EPA's Water Quality Framework
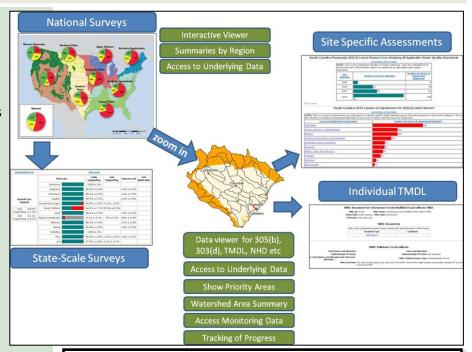
Next Steps Toward Improved Accountability

What is EPA's Water Quality Framework?

The Water Quality Framework is a new way of integrating EPA's data and information systems to more fully support water quality managers. The Framework will streamline water quality assessment and reporting while providing a more complete picture of the nation's water quality.
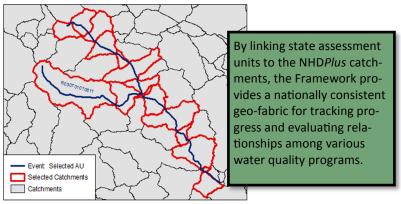
Benefits of this approach

Integrating data systems through the implementation of the Water Quality Framework:

- Reduces state burden by streamlining the Clean Water Act assessment and reporting process;

- Provides the means to tell the 'whole' story from monitoring to assessment to restoration;

- Provides better measurement and reporting of water quality improvement;

- Provides more transparency in water quality decision making;

- Allows for tools that can be used to identify relevant monitoring data for water quality assessments;

- Supports state development of tools to automate the screening of monitoring data against water quality standards; and

- Connects data, decisions, and actions geospatially.

This graphic represents how the Framework will integrate assessment information on EPA's public web site. This user could start at the national scale, interacting with data and summary information from EPA's National Aquatic Resource Surveys. From there, the user will be able to navigate to a state-scale survey to see conditions and progress across the state, and then zoom into state priority areas and track site-specific assessments and restoration activities.

By linking state assessment units to the NHD*Plus* catchments, the Framework provides a nationally consistent geo-fabric for tracking progress and evaluating relationships among various water quality programs.

Step K.6. Final Catchments associated with the selected Event (AssessmentUnit).

More information is available at the Framework SharePoint site: https://usepa.sharepoint.com/sites/OW_Work/WQF/

Implementing the Framework

2014	Initiate ATTAINS Redesign Workgroups
	Implement new geoprocessing approaches
	Workgroup report-outs
	Research options for sensor data
2015	Redesign ATTAINS based on partner input
	Conduct 'experiment' for sensor data
	Use new approaches for new 303(d) program measures
	Release ATTAINS for 2016 Integrated Report
	Initiate open-source community for tools to automate portions of the state assessment process
	Initiate support to partners to transition to the new Framework
2016	Update public website to give a more holistic view of water quality
	Test new approaches for water quality restoration measures
	Conduct study of 'lessons learned' from 2016 Integrated Report cycle
2017	Make revisions based on lessons learned
	Final release of ATTAINS for 2018 Integrated Report
2018	Begin Phase II of the Framework to incorporate 'Actions' (Non-point source grants, permits, etc.)

Framework Components

STORET/WQX: Making Water Quality Monitoring Data Easily Accessible and Available to the Public

Under the Framework, STORET/WQX will continue to provide easy access to monitoring data via the **Water Quality Portal.** Additional Framework activities include:

- Developing approaches for **sharing continuous data**

- Further streamlining the discovery of monitoring data and working with partners to develop **tools to automatically screen monitoring data against water quality criteria**

Assessment TMDL Tracking and Implementation System (ATTAINS): Providing public access to CWA assessment conclusions and restoration plans, and communicating progress towards restoring water quality

ATTAINS will be redesigned as part of the Framework. A new interface will be developed to provide easy submittal of state 303(d)/305(b) Integrated Reporting and Total Maximum Daily Load (TMDL) information, as well as a single location for EPA review of state impaired water lists and TMDLs. Some other key activities include:

- Streamline reporting of **water quality measures**

- Providing **linkages** between **water quality assessments** and **monitoring data**

- Provide more **transparent** and **timely** access to **state assessment and TMDL data**

NHDPlus: Providing a nationally consistent geofabric for tracking progress and evaluating relationships between various water quality programs

The NHD*Plus* is a key component of the Framework. It will provide the backbone for a number of EPA's water quality measures. EPA will:

- Use the NHD*Plus* **catchments** to provide a **consistent** and s**treamlined** way to **demonstrate** the **progress that states are making in restoring and protecting** water quality

- Use **automated approaches** for **mapping state data** to the NHD*Plus*