STORET User Call Minutes

September 22, 2016 12:00 Noon – 1:00 PM EST

Call number: 866-299-3188 Access: 202 566 1170#

Presenters

Name	Organization
Laura Shumway	USEPA (OW)
Dwane Young	USEPA (OW)
Rusty Wasem and Bob Greenspun	USEPA (OECA)

Agenda Topics

1) Water Quality Indexing (WQI) Graphical User Interface

- **a.** The Water Quality Indexing tool (WQI) is an internal EPA tool which will be used to inform OECA in water quality decisions.
- **b.** Arose out of the question of can we use underlying water quality data to determine criteria hotspots?
 - i. Decided to focus on Nutrients.
 - **ii.** Wanted a tool that uses the water quality data that is already readily available.
- **c.** Developed as an inspection targeting tool. How can we use the data to improve our inspection?
 - i. We typically focus on the worst polluters in the most polluted areas.
- d. Scope
 - i. Focusing on nutrients.
 - ii. Data timeframe 2009-2014.
 - **iii.** Data source are Water Quality Portal, ECHO-NPDES permitted facility, CWA 304a National Criteria, CWA 303(d) impaired waters.
- **e.** Project approach
 - i. Derived and used available total nitrogen
 - **1.** Calculated relevant statistics with data and compare to ANE criteria.
 - **2.** Associated results in a GUI that allows user to visually identify water monitoring locations.

- **f.** Major Caveats
 - i. Didn't change any data. Because of that half the measurements (2.2million) were rejected for missing units or sample fraction.
 - **ii.** Only about 40 station types of 120 in the portals data were used. Excluded were: no type present, aggregate surface water use, estuary, and ocean.
 - iii. CWA 304(a) criteria used were developed 15 years ago and are specific to ANE but not to local areas.
- g. Demo of Tool presented by Rusty Wasem and Bob Greenspun from OECA.
- h. Data Summary
 - i. Records not used due to missing measure value: 319551
 - ii. Records not used due to missing fraction: 162848
 - iii. Non-detects were handled by substitution of detects at ½ detection limit.
 - iv. How can we improve our data submission so the data is more usable?

2) <u>Upstream/Downstream Query Function</u>

- **a.** This is a new feature that allows users to query upstream or downstream of a selected point.
- **b.** Live on WQP website. Labeled as a beta product.
- **c.** A navigation direction, distance, and query location is selected on a map.
 - i. Map displays sites upstream or downstream of that point.
 - ii. Sites will be passed through the water quality portal query.
- **d.** Demo of tool presented by Dwane Young (USEPA)
- **e.** The tool uses NLDI services which allows the user to discover indexed information.
- **f.** Programmers can use the NLDI services to query and return GeoJSON code that can be used in other representations