WQX User Call
January 27, 2022

There were approximately 46 participants
The next WQX User Call is scheduled for February 24th, 2022.

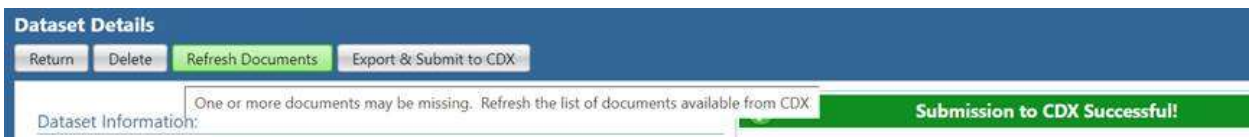Agenda:

1. WQX Project Status Report
2. Review recently launched QAQC Service
3. New Water Quality Portal interface is now live and public https://www.waterqualitydata.us/
4. WQX Domain Services
5. Open Discussion

1) **WQX Project Status Report**

   Log4j issues - WQX systems did not contain the Log4J vulnerability as we were on an older version than where the vulnerability existed. Upgrades, however, have been nonetheless taking place with a high priority, including migrations to Apache Tomcat. WQX will also be moving to the same server as ATTAINS to take advantage of some of the infrastructure already in place there. WQX and ATTAINS developers are working together to set up the new node. We will notify via the listserv if there will be any planned interruptions as these upgrades continue to take place. Bug fixes - needless to say, that developers have been focused on these vulnerability upgrades, however, some bugs have also been addressed including calendar controls. There are also a number of ongoing data migrations/updates being designed and tested, including USGS data migration to WQX.

2) **Review recently launched QAQC Service**

   We reviewed the QAQC Service exports, where and how to find them, and how to best use and interpret the results. There are two possible reports to be received, one each for any submitted Locations or Results exports. When you receive the confirmation email from CDX confirming your submission, that is the time that the reports will also be available for review.

   The QAQCLocations.zip files will return reverse-geocoded results created from the submitted latitude and longitude files. It checks for duplicate sites, ensures sufficient decimal length, and proper assignment/agreement of Country, State, and County.

Table 1 QAQCLocations.xlsx validation columns

InvalidUS ALatLong	Duplicate SiteOrg	NationalS iteDups	Less3Digit Decimal	CountryDISAGR EEwLatlong	StateDISAGRE EwLatlong	CountyDISAGR EEwLatlong

Table 2 QAQCResults.csv Validation Columns

Invalid_CharacteristicName_YN
Invalid_Unit_YN
Invalid_Speciation_YN
Invalid_Fraction_YN
Uncommon_Analytical_Method_YN
Result_Special_Characters_YN
QAPP_NOTApproved_YN
QAPP_Doc_Missing
Below_Lower_Threshold_YN
Exceeds_Upper_Threshold_YN

The QAQCResults.zip (QAQCResults.CSV) file checks for correct combinations of Characteristic, Unit, Fraction, Speciation, Values above or below expected thresholds, and several other Quality aspects.

3) **Water Quality Portal new UI is live and public**

We reviewed the new Water Quality Porta (WQP). Members of the WQP development team from USGS were in attendance. We covered basic elements and operation, and also reviewed where to locate the User Guide and Web Services Guide.

a. WQP download profiles – The work group is finalizing and reviewing the newly created download profiles. There may be some delay in being able to publish the new profiles once received by the WQP development team.
b. WQP Web Feature Services – WFS services for use in ArcOnline have been in re-development and there is continual back-and-forth between the USGS team and ESRI. It seems we are close, but as of now, WFS services are still not yet operating as intended.

4) **WQX Domain Services** – Please review Domain Value Business rules for corrections (by SME) (5 min)

<p align="center">QAQCCharacteristicValidation (ZIP) | (XML) | (CSV)</p>

5) **Open Discussion**
   a. Requests for Training – Adam started off wanting hear User's ideas or requests for training
      i) Some general training for using the WQP
      ii) MB - Intro to WQX/WQXWeb standing trainings would be helpful.
      iii) RS - Virtual trainings preferred
      iv) TK - WQX Web Templates
      v) JW- Training on electronic field forms to WQX templates
   b. WQP User Guide – Do we need to update these resources?
   c. Microcystin - send out examples of data submission to user community
   d. Thank you!

Next Meeting: February 24th, 2022.