

Working together for clean water

# **Getting Started With The Water Quality Portal**

http://www.waterqualitydata.us/

### What is the Portal?

The national Water Quality Portal (Portal) combines physical, chemical and biological water quality data from multiple data sources at one location and serves the data out in one format. It provides a single, user friendly web interface to access more than 250 million water quality data records collected by over 400 federal, state and tribal agencies and other water partners. The data is served out in one format to increase the use for prospective users including scientists, policy-makers, and the public in their water data analyses.

The Portal is a cooperative service sponsored by the United States Geological Survey (USGS), the United States Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). The Portal integrates publicly available water-quality data from the EPA STOrage and RETrieval (STORET) Data Warehouse, the USGS National Water Information System (NWIS) and the United States Department of Agriculture (USDA) Sustaining the Earth's Watersheds Agricultural research Data System (STEWARDS) through the Water Quality eXchange (WQX).

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### How can I access data from the WQP?

Retrieving data from the WQP is easy using the customizable search fields. The following steps are an example of a typical way users could search the data, but utilizing all steps is not necessary.

#### Step 1 Select a location

The Location section allows you to spatially locate data by Place, Point Location, or Bounding Box. Place allows you to select data based on country, state and/or county associated with the desired dataset. Point Location can be used to enter a latitude/ longitude point and a distance (in miles) surrounding a point to find data near your desired location. Latitude/ longitude coordinates can be found using mapping tools, for example Google Maps has this feature. Also, you can click Use my location to find stations and data near you.

**Bounding Box** allows you to identify a square by entering latitude/longitude coordinates. This query will return all stations or data within the spatial square you have defined.

#### Step 2 Define your site type

The Portal allows you to select the data types of interest, thereby limiting the amount of data the Portal will return. This is helpful for users who want to analyze certain characteristics in specific waterbody.

The *Site Parameters* section allows you to select data by a Site Type, Organization ID, Site ID, and/or Hydrologic Unit Code (HUC).

**Site Type:** A site type is a description of the typed of location where the data was collected. (e.g. Estuary, Stream, Wetland, etc.)

#### Water Quality Portal

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**Site ID:** An Id for a location as defined by the collecting Organization. This is best used when you know the exact site ID you are looking for.

**HUC:** Federal Code used to identify the hydrologic unit of the monitoring location to the cataloging unit level of precision. Entry must be in HUC8 format.

#### Step 3 Define your parameters

The Sampling Parameters section allows you to find water quality data of a certain type and/or within a specific date range.

SAMPLING PARAMETERS	0	Ľ
		l c
Sample Media:		
Characteristic Group:		
Characteristics:	All ?	
Parameter Code: (NWIS ONLY)	?	
Date range - from: mm-dd-yy	yy to: mm-dd-yyyy	

Sample Media: indicates the environmental medium where a sample was taken (e.g. water, air, habitat, etc.)

Characteristic Group: refers to specific constituent groups (e.g. nutrients, sediment, etc.)

Characteristic: You can select data for a specific parameter of interest. (i.e. nitrogen)

Parameter Code: This is available for NWIS data only. This guery allows users to search for specific water quality constituents by NWIS parameter codes. Date Range: A user can define a specific late range to limit their data download.

#### Step 4 Select data source and download your data

As a cooperative service, the Portal enables you to seamlessly access data from STORET, NWIS and STEWARDS collectively or separately.

Select Database: If you are looking for all the data with the location and site information identified above, leave the field at the default All. Alternatively, you can select an individual database.

Select Data to Download: You are now ready to download your data. Select the data sites or results and the file format you want. To get both the site and result information, you will need to first select Sites only and select download and then select Sample results only and select download again to obtain both types of records. Note: The sites and results datasheets have a common data field Monitoring Location ID which can be used to join the two datasets.

File Format: You can download the Sites and Sample results data using the options listed. The comma-separated, tabseparated and MS Excel 2007 can be opened directly into Excel. The KML format is a geospatial file available only for

	Select database:	
Optional Step– Show Web Service Calls		
To save the query specifications for future search-	Show sites on map	
es, select this step to obtain the URL for down-		
loading the data. Copy the URL for <i>Site Data</i> only,	Select data to download:	File format:
Sample Results, or use the WFS GetFeature. These	<ul> <li>Site data only</li> </ul>	Comma-separated
links can be imbedded for web calls to the data.	<ul> <li>Sample results (physical/chemical metadata)</li> <li>Sample results (historical metadata)</li> </ul>	Tab-separated     Mo Fund 2007
<b>Note</b> : future uses of the same guery may yield	<ul> <li>Sample results (biological metadata)</li> </ul>	MIS EXCEL2007+     KML (Keyhole Markup Language - for Sites only)
different data, as new data are continually added		
and records updated in the Portal databases.	DOWNLOAD	
·	Show Web Service Calls ?	



## **Optional Step-**Show Sites on a Map

The Portal enables a guick display of your data query result locations. The map display is an optional step, but can be helpful for identifying an exact site within the specified query parameters, to verify the query returned the desired results, or to find other agency site locations in the area of interest. From the map view, you can select a single station to identify the station owner and download the data.

For more information, contact the EPA STORET/WQX team at storet@epa.gov