



Florida STORET Public Access

Help Document

PURPOSE

This document contains instructions for retrieving information from Florida STORET. It addresses, in detail, three search options.

Once on the Welcome screen, you will see two search options within SPA, and one option for a geographical search outside of SPA:

1. [How to query station information by map](#) and download the result data.
2. [How to search by water quality criteria](#) and download the result data.
3. [How to access Map Direct Lite](#) outside of the SPA application.

SPA Welcome Screen

The screenshot shows the 'BUSINESS PORTAL' for 'STORET Public Access' by the 'Florida Department of Environmental Protection'. It includes a 'Welcome' message, search instructions, and numbered callouts (1, 2, 3) pointing to specific links. The footer contains version information, contact details, and a disclaimer.

BUSINESS PORTAL STORET Public Access
Florida Department of Environmental Protection

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Home

Welcome

Welcome to the Florida STORET Public Access (SPA) website. SPA provides access to the water quality, biological, and physical data collected in Florida that are provided to the Department of Environmental Protection for storage and retrieval from Florida STORET. The SPA website allows you to retrieve data from the Florida STORET data warehouse and to download the data to a text file or display them on a map. This website allows you to dynamically query the Florida STORET data warehouse in two ways:

- Search By Map
- Search By Water Quality Criteria

Please click on the **1** below to search STORET.

SEARCH BY MAP: This allows you to query the stations dataset by a physical area (county, city, zip code, WBID, etc.). The result set that is generated is a map display of stations that are located within the selected area, and a list display of stations data that meet the query criteria. The mapping feature provides a number of standard tools for zooming, panning, extracting, and querying the information provided on the map.

To visit Map Direct Lite outside of the SPA application and without search criteria filters, please visit **Map Direct Lite** **3**

2

SEARCH BY WATER QUALITY CRITERIA: This allows you to query both the stations dataset by one or more of seven specific fields and/or the water quality (field and analytical) datasets by Organization ID, Characteristic, and Activity Date. The result set(s) that are generated are a list of stations and water quality results that meet the criteria in the query.

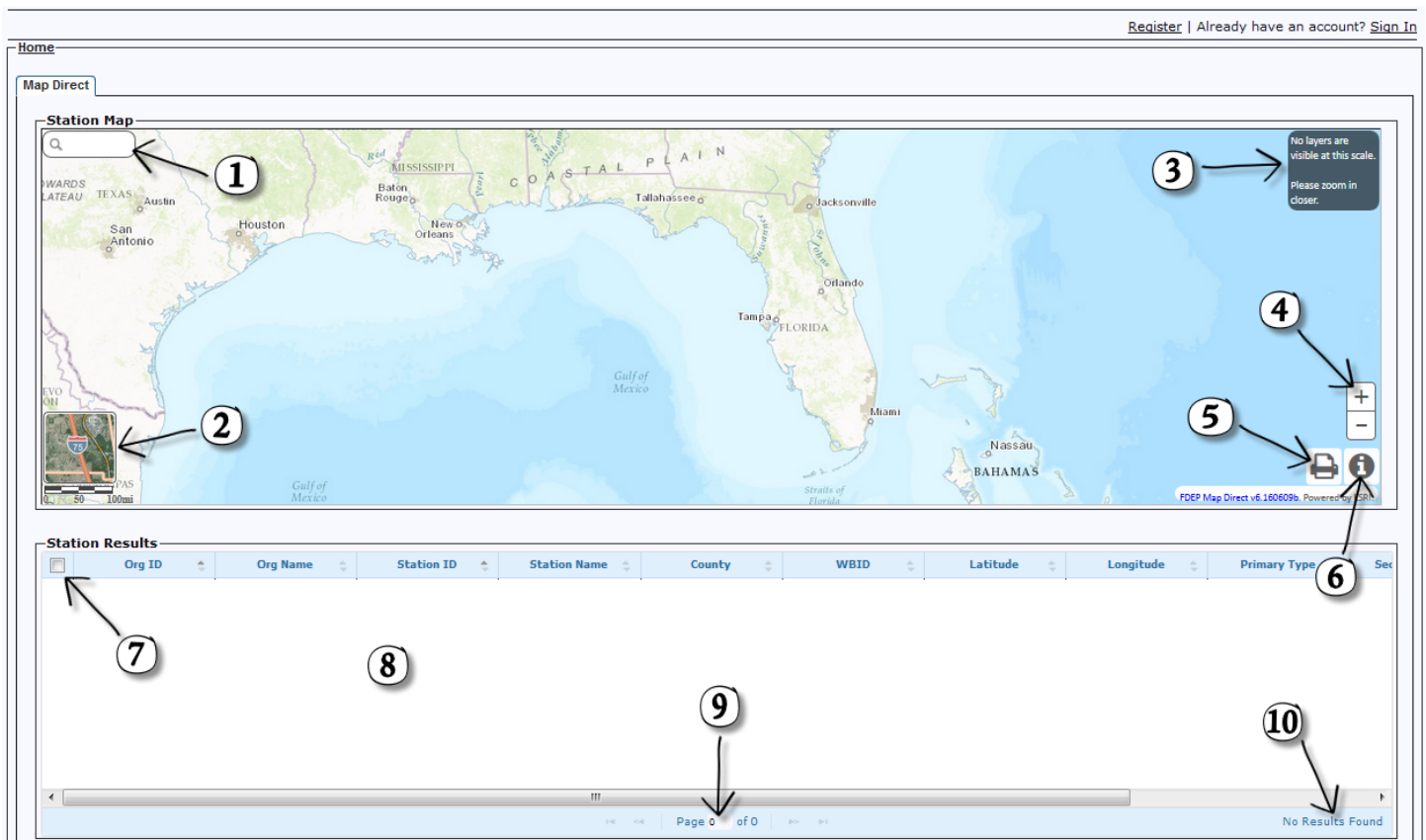
STORET Public Access — 3.8.11.
Kyra Solutions, Inc
Business Issues / Technical Assistance — [Contact Us](#)

Disclaimer: It is not required to register or sign in to an account to use STORET Public Access

Integrated Map Direct Lite

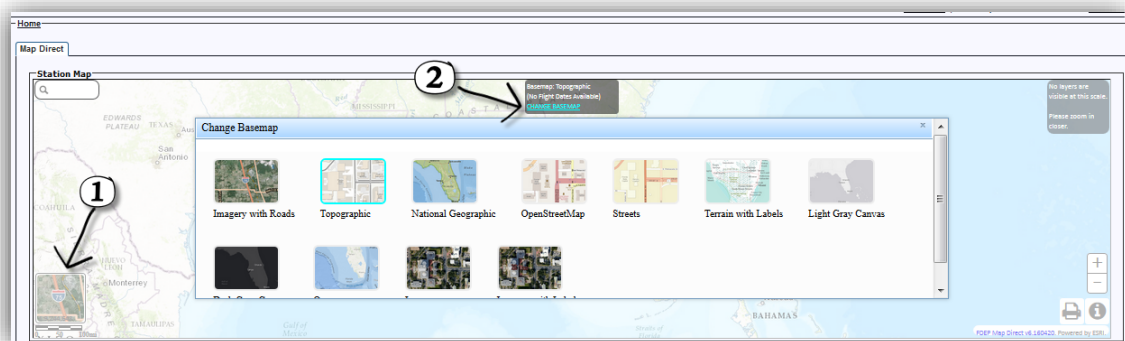
On the SPA Welcome screen, select the 'Search By Map' link.

The application will navigate to the imbedded Map Direct Lite application seen below.



Integrated Map Direct Lite legend

1. Search Bar
 - Search dropdown menus by Waterbody ID, Organization ID, or County.
 - Type in an address.
 - Type in a station ID or name.
2. Expandable Basemap selector
 - 1) Click the Basemap Selector
 - 2) Select the link "CHANGE BASEMAP".



3. STORET Stations layer key
 - Lets you know if your zoom extent is close enough to view STORET stations
 - Defines the STORET station icons
4. Zoom tool
 - Zooms the map in and out
5. Print tool
 - Creates a PDF of the map in a new browser window
6. Station Selection tool
 - Activates the station selection. Click on this tool and circle stations of interest.
7. Station selection box
 - Select all or individual stations, view station information or query for water quality data
8. Result grid
 - Displays station results based on station selected criteria
9. Page number presented out of the total number of pages
10. Total number of result records found

How to 'Search By Map'

1. Zoom in to the location of interest.



2. Click on the station selection tool indicated by the icon

The screenshot displays the FDEP Map Direct application. The main map area shows a coastal region with many blue and yellow station icons. A legend on the right side categorizes these icons by water feature type. Below the map, there is a table for 'Station Results' which is currently empty. The bottom of the interface shows a pagination bar indicating 'Page 0 of 0' and a message 'No Results Found'. A red arrow points to the information icon (i) located in the bottom right corner of the map area.

3. Lasso the stations of interest by holding down the left mouse click and drawing a circle.

File Edit View History Bookmarks Tools Help

Search Water Quality Data x US EPA Frequently Asked Question... x Index of ftp://ftp.epa.gov/s... x +

prodenv.dep.state.fl.us/DearSpa/public/searchStoretByMap.action

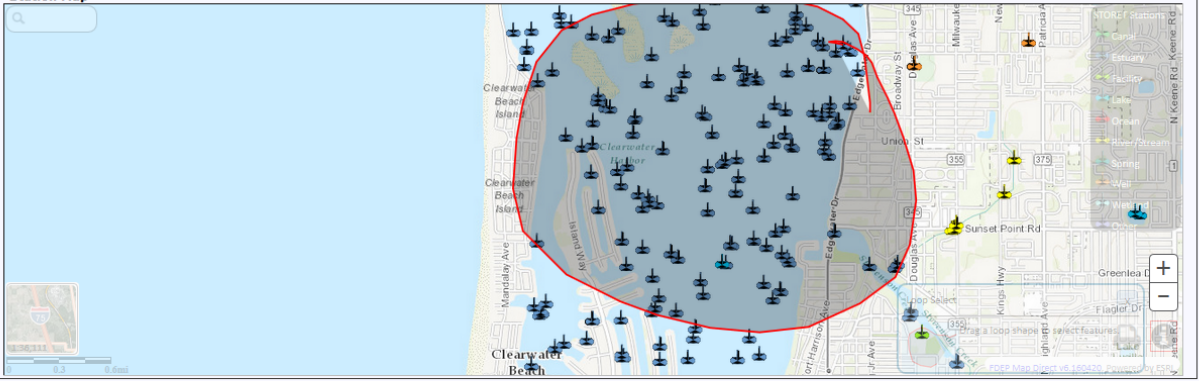
Most Visited Getting Started Florida's Surf Cams OhioStateBuckeyes.co... ShowMyPC Suggested Sites (2) Suggested Sites (3) Welcome to DepNet ...

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Home

Map Direct

Station Map



Station Results

Org ID	Org Name	Station ID	Station Name	County	WBID	Latitude	Longitude
--------	----------	------------	--------------	--------	------	----------	-----------

Page 0 of 0 No Results Found

4. The stations lassoed will appear highlighted on the map as shown below, and the station result grid will populate with station metadata for those stations.
 - a. The result grid displays up to 100 stations per page.
 - 1) If more than 100 stations are selected, pagination will occur.

The screenshot shows the DEP Map Direct interface. The top section is a map of Clearwater Beach with many station markers. Below the map is a table titled 'Station Results' with the following columns: Org ID, Org Name, Station ID, Station Name, County, WBID, Latitude, and Longitude. The table contains several rows of data. At the bottom of the table, there is a pagination bar that says 'Page 1 of 2' and 'View 1 - 100 of 125'. There are also buttons for 'Query Water Quality Data' and 'Download Station Results'.

- b) Columns can be sorted by clicking on the column header. Column sorting will sort the entire dataset, not just the page being viewed.
- c) Station selection can be all or individual. At least one station must be selected to query for water quality data.

Station Results

☒	Org ID	Org Name	Station ID
☒	21FLDOH	Division of Environmental Protection	PINELLAS231
☒	21FLDOH	Health, Bureau of Water Programs	PINELLAS236
☒	21FLFMR	Fish and Wildlife Research Institute / FWC	WCC200326
☒	21FLFMR	Fish and Wildlife Research Institute / FWC	WCC200327
☒	21FLGW	FL Dept. of Environmental Protection	35431
☒	21FLGW	FL Dept. of Environmental Protection	35434

Select all stations

Station Results

☐	Org ID	Org Name	Station ID
☐	21FLDOH	Division of Environmental Protection	PINELLAS231
☒	21FLDOH	Health, Bureau of Water Programs	PINELLAS236
☐	21FLFMR	Fish and Wildlife Research Institute / FWC	WCC200326
☐	21FLFMR	Fish and Wildlife Research Institute / FWC	WCC200327
☒	21FLGW	FL Dept. of Environmental Protection	35431
☒	21FLGW	FL Dept. of Environmental Protection	35434

Select stations individually

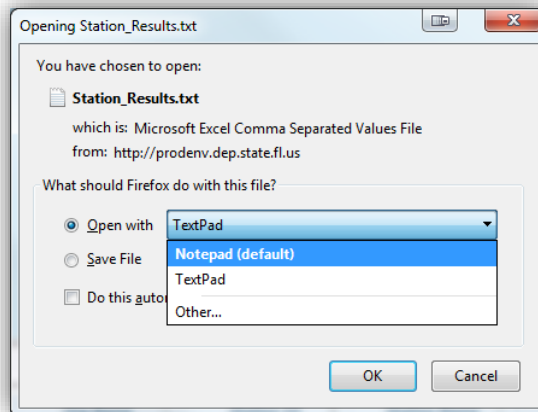
5. The option remains to Query Water Quality Data or Download Station Results.
- The 'Query Water Quality Data' option will transfer the selected stations to the 'Search by Water Quality Criteria' page where the search criteria will have the selected stations and their respective org_IDs pre-populated.



- The rest of the search criteria are set to the default values.
 - Criteria can be changed and more criteria can be specified at this time.
- The 'Download Station Results' option will download the entire data set for the query, not just the page being viewed. The download file is a pipe-delimited text file.



- The file can be opened/saved using NotePad, TextPad, or other text file software.
- Note:** Text files can be opened in MS Excel and MS Access for easier data viewing and manipulation.



How to 'Search By Water Quality Criteria'

You can navigate to this screen **two ways**:

- Selecting the 'Search By Water Quality Criteria' option on the Welcome Screen
- Clicking 'Query Water Quality Data' at the bottom of the 'Search By Map' result screen.
 - This option transfers the selected stations to the 'Search by Water Quality Criteria' screen where the search criteria will have the selected stations and their respective org_IDs pre-populated.

[Home](#)

Search by Water Quality Criteria

1 Please enter your search criteria below. Click [here](#) to learn more about *STORET* search criteria. Please select at least one Station criterion.

Search for ☐ Station ☐ Water Quality Criteria ☒ Both

2 **Station Criteria**

Org ID/Org Name: USGS HUC:

County Name: Primary Type:

WBID:

Station(s) can be selected by "Station ID Look Up", "Station ID" or "Station Name".

☒ **Station ID Lookup:**

☐ **Station ID:**

Enter Single Station ID or Multiple, separated by comma e.g. 1234,5678

☐ **Station Name:**

Enter Single Station Name or Multiple, separated by comma e.g. Station A,Station B

Water Quality Search Criteria

3 **Activity Date Range:** From To

5 **Result Type:** ☐ Detected ☐ Non-Detected ☒ All

4  **Select Water Quality Characteristic Group/Characteristics**

6 **Submit Query** 7 **Reset Criteria**

'Search by Water Quality Criteria' Legend:

1. Search for:
 - *Station*: search only for stations without water quality criteria constraints,
 - *Water Quality Criteria*: search for water quality data only by selecting at least one station criterion, or
 - *Both*: search both station and water quality data within the same query.
 - When searching for water quality data or both water quality and station data, only the stations that have water quality data results for the selected search criteria will be displayed.
 - When one radio button is selected, the others are deactivated.
 - The 'Search for' option will default to 'Both' if no selection is made.
2. Station Criteria section:
 - Org ID/Org Name: A standard Values drop-down list. More than one org can be selected. The OrgID and Name are concatenated.
 - County Name: A standard Values drop-down list. More than one county can be selected.
 - WBID: A smart search. More than one WBID can be selected.
 - USGS HUC: A standard Values drop-down list. Only one HUC can be selected.
 - Primary Type: A standard Values drop-down list. More than one primary type can be selected.
 - Station ID Lookup: A smart search. More than one station can be selected.
 - Station ID: Text field. Multiple comma-delimited IDs can be entered.
 - Station Name: Text field. Multiple comma-delimited names can be entered.

3. Activity Date Range:
 - Defaults to 2 year span from present date.
 - When selecting a different year, please select a day also to lock it in. Today's day will not default.
4. Select Water Quality Characteristic Group/Characteristics:
 - Using this button opens a modal screen for selection of characteristics
 - Characteristics can be selected either by Characteristic Group or by Characteristics Filter
 - When no selection is made, this option defaults to all available characteristics for the selected search criteria.
5. Result Type:
 - This option allows you to select the result type by clicking the radio button for one of three options.
 - When one button is selected, the others are deactivated.
 - This option will default to "Both" if no selection is made.
6. Submit Query:
 - Submits the query with the selected criteria.
7. Reset Criteria:
 - Resets all search criteria back to default settings.

Building the query:

- 1) Navigate to the 'Search By Water Quality Criteria' screen.
 - In the demonstration above on how to search by map, 125 stations were selected by drawing a loop around them in the integrated Map Direct Lite. By selecting 'Query Water Quality Data' at the bottom of the station result screen, the user is transferred to the 'Search by Water Quality Criteria' screen where the search criteria will include the selected stations and their respective org_IDs pre-populated as shown below.

Home

Search by Water Quality Criteria

Please enter your search criteria below. Click [here](#) to learn more about STORET search criteria. Please select at least one Station criterion.

Search for ☐ Station ☐ Water Quality Criteria ☒ Both

Station Criteria

Org ID/Org Name: 4 selected **USGS HUC:**

County Name: **Primary Type:**

WBID:

Station(s) can be selected by "Station ID Look Up", "Station ID" or "Station Name".

☐ **Station ID Lookup:**

☒ **Station ID:** 23,COSPE6-1,COSPE7-1,COSPE7-2,E6 44-04,E6-A-04-07,E6-A-07-08,E6-A-
Enter Single Station ID or Multiple, separated by comma e.g. 1234,5678

☐ **Station Name:**
Enter Single Station Name or Multiple, separated by comma e.g. Station A,Station B

Water Quality Search Criteria

Activity Date Range: From To **Result Type:** ☐ Detected ☐ Non-Detected ☒ All

 **Select Water Quality Characteristic Group/Characteristic**

- 2) Modify the search criteria or continue without modification.
- 3) Selecting Characteristic Group/ Characteristics

- The 'Characteristic Group/ Characteristics' button opens a modal screen for selection of characteristics
- Characteristics can be selected either by Characteristic Group or by Characteristics Filter
- Selecting by Characteristic Group
 - Select the 'Characteristic Group' radio button.
 - Click on the drop down menu; one or multiple groups may be selected.
 - After selecting the Group(s), click 'Search'. The individual characteristics assigned to that Group(s) are listed in the selection box on the left side of the screen.
 - Any or all of the characteristics displayed in the Select Water Quality Characteristic Group/Characteristics list may be selected.
 - If more than 100 characteristics are returned, pagination will occur.
 - To preserve intended selection, characteristics selected on one page must be added to the Selected Characteristics box on the right side of the screen before moving to the next page.
 - 'Add' or 'Remove' are used to populate or remove from the Selected Characteristics box.
 - Characteristics may be added to or removed from the Selected Characteristics box by Group or individually..

Select Water Quality Characteristic Group/Characteristics

Characteristics can be selected either by *Characteristic Group* or by *Characteristics Filter*

☒ **Characteristic Group :** 2 selected

☐ **Characteristics Filter :**

Search

Select Water Quality

	Characteristics
☒	Escherichia coli
☒	Fecal Coliform
☐	Fecal Streptococcus Group Bacteria
☒	Nitrogen ion (N)
☒	Nitrogen, Kjeldahl
☐	Nitrogen, Nitrate (NO3) as N
☐	Nitrogen, Nitrate (NO3) as NO3
☐	Nitrogen, Nitrite (NO2) + Nitrate (NO3) as N

Page 1 of 1 View 1 - 38 of 38

Please add selected characteristics before moving to the next page.

Selected Characteristics

- ☐ Biological
 - ☐ Escherichia coli
 - ☐ Fecal Coliform
- ☐ Nutrients
 - ☐ Nitrogen ion (N)
 - ☐ Nitrogen, Kjeldahl

Add >> **<< Remove**

Done **Cancel**

Number of Characteristics : 4

- Selecting by Characteristics Filter
 - Select the 'Characteristics Filter' radio button.
 - Use the text box to type part or all of a characteristic name.
 - Click the 'Search' button. A list of all characteristics containing the entered text is returned in the selection box on the left side of the screen.
 - Any or all of the characteristics displayed in the Select Water Quality Characteristic Group/Characteristics list may be selected.
 - If more than 100 characteristics are returned, pagination will occur.
 - To preserve intended selection, characteristics selected on one page must be added to the Selected Characteristics box on the right side of the screen before moving to the next page.
 - 'Add' or 'Remove' are used to populate or remove from the Selected Characteristics box.
 - Characteristics may be added to or removed from the Selected Characteristics box by Group or by individual.

Select Water Quality Characteristic Group/Characteristics

Characteristics can be selected either by *Characteristic Group* or by *Characteristics Filter*

☐ Characteristic Group : Please Select Group

☒ Characteristics Filter : Chloro

Search

Select Water Quality Characteristic Group/Characteristics

	Characteristics
☐	Chlorophyll (a+b+c)
☐	Chlorophyll a (probe relative fluorescence)
☐	Chlorophyll a (probe)
☒	Chlorophyll a, corrected for pheophytin
☐	Chlorophyll a, free of pheophytin
☐	Chlorophyll a, uncorrected for pheophytin
☐	Chlorophyll b
☐	Chlorophyll c
☐	Chlorophyll/Pheophytin ratio

Page 2 of 2
View 101 - 178 of 178

Please add selected characteristics before moving to the next page.

Add >>

<< Remove

Selected Characteristics

☐ Biological

- ☒ Chlorophyll a, corrected for pheophytin
- ☐ Escherichia coli
- ☐ Fecal Coliform

☐ Nutrients

- ☐ Nitrogen ion (N)
- ☐ Nitrogen, Kjeldahl

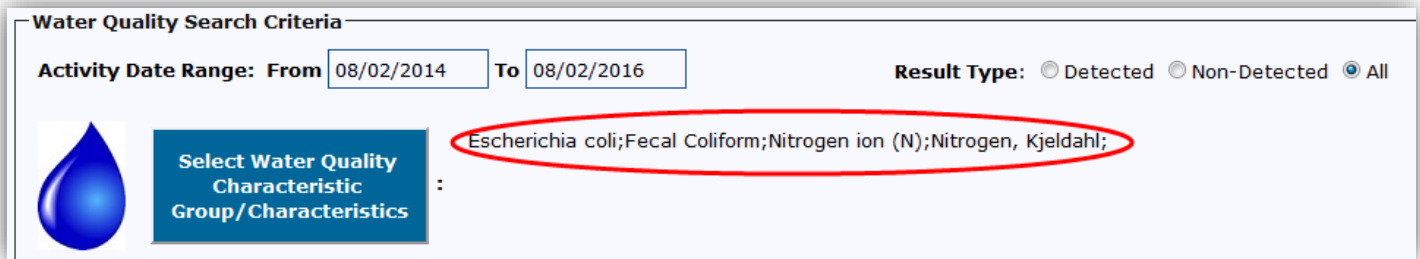
Number of Characteristics : 5

Done

Cancel

- Additional Characteristics can be added to the query by repeating this process through the Select Water Quality Characteristic Group/Characteristics button.

- Clicking 'Cancel' returns to the Search by Water Quality Criteria screen with no new characteristics added.
- Clicking 'Done' returns to the 'Search by Water Quality Criteria' screen and displays the selected characteristics.



4) Select 'Submit Query' or 'Reset Criteria'

Submit Query: Submits the query to return results

- Results are displayed in tabs based on which criteria was selected for the 'Display Results By' option
 - o Station
 - o Water Quality Data
 - o Both

Reset Criteria: Erases ALL search criteria, including the stations that were transferred from a previous 'Search By Map' query.

Viewing the Station Result tab

- 1) Listed at the top of the page are all the search criteria for the current query.
 - 2) The center of the page shows selected stations that match the search criteria using the integrated Map Direct Lite.
 - Data can be sorted by clicking the right side of the column heading. The sort is applied to the entire result data set, not just the page shown. The download file will not reflect the sorting of data.
 - Columns can be moved by left clicking on the column heading and sliding left or right. The download file will not reflect the new position of columns.
 - Although many stations were originally selected from the map and transferred to the 'Search By Water Quality Data' screen to be included in the search criteria, in this example there are only 3 stations that meet *all* of the selected search criteria and produced results.
- NOTE:
- When the 'Search For' option selected is Both, the query will return results that meet all search criteria for both the stations and the water quality data.
 - This result set in the Station Result Tab includes only stations that meet ALL search criteria, remembering that part of the defaulted criteria is a 2 year data range.
 - To increase the number of stations returned, try increasing the date range by selecting 'Modify Search' at the bottom of the screen.

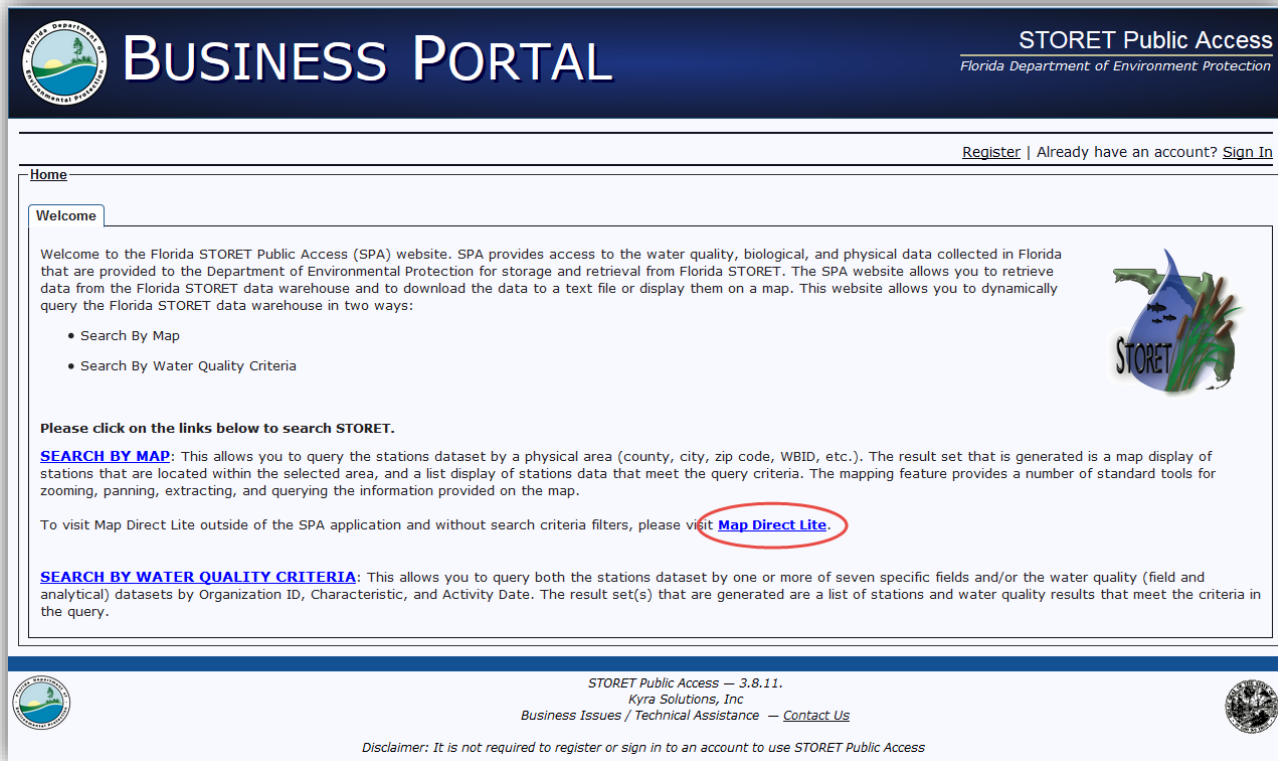
- When the 'Search For' option selected is Both, the query will return results that meet all search criteria for both the stations and the water quality data.
- The water quality data results include only result records that meet ALL search criteria – including the stations that meet all search criteria. So these result records are for the 3 stations that met search criteria for the designated 2 year period.
- To get a broader range of results, try increasing the date range by selecting 'Modify Search' at the bottom of the screen.

3) You have three options at the bottom of the screen:

- **Modify Search:** Return to the Search By Water Quality Criteria screen maintaining the current search criteria.
- **Download Water Quality Data Results:** Downloads the result water quality data.
- **Start New Search:** Return to the Search By Water Quality Criteria screen with all search criteria returning to default values.

How to view the Map Direct Lite application outside of the SPA application

On the Welcome screen, there is a link called 'Map Direct Lite'.



Click this link to leave the SPA application and access Map Direct Lite.

When directed to Map Direct Lite from SPA, the STORET Stations map is displayed.

If STORET Stations are selected, using the Report for this Station or Report for all Stations links within Map Direct Lite will return to the Search by Water Quality Criteria screen of SPA, and the selected stations are pre-populated in the Station ID field of the Station Criteria.

Glossary

Stations

Data Element Name	Definition
COUNTY	County in which the station is located.
LATITUDE	A latitude measurement indicates the angular distance (00 to 90 degrees) of a location north or south of the equator. North denotes a positive value for latitude, and south denotes a negative value. For example, the US has positive latitudes and Australia has negative latitudes. Latitude measurement is further specified by measuring the minutes (00 to 59 minutes) and seconds (00 to 59 seconds) of each degree. One degree of latitude equals 111.1 km or approximately 60 nautical miles.
LONGITUDE	A longitude measurement indicates the angular distance (0 to 180 degrees) of a location west or east of the prime meridian. The prime meridian is a measurement line that is drawn from pole to pole around the Earth, passing through Greenwich, England. East denotes positive values; west denotes negative values. For example, Australia has positive longitudes and the US has negative longitudes. Longitude measurement is further specified by measuring the minutes (00 to 59 minutes) and seconds (00 to 59 seconds) of each degree.
DATUM	The code that represents an acknowledged standard reference scheme of known coordinates from which calculations or measurements may be taken.
METHOD	The code that represents the method used to determine geographic coordinates of a location point.
PRIMARY TYPE	Type refers to the principle designation of the station (e.g., estuary, ocean, great lake, facility, etc.). Sometimes this primary station type can be further clarified.
SECONDARY TYPE	Secondary type is a more detailed description of the principal designation of the station. Only some primary station types require the listing of a secondary type. For example, if the primary type is facility, the secondary type must specify what type of facility the station is (e.g., Industrial, Municipal Sewage (POTW), Municipal Water Supply (PWS), etc.).
STATION ID	This ID identifies the station within the organization; therefore, it must be a unique ID within the organization. If you enter a duplicate ID, the system will reject the ID when you attempt to accept the station. Station ID is a 15-character, alphanumeric field.
STATION NAME	This is the name by which an organization refers to a station. For example: Jones Point Station. Station Name is a 60-character, alphanumeric field.
USGS HUC	The US has been mapped into different drainage basins to identify where water will flow when it rains. These basins are identified by a series of hydrologic levels. The Hydrologic Unit Code (HUC) is an eight-digit number that describes the four hydrologic levels into which the US has been divided: Region, Sub region, Accounting Unit, and Cataloging Unit. For more information, visit http://water.usgs.gov/GIS/huc.html .
WBID	Water Body ID. An identifier for a homogeneous portion of water that the Department will assess and evaluate for purposes of determining whether a TMDL will be required.

Data Element Name	Definition
ACTIVITY DATE	This is the date on which the sampling activity began (note: This entity could be interpreted differently for different activity types. For example, if the activity type was a data logger event, the activity date would most likely reflect the date of logger deployment).
ACTIVITY TYPE	Indicates the nature of an activity; whether the activity performed is a field measurement/observation, a laboratory sample, a data logger event, or a trip QC sample.
ACTIVITY CATEGORY	A descriptor used to distinguish different kinds of samples and different kinds of Measurements & Observations. The permitted value list is controlled by the choice of Activity Type (i.e. if ACTIVITY TYPE is 'Sample', CATEGORY may be 'Routine Sample' or 'Field Replicate/Duplicate').
ACTIVITY DEPTH	This is the distance from the surface to the point in the water column at which the activity is conducted.
ANALYSIS DATE	The date on which laboratory analysis of the sample for a particular result was performed.
CHARACTERISTIC	A characteristic is the name of the biological, chemical or physical constituent being investigated. For example, in an analysis for fecal Coliform bacteria, the name of the characteristic is 'Fecal Coliform'.
DATE RANGE	In reference to the search engine interface, this is the date range chosen for a desired set of results.
MINIMUM DETECTION LIMIT (MDL)	Refers to the least amount of the target substance that could be detected by the instrument or analytical process that was used to determine the result. Above this value, the target substance is presumed to be present.
ORG ID	The Org ID is the unique identifier of the State, Federal, local, academic, commercial, or other agency responsible for and in ownership of retrieved data. For a list of Org IDs and names, visit http://publicfiles.dep.state.fl.us/DEAR/storet/tsmorgan.pdf
PRACTICAL QUANTITATION LIMIT (PQL)	Represents the least amount of the target substance which could be quantified by the instrument/analytical process employed to determine the result. Values above the minimum and below the maximum quantitation limits are reported as valid numeric results.
PROCEDURE NAME	The abbreviated name or identifying code of the analytical procedure.
RELATIVE DEPTH	This is a general description of the depth at which the activity is conducted (i.e. surface, midwater, or bottom).
COMMENT	This field is a free text metadata field (up to 1999 characters) that provides additional information about a result record, particularly if the result is anomalous or in some way questionable.
RESULT VALUE	The alpha-numeric representation of the result of analyzing, measuring, or observing a Characteristic.
SAMPLE FRACTION	When results are obtained from a physically partitioned sample. This field is used to select the portion of the sample that was associated with the results.
VALUE QUALIFIER (VQ)	A code describing specific quality assurance conditions as reported by the data provider. This field is exclusive to FDEP STORET. For definitions of the specific codes, visit http://www.dep.state.fl.us/water/storet/docs/EASo1-01_help.pdf .