

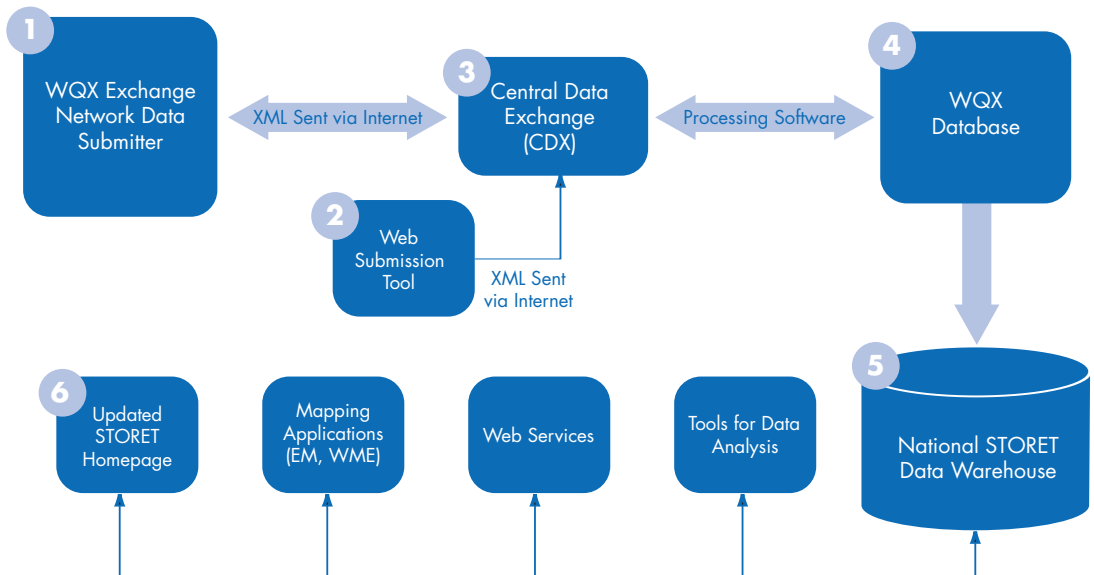


Water Quality Exchange

What Is Water Quality Exchange (WQX)?

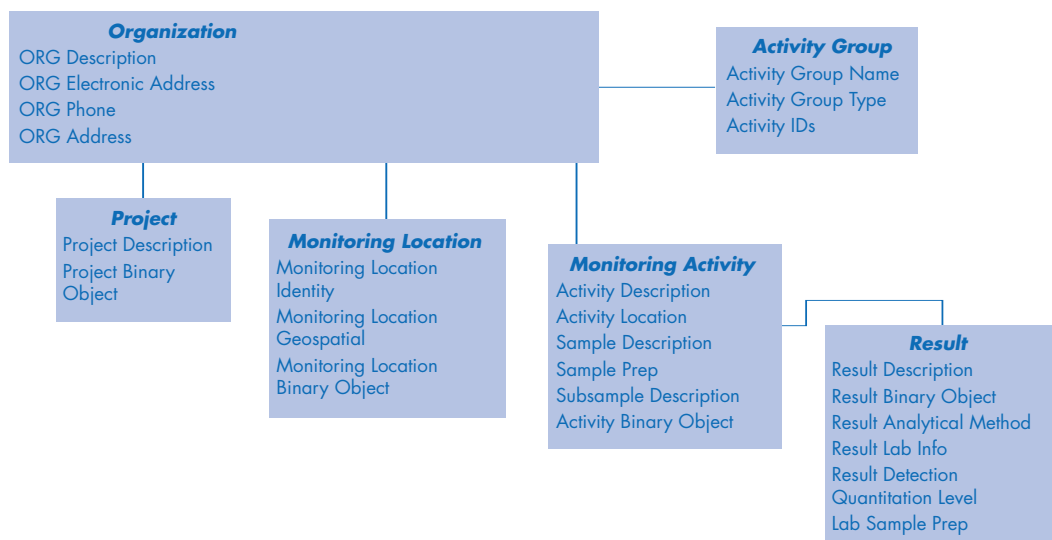
- **The next evolution of the distributed STORET system** as a new way of sharing ambient water quality data with the U.S. Environmental Protection Agency (EPA).
- **A framework** that facilitates the submission of water quality and related environmental monitoring data to the National STORET Warehouse over the Internet.
- **The WQX schema** is a standard set of data formats that specify the data elements and data structure required for submission of data to EPA. The WQX schema is an implementation of the Environmental Sampling, Analysis, and Results (ESAR) data standard, developed by states and EPA.

How Does the WQX Data Flow Work?



- 1 Data are submitted to the WQX system using XML in the format of the WQX schema.
- 2 Alternatively, users may submit data using a Web submission tool that generates XML.
- 3 WQX data come in to EPA through the Central Data Exchange (CDX). CDX is EPA's presence on the Exchange Network, and all data submitted to EPA must come through CDX for user authentication and data validation.
- 4 The WQX database receives the data after they are processed to fit into the database format.
- 5 The data are then put into the National STORET Data Warehouse, where they can be accessed for data retrieval through:
 - 6 the updated STORET homepage, mapping applications such as EnviroMapper and Window to My Environment, Web services, and other tools for data analysis.

The WQX Schema



- The WQX schema represents a more streamlined set of data elements than STORET yet still provides for complete reporting of water quality monitoring, from field measurements and observations to samples and subsamples.
- The major components of the WQX schema follow the ESAR data standard closely, and many of the data elements in WQX share the same names and definitions as the data elements in ESAR.
- The WQX schema accommodates the sharing of physical, chemical, and fish tissue results data. In the future, WQX will also accommodate the sharing of biological and habitat data.

WQX Milestones

| | |
|---|---------------|
| WQX ready to receive submissions of chemical, physical and fish tissue data | February 2007 |
| Begin WQX Bio/Habitat Schema Pilot | March 2007 |
| Finalize WQX Bio/Habitat Schema | January 2008 |
| WQX ready to receive submissions of biological and habitat data | May 2008 |
| WQX Web Tool available for Physical/Chemical data | Early 2008 |
| Final WQX web tool (including bio/habitat) available | Mid 2008 |

What About STORET?



- STORET is the currently distributed suite of data management tools that facilitate water quality monitoring data submittal to EPA for placement in the National STORET Data Warehouse.
- Over the next 3 to 4 years, WQX will become the primary means of submitting water quality monitoring data to EPA as support for STORET-distributed tools will be discontinued in September 2009.
- The National STORET Data Warehouse will be enhanced to accommodate WQX data and will still serve as the national repository of water quality data.

Web Resources and Additional Information

For additional information about WQX, visit www.epa.gov/storet/wqx.html

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

For additional information about CDX, visit www.epa.gov/cdx