

**WQX/STORET User Call
Meeting Minutes
Thursday, October 25, 2018
12:00 – 1:00 PM EST
202-991-0477 ID: 4189172**

<http://epawebconferencing.acms.com/wqxqa/>

Next WQX/STORET Workgroup Meeting – January 24, 2019, 12 p.m. EST

Agenda:

- 1) Call for WQX 3.0 Biological Data requirements
- 2) WQX Web 2.8.6 Release / New features
- 3) Innovative Data Publishing to the Water Quality Portal

Kevin Christian chaired today's call.

1) Call for WQX 3.0 Biological Data requirements

As mentioned earlier this year, the WQX Team plans to update Biological data requirements. The project timeline to get this done will be by the end of 2019. The only area of question is the biological data. Not all 50 states and organizations submit biological data but may start doing so in the future.

The requirements will be built from feedback from the user community on the challenges they have sending data to WQX and proposed elements that may better capture biological conditions.

The WQX Team has looked at the USGS Biological data and has mapped all the taxonomic names to create a comprehensive WQX domain values list.

The full configuration diagram for the schema and business rules can be referenced at:

<ftp://ftp.epa.gov/storet/xfer/How/2018-10-25/>

- BIODATA_taxondiscussion.pdf (definitions + new domain services)
- DATAOWNER_characteristicdiscussion.pdf (definitions + new domain services)
- WQX Web RESTful Web Services_EE2018.pptx
- Example WQX Web Import File:
 - WQXTESTActivityToProject1.txt
 - WQXTESTActivityToResultStatusPreliminary.txt
- WQX_FCD_v2.1_business_rules.pdf (business rules + schema v2.1)
- WQX_FCD_v2.1_schema_elements.pdf (schema v2.1)

2) WQX Web 2.8.6 Release / New features

There is a new WQX Web release that is available in the CDX Test environment. It will be available in the CDX Production environment on October 26, 2018. Kevin reviewed the following new features in this release:

- a) Ability to update result status for activities using a system import configuration. Users can add project IDs to an existing Activities template and update their Result Status from their template. This will allow users run WQX Web in the field on a laptop or tablet from a spreadsheet.
- b) Bugfixes -
 - Cancelled Imports will be reported as error messages.
 - During a WQX Web Import event, missing attachments will be reported as error messages.
- c) New and Updated WQX Domain Values for Characteristic Aliases, Taxon Aliases, and Characteristic Group via domain services report. This available in CDX Production and through [GetDomainValues](#).
- d) API services now support re-assigning up to five generated values (from the import configuration using the StartImport web service method. It is recommended to save/copy new Import Configurations to change more than five generated elements. Kevin is working on putting together example code for this.

3) Innovative Data Publishing to the Water Quality Portal

Data owners can now publish water quality monitoring data via locally developed application calling WQX Web API services to submit text files to WQX (which is refreshed to water quality portal).

Description: EPA's Water Quality eXchange (WQX) team, the Chesapeake Bay Program, and EPA Contractor Gold Systems have developed, tested, and utilized a new way to submit data to WQX and the Water Quality Portal. Until very recently the only two avenues to publish your data via WQX were to set up an automated node to node communication via EPA's Exchange Network or to manually upload your data using the WQX Web user interface. The Chesapeake Bay Program recently began publishing their data using automated API services through WQX Web. The new WQX Web API services allow a data submitter to automate data submissions like a node but through WQX Web. The API is intended to provide programmatic access to WQX Web data submission functions and procedures. The intended audience of this session is programmers who are familiar with the concepts and techniques of WQX data submissions and Web Services. This project is innovative because maintenance on the data mapping is managed within the WQX Web. The interface makes maintaining data translation rules easy and user friendly. WQX Web maintains compatibility with new business rules, elements and xml schema validation.

Guidance and Best Practices for Continuous Monitoring Data to submit to WQX

Best Practices for Continuous Monitoring Data and WQX are as follows:

1. store discrete sampling **summary** data which can be....
 - a. hourly result value measurement - every 2 hours or every 4 hours (ie 8am, 12pm, 4pm, 8pm, 12am, 4am)
 - b. Discrete Sampling Activities (Activity IDs) can be generated by daily, monthly or as frequent to each bi-hourly sampling events.
2. discrete sampling results are stored from actual result measurement values per bi-hourly sampling event.
3. The raw data file is attached to a SINGLE activity id which archives the data logger operating period (Activity Start date thru Activity End date)
 - a. one result for each line / parameter: This activity represents the catalog info and period of record for the entire operating period.

Activity ID	Activity Attachment File Name	Activity Attachment Type	Activity Start Date (monitoring period)	Activity End Date (monitoring period)	Analysis Start Date (measuring cycle)
CM:WQXTEST16465:M2013-6	Continuous_data_example.txt	txt	6/1/2013	6/9/2013	6/1/2013
CM:WQXTEST16465:M2013-6	Continuous_data_example.txt	txt	6/1/2013	6/9/2013	6/2/2013
CM:WQXTEST16465:M2013-6	Continuous_data_example.txt	txt	6/1/2013	6/9/2013	6/3/2013
CM:WQXTEST16465:M2013-6	Continuous_data_example.txt	txt	6/1/2013	6/9/2013	6/4/2013
CM:WQXTEST16465:M2013-6	Continuous_data_example.txt	txt	6/1/2013	6/9/2013	6/5/2013
CM:WQXTEST16465:M2013-6	Continuous_data_example.txt	txt	6/1/2013	6/9/2013	6/6/2013
CM:WQXTEST16465:M2013-6	Continuous_data_example.txt	txt	6/1/2013	6/9/2013	6/7/2013
CM:WQXTEST16465:M2013-6	Continuous_data_example.txt	txt	6/1/2013	6/9/2013	6/8/2013
CM:WQXTEST16465:M2013-6	Continuous_data_example.txt	txt	6/1/2013	6/9/2013	6/9/2013

Analysis End Date (measuring cycle)	Analysis Start Time (measuring cycle)	Analysis Start Time Zone (measuring cycle)	Data Logger Line	Result Sample Fraction	Characteristic Name	Result Value	Result Unit	Result Status ID
6/2/2013	8:00	CDT	Line1 Event #13		Flow	4.78	ft3/sec	Final
6/3/2013	12:00	CDT	Line1 Event #37		Flow	4.61	ft3/sec	Final
6/4/2013	16:00	CDT	Line1 Event #61		Flow	5.27	ft3/sec	Final
6/5/2013	20:00	CDT	Line1 Event #85		Flow	4.82	ft3/sec	Final
6/6/2013	0:00	CDT	Line1 Event #109		Flow	4.56	ft3/sec	Final
6/7/2013	4:00	CDT	Line1 Event #133		Flow	4.52	ft3/sec	Final
6/8/2013	8:00	CDT	Line1 Event #157		Flow	40.73	ft3/sec	Final
6/9/2013	12:00	CDT	Line1 Event #181		Flow	27.81	ft3/sec	Final
6/10/2013	16:00	CDT	Line1 Event #205		Flow	7.47	ft3/sec	Final