

Update on WQX/STORET Activities

STORET User Call
June 26, 2014

Overview

- ▶ Update on Water Quality Framework
- ▶ Update on WQX and STORET activities
- ▶ What does this mean for water data sharing and STORET community?
- ▶ We need your help

Agenda

- ▶ Greetings STORET Community
- ▶ We will hold the monthly STORET User call on Thursday May 26, 2014 at 12 noon Eastern using:
 - Call number 866-299-3188, access 202-566-0399#
 - Please remember send an email to storet@epa.gov to indicate that you are on the call.
 - Webinar link:
<https://epa.connectsolutions.com/storetusercall/>
- ▶ Agenda
 - ▶ 1. Presentation: Update of STORET Activities
 - ▶ a. Water Quality Framework
 - ▶ b. WQX and STORET enhancements
 - ▶ c. How you can participate

Attendees

- ▶ Bill Kramer – US EPA
- ▶ Cathy Alexander – Ohio EPA
- ▶ Cathy Anderson – Texas
Commission on Environmental
Quality
- ▶ Dean Tucker – National Park Service
- ▶ Emily Zimmermann – Maine
Department of Environmental
Protection
- ▶ Eric Wilson – Gulf Coast STORET
- ▶ James Hudson – Wisconsin DNR
- ▶ Jim Porter – MN.IT Services
- ▶ Jolene McQuillan – Montana
Department of Environmental Quality
- ▶ Katie Anderson – Northwest Indian
Fisheries Commission
- ▶ Kayren Pittman – Alabama
Department of Environmental
Management
- ▶ Lara Panayotoff – Kentucky
Department of Environmental
Protection
- ▶ Lemonteh' Horne – Florida
Department of Environmental
Protection
- ▶ Melanie Titus – New Hampshire
Watershed Management Bureau
- ▶ Michael Whitman – West Virginia
Department of Environmental
Protection
- ▶ Rachel Gibeault – TerraGraphics
Environmental Engineering, Inc.
- ▶ Shawn Henderson – US EPA
- ▶ Susie Attocknie – Quapaw Tribe of
Oklahoma
- ▶ Tina Rice – Critigen
- ▶ Tracie Merrill – Seldovia Village Tribe
- ▶ William Puknat – Montana
Department of Environmental Quality

Water Quality Framework

- ▶ New way of thinking about how EPA's data and information systems can be better integrated
- ▶ Built upon the existing OWOW data systems:
 - Water Quality Monitoring: STORET/WQX
 - Assessment/Restoration: ATTAINS
 - Actions: GRTS
 - Geospatial Fabric: NHDPlus



Goal: to streamline water quality assessment and reporting while providing a more complete picture of the nation's water quality.

ATTAINS Redesign Workgroups

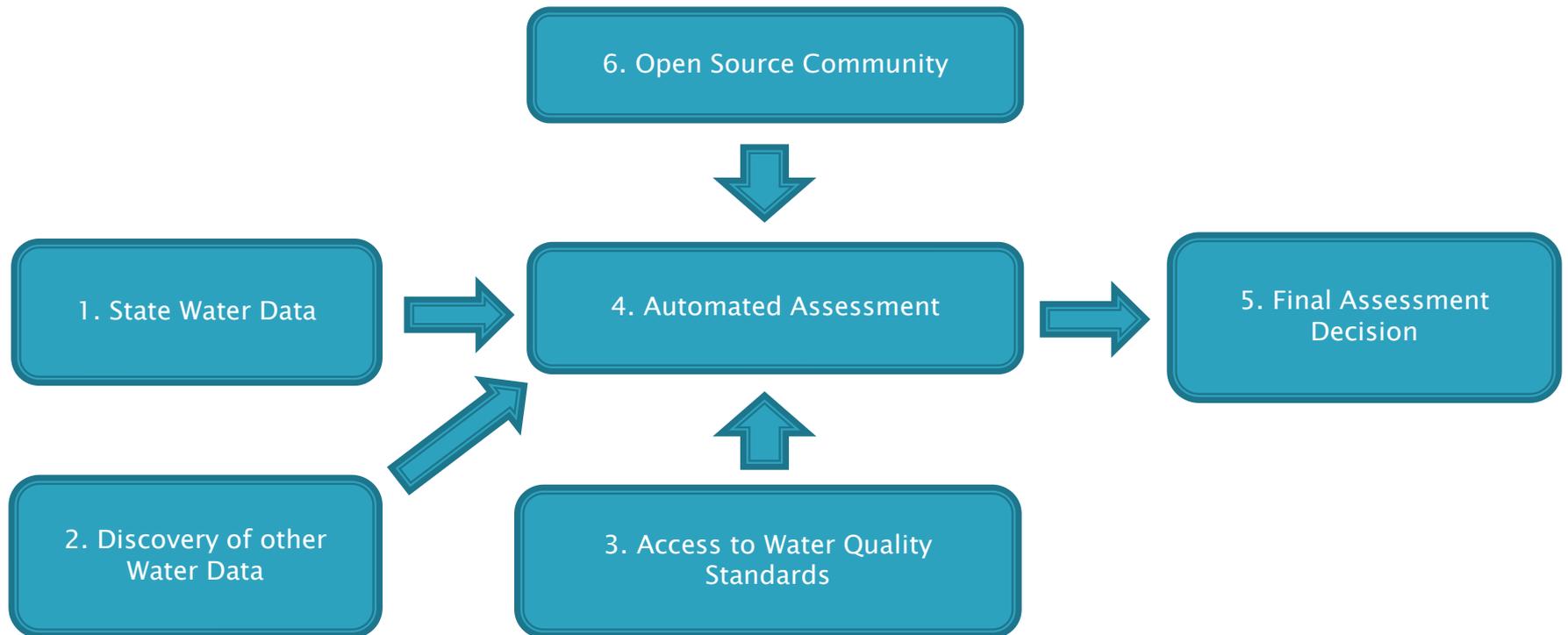
- ▶ EPA established 4 workgroups that consisted of state and regional staff
- ▶ Had representatives from 32 states and a number of regional offices
- ▶ The goal of the workgroups was to provide input into four aspects of the new ATTAINS system:
 1. Data elements for 303(d), 305(b), and TMDL reporting
 2. Requirements for the new system and data flow (how it should work)
 3. Strategic measures (with particular focus on SP-10 and SP-11)
 4. Potential improvements in the assessment process, including the discovery of monitoring data and the automated screening of that data against water quality criteria

ATTAINS Redesign Next Steps

- ▶ Each workgroup will develop a recommendations report
- ▶ These reports will be presented to the workgroups as they are completed over the next couple months
- ▶ The recommendations for these reports will be used as input into the ATTAINS redesign which will begin Fall/Winter of 2014
- ▶ EPA envisions follow-up face-to-face meetings with states starting Fall of 2014, including engaging the Exchange Network and potentially an IPT to do an additional vetting of the data elements and system requirements
- ▶ EPA is also looking for partners as we design the ATTAINS system to provide some additional vetting of the approach (through 2015)
- ▶ EPA will continue to provide updates to ACWA as we progress

Review of Improved Assessment Methods Workgroup

▶ Automated Assessment Components

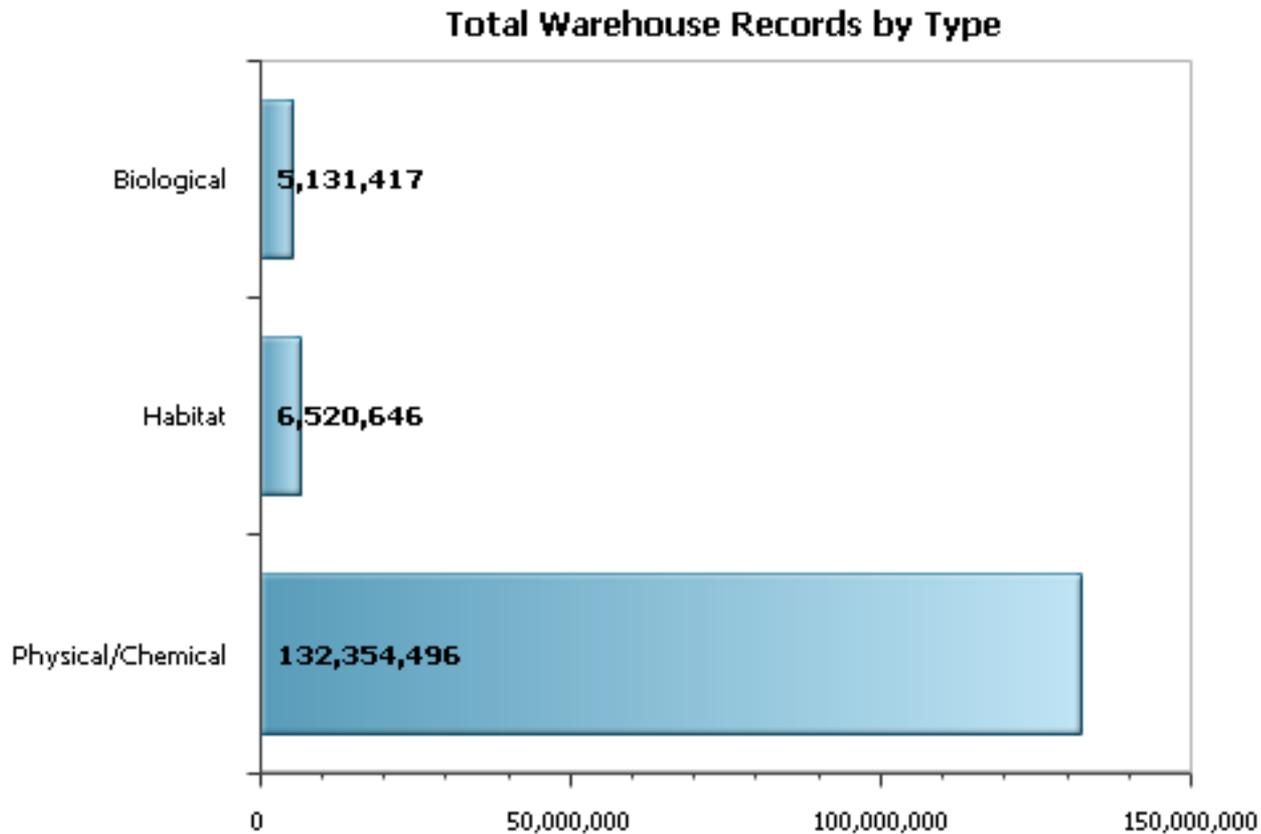


STORET and WQX Support to Water Quality Framework

- ▶ Support an improved assessment process
 - Look for ways to make the monitoring data more discoverable
 - Work with the States to evaluate methods that can be used to automate the screening of water quality monitoring data against water quality criteria
- ▶ Provide the means to support the sharing of continuous monitoring data



STORET Monitoring Data Summary



STORET Monitoring Data Summary

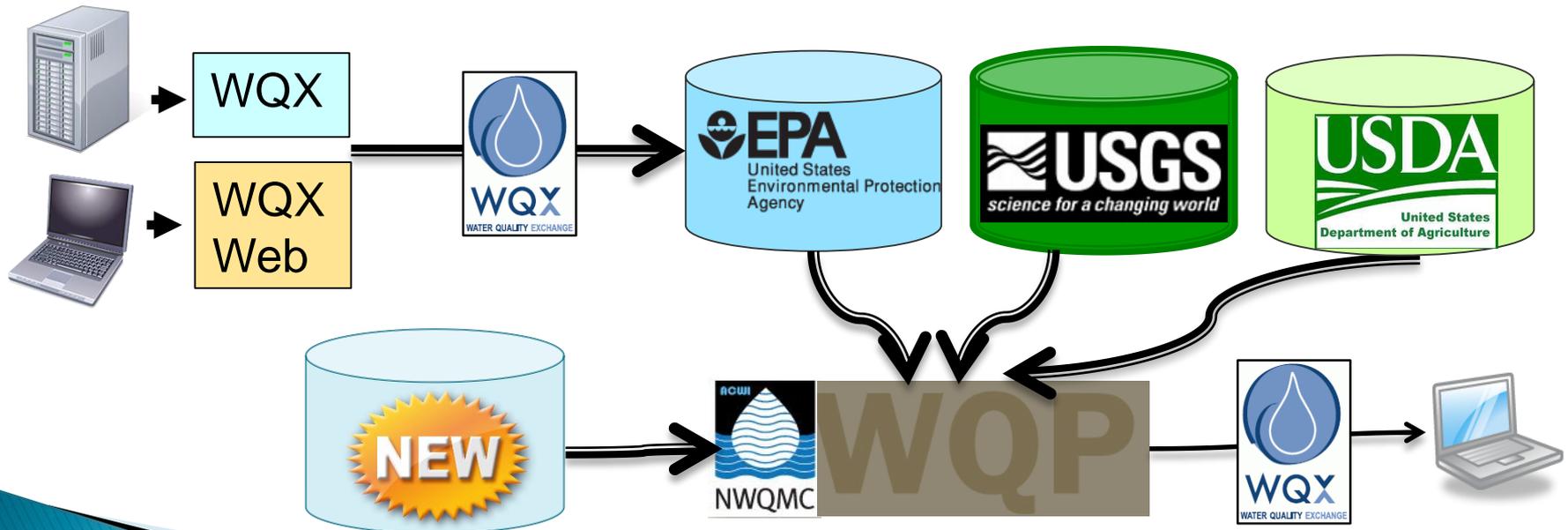
- ▶ STORET Data Partners
 - EPA – Regions, labs
 - Federal – USACOE, NPS, USBR
 - States and territories – 46
 - Tribes – 95
 - Other organizations – county, watershed groups, academic

Top Reported Results in STORET

Parameter	Result Count
Temperature, water	27,566,324
pH	7,948,068
Dissolved Oxygen	7,808,509
Temperature, air	6,275,098
Salinity	3,899,733
Turbidity	2,821,747
Fecal Coliform	2,494,164

Water Quality Portal

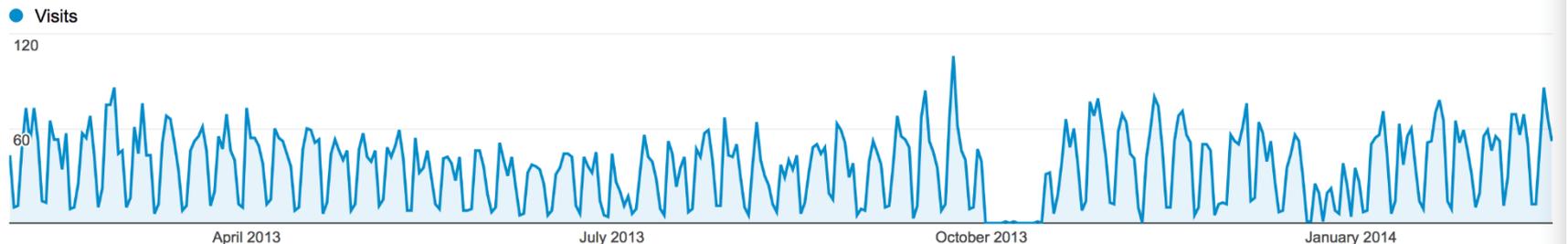
With the National Water Quality Monitoring Council ([NWQMC](#)), the Water Quality Portal ([WQP](#)) integrates publicly available water-quality data, through use of the Water Quality eXchange ([WQX](#)), from the USGS [NWIS](#), EPA [STORET](#), and USDA ARS [STEWARDS](#).



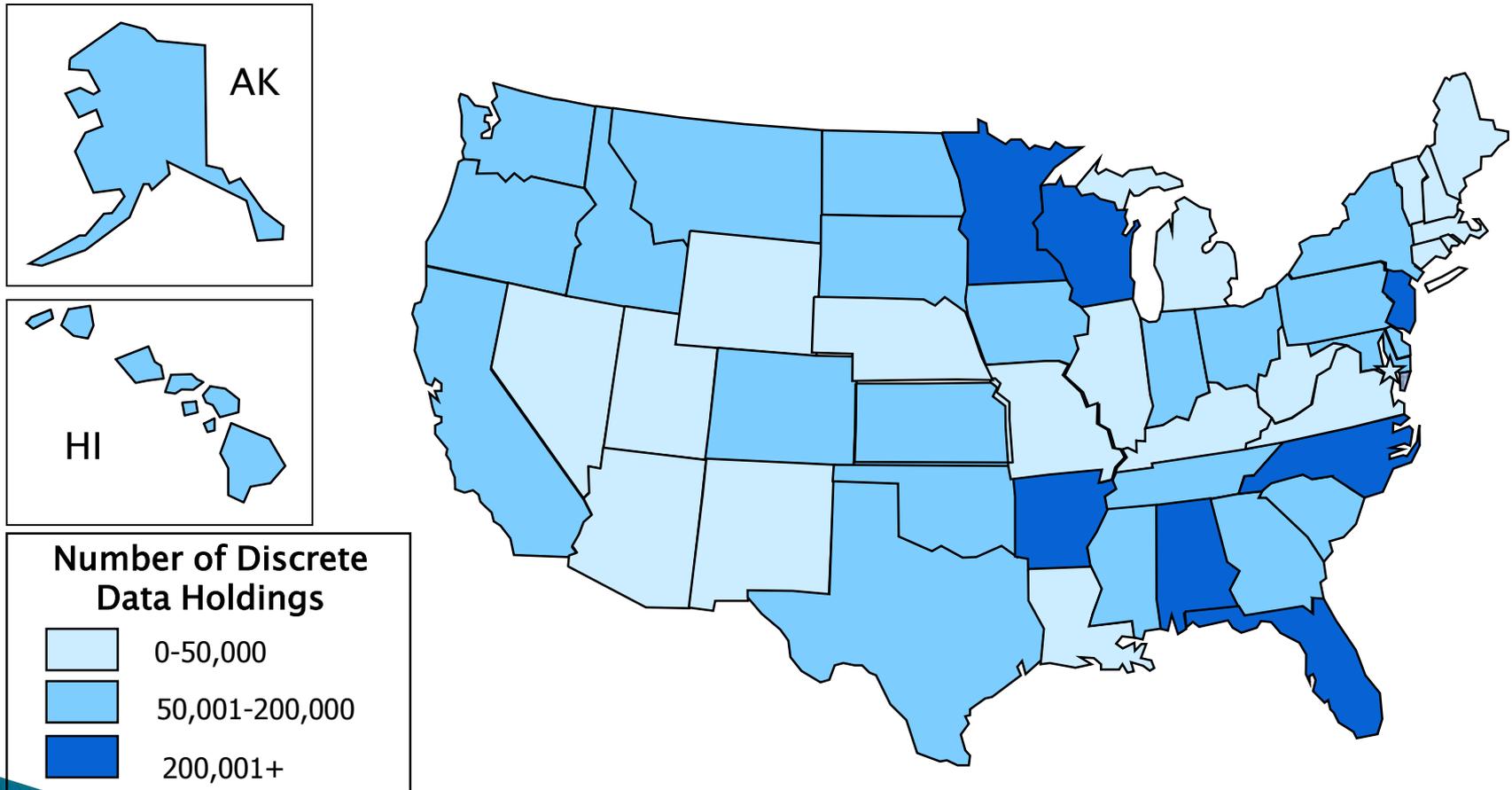
Water Quality Portal Activity

- ▶ Since the Portal's launch in April 2012:
 - Average 50–100 person visits per weekday
 - Over 10,000 unique visitors annually
- ▶ Increased use of web services
 - May 2014 there were 117,571 automated web service calls resulting in over 579 million records being downloaded

Number of Visits to Portal per Day Feb 2013–Feb 2014



State Agency Water Monitoring Data Submitted to STORET 2012-2014



Upcoming WQX and STORET activities

- ▶ Update WQX Schema
 - Update WQX Web
- ▶ Redesign STORET Warehouse
 - Enhance STORET Services
- ▶ Identify analytical tools to develop off of STORET
- ▶ Call for data
- ▶ Host webinars and conduct Regional visits
- ▶ Support the Water Quality Portal

What does this mean to you?

- ▶ WQX Schema will better capture your data
 - All previous WQX versions will still be accepted
- ▶ WQX Web will have enhanced functionality
- ▶ STORET warehouse will have improved service
- ▶ Analytical tools will be available
- ▶ Improved connection and support to other water programs
- ▶ Expanded water data coverage for analysis
- ▶ Increased access to data through STORET and Water Quality Portal

We need your help

- ▶ Participate in WQX schema updates
- ▶ Identify suggestions for STORET services
- ▶ Provide examples for analytical tools
- ▶ Identify other data holdings and partners
- ▶ Notify us of regional meetings
- ▶ Send suggestions for webinar topics
- ▶ Identify ways to integrate water quality monitoring and assessments for water programs
 - 305b & 303d, 319 Non-point source, NPDES permits

Timeline

- ▶ Update WQX Schema
 - Call for data elements and review – Summer 2014
 - Schema update – Fall 2014
 - Schema review with EN – Spring 2015
 - Implementation – Summer 2015
- ▶ Redesign STORET Warehouse – Begin Fall 2014
- ▶ Enhance STORET Services
 - Call for suggestions – Summer 2014
- ▶ Develop analytical tools off of STORET
 - Call for suggestions – Summer 2014
- ▶ Identify new data partners or data holdings
 - Call for new partners – Summer 2014
- ▶ Develop continuous monitoring data strategy – Begin Fall 2014
- ▶ Host webinars and conduct Regional visits on WQX, STORET and WQPortal
 - VA Water Monitoring Council – June 2014
 - EPA Region 1 – Fall 2014
- ▶ Identify ways to integrate water quality monitoring and assessments for water programs, e.g. non-point source, NPDES

Questions

storet@epa.gov

