



September 7, 2012

## **Office of Water Quality Water-Quality Information Note 2012.08**

### **Subject: New Water-Quality Portal Provides Access to Over 150 million Water-Quality Data Records**

The U.S. Geological Survey (USGS) and U.S. Environmental Protection Agency (USEPA) have launched a new [Water Quality Portal](#) for discovery and acquisition of water-quality data. Technological advances and continuing collaboration over the past 10 years have made it possible to bring together discrete chemical, physical, and microbiological data from USGS's National Water Information System Web Interface (NWISWeb) and USEPA's modern Storage and Retrieval Data Warehouse (STORET) into one common Portal. Improved access to water-quality information, such as provided by the Portal, can lead to better informed water-quality management and policy decisions at all levels.

The Portal provides a single, user-friendly web interface showing where water-quality information is available from federal, state, tribal and other partners. It greatly reduces time and effort required to discover, evaluate, acquire, compile, and format discrete water-quality data and information. The Portal is unique in that it provides scientists, policy-makers, and the public with a single web interface to query data stored in the modern STORET and NWISWeb systems. The Portal utilizes the common nomenclature known as the Water Quality Exchange (WQX) to output data from NWISWeb and STORET and provide it in a consistent format.

Data can be identified and acquired based on state, county, watershed, site(s) and by authoritative data source. Downloaded data can be served in comma-separated, tab-separated, MS Excel, Keyhole Markup Language (KML) and Extensible Markup Language (XML) file formats. Future enhancements planned for the Portal in the near term include a data mapper to further simplify data discovery and acquisition.

For USGS users, the new Portal enhances the ability to readily acquire STORET information. This new Portal provides improved access to a wider range of water-quality data beyond NWISWeb for development of projects and proposals for water-quality monitoring, assessment, research, synthesis, and models. The Portal enables the aggregation of data from multiple sources and at multiple scales that in the past were relatively more difficult and time consuming to discover, acquire, and format for analysis. This new Portal is the culmination of many years of collaborative work between USGS and USEPA. Initial water-quality web services were released by both agencies in 2008 (<http://www.usgs.gov/newsroom/article.asp?ID=2046>) as a first step in a long-term data sharing collaboration. These initial web services provided data in a common format which allowed users to merge datasets after retrieval from each agency database. While web service calls developed using the older USGS "Mini Portal" interface (<http://qwwwebservices.usgs.gov/portal.html>) continue to be supported, we encourage users to update software and scripts to reflect the updated URLs from the USGS/USEPA Water Quality Portal (<http://www.waterqualitydata.us/portal.html>).

The Portal is a cooperative service sponsored by the USGS, the USEPA, and the National Water Quality Monitoring Council (NWQMC). The NWQMC provides a forum to improve the Nation's water quality through partnerships that foster increased understanding and stewardship of our water resources. The Portal is supported, in part, through funding from the USGS' National Monitoring Network for Coastal Waters and their Tributaries and the USEPA Office of Water. The new Water-Quality Portal can be accessed at <http://www.waterqualitydata.us/>.

For additional information on using or contributing data to the Portal, contact Nate Booth ([nlbooth@usgs.gov](mailto:nlbooth@usgs.gov)). For programmatic and general information contact Mike Yurewicz ([mcyurewi@usgs.gov](mailto:mcyurewi@usgs.gov)).

*WaQI Notes are archived on the Office of Water Quality web site,  
<http://water.usgs.gov/usgs/owq/WaQI/index.html>*

Signed,

The Office of Water Quality  
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