validation checks on the data. If the validation fails, the record is flagged as

invalid and the specific type of validation failure is recorded. A summary of the validation checks are provided in two tables on the Dataset Summary page (shown above). On the left is a summary of the number of records that are valid or invalid. On the right is a list of each type of validation error and count of the times the error occurred (originally and currently remaining). If there were no validation errors recorded, this table will not display. Each type of validation error has a link to a page where the validation issue can be resolved within the system.

2. All errors, warnings and messages that the system encounters during the import process will be recorded in a log for this dataset. The "Errors & Warnings" field displays a count of the number of errors and the number of warnings. If either count is greater than zero, a link is provided to view the log. The log will include all of the errors from #1 above and may include additional errors, warnings, etc. that are only tracked here. These include issues with the file not matching the import configuration, problems reading the file, and any other unexpected issue that arose during the import process. In some cases the unexpected issue may be caused by a bug in the system that needs to be resolved. If the system is unable to recover from the error that it has logged, it may stop importing the file and mark the dataset with a status of "Cancelled or Failed Import".
 - a. It is particularly important to view the log if it contains warnings or errors that are not included in the table of validation errors (mentioned in #1 above). You can quickly assess this by determining if the number of errors in the log is greater than the number of validation errors in the table. Using the example above we can see that the log contains 190 errors and the validation error table contains $126 + 32 + 32$ errors, which also equals 190. In this case we know that the counts are the same, so it is not necessary to view the error log (if you plan to resolve the errors using the resolution pages provided in this system). If you prefer to resolve your errors in your original file (outside of the system) you may still prefer to use the log as the way you determine what needs to be fixed in your file. Although this is less efficient (in most cases), because you have to delete the dataset, correct your file and re-import it, you always have this option for correcting your data.

To View Event Log Messages:

1. Click the "View Log" link on the Dataset Summary Page. This will display the Event Log Messages page.

You are here: [Home](#) >> [Event Log](#) >> Event Log Messages

Event Log Messages

Details
 Summary
 Errors Only

ID	Type	Message	Context
277323	Error	Value has exceeded its maximum length: 'A234567890123456789012345678901234567890'	Row 2
277324	Error	Invalid value '0010(BT)' for Result Analytical Method ID	Row 2
277325	Error	Invalid value '00-04' for Result Analytical Method ID	Row 3
277326	Error	Value does not match its required format: '6/32/1999'	Row 5
277327	Error	Invalid value '00-04' for Result Analytical Method ID	Row 5
277328	Error	Value does not match its required format: '8/8//1999'	Row 8
277329	Error	Value has exceeded its maximum length: 'A234567890123456789012345678901234567890'	Row 8
277330	Error	Invalid value '0010(BT)' for Result Analytical Method ID	Row 8
277331	Error	Invalid value '0010(BT)' for Result Analytical Method ID	Row 10
277332	Error	Invalid value '00-04' for Result Analytical Method ID	Row 11
277333	Error	Invalid value '00-04' for Result Analytical Method ID	Row 13
277334	Error	Invalid value '0010(BT)' for Result Analytical Method ID	Row 16

2. You can select the Summary radio button at the top of the page to get a summary of each error or warning (and the number of times it occurred). This is a quick way to assess the specific issues that need to be resolved.

You are here: [Home](#) >> [Event Log](#) >> Event Log Messages

Event Log Messages

Details
 Summary
 Errors Only

Type	Message	Count
Error	Invalid value '00-04' for Result Analytical Method ID	63
Error	Invalid value '0010(BT)' for Result Analytical Method ID	63
Error	Value does not match its required format: '6/32/1999'	16
Error	Value does not match its required format: '8/8//1999'	16
Error	Value has exceeded its maximum length: 'A234567890123456789012345678901234567890'	32

3. Check the "Errors Only" checkbox if you want to hide warnings.
4. Select the Return button to navigate back to the Dataset Summary page.

3.2.4 Resolving Validation Errors in a Dataset

As mentioned previously, the import process performs validation checks on the data in your import file. A summary of the findings are displayed in a "Validation Errors" table on the Dataset Summary Page.

Validation Errors	Original	Remaining
Invalid Domain Value	8	8
Invalid Format	9	9
Max Length Exceeded	2	2
Required Value Missing	12	12

Each type of validation error has a link to a page where the validation issue can be resolved within the system. You should resolve these validation errors prior to exporting and submitting the data to CDX. If you choose to export without resolving all of the validation errors, any invalid records will be excluded from the export.

There are four types of validation errors that can be corrected in the system:

1. Maximum Length Exceeded – The length of a value in the import file exceeded the maximum allowable length of the corresponding data element.
2. Invalid Domain Value – A value in the import file didn't match any of the allowed values in the lookup table for the corresponding data element.
3. Invalid Format – The format of a value in the import file didn't match the format you specified in your import configuration for the corresponding data element.
4. Required Value Missing – The import file was missing a value that is required to create a valid WQX Submission File.

There is one additional validation error that currently does not have a resolution page. It occurs infrequently, but, if it occurs, you will have to make the correction manually and re-import your file.

5. Invalid Translation – a value in your import file did not match a translation in the import configuration and the import column is mapped to multiple data elements. There is at least one translation and no defaults in the import configuration. In this situation, a translation is required for every value in that column of your import file. See the section titled *Using Translations to Populate Many Related Data Elements* for more details

Resolving Invalid Domain Values

To resolve domain value errors:

1. Select the "Invalid Domain Value" link in the Validation Errors table on the Dataset Summary page. The system will display the Domain Resolution page.

You are here: [Home](#) >> [Datasets](#) >> [Dataset Summary](#) >> Domain Resolution

Domain Resolution

This page lists values from your import file that do not match a valid domain value. To correct a value, click its link and select a valid value from the list. Then change the resolution for each row (as needed) and save your changes.

Show:

Count	Element	Value	Resolution
3	Characteristic Name	Potasium	<input type="text" value="Add a translation to the Import Configuration"/>
4	Result Analytical Method ID	00-01	<input type="text" value="Modify value manually"/>
1	Sample Collection Equipment Name	Plastic Bag	<input type="text" value="Add a translation to the Import Configuration"/>

This page allows you to resolve errors where the value in your import file did not match an allowed value for that data element.

- **Count** – This column displays the number of times the error occurred (in a particular import column position).
 - **Element** – This column displays the name of the data element that was used for validation.
 - **Value** – This column displays the current value for the data element. Before the value is corrected, this displays the value from your import file. After it's been corrected, it displays the corrected value.
 - **Resolution** – This column displays a dropdown list allowing you to select the method of resolving the validation error:
 - *Add a translation to the Import Configuration*: selecting this will create a translation in your Import Configuration so that any future file having the same value (in the same column) will be corrected automatically.
 - *Modify value manually*: selecting this will update the value(s) in this dataset, but will not create a translation in your Import Configuration.
 - **Note**: there is a preference on the User Preference Page where you can set the default value for the Resolution dropdown list, so that you only have to change the selection when it doesn't match your standard choice for Resolution.
2. Select the link in the Value column for the value you wish to change. A list of allowed values will be displayed.

SAMPLE COLLECTION EQUIPMENT		
Cancel		
	Name	Type
Select	{none}	
Select	A-Frame Net	Net/Non-Tow
Select	Activity Trap	Trap/Substrate
Select	Anchor Box Dredge	Benthic Dredge
Select	Artificial Substrate	Trap/Substrate
Select	Backpack Electroshock	Electroshock
Select	Beach Seine Net	Net/Non-Tow
Select	Beam Trawl	Net/Horizontal Tow
Select	Benthic Corer (Other)	Benthic Corer
Select	Benthic Dredge (Other)	Benthic Dredge
Select	Benthic Grab (Other)	Benthic Grab
Select	Birge Closing Net	Net/Vertical Tow
Select	Black Light Trap	Trap/Substrate

3. Click the "Select" link on the row you wish to select. The new value will be displayed on the Resolution Page.
 - a. Note that although "{none}" is a standard choice in the list of values, this page will not allow a value of "{none}"
4. If the Resolution dropdown list is not set to the value you want, change it.
5. Repeat steps 3 & 4 for each row.
6. Click the Save button to save your changes and refresh the page (showing the remaining unresolved rows). This is particularly useful if there is more than one page of errors. Otherwise you can click the Return button to save your changes and return to the Dataset Summary page.

The dataset summary page will recalculate the unresolved validation errors and invalid records and display the new counts.

Validation Errors	Original	Remaining
Invalid Domain Value	8	0
Invalid Format	9	9
Max Length Exceeded	2	2
Required Value Missing	12	12

Resolving Invalid Formats

To resolve format errors:

1. Select the “Invalid Format” link in the Validation Errors table on the Dataset Summary page. The system will display the Format Resolution page.

You are here: [Home](#) >> [Datasets](#) >> [Dataset Summary](#) >> Format Resolution

Format Resolution

This page lists values from your import file that did not match the format specified in the import configuration. Edit each value to match the format and then save your changes.

Show: ▼

Count	Element	Value	Format
1	Activity Latitude	<input type="text" value="129.99"/>	-DD.DDDDDDDDDD
1	Activity Longitude	<input type="text" value="-180.99"/>	-DDD.DDDDDDDDDD
1	Activity Start Date	<input type="text" value="6/32/1999"/>	MM/DD/YYYY
1	Activity Start Date	<input type="text" value="8/8//1999"/>	MM/DD/YYYY
1	Activity Start Time	<input type="text" value="16:99"/>	HH24:MI
1	Laboratory Accreditation Indicator	<input type="text" value="0"/>	Yes/No
1	Laboratory Accreditation Indicator	<input type="text" value="1"/>	Yes/No
1	Laboratory Accreditation Indicator	<input type="text" value="FALSE"/>	Yes/No
1	Laboratory Accreditation Indicator	<input type="text" value="TRUE"/>	Yes/No

This page allows you to resolve errors where the value in your import file did not match the format you specified in your import configuration.

- Count – This column displays the number of times the error occurred (in a particular import column position).
- Element – This column displays the name of the data element that was used for validation.
- Value – This column displays the current value for the data element. Before the value is corrected, this displays the value from your import file. After it's been corrected, it displays the corrected value.
- Format – This column displays the format (from your import configuration) that the value must match.

2. Update the value in the Value column to match the required format.
3. Repeat step 2 for each row.

- Click the Save button to save your changes and refresh the page (showing the remaining unresolved rows). This is particularly useful if there is more than one page of errors. Otherwise you can click the Return button to save your changes and return to the Dataset Summary page.

The dataset summary page will recalculate the unresolved validation errors and invalid records and display the new counts.

Validation Errors	Original	Remaining
Invalid Domain Value	8	0
Invalid Format	9	0
Max Length Exceeded	2	2
Required Value Missing	12	12

Resolving Values that Exceed Maximum Length

To resolve maximum length errors:

- Select the “Max Length Exceeded” link in the Validation Errors table on the Dataset Summary page. The system will display the Maximum Length Resolution page.

You are here: [Home](#) >> [Datasets](#) >> [Dataset Summary](#) >> Maximum Length Resolution

Maximum Length Resolution

This page lists values from your import file that exceed that maximum length allowed. To correct a value, edit the value to reduce its length or choose "Truncate" (to have the system truncate for you). Then save your changes.

Show:

Count	Element	Max Length	Value	Resolution
2	Monitoring Location ID	35	A234567890123456789012345678901234567890	<input type="button" value="Modify value manually"/>

This page allows you to resolve errors where the value in your import file exceeded the maximum length allowed for a data element.

- Count – This column displays the number of times the error occurred (in a particular import column position).
- Element – This column displays the name of the data element that was used for validation.
- Max Length – This column display the maximum length for the data element

- Value – This column displays the current value for the data element. Before the value is corrected, this displays the value from your import file. After it's been corrected, it displays the corrected value.
- Resolution – This column displays a dropdown list allowing you to select the method of resolving the validation error:
 - *Truncate value to fit*: selecting this will tell the system to automatically trim off any excess characters from the value so that it will fit within the allowed size. No change to the value is needed. If you change the value manually to fit within the allowed size, this instruction will be ignored and your new value will be used.
 - *Modify value manually*: selecting this will tell the system that you will update the value manually by changing the value to something that fits within its allowed size.
 - Note: there is a preference on the User Preference Page where you can set the default value for the Resolution dropdown list, so that you only have to change the selection when it doesn't match your standard choice for Resolution.

2. If the Resolution dropdown list is not set to the value you want, change it.
3. Update any rows (where the resolution selected is "Modify value manually"). Otherwise, you can leave the values unchanged.
4. Click the Save button to save your changes and refresh the page (showing the remaining unresolved rows). This is particularly useful if there is more than one page of errors. Otherwise you can click the Return button to save your changes and return to the Dataset Summary page.

The dataset summary page will recalculate the unresolved validation errors and invalid records and display the new counts.

Validation Errors	Original	Remaining
Invalid Domain Value	8	0
Invalid Format	9	0
Max Length Exceeded	2	0
Required Value Missing	12	12

Resolving Required Values that are Missing

To resolve required value errors:

1. Select the “Required Value Missing” link in the Validation Errors table on the Dataset Summary page. The system will display the Required Resolution page.

You are here: [Home](#) >> [Databases](#) >> [Dataset Summary](#) >> Required Resolution

Required Resolution

This page lists required values that were not provided in your import file. Provide a value for each one and then save your changes.

Show: Unresolved Rows Only

Row	Element	Value	Activity ID	Activity Type	Activity Media Name	Activity Media Subdivision Name	Activity Start Date	Activity Start Time	Project ID	Project ID	Monitoring Location ID	Result Analytical Method ID	Result Analytical Method Context	Characteristic Name	Result Measure	Result Unit	Result Value Type
7	Activity Longitude (-DDD.DDDDDDDDDDD)	<input type="text"/>	A3	Field Msr/Obs	Water	Surface Water	1999-07-07	14:32:00	Project 2	Project 1	Monitoring Location 3	377.1	USEPA	Potassium bisulfate	1	ml	Actual
7	Sample Collection Equipment Name	{None}	A3	Field Msr/Obs	Water	Surface Water	1999-07-07	14:32:00	Project 2	Project 1	Monitoring Location 3	377.1	USEPA	Potassium bisulfate	1	ml	Actual
8	Activity Longitude (-DDD.DDDDDDDDDDD)	<input type="text"/>	A4	Sample-Routine	Water	Stormwater	8/8//1999	14:32:00	My Main Project		help	AM1	WQXTEST	Dissolved oxygen (DO)	223	in3	Calculated
8	Activity Latitude (-DD.DDDDDDDDDDD)	<input type="text"/>	A4	Sample-Routine	Water	Stormwater	8/8//1999	14:32:00	My Main Project		help	AM1	WQXTEST	Dissolved oxygen (DO)	223	in3	Calculated
12	Activity Longitude (-DDD.DDDDDDDDDDD)	<input type="text"/>	A5	Sample-Routine	Water	Groundwater	1999-09-09	16:49:00	My Main Project		Monitoring Location 2	377.1	USEPA	Potassium bisulfate	1.232	ml	Actual
12	Activity Latitude (-DD.DDDDDDDDDDD)	<input type="text"/>	A5	Sample-Routine	Water	Groundwater	1999-09-09	16:49:00	My Main Project		Monitoring Location 2	377.1	USEPA	Potassium bisulfate	1.232	ml	Actual
14	Activity Latitude (-DD.DDDDDDDDDDD)	<input type="text"/>	A6	Field Msr/Obs	Water	Surface Water	1999-10-10	20:00:00	Project 1	Project 2	Monitoring Location 3	377.1	USEPA	5-Nitrovanillin	45	in3	Estimated
14	Activity Longitude (-DDD.DDDDDDDDDDD)	<input type="text"/>	A6	Field Msr/Obs	Water	Surface Water	1999-10-10	20:00:00	Project 1	Project 2	Monitoring Location 3	377.1	USEPA	5-Nitrovanillin	45	in3	Estimated
15	Activity Longitude (-DDD.DDDDDDDDDDD)	<input type="text"/>	A7	Field Msr/Obs	Water	Stormwater	1999-11-11	21:03:00	Project 1	Project 2	Monitoring Location 3	377.1	USEPA	Potassium bisulfate	1	ml	Actual
15	Activity Latitude (-DD.DDDDDDDDDDD)	<input type="text"/>	A7	Field Msr/Obs	Water	Stormwater	1999-11-11	21:03:00	Project 1	Project 2	Monitoring Location 3	377.1	USEPA	Potassium bisulfate	1	ml	Actual
16	Activity Longitude (-DDD.DDDDDDDDDDD)	<input type="text"/>	A8	Sample-Routine	Water	Groundwater	1999-12-12	22:52:00	My Main Project	Project 2	Monitoring Location 2	AM1	WQXTEST	Pyrazon	223	in3	Calculated
16	Activity Latitude (-DD.DDDDDDDDDDD)	<input type="text"/>	A8	Sample-Routine	Water	Groundwater	1999-12-12	22:52:00	My Main Project	Project 2	Monitoring Location 2	AM1	WQXTEST	Pyrazon	223	in3	Calculated

This page allows you to provide a value for a data element that was not provided in the import file but is required to create a valid WQX Submission File. Unlike the other resolution pages that group related changes together to save you time, this page requires that you address each missing value individually.

- Row – This column displays the row where the missing value originated.
 - Element – This column displays the name of the data element that is missing a required value.
 - Value – This column displays the current value for the data element. Before the value is corrected, this will display {none} or an empty text box. After it's been corrected, it displays the corrected value.
 - Other element value columns – The rest of the columns are there to provide you with sufficient context information so that you can assess what the missing value should be. These columns display the current values for data elements that came from the same row of the import file.
2. Update the value in the Value column to be an appropriate value (based on the context information provided). If the value is constrained by a list of values, click the {none} link to display and select the desired value.
 3. Repeat step 2 for each row.
 4. Click the Save button to save your changes and refresh the page (showing the remaining unresolved rows). This is particularly useful if there is more than one page of errors.

Otherwise you can click the Return button to save your changes and return to the Dataset Summary page.

The dataset summary page will recalculate the unresolved validation errors and invalid records and display the new counts.

Validation Errors	Original	Remaining
Invalid Domain Value	8	0
Invalid Format	9	0
Max Length Exceeded	2	0
Required Value Missing	12	0

3.2.5 Exporting / Submitting a Dataset to CDX

Before a dataset becomes final it must be submitted to CDX where it will be processed by the WQX System and loaded into the WQX Database. You have two typical choices for submitting your dataset to CDX.

1. Default: Submit the data to CDX directly from the WQX Web Application
 - a. This is the simplest option because it can be submitted in one step.
 - b. WQX Web will track the status of the submission at CDX and automatically download relevant documents (e.g. Processing Report) so you can follow up on any issues that may have occurred while the file was being processed by the WQX System.
2. Export the data to a WQX-compatible submission file and send it to CDX via your state or tribal node.
 - a. If your state or tribe has its own node and protocol is that all data flows should go through your local node, this is the appropriate choice for you.

In addition to the ability to export a WQX Submission File, for certain types of datasets you may also export a flat file by applying a built in Stylesheet.

To export and submit a dataset to CDX:

1. Click the “Export/Submit File(s)” button on the Dataset Summary Page.
2. The system will display the Export Page.

You are here: [Home](#) >> [Datasets](#) >> [Dataset Summary](#) >> Export

Export

WQX XML File:

Export Only

Export and Submit to CDX

Additional File (optional):

Apply the following stylesheet: Activity and Results Flat File ▼

Header Information:

Author:

Organization:

Contact Info:

Comment:

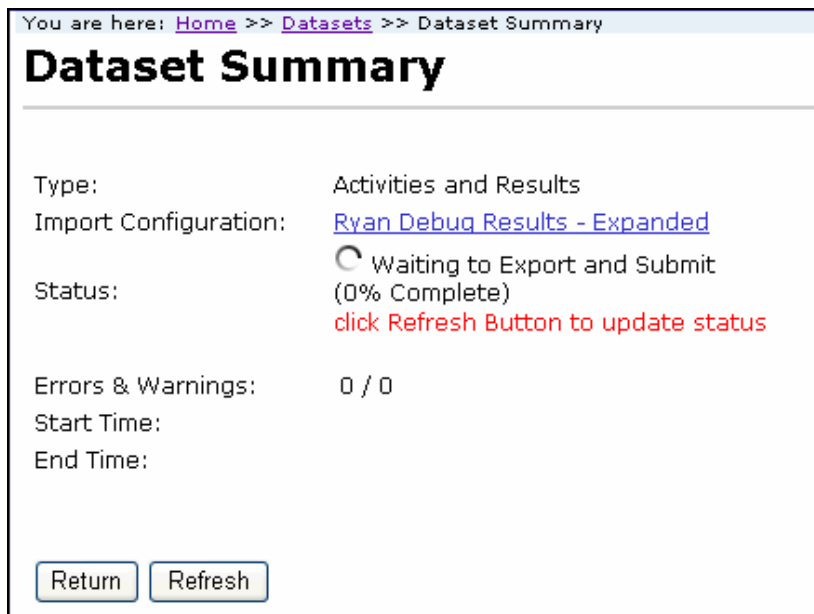
3. You have two choices when exporting. If you do not wish to submit to CDX (because you have your own node, or you have already submitted this dataset), then choose "Export Only". Otherwise, leave the default choice of "Export and Submit to CDX"
4. If the dataset is one of the following three types you also have the option of applying a stylesheet to convert your WQX XML file to a flat file.
 - a. Monitoring Locations
 - b. Activities and Results
 - c. Activities and Metrics

Remember that if you've already submitted your dataset to CDX and just want to create a flat file this time, choose the "Export Only" option (as described in the previous step).

If you check the box to apply a stylesheet to your XML File, the export process will create two files (described later).

5. The Header Information is used to populate the header that is part of every Exchange Network Submission File. This section is automatically populated from the data from your User Detail Page. Correct any of the header information as necessary. It helps identify who submitted the file and allows you to add any comments that might be helpful (mostly for your own use) in understanding what this dataset includes.

6. Click the Continue button to begin the export.
7. The system will display the Dataset Summary page. When datasets are being imported or exported the Dataset Summary Page has a simplified layout (as seen below). The page provides information regarding the status of a dataset, including the percent complete and a count of any warnings or errors logged so far. An animated image will spin to remind you that an active process is running on the server.



The status of the dataset is displayed. During the export process the status will be one of the following:

- **Waiting to Export** – The dataset has been queued for exporting but has not yet started. Generally a dataset only has this status for a fraction of a second. In many cases you will not even see this status. However, in some cases when the server is heavily loaded, a dataset may remain in this state for an extended period of time waiting for other datasets to finish processing.
- **Waiting to Export and Submit** – Same as previous status, but only used when submitting to CDX
- **Exporting** – The dataset is being exported.

Keep in mind that this page does not continue to show you updates of the status automatically. You must initiate the process manually (as explained in the next step).

8. After waiting 10 or 20 seconds, click the Refresh button and check the Status. If it is exporting, you will be able to see the percentage complete and start to get a feel for how long it will take to finish exporting. Click the Refresh button periodically to update the status.
 - a. Note that the percent complete only includes the export process (in this system). It does not include the time for the WQX System to process your file. A rough way to estimate the time to completion (when submitting) is to double the export time. For example: If after about 5 minutes the export process is 20% complete

you can roughly estimate the export process to take about 25 minutes and an additionally 25 minutes for WQX to process your file at CDX. Rather than continue to hit Refresh while the file processes, if it appears that it will take more than a few minutes to complete you can choose to navigate elsewhere in the system and perform other tasks or leave the system entirely and come back at a later time. The process will continue on its own and you can check back at any time by navigating to the Datasets list page and clicking on this dataset (to return to this page)

9. When the export process completes the dataset will have one of the following statuses:

- Exported – The dataset has been exported. This is only used when you are not submitting to CDX. When submitting to CDX this status is skipped.
- Processing at CDX – The submission file has been submitted to CDX and is being processed there.

At this point, the Dataset Summary Page will display an additional table with links to files that you can download.

Documents (available for download)
SubmissionFile-1465.zip
FlatFile-1465.txt

One or two documents will be available after the export has completed.

- SubmissionFile-9999.zip – This is your WQX Submission File (zipped up). The numeric portion of the name will be different each time.
- FlatFile-9999.txt – If you chose to apply a stylesheet to create a flat file version of your dataset, you will also have this file available for download.

For further explanation of these files see the section titled "Downloading Files" below.

10. If your status is "Processing at CDX" you can continue to check on the status periodically by clicking the Refresh button.

11. When the processing at CDX is completed, the dataset will have one of the following statuses:

- Failed at CDX – At least one error was logged while processing the file in the WQX System at CDX.
- Completed at CDX – No errors were found while processing the file in the WQX System at CDX. All of your data successfully loaded.

At this point, or soon after reaching one of these final statuses, the Refresh button will update the list of Documents to include all of the documents created during the processing at CDX (in addition to the ones mentioned previously).

You are here: [Home](#) >> [Datasets](#) >> Dataset Summary

Dataset Summary

Type: Activities and Results
 Import Configuration: [Ryan Debug Results - Expanded](#)
 Status: Failed at CDX

	<u>Import</u>	<u>Export</u>
Errors & Warnings:	31 / 0 View Log	0 / 0
Start Time:	12-16-2008 05:35:31 PM	12-16-2008 10:49:00 PM
End Time:	12-16-2008 05:35:35 PM	12-16-2008 10:49:01 PM
File/Transaction ID:	Ryan - Debug Results - Expanded.txt	_d5b613cb-4175-4580-aa0f-deda2f4b8fb2

Record Counts	Valid	Invalid	Validation Errors	Original	Remaining
Result	16	0	Invalid Domain Value	8	0
Activity	8	0	Invalid Format	9	0
Activity Group	4	0	Max Length Exceeded	2	0
			Required Value Missing	12	0

Documents (available for download)

- [SubmissionFile-1465.zip](#)
- [FlatFile-1465.txt](#)
- [ValidationResults.xml](#)
- [Notify.xml](#)
- [ProcessingReport.zip](#)

The documents available for download are as follows (in the order they are created in the export/submit process):

- SubmissionFile-9999.zip – This is your WQX Submission File that was created in the export process. The numeric portion of the name will be different for each dataset. This is an XML document contained inside a Zip File.
 - Even if you submitted this file directly to CDX, you are encouraged to download a copy of this for your own records (so that you have a backup copy of each file sent to EPA).
- FlatFile-9999.txt – If you chose to apply a stylesheet to create a flat file version of your dataset during the export process, you will also have this file available for download. The numeric portion of the name will be different for each dataset. This is a tab-delimited text file that contains the same information in it that was contained in your XML submission file. This file can be a useful way to review the data that was sent in your submission file, because it can be easily opened with tools like Microsoft Excel. Keep in mind that this is a one-size-fits-all file

that contains columns for every data element available in an import configuration (whether you use them or not), so you may have a large number of columns without any data in them. It will also create several columns for elements that are allowed to repeat multiple times in WQX (such as a Project ID for an Activity).

- ValidationResults.xml – This is a report produced by CDX when it compares your submission file against the WQX XML Schema document (which is a document that describes the format that every WQX Submission File must follow). Typically you will not need to view this document because it will just say that the document was valid. If, for some reason, you never receive the next two documents mentioned below, you should view this document to see if it describes a problem with your file. If it does, you should follow up with EPA because this may suggest a bug in the system that needs to be resolved.
- Notify.xml – This is copy of the final response that the WQX System sent to CDX when it was done processing your submission file. Typically you will not need to view this document because it will just state the final status of your submission (which you already have on this page) and remind you to view the Processing Report (next) to view the outcome of your submission. Once again, if, for some reason, you never receive the next document mentioned below, you should view this document to see if it describes a problem that occurred in the WQX System. If it does, you should follow up with EPA because this may suggest an issue in the WQX System that needs to be resolved.
- ProcessingReport.zip – This is a report of everything that was logged in the WQX System while processing your submission file. It's not critical to look at this file if your dataset status is "Completed at CDX" because all of your data loaded successfully and there is nothing more you need to do. It still may be useful to download and save this file for your records because it contains information that could be useful to you or EPA at some future time. If your final dataset status is "Failed at CDX", however, this file is critical for you to look at, because it contains information about errors while processing your submission file.
 - A very important detail to understand about WQX Web is that version 1.0 does not include validation of every rule that is included in the WQX System. Because of this fact, you can resolve every validation error in WQX Web and have a fully valid dataset, but it could still receive errors when it is processed by the official WQX System at CDX. At a future date, these additional rules may be added, but for now there is still this limitation.
 - For information regarding the Data Rules enforced by WQX, consult the WQX Flow Configuration Document.
 - Keep in mind that the WQX System will only reject records with errors. So every Project, Monitoring Location, Index, Activity and Activity Group that loaded without error will be in the WQX System even if your dataset status is "Failed at CDX".
 - There are a few options for resolving errors that are logged in the processing report. #1 is probably the most comfortable for most users.

1. Review the errors in the processing report and make the necessary changes in your original import file. Then re-import the corrected import file and submit that dataset to CDX.
 - If you are confident of the rows that need to be corrected, you could limit the new import file to only those rows, to keep the file small. However, in most cases, it's safest to re-import the entire file. Submitting duplicate data to CDX will be harmless, because the WQX system can detect duplicates.
2. Transform your submission file to a flat file (if you haven't already done so) using the stylesheet available on the Export Page. Then download and edit that file to correct any issues mentioned in the processing report. You could then import this file back into WQX Web and submit the dataset to CDX.
 - One limitation currently is that an import configuration matching this file has not yet been created (although once it was created by someone it could be shared with everyone).
 - One other disadvantage is that this file will not be as comfortable for you because it doesn't match your original import file.
 - One advantage of this approach might be that if you had a number of validation errors in your original import file, that were corrected in the system, you would not have to make those corrections again because they'd already be in the file.
3. Download and save a copy of the SubmissionFile-9999.zip file. Unzip it and open the file in a text editor. If you have some familiarity with XML you may be able to find the location of the error (using the line # mentioned in the processing report) and manually correct the XML Submission file. The main limitation of this approach, presently, besides the difficulty for some of editing an XML document, is that there is no way built into WQX Web to submit an XML document (that you have) to CDX. You would need to use one of the free Node Clients available to manually re-submit the file to CDX.

A few details to note when downloading documents from the Dataset Summary Page:

Certain types of documents will often load in your browser window. Typically this is true for .txt and .xml files.

For example, if you click on the FlatFile-9999.txt link you will typically see the file in a separate browser window.

OrganizationIdentifier	OrganizationFormalName	OrganizationDescriptionText	TribalCode	ActivityIdentifier	
WQXTEST	WQX	Test Organization	001	DWNT01F20020801	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20020801	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20020801	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20020801	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20020801	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20020801	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20010910	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20010910	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20010910	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20010910	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20010910	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20010910	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20011003	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20011003	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20011003	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20011003	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01F20011003	Field Mr/Obs
WQXTEST	WQX	Test Organization	001	DWNT01S20010910	Sample-Routine
WQXTEST	WQX	Test Organization	001	DWNT01S20010910	Sample-Routine
WQXTEST	WQX	Test Organization	001	DWNT01S20010910	Sample-Routine
WQXTEST	WQX	Test Organization	001	DWNT01S20020801	Sample-Routine
WQXTEST	WQX	Test Organization	001	DWNT01S20020801	Sample-Routine
WQXTEST	WQX	Test Organization	001	DWNT01S20020801	Sample-Routine
WQXTEST	WQX	Test Organization	001	DWNT01S20020801	Sample-Routine
WQXTEST	WQX	Test Organization	001	DWNT01S20011003	Sample-Routine
WQXTEST	WQX	Test Organization	001	DWNT01S20011003	Sample-Routine
WQXTEST	WQX	Test Organization	001	DWNT01S20011003	Sample-Routine
WQXTEST	WQX	Test Organization	001	DWNT01S20011003	Sample-Routine

If the file does not open, you may need to tell your pop-up blocker to allow pop-ups on this site.

If you want to download and save a local copy of the file, you can right click on the FlatFile-9999.txt link (in Internet Explorer 7) and chose the "Save Target As..." menu. This will open a file window where you can specify the location that you want to save the file.

Zip files will download by default, so you can click their links and you will be given the opportunity to specify the location that you want to save the file.



Unzip the file locally and then open the XML File found inside (ProcessingReport.xml). If you open the processing report in Internet Explorer it will be converted to a web-based report using a stylesheet created by EPA. This provides a more user-friendly format (see below) but also only

provides a summary of the errors. If you want to view each individual error you will need to open the XML document in a text editor.

Here's an example of what the log portion of the processing report looks like when viewed in the browser:

Processing Log

*This table shows unique errors. For line-specific errors, view the source XML file by viewing the Page Source in the Browser	
Message	Parse and Load started at 12/16/2008 11:00:58 PM
Error	Project Identifier "My Main Project" is invalid
Error	Analytical Method Identifier Context (WQXTEST) is invalid. The value must match a value from the domain list or be the same as your Organization Identifier if it's your own private method).
Error	Sample Fraction Name is required when Characteristic Name = "Pyrazon"
Error	Characteristic Name and Result Status Identifier are required when Result Measure is reported
Error	Characteristic Name must be "Count" when Biological Intent Name is "Frequency Class"
Error	Sample Fraction Name is required when Characteristic Name = "Potassium bisulfate"
Error	Monitoring Location Identifier "Monitoring Location 2" is invalid
Error	Project Identifier "Project 2" is invalid
Error	Project Identifier "Project 1" is invalid
Error	Sample Fraction Name is required when Characteristic Name = "5-Nitrovanillin"
Error	Characteristic Name must be "Count" or "Total Sample Weight" when Biological Intent Name is "Population Census"
Error	Monitoring Location Identifier "Monitoring Location 3" is invalid
Error	Sample Collection Method is required when Activity Type Code contains the word "Sample"
Error	Activity Identifier "A1" is invalid
Error	Activity Identifier "A2" is invalid
Message	Parse and Load completed at 12/16/2008 11:01:04 PM

3.2.6 Deleting a Dataset

Datasets in WQX Web are temporary and only become final after they have been submitted to CDX and loaded successfully in the WQX System. You are encouraged to delete your datasets once they have received a status of “Completed at CDX”. Deleting a dataset will have no effect on data that has been submitted to CDX. You are only deleting the temporary data that was used to create the submission file that sent to CDX.

To keep the system clean, datasets that reach a certain age will be automatically removed from the system. The dataset summary page will tell you how many days are remaining before the dataset will be automatically deleted.

You are here: [Home](#) >> [Datasets](#) >> Dataset Summary

Dataset Summary

Type:	Activities and Results	Datasets are Temporary Datasets in WQX Web are temporary and must be submitted to CDX to become permanent. To keep this system clean, please delete datasets that have been processed successfully at CDX or are no longer needed. The system will automatically delete this dataset in 15 days.
Import Configuration:	Ryan Debug Results - Expanded	
Status:	Failed at CDX	

	Import	Export
Errors & Warnings:	31 / 0 View Log	0 / 0
Start Time:	12-16-2008 05:35:31 PM	12-16-2008 11:00:21 PM
End Time:	12-16-2008 05:35:35 PM	12-16-2008 11:00:26 PM
File/Transaction ID:	Ryan - Debug Results - Expanded.txt	_68999e74-889f-4a8c-a83b-b9210fe46aff

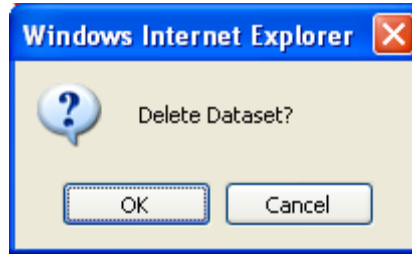
Record Counts	Valid	Invalid	Validation Errors	Original	Remaining
Result	16	0	Invalid Domain Value	8	0
Activity	8	0	Invalid Format	9	0
Activity Group	4	0	Max Length Exceeded	2	0
			Required Value Missing	12	0

Documents (available for download)

- [SubmissionFile-1465.zip](#)
- [FlatFile-1465.txt](#)
- [ValidationResults.xml](#)
- [Notify.xml](#)
- [ProcessingReport.zip](#)

To delete a dataset manually, click the Delete button on the Dataset Summary Page.

You will be asked to confirm before the dataset is actually deleted.



You will then be returned to the Datasets list page.

3.3 Viewing the Event Log

Click on the “Event Log” link on the navigation panel to view the Event Log.

You are here: [Home](#) >> Event Log

Event Log

Show Events Created By: ▼

ID	Start Time	Type	Messages
7900	12-16-2008 11:45:20 PM	Application Error	1 View
7899	12-16-2008 11:45:20 PM	Application Error	1 View
7898	12-16-2008 11:00:21 PM	Export	0
7897	12-16-2008 10:59:04 PM	Export	0
7896	12-16-2008 10:49:00 PM	Export	0
7895	12-16-2008 10:47:59 PM	Export	0
7894	12-16-2008 10:46:13 PM	Export	0
7893	12-16-2008 10:45:52 PM	Application Error	1 View
7891	12-16-2008 05:35:31 PM	Import	31 View
7837	12-16-2008 11:32:05 AM	Import	139 View
7836	12-16-2008 11:27:23 AM	Import	276 View
7832	12-16-2008 11:21:27 AM	Import	139 View

Page 1 of 70

The filter for the event log will automatically be set to show events for the current user.

Pick a different user from the dropdown list titled "Show Events Created By:" to change the filter to another user. The dropdown list only includes users that belong to the same organizations that you belong to. If you are a system administrator you can also view system events by picking "System" from the dropdown list.

Viewing Individual Messages for an Event

To View Event Log Messages:

1. Click the "View" link in the Message column. This will display the Event Log Messages page.

You are here: [Home](#) >> [Event Log](#) >> Event Log Messages

Event Log Messages

Details
 Summary
 Errors Only

ID	Type	Message	Context
277323	Error	Value has exceeded its maximum length: 'A234567890123456789012345678901234567890'	Row 2
277324	Error	Invalid value '0010(BT)' for Result Analytical Method ID	Row 2
277325	Error	Invalid value '00-04' for Result Analytical Method ID	Row 3
277326	Error	Value does not match its required format: '6/32/1999'	Row 5
277327	Error	Invalid value '00-04' for Result Analytical Method ID	Row 5
277328	Error	Value does not match its required format: '8/8//1999'	Row 8
277329	Error	Value has exceeded its maximum length: 'A234567890123456789012345678901234567890'	Row 8
277330	Error	Invalid value '0010(BT)' for Result Analytical Method ID	Row 8
277331	Error	Invalid value '0010(BT)' for Result Analytical Method ID	Row 10
277332	Error	Invalid value '00-04' for Result Analytical Method ID	Row 11
277333	Error	Invalid value '00-04' for Result Analytical Method ID	Row 13
277334	Error	Invalid value '0010(BT)' for Result Analytical Method ID	Row 16

[First](#)
[Previous](#)
[Next](#)
[Last](#)

[Return](#)

2. You can select the Summary radio button at the top of the page to get a summary of each error or warning (and the number of times it occurred).

You are here: [Home](#) >> [Event Log](#) >> Event Log Messages

Event Log Messages

Details
 Summary
 Errors Only

Type	Message	Count
Error	Invalid value '00-04' for Result Analytical Method ID	63
Error	Invalid value '0010(BT)' for Result Analytical Method ID	63
Error	Value does not match its required format: '6/32/1999'	16
Error	Value does not match its required format: '8/8//1999'	16
Error	Value has exceeded its maximum length: 'A234567890123456789012345678901234567890'	32

[Return](#)

3. Check the "Errors Only" checkbox if you want to only view errors (and hide warnings and messages)

3.4 *Setting User Preferences*

Use the User Preferences Page to customize the way you want the system to behave.

Click on the “Preferences” link on the navigation panel to open the Preferences Page

You are here: [Home](#) >> Preferences

Preferences

Import Configuration Page
Column Delimiter:

Import File Page
 Ignore First Row of Import Files

Max. Length Resolution Page
Resolution:

Domain Value Resolution Page
Resolution:

The preferences currently available are:

- **Import Configuration Page: Column Delimiter.** This sets the default value for the Column Delimiter field on a new import configuration. It can be overridden each time you create an import configuration.
- **Import File Page: Ignore First Row of Import Files.** This sets the default value for this check box on the Import File Page and can be overridden each time you import a file
- **Max Length Resolution Page: Resolution.** This sets the default value for this field on the Max Length Resolution Page. See the Max Length Resolution Page for more information.
- **Domain Value Resolution Page: Resolution.** This sets the default value for this field on the Domain Value Resolution Page. See the Domain Value Resolution Page for more information.

3.5 *Changing Your User Information*

The User Detail Page allows you to change your contact information (Name, Address, Email, etc). The information on this page is also used on the Export Page. Each time you create a WQX Submission file you are given an opportunity to include contact information in your file.

That page will be filled out with the information you provide on this page. See the Export Page for more information.

This page also shows you the organizations you have been given access to. Note that only a System Administrator can change organization rights.

Click the “User Information” link on the navigation panel to open the User Detail Page. *If you are a System Administrator, this link will behave differently (see the next section for details).*

You are here: [Home](#) >> [Users](#) >> User Detail

User Detail

Status: Active

Login Name:* mlebaron

Password:* ●

Full Name:* Mark M. LeBaron

Affiliation: Gold Systems, Inc.

Address: 3330 South, 700 East

City: Salt Lake City

State: UT

Zip: 84040

Country: USA

Phone #: (801)

Email: markl@goldsystems.com

Organization Rights:

Organization	Admin
Gold Systems - Mark	<input checked="" type="checkbox"/>
Gold Systems - Shared	<input type="checkbox"/>

Return Save Cancel

4.0 Administration

This section describes features only available to system administrators. If you are not a system administrator you can skip Section 4.

4.1 Managing User Accounts

A user can manage their own contact information, but only a System Administrator can perform the following user-related tasks:

- Add a new user

- Activate a user
- Deactivate a user
 - However, you are not allowed to deactivate your own account.
- Edit a user's NAAS ID
- Flag a user as a System Administrator
- Grant rights to an organization

Note: the User Information link in the navigation panel behaves differently for system administrators than it does for other users. Rather than going directly to the User Detail Page (for your user account), this link will take you to the Users list page where you can select the specific user account you wish to edit.

You are here: [Home](#) >> [Users](#)

Users

Show Inactive Users

Login Name	Full Name	Affiliation	Active?
jschimek	Jenn Schimek	RTI	Yes
jwellman	Jennifer Wellman	Pueblo of Santa Ana, New Mexico	Yes
jbisese	Jimmy Bisese	RTI	Yes
jfreise	John Freise	Cherokee Nation, Oklahoma	Yes
jwright	Julia Wright	Osage Tribe, Oklahoma	Yes
kcs	Kevin Christian	US EPA	Yes
gkb	Kristen Gunthardt	US EPA	Yes
mlebaron	Mark M. LeBaron	Gold Systems, Inc.	Yes
nbove	Nathan Bove	Gold Systems	Yes
pdz	Paul Andrews	RTI	Yes
rcooke	Rick Cooke	Gold Systems	Yes
rjorgensen	Ryan Jorgensen	Gold Systems	Yes

[First](#) [Previous](#) [Next](#) [Last](#) Page 2 of 3

[Return](#) [Add New](#)

From the Users list page, you can view/edit an existing user by clicking the appropriate link in the “Full Name” column of the list. To add a new user, click the “Add New” button.

The User Detail page will be displayed.

You are here: [Home](#) >> [Users](#) >> User Detail

User Detail

Status: Active

Login Name:*

Full Name:*

Affiliation:

Address:

City:

State:

Zip:

Country:

Phone #:

Email:

NAAS ID:

System Administrator?

Organization Rights:

	Organization	Admin
Edit Delete	WQX Test Organization	<input checked="" type="checkbox"/>
Edit Delete	Gold Systems - Ryan	<input checked="" type="checkbox"/>
Edit Delete	Gold Systems - Shared	<input checked="" type="checkbox"/>
Edit Delete	Katrina Test	<input checked="" type="checkbox"/>
Assign Cancel	<input type="text" value=""/>	<input type="checkbox"/>

Fill in the user information, as appropriate.

Login Name:

This is the user's CDX-Web account name. Note: A user must have a valid CDX-Web account and be granted rights to the WQX: WQX Web application before they will have access to this application.

NAAS ID:

This is the account name used when submitting a WQX Submission File to CDX. This should match the account name created for this user in the WQX System. If a user has an Exchange Network NAAS Account, use it. Otherwise, it's recommended that you fill in

the user's email address here (and use their email address as their account name in the WQX System).

System Administrator Checkbox:

Checking this checkbox will grant the following rights to a user:

- Manage organizations
- Manage users
- View certain types of restricted event logging data
 - This is useful for monitoring the system's performance and following up on potential bugs in the system.

Organization Rights:

Use this section to manage a user's access rights for an organization.

To assign rights to a new organization:

1. Choose an organization from the Organization dropdown list on the last row of the table.
2. Check the Admin checkbox to allow a user to manage that organization's specific list of lookup values in the following tables: Analytical Method, Citation, Index Type, Metric Type, Lab Sample Prep. Method, Sample Collection Method, and Sample Preparation Method.
3. Click the Assign link to apply the changes

To edit rights to an organization:

1. Click the Edit link for the appropriate row.
2. Make changes as necessary.
3. Click the Assign link to apply the changes

To remove rights to an organization:

1. Click the Delete link for the appropriate row.

Click the Save button or the Return button to save your changes.

4.1.1 Enabling/Disabling a User Account

Before a user is allowed access to the system, their user account must be enabled. Click the "Enable User" button on the User Details page to enable a new user (or previously disabled user).

To prevent a user from accessing the system you can disable their account. Click the “Disable User” button on the User Details page to disable a user.

4.2 *Managing Organizations*

1. Click on the Organizations link on the navigation panel to go to the Organizations list page.

You are here: [Home](#) >> Organizations

Organizations

ID	Name
SANDIA	Pueblo of Sandia
WQXTEST	WQX Test Organization
SANCLR	Santa Clara Pueblo
SANANA	Pueblo of Santa Ana
TCEQMAIN	Texas Commission on Environmental Quality
MA_DEP	Massachusetts Department of Environmental Protection
OREGONDEQ	Oregon Department of Environmental Quality
WIDNR_WOX	Wisconsin Department of Natural Resources
21KAN001_WOX	Kansas Dept. of Health & Environment
HUALAPAI	Hualapai Tribe
DEMOTEST	The Commission for a Good Clean Chesapeake Bay
GOLDMARK	Gold Systems - Mark

First Previous Next Last Page 1 of 4

Return Add New

2. To create a new organization, click the Add New button. Otherwise click the link for a specific organization that you wish to view/edit. The Organization Details page will be displayed.

You are here: [Home](#) >> [Organizations](#) >> Organization Detail

Organization Detail

ID:*

Name:*

Description:

Tribe:

Organization Address: (Limit: 3) [Add](#)

Type	Address	Supplemental Address	City/Locality	Country	State	Postal Code	County
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Organization Phone: [Add](#)

Type	Phone Number	Extension
------	--------------	-----------

Organization Email/Web: [Add](#)

Type	Address
------	---------

3. Fill in the Organization information
 - a. Use the Add link to add up to 3 Organization Addresses.
 - b. Use the Add link to add Organization Phone Numbers.
 - c. Use the Add link to add Organization Email/Web Addresses.
4. Click the Save button or the Return button to save the new organization

You are here: [Home](#) >> [Organizations](#) >> Organization Detail

Organization Detail

ID:*

Name:*

Description:

Tribe:

Organization Address: (Limit: 3) [Add](#)

Type	Address	Supplemental Address	City/Locality	Country	State	Postal Code	County	
Mailing	<input type="text" value="3300 S 700 E Suite C"/>	<input type="text"/>	<input type="text" value="Salt Lake City"/>	<input type="text" value="US"/>	<input type="text" value="UT - Utah"/>	<input type="text" value="84112"/>	<input type="text" value="Salt Lake"/>	Remove

Organization Phone: [Add](#)

Type	Phone Number	Extension	
Fax	<input type="text" value="800-123-2343"/>	<input type="text"/>	Remove
Office	<input type="text" value="800-876-9878"/>	<input type="text" value="9786"/>	Remove
Mobile	<input type="text" value="801-876-9876"/>	<input type="text"/>	Remove

Organization Email/Web: [Add](#)

Type	Address	
Email	<input type="text" value="acme@whatever.com"/>	Remove
Internet	<input type="text" value="www.acme.com"/>	Remove
Intranet	<input type="text" value="localhost/acme/index.html"/>	Remove

To remove an address, phone number etc, click the Remove link on the row you wish to remove. Click the Save or the Return button to save the changes.

4.3 Managing Lookup Tables

Lookup tables are a list of allowed values for a given data element. The lists can be used as a reference for the allowable values for an element.

4.3.1 Viewing the Values in a Lookup Table

1. Click on the "Lookup Tables" link in the navigation panel to view the list of Lookup Tables.

You are here: [Home](#) >> [Lookup Tables](#)

Lookup Tables

[ACTIVITY GROUP TYPE](#)

[ACTIVITY MEDIA](#)

[ACTIVITY MEDIA SUBDIVISION](#)

[ACTIVITY TYPE](#)

[ADDRESS TYPE](#)

[Edit](#) [ANALYTICAL METHOD](#)

[ANALYTICAL METHOD CONTEXT](#)

[ASSEMBLAGE](#)

[BIOLOGICAL INTENT](#)

[CELL FORM](#)

[CELL SHAPE](#)

[CHARACTERISTIC](#)

[CHARACTERISTIC PICK LIST VALUE](#)

[CHARACTERISTICS WITH PICK LIST](#)

[Edit](#) [CITATION](#)

[CONTAINER COLOR](#)

[CONTAINER TYPE](#)

[COUNTRY](#)

[COUNTY](#)

[DETECTION QUANT LIMIT TYPE](#)

[ELECTRONIC ADDRESS TYPE](#)

[FREQUENCY CLASS DESCRIPTOR](#)

[HABIT](#)

[HORIZONTAL COLLECTION METHOD](#)

[HORIZONTAL REFERENCE DATUM](#)

[Edit](#) [INDEX TYPE](#)

[Edit](#) [LAB SAMPLE PREPARATION METHOD](#)

[MEASUREMENT UNIT](#)

[METHOD SPECIATION](#)

[Edit](#) [METRIC TYPE](#)

[METRIC TYPE CONTEXT](#)

[MONITORING LOCATION TYPE](#)

[NET TYPE](#)

[ORGANIZATION](#)

[PHONE TYPE](#)

[REFERENCE LOCATION TYPE](#)

[RELATIVE DEPTH](#)

2. Select the link for the table you wish to view (for example, select the Characteristic link).

3. Type in a partial characteristic name such as “sil”.

4. Click the Show Values button. The system will display any matches it finds in the table.

Name	SRS ID	Sample Fraction Required
2,4,5-T + Silvex	966754	Y
Cryptomonas pusilla	1852383	N
Decamethylcyclopentasiloxane	52019	N
Fluorotrimethylsilane	45112	Y
Hexamethylcyclotrisiloxane	52027	Y
Octamethylcyclotetrasiloxane	53975	N
RBP Substrate - Silt 0.004-0.06 mm	1645134	N
RBP2, Habitat type, sand-silt-mud-muck (%)	1644988	N
RBP2, Substrate, Inorganic, Silt, 0.004-0.06 mm	1645134	N
Silica	151977	N
Silicate	962233	N
Silicate/dissolved inorganic nitrogen ratio	17328048	N
Silicon	149831	N
Silicon as SiO2		Y
Silt	52456985	N
Silver	149849	Y
Silver-110	776666	N
Silvex	15057	N
Silvex isooctyl ester	262402	N
Substrate - silt	1645142	N
Substrate - silt, coarse	1645159	N
Substrate - silt, fine	1645167	N
Substrate - silt, medium	1645175	N
Substrate - silt, very fine	1645183	N
Substrate - silt/clay mix	1645191	N

5. Click the Cancel button to return to the Lookup Tables page.

4.3.2 Managing Organization-Specific Values in Certain Lookup Tables

Lookup tables that contain organization-specific values will have an “Edit” link next to them. Click the link to open the lookup table’s Edit Page. Only users that have been granted the "Admin" right on an organization can edit that organization's set of lookup values.

The editable lookup tables have the following required fields:

- Citation: ResourceTitleName, ResourceDate, and ResourceIdentifier are required.
- Analytical Method: Method ID, Context, and Method Name are required.
- Sample Preparation Method: Method ID, Context, and Method Name are required.
- Metric Type: MetricTypeIdentifier, MetricTypeIdentifierContext, and MetricTypeName are required.
- Index Type: IndexTypeIdentifier, the IndexTypeIdentifierContext, and IndexTypeName are required.
- Sample Collection Method: Method Identifier, the Method Identifier Context, and the Method Name fields are required.
- Lab Sample Prep. Method: Method Identifier, Context, and Method Name are required.

1. Select the “Edit” link next to the table name in the list. For example, select the Edit link next to “ANALYTICAL METHOD”. The system will display the edit page for the lookup table.

You are here: [Home](#) >> [Lookup Tables](#) >> Analytical Methods

Analytical Methods

Context:

	ID*	Name*	Description	Qualifier Type
Edit Delete	911.03	Strontium in Water		
Edit Delete	920.13	Inorganic and Organometallic Pesticides		
Edit Delete	920.193(A)	Total Solids in Water		
Edit Delete	920.193(B)	Solids in Solution in Water		
Edit Delete	920.193(C)	Solids in Water by Ignition		
Edit Delete	920.194	Carbonate and Bicarbonate in Water		
Edit Delete	920.195	Silica in Water		
Edit Delete	920.196	Aluminum and Iron in Water		
Edit Delete	920.197(A)	Iron in Water		
Edit Delete	920.197(B)	Iron in Water		

All of the editable lookup tables are filtered by Context or Organization.

2. Select a context from the dropdown list at the top of the page. The list will be filtered to display only values for the context chosen.

Adding a New Value

1. Add the new Analytical Method into the empty text boxes provided at the bottom of the list.

You are here: [Home](#) >> [Lookup Tables](#) >> Analytical Methods

Analytical Methods

Context:

	ID*	Name*	Description	Qualifier Type
Edit Delete	12345	Calcium by FLAA		
Edit Delete	123DEMO	Demo Method	This is an analytical method entered into WQXWeb for demonstration purposes	
Edit Delete	424.1	Method 424	Method Description	QualTypeName
Edit Delete	QAPP	Quality Assurance Project Plan		
Edit Delete	Sontek Flowtrack	SonTek FlowTracker Handheld ADV	Flow is collected using a SonTek/YSI FlowTracker Handheld ADV by taking multiple measurements within a crosssection of stream at 0.6 times total water depth. The recorded flow represents Total Discharge.	
Edit Delete	YSI 6-Series	YSI 6-Series Multi-Parameter Sonde		
Insert Cancel	<input type="text" value="EPA/620/R-01/003-SD"/>	<input type="text" value="EPA/620/R-01/003 Secch"/>	<input type="text" value="The Secchi disk with calibrated tether is used to give a measurement of the transparency of"/>	<input type="text"/>

2. Click the “Insert” link to save the new value. The row will become non-editable and the Insert and Cancel links will be changed into Edit and Delete links, respectively.

Changing a Value in a Lookup Table

1. Click the “Edit” link to change data for a lookup value in the table.
2. Make the changes in the row as necessary.
3. Click the “Update” link to save the changes

Deleting a Value from a Lookup Table

To delete a row from a lookup table, simply click the Delete link next to the row you wish to delete.