



What's New in STORET?

Improving How We Share and Use Water Quality Data

The U.S. Environmental Protection Agency's (EPA) STORET program is proud to announce the release of the Water Quality Exchange, or WQX. WQX is a new data transfer system that makes it easier for states, tribes, and others to submit and share water quality monitoring data over the Internet. With WQX, groups who collect water quality data no longer need to use EPA's STORET database to submit their information to the National STORET Data Warehouse. WQX, in essence, uses new Web technology to bring data sharing into the 21st century.

Also newly available is a Web-based Watershed Summary tool designed to help water quality managers and the public use the information in the National STORET Data Warehouse. The Watershed Summary allows users to create a summary report for an individual watershed. It shows the types of data available in the Warehouse for that watershed (such as metals, nutrients, or pesticides data), who has entered the data, the period of record for the data, and how much data are available. The user can then download the specific data needed for that watershed.

WQX and the National STORET Data Warehouse

EPA developed the National STORET Data Warehouse in 2001 to store and make available water quality data collected by federal agencies, states, tribes, watershed organizations and universities. A chief goal of the Warehouse has always been to encourage data sharing and to support national, regional, and local analyses of water quality data collected around the country. EPA will continue to maintain the Warehouse to ensure that data of documented quality are available across jurisdictional and organizational boundaries.

Until now, to upload water quality data into the Warehouse, users needed to operate the Oracle-based STORET database. This was cumbersome and difficult for many states and tribes. WQX is a data transfer framework that eases this process for chemical, physical, and fish tissue data. Data in the Web-accessible Warehouse can then be

WQX uses new Web technology to make it easier for users to submit water quality data to the National STORET Data Warehouse using their own varied databases. The Web-based Watershed Summary tool, designed to improve the use of the data in the Warehouse, allows water quality managers and the public to create summaries of available data for individual watersheds.

The National STORET Data Warehouse houses 50 million records of water quality data collected across jurisdictional and organizational boundaries. EPA will continue to maintain the Warehouse and require data owners to document the quality of the data they submit.

more easily shared with others across the nation. Ease of use will also encourage more states and tribes to transfer their data to the Warehouse, where it will be of value to federal, state, and local water quality managers and the public.

WQX improves the flow of data into the STORET Warehouse by using new Web technology and standard processes on the National Environmental

Information Exchange Network (a partnership among states, tribes, and EPA that allows efficient and secure data sharing). Data may be transmitted through the Exchange Network to the Warehouse from any database, once the database fields are “mapped” to the Warehouse structure.

Compared to STORET, WQX requires a more streamlined set of data elements yet still provides for complete reporting of water quality monitoring data of documented quality, from field measurements and observations to samples and sub samples. EPA continues to require data owners to document the quality of the data they submit. This information is critical to states and other users who define the data quality objectives they need to support water management decisions.

Next Steps

EPA continues to work with its partners to improve how we share and use water quality data.

- New Web services, which will be available by summer 2007, will provide improved accessibility to data. These Web services allow users to incorporate data from the STORET Warehouse into their own specialized applications that include water quality modeling, data analysis, priority setting and decision making, or public information.
- EPA is working to complete WQX's ability to migrate the full range of water quality data, including biological, physical habitat, and toxicity data. This is scheduled to be available by spring 2008.
- EPA is committed to working with current state and tribal users of the distributed STORET database as they transition to the new WQX system.
- EPA hopes to develop a Web-based data transfer tool that will enable small users (such as some tribes and watershed organizations) to migrate data of documented quality into the Warehouse.



Web Resources and Additional Information

For additional information about WQX, visit

www.epa.gov/storet/wqx.html

or contact

The STORET Team
storet@epa.gov

To learn more about the Watershed Summary, visit
www.epa.gov/storet

For additional information about the Exchange Network, visit
www.exchangenetwork.net

USEPA Office of Water
EPA 841-F-07-002