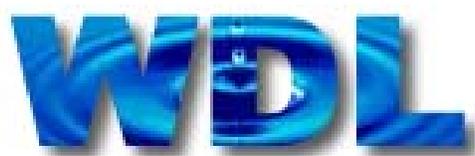


Water Data Library Water Quality Module Data Management



User Manual

Department Of Water Resources
Division of Planning & Local Assistance
And
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Division of Environmental Services

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1.0 Introduction

The Water Data Library (WDL) is an on-line data management system designed to store, manage, and disseminate hydrologic, water quality, climatology, and surface water flow. Although the databases are of disparate design, the collective database is designed to use common data definitions and station definitions. The original system was designed and developed by DWR in collaboration with the College of Business at California State University, Chico.

The WDL Water Quality Module was designed to permanently store and manage all grab sample water quality data and associated quality control data collected by the Department. It helps to satisfy WREM 60, which requires QC Documentation be collected with water quality data. The module is integrated with the Department's Field and Laboratory Information Management System, which is used to plan water quality data collection and to store laboratory data generated at DWR Bryte Water Quality Laboratory.

Because the database is centralized, corrections may be applied by the data owner or by laboratory and are instantaneously available to all.

This training manual provides instruction on how to access data and use administrative functions of the water quality module of WDL.

1.1 Differences Between Public Data And Internal Data

The Water Data Library Water Quality Module stores all data produced by DWR Bryte Lab and some contract labs. The public expectation is that data associated with a station is correct and somehow represents that location. However not all results meet this expectation. For example, the following would be considered data which generally don't meet the public expectation and therefore better suited for internal use:

- Special study samples where the water is treated in special ways do not represent water quality at a given sampling station. These samples have meaning only to the individuals collecting the samples.
- Samples may require review by staff before they are deemed valid so should not be seen by the general public until this step takes place.
- Blanks and Duplicate are important to Quality Control, but would only confuse the public expecting only data representing the sampling location.
- Some results may be associated with litigation and therefore may be confidential.

On the other hand, most data should be publicly available. Here are the criteria that must be met for this to happen:

- Only "Normal" and "Composite" samples are published on the main website.
- Data must be associated with a Validated Station on the Master Stations List.
- The data owner (Activity Unit) must specify that the data are to be published by changing the sample status

The "Admin Login" listed under "DWR Client's Only" provides access to all of your data regardless of its purpose.

In general, data owners have a legal responsibility to publish valid water quality data. This module enables you to do so in a responsible way. Data not meeting the expectation of representativeness, like experimental data, can be provided by other means.

1.2 Public Data Made Automatic

If users were required to handle all data before its release to the public it could become a big job. Although users may choose to do business this way, it is also possible to configure data before the request even reaches Bryte Lab so that it is automatically accessible by the public. In addition, data may also be pre-associated with User Projects to that it is

automatically selectable by subject. These options may be set up as defaults in the FLIMS Field Module. Once configured (and stations moved to the Master Stations List) data can automatically be published. Because the data are entered directly at Bryte Lab, the values reported by the lab are the same in the WDL database. There are no transcription errors and the data are QC'd by the lab as part of their normal business. If data are later found to be in error (rare), they may be retracted or corrected.

1.3 How WDL Data are Found on the Public Web Pages

In publishing your data it is helpful to consider how the public will find your data. If you do nothing more than 'publish', the data can only be found by map or station information. However, there are other, more powerful ways to find your data if you choose to utilize them.

When the public goes to the WDL website, they see the following screen:

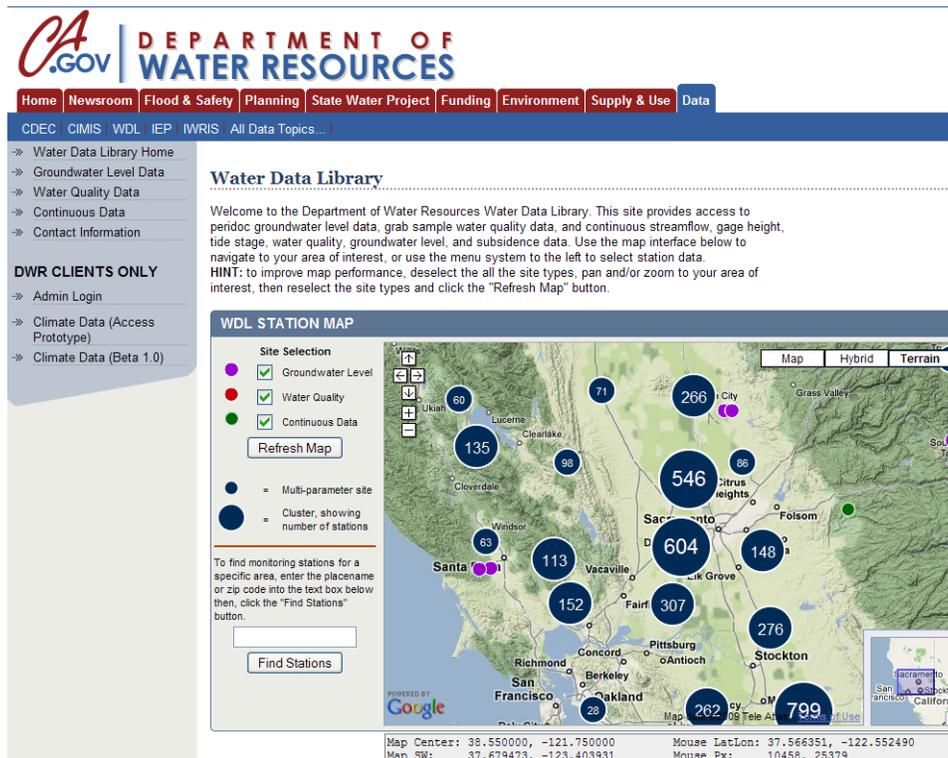


Figure 1-1 WDL Welcome Screen

1.3.1 Find Using Map

Users may drag the map to the area of interest. They may zoom in to the map by double-clicking until they reach the level where the individual 'dots' resolve into singles. At that point, clicking on the dot lists the station name and data available. Clicking on the appropriate brings up the desired data. This is a very cool, but limited search tool, best used for exploring.

In addition to the zoom feature, users may find stations in a specific area by entering a Zip Code or a City or Landmark name. This quickly zooms the map in to an area of interest. If your data are 'published' your station will show up regardless of how the user navigated the map.

1.3.2 Find Using Station Name, Number or County

Selecting the Water Quality Data link to the left of the map brings up additional ways to find stations of interest. The first is to find the station by all or part of the Station Name, Number or county. If the user knows the station he or she is looking for this can be a quick search. If they do not, there are other alternatives.

1.3.3 Find by User Project

Selecting the Water Quality Data link to the left of the map brings up additional ways to find stations of interest. If you have interested parties who want to find only your data – or data from a specific activity or study – this is the search for them. Users don't need to know all of the station names or the dates – but if they know the name of the project – they can get the data using this choice. In order for them to find your data, several things must be true.

1. Your data must meet the criteria for being published and flagged for publishing
2. Your data must be associated with a project
3. The project name must be published

Users find your project in a pick list, and narrow the search by date range. Note that on the public side your project name will fall in with all other project names published by other DWR organizations – so the name should be easy to recognize.

1.3.4 Find by Station Group (Not yet available)

Selecting the Water Quality Data link to the left of the map brings up additional ways to find stations of interest. A station group is simply a named group of stations which when selected makes several stations available at once. It does not require special tagging like User Project, however it provides all data – not just that in a narrow study, as an example. The requirements for finding by Station Group are:

1. Your data must meet the criteria for being published and flagged for publishing.
2. The Station Group must be published

Users find the station group in a pick list, and narrow the search by date range. Station Groups should be named descriptively since they will share the list with other published groups.

1.4 Purpose of the Internal Data Management Web Pages

The purpose of the internal WDL WQ Module web pages is to

- Retrieve all data owned by your data collection group (Activity Unit) including data not available on the public website.
- Retrieve internal data shared by another Activity Unit
- Edit Sample Information
- Edit or Add Field Data
- Flag samples for public access
- Create and manage User Projects and Station Groups
- Manage user logins and data management rights

2.0 Getting Started

2.1 Accessing the Water Data Library

Water Data Library modules are accessible at <http://www.water.ca.gov/waterdatalibrary>. This site is available to both DWR users and the public. This manual covers data management features available only to internal DWR users.

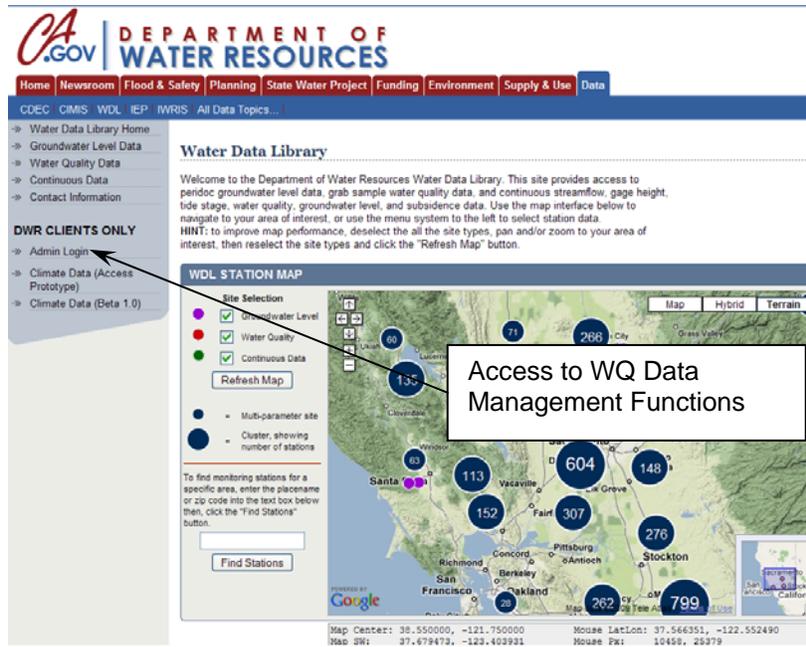


Figure 2-1 Water Data Library Home Page

2.2 Login

In order to access the Administrative login you must access the web page from a DWR computer or you must log in via VPN. Administrative functions are accessible only to authorized users of the system; therefore you must contact your data administrator or the WDL webmaster to register your Username and Password. At the time your account is created you will also be assigned an access level. “Read Only” users may find and output internal data. “Edit” access allows the user to edit Sample and Field Data and to release data for public viewing. “Admin” rights allow the user to create useful definitions for section and to manage user accounts.

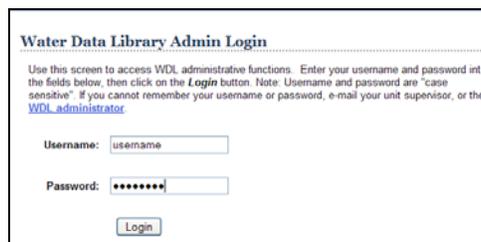


Figure 2-2 WDL Login

The first time you click on the “WQ Admin” link on the left you will be required to log in. The Administration Login screen is Figure 2-2. Enter your User Name and Password in the appropriate boxes and click on the “Login” button.

Please Note: The user name and password are a maximum of eight characters each, and are case-sensitive. If you can't remember your username and password, or need to set up a new account, contact the data administrator in your section, the WDL webmaster at wdlweb@water.ca.gov, or the WDL database administrator at wdldba@water.ca.gov.

For security reasons, your session will time-out if left idle for an extended period of time. If your session times out you will be returned to the login screen.

After successful completion of the Administration Login, you will be directed to the Water Quality Admin Functions page where you will be presented with one or more choices (Figure 2-3). One will lead you to Water Quality Data Administration and Internal Reports.



Figure 2-3 WDL Admin Functions

2.3 Water Quality Admin Functions Menu

The Water Quality Admin Functions Main Menu is shown below. At this point you have access to all grab sample WQ data 'owned' by your Activity Unit (Roughly your Section). Depending on your user level and the privileges assigned, you may not see all of the functions shown below. The Water Quality Admin Menu provides access to functions that let you add, modify, and delete records in WDL. In addition, this menu provides access to specific report data reports and database retrieval functions available only to DWR clients.

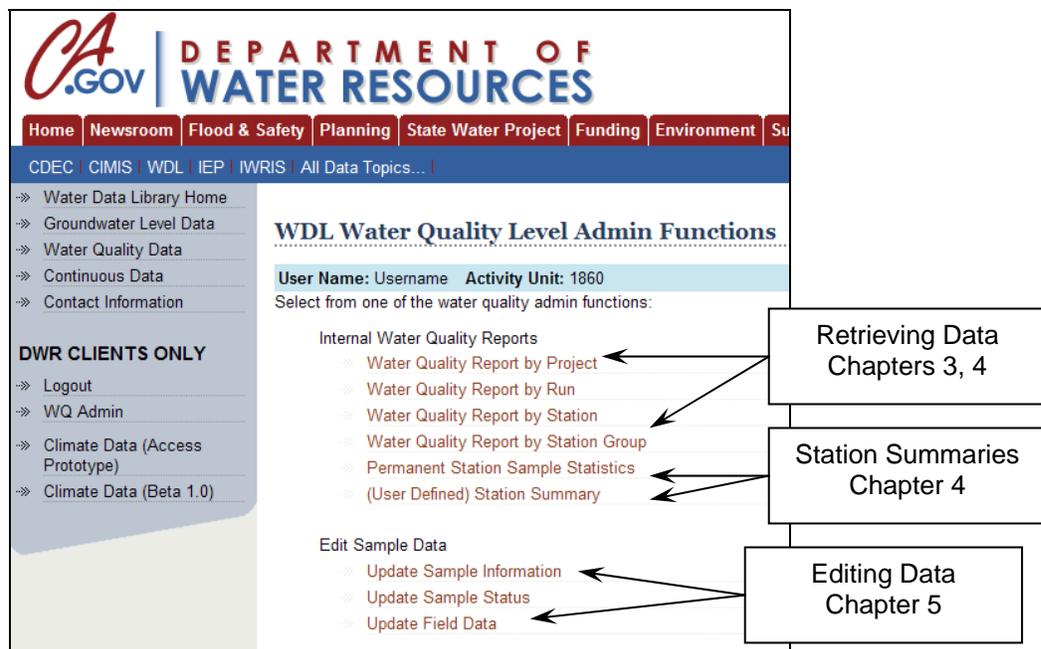


Figure 2-4 WDL WQ Main Menu for Read and Edit Access

3.0 Retrieving Data

3.1 Search Parameters

Data are most easily analyzed in blocks using specialized statistical programs or spreadsheets. These programs do a great job of analysis, but a lousy job of storing the data over the long haul. Data storage is a function best performed by a database. However, even in a database, the challenge is in figuring out how to retrieve all of the data you want in an efficient manner.

The public face of the WDL WQ module allows users to find data by indication one or more locations or selecting a Project Name. A Project, to be discussed in later sections, is simply a named activity associated with specific groups of samples. It allows users to find data essentially by subject and date without knowing the actual locations.

The internal website also allows users to find data by named Field Run. This is information significant only to the group of samplers and the analysts working with them. However it is often the quickest way to find recently collected data and data collected for a single purpose.

Whether creating reports or selecting data to update, you will use Station, Run, or Project – plus time – to select the records of interest. In addition, you may be creating new Station Groups or Projects as tools to aid your staff and outside users in finding the data records they are looking for.

3.2 Date Range

All queries require the specification of date range. When you select the type of search you will use, the first thing you will usually encounter is a request for date range. The default date range will be the past six months, ending with the current date. You may change the beginning and ending date as you wish, within the following limitations.

- You may not search for dates later than the current date
- Wider date ranges will usually result in more samples to be retrieved, increasing the amount of time needed for retrieval.
- Searching for stations or projects not existing within your date range will of course result in no samples retrieved.

3.3 Refresh Button



The image shows a user interface for selecting a date range. It consists of the text "Date Range:" followed by three dropdown menus for the start date: "Feb", "6", and "2009". This is followed by the word "to" and three more dropdown menus for the end date: "Aug", "6", and "2009". Below these date selections is a rectangular button labeled "Refresh Run List".

Figure 3-1 Date Range Refresh Button

Helper tools are provided to determine whether the stations, runs or projects you want may be found within the date range you have specified, thus saving time and frustration. Click the “Refresh” button after you have specified the desired data range to refresh the list of valid items in the list. Be sure to click the refresh button each time you change the date range.

3.4 Stations

Stations are (usually) the locations where the samples were collected. However there are two other types of stations.

- (None), which means that there is no location associated with the sample (often used with Blanks).
- (User Defined), stations which haven't yet been validated and moved into the Master Stations List.

The internal website treats stations in a significantly different way than the public website. The public website can display only validated stations in the "Master Stations List". The internal website shows all stations, including those currently existing as temporary definitions. Instructions on how to move stations from the "Temporary List" to the "Permanent List" will be provided in a later section.

Selecting stations in the internal website is relatively simple. Once a date range has been selected and the stations list refreshed, users may select one or more stations by highlighting stations in the list.

3.5 Multiple Stations

Users may select multiple stations by holding down either the Shift Key (Selects all stations between your first click and second click) or Control Key (Selects each station you click on).

3.6 Station Groups

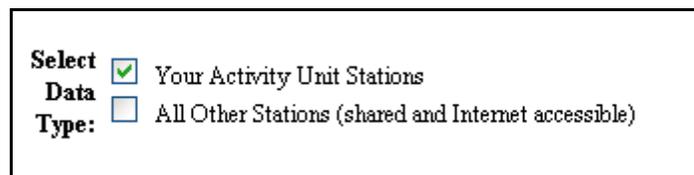
Station Groups are created by your database administrator and are intended to save time and effort in selecting stations which you typically review together. Station groups have a similar function to User Projects with this distinction; Station Groups act on all samples in the database. User Projects act only on specific samples flagged to be in the given project.

3.7 Multiple Station Groups

If such a group or groups have been created, you may select the group by name or select multiple groups by holding down either the Shift Key (Selects all station groups between your first click and second click) or Control Key (Selects each station group you click on).

3.8 Internally Shared Station Data

Although you are given direct access to only the data owned by your Activity Unit, other Activity Units within DWR may choose to share their data with you (or you with them). This is useful when you are involved in collaborative studies and need to use internal data collected by other organizations within DWR. If your group has been designated to see data from other Activity Units – you may optionally see the data when viewing by Station, Station Group, or Project.



The image shows a rectangular dialog box with a black border. On the left side, the text "Select Data Type:" is displayed in a bold, black font. To the right of this text are two radio button options. The first option consists of a checked radio button (a small square with a white checkmark inside) followed by the text "Your Activity Unit Stations". The second option consists of an unchecked radio button (a small empty square) followed by the text "All Other Stations (shared and Internet accessible)".

Figure 3-2 Selecting Shared Data

3.9 Runs

Runs are set up by your section's field staff. A run is a group of samples collected (usually) on a single outing. If you are reviewing your data before you release it for public viewing you will probably prefer to view the data by Run Name.

3.10 Multiple Runs

You may select the multiple run names by holding down either the Shift Key (Selects all runs between your first click and second click) or Control Key (Selects each run you click on).

3.11 Projects

Samples may be associated with tags called 'User Projects'. A project can represent all of the information associated with a routine activity, or a special study, or a report. Samples are most simply associated with projects as they are defined by field staff using the FLIMS Field Module, however a sample can be assigned to new projects at any time by persons granted Edit Access or greater. Retrieving data by project can be a very efficient way of finding the samples important to you.

3.12 Multiple Projects

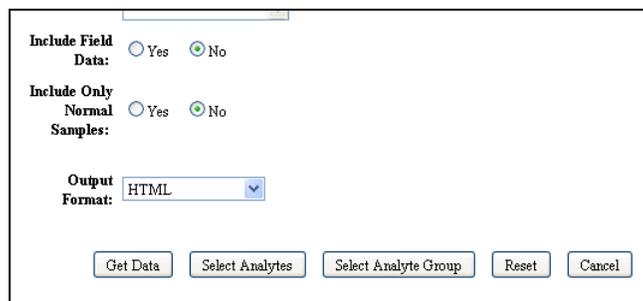
You may select the multiple Projects by holding down either the Shift Key (Selects all Projects between your first click and second click) or Control Key (Selects each Project you click on).

4.0 Data Reports

All persons with Read Access or better may view Data Reports. The method of selecting the samples to be viewed in a report is discussed in Section 3. Once the parameters of selection have been specified, reports may be further defined by several options to be discussed in the following paragraphs. However, the basic report may be viewed without specifying any further information. The sequence for specifying the sample in a report is:

- 1) Indicate how you will select the data (Station, Station Group, Run, Project)**Error! Bookmark not defined.**
- 2) Enter the Date Range, and click the Refresh Button
- 3) Select the desired Station, Station Group, Run or Project
- 4) Click the 'Get Data' button.

In addition, there are many options for refining your search and displaying the data. This section covers each of those options.



The screenshot shows a dialog box titled "Report Options". It has two sections for radio button selection. The first section is "Include Field Data:" with "Yes" and "No" options; "No" is selected. The second section is "Include Only Normal Samples:" with "Yes" and "No" options; "No" is selected. Below these is an "Output Format:" dropdown menu currently showing "HTML". At the bottom of the dialog are five buttons: "Get Data", "Select Analytes", "Select Analyte Group", "Reset", and "Cancel".

Figure 4-1 Report Options

4.1 Option: Include Field Data

Select Yes to include Field Data

4.2 Option: Include Only Normal Samples

Normal Samples are those which represent the water quality of the Station. If you select this option, QC Samples, and other special purpose samples will be excluded. If you can't find your samples, try un-checking this box.

4.3 Option: Select Analytes (Button)

There are situations where you don't want to see the results for all of the analytes that were measured for the samples you selected. You can optionally choose to select individual analytes by clicking on the "Select Analytes" button. The next screen will provide a list of analytes click the box next to any desired analyte before continuing.

You may select or de-select all listed analytes by clicking in the box next to Select in the Column Header.

Select Report Analytes

Instructions:
Use this screen to refine search parameters for water quality data. Mark analytes for retrieval by clicking in the checkbox next to the analyte name and choose an output format for the data. Click on the **Get Data** button to retrieve the selected data.

<input type="checkbox"/> Select	Analyte Name
<input type="checkbox"/>	Alkalinity
<input type="checkbox"/>	Aluminum
<input type="checkbox"/>	Ammonia
<input type="checkbox"/>	Arsenic
<input type="checkbox"/>	Boron
<input type="checkbox"/>	Cadmium
<input type="checkbox"/>	Calcium
<input type="checkbox"/>	Chloride

Figure 4-2 Select Analytes

4.4 Option: Select Analyte Group (Button)

Analyte Groups are pre-defined groupings of analytes that may have significance to your program. Analyte Groups may be created specifically for your program. Currently this must be done by the WDL WQ Database Administrator. Contact the administrator if you desire this option.

Select the desired pre-defined Analyte Group for display in your report. You may select more than one analyte group at a time by clicking the appropriate box. Select or Deselect All is a quick way to fill or clear the desired analyte groups.

Instructions:
Use this screen to refine search parameters for water quality data. Mark analytes for retrieval by clicking in the checkbox next to the analyte name and choose an output format for the data. Click on the **Get Data** button to retrieve the selected data.

<input type="checkbox"/> Select	Analyte Group Name (Activity Unit 4804)
<input type="checkbox"/>	DWR Minerals Suite
<input type="checkbox"/>	Metals
<input type="checkbox"/>	Nutrients

Figure 4-3 Select Analyte Group

4.5 Report Formats

Nearly all reports are available in one of three different file types:

- HTML (Web Page) ,
- MS Excel Spreadsheet, or
- Comma Separated Variable (Text).

Each file type is available in two different formats:

- List Form; where each analyte is a record in a list.
- Crosstab, or Tabular, Form; where each analyte is a Column in a Table.

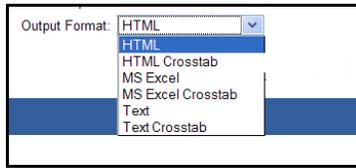


Figure 4-4 Report Formats

4.5.1 HTML Format

HTML Format is the easiest to view and works well for data review.

Water Quality Report				
The analytical results corresponding to Run Name(s): 'Clear Lake/Cache C May,Jul,Sep,Jan' for date range Feb/6/2009 to Aug/6/2009 are listed in the table below.				
Station Name: CLEAR LK 23 OAKS ARM CL4 (ID:2418)			Station Number: A8L90072417	
Collection Date: 05/28/2009 08:40			Sample Code: NA0509B0343	
Depth: 0.5 Meters Matrix: Water, Natural		Purpose: Normal Sample Sample Parent: 0		
Sample Owner Code: 4804			Aliquot Status ID: 3000	
Description:				
Analyte	Result	Rpt Limit	Units	Method [1]
Dissolved Ammonia	< R.L.	0.01	mg/L as N	EPA 350.1 [1]
Dissolved Nitrate + Nitrite	< R.L.	0.01	mg/L as N	Std Method 4500-NO3-F (28Day) [1]
Dissolved Ortho-phosphate	< R.L.	0.01	mg/L as P	EPA 365.1 (DWR Modified) [1]
Total Phosphorus	0.02	0.01	mg/L	EPA 365.4 [1]
Field Result(s):				
Water Temperature	22.6	0.1	°C	EPA 170.1 (Field) [1]
Conductance (EC)	307	1	µS/cm	EPA 120.1 (Field) [1]
Secchi Depth	4	0.1	Meters	Secchi Depth (Field) [1]
Dissolved Oxygen	9.3	0.1	mg/L	EPA 360.2 (Field) [1]
Turbidity	1	1	N.T.U.	EPA 180.1 (Field) [D-2]
pH	8.7	0.1	pH Units	EPA 150.1 (Field) [1]

Figure 4-5 HTML Format Report

4.5.2 HTML Crosstab Format

Water Quality Crosstab Report											
Laboratory Results											
Station Name	Station Number	Sample Date	Sample Code	Sample Depth	Sample Description	Sample Purpose	Parent Sample Code	Dissolved Ammonia mg/L as N EPA 350.1 [1]*	Dissolved Nitrate + Nitrite mg/L as N Std Method 4500-NO3-F (28Day) [1]*	Dissolved Ortho-phosphate mg/L as P EPA 365.1 (DWR Modified) [1]*	Total Phosphorus mg/L EPA 365.4 [1]*
(None)	(NONE)	05/28/2009 16:00	NA0509B0348	Meters		Blank; Equipment	0	<0.01	0.02	<0.01	N/A
(None)	(NONE)	05/28/2009 16:00	NA0509B0350	Meters		Blank; Field	0	N/A	N/A	N/A	<0.01
CACHE C NR LOWER LK	A8135000	05/28/2009 14:30	NA0509B0347	0.15 Meters	N	Normal Sample	0	<0.01	<0.01	<0.01	0.08
CLEAR LK 15-UP ARM CL-1	A8L90382519	05/28/2009 11:30	NA0509B0341	0.5 Meters		Normal Sample	0	<0.01	<0.01	<0.01	0.02
CLEAR LK 15-UP ARM CL-1	A8L90382519	05/28/2009 11:30	NA0509B0342	6 Meters		Normal Sample	0	<0.01	<0.01	0.03	0.04
CLEAR LK 15-UP ARM CL-1	A8L90382519	05/28/2009 11:30	NA0509B0349	0.5 Meters		Replicate Sample	NA0509B0341	<0.01	0.02	0.01	0.02
CLEAR LK 23	A8L90072417	05/28/2009	NA0509B0343	0.5		Normal	0	<0.01	<0.01	<0.01	0.02

Figure 4-6 HTML Format Crosstab Report

4.5.3 HTML Format Field Data Example

If you have checked Include Field Results, all reports will include a separate Field Result section at the end of Lab Results. In the HTML format field results are gray/white and located at the end of the lab results.

Field Result(s):			
Water Temperature	23.6	0.1 °C	EPA 170.1 (Field) [1]
Conductance (EC)	305	1 µS/cm	EPA 120.1 (Field) [1]
Secchi Depth	6.4	0.1 Meters	Secchi Depth (Field) [1]
Dissolved Oxygen	8.4	0.1 mg/L	EPA 360.2 (Field) [1]
Turbidity	0.7	1 N.T.U.	EPA 180.1 (Field) [D-2]
pH	8.5	0.1 pH Units	EPA 150.1 (Field) [1]

Figure 4-7 Field Data Example - HTML Format

4.5.4 Excel Format

	A	B	C	D	E	F	G	H	I	J	K	L
1	Long Station	Short Station	Station Nur	Sample Code	Collection Date	Analyte	CAS Reg. N	Result	Rpt Limit	Units	Method	
2	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Total Alkalinity	471341	82	1	mg/L as Ca	EPA	
3	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Dissolved Boron	7440428	0.2	0.1	mg/L	USG	
4	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Bromodichloromethane	75274	120	10	µg/L	DWF	
5	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Bromoform	75252	< R.L.	1	µg/L	DWF	
6	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Dissolved Calcium	7440702	51	1	mg/L	EPA	
7	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Dissolved Chloride	16887006	102	1	mg/L	EPA	
8	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Chloroform	67663	2600	10	µg/L	DWF	
9	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Color	0	200	5	Color Units	EPA	
10	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Conductance (EC)	0	854	1	µS/cm	EPA	
11	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Dibromochloromethane	124481	< R.L.	10	µg/L	DWF	
12	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Hardness	0	279	1	mg/L as Ca	Std	
13	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Dissolved Magnesium	7439954	37	1	mg/L	EPA	
14	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Total Organic Carbon	0	34	0.1	mg/L as C	EPA	
15	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Dissolved Potassium	7440097	2.9	0.1	mg/L	EPA	
16	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Dissolved Selenium	7782492	< R.L.	0.001	mg/L	EPA	
17	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Dissolved Sodium	7440235	70	1	mg/L	EPA	
18	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Total Dissolved Solids	0	593	1	mg/L	EPA	
19	Ag Drain oi	BRANNANF	B9V80671	3C0188A0019	1/19/1988 10:00	Dissolved Sulfate	14808798	162	1	mg/L	EPA	

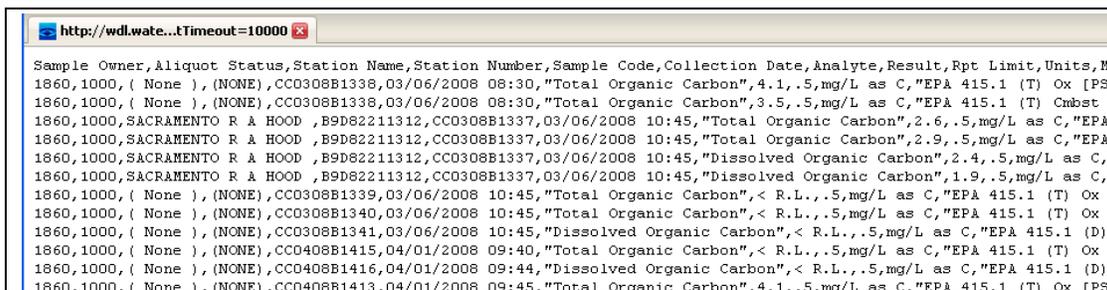
Figure 4-8 Excel Format Report

4.5.5 Excel Crosstab Format

	A	B	C	D	E	F	G	H	I	J	K	L
1	<<<Laboratory Results>>>											
2	Station Nar	Sample Date	Sample Coc	Sample Dep	2,4-D µg/	Alachlor µ	Total Alk al	Atrazine µ	Dissolved t	Bromodich	Bromoform	Dissolved C
3	Ag Drain oi	1/19/1988 10:00	C0188A0011	Meters	N/A	N/A	82 N/A	0.2	120	<1		51
4	Ag Drain oi	3/10/1988 8:11	C0388A0151	Meters	N/A	N/A	88 N/A	0.3	120	<1		28
5	Ag Drain oi	4/21/1988 7:50	C0488A0211	Meters	N/A	N/A	88 N/A	0.2 N/A		N/A		20
6	Ag Drain oi	5/9/1988 7:19	C0588A0311	Meters	N/A	N/A	101 N/A	0.3	120	<1		20
7	Ag Drain oi	7/21/1988 7:37	C0788A0411	Meters	<.25	<.1	60 <.1	0.1	95	<1		14
8	Ag Drain oi	1/6/1989 9:30	C0189A0001	Meters	N/A	N/A	60 N/A	0.2	150	<1		47
9	Ag Drain oi	4/20/1989 7:49	C0489A0211	Meters	N/A	N/A	86 N/A	0.2	126	<1		34
10												
11	*Codes in brackets () following the analyte name refer to the Method Comparability Code. For more information, please refer to http://wdl.wate											
12	**More than one analysis was made for this sample											
13												

Figure 4-9 Excel Format Crosstab Report

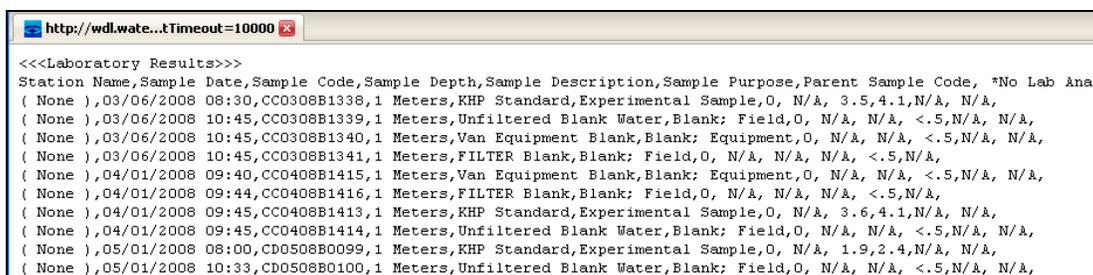
4.5.6 Text (CSV Format)



```
http://wdl.wate...tTimeout=10000
Sample Owner,Aliquot Status,Station Name,Station Number,Sample Code,Collection Date,Analyte,Result,Rpt Limit,Units,Me
1860,1000,( None ),(NONE),CC0308B1338,03/06/2008 08:30,"Total Organic Carbon",4.1,.5,mg/L as C,"EPA 415.1 (T) Ox [PS-
1860,1000,( None ),(NONE),CC0308B1338,03/06/2008 08:30,"Total Organic Carbon",3.5,.5,mg/L as C,"EPA 415.1 (T) Cmbst [
1860,1000,SACRAMENTO R A HOOD ,B9D82211312,CC0308B1337,03/06/2008 10:45,"Total Organic Carbon",2.6,.5,mg/L as C,"EPA
1860,1000,SACRAMENTO R A HOOD ,B9D82211312,CC0308B1337,03/06/2008 10:45,"Total Organic Carbon",2.9,.5,mg/L as C,"EPA
1860,1000,SACRAMENTO R A HOOD ,B9D82211312,CC0308B1337,03/06/2008 10:45,"Dissolved Organic Carbon",2.4,.5,mg/L as C,"
1860,1000,SACRAMENTO R A HOOD ,B9D82211312,CC0308B1337,03/06/2008 10:45,"Dissolved Organic Carbon",1.9,.5,mg/L as C,"
1860,1000,( None ),(NONE),CC0308B1339,03/06/2008 10:45,"Total Organic Carbon",< R.L.,.5,mg/L as C,"EPA 415.1 (T) Ox [
1860,1000,( None ),(NONE),CC0308B1340,03/06/2008 10:45,"Total Organic Carbon",< R.L.,.5,mg/L as C,"EPA 415.1 (T) Ox [
1860,1000,( None ),(NONE),CC0308B1341,03/06/2008 10:45,"Dissolved Organic Carbon",< R.L.,.5,mg/L as C,"EPA 415.1 (D)
1860,1000,( None ),(NONE),CC0408B1415,04/01/2008 09:40,"Total Organic Carbon",< R.L.,.5,mg/L as C,"EPA 415.1 (T) Ox [
1860,1000,( None ),(NONE),CC0408B1416,04/01/2008 09:44,"Dissolved Organic Carbon",< R.L.,.5,mg/L as C,"EPA 415.1 (D)
1860,1000,( None ),(NONE),CC0408B1413,04/01/2008 09:45,"Total Organic Carbon",4.1,.5,mg/L as C,"EPA 415.1 (T) Ox [PS-
```

Figure 4-10 Text (CSV) Format Report

4.5.7 Text (CSV) Crosstab Format



```
http://wdl.wate...tTimeout=10000
<<<Laboratory Results>>>
Station Name,Sample Date,Sample Code,Sample Depth,Sample Description,Sample Purpose,Parent Sample Code,*No Lab Anal
( None ),03/06/2008 08:30,CC0308B1338,1 Meters,RHP Standard,Experimental Sample,0, N/A, 3.5,4.1,N/A, N/A,
( None ),03/06/2008 10:45,CC0308B1339,1 Meters,Unfiltered Blank Water,Blank; Field,0, N/A, N/A, <.5,N/A, N/A,
( None ),03/06/2008 10:45,CC0308B1340,1 Meters,Van Equipment Blank,Blank; Equipment,0, N/A, N/A, <.5,N/A, N/A,
( None ),03/06/2008 10:45,CC0308B1341,1 Meters,FILTER Blank,Blank; Field,0, N/A, N/A, N/A, <.5,N/A,
( None ),04/01/2008 09:40,CC0408B1415,1 Meters,Van Equipment Blank,Blank; Equipment,0, N/A, N/A, <.5,N/A, N/A,
( None ),04/01/2008 09:44,CC0408B1416,1 Meters,FILTER Blank,Blank; Field,0, N/A, N/A, N/A, <.5,N/A,
( None ),04/01/2008 09:45,CC0408B1413,1 Meters,RHP Standard,Experimental Sample,0, N/A, 3.6,4.1,N/A, N/A,
( None ),04/01/2008 09:45,CC0408B1414,1 Meters,Unfiltered Blank Water,Blank; Field,0, N/A, N/A, <.5,N/A, N/A,
( None ),05/01/2008 08:00,CD0508B0099,1 Meters,KHP Standard,Experimental Sample,0, N/A, 1.9,2.4,N/A, N/A,
( None ),05/01/2008 10:33,CD0508B0100,1 Meters,Unfiltered Blank Water,Blank; Field,0, N/A, N/A, <.5,N/A, N/A,
```

Figure 4-11 Excel (CSV) Crosstab Format Report

4.6 List vs Crosstab Advantages and Disadvantages

List format output, particularly the HTML version, is convenient for viewing the results of a few samples. Because there is only one result per record, the results are relatively easy to review because the table is not too wide. Data retrieval is much faster than the Crosstab version and more samples may be downloaded before the time limit is imposed by the website.

Crosstab formatted reports look more like a finished table of results, therefore are most like data if it were stored in a spreadsheet. However, there are a few disadvantages: Crosstab tables separate analytes by method. Therefore if an analyte is analyzed by multiple methods, each will have a separate column. If the user wishes to combine results from different methods they must do so manually. (See Method Comparability Code before combining results). Crosstab reports are potentially very wide if there is a large number of analytes. Also, Crosstab reports take much more processing time to be created.

4.7 Adapting Reports for Data Analysis

A major reason for pulling a copy of your data from the Water Data Library is to analyze it in other programs such as statistical or spreadsheet programs. The following sections provide useful background information and guidance on how best to treat the data once it has been downloaded.

4.7.1 Report Field (Column Name) Summary

Aliquot Status ID: Identifies whether sample is currently viewable by internal users

Analyte: The constituent being analyzed.

Collection Date: The date and time the sample was collected.

Depth: Depth of sample collection
 Method Comparability Code: The Method Comparability Code provides advice about whether the Results from one method should be combined with those from a different method.
 Method: The analytical method used to measure the analyte.
 N.A. : Not Analyzed
 Owner Code: Activity Unit responsible for the sample data.
 Purpose: +, Sample Purpose, what the sample should be interpreted as: e.g. Normal Sample, Blank, Experimental Sample.
 Result: The concentration of the analyte. N.A.=Not analyzed, < R.L.= Below Reporting Limit
 Rpt Limit: Method Reporting Limit; the lowest reliably reportable concentration.
 Sample Description: Description of the Sample; provides additional information about the sample beyond Location, Depth, Date, Matrix, and Purpose.
 Sample Parent: If the sample is a replicate or subsample – provides the Sample Number of the related sample. Zero means no parent.
 Station ID: The WDL Database ID for the Station.
 Station Name: The Full Station Name
 Station Number: Official DWR Station Number (Unless User Defined)
 Units: The units that the Analyte is measured in. e.g. mg/L.
 [1], [2], [*] : See Method Comparability Code
 < R.L. : Result is below the Reporting Limit. Generally this means the analyte was not found

4.7.2 Sample Purpose

Unlike public data reports, which include only Normal and Composite samples, internal reports may include samples of all types if so desired. Users should be aware of the sample purpose (Purpose) of data records in internal reports. Samples of different purpose usually should not be mixed together. E.g., blanks or experimental samples should not be accidentally mixed in with “normal” data samples when calculating averages or interpreting results.

4.7.3 Units

Some analytical results, particularly nutrients, are reported as something else; e.g. units may be expressed as mg/L as N, as P, as S, as SiO₂, as C, etc. Users sometimes want to know why – for example – why Nitrate is not reported as NO₃. The simple answer is that analytes are always reported as themselves. The mg/L as XX is used only when the result is converted to something else, such as N.

4.7.4 Method Comparability Code

WDL displays results showing both the analyte and the method by which it was analyzed. Some methods yield results which should not or cannot be directly compared with the results from other methods – even though the analyte name is the same. The Method Comparability Code provides advice about whether the Results from one method should be combined with those from a different method. Data downloaded in crosstab tables will be separated by method – but can safely re-combined if the method comparability codes are the same. **Results from differing comparability codes should only be combined with full knowledge of the implications to your data interpretation.**

Dissolved Nitrate	5.1	0.1	mg/L	EPA 300.0 28d Hold [1]
Dissolved Nitrate + Nitrite	0.96	0.01	mg/L as N	Std Method 4500-NO ₃ -F (28Day) [1]
Total Organic Carbon	5.2	0.5	mg/L as C	EPA 415.1 (T) Ox [PS-3]
Dissolved Organic Carbon	4.9	0.5	mg/L as C	EPA 415.1 (D) Ox [PS-3]
Dissolved Organic Carbon	4.2	0.5	mg/L as C	EPA 415.1 (D) Cmbst [PS-2]

Figure 4-12 Method Comparability

Method comparability codes and hyperlinks to the Method Comparability Code table are provided as an annotation to each method, and the bottom of each report. A summary of all method comparability codes is provided in the next figure. Be sure to check the website for updates to this list.

Code	Comparability Category	Description
1	Standard Analytical Method	1: Data comparable to others in this category within accuracy and precision limits. Filtered samples use standard filter pore sizes.
D-1	Analyte Definition Drift	D-1: Turbidity by Jackson Candle Method. Not comparable to other turbidity measurements.
D-2	Analyte Definition Drift	D-2: Turbidity using light side-scatter measurement. Not comparable with D-1. Differences with D-3 are most pronounced at high values or in colored waters.
D-3	Analyte Definition Drift	D-3: Turbidity by light side-scatter measurement, compensated by color and absorbance. Not comparable with D-1. Differences with D-2 are most pronounced at high values or in colored waters.
Ex	Experimental or Research Method	Ex: Not intended for comparison to routine methodologies. Specific knowledge of the method required.
FP-0	Formation Potential	FP: General Caution. Formation Potential Methods should always be examined to be sure of their comparability.
FP-1	Formation Potentials	FP-1: Formation Potential using fixed chlorination, 7 day incubation, unbuffered. Comparable to FP-2 if DOC < 10, Not comparable if DOC > 20. DWR Method. Not comparable with FP-3 or FP-4.
FP-2	Formation Potentials	FP-2: Formation Potential using fixed chlorination, 7 day incubation, with buffering. Comparable to FP-1 if DOC < 10. DWR Method. Not comparable with FP-3 or FP-4.
FP-3	Formation Potentials	FP-3: Reactivity Based Formation Potential using 7 day incubation. Variable chlorination. Not comparable with FP-1, FP-2 or FP-4.
FP-4	Formation Potentials	FP-4: Simulated Distribution System Formation Potential - 24 Hr incubation. Variable Chlorination. Not comparable with FP-1, FP-2 or FP-3.
I-0	Change in Measurement Method	I-0: Change in Measurement Method. Instrumentation changes make comparability between measurements difficult. Care in mixing data of unlike codes is advised.
I-1	Change in Measurement Method	I-1: Change in Measurement Method. Instrumentation changes make comparability between measurements difficult. Care in mixing data of unlike codes is advised.
I-2	Change in Measurement Method	I-2: Change in Measurement Method. Instrumentation changes make comparability between measurements difficult. Care in mixing data of unlike codes is advised.
P/A	Presence/Absence	P/A: Lack of preservation and long holding times make reported values unreliable. Method valuable only for indicating presence or minimum concentration values.
PS-1	Particle Size Dependent	PS-1: Filtered using non-standard filter pore size. Analysis not necessarily comparable with other filtered results.
PS-2	Particle Size Dependent	PS-2: Particle Size Dependent Results, (Combustion Method). May not be comparable to Non PS-2 results.
PS-3	Particle Size Dependent	PS-3: Particle Size Dependent Results, (Oxidation Method). May not be comparable to Non PS-3 results.
S	Soil Measurement	Measurement in soil.
SE-0	Extraction Strength (Soils)	SE-0: Analyte found in water from soils or extracted using deionized water. Not comparable to SE-1 or SE-2.
SE-1	Extraction Strength (Soils)	SE-1: Analyte found in weak acid soil extract. Not comparable to SE-0 or SE-2.
SE-2	Extraction Strength (Soils)	SE-2: Analyte found in liquid from strong acid soil digestion. Not comparable to SE-0 or SE-1.
Sur	Surrogate Measure	Sur: Surrogate measurement substituted for direct analyte measurement. Assumes a relationship between the surrogate and the analyte. May not be comparable to direct measurements.
T	Tissue	Measurement in tissue.
Unk	Unknown Method	Unk: Unknown or Undocumented Method. Data usually from non-DWR laboratories. Data comparability unknown.
UnkH	Unknown Historical Method	UnkH: Unknown Historical Method. Data comparability is unknown because exact historical method is unknown. Users should research likely comparability if combining with modern data.

Figure 4-13 List of Comparability Codes

4.7.5 Adapting Text Fields For Numeric Analysis

If you are importing data from the WDL WQ module into your own database or spreadsheet for analysis, you will prefer that results be expressed as numbers for easier analysis. Here are some suggested Find/Replace substitutions for Result which may serve your needs.

N.A. – Replace with Null (nothing) since there is no result.

< R.L. – Replace with “-1 *[Reporting Limit]” – in this case a negative result means not detected or not reportable and includes the Reporting Limit

Alternatively, Replace < R.L. with Zero – this also means that the result was not detected – but information about the Reporting limit is lost. In both cases, be careful about computing averages or other statistics when there are non-detects in your data tables.

Multiple Results: List Reports may show multiple results for a single analyte. Crosstab Reports may show two or more results separated by commas. Laboratories perform duplicate analyses as part of their routine QC and will report both. All reported results are valid. Users may choose which result they prefer or use both.

4.8 Station Summary Reports

There are two Station Summary reports which can be useful tools for managing stations and performing edit functions. Both summaries are available only in Excel format so that users may sort and select the stations of interest.

4.8.1 Permanent Station Sample Statistics

This report is actually based on a helper table used to speed certain database queries. The table provides a summary of the number of analyses (not samples) by Station Number/Name and Status ID. For a given station, if some samples have Status 3000 and others have status 1000 – each combination will be listed. This will guide you in finding samples that could be released for public viewing (as long as they are normal samples). The report also indicates whether the station is mappable (in the Master Stations List) and the date range of the samples referring to the station.

Station Numbers called (NONE) are likely blanks and cannot be published anyway.

Station Numbers called (User Defined) are temporary station definitions which require further work before they can be published. User Defined stations may be moved to the Master Stations list if the user supplies a valid Station Number, plus information on the County, Latitude and Longitude. Contact the WDL WQ Administrator about moving User Defined stations into the Master Stations List.

	A	B	C	D	E	F	G
1	Station Number	Station Name	Status	Analysis Count	Station Mappable?	Min Coll. Date	Max Coll. Date
2	B9D81871565ASW	"A" series shallow w	3000	5	Y	1/26/2000 13:10	3/15/2000 1
3	B9D81871565DW	"A" series deep well	3000	1	Y	3/8/2000 11:30	3/8/2000 1
4	B9D81911556DW	"B" series deep well	3000	2	Y	3/1/2000 11:25	3/15/2000 1
5	B9D81911556SW	"B" series shallow w	3000	3	Y	2/16/2000 14:00	3/22/2000 1
6	B9D81801525DW	"C" series deep well	3000	8	Y	1/26/2000 11:20	3/29/2000
7	B9D81801525SW	"C" series shallow w	3000	1	Y	1/26/2000 11:10	1/26/2000 1
8	B9D81731520DW	"D" series deep well	3000	5	Y	1/26/2000 9:45	3/29/2000
9	B9D81731520SW	"D" series shallow w	3000	3	Y	1/26/2000 9:40	2/23/2000
10	B9D81721521DW	"E" series deep well	3000	10	Y	1/26/2000 10:30	3/29/2000
11	B9D81721521SW	"E" series shallow w	3000	3	Y	1/26/2000 10:25	2/23/2000 1
12	(NONE)	(None)	1000	4602	N	3/20/1996 10:45	6/19/2008 1
13	(NONE)	(None)	1500	545	N	3/23/1993 12:11	3/24/1998 1
14	(NONE)	(None)	2000	272	N	9/18/2001 11:30	4/21/2004 1
15	(NONE)	(None)	3000	341	N	12/6/1995 11:25	8/29/2007 1
16	(UserDefined)	(User Defined)	1000	625	N	12/11/1987 9:15	6/5/2007 1
17	(UserDefined)	(User Defined)	1500	5	N	5/7/1996 10:32	5/7/1996 1
18	(UserDefined)	(User Defined)	3000	282	N	3/16/1987 7:30	6/2/2008 1

Figure 4-14 Permanent Station Sample Statistics Report

4.8.2 (User Defined) Station Summary

This report summarizes User Defined Stations in your data set. It summarizes by temporary Station Number/Name, the true number and date range of samples using the Station.

	A	B	C	D
1	User Station Number	Temp Station Name	Temp Full Station Name	Sample Count
142	SmallPipe	Small Pipe	Water Level Pipe	7
143	NOBAYTREAT	NOBAYTREAT	North Bay Aqueduct @ Treatment Plant	1
144	THM1/23/92	THMEXST/SR@GL	THM Exp. Study--SR@GL Water	4
145	B9D42136142	Little Sl.@French Cu	Little Slough@ French Cut	19
146	B9D74921110	GLCW4	Grant Line Canal Water Station #4	1
147	B9D75732454	Johnson Sl.@Robinson	Johnson Slough at Robinson Road	8
148	B9D80401357	Webb Soil 2		12
149	B9D80701383	Twitchell Soil 2		12
150	B9D81543434	South Sl nr.Hanrahan	South Slough near Hanrahan Road	15
151	B9D817X149X	FishPondculvertnrCLK	Culvert draining the fish pond near Campbell Lake	12
152	B9D83031069	BOULDSIPH01	Bouldin Siphon @ S. Mokelumne River	25
153	B9P75431278	UJONESSIPH02	U. Jones Siphon 02 @ Trapper Slough	4
154	B9P75451276	UJONESSIPH01	U. Jones Siphon 01 @ Trapper Slough	4
155	B9V80181452	SHERMST02	Sherman Island Dredge Site 02	20
156	B9V80191454	SHERMST01	Sherman Island Dredge Site 01	20
157	B9V80291426	SHERMST03	Sherman Island Dredge Site 03	15

Figure 4-15 (User Defined) Station Summary Report

5.0 Edit Functions

5.1 Correcting Lab Results

Users with Edit Access may make corrections to Sample Descriptions and Field Data. The user cannot correct analytical results, which are the responsibility of Bryte Lab. Contact Bryte Lab if you suspect that reported results are in error. They will review the data and make corrections if necessary. If the data are deemed invalid they will be flagged so that they cannot be published. Lab records are not kept indefinitely, so the earlier you contact Bryte Lab about your concerns the better. If contact is made within a month, there may be sample material available for re-analysis as long as the holding time has not been exceeded.

5.2 Editing Sample Information

At the Main Menu, select “Update Sample Information”, use the Refresh Button. Select Date Range and find by Run or Project – or select all Data. Details on selecting data is covered in Chapter 3. You will be presented with a list of samples – click the hyperlink to select a specific sample. Most user-originated information may be edited. This includes:

- Collection Date and Time
- Depth, Depth Units
- Associated User Projects
- Sample Status
- Sample Description
- Private Owner Note

Contact the WDL WQ Administrator about updating Stations.

Update Sample Information, Step 3

Instructions:
Use this screen to update the sample data. Enter data in text boxes or use the dropdown boxes to select the desired data options. Click the **Update Description** button to proceed to the next screen; click the **Cancel** button to return to the WDL Water Quality Administration page.

Sample Number: NB0709B3137	Matrix: Water, Natural
Run Name: Colusa Co GW Section Wells	Run Code: NB0709B0222
Station Number: 15N03W20Q003M (User Defi)	Station Name: 15N03W20Q003M
Collection Date: Jul 21 2009	Collection Time: 08:05
Depth: 0	Units: Meters
Sampling Device: Pump Sampler	
Purpose: Normal Sample <small>Requires Parent Sample Designation</small>	Parent Sample: N/A
Available Projects	
User Project Name: <small>(use left and right arrows to select or deselect projects for this sample)</small> <ul style="list-style-type: none"> CLEAR LAKE FERC RELICENSING GLENN COUNTY GW SECTION MONITORING WELLS MAXWELL GW SI SAN PABLO BLOOM SWCMP TEHAMA COUNTY GROUNDWATER QUALITY 	Selected Projects <ul style="list-style-type: none"> NOT SPECIFIED
Sample Status: 1000 - New Data Not Validated by Owner <small>Please contact the WDL QC Staff if you need to mark some sample data invalid, while publishing the remaining results</small>	
Sample Description: <small>(max 4000 characters)</small>	
Owner Note: <small>(max 4000 characters)</small>	

Figure 5-1 Update Sample Page

Station Name and Station Number are hyperlinks. If you click on them you will bring up the station information and find a link showing the station location on a map. If you find the station does not map correctly, contact the WDL Administrator about correcting the information.

Once you have updated the Sample information click the Update Description button to register the changes in the database. You will be asked to confirm your intention to make the changes. The database does not track changes at this time – so any changes you make are permanent.

If there are no changes to Sample Information you may click the Edit Field Data Button instead, however if you plan to edit field data from a number of samples the preferred method would be to use the Edit Field Data link on the Main Menu.

5.3 Editing Field Data

Since field data was originally recorded by your Field Staff, all field data may be edited or deleted, and new field data records may be added. To edit field data – you may enter via the Edit Sample Data from the previous section. However the preferred method is to select the “Update Field Data” link from the Main Menu.

5.3.1 Update / Delete Field Data

Once selected, you can find the samples of interest by supplying a Date Range and Clicking the Refresh Button. Select by Run or Project, or Select All and click the Submit Button. You will be presented with a list of Samples. Click the link to the sample of interest and the Update Field Measurements Screen will appear.

Update Field Data, Step 3

Instructions:
 Use this screen to select a Field Result to update. Click on the hyperlink of the desired Field Result Number to edit that parameter. Click the **Add New Field Result** button to add a new field measurement result. To edit a different sample, click the **Select Another Sample** button. To view recent edits that may not appear, click the **Refresh** button.

Station Name: 15N03W20Q003M **Station Number:** 15N03W20Q003M
Sample Number: NB0709B3137 **Collection Date:** 07/21/2009 08:05

Field Result Number	Analyte	Result	Units	Method
BL09B407701	Conductance (EC)	N.A.	µS/cm	EPA 120.1 (Field)
BL09B407700	pH	N.A.	pH Units	EPA 150.1 (Field)
BL09B407699	Turbidity	N.A.	N.T.U.	EPA 180.1 (Field)
BL09B407702	Water Temperature	N.A.	°C	EPA 170.1 (Field)
BL09B407703	Field Notes			
BL09B407704	Weather Observations			

Figure 5-2 Field Results Edit List

Click the link associated with the Analyte you wish to Edit or Delete. The Update Field Measurements screen will appear. You may update the Result, Units, and measuring instrument information (if you record this kind of info). Click the Update Result Button to record your changes. Alternatively, you may Delete the result if appropriate. Either way, confirm your changes to continue.

Instructions:
Update the field result by entering values into the appropriate fields below, then click the **Update Result** button to save the values. Click the **Delete Result** button to remove this field result entry from the database. Click the **Cancel** button to return to the previous screen.

Station Name:	15N03W20Q003M	Station Number:	15N03W20Q003M
Lab Sample Number:	NB0709B3137	Collection Date:	07/21/2009 08:05
Field Result Sample Number:		BL09B407702	

Fraction/Analyte:	Water Temperature
Method:	EPA 170.1 (Field)
Matrix:	Water, Natural
Units:	°C
Result:	12.2
Instrument:	Thermometer/Electronic Probe
Instrument Number:	
Probe Number:	

Figure 5-3 Edit Field Results Form

5.3.2 Adding Field Data

From the Update Field Measure Menu (Section 5.3.1), click Add New Field Result. The following screen will appear:

Add Field Results, Step 1

Instructions:
Use this screen to enter Field Measurement information pertaining to a single sample. Select a Method-Fraction-Analyte combination from the dropdown box, then click the **Continue** button to proceed to the next screen. Click the **Cancel** button to return to the previous screen.

Station Name:	CLIFTON
Station Number:	KA000000
Lab Sample Number:	DA0609B2384
Field Result Number:	W0809B00103

Analyte | Method:

- 1% Light Depth | Soil, Organics (Field)
- Algae (Description) | DWR Field Observations (Water)
- Carbon Dioxide | (Field) CO2
- Residual Chlorine | (Field) Residual Chlorine
- Cloud Cover | Weather Observations (Field)
- Water Color (Description) | DWR Field Observations (Water)
- Conductance (EC w/time) | EPA 120.1 (Field)
- CROP | Agricultural Obs (Field)
- Crop Height | Agricultural Obs (Field)

Figure 5-4 Add Field Data Form

Select the Field Analyte / Method from the list and click Continue.

Add Field Results, Step 2

Instructions:
Use this screen to enter Field Measurement information pertaining to a single sample. Click the **Save Field Result** button to go to the next screen. Or use **Cancel** to start over.

Station Name:	CLIFTON	Station Number:	KA000000
Lab Sample Number:	DA0609B2384		
Field Result Number:	W0809B00103		

Method:	Secchi Depth (Field)
Fraction:	--n/a--
Analyte:	Secchi Depth
Matrix:	Water, Natural
Units:	Meters <input type="button" value="v"/>
Result:	<input type="text"/>
Reporting Limit:	0.1 <input type="text"/>
Instrument:	<input type="button" value="v"/>
Instrument Number:	<input type="text"/>
Probe Number:	<input type="text"/>

Figure 5-5 Entering Field Data Form

Enter Results, Units, and if desired, Instrument, Instrument Number, and Probe Number. When you are finished click the Save Field Result Button to save the record. Once you return to the Field Measures List – you may need to Click on the Refresh Button to see the new record.

5.4 Update Sample Status (Bulk Method)

Making a large amount of your data publicly accessible would be a daunting task if you had to edit each sample separately as described in Section 5.2. There is an easier way. From the Main Menu click the Update Sample Status link. Select the desired date range, then select the Run, Project, Station Name, or All Data.

Update Sample Status, Step 1

Instructions:
Use this screen to select a date range for updating the status of samples. Use the month, day, and year dropdown boxes to select the desired dates. Use the Status dropdown to view samples with a particular Status Level, or use "All Status Levels" to see all samples for a selected Date Range. Click the **Submit** button to proceed to the next screen. To view an Excel file summary of the current status of samples by station, click the **Download Station List** button.

Date Range: Feb 6 2009 to Aug 6 2009

Run Name: --Select a run--

Project Name: --Select a project--

Station Name:

All Data

Show samples with status: All Status Levels

include only "Normal" purpose samples

Figure 5-6 Selecting Stations - Bulk Sample Status Update

If you click the button “Download Station List” you will get the Excel “Permanent Stations Sample Statistics Report” described in Section 4.9.1. This report is very useful in identifying potential samples with Station Numbers that may not have been published (released for public access) yet.

Regardless of selection method, click the Submit Button. On the update page, click on the samples you want to update, then select the new status you desire. Alternatively you may click the box above Select to select or de-select all.

IMPORTANT: Be sure to select the new status code – otherwise all selected samples will revert to the default – 1000.

Update Sample Status, Step 2

Instructions:
 Use this screen to select a new sample status and the samples to assign to this status. (1) Select a new sample status from the dropdown box. (2) Mark the samples to assign to this status. Either click on the **Select All** button will assign all samples on this screen to the new status, or manually insert checkmarks next to the sample numbers requiring an update. Click on the **Deselect All** button to clear all checkmarks. When all the desired samples have been checked, click the **Submit** button to proceed to the next screen.

Date Selected: 6-Mar-2009 to 6-Apr-2009

<input checked="" type="checkbox"/> Select	Sample Number	Run Name	Collection Date	Station Name	Current Status	Sample Purpose	Sample Description
<input checked="" type="checkbox"/>	EA0309B10061	Mid Delta Boat Day 1	03/18/2009 08:30	D12	1000	Normal Sample	
<input checked="" type="checkbox"/>	EA0309B10062	Mid Delta Boat Day 1	03/18/2009 09:50	D19	1000	Normal Sample	
<input checked="" type="checkbox"/>	EA0309B10063	Mid Delta Boat Day 1	03/18/2009 10:50	D28A	1000	Normal Sample	

Change Status to: 1000 - New Data Not Validated by Owner

- 1000 - New Data Not Validated by Owner
- 1500 - Validated, ACT_ID use only
- 2000 - Viewable by Share Permission
- 3000 - Viewable by All

Figure 5-7 Refining Station Selection - Bulk Sample Status Update

Once all samples are selected, click Submit at the bottom of the page, and confirm your intentions.

6.0 Administrative Functions: Customizing Data Tools

The remainder of this manual is for users with administrative rights. However users with Read or Edit rights should know that these functions are available so that they can work with their Database Administrator to set up needed tools. Currently your database administrator can perform the following functions:

- Create and Manage Station Groups for quick access to commonly used station data.
- Create and Manage User Projects – used for finding data used for a specific activity.
- Share internal data with other Activity Units

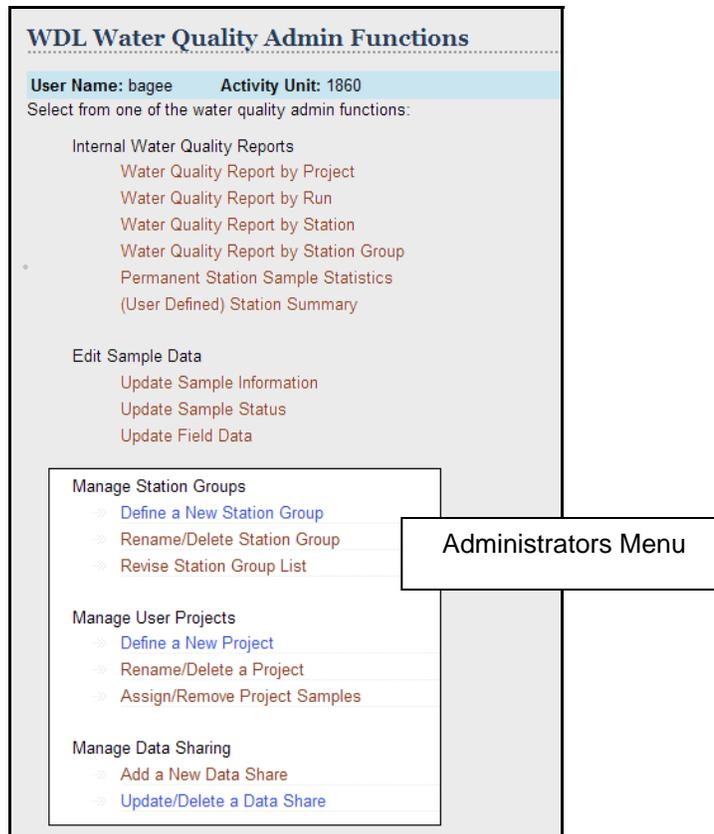


Figure 6-1 Administrative Functions Main Menu

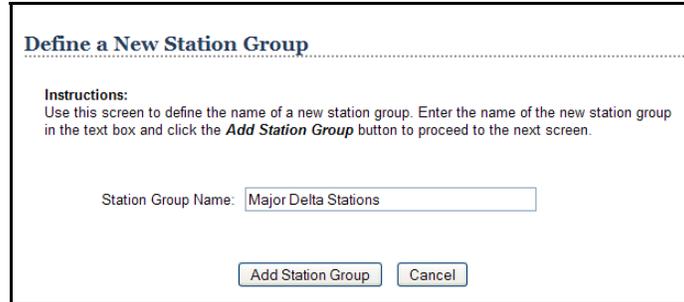
6.1 Managing Station Groups

It may be more convenient to access data from a group of stations rather than selecting the stations individually every time the data set is queried. Station groups are an easy way to do this. They have the advantage that they are easy to set up and they can include stations sampled by other groups within DWR. As long as they ‘share’ their internal data with you – you can include their stations in a Station Group, thus simplifying access to their information.

Important: Only Stations in the Master Stations List may be added to Station Groups. Temporary station definitions cannot be included. If you need to add a station to the Master Stations List – contact the WDL WQ Data Administrator.

6.1.1 Creating a Station Group

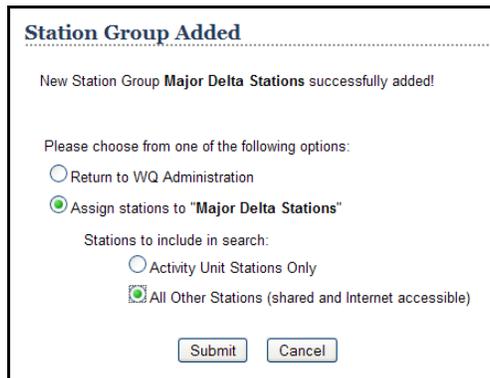
From the Administrative Login Main Menu click Add New Station Group. At the next screen, name your new Station Group and click the Add Station Group Button.



The screenshot shows a web form titled "Define a New Station Group". Below the title, there are instructions: "Instructions: Use this screen to define the name of a new station group. Enter the name of the new station group in the text box and click the **Add Station Group** button to proceed to the next screen." Below the instructions is a text input field labeled "Station Group Name:" containing the text "Major Delta Stations". At the bottom of the form are two buttons: "Add Station Group" and "Cancel".

Figure 6-2 Naming New Station Group

The next screen will ask your intentions – you can return to the main menu without adding stations – but most likely you will continue to add stations to your group. You can elect to include Stations from ‘shared’ data at this point. Only stations from the Master Stations list will be available for creating a Station Group.



The screenshot shows a web form titled "Station Group Added". Below the title, it says "New Station Group **Major Delta Stations** successfully added!". Below this, it asks "Please choose from one of the following options:" and lists two radio button options: "Return to WQ Administration" (unselected) and "Assign stations to 'Major Delta Stations'" (selected). Below this, it asks "Stations to include in search:" and lists two radio button options: "Activity Unit Stations Only" (unselected) and "All Other Stations (shared and Internet accessible)" (selected). At the bottom of the form are two buttons: "Submit" and "Cancel".

Figure 6-3 Adding Station Group - Selecting Source

Assigning stations to the new Station Group is relatively easy, although the list of stations to pick from may be long. You may pick one station at a time, or hold down the Ctrl Key and click on many individual stations, or Click on a station, hold down the Shift Key and Click a second station – which will select all stations in between. Click the “>” button to move the stations into your new Station Group. Click the “>>” button to move all stations in the list into your group.

If you make a mistake, you may selections from the “Assigned Stations” list and remove them by clicking the “<” button.

Click the “Submit” Button to save the Station Group assignments to the database.

Define a New Station Group

Instructions:
The two boxes below show the water quality station that are available for assignment to this station group, and stations that have already been assigned to group **Major Delta Stations**. Select a well or wells from the list boxes below and click the Right (<) or Left (>) arrow buttons to move wells between Available Station and Assigned Stations. Click the Move All (>>) button to move all Available Stations to Assigned Stations. At least one station must be selected to proceed to the next step. Click the **Submit** button to save the Station Group assignments to the database. Click the **Cancel** button to return to the Water Quality Administration Page.

Station Group:

Available Stations	Assigned Stations
Holland Cut at Holland Marina (B9D75841349)	Contra Costa PP Number 01 (B9591000)
Holland Cut near Bethel Island (B9D80101349)	Grant Line Canal near Old River (B9D72921327)
LITTLE TRUCKEE R AB BOCA RES (G7216000)	
MIDDLE RIVER A UNION POINT (B9D75351292)	
Middle R @ Tracy Rd Bdg (B9D75291273)	
Middle River at Howard Road (B9D75261230)	
Middle River at Undine Road (B9D75011230)	
Middle River near Holt (B9D80021306)	
Middle River near Tracy Road (B9D75291280)	
Mokelumne River near Highway 12 (B9204500)	
OLD R BL HEAD (B9D74851200)	

Figure 6-4 Assigning Stations to Station Group

Note: It is important to understand that adding stations from your Activity Unit and from a Shared list is a Two Step process. First you select from your stations (for example), save the list, then edit the list to add stations from the Shared station list. The selection lists are not combined. Note also that any stations with publicly accessible data will appear in the Shared station list – but only public data can be drawn from these stations.

6.1.2 Editing Station Groups

You may edit a Station Group at any time to add or remove stations. Simply click on the “Assign Stations to a Group” link, select the Group you are interested in, and edit the definition. The Edit Screen looks and functions just like the Assign Screen described in the previous section.

6.1.3 Rename or Delete a Station Group

Rename/Delete Station Group

Instructions:
Use this to rename or delete a station group. Only one update can be made at a time. To rename a station group, enter the new name in the appropriate text box, then click the **Update** button. To delete a station group, select the appropriate radio button in the “Select” column, then click the **Delete** button. Click the **Cancel** button to return to the Water Quality Administration page.

Select	Station Group Name
<input type="radio"/>	MWQI Active Stations
<input type="radio"/>	MWQI Delta Stations
<input type="radio"/>	MWQI Discrete Samplin
<input checked="" type="radio"/>	Major Delta Stations

Figure 6-5 Selecting Station Group For Renaming

Click the Rename/Delete Station Group Link. Click the radio button next to the item of interest. If you want to delete the group, simply click the Delete Button.

To rename the group, Click the radio button, then click into the Name of the Station Group and type in a New Name. When you are finished, click the Update button. Only one Station Group may be renamed at a time.

6.2 Managing User Projects

User Projects are essentially named activities. A project can be a Report or an ongoing monitoring activity or a special activity. Samples may be tagged or associated with as many User Projects as you desire. By looking for data associated with a User Project, users are able to find data by subject without having to know which stations are involved. Once set up, the User Project can be a very effective way to share your data.

User Project Definitions can be initiated with the FLIMS Field Module and associated with samples as they are collected. This is a very effective way of tagging samples because they are automatically tagged as they are created. However, it is possible to tag samples after they are in the Water Data Library. It is also possible to create new User Projects to be used exclusively with existing data.

Project Definitions should be with the thought that the definitions will be permanent - for use in perpetuity. In many ways a Project become part of the Meta-Data description for the selected data.

6.2.1 Creating a New User Project

Note: If your Field Staff create a new User Project you should wait until the definition reaches the WDL with the data rather than create a duplicate definition in the WDL.

Click on Add New Project on the Administrator's Main Menu. Enter the Name, Status of the Project (see Note), and a useful description of your new Project. If your project covers multiple years it is not necessary to create a new Project Name for each year – since users will be selecting by date anyway.

The project description is a great place to supply project Meta-Data. It is here that users will be able to understand the What, Why, Where and How of the activity.

Note: The Status of the project refers to whether the Project will be listed internally (Status 1000) or publicly (Status 3000). It does not confer status to the sample data.



Define a New Project

Instructions:
Use this screen to define the name of a new project. Enter the name of the new project in the text box and select a status level for your project. Click the **Add Project** button to proceed to the next screen.

Project Name:

Project Status:

Project Description:

Figure 6-6 Add / Edit / Delete User Project Form

Click the Add Project Button when your definition is complete.

6.2.2 Edit or Delete a Project

Click on the Update/Delete User Project Button. You will be presented with a list of your user projects. Click on the desired project name to retrieve the definition. The edit screen will look just like the Define screen except that the options will be to Delete or Update the Project Definition.

IMPORTANT: Be very careful about deleting projects. As a safety precaution, projects with greater than 20 samples must be deleted by the WDL Administrator.

Update a Project, Step 1

Instructions:
Use this screen to select a project to update. Click the hyperlink of the Project Name to proceed to the next screen. Click the **Cancel** button to return to the Water Quality Administration page.

Project Name	Description	Status
2004 Upper Jones Levee Break		Viewable by All
2004-05 Staten Island Field Flooding		Viewable by All
Ag Drains		Viewable by All
Algal DBP Study		Viewable by All
Autosamplers		Internal Use Only
Barker Autosampler Tubing QC		Internal Use Only
Barker QC		Internal Use

Figure 6-7 Selecting User Project for Edit / Delete

6.2.3 Assign Samples to a Project (Bulk Method)

As mentioned at the beginning of Section 6.3, the most efficient way of assigning a Project to samples is to include the Project in Run Templates defined by Field Staff. User Projects may also be assigned to individual samples as described in Section 5.2. However a less labor-intensive Bulk Method of assignment is available here. Assigning samples is a multi-step process: first you will look for stations by name, number, or by association with a run. Next you will narrow the list of stations if needed – and finally you will select individual samples to be associated with your project.

Assign Samples to a Project, Step 2

Instructions:
Use this screen to select the project to which you wish to assign samples. First, select the project name, then choose a method for selecting station samples, either by Run Name, Station Name, or Station Number. Click the **Submit** button to proceed to the next screen. Click the **Cancel** button to return to the Water Quality Administration page.

1. Select Project Name (Status):

2. Select Sample Retrieval Parameters:

by Run Name:

Date: Feb 7 2009 to Aug 7 2009
 Range: 2009

by Station:

Station Scope:	<input checked="" type="checkbox"/> Activity Unit Stations Only
	<input type="checkbox"/> All Other Stations (shared and Internet accessible)
Station Name:	<input type="text"/>
Station Number:	<input type="text"/>

Figure 6-8 Assign Stations To User Project - Selecting Stations

From the Administrative Man Menu, Select the Assign/Remove Project Samples link.

- 1) At the new screen, select the Project to be associated with your samples.
- 2) Select the samples you will be working with. Start by designating the Date Range you are interested in.
 - a. If you are selecting by Run – Click the Refresh Button , then Select by Run Name
 - b. If you are selecting by Station – click the Station radio button, then designate whether you wish to search your Activity Unit stations – or a list of stations with Shared or Published data.

Stations may be found by Station Name or Number. Partial matches are possible so you don't need to type in the entire name or number. It may be helpful to print out a list of your stations before you reach this step. See section 4.9.1.

You will be presented with a list of stations which satisfy your initial query – and curiously can re-select the date range – or all dates. The box “Include only normal samples is checked – it is recommended that you uncheck the box – because QC analysis could be easier if QC samples are included in the Project. Check the Select Box for each station desired to be included in the Project assignment. Click Submit to proceed to the next step.

Assign Samples to a Project, Step 2

Instructions:
 This screen allows you to refine the parameters used to select samples to include in your project. The list below includes stations for Run Banks/Vern Dionex QC. Select a sample date range, sample purpose, and stations that you want to include in your project. Click the **Submit** button to search for matching samples. Click the **Cancel** button to return to the Water Quality Administration Page.

Project Name:

Select Date Range: Feb 7 2009 to Aug 7 2009
 All Dates

Include only normal samples (exclude replicates, blanks, etc.)

Select	Station Name (Number)	Min Date	Max Date
<input type="checkbox"/>	DELTA P.P. HEADWORKS AT H.O. BANKS PP (KA000331)	02/10/2009	07/28/2009
<input type="checkbox"/>	SAN JOAQUIN R. NR. VERNALIS (B0702000)	02/10/2009	07/28/2009

Figure 6-9 Assign Stations to User Project - Refining Station Selection

Once you've selected the stations of interest, you will be presented with a potentially very long list of Samples. To assist you in selecting samples, the list can be sorted by Sample Number, Station Name or Number, Collection Date, or Sample Purpose. Click the Assign radio button to assign the sample to your project. Click the Remove to Remove it.

When you are ready, click Submit and confirm your intentions.

Assign Samples to a Project, Step 3

Instructions:
Below is a listing of samples corresponding to the criteria you specified. To include a sample in the project, click the "Assign" radio button next to the sample code. To exclude a sample in the project, click the "Remove" radio button next to the sample code. Click on the Sample Code hyperlink to view the data for that sample (opens a new window). Click the **Submit** button to assign the samples to the project; click the **Cancel** button to return to the Water Quality Administration page.

Member/Assign	Non-Member/Remove	Sample Number	Station Number	Station Name	Collection Date	Sample Purpose	Sample Description
<input type="radio"/>	<input checked="" type="radio"/>	CD0309B0487	KA000331	H.O. Banks Headworks	03/04/2009 12:20	Normal Sample	Canal Sample
<input type="radio"/>	<input checked="" type="radio"/>	CI0409B0696	KA000331	H.O. Banks Headworks	04/01/2009 10:50	Normal Sample	Canal Sample
<input type="radio"/>	<input checked="" type="radio"/>	CI0609B0890	KA000331	H.O. Banks Headworks	06/10/2009 10:30	Normal Sample	Canal Sample
<input type="radio"/>	<input checked="" type="radio"/>	CI0709B1001	KA000331	H.O. Banks Headworks	07/08/2009 11:30	Normal Sample	Canal Sample

Figure 6-10 Assigning Samples to User Project - Final Step

6.3 Sharing Internal Data

It is not uncommon for staff from different DWR Sections or even Divisions to work together on an activity. Although users can access any data made 'Public', they cannot easily access data from other Activity Units unless it is shared. The share function is not sophisticated – it either allows all of your data to be internally shared or none of it. Sharing only applies to data not yet available to the general public.

6.3.1 Adding Data Shares

Select Add New Data Share from the Administrator's Main Menu. Enter the Activity Unit you wish to share your internal data with and select the Share Access Level. The most practical is to select share level 1000, but you may limit sharing to higher levels if you desire. Click Submit and confirm your intentions.

Add a New Share Access

Instructions:
Use this screen to give another activity unit access to your data. Using the dropdown boxes below, select an activity unit and the access level at which that unit will be able to access your data. Click the **Submit** button to proceed to the next screen. If you do not see the activity unit that you want, you have already granted them share permission. Click [here](#) to edit the list of current shares.

Share Activity Unit:

Share Access Level:

Figure 6-11 Add / Edit / Delete Share Access Form

6.3.2 Editing and Deleting Data Shares

Select Update/Delete Data Share from the Administrator's Main Menu. You will be present with a list of your current shares. Click the radio button of the Share you wish to modify or delete. Click Submit.

Update a Share Access, Step 1

Instructions:
Use this screen to update share access for a share activity unit. Click on the radio button of the share activity unit you want to edit, then click the **Submit** button to proceed to the next screen.

Select	Share Activity Unit Name	Share Unit Code	Share Access Level
<input type="radio"/>	Central District - Geology and Groundwater	6200	1500 - Validated, ACT_ID use only
<input checked="" type="radio"/>	Central District - Ground Water	6203	1000 - New Data Not Validated by Owner
<input type="radio"/>	Central District - Surface/Ground Water	6301	1000 - New Data Not Validated by Owner
<input type="radio"/>	Headquarters - O&M Headquarters	2040	2000 - Viewable by Share Permission

Figure 6-12 Selecting Shares for Edit / Delete

The update screen is much like the add screen. Change the Share Access Level or Delete as desired.

6.4 Managing User Access

User Accounts are currently handled by the WDL Database Administrator. Please call or contact by email

7.0 Super Administrator Functions

There are certain functions reserved for the WDL WQ Module Super Administrators. These functions include:

- Manage User Accounts
- Managing Temporary Station Definitions and moving them into the Master Stations List
- Updating or Correcting Station information for stations already in the Master Stations List
 - This includes updating corresponding information in Field Module Definitions
- Bulk updates of some sample information including
 - Station Number
 - Sample Ownership
 - Sample Descriptions
 - Sample Status
- Bulk assignment of samples to User Projects
- Correcting Errors in Lab Results (as directed by Bryte Lab)

The database also stores extensive QC information which is not currently available through the website. The Super-Administrator can retrieve this information for you.

If you have any questions about finding data, publishing data, or any other issue please contact the DWR WQ Module Administrator.

8.0 F.A.Q.s

- 1) How do I get a user account?
 - a. Contact the data person in your Unit and/or contact the WDL data administrator.
- 2) I forgot my login.
 - a. Usually your WDL login is the same as your DWR network login. If you still need help, contact the WDL data administrator.
- 3) How do I access my data?
 - a. Establish user account
 - b. Use your browser to access the Water Data Library
 - c. Log-in using the Admin Login using your account username and password
- 4) I can't find my data
 - a. Have you logged in using the Admin Login?
 - b. Check the date range – the samples may not have been collected in the range you specified
 - c. Be sure to use Refresh Button – pick list items are updated after selection of the Date Range
 - d. Try un-checking the “Normal Samples Only” box. You may be looking for blanks, duplicates, or special study samples.
 - e. Are the data really ‘owned’ by your Activity Unit? If not, the data may not be available to you.. Contact the data owners about sharing or ‘releasing’ the data
 - f. Contact the WDL Administrator for assistance. If this is the first time a station is published, the Administrator may need to update a table. Alternatively the Administrator can diagnose the problem.
- 5) How can I “publish” my data?
 - a. Change the status of the data to 3000 – Viewable by All
- 6) How can I “Un-Publish” my data?
 - a. Change the status of the data to 1500 Validated, ACT_ID use only
- 7) Some of my published data isn't showing up on the public website
 - a. Station may be a User-Defined Stations, will not show up. Contact the WDL data administrator about moving your station to the Master Station List.
 - b. Are you sure that the status of the ‘missing’ data is 3000?
 - c. Sample may not be a “Normal” or “Composite” sample. By design, Blanks, Duplicates, and other Special samples do not show up.
- 8) I need to ‘publish’ my Blanks, Duplicates or Special Sample data.
 - a. You can retrieve this data from the Internal website and save it in various formats, including Excel. You may share the data by providing the file to individuals or posting the data on your program website.
- 9) I'd like to publish my data as soon as possible.
 - a. Work with your field staff. Ask them to edit their Run Template and set the WDL Fate to 3000.
- 10) I have a new activity and I need to identify or share the data quickly.
 - a. Work with your field staff. Ask them to create a new “User Project” to track your activity. Tell them to edit the template for the study and add the activity code to each template sample.
 - b. Contact Bryte lab to alert them about your sampling plans. They can also provide advice on containers and QC considerations.
 - c. Also, contact the FLIMS Administrator at Bryte Lab. He can make sure that Station definitions are quickly added to the Master Station List. He can also work with your Field Staff and DWR Bryte Lab to make sure that early samples are tagged properly with the proper Status Code and User Project flag.
- 11) I need to publish my data but one of the Stations is a temporary definition.
 - a. Contact the WDL Administrator to get the station added to the permanent station list. He can also update samples to associate with the permanent definition. Information you need to supply are:
 - i. A valid station number (the WDL Administrator can help with that)
 - ii. Short and long station name.
 - iii. Latitude/Longitude
 - iv. County

- 12) What does “N.A.” mean?
 - a. It means that the analysis was not done. N.A. means Not Analyzed.
- 13) Any Advice on how to prepare my data for analysis?
 - a. You’ll need to download a copy of the data you want to analyze. The best format for this is probably Excel Crosstab, but you have several options. Note that it takes much longer to produce a crosstab report so you may want to get your data in smaller blocks.
 - b. Be sure to separate out Blanks and other unusual samples by Sample Purpose, otherwise you may skew your results.
 - c. Results in crosstab reports are separated by Method but you may re-combine the data if it is comparable. Read the advice about Method Comparability Codes in section 4-7-4
 - d. You’ll probably want to change Non-Detect results, which are displayed as “< .01” for example, to numbers which will work better in your program.. Advice for doing this may be found in section 4-7-5
- 14) Where is my biological data?
 - i. With the exception of Chlorophyll and Coliforms biological data are not stored in the WDL.
- 15) Why are my nutrient results not reported, for example “as NO3”?
 - a. Units are always for the analyte reported. To report NO3 as NO3 is redundant. Results are reported “as XX” only when the result is converted to something else: e.g. as N, as P, as S, as C, etc.
- 16) I found an erroneous result.
 - a. Contact DWR Bryte Lab. If they find the result is in error, they will update the value in the WDL.
- 17) I found an error in the Field Data or Sample information.
 - a. You or someone in your Unit should have Edit privileges in the WDL. You may edit this data yourself.
- 18) My public would like to find all of my Stations as a group, rather than find them one-by-one.
 - a. Create a Station Group and make sure the Status is set to 3000* [Feature not yet available]
- 19) My public would like to find the data for my most recent report.
 - a. Although it’s best to set up User Projects while data are being collected, you can create one later in the process and associate the samples in WDL with the project.
- 20) The public can’t find my Station Group or User Project.
 - a. Make sure that the Status for these objects is set to 3000
- 21) There is a Station Group or User Project that I intended for Internal Use – but it’s on the public website.
 - a. Change the Status for the Group or Project to 1000.
- 22) I have a lot of changes I need to make with my data. Working sample by sample will take forever.
 - a. Contact the WDL Administrator. We can help with bulk updates to your data.
- 23) I found a sample result listed twice or I found two different results for the same sample.
 - a. Laboratories often re-analyze samples to show that the results are repeatable. Most methods find the results valid if the results are within 15% to 20%. Rather than pick one result over another, both are reported. In Excel crosstab reports the results are separated by a comma. In CSV crosstabs only the first result encountered is reported.
- 24) What is the “Method Comparability Code?”
 - a. Not all methods are created equal. Even though they may report the same analyte and units, the results represent such different values that they really shouldn’t be compared. The database separates the results by different methods and provides advice on whether the results can safely be combined.
- 25) Why are some of the results “split” between two or more columns when I retrieve data using “crosstab”?
 - a. All results show the method by which the results were obtained. Since some methods may not yield comparable results, crosstabs separate out results by method. Most method results are comparable, however users should use Comparability Code guidance when re-combining different columns.
- 26) How can I separate data by method?
 - a. Output your data using a crosstab report.
- 27) Why can’t I delete my User Project?
 - a. If you’ve assigned 20 or more samples to a User Project you must contact a WDL Administrator. This is a protective measure to prevent accidental deletion of major projects.

9.0 Index

[1], [2], [*]. *See* Method Comparability Code
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