



# Water Quality Portal Update

13 Sept 2012  
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Charles Kovatch, USEPA

# Outline

- Brief Project Review & Status
  - FY13 Plans
  - NWQMC Communications Strategy
  - Discussion and Feedback
- 
- Will be providing Proposed Workplan for comments.



# NATIONAL WATER QUALITY MONITORING COUNCIL



## Water Quality Portal

[www.waterqualitydata.us](http://www.waterqualitydata.us)



*Search over **150 million water-quality data records** from States, Tribal Partners, USEPA, and USGS*





# NATIONAL WATER QUALITY MONITORING COUNCIL



Working Together for Clean Water

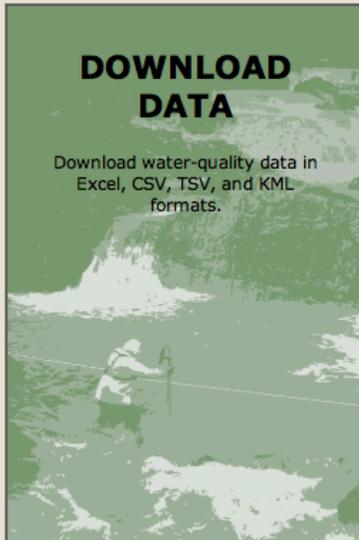
# WQP

## Water Quality Portal

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC).

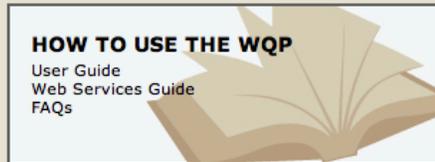
### DOWNLOAD DATA

Download water-quality data in Excel, CSV, TSV, and KML formats.



### HOW TO USE THE WQP

User Guide  
Web Services Guide  
FAQs



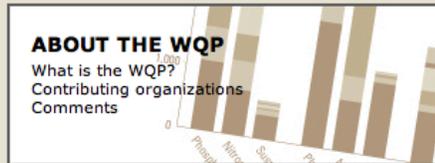
### NATIONAL RESULTS COVERAGE

Water-quality data in your state.

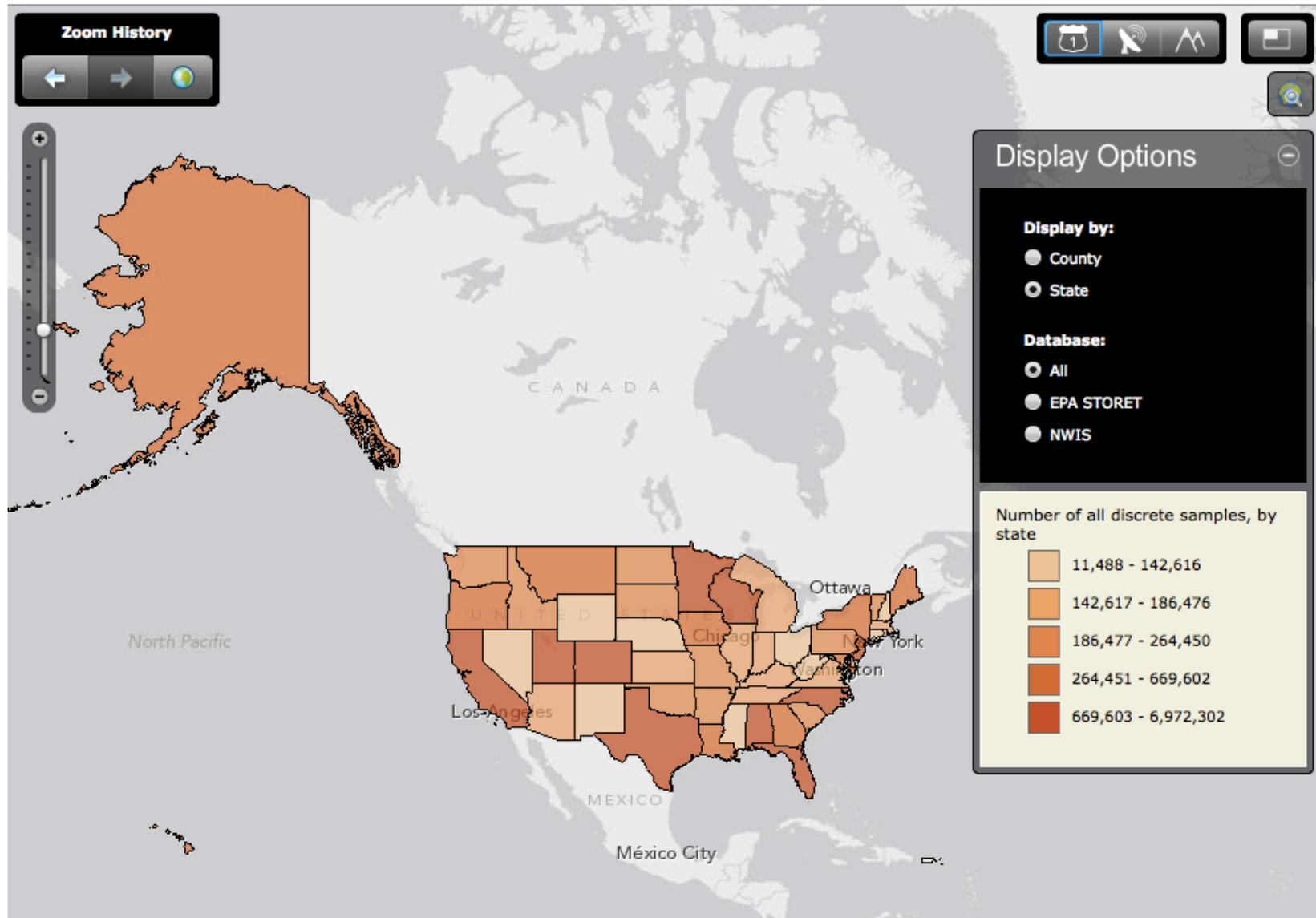


### ABOUT THE WQP

What is the WQP?  
Contributing organizations  
Comments



# Water Quality Portal National Results Coverage STORET & NWIS



# Water Quality Portal

## Query data

### LOCATION

Country:  [select](#)  
State:  [select](#)  
County:  [select](#)

### Point location: ?

Within:  miles from:  
Lat:  Long:   
[my location](#)

### Bounding box: ?

North:   
West:  East:   
South:

### SITE PARAMETERS

Site Type:  [select](#)  
Organization ID:  [select](#)  
Site ID:  ?  
HUC:  ?

### SAMPLING PARAMETERS

Sample Media:  [select](#)  
Characteristic Group:  [select](#)  
Characteristics:  [select](#)  
Date range: from  to  (mm-dd-yyyy)

### DOWNLOAD

Select database:  All databases  USGS NWIS only  EPA STORET only  
Select data:  Sites only  Sample results only

#### Download tabular data:

File format:

- Comma-separated  
 Tab-separated  
 MS Excel (Excel 2003 and earlier versions have a limit of 65,536 rows. If your download exceeds this limit, only the first 65,536 rows will open.)

#### Download map data:

File format:

- KML (Keyhole Markup Language - this is available for Sites only)

[Show data on Google Maps](#) Google Maps limits the number of sites shown to a maximum of 1000. It will also time out if the query is slow.

**DOWNLOAD**

Show RESTlike queries ?

# Meeting NWQMC Goals

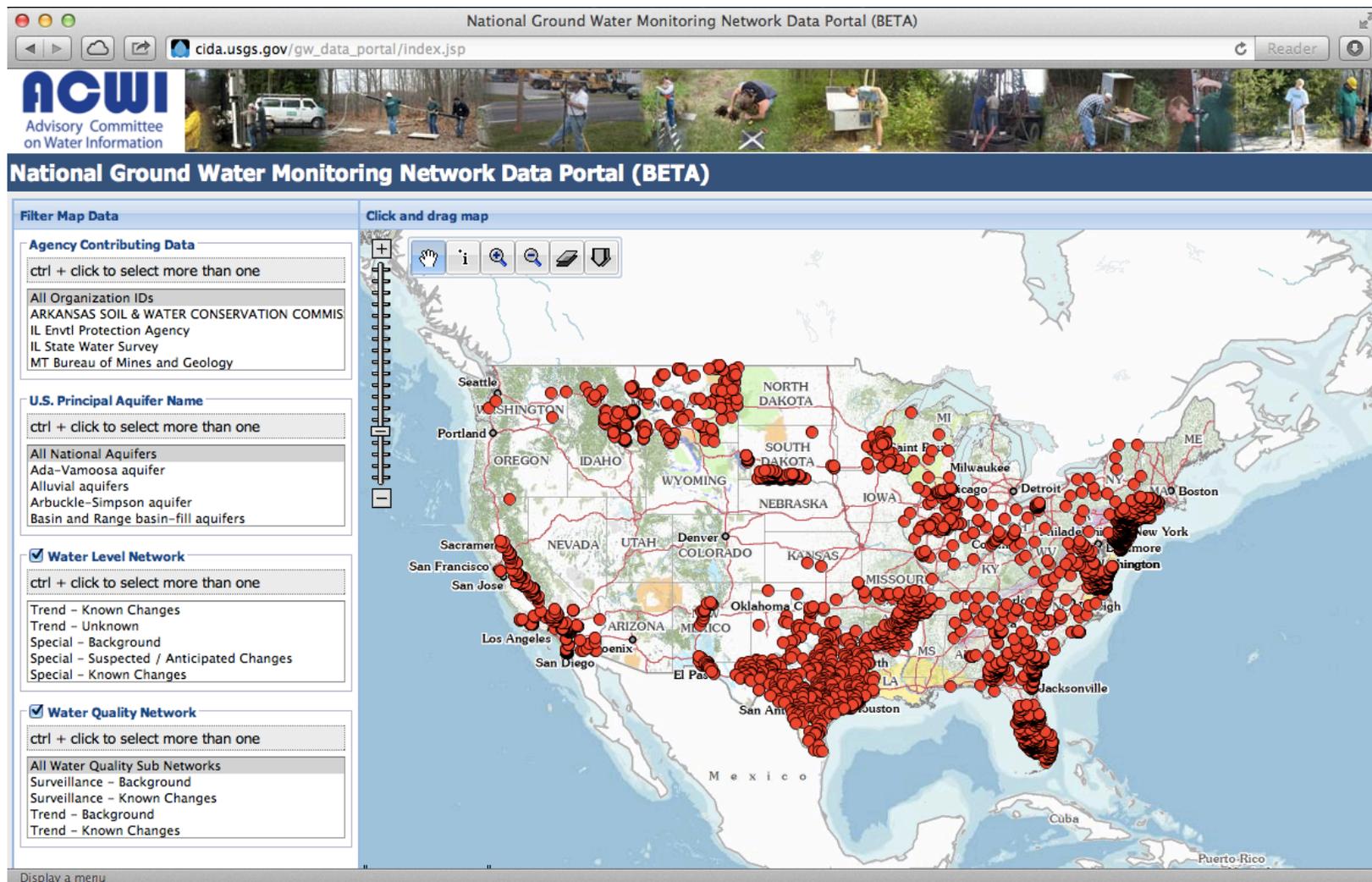
- Comparable and reliable data
- Data management and sharing
- Collaborative monitoring & outreach
- Supporting a National Monitoring Network

# Status – Portal Website

- Usage: 4000 visits since Conference
- ~50-200+ visitors / day
- ~75 “contacts”

# Status – Portal Serving Other Applications

# National Groundwater Monitoring Network





HOME

DOWNLOADS

COMMUNITY

DOCUMENTATION

FEATURES

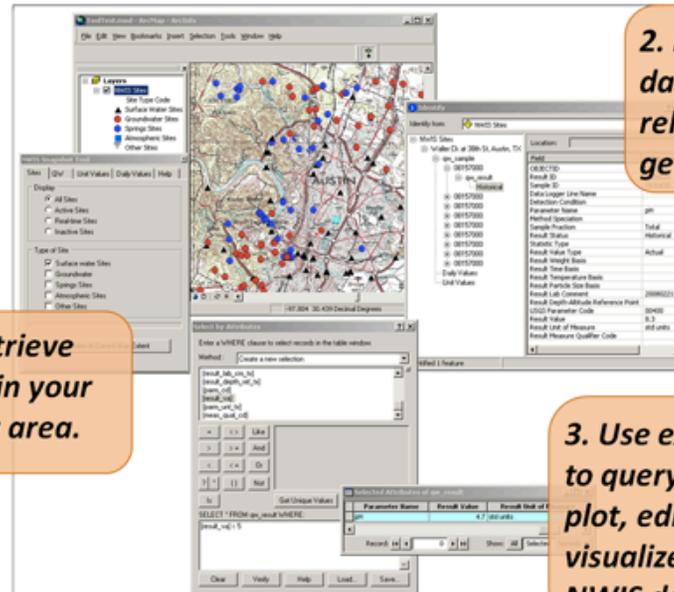
## NWIS Snapshot

### What is the NWIS Snapshot?

The NWIS Web Services Snapshot Add-In gives ArcGIS users the ability to query NWIS web services and download a "snapshot" of NWIS data from the web services to a geodatabase.

The geodatabase, provided with the Snapshot Add-In installation files, has built-in relationships between sites and measurements taken at each site so users can run powerful queries, import tables and build new relationships with the NWIS data, and edit the data while maintaining the built-in relationships.

After requesting data from NWIS web services and populating the geodatabase, standard ArcGIS functions may then be used to visualize, analyze, and export data to other analysis software also. Aside from the software download links, this website contains tutorials that demonstrate how to install and use the NWIS Web Services Snapshot Add-In for ArcGIS.



1. Retrieve sites in your study area.

2. Retrieve data to a relational geodatabase.

3. Use existing tools to query, analyze, plot, edit, expand, visualize, and export NWIS data.

[Download Latest Version](#)

# Nearshore Modeling Support

EnDDaT
cida.usgs.gov/enddat/dataDiscovery.jsp
Reader

**USGS Home**  
**Contact USGS**  
**Search USGS**

**Environmental Data Discovery and Transformation - Beta Service Version 1.3.0**

Access and Integrate Environmental Observations for Coastal Decision Support

Choose Data
Create Project Location
EnDDaT Information

USGS Time Series ([NWIS](#), [Plotting Tool](#))
   National Data Buoy Center ([NDBC](#))
   6-hr Quantitative National Precipitation

Great Lakes Coastal Forecasting System ([GLCFS](#))
   National Climate Data Center ([NCDC](#))
   1-hr Quantitative North Central Precipitation

USGS Water Quality ([Water Quality](#))
   Surface Summary of Day Data ([SOD](#))

Search within a  mile bounding box from selected project (click marker to identify)

Map
Satellite
Hybrid
Terrain

NWIS
GLCFS
Water Quality
NDBC
NCDC
SOD
Precipitation

Overview
Active Stations

Clear list:       Uncheck All:

**MANITOWOC RIVER AT MANITOWOC, WI**

**MANITOWOC RIVER AT MANITOWOC, WI**  
 Station ID: USGS-04085427  
 Approximate distance to active beach: 3.508 miles

	Property	Units	Start Date	End Date
<input type="checkbox"/>	Temperature, water	deg C	1972-11-30	2008-09-16
<input type="checkbox"/>	Suspended sediment concentration (SSC)	mg/l	1972-11-30	2002-10-16
<input type="checkbox"/>	Stream flow, instantaneous	cfs	1972-11-30	2011-09-08
<input type="checkbox"/>	Suspended sediment discharge	tons/day	1972-11-30	2011-09-08

Display a menu

# FY13 Draft Plans

- Based on WQP User's Group, NWQMC Conference, Users, USGS & USEPA Staff
- Components:
  - Operations and Maintenance
  - Communications and Outreach
  - New Capabilities

# Operations and Maintenance

- User Support
- Database and Web Service Operations
- Software Updates and Bug Fixes
- Collecting Usage Statistics
- Coordinating with Source Systems

# Map Display

- Strongly Desired by Community
- Display monitoring locations on map based on portal search criteria
- Improved site and sampling metadata on map

# Data QA/QC Analysis and Checks

- Analyze various data quality issues
- Scope with the Council

# Add Additional Data Providers

- Analyze and understand steps for adding additional providers
- Encourage additional WQX “flows”
- USDA STEWARDS

# Integration with NEMI

- Scope Activity and Pilot in FY13
- Search for WQ data by analysis performance metrics and methods
- Downloads performance and methods metadata with WQ sample data

# Integration with NHD

- Scope Activity and Pilot in FY13
- USGS and USEPA indexing surface water monitoring locations with NHD
- NHD can provide:
  - upstream/downstream search
  - Linking monitoring locations spatially

# Communications

- USGS announcement (made week of 9/3/3012)
- Article in Fall Council Newsletter
- Briefing Sheet - Obtain quotes from folks on the WQP during the NWQMC meeting and include in a podcast.
- EPA Watershed Academy Webinar Demonstration
- NWQMC Webinar to be scheduled in coordination with EPA sponsored webinar.
- Develop ongoing NWQMC communication strategy:
  - Water Information Strategies Workgroup
  - Proposal at November Meeting